

**CONSOLIDATED TRANSFER APPLICATION [AFTER PROPOSED TRANSACTION STRUCTURE]
[REDACTED / NON-CONFIDENTIAL VERSION]**

FORM G

APPLICATION TO TRANSFER OWNERSHIP AND/OR CONTROL OF AN INDIVIDUAL LICENCE

(Regulation 11)

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

Note:

- (a) *Applicants must refer to the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("the Act") and any regulations published under that Act with regard to the requirements to be fulfilled by applicants.*
- (b) *Information required in terms of this Form which does not fit into the space provided may be included in an appendix attached to the Form. Each appendix must be numbered with reference to the relevant part of the Form.*
- (c) *Where any information in this Form does not apply to the applicant, the applicant must indicate that the relevant information is not applicable.*

LEGEND:

Information that is **confidential** to CIVH and its shareholders and/or subsidiaries (NewCo, DFA, SADV, Vumatel)

Information that is **confidential** to Vodacom and its shareholders



1. PARTICULARS OF LICENCE	
1.1 Licence number/s:	<i>Individual Electronic Communications Network Service (IECNS) Licence under licence number 0400/IECNS/AUG/2009 issued to Dark Fibre Africa Proprietary Limited (DFA) on 12 August 2009 (updated on 3 July 2013) (the IECNS Licence).</i> <i>Individual Electronic Communications Service (IECS) Licence under licence number 0400/IECS/AUG/2009 issued to DFA on 12 August 2009 (updated on 3 July 2013) (the IECS Licence).</i>
1.2 Nature of services authorised to be provided in terms of the Licence:	<i>The IECNS Licence authorises the provision of electronic communications network services, involving electronic communications networks of provincial and national scope operated for commercial purposes, as contemplated in section 5(3) of the Act.</i> <i>The IECS Licence authorises the provision of electronic communications services (including electronic communications services consisting of voice telephony utilising numbers from the national numbering plan) on a provincial and national basis, as contemplated in section 5(3) of the Act.</i>

1.3	Attach a copy of the Licence that is the subject of this application. The copy of the Licence must be marked clearly as Appendix 1.3 of FORM G . <i>Please refer to attached Appendix 1.3 of FORM G.</i>
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2. PARTICULARS OF THE APPLICANT (LICENSEE)	
2.1	Full name of applicant: <i>Dark Fibre Africa Proprietary Limited (DFA)</i>
2.2	Designated contact person: <i>Ms Neo Moshimane Mr Andries Delport</i>
2.3	Applicant's street address: <i>96 Koranna Avenue DoringKloof Centurion Gauteng 0157</i>
2.4	Applicant's principal place of business (if different from street address): <i>Same as street address.</i>
2.5	Applicant's postal address: <i>Private Bag X 116 Centurion Pretoria Gauteng 0046</i>
2.6	Designated contact person's telephone number/s: <i>Neo Moshimane: 071 877 1839 Andries Delport: 082 990 4454</i>
2.7	Designated contact person's telefax number/s: <i>Not applicable.</i>
2.8	Email address of designated contact person: Neo.Moshimane@civh.co.za Andries.Delport@dfafrica.co.za

3. PARTICULARS OF TRANSFEREE (INTENDED LICENCE HOLDER)	
3.1	Full name of transferee: <i>Business Venture Investments No 2213 Proprietary Limited (NewCo)</i>

3.2	Designated contact person:	<i>Ms Neo Moshimane</i>
3.3	Transferee's street address:	<i>17 Petunia Street Corner of Main Road and Petunia Street Bryanston Gauteng 2191</i>
3.4	Transferee's principal place of business (if different from street address):	<i>Same as street address.</i>
3.5	Transferee's postal address:	<i>Same as street address.</i>
3.6	Telephone number/s:	<i>071 877 1839</i>
3.7	Telefax number/s:	<i>Not applicable.</i>
3.8	Email address of the designated contact person:	Neo.Moshimane@civh.co.za

4. LEGAL FORM OF THE APPLICANT (LICENSEE)	
4.1	Indicate if the applicant is:
(i)	a natural person
(ii)	a partnership
(iii)	a juristic person
(iv)	other (specify)
4.2	If the applicant is a natural person or a partnership:
4.2.1	Provide the identity number of the applicant or each partner in the applicant:
4.2.2	Attach a certified copy of the identity document of the applicant or certified copies of the identity document of each partner in the applicant marked clearly as Appendix 4.2.2 of FORM G , indicating that he or she is a citizen of the Republic, as required by section 5(8)(a) of the Act.

<i>Not applicable.</i>	
4.3 If the applicant is a juristic person:	
4.3.1 Indicate the legal form of the applicant (e.g. private company incorporated in terms of the Companies Act, 1973): <i>DFA is a private company incorporated in terms of the Companies Act 71 of 2008.</i>	
4.3.2 Registration number of applicant:	2007/013968/07
4.3.3 Attach certified copies of the applicant's certificate of incorporation and memorandum and articles of association or other constitutive documents of the applicant (e.g. memorandum and articles of association, association agreement, constitution) marked clearly as Appendix 4.3.3 of FORM G , indicating the applicant's compliance with the requirements of section 5(8)(b) of the Act. <i>Please refer to attached Appendix 4.3.3 of FORM G.</i>	
4.4 Where the applicant has been liquidated or sequestrated, provide:	
4.4.1 Liquidator / Executor's postal address:	<i>Not applicable.</i>
4.4.2 Liquidator / Executor's telephone number/s:	<i>Not applicable.</i>
4.4.3 Liquidator / Executor's mobile number/s:	<i>Not applicable.</i>
4.4.4 Liquidator / Executor's telefax number/s:	<i>Not applicable.</i>
4.4.5 Liquidator / Executor's email address:	<i>Not applicable.</i>
4.4.6 Attach an affidavit deposed to by the liquidator or executor, indicating the consent to the transfer of the Licence, marked clearly as Appendix 4.4.5 of Form G . <i>Not applicable.</i>	
5. LEGAL FORM OF TRANSFEREE (INTENDED LICENCE HOLDER)	
5.1 Indicate if the transferee is:	
(i) a natural person	
(ii) a partnership	

(iii) a juristic person	x
(iv) other (specify)	
5.2 If the transferee is a natural person or a partnership:	
5.2.1 Provide the identity number of the transferee or each partner in the transferee:	<i>Not applicable.</i>
5.2.2 Attach a certified copy of the identity document of the transferee or certified copies of the identity document of each partner in the transferee marked clearly as Appendix 5.2.2 of FORM G , indicating that he or she is a citizen of the Republic, as required by section 5(8)(a) of the Act. <i>Not applicable.</i>	
5.3 If the transferee is a juristic person:	
5.3.1 Indicate the legal form of the transferee (e.g. private company incorporated in terms of the Companies Act, 1973):	<i>NewCo is a private company incorporated in terms of the Companies Act 71 of 2008.</i>
5.3.2 CIPC Registration number of the transferee:	<i>2020/810311/07</i>
5.3.3 Attach certified copies of the transferee's certificate of incorporation and memorandum and articles of association or other constitutive and/or other governing documents of the transferee (e.g. memorandum and articles of association, association agreement, constitution) marked clearly as Appendix 5.3.3 of FORM G , indicating the transferee's compliance with the requirements of section 5(8)(b) of the Act. <i>Please refer to attached Appendix 5.3.3 of FORM G.</i>	
5.4 If the transferee is not a juristic person but intends to operate as one if this application is granted:	
5.4.1 Provide a written undertaking that the transferee will comply with section 5(8)(b) of the Act marked clearly as Appendix 5.4.1 of FORM G . <i>Not applicable.</i>	

6. OWNERSHIP AND MANAGEMENT OF APPLICANT (LICENSEE)	
6.1 Provide details of all ownership interests in the applicant and the identity number and address of each holder of an ownership interest in the applicant. Where an applicant is a juristic person only shareholdings (or equivalent) of 5% or more of the total issued shares (or equivalent) in the applicant are relevant. Attach as Appendix 6.1 of FORM G. <i>Please refer to attached Appendix 6.1 of FORM G.</i>	
6.2 Indicate whether the applicant is listed on any stock exchange, and provide details of any such listing: Attach as Appendix 6.2 of FORM G. <i>DFA is not listed on any stock exchange.</i>	
6.3 In respect of each holder of any ownership interest in any person holding an interest in applicant, provide the details required in 6.1 in respect of each such holder: Attach as Appendix 6.3 of FORM G.	

<i>Please refer to attached Appendix 6.3 of FORM G.</i>	
6.4	Indicate the extent to which any ownership interest referred to above is held by a historically disadvantaged person:
<i>Please refer to attached Appendix 6.4 of FORM G.</i>	
6.5	Indicate whether the holder of any ownership interest in the applicant is a foreign citizen or an entity registered or incorporated in any country other than South Africa:
<p><i>Not applicable.</i></p> <p><i>Remgro Limited (Remgro Limited) currently holds 57.36% in CIVH through Industrial Electronic Investments Proprietary Limited (Remgro), its wholly-owned subsidiary.</i></p> <p><i>CIVH is the sole shareholder of CIV Fibre Network Solutions Proprietary Limited (CIV FNS), which currently holds 52.41% of DFA. CIVH holds the remainder of the shares in DFA (47.59%) directly. As such, CIVH holds all of the shares in DFA.</i></p> <p><i>Remgro Limited is listed on the Johannesburg Stock Exchange with a shareholder base, which is too diverse to be detailed in this application. As at 30 June 2021, 28% of the shares of Remgro Limited were held by foreign shareholders, as indicated in its most recent integrated annual report (https://www.remgro.com/wp-content/uploads/2021/10/Remgro_IAR-ENG_2021.pdf). None of the foreign shareholders in Remgro Limited hold 5% or more of the shares in the company, and accordingly none holds 5% or more of the shares in DFA.</i></p>	
6.6	Indicate whether any person holding an ownership interest in the applicant holds a licence issued in terms of the Act or holds an ownership interest in any other licensee licensed to provide a service similar to that to which this application relates:
<ul style="list-style-type: none"> • <u>Community Investment Ventures Holdings Proprietary Limited (CIVH)</u>: CIVH currently holds 47.59% in DFA directly and 52.41% of DFA indirectly through CIV FNS. CIVH is the sole shareholder of CIV FNS. DFA is, accordingly, a wholly-owned subsidiary of CIVH. CIVH is currently: <ul style="list-style-type: none"> ○ the sole shareholder of Vumatel Proprietary Limited (Vumatel) (which holds a number of class electronic communications network services (ECNS) licences issued in terms of the Act); ○ an indirect shareholder in SA Digital Villages Proprietary Limited (SADV), which is wholly-owned by DFA and which is the holder of an individual ECNS licence under licence number 0074/IECNS/JAN/09 and an individual electronic communications service (ECS) licence under licence number 0074/IECS/JAN/09, issued in terms of the Act but which licences are in the process of being surrendered; and ○ a minority shareholder of 45% of the shares in Herotel Holdings Proprietary Limited (Herotel), which is the holder of an individual ECNS licence under licence number 0395/IECNS/MAY/2009 and an individual electronic communications service (ECS) licence under licence number 0395/IECS/MAY/2009. • <u>New GX Capital Holdings Proprietary Limited (New GX)</u>: New GX holds shares in New GX Investments Proprietary Limited which holds shares in New GX Fund 1 Proprietary Limited which currently holds 10.48% of CIVH. New GX is the sole shareholder of Tuludi Capital Proprietary Limited (Tuludi), previously known as K2019506887 (South Africa) Proprietary Limited. Tuludi is the holder of an individual ECS licence under licence 	

	<p>number 0408/IECS/JUNE/09 and an individual ECNS licence under licence number 0408/IECNS/JUNE/09 issued in terms of the Act, both of which were transferred to Tuludi on 23 March 2021.</p> <ul style="list-style-type: none"> • <u>Community Investment Holdings Proprietary Limited (CIH)</u>: CIH, which currently holds 4.58% in CIVH, has ownership interests (which amount to more than 5% in aggregate together with the ownership interests held by CIH's subsidiaries) in Jasco Electronics Limited (Jasco). (Given that CIH holds less than 5% in CIVH, its ownership interest is not strictly relevant but has been included for the sake of completeness.) Jasco's subsidiary, Spescom Special Resources Proprietary Limited, holds an individual ECS licence under licence number 0080/IECS/JAN/09 and an individual ECNS licence under licence number 0080/IECNS/JAN/008, issued in terms of the Act. • <u>Remgro Limited</u>: Remgro Limited, which indirectly holds ownership interests in CIVH through Remgro, holds an ownership interest of 30% in Seacom Business Proprietary Limited, which holds an individual ECS licence under licence number 0041/ECS/JAN/2009 and an individual ECNS licence under licence number 0041/ECNS/JAN/2009, issued in terms of the Act.
6.7	<p>Provide particulars of any interest held by the applicant in another licensee licensed in terms of the Act:</p> <p><i>SADV holds an individual ECNS licence and an individual ECS licence, issued in terms of the Act as detailed in 6.6 above. SADV's licences are in the process of being surrendered.</i></p>
6.8	<p>Provide details (including name, nationality, identification or passport number, position and address) of each member of the applicant's:</p> <p>(i) board of directors or similar body; and</p> <p>(ii) senior management.</p> <p>Attach as Appendix 6.8 of FORM G.</p> <p><i>Please refer to attached Appendix 6.8 of FORM G.</i></p>

7.	OWNERSHIP AND MANAGEMENT OF TRANSFeree (INTENDED LICENCE HOLDER)
7.1	<p>Provide details of all ownership interests in the transferee and the identity and address of each holder of an ownership interest in the transferee if a natural person. Where a transferee is a juristic person, indicate all; the shareholders and the percentage shares held by each shareholder.</p> <p>Attach as Appendix 7.1 of FORM G.</p> <p><i>Please refer to attached Appendix 7.1 of FORM G.</i></p>
7.2	<p>Provide a written undertaking indicating the correctness of the information stated in 7.1 signed off by Accounting Officer clearly marked Appendix 7.2 of FORM G.</p> <p><i>Please refer to attached Appendix 7.2 of FORM G.</i></p>
7.3	<p>Indicate whether the transferee is listed on any stock exchange, and provide details of any such listing:</p> <p><i>NewCo is not listed on any stock exchange.</i></p>
7.4	<p>Provide a written undertaking indicating the stated in 7.3 signed off by Accounting Officer clearly marked Appendix 7.4 of FORM G.</p>

7.5	<p>In respect of each holder of any ownership interest in any person holding an ownership interest in the transferee, provide the details required in 7.1 in respect of each such holder:</p> <p><i>Please refer to attached Appendix 7.5. of FORM G.</i></p>
7.6	<p>Provide a written undertaking indicating the stated in 7.5 signed off by Accounting Officer clearly marked Appendix 7.6 of FORM G.</p> <p><i>Please refer to attached Appendix 7.6 of FORM G.</i></p>
7.7	<p>Indicate the extent to which any ownership interest referred to above is held by historically disadvantaged groups.</p> <p><i>Please refer to attached Appendix 7.7 of FORM G.</i></p>
7.8	<p>Provide a written undertaking indicating the stated in 7.7 signed off by Accounting Officer clearly marked Appendix 7.8 of FORM G.</p> <p><i>Please refer to attached Appendix 7.8 of FORM G.</i></p>
7.9	<p>Indicate whether the holder of any ownership interest in the transferee is a foreign citizen or an entity registered or incorporated in any country other than South Africa:</p> <p><i>Not applicable.</i></p> <p><i>Remgro Limited (Remgro Limited) holds 57.02% in CIVH through Industrial Electronic Investments Proprietary Limited (Remgro), its wholly-owned subsidiary. CIVH will hold 60% or more of the shares in NewCo.</i></p> <p><i>Remgro Limited is listed on the Johannesburg Stock Exchange with a shareholder base, which is too diverse to be detailed in this application. As at 30 June 2021, 28% of the shares of Remgro Limited were held by foreign shareholders, as indicated in its most recent integrated annual report (https://www.remgro.com/wp-content/uploads/2021/10/Remgro_IAR-ENG_2021.pdf). None of the foreign shareholders in Remgro Limited hold 5% or more of the shares in the company and none will hold 5% or more of the shares in NewCo.</i></p> <p><i>Vodacom will own 30% of the shares in NewCo and may increase its shareholding in NewCo to 40% if it exercises the Call Option (as described in the accompanying cover letter and further below with respect to NewCo's ownership structure following the implementation of the Proposed Transaction and Internal Restructure). Vodacom's sole shareholder is Vodacom Group Limited (Vodacom Group), which is incorporated in South Africa and is listed on the Johannesburg Stock Exchange. As such, no ownership interest in Vodacom is directly held by a foreign citizen or an entity registered or incorporated in any country other than South Africa.</i></p> <p><i>Vodafone Group PLC, which is incorporated in the United Kingdom, holds 60.50% in Vodacom Group through its subsidiaries (Vodafone International Holdings B.V (Vodafone International), which is incorporated in the Netherlands, and Vodafone Investments SA Proprietary Limited (Vodafone Investments), which is incorporated in South Africa). Please see Vodacom Group's most recent integrated annual report for the financial year that ended on 31 March 2021 (the 2021 Annual Report) (https://vodacom-reports.co.za/integrated-reports/ir-2021/documents/vodacom-integrated-report-2021-lores.pdf).</i></p> <p><i>Vodafone International currently holds 7.81% of Vodacom Group which is the sole shareholder of</i></p>

Vodacom, and, accordingly, indirectly holds 7.81% (100% x 7.81%) in Vodacom.

In addition, the 2021 Annual Report for Vodacom Group shows that Vodacom Group has 15.76% institutional shareholding. Of this 15.76%, foreign institutional shareholding as follows:

- 40.7% (i.e. 6.41% (15.76% x 40.7%)) is from institutional shareholders in the United States of America;
- 14.4% (i.e. 2.27% (15.76% x 14.4%)) is from institutional shareholders in the United Kingdom;
- 9.3% (i.e. 1.47% (15.76% x 9.3%)) is from institutional shareholders in Europe; and
- 8.6% (i.e. 1.36% (15.76% x 8.6%)) is from institutional shareholders in Asia-Pacific.

7.10 Provide a written undertaking stating the stated in 7.9 signed off by Accounting Officer clearly marked **Appendix 7.10 of FORM G**.

Please refer to attached **Appendix 7.10 of FORM G**.

7.11 Indicate whether any person holding an ownership interest in the transferee holds a Licence issued in terms of the Act or holds an ownership interest in any other licensee licensed to provide a service similar to that to which this application relates:

- New GX Capital Holdings Proprietary Limited (New GX) (shareholder in CIVH and indirect shareholder in NewCo after the Proposed Transaction and Internal Restructure have been effected): New GX holds shares in New GX Investments Proprietary Limited which holds shares in New GX Fund 1 Proprietary Limited which currently holds 10.48% in CIVH. New GX is the sole shareholder of Tuludi Capital Proprietary Limited (**Tuludi**), previously known as K2019506887 (South Africa) Proprietary Limited. Tuludi is the holder of an individual ECS licence under licence number 0408/IECS/JUNE/09 and an individual ECNS licence under licence number 0408/IECNS/JUNE/09 issued in terms of the Act, both of which were transferred to Tuludi on 23 March 2021.
- Community Investment Holdings Proprietary Limited (CIH) (shareholder in CIVH and indirect shareholder in NewCo after the Proposed Transaction and Internal Restructure have been effected): CIH has ownership interests (which amount to more than 5% in aggregate together with the ownership interests held by CIH's subsidiaries) in Jasco Electronics Limited (**Jasco**). (Given that CIH holds less than 5% in CIVH, its ownership interest is not strictly relevant but has been included for the sake of completeness.) Jasco's subsidiary, Spescom Special Resources Proprietary Limited, holds an individual ECS licence under licence number 0080/IECS/JAN/09 and an individual ECNS licence under licence number 0080/IECNS/JAN/008, issued in terms of the Act.
- Remgro Limited: (indirect shareholder in CIVH through Remgro and indirect shareholder in NewCo once the Proposed Transaction and Internal Restructure have been effected): holds an ownership interest of 30% in Seacom Business Proprietary Limited, which holds an individual ECS licence under licence number 0041/ECS/JAN/2009 and an individual ECNS licence under licence number 0041/ECNS/JAN/2009, issued in terms of the Act.
- Vodacom Group: Vodacom Group holds all the shares in Vodacom, which holds the service licences and radio frequency spectrum licences detailed below.
- Vodacom: Vodacom holds the following service licences issued in terms of the Act:
 - an individual ECNS licence under licence number 009/IECNS/JAN/09; and
 - an individual ECS licence under licence number 009/IECS/JAN/09.

Vodacom also holds a number of radio frequency spectrum licences issued in terms of the Act, which are detailed in item 5.6 of the RFS Control Application (Form B).

	<p><i>Vodacom holds ownership interests in the following holders of licences issued in terms of the Act:</i></p> <ul style="list-style-type: none"> ○ <i>70% of the issued share capital in Jupicol Proprietary Limited, which holds an individual ECNS licence under licence number 0049/IECNS/JAN/09 issued on 15 January 2009, and an individual ECS licence under licence number 0049/IECS/JAN/09 issued on 15 January 2009; and</i> ○ <i>100% of the issued share capital of X-link Communications Proprietary Limited, which holds a class ECS licence under licence number 0547/CECS/NOV/08.</i>
7.11	<p>Provide a written undertaking indicating the stated in 7.11 signed off by Accounting Officer clearly marked Appendix 7.12 of FORM G.</p> <p><i>Please refer to attached Appendix 7.12 of FORM G.</i></p>
7.12	<p>Provide particulars of any interest held by the transferee in another licensee licensed in terms of the Act:</p> <p><i>NewCo will not hold any interest in another licensee in terms of the Act.</i></p> <p><i>SADV and Vumatel, which will become subsidiaries of NewCo following the Proposed Transaction and Internal Restructure, currently hold licences but these will be surrendered when they become subsidiaries of NewCo.</i></p>
7.13	<p>Provide a written undertaking indicating the stated in 7.13 signed off by Accounting Officer clearly marked Appendix 7.14 of FORM G.</p> <p><i>Please refer to attached Appendix 7.14 of FORM G.</i></p>
7.14	<p>Provide details (including name, nationality, identification or passport number, position and address) of each member of the transferee's:</p> <ul style="list-style-type: none"> (i) board of directors or similar body; and (ii) senior management. <p>Attach as Appendix 7.15 of FORM G.</p> <p><i>Please refer to attached Appendix 7.15 of FORM G.</i></p>

8.	SUITABILITY OF TRANSFEEE (INTENDED LICENCE HOLDER)
8.1	<p>Provide particulars of any Licence held by the transferee in terms of the Act which has been revoked: Attach as Appendix 8.1 of FORM G.</p> <p><i>Not applicable.</i></p>
8.2	<p>Provide particulars of any application submitted by the transferee for a Licence in terms of the Act which was rejected: Attach as Appendix 8.2 of FORM G.</p> <p><i>Not applicable.</i></p>

8.3	Provide particulars of any application submitted by the transferee for a Licence in terms of the Act which is pending before the Authority: Attach as Appendix 8.3 of FORM G.
	<i>Not applicable.</i>
8.4	Provide details of any action taken in relation to the transferee by the Authority or any other person due to a breach of the Act and related legislation: Attach as Appendix 8.4 of FORM G.
	<i>Not applicable.</i>
8.5	Provide a written undertaking indicating the stated in 8.1, 8.2, 8.3 and 8.4 signed off by Accounting Officer clearly marked Appendix 8.5 of FORM G.
	<i>Not applicable.</i>
8.6	Provide details of the transferee's 5-year business plan in respect of the application. Attach as Appendix 8.6 of FORM G: <i>Please refer to attached Appendix 8.6 of FORM G, which sets out the details of the business plan for DFA, SADV and Vumatel, which will be wholly-owned subsidiaries of NewCo (the transferee) following the implementation of the Proposed Transaction and the Internal Restructure.</i>
8.7	Attach a comprehensive business plan stated in 8.6 clearly marked Appendix 8.7 of FORM G. <i>Please refer to attached Appendix 8.7 of FORM G.</i>
8.8	Provide separately and mark clearly as Appendix 8.8 of FORM G , copies of the transferee's audited annual financial statements for the previous three years: <i>Please refer to attached Appendix 8.8 of FORM G.</i> <i>Given that NewCo is a newly incorporated company that does not have any audited (or non-audited) annual financial statements for the previous three years, the audited annual financial statements of DFA and Vumatel (which will become wholly-owned subsidiaries of NewCo following the implementation of the Proposed Transaction and Internal Restructure) are attached.</i>
8.9	Provide detailed network architecture layout plan and roll-out plans should this application be granted indicating timeframes and roll-out targets clearly marked Appendix 8.9 of FORM G. <i>Please refer to attached Appendix 8.9 of FORM G.</i>
8.10	Applicable to Individual ECS/ECNS only: provide detailed proposed commercial agreements to be made available in terms of roaming, interconnection, facilities, leasing clearly marked Appendix 8.10 of FORM G. <i>Please refer to attached Appendix 8.10 of FORM G.</i>

9.	OWNERSHIP AND CONTROL BY HISTORICALLY DISADVANTAGED PERSONS, COMPETITION ANALYSIS AND CONSUMER INTEREST
9.1	<p>Provide details of how the parties comply with the 30% ownership and control interest by historically disadvantaged groups clearly marked Appendix 9.1 of FORM G.</p> <p><i>Please refer to attached Appendix 9.1 of FORM G.</i></p>
9.2	<p>Provide an independent competition analysis report regarding the impact of this transaction on the relevant market clearly marked Appendix 9.2 of FORM G.</p> <p><i>Please refer to attached Appendix 9.2 of FORM G.</i></p>
9.3	<p>Provide a consumer interest analysis report post the transaction clearly marked Appendix 9.3 of FORM G.</p> <p><i>Please refer to attached Appendix 9.3 of FORM G.</i></p>

10.	REASONS FOR PROPOSED TRANSFER
10.1	<p>Provide the detailed reasons for the proposed transfer clearly marked Appendix 10.1 of FORM G.</p> <p><i>Please refer to attached Appendix 10.1 of FORM G.</i></p>

11.	APPLICANT'S LICENCE OBLIGATIONS
11.1	<p>Indicate those obligations of the applicant in terms of the Licence which have been discharged and those which will be assumed by the transferee should this application be granted:</p>
	<p><i>DFA has complied with its obligations under the Act, particularly in relation to the following:</i></p> <ul style="list-style-type: none"> • <i>payment of its annual licence fees to the Authority in terms of Schedule 2 to the General Licence Fees Regulations, 2012 and submission of its annual financial statements on the basis of which its annual licence fees are calculated;</i> • <i>payment of its annual contribution towards the Universal Service Access Fund (USAF) contribution, which is 0.2% of its annual turnover, as required in terms of the USAF Regulations, 2011;</i> • <i>ongoing reporting and filing obligations in terms of the Regulations regarding Standard Terms and Conditions for Individual Licences under Chapter 3 of the ECA, 2010, and the Regulations regarding Standard Terms and Conditions for Individual Licences under Chapter 3 of the ECA, 2010 (for example, notifying the Authority of changes to its shareholding structure in the prescribed form); and</i> • <i>compliance with the End-User and Subscriber Service Charter Regulations, 2016 to the extent applicable to DFA given that it provides licensable services primarily on a wholesale basis.</i> <p><i>NewCo, as the intended licence-holder, will assume the above obligations and undertakes to comply with these obligations as provided in 11.2 below.</i></p>
11.2	<p>Provide separately and mark clearly as Appendix 11.2 of FORM G, a written undertaking given by the transferee, through its duly authorised representative, that it will comply with the applicant's Licence obligations in the event of the transfer application being approved by the Authority.</p>

*Please refer to attached **Appendix 11.2 of FORM G.***

12. UNDERTAKINGS

- 12.1 Specify any undertakings which the transferee is prepared to make in order to promote the objects of the Act, should this application be approved by the Authority clearly marked as **Appendix 12 of FORM G.**

*Please refer to attached **Appendix 12 of FORM G.***

Not applicable.

13. COMPLIANCE WITH CHAPTER 9 OF THE ACT

This section is only applicable where the Licence to be transferred is in respect of a broadcasting service.

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| 13.1 | Indicate whether the transferee is a member of the Advertising Standards Authority or intends to become a member: | <i>Not applicable.</i> |
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- | | | |
|------|---|------------------------|
| 13.2 | Indicate whether the transferee is a member of a body contemplated in section 54(3) of the Act or intends to become a member: | <i>Not applicable.</i> |
|------|---|------------------------|

- | | | |
|------|--|------------------------|
| 13.3 | Indicate whether the transferee is a party, movement, organisation, body or alliance which is of a party-political nature: | <i>Not applicable.</i> |
|------|--|------------------------|

- | | | |
|------|--|------------------------|
| 13.4 | Indicate whether the transferee controls a newspaper and, if so, provide details of:
13.4.1 the newspaper's circulation figures;
13.4.2 area in which the newspaper is distributed
13.4.3 newspaper's market share. | <i>Not applicable.</i> |
|------|--|------------------------|

14. GENERAL

- 14.1 Provide details of any other matter of which, in the applicant's view, the Authority should be aware:

Not applicable.

- 14.2 Attach a resolution authorising the persons signing this application to sign this application marked clearly as **Appendix 14.2 of FORM G.**

*Please refer to attached **Appendix 14.2 of FORM G.***

The persons signing the application on behalf of the applicant and the transferee must acknowledge as follows:

I, the applicant, acknowledge that the Authority reserves the right to have any Licence amended pursuant to this application set aside, should any material statement made herein, at any time, be found to be false.

Signed on behalf of the Applicant, Dark Fibre Africa
Proprietary Limited, who warrants his authority hereto

Signed on behalf of the Transferee, Business Investments No
2213 Proprietary Limited ("NewCo"), who warrants his authority
hereto

I certify that this declaration was signed and sworn to before me at Sandton on the 9th
day of December 2021 by the deponent who acknowledged that he/she:

1. knows and understands the contents hereof;
2. has no objection to taking the prescribed oath or affirmation; and
3. considers this oath or affirmation to be truthful and binding on his/her conscience.

COMMISSIONER OF OATHS

Name: Michael Bonetfeld

Address: 90 Rivonia Road, Sandton, 2196

Capacity: Practising Attorney RSA

Attach a copy of the Licences that are the subject of this application.



Independent Communications Authority of South Africa

Registration: 154 Katherine Street, Sandton
 Postal Bag 21002, Sandton, 2146

INDIVIDUAL ELECTRONIC COMMUNICATIONS NETWORK SERVICE LICENCE

No:0400/IECNS/AUG/2009

GRANTED AND ISSUED

TO

**DARK FIBRE AFRICA (PTY) LTD
 REGISTRATION NO: 2007/013968/07**

**FOR THE PROVISION OF
 ELECTRONIC COMMUNICATIONS NETWORK SERVICES**

**SIGNED FOR AND ON BEHALF OF THE INDEPENDENT COMMUNICATIONS
 AUTHORITY OF SOUTH AFRICA**

EFFECTIVE FROM 12 AUGUST 2009

A handwritten signature in black ink, appearing to read 'Mncube', written over a horizontal line.

**DR SS MNCUBE
 CHAIRPERSON**

DATE: 03 / 07 / 2013

1. LICENSEE

The Licence is issued to:

- 1.1 Name of Company: Dark Fibre Africa (Pty) Ltd
- 1.2 Shareholders: CIV Fibre Network Solutions (Pty) Ltd – 63,397%
Remgro (Pty) Ltd – 23,050%
New Gx Partnership 2 – 13,553%
- 1.3 Ownership held by persons from historically disadvantaged groups:
43.760%

2. CONTACT DETAILS

- 2.1 The contact person for the Licensee shall be:
 - 2.1.1 Name: Johan van Deventer
 - 2.1.2 Tel: (012) 443 1000
 - 2.1.3 Fax: (012) 443 1003
 - 2.1.4 Cell: (082) 787 0207
 - 2.1.5 Email: johan.vd@dfafrica.co.za
- 2.2 Should the Licensee propose to replace the person so designated, the Licensee shall notify the Authority in writing within seven (7) days after appointing the new designated person.

3. NOTICES AND ADDRESSES

The Licensee chooses the following addresses as its principal addresses:

- | | |
|---|--|
| <ul style="list-style-type: none"> 3.1 Postal Address Private Bag X116 Centurion 0046 | <ul style="list-style-type: none"> 3.2 Physical Address 55 Regency Drive, Route 21 Corporate Park Nellmapius Drive Irene 0062 |
|---|--|

SCHEDULE

1. Trading Name

Dark Fibre Africa

2. Geographic coverage

The Licensee shall provide national coverage of its electronic communication network services.

3. Rights and obligations

3.1 The Licensee is hereby authorised to construct, maintain and operate an electronic communications network, as well as provide electronic communications network services.

3.2 The rights and obligations under this licence may be exercised or performed by a third party, including its agents and contractors. The Licensee shall be responsible for the acts or omissions in respect thereof on the basis that –

3.2.1 the liability of the Licensee for any acts or omissions of such third party, including agents or contractors, in relation to the exercise of such rights shall be limited to acts or omissions which constitute a contravention of the conditions of this Licence;

3.2.2 the Licensee shall stipulate adequate provisions in its contracts with such third party, including agents or contractors, to ensure that their exercise of any of the above rights do not contravene any of the conditions of this Licence;

3.2.3 should any such third party, including agents or contractors, commit any act or omission in contravention of a condition of this Licence, the Licensee shall, upon becoming aware thereof, act as expeditiously as is reasonably possible to remedy such contravention and for this purpose the Licensee shall be afforded reasonable time; and

3.2.4 the Authority shall, upon becoming aware of any contravention of this Licence by such third party, including the Licensee's agents or contractors or any complaints lodged with the Authority in relation thereto, forthwith in writing notify the Licensee accordingly.

3.3 The Licensee and any or all of its Subsidiaries shall be entitled by virtue of this Licence to provide all or any of the Services together with all or any other rights granted to it under this Licence.

3.4 Nothing in this Licence shall be construed or understood as to relieve the Licensee or any other party of the obligations to comply with any other applicable statutory prohibition or obligation.



Independent Communications Authority of South Africa

Finmill Farm, 164 Katherine Street, Sandton
Private Bag X10002 Sandton, 2146

INDIVIDUAL ELECTRONIC COMMUNICATIONS SERVICE LICENCE

No:0400/IECS/AUG/2009

GRANTED AND ISSUED

TO

**DARK FIBRE AFRICA (PTY) LTD
REGISTRATION NO: 2007/013968/07**

**FOR THE PROVISION OF
ELECTRONIC COMMUNICATIONS SERVICES**

**SIGNED FOR AND ON BEHALF OF THE INDEPENDENT COMMUNICATIONS
AUTHORITY OF SOUTH AFRICA**

EFFECTIVE FROM 12 AUGUST 2009

A handwritten signature in blue ink, appearing to read 'Mncube', written over a horizontal line.

**DR SS MNCUBE
CHAIRPERSON**

DATE: 03 / 07 / 2013

**Dr SS Mncube (Chairperson), NA Batyi, WH Currie, JM Lebooa, MR Mohlologa, N Ndhlovu, KGS Pillay,
Dr MM Socikwa, WF Stucke (Councillors), TTC Dlamini (CEO)**

1. LICENSEE

The Licence is issued to:

- 1.1 Name of Company: Dark Fibre Africa (Pty) Ltd
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Remgro (Pty) Ltd – 23,050%
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The Licensee chooses the following addresses as its principal addresses:

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|---|--|
| <ul style="list-style-type: none"> 3.1 Postal Address Private Bag X116 Centurion 0046 | <ul style="list-style-type: none"> 3.2 Physical Address 55 Regency Drive, Route 21 Corporate Park Nellmapius Drive Irene 0062 |
|---|--|

SCHEDULE

1. Trading Name

Dark Fibre Africa

2. Geographic coverage

The Licensee shall provide national coverage of its electronic communication services.

3. Range of numbers from the National Numbering Plan

The Licensee shall retain a right to apply for numbers subject to the numbering plan and related regulations issued in terms of section 68 of the EC Act.

4. Rights and obligations

4.1 The Licensee is entitled to provide electronic communications services in the Republic.

4.2 The rights and obligations under this licence may be exercised or performed by a third party, including its agents and contractors. The Licensee shall be responsible for the acts or omissions in respect thereof on the basis that –

4.2.1 the liability of the Licensee for any acts or omissions of such third party, including agents or contractors, in relation to the exercise of such rights shall be limited to acts or omissions which constitute a contravention of the conditions of this Licence;

4.2.2 the Licensee shall stipulate adequate provisions in its contracts with such third party, including agents or contractors, to ensure that their exercise of any of the above rights do not contravene any of the conditions of this Licence;

- 4.2.3 should any such third party, including agents or contractors, commit any act or omission in contravention of a condition of this Licence, the Licensee shall, upon becoming aware thereof, act as expeditiously as is reasonably possible to remedy such contravention and for this purpose the Licensee shall be afforded reasonable time; and
- 4.2.4 the Authority shall, upon becoming aware of any contravention of this Licence by such third party, including the Licensee's agents or contractors or any complaints lodged with the Authority in relation thereto, forthwith in writing notify the Licensee accordingly.
- 4.3 The Licensee and any or all of its Subsidiaries shall be entitled by virtue of this Licence to provide all or any of the Services together with all or any other rights granted to it under this Licence.
- 4.4 Nothing in this Licence shall be construed or understood as to relieve the Licensee or any other party of the obligations to comply with any other applicable statutory prohibition or obligation.

14

Appendix 4.3.3 of FORM G

Attach certified copies of the applicant's certificate of incorporation and memorandum and articles of association or other constitutive documents of the applicant (e.g. memorandum and articles of association, association agreement, constitution) indicating the applicant's compliance with the requirements of section 5(8)(b) of the Act.

Republiek van Suid-Afrika
Maatskappywet 1973
(Artikel 64)

Republic of South Africa
Companies Act 1973
(Section 64)

Vorm/Form CM 1

Registr



INTELLECTUAL
PROPERTY OFFICE

in No. of Company

GOLDEN POND TRADING
615

2007/013968/07

Sertifikaat van Inlywing van 'n Maatskappy met 'n aandelekapitaal

Certificate of Incorporation of a Company having a share capital

Hierby word gesertifiseer dat/This is to certify that

GOLDEN POND TRADING 615 (PTY) LTD

vandag ingelyf is kragtens die Maatskappywet, 1973 (Wet 61 van 1973), en dat die Maatskappy 'n maatskappy is met 'n aandelekapitaal.

was this day incorporated under the Companies Act, 1973 (Act 61 of 1973), and that the Company is a company having a share capital.

Geteken en geseël te Pretoria op hede/Signed and sealed at Pretoria this

14 dag van/day of

May

/Two Thousand and Seven

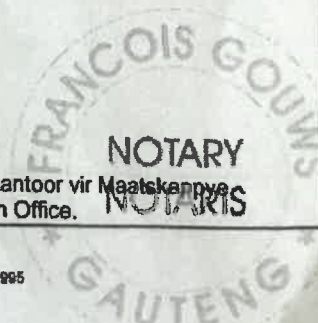
**CERTIFIED A TRUE COPY OF THE ORIGINAL
KHAYAKAZI THOMAS
EX OFFICIO**

**COMMISSIONER OF OATHS
PRACTISING ATTORNEY
REPUBLIC OF SOUTH AFRICA
11 ALICE LANE
SANDTON
10/12/2004**

Registrateur van Maatskappye/Registrar of Companies

Seël van die Registrasiekantoor vir Maatskappye
Seal of Companies Registration Office

Hierdie sertifikaat is nie geldig nie, tensy geseël deur die seël van die Registrasiekantoor vir Maatskappye
This certificate is not valid unless sealed by the seal of the Companies Registration Office.



DFA Board Resolution(15630415.3)

DARK FIBRE AFRICA PROPRIETARY LIMITED
Registration Number 2007/013968/07

(the Company)

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF THE COMPANY HELD AT VIA
Video Conference ON 25 January 2021

1. ATTENDANCE AND CHAIRMAN

1.1 Thinus Mulder / ⁴~~Jacques Gryzenhout~~ was elected chairman of the meeting.


1.2 It is recorded that each director of the Company has received, or waived the requirement to receive, notice of the matters referred to below and a quorum of directors was present and the meeting could accordingly proceed in accordance with the memorandum of incorporation of the Company and the Companies Act, 2008 (the Companies Act).

	Director	Present
1.	Jakobus Viljoen	✓
2.	Priscilla Ralebitso	✓
3.	Raymond Ndlovu	✓
4.	Thinus Mulder	✓
5.	Jacques Gryzenhout	✓
6.	Andries Delpoit	✓

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11 ALICE LANE
SANDTON
10/12/2021

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON
 Commissioner of Oaths
 Chartered Governance Institute of Southern Africa
 Member number : M0842019 ACG

Date: 30/08/2021 Signature: 
 Place: Sandton
 88 Rivonia Road, Sandton, 2196

BACKGROUND

- 2.1 Community Investment Ventures Holdings Proprietary Limited (the Parent) entered into a preference share subscription agreement in May 2019 pursuant to which the Parent issued certain Class A Preference Shares (the **Class A Parent Preference Shares**) and Class B Preference Shares (the **Class B Parent Preference Shares**) to FirstRand Bank Limited (acting through its Rand Merchant Bank division) (RMB).
- 2.2 CIVH PrefCo (RF) Proprietary Limited (PrefCo), a subsidiary of the Parent will enter into a preference share subscription agreement with, amongst others, RMB, Absa Bank Limited (acting through its Corporate and Investment Banking division) and Depfin Investments Proprietary Limited (as subscribers) (the **PrefCo Subscription Agreement**) pursuant to which the subscribers will subscribe for preference shares in PrefCo (the **PrefCo Preference Shares**).
- 2.3 PrefCo will use the proceeds from the PrefCo Preference Shares to subscribe for preference shares in each of the Company (the **DFA Preference Share**) and Vumatel Proprietary Limited (Vumatel) (the **Vumatel Preference Share** and together with the DFA Preference Share, the **Opco Preferred Shares**). Vumatel and the Company will use the proceeds from the Opco Preferred Shares to repay a portion of the inter-company loans previously advanced by CIVH LoanCo (RF) Proprietary Limited (**LoanCo**) to Vumatel and the Company.

DFA Board Resolution(15630415.3)

- 2.4 LoanCo will use the proceeds received from Vumatel and the Company to repay a portion of the inter-company loans previously advanced by PrefCo to LoanCo. PrefCo will use the proceeds received from LoanCo to repay a portion of the inter-company loans previously advanced by the Parent to PrefCo. The Parent will ultimately use these proceeds to redeem the Class B Parent Preference Shares.
- 2.5 The Equity Flow of Funds Agreement will be entered into between LoanCo, the Parent, Vumatel, PrefCo, the Company, CIVH Fibre Network Solutions Proprietary Limited and FirstRand Bank Limited (acting through its Rand Merchant Bank division) as Funds Flow Bank and the transactions contemplated therein will be implemented.
- 2.6 The Company will enter into the Equity Flow of Funds Agreement and any other agreement/document defined as a "Finance Document" in the PrefCo Subscription Agreement to which the Company is a party (together with the Amendment and Restatement Agreement of the CTA (defined below), the Relevant Documents and the transactions described in paragraphs 2.1 to 2.5 being the Transaction).
- 2.7 For purposes of the subscription by PrefCo for the DFA Preference Share, the board of directors is required to determine the preferences, rights and limitations of the DFA Preference Share in terms of section 36(3)(d) of the Companies Act.
- 2.8 Accordingly, the board wishes to determine the preferences, rights, limitations and/or other terms attaching to 1 (one) of the preference shares contemplated in article 2.1.2 of the memorandum of incorporation of the Company, as being an Opco Preferred Share, having the preference share terms set out in Annexe A to these resolutions.

Amendment to CTA

- 2.9 A Common Terms Agreement was entered into between the Original Lenders, the Original GBF Providers, the Original Hedge Providers, LoanCo, the Company, PrefCo and Vumatel on or about 10 December 2019 pursuant to which, inter alia, the Parties thereto agreed certain common definitions and provisions which apply in all the Finance Documents (as defined in the Common Terms Agreement), as amended pursuant to a first addendum thereto between the Parties dated 19 October 2020.

The Parties to the Common Terms Agreement have agreed to amend the Common Terms Agreement in the manner set out in an Amended and Restated Common Terms Agreement which will be appended to an Amendment and Restatement Agreement (the Amendment and Restatement Agreement of the CTA).

CONSIDERATION OF RELEVANT DOCUMENTS

To the extent available, a copy of the Relevant Documents (or the latest version thereof) has been provided to all the directors of the Company for consideration. Each director of the Company confirms, by his/her signature hereto, that he/she has considered the terms of, and the transactions contemplated by, the Transaction, and that he/she considers it to be in the interest of the Company's business and to the commercial benefit and advantage of the Company to enter into the Relevant Documents.

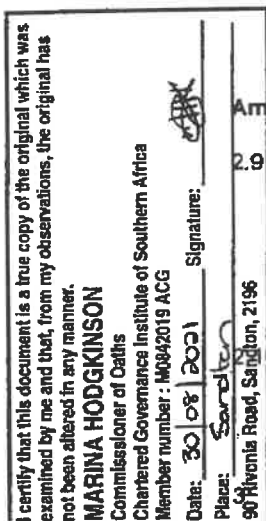
4. PERSONAL FINANCIAL INTERESTS

- 4.1 It is recorded that:

- 4.1.1 each of Jakobus Viljoen, Priscilla Ralebitso, Andries Delpoit and Raymond Ndlovu disclosed, or has previously disclosed, that (i) he/she is also a director (as defined in section 75 of the Companies Act) of Prefco and/or Vumatel (Conflicted Companies) and accordingly, for the purposes of s75 of the Companies Act, such Conflicted Companies constitute a related person to him/her; and that (ii) by the Company's

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 SANDTON

10/12/2021



DFA Board Resolution(15830415.3)

issuance of the DFA Preference Shares, such Conflicted Companies have a personal financial interest (as defined in the Companies Act) in the matters to be considered at the meeting; and

- 4.1.2 save as set out above, each director of the Company confirmed that he/she does not have, and is not aware of any related person to him/her having, any personal financial interests as contemplated in section 75 of the Companies Act which are required to be disclosed in terms of such section.

- 4.2 It is further recorded that each of Jakobus Viljoen, Priscilla Ralebitso, Andries Delpont and Raymond Ndlovu were requested to disclose to the meeting their observations and/or pertinent insights relating to the Transaction, and that each of such directors of the Company confirmed that he/she has considered the terms of, and the transactions contemplated by, the Transaction, and that had he/she been permitted under the Companies Act to vote on the resolutions to be considered at the meeting, he/she would have voted in favour of the conclusion of the Transaction.

- 4.3 In accordance with section 75(5) of the Companies Act Jakobus Viljoen, Priscilla Ralebitso, Andries Delpont and Raymond Ndlovu left the meeting and took no further part in consideration of the matters considered at the meeting.

5. FINANCIAL ASSISTANCE AND DISTRIBUTIONS

5.1 General


- 5.1.1 It is noted that the Transaction together with the Relevant Documents contemplate the Company giving "financial assistance" within the meaning of section 44 and/or section 45 of the Companies Act to a related or inter-related company or corporation, (collectively the **Applicable Financial Assistance**); and/or making a "distribution" within the meaning of section 46 of the Companies Act.

- 5.1.2 Each director of the Company, by his/her signature hereto, confirms that he/she is aware that:

- (a) under the Companies Act the giving of unlawful financial assistance may result in some or part of the Relevant Documents being void to the extent inconsistent with sections 44 and/or 45 of the Companies Act, and personal liability for directors of the Company;
- (b) the giving of financial assistance would not be invalid if the requirements provided under sections 44 and 45 (as applicable) of the Companies Act were complied with;
- (c) under sections 44(3) and 45(3) of the Companies Act, the Company may provide financial assistance, if:
 - (i) the financial assistance is given pursuant to a special resolution of its shareholder(s) adopted within the previous 2 years which approved the financial assistance either for the specific recipient, or generally for a category of potential recipients (and the specific recipient falls within that category);
 - (ii) the board of directors of the Company is satisfied that (A) immediately after providing the financial assistance, the Company would satisfy the solvency and liquidity test, as contemplated in section 4 of the Companies Act (the **Solvency and Liquidity Test**); and (B) the terms under which the financial assistance is proposed to be given are fair and reasonable to the Company;

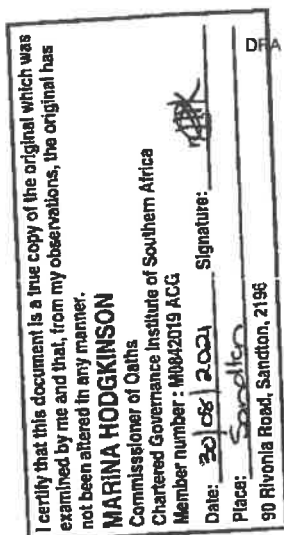
I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON
 Commissioner of Oaths
 Chartered Governance Institute of Southern Africa
 Member number : M0842019 ACG

Date: 30/08/2024
 Signature: 
 Place: Sandton
 90 Rivonia Road, Sandton, 2196.

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 EX OFFICIO
 COMMISSIONER OF OATHS
 PRACTISING ATTORNEY
 REPUBLIC OF SOUTH AFRICA
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 SANDTON

10/12/2024



DFA Board Resolution(15630415.3)

- (d) under sections 44(4) and 45(4) of the Companies Act, the Company may only provide financial assistance, if and in addition to satisfying the requirements set out in sections 44(3) and 45(3) (as the case may be) of the Companies Act, the board of directors of the Company is satisfied that any condition or restriction on the granting of financial assistance in the memorandum of incorporation of the Company has been satisfied;
- (e) under section 46(1) of the Companies Act, the Company may not make a distribution (as defined in section 1 of the Companies Act), unless (i) the board of directors of the Company has, by ordinary resolution, authorised such distribution; (ii) it reasonably appears that the Company will satisfy the Solvency and Liquidity Test immediately after completing the proposed distribution; and (iii) the board of directors of the Company has, by ordinary resolution, acknowledged that it has applied the Solvency and Liquidity Test and has reasonably concluded that the Company will satisfy the Solvency and Liquidity Test immediately after completing the proposed distribution.

5.2

Special Resolutions by shareholders

The resolutions set out herein are subject to the shareholders of the Company passing the special resolutions required in terms of sections 44 and/or 45 (as the case may be) of the Companies Act, which resolutions, amongst other things, authorise or will authorise, the entry into of the Relevant Documents and the granting of the Applicable Financial Assistance (the Shareholders Resolution).

5.3

Solvency and Liquidity Test and other requirements

Having carefully considered all relevant information, the directors confirm by their signature hereto that:

5.3.1

they have applied the Solvency and Liquidity Test and are satisfied that the Company will satisfy the Solvency and Liquidity Test immediately after providing the Applicable Financial Assistance and immediately after completing any distribution pursuant to and as otherwise contemplated in the Relevant Documents;

5.3.2

there were no circumstances known to them that might disqualify the Company from being able to satisfy the conditions in sections 44(3) or 45(3) of the Companies Act, or which might otherwise invalidate the resolutions set out below;

5.3.3

the terms under which the Applicable Financial Assistance is proposed to be given are fair and reasonable to the Company; and

5.3.4

all applicable requirements and restrictions in respect of the granting of the financial assistance set out in the Company's memorandum of incorporation will have been satisfied,

and, accordingly that the Company is able to give the Applicable Financial Assistance pursuant to the implementation of the Transaction in accordance with the requirements of sections 44, 45 and 46 of the Companies Act, as applicable.

6. RESOLUTIONS

IT WAS RESOLVED that, subject to the passing of the Shareholders Resolution:

6.1

the board of the Company has acknowledged that it has applied the Solvency and Liquidity Test and reasonably concluded that the Company will satisfy the Solvency and Liquidity Test immediately after providing the Applicable Financial Assistance and immediately after

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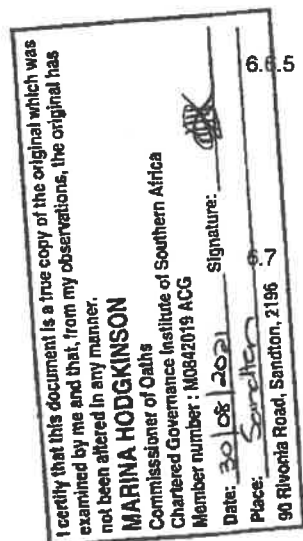
DFA Board Resolution(15630415,3)

completing any distribution pursuant to and as otherwise contemplated in the Relevant Documents and the Transaction;

- 6.2 in accordance with section 44 and 45 of the Companies Act, and also taking into account, inter alia, the effect of the Transaction and the Relevant Documents in relation to the Company, it is recorded that each director of the Company is satisfied that –
- 6.2.1 immediately after the provision by the Company of the Applicable Financial Assistance, the Company will satisfy the Solvency And Liquidity Test;
- 6.2.2 the terms under which the Company is giving the Financial Assistance are fair and reasonable to the Company; and
- 6.2.3 all conditions and restrictions (if any) set out in the Company's Memorandum of Incorporation regarding the granting of the Applicable Financial Assistance have been satisfied;
- 6.3 the Company be and is hereby authorised to give the Applicable Financial Assistance;
- 6.4 to the extent that the entry into and/or implementation of and/or existence of the Relevant Documents constitutes a distribution(s) by the Company as contemplated by section 46 of the Companies Act, the Company be and is hereby authorised to make such distribution(s);
- 6.5 the terms of, and the transactions contemplated by each Relevant Document are approved and that the Company be authorised to enter into the Relevant Documents and all related documents, notices, agreements and/or certificates (each a **related document**) which may be necessary for or incidental to the implementation of those Relevant Documents and/or the Transaction;
- 6.6 any director of the Company, acting individually or jointly, with full power of delegation is authorised to:
- 6.6.1 negotiate, settle and agree the terms of the Relevant Documents and any related documents;
- 6.6.2 agree any amendments, restatements and/or reinstatements to those Relevant Documents or any related document (whether agreed at the same time or at any time after the conclusion of the Relevant Documents or any related document);
- 6.6.3 execute and sign on behalf of the Company, in such form as he or she deems fit, each Relevant Document, any related documents and any amendments, restatements and/or reinstatements thereof;
- 6.6.4 sign and despatch all other documents and notices to be sent by the Company in connection with the Relevant Documents, any related document and any amendments, restatements and/or reinstatements thereof; and
- 6.6.5 take any other action which he or she considers necessary or desirable in connection with the transactions contemplated by the Relevant Documents, any related document and any amendments, restatements and/or reinstatements thereof;

provided that such authorised person shall not have the authority to materially adversely alter the terms of the Applicable Financial Assistance authorised in these resolutions;

to the extent that any director referred to in paragraph 5.1 above exercises any power given to him/her under this paragraph 7 to execute any Relevant Document, any related documents or amendments, restatements and/or reinstatements to such documents, he/she shall be deemed to have been requested to do so by the board;

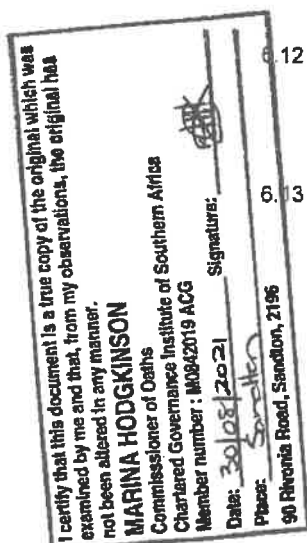


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DFA Board Resolution(15630415.3)

- 6.8 having regard to the pledge and cession to be provided by PrefCo in favour of the Debt Guarantor (the **Pledge and Cession**) pursuant to which PrefCo, amongst other things, pledges and cedes all its shares and claims, from time to time, in the Opco Preferred Shares issued by the Company (the **Shares**) and cedes all of its current and future claims that it may have against the Company, the Company:
- 6.8.1 notes and gives its consent to the transactions contemplated in the Pledge and Cession; and
- 6.8.2 consents to any transfer of the Shares and the related claims pursuant to any enforcement by the Debt Guarantor of its rights under the Pledge and Cession, and
- 6.8.3 authorises any director, acting individually or jointly, with full power of delegation, (A) to sign any documents; and (B) to take any steps, that may be necessary or incidental to give effect to the Pledge and Cession;
- 6.9 as contemplated in article 2.1.2 of the memorandum of incorporation of the Company and subject to the provisions of sections 36(1)(d) and 36(3)(d) of the Companies Act, the Company is hereby authorised to:
- 6.9.1 classify 1 (one) unspecified share as an Opco Preferred Share;
- 6.9.2 attach to the Opco Preferred Share, the rights and privileges set out in Annexe A of these resolutions; and
- 6.9.3 issue the Opco Preferred Share;
- 6.10 the directors hereby confirm that they have determined that the consideration payable for the Opco Preferred Share is adequate consideration to the Company, as contemplated in section 40(1) of the Companies Act;
- 6.11 in terms of sections 36(1)(d) and 36(3)(d) of the Companies Act, the existing memorandum of incorporation of the Company be and is hereby amended with effect from the date of filing of the required notice of amendment at the Companies and Intellectual Property Commission in terms of section 16(9)(b)(i) of the Companies Act by:
- 6.11.1 adding the following new article 2.1.2A directly after article 2.1.2:
- "2.1.2A The Company is further authorised to issue 1 (one) cumulative, redeemable preference share, with no par value, subject to the preferences, rights, limitations and other terms set out in Schedule 1 to this Memorandum of Incorporation, designated an "Opco Preferred Share".;*
and
- 6.11.2 by attaching Annexe A to these resolutions to the memorandum of incorporation as Schedule 1 (Opco Preferred Share Terms);
- 6.12 the Company files a notice of amendment of the memorandum of incorporation with the Companies and Intellectual Property Commission setting out the preferences, rights and limitations attaching to the Opco Preferred Share as determined in accordance with section 36(3)(d) of the Companies Act; and
- 6.13 any director of the Company, acting individually or jointly, be and is hereby authorised on behalf of the Company to do or cause all such things to be done, and to sign all documentation as may be necessary, to give effect to and implement the abovementioned resolutions. Any actions which have thus far been taken by any director of the Company related to the abovementioned resolutions are hereby retrospectively ratified and approved in their entirety.



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KHAYAKAZI THOMAS
EX OFFICIO
COMMISSIONER OF OATHS
PRACTISING ATTORNEY
REPUBLIC OF SOUTH AFRICA
11 ALICE LANE
SANDTON

10/12/2021

DFA Board Resolution(15630415.3)

7. CLOSE

There being no further business the meeting was declared closed.



Name: Alexandra Stratis

Company Secretary

Date: 25 January 2021

15h00

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON

Commissioner of Oaths

Chartered Governance Institute of Southern Africa

Member number : M0842019 ACG

Date: 20/08/2021

Signature: 

Place: Sandton

90 Rivonia Road, Sandton, 2196

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KHAYAKAZI THOMAS
EX OFFICIO
COMMISSIONER OF OATHS
PRACTISING ATTORNEY
REPUBLIC OF SOUTH AFRICA
11 ALICE LANE
SANDTON

10/12/2021

Annexe A


Schedule 1

Opco Preferred Share Terms

1. Each Opco Preferred Share shall have associated with it the preferences, rights, limitations and other terms set out in this **Annexe A**.
2. In this Annexe A –
 - 2.1 **Actual Issuer** means the issuer of a share (i.e. either Dark Fibre Africa Proprietary Limited (**Dark Fibre**) or Vumatel Proprietary Limited (**Vumatel**);
 - 2.2 **Other Issuer** means Dark Fibre in relation to the Share issued by Vumatel and Vumatel in relation to the Share issued by Dark Fibre; and
 - 2.3 **Share** means an Opco Preferred Share.
3. The Share shall not confer any voting rights on its holder.
4. The Share shall be entitled to such dividends as are required, together with the dividends paid by the Other Issuer in respect of the Share issued by it to CIVH PrefCo (RF) Proprietary Limited (the **Issuer**), to enable the Issuer to pay any amounts which the Issuer has contracted to pay in terms of the Preference Share Terms (being the preference share terms attaching to the preference shares issued by the Issuer).
5. On the liquidation of the Actual Issuer the holder of the share shall be entitled to a return of capital (paid out of the assets of the Issuer that remain after all its liabilities have been paid) in an amount of ZAR1-00 (one Rand) whereafter the Share shall not be entitled to any further participation in excess assets.

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON
 Commissioner of Oaths
 Chartered Governance Institute of Southern Africa
 Member number : M0842019 ACG

Date: 30/08/2021 Signature: 

Place: Sandton
 90 Rivonia Road, Sandton, 2196

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 PRACTISING ATTORNEY
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 11 ALICE LANE
 SANDTON

10/12/2021

DARK FIBRE AFRICA PROPRIETARY LIMITED

Registration Number 2007/013968/07

(the Company)

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF THE COMPANY HELD AT
ON**1. ATTENDANCE AND CHAIRMAN**

- 1.1 Marthinus Mulder / Jacques Gryzenhout was elected chairman of the meeting.
- 1.2 It is recorded that each director of the Company has received, or waived the requirement to receive, notice of the matters referred to below and a quorum of directors was present and the meeting could accordingly proceed in accordance with the memorandum of incorporation of the Company and the Companies Act, 2008 (the Companies Act).

	Director	Present
1.	Jakobus Viljoen	✓
2.	Priscilla Ralebitso	✓
3.	Raymond Ndlovu	✓
4.	Marthinus Mulder	✓
5.	Jacques Gryzenhout	✓
6.	Andries Delport	✓

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON
Commissioner of Oaths
Chartered Governance Institute of Southern Africa
Member number : M0842019 ACG

Date: 30/08/2021
Place: Sandton
Signature: [Signature]

90 Rivonia Road, Sandton, 2196

2. BACKGROUND

- 2.1 Community Investment Ventures Holdings Proprietary Limited (the Parent) entered into a preference share subscription agreement in May 2019 pursuant to which the Parent issued certain Class A Preference Shares (the Class A Parent Preference Shares) and Class B Preference Shares (the Class B Parent Preference Shares) to FirstRand Bank Limited (acting through its Rand Merchant Bank division) (RMB).
- 2.2 CIVH PrefCo (RF) Proprietary Limited (PrefCo), a subsidiary of the Parent entered into a preference share subscription agreement with, amongst others, RMB, Absa Bank Limited (acting through its Corporate and Investment Banking division) and Depfin Investments Proprietary Limited (as subscribers) (the PrefCo Subscription Agreement) pursuant to which the subscribers will subscribe for preference shares in PrefCo (the PrefCo Preference Shares).
- 2.3 PrefCo will use the proceeds from the PrefCo Preference Shares to subscribe for preference shares in each of the Company (the DFA Preference Share) and Vumatel Proprietary Limited (Vumatel) (the Vumatel Preference Share and together with the DFA Preference Share, the Opco Preferred Shares). Vumatel and the Company will use the proceeds from the Opco Preferred Shares to repay a portion of the inter-company loans previously advanced by CIVH LoanCo (RF) Proprietary Limited (LoanCo) to Vumatel and the Company.

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SANDTON

10/12/2021


I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON

Commissioner of Oaths

Chartered Governance Institute of Southern Africa

Member number : M0842019 ACG

Date: 30/08/2021 Signature: 

Place: Sandton

90 Rivonia Road, Sandton, 2196

Companies and Intellectual Property Commission
Republic of South Africa

WWB001

Form CoR 15.2

About this Notice

- This notice is issued in terms of Section 16 of the Companies Act, 2008, and Regulation 15 (2) and (3) of the Companies Regulations, 2011
- A notice of amendment must be filed within 10 business days after the amendment has been effected.
- If the amendment has changed the name of the Company, the provisions of the Act and Regulations applicable to company names apply.
- If the amendment has submitted a new memorandum of incorporation in place of the previous one, a copy of the new memorandum must be appended to this Notice.
- The fee for filing this notice is R 250. See item 3 of Table CR2B. A transitional amendment of a pre-existing company, filed in terms of Schedule 5, item 4 (2) is exempt from the fee.

Contacting the Commission

The Companies and Intellectual Property Commission of South Africa

Postal Address
PO Box 429
Pretoria
0001
Republic of South Africa
Tel: 086 100 2472

www.cipc.co.za

Notice of Amendment of Memorandum of Incorporation
13 AUG 2021

Date: _____ Customer Code: WWB001

Concerning:

(Name and Registration Number of Company)

Name: DARK FIBRE AFRICA PROPRIETARY LIMITED

Registration number: 2007/013968/07

The Memorandum of Incorporation of the above named company has been amended in accordance with section 16 of the Companies Act, 2008. In terms of section 16 (9), this amendment is to take effect on -

- ☒ The date that this Notice is filed in the Companies Registry.
- ☐ The date of the amended registration certificate to be issued by the Commission.
- ☐

(Later Date as shown on Notice of Incorporation)

In support of this Notice, the company has attached a copy of the court order, board resolution or special resolution authorising the amendment and -

- ☒ A copy of the amendment to the Memorandum; or
- ☐ A copy of the Memorandum of Incorporation, as amended.

As a result of this amendment, the Memorandum of Incorporation:

- ☒ Has no provision of the type contemplated in section 15 (2) (b) or (c).
- ☐ Has provision of the type contemplated in section 15 (2) (b) or (c) as listed in Annexure A.

(Personal Liability Companies only)

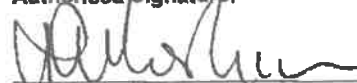
As a result of this amendment, the company:

- ☐ N/A Will remain a personal liability company;
- ☐ N/A Will no longer be a personal liability company, and has complied with the requirements of section 16 (10) by giving advance notice of this filing on _____

Name and Title of person signing on behalf of the Company:

Priscilla Ralebitso

Authorised Signature:



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KHAYAKAZI THOMAS
EX OFFICIO
COMMISSIONER OF OATHS
PRACTISING ATTORNEY
REPUBLIC OF SOUTH AFRICA
11 ALICE LANE
SANDTON

10/12/2021

DARK FIBRE AFRICA PROPRIETARY LIMITED
Registration Number 2007/013968/07

(the Company)

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF THE COMPANY HELD AT
Teams ON 11 August 2021


1. ATTENDANCE AND CHAIRMAN

- 1.1 Marthinus Mulder / Jacques Gryzenhout was elected chairman of the meeting.
- 1.2 It is recorded that each director of the Company has received, or waived the requirement to receive, notice of the matters referred to below and a quorum of directors was present and the meeting could accordingly proceed in accordance with the memorandum of incorporation of the Company and the Companies Act, 2008 (the Companies Act).

	Director	Present
1.	Jakobus Viljoen	✓
2.	Priscilla Ralebitso	✓
3.	Raymond Ndlovu	✓
4.	Marthinus Mulder	✓
5.	Jacques Gryzenhout	✓
6.	Andries Delport	✓

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

MARINA HODGKINSON
 Commissioner of Oaths
 Chartered Governance Institute of Southern Africa
 Member number : M0842019 ACG

Date: 30/08/2021
 Place: Sandton
 Signature: 

2. BACKGROUND

- 2.1 Community Investment Ventures Holdings Proprietary Limited (the Parent) entered into a preference share subscription agreement in May 2019 pursuant to which the Parent issued certain Class A Preference Shares (the Class A Parent Preference Shares) and Class B Preference Shares (the Class B Parent Preference Shares) to FirstRand Bank Limited (acting through its Rand Merchant Bank division) (RMB).
- 2.2 CIVH PrefCo (RF) Proprietary Limited (PrefCo), a subsidiary of the Parent entered into a preference share subscription agreement with, amongst others, RMB, Absa Bank Limited (acting through its Corporate and Investment Banking division) and Depfin Investments Proprietary Limited (as subscribers) (the PrefCo Subscription Agreement) pursuant to which the subscribers will subscribe for preference shares in PrefCo (the PrefCo Preference Shares).
- 2.3 PrefCo will use the proceeds from the PrefCo Preference Shares to subscribe for preference shares in each of the Company (the DFA Preference Share) and Vumatel Proprietary Limited (Vumatel) (the Vumatel Preference Share and together with the DFA Preference Share, the Opco Preferred Shares). Vumatel and the Company will use the proceeds from the Opco Preferred Shares to repay a portion of the inter-company loans previously advanced by CIVH LoanCo (RF) Proprietary Limited (LoanCo) to Vumatel and the Company.

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 11 ALICE LANE
 SANDTON

10/12/2021

DFA Board Resolution(18685095.5)

- 2.4 LoanCo will use the proceeds received from Vumatel and the Company to repay a portion of the inter-company loans previously advanced by PrefCo to LoanCo. PrefCo will use the proceeds received from LoanCo to repay a portion of the inter-company loans previously advanced by the Parent to PrefCo. The Parent will ultimately use these proceeds to redeem the Class A Parent Preference Shares.
- 2.5 The Equity Flow of Funds Agreement will be entered into between LoanCo, the Parent, Vumatel, PrefCo, the Company and FirstRand Bank Limited (acting through its Rand Merchant Bank division) as Funds Flow Bank and the transactions contemplated therein will be implemented.
- 2.6 The Company will enter into the Equity Flow of Funds Agreement and any other agreement/document defined as a "Finance Document" in the PrefCo Subscription Agreement to which the Company is a party (the Relevant Documents and the transactions described in paragraphs 2.1 to 2.5 being the Transaction).
- 2.7 For purposes of the subscription by PrefCo for the DFA Preference Share, the board of directors is required to determine the preferences, rights and limitations of the DFA Preference Share in terms of section 36(3)(d) of the Companies Act.
- 2.8 Accordingly, the board wishes to determine the preferences, rights, limitations and/or other terms attaching to 1 (one) of the preference shares contemplated in article 2.1.2 of the memorandum of incorporation of the Company, as being an Opco Preferred Share, having the preference share terms set out in schedule 1 of the memorandum of incorporation of the Company.

3. CONSIDERATION OF RELEVANT DOCUMENTS

To the extent available, a copy of the Relevant Documents (or the latest version thereof) has been provided to all the directors of the Company for consideration. Each director of the Company confirms, by his/her signature hereto, that he/she has considered the terms of, and the transactions contemplated by, the Transaction, and that he/she considers it to be in the interest of the Company's business and to the commercial benefit and advantage of the Company to enter into the Relevant Documents.

4. PERSONAL FINANCIAL INTERESTS

4.1 It is recorded that:

- 4.1.1 each of Jakobus Viljoen, Priscilla Ralebitso, Andries Delpont and Raymond Ndlovu disclosed, or has previously disclosed, that (i) he/she is also a director (as defined in section 75 of the Companies Act) of Prefco and/or Vumatel (Conflicted Companies) and accordingly, for the purposes of s75 of the Companies Act, such Conflicted Companies constitute a related person to him/her; and that (ii) by the Company's issuance of the DFA Preference Shares, such Conflicted Companies have a personal financial interest (as defined in the Companies Act) in the matters to be considered at the meeting; and

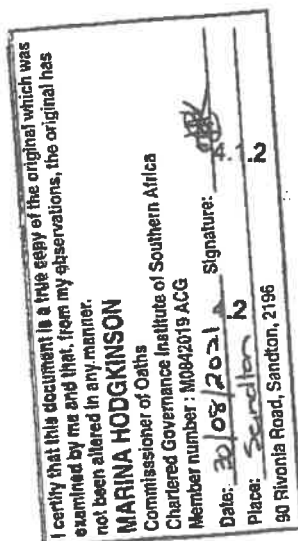
save as set out above, each director of the Company confirmed that he/she does not have, and is not aware of any related person to him/her having, any personal financial interests as contemplated in section 75 of the Companies Act which are required to be disclosed in terms of such section.

It is further recorded that each of Jakobus Viljoen, Priscilla Ralebitso, Andries Delpont and Raymond Ndlovu were requested to disclose to the meeting their observations and/or pertinent insights relating to the Transaction, and that each of such directors of the Company confirmed that he/she has considered the terms of, and the transactions contemplated by, the Transaction, and that had he/she been permitted under the

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KHAYAKAZI THOMAS**

**EX OFFICIO
COMMISSIONER OF OATHS
PRACTISING ATTORNEY
REPUBLIC OF SOUTH AFRICA
11 ALICE LANE
SANDTON**

10/12/2021



Companies Act to vote on the resolutions to be considered at the meeting, he/she would have voted in favour of the conclusion of the Transaction.

- 4.3 In accordance with section 75(5) of the Companies Act Jakobus Viljoen, Priscilla Ralebitso, Andries Delpont and Raymond Ndlovu left the meeting and took no further part in consideration of the matters considered at the meeting.

5. FINANCIAL ASSISTANCE AND DISTRIBUTIONS

5.1 General

- 5.1.1 It is noted that the Transaction together with the Relevant Documents contemplate the Company giving "financial assistance" within the meaning of section 44 and/or section 45 of the Companies Act to a related or inter-related company or corporation, (collectively the Applicable Financial Assistance); and/or making a "distribution" within the meaning of section 46 of the Companies Act.

- 5.1.2 Each director of the Company, by his/her signature hereto, confirms that he/she is aware that:

- (a) under the Companies Act the giving of unlawful financial assistance may result in some or part of the Relevant Documents being void to the extent inconsistent with sections 44 and/or 45 of the Companies Act, and personal liability for directors of the Company;
- (b) the giving of financial assistance would not be invalid if the requirements provided under sections 44 and 45 (as applicable) of the Companies Act were complied with;
- (c) under sections 44(3) and 45(3) of the Companies Act, the Company may provide financial assistance, if:
 - (i) the financial assistance is given pursuant to a special resolution of its shareholder(s) adopted within the previous 2 years which approved the financial assistance either for the specific recipient, or generally for a category of potential recipients (and the specific recipient falls within that category);
 - (ii) the board of directors of the Company is satisfied that (A) Immediately after providing the financial assistance, the Company would satisfy the solvency and liquidity test, as contemplated in section 4 of the Companies Act (the Solvency and Liquidity Test); and (B) the terms under which the financial assistance is proposed to be given are fair and reasonable to the Company;
- (d) under sections 44(4) and 45(4) of the Companies Act, the Company may only provide financial assistance, if and in addition to satisfying the requirements set out in sections 44(3) and 45(3) (as the case may be) of the Companies Act, the board of directors of the Company is satisfied that any condition or restriction on the granting of financial assistance in the memorandum of incorporation of the Company has been satisfied;
- (e) under section 46(1) of the Companies Act, the Company may not make a distribution (as defined in section 1 of the Companies Act), unless (i) the board of directors of the Company has, by ordinary resolution, authorised such distribution; (ii) it reasonably appears that the Company will satisfy the Solvency and Liquidity Test immediately after completing the proposed distribution; and (iii) the board of directors of the Company has, by ordinary

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MARINA HODGKINSON
 Commissioner of Oaths
 Chartered Governance Institute of Southern Africa
 Member number : M0842019 ACG

Date: 22/08/2021
 Place: Sandton
 90 Rivonia Road, Sandton, 2196

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 PRACTISING ATTORNEY
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 11 ALICE LANE
 SANDTON

10/12/2021

resolution, acknowledged that it has applied the Solvency and Liquidity Test and has reasonably concluded that the Company will satisfy the Solvency and Liquidity Test immediately after completing the proposed distribution.

5.2 Special Resolutions by shareholders

It is recorded that the shareholders of the Company passed a special resolution, on or about 25 January 2021, authorising, for all purposes required in terms of sections 44 and/or 45 (as the case may be) of the Companies Act, amongst other things, the granting of financial assistance by the Company as contemplated in sections 44 and/or 45 of the Companies Act, as applicable.

5.3 Solvency and Liquidity Test and other requirements

Having carefully considered all relevant information, the directors confirm by their signature hereto that:

5.3.1 they have applied the Solvency and Liquidity Test and are satisfied that the Company will satisfy the Solvency and Liquidity Test immediately after providing the Applicable Financial Assistance and immediately after completing any distribution within the meaning of section 46 of the Companies Act pursuant to and as otherwise contemplated in the Relevant Documents;

5.3.2 there were no circumstances known to them that might disqualify the Company from being able to satisfy the conditions in sections 44(3) or 45(3) of the Companies Act, or which might otherwise invalidate the resolutions set out below;

5.3.3 the terms under which the Applicable Financial Assistance is proposed to be given are fair and reasonable to the Company; and

all applicable requirements and restrictions in respect of the granting of the financial assistance set out in the Company's memorandum of incorporation have been satisfied,

and, accordingly that the Company is able to give the Applicable Financial Assistance and/or make any distribution within the meaning of section 46 of the Companies Act pursuant to the Relevant Documents and/or the implementation of the Transaction in accordance with the requirements of sections 44, 45 and 46 of the Companies Act, as applicable.

6. RESOLUTIONS

IT WAS RESOLVED that:

6.1 the board of the Company has acknowledged that it has applied the Solvency and Liquidity Test and reasonably concluded that the Company will satisfy the Solvency and Liquidity Test immediately after providing the Applicable Financial Assistance and immediately after completing any distribution pursuant to and as otherwise contemplated in the Relevant Documents and the Transaction;

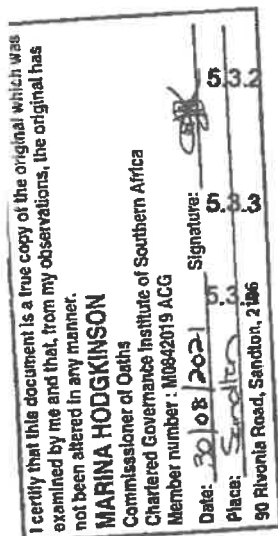
6.2 in accordance with section 44 and 45 of the Companies Act, and also taking into account, inter alia, the effect of the Transaction and the Relevant Documents in relation to the Company, it is recorded that each director of the Company is satisfied that –

6.2.1 immediately after the provision by the Company of the Applicable Financial Assistance, the Company will satisfy the Solvency and Liquidity Test;

6.2.2 the terms under which the Company is giving the Financial Assistance are fair and reasonable to the Company; and

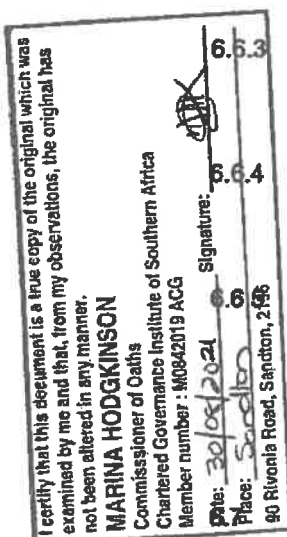
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PRACTISING ATTORNEY
REPUBLIC OF SOUTH AFRICA
11 ALICE LANE
SANDTON

10/17/2021



DFA Board Resolution(16885095.5)

- 6.2.3 all conditions and restrictions (if any) set out in the Company's Memorandum of Incorporation regarding the granting of the Applicable Financial Assistance have been satisfied;
- 6.3 the Company be and is hereby authorised to give the Applicable Financial Assistance;
- 6.4 to the extent that the entry into and/or implementation of and/or existence of the Relevant Documents constitutes a distribution(s) by the Company as contemplated by section 46 of the Companies Act, the Company be and is hereby authorised to make such distribution(s);
- 6.5 the terms of, and the transactions contemplated by each Relevant Document are approved and that the Company be authorised to enter into the Relevant Documents and all related documents, notices, agreements and/or certificates (each a related document) which may be necessary for or incidental to the implementation of those Relevant Documents and/or the Transaction;
- 6.6 any director of the Company, acting individually or jointly, with full power of delegation is authorised to:
- 6.6.1 negotiate, settle and agree the terms of the Relevant Documents and any related documents;
- 6.6.2 agree any amendments, restatements and/or reinstatements to those Relevant Documents or any related document (whether agreed at the same time or at any time after the conclusion of the Relevant Documents or any related document);
- 6.6.3 execute and sign on behalf of the Company, in such form as he or she deems fit, each Relevant Document, any related documents and any amendments, restatements and/or reinstatements thereof;
- 6.6.4 sign and despatch all other documents and notices to be sent by the Company in connection with the Relevant Documents, any related document and any amendments, restatements and/or reinstatements thereof; and
- 6.6.5 take any other action which he or she considers necessary or desirable in connection with the transactions contemplated by the Relevant Documents, any related document and any amendments, restatements and/or reinstatements thereof,
- provided that such authorised person shall not have the authority to materially adversely alter the terms of the Applicable Financial Assistance authorised in these resolutions;
- to the extent that any director referred to in paragraph 5.1 above exercises any power given to him/her under this paragraph 6 to execute any Relevant Document, any related documents or amendments, restatements and/or reinstatements to such documents, he/she shall be deemed to have been requested to do so by the board;
- 6.8 as contemplated in article 2.1.2 of the memorandum of incorporation of the Company and subject to the provisions of sections 36(1)(d) and 36(3)(d) of the Companies Act, the Company is hereby authorised to:
- 6.8.1 classify 1 (one) unspecified share as an Opco Preferred Share;
- 6.8.2 attach to the Opco Preferred Share, the rights and privileges set out in schedule 1 of the memorandum of incorporation of the Company; and
- 6.8.3 issue the Opco Preferred Share referred to in paragraph 6.8.1 above to PrefCo;



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 EX OFFICIO
 COMMISSIONER OF OATHS/
 PRACTISING ATTORNEY
 REPUBLIC OF SOUTH AFRICA
 11 ALICE LANE
 SANDTON


10/12/2021

DFA Board Resolution(10685085.5)

- 6.9 the directors hereby confirm that they have determined that the consideration payable for the Opco Preferred Share is adequate consideration to the Company, as contemplated in section 40(1) of the Companies Act; and
- 6.10 in terms of sections 36(1)(d) and 36(3)(d) of the Companies Act, the existing memorandum of incorporation of the Company be and is hereby amended with effect from the date of filing of the required notice of amendment at the Companies and Intellectual Property Commission in terms of section 16(9)(b)(i) of the Companies Act by deleting article 2.1.2A in its entirety and replacing it with a new article 2.1.2A as follows:
- "2.1.2A The Company is further authorised to issue 2 (two) cumulative, redeemable preference shares, with no par value, subject to the preferences, rights, limitations and other terms set out in Schedule 1 to this Memorandum of Incorporation, designated an "Opco Preferred Share".; and**
- 6.11 the Company files a notice of amendment of the memorandum of incorporation with the Companies and Intellectual Property Commission setting out the preferences, rights and limitations attaching to the Opco Preferred Share as determined in accordance with section 36(3)(d) of the Companies Act; and
- 6.12 any director of the Company, acting individually or jointly, be and is hereby authorised on behalf of the Company to do or cause all such things to be done, and to sign all documentation as may be necessary, to give effect to and implement the abovementioned resolutions. Any actions which have thus far been taken by any director of the Company related to the abovementioned resolutions are hereby retrospectively ratified and approved in their entirety.

7. CLOSE


There being no further business the meeting was declared closed.



Name: Alexandra Stratis

Company Secretary

Date:

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.	
MARINA HODGKINSON	
Commissioner of Oaths	
Chartered Governance Institute of Southern Africa	
Member number : M0842019 ACG	
Date: 30/08/2021	Signature: 
Place: Sandton	
90 Rivonia Road, Sandton, 2196	

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KHAYAKAZI THOMAS
 EX OFFICIO
COMMISSIONER OF OATHS
 PRACTISING ATTORNEY
 REPUBLIC OF SOUTH AFRICA
 11 ALICE LANE
 SANDTON


10/12/2021

DFA Board Resolution(18685085.5)

- 6.9 the directors hereby confirm that they have determined that the consideration payable for the Opco Preferred Share is adequate consideration to the Company, as contemplated in section 40(1) of the Companies Act; and
- 6.10 in terms of sections 36(1)(d) and 36(3)(d) of the Companies Act, the existing memorandum of incorporation of the Company be and is hereby amended with effect from the date of filing of the required notice of amendment at the Companies and Intellectual Property Commission in terms of section 16(9)(b)(i) of the Companies Act by deleting article 2.1.2A in its entirety and replacing it with a new article 2.1.2A as follows:
- "2.1.2A The Company is further authorised to issue 2 (two) cumulative, redeemable preference shares, with no par value, subject to the preferences, rights, limitations and other terms set out in Schedule 1 to this Memorandum of Incorporation, designated an "Opco Preferred Share".; and*
- 6.11 the Company files a notice of amendment of the memorandum of incorporation with the Companies and Intellectual Property Commission setting out the preferences, rights and limitations attaching to the Opco Preferred Share as determined in accordance with section 36(3)(d) of the Companies Act; and
- 6.12 any director of the Company, acting individually or jointly, be and is hereby authorised on behalf of the Company to do or cause all such things to be done, and to sign all documentation as may be necessary, to give effect to and implement the abovementioned resolutions. Any actions which have thus far been taken by any director of the Company related to the abovementioned resolutions are hereby retrospectively ratified and approved in their entirety.

7. CLOSE


There being no further business the meeting was declared closed.



Name: Alexandra Stratis

Company Secretary

Date: 11 August 2021, 11:00

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.	
MARINA HODGKINSON	
Commissioner of Oaths	
Chartered Governance Institute of Southern Africa	
Member number : M0842019 ACG	
Date: 30/08/2021	Signature: 
Place: Sandton	
90 Rivonia Road, Sandton, 2196	

CERTIFIED A TRUE COPY OF THE ORIGINAL
KHAYAKAZI THOMAS
 EX OFFICIO
 COMMISSIONER OF OATHS
 PRACTISING ATTORNEY
 REPUBLIC OF SOUTH AFRICA
 11 ALICE LANE
 SANDTON

10/12/2021

Appendix 5.3.3 of FORM G

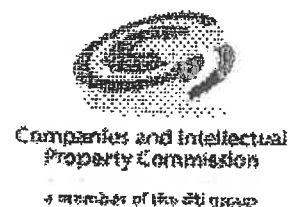
Attach certified copies of the transferee's certificate of incorporation and memorandum and articles of association or other constitutive and/or other governing documents of the transferee (e.g. memorandum and articles of association, association agreement, constitution.

I certify that this document is a true copy of the original which was examined by me and that from my observations, the original has not been altered in any manner.

Hakame

 HERMANN BRIAN MALCOMESS
 ATTORNEY RSA
 6TH FLOOR, 61 KATHERINE STREET
 SANDTON 2196

Date: 10/12/2020



COMPANIES AND INTELLECTUAL PROPERTY COMMISSION REPUBLIC OF SOUTH AFRICA

FORM COR 14.3 - REGISTRATION CERTIFICATE

Issue date: 20/10/2020
 Print date: 20/10/2020
 Customer code: GILVDM
 Tracking number: 112000642

Concerning

BUSINESS VENTURE INVESTMENTS NO 2213 (Pty) Ltd 2020/810311/07

The above company has been registered in terms of section 14 of the Companies Act, 2008.

In accordance with the Notice of Incorporation, the registration of the company takes effect on 20/10/2020.

In conjunction with this certificate, the Commission has not issued another notice contemplated in section 12 (3).

Commissioner: CIPC

TMO TMO

About this Notice

This Notice is issued in terms of section 14 of the Companies Act, 2008, and Regulation 14 of the Companies Regulations, 2011. If the Commission has altered the name of the company, in terms of section 14 (2) (b), the company may file an amended Notice of Incorporation to change the name. If the Commission has issued a Notice of a Potentially Contested Name in conjunction with the Certificate, the company must serve that Notice on each person identified in the Notice, and any such person has the right to challenge the use of the name, by the company.

The Companies and Intellectual Property Commission of South Africa
 P.O. Box 429, Pretoria, 0001, Republic of South Africa
 Docex 256, Pretoria
 Contact centre 086 100 2472
 www.cipc.co.za



**Certificate issued by the Companies and Intellectual Property Commission
on Tuesday, October 20, 2020 08:56
Registration Certificate**



**Companies and Intellectual
Property Commission**
a member of the SAG group

Registration number	2020 / 810311 / 07
Enterprise name	BUSINESS VENTURE INVESTMENTS NO 2213 (PTY) LTD
Enterprise shortened name	NOT APPLICABLE
Enterprise translated name	NOT APPLICABLE
Registration date	20/10/2020
Business start date	20/10/2020
Enterprise type	PRIVATE COMPANY
Enterprise status	IN BUSINESS
Financial year end	FEBRUARY
Type of MOI	NON-STANDARD (COR15.1B)
Main business/main object	NO RESTRICTION ON BUSINESS ACTIVITIES
Postal address	GMI HOUSE 164 TOTUIS STREET GROENKLOOF 0027
Address of registered office	GMI HOUSE 164 TOTUIS STREET GROENKLOOF 0027

I certify that this document is a true copy of the
original which was examined by me and that
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altered in any manner.

Hermann

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ATTORNEY RSA
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SANDTON 2196

Date: 10/12/2021

The Companies and Intellectual Property Commission of South Africa
P.O. Box 429, Pretoria, 0001, Republic of South Africa
Docex 256, Pretoria
Contact centre 086 100 2472
www.cipc.co.za



**Certificate issued by the Companies and Intellectual Property Commission
on Tuesday, October 20, 2020**

Registration Certificate



Registration number 2020/810311/07
Enterprise name BUSINESS VENTURE INVESTMENTS NO 2213 (PTY) LTD

Auditors

Directors

Surname and first names	Status	ID number or date of birth	Director type	Appointment date	Addresses
VAN STADEN, WILHELMINA LOUISA	ACTIVE	6012050097087	DIRECTOR	20/10/2020	Postal P O BOX 619, PRETORIA, 0001 Residential PLOT 334, DERDEPOORT, PRETORIA, 0035

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Date: 10/12/2021

The Companies and Intellectual Property Commission of South Africa
P.O. Box 429, Pretoria, 0001, Republic of South Africa
Docex 258, Pretoria
Contact centre 086 100 2472
www.cipc.co.za



GILVDM

**THE COMPANIES ACT, NO. 71 OF 2008
(AS AMENDED)**

MEMORANDUM OF INCORPORATION

OF

**BUSINESS VENTURE INVESTMENTS NO 2213 PROPRIETARY
LIMITED**

A PRIVATE COMPANY

REGISTRATION NUMBER: 2020/810311/07

REGISTRATION DATE: 20 October 2020

I certify that this document is a true copy of the original which was examined by me and that, from my observations, the original has not been altered in any manner.

Hermann

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ATTORNEY RSA
6TH FLOOR, 61 KATHERINE STREET
SANDTON 2196

Date: 10/12/2020.....

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[Date]

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SCHEDULES

SCHEDULE "1" : ADDITIONAL CLASSES OF SHARES

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.....
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1

1 INTERPRETATION

Date: 10/12/2021

- 1.1 In this Memorandum of Incorporation, unless the context clearly indicates a contrary intention, the following words and expressions bear the meanings assigned to them and cognate expressions bear corresponding meanings –
- 1.1.1 "Act" means the Companies Act, No. 71 of 2008, as amended, consolidated or re-enacted from time to time, and includes all Schedules to such Act and the Regulations;
- 1.1.2 "Board" means the board of Directors from time to time of the Company or if there is only one Director, then that Director;
- 1.1.3 "Commission" means the Companies and Intellectual Property Commission established by section 185;
- 1.1.4 "Company" means the company named on the first page of this document, duly incorporated under the registration number endorsed thereon;
- 1.1.5 "Director" means a member of the Board as contemplated in section 66, or an alternate director, and includes any person occupying the position of a director or alternate director, by whatever name designated;
- 1.1.6 "Disposal" or "disposal" means, in the context of a disposal of a Share –
- 1.1.6.1 the transfer of all or any rights making up such Share to any other person for his benefit and/or for the benefit of others, whether such transfer is effected pursuant to a sale, exchange, donation, distribution *in specie* or otherwise; or
- 1.1.6.2 any other transaction or event whereby such Share becomes beneficially owned by someone other than the person who was the beneficial holder thereof immediately prior to such transaction or event taking place; or
- 1.1.6.3 granting, creating or allowing the Encumbrance of such Share,

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and "**dispose**" means to bring about a disposal within the meaning of this definition; Date: 10/12/2021

- 1.1.7 "**Electronic Communication**" has the meaning set out in section 1 of the Electronic Communications and Transactions Act, No 25 of 2002;
- 1.1.8 "**Encumbrance**" means any right of first refusal, purchase right, option or any other restriction of any kind on ownership, transfer, use, possession, receipt of income from or any other exercise of any attribute of ownership, including any mortgage, pledge, lien or other security interest;
- 1.1.9 "**Equity**" means, in relation to any Shareholder, the Shares held by such Shareholder plus the Loan Claims (if any) of such Shareholder; and if a Shareholder does not have any Loan Claims, each reference in this Memorandum of Incorporation to the Equity of such Shareholder shall mean the Shares held by such Shareholder;
- 1.1.10 "**Loan Claims**" means any claims which a Shareholder has against the Company for the payment of any amount in respect of any monies lent to the Company by that Shareholder in its capacity as a Shareholder, including any accrued interest thereon or in respect thereof;
- 1.1.11 "**Regulations**" means the regulations published in terms of the Act from time to time;
- 1.1.12 "**Republic**" means the Republic of South Africa;
- 1.1.13 "**Rules**" means any rules made in respect of the Company from time to time as contemplated in section 15(3) to (5) of the Act and clause 41 hereof;
- 1.1.14 "**Securities**" means any Shares, debentures or other instruments, irrespective of their form or title, issued or authorised to be issued by the Company;
- 1.1.15 "**Securities Register**" means the register contemplated in section 50(1) of the Act and referred to in clause 8.9 hereof;

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- 1.1.16 "Share" means one of the units into which the proprietary interest in the Company is divided;
- 1.1.17 "Shareholder" means the holder of a Share and who is entered as such in the Securities Register, subject to the provisions of section 57;
- 1.1.18 "Shareholders Agreement" means any signed written agreement or signed written agreements in force from time to time between all the Shareholders and the Company in terms of which the rights and obligations of the Shareholders amongst themselves (in their capacities as Shareholders) are regulated and in terms of which the relationship between each Shareholder and the Company is regulated; and
- 1.1.19 "Solvency and Liquidity Test" has the meaning attributed thereto in section 4.
- 1.2 In this Memorandum of Incorporation, unless the context clearly indicates otherwise –
- 1.2.1 words and expressions defined in the Act and which are not defined herein shall have the meanings given to them in the Act;
- 1.2.2 a reference to a section by number refers to the corresponding section of the Act notwithstanding the renumbering of such section after the date on which the Company is incorporated;
- 1.2.3 in any instance where there is a conflict between a provision (be it expressed, implied or tacit) of this Memorandum of Incorporation and –
- 1.2.3.1 a provision of any Shareholders Agreement, the provision of this Memorandum of Incorporation shall prevail to the extent of the conflict;
- 1.2.3.2 an alterable or elective provision of the Act, the provision of this Memorandum of Incorporation shall prevail to the extent of the conflict; and
- 1.2.3.3 an unalterable or non-elective provision of the Act, the unalterable or non-elective provision of the Act shall prevail to the extent of the

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conflict;

Date: 10/12/2021

- 1.2.4 clause headings are for convenience only and are not to be used in its interpretation;
- 1.2.5 an expression which denotes -
 - 1.2.5.1 any gender includes the other genders;
 - 1.2.5.2 a natural person includes a juristic person and *vice versa*; and
 - 1.2.5.3 the singular includes the plural and *vice versa*.
- 1.2.6 if the due date for performance of any obligation in terms of this Memorandum of Incorporation is a day which is not a business day then (unless otherwise stipulated), the due date for performance of the relevant obligation shall be the immediately succeeding business day;
- 1.2.7 any words or expressions defined in any clause shall, unless the application of any such word or expression is specifically limited to that clause, bear the meaning assigned to such word or expression throughout the whole of this Memorandum of Incorporation;
- 1.2.8 any reference to a notice shall be construed as a reference to a written notice, and shall include a notice which is transmitted electronically in a manner and form permitted in terms of the Act and/or the Regulations.
- 1.3 Any reference in this Memorandum of Incorporation to -
 - 1.3.1 "days" shall be construed as calendar days unless qualified by the word "business", in which instance a "business day" will be any day other than a Saturday, Sunday or public holiday as gazetted by the government of the Republic from time to time;
 - 1.3.2 "law" means any law of general application and includes the common law and any statute, constitution, decree, treaty, regulation, directive, ordinance, by-law, order or any other enactment of legislative measure of government (including local and provincial government) statutory or regulatory body which has the force of law and a reference to any

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statutory enactment shall be construed as a reference to that enactment as amended or substituted from time to time;

- 1.3.3 "writing" means legible writing and in English and includes printing, typewriting, lithography or any other mechanical process, as well as any electronic communication in a manner and a form permitted in terms of the Act and/or the Regulations.
- 1.4 The words "include" and "including" mean "include without limitation" and "including without limitation". The use of the words "include" and "including" followed by a specific example or examples shall not be construed as limiting the meaning of the general wording preceding it.
- 1.5 Unless otherwise provided in this Memorandum of Incorporation or the Act, defined terms appearing herein in title case shall be given their meaning as defined, while the same terms appearing in lower case shall (except where defined in the Act) be interpreted in accordance with their plain English meaning.
- 1.6 Where a particular number of business days is provided for between the happening of one event and another, the number of days must be calculated by excluding the day on which the first event occurs and including the day on which or by which the second event is to occur.
- 1.7 Where figures are referred to in numerals and in words, and there is any conflict between the two, the words shall prevail, unless the context indicates a contrary intention.
- 1.8 Any reference herein to "**this Memorandum of Incorporation**" shall be construed as a reference to this Memorandum of Incorporation as amended from time to time.
- 1.9 Whenever any person is required to act "*as an expert and not as an arbitrator*" in terms of this Memorandum of Incorporation, then –
- 1.9.1 the determination of the expert shall (in the absence of manifest error) be final and binding;
- 1.9.2 subject to any express provision to the contrary, the expert shall

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Date: 10/12/2021

determine the liability for his or its charges, which shall be paid accordingly;

- 1.9.3 the expert shall be entitled to determine such methods and processes as he or it may, in his or its sole discretion, deem appropriate in the circumstances provided that the expert may not adopt any process which is manifestly biased, unfair or unreasonable;
- 1.9.4 the expert shall consult with the relevant parties (provided that the extent of the expert's consultation shall be in his or its sole discretion) prior to rendering a determination; and
- 1.9.5 having regard to the sensitivity of any confidential information, the expert shall be entitled to take advice from any person considered by him or it to have expert knowledge with reference to the matter in question.

2 JURISTIC PERSONALITY

- 2.1 The Company is incorporated as a private company, as defined in the Act, and has juristic personality from the date and time that the incorporation of the Company is registered, as stated in its Registration Certificate and as contemplated in section 19(1).
- 2.2 The Company is incorporated in accordance with and governed by –
 - 2.2.1 the unalterable provisions of the Act; and
 - 2.2.2 the alterable provisions of the Act, subject to the limitations, extensions, variations or substitutions set out in this Memorandum of Incorporation;
 - 2.2.3 the other provisions of this Memorandum of Incorporation; and
 - 2.2.4 its Rules, if any.

3 PRIVATE COMPANY PROVISIONS

The Company is a private company, and accordingly –

- 3.1 the transferability of the Securities of the Company is restricted as provided in this Memorandum of Incorporation; and

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Date: 16/12/2021 any offer to the public to subscribe for any Securities of the Company is prohibited.

4 LIMITATION OF LIABILITY

No person shall, solely by reason of being an incorporator, Shareholder or Director of the Company, be liable for any liabilities or obligations of the Company.

5 POWERS OF THE COMPANY

5.1 Subject to the provisions of clause 6 (to the extent applicable), the Company has all of the legal powers and capacity contemplated in the Act, and no provision contained in this Memorandum of Incorporation should be interpreted or construed as negating, limiting, or restricting those powers in any way whatsoever.

5.2 Except to the extent that clause 6 provide otherwise, the legal powers and capacity of the Company are not subject to any restrictions, limitations or qualifications, as contemplated in section 19(1)(b)(ii).

6 SPECIAL CONDITIONS

This Memorandum of Incorporation does not contain any special conditions applicable to the Company as contemplated in section 15(2)(b) or (c).

7 APPLICATION OF OPTIONAL PROVISIONS OF THE ACT

7.1 The Company does not elect, in terms of section 34(2), to comply voluntarily with the extended accountability provisions set out in Chapter 3 of the Act.

7.2 The Company, being a private company, does not elect in terms of section 118(1)(c)(ii) to submit voluntarily to the provisions of Parts B and C of Chapter 5 of the Act and to the Takeover Regulations provided for in the Act.

8 SHARES

8.1 The Company is authorised to issue –

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Date: *10/12/2021*

8.1.1

5,000 (five thousand) ordinary Shares, of the same class, each of which entitles the holder to –

8.1.1.1

vote on any matter to be decided by the Shareholders of the Company and to 1 (one) vote in the case of a vote by means of a poll;

8.1.1.2

participate proportionally in any distribution made by the Company; and

8.1.1.3

receive proportionally the net assets of the Company upon its liquidation;

8.1.2

such number of each of such further classes of Shares, if any, as are set out in Schedule 1 hereto subject to the preferences, rights, limitations and other terms associated with each such class set out therein.

8.2

The Board may, subject to clause 8.3, resolve to issue Shares of the Company at any time, but only within the classes and to the extent that those Shares have been authorised by or in terms of this Memorandum of Incorporation.

8.3

Notwithstanding the provisions of clause 8.2, any issue of Shares, Securities convertible into Shares, or rights exercisable for Shares in a transaction, or a series of integrated transactions shall, in accordance with the provisions of section 41(3), require the approval of the Shareholders by special resolution if the voting power of the class of Shares that are issued or are issuable as a result of the transaction or series of integrated transactions will be equal to or exceed 30% (thirty percent) of the voting power of all the Shares of that class held by Shareholders immediately before that transaction or series of integrated transactions.

8.4

The authorisation and classification of Shares, the numbers of authorised Shares of each class, and the preferences, rights, limitations and other terms associated with each class of Shares as set out in this Memorandum of Incorporation may be changed only by an amendment of this Memorandum of Incorporation by special resolution of the Shareholders.

8.5

The Board shall not have the power to –

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Date: 16/12/2021 increase or decrease the number of authorised Shares of any class of the Company's Shares; or

8.5.2 reclassify any classified Shares that have been authorised but not issued; or

8.5.3 classify any unclassified Shares that have been authorised but not issued; or

8.5.4 determine the preferences, rights, limitations or other terms of any Shares,

and such powers shall only be capable of being exercised by the Shareholders by way of special ordinary resolution of the Shareholders.

8.6 Save to the extent –

8.6.1 that any such right is specifically included as one of the rights, preferences or other terms upon which any class of Shares is issued; or

8.6.2 otherwise provided in this Memorandum of Incorporation,

no Shareholder shall have any pre-emptive or other similar preferential right to be offered or to subscribe for any additional Shares issued by the Company.

8.7 Each Share issued by the Company has associated with it an irrevocable right of the Shareholder to vote on any proposal to amend the preferences, rights, limitations and other terms associated with that Share.

8.8 Securities of the Company are to be issued in certificated or uncertificated form, as shall be determined by the Board from time to time.

8.9 The Company must establish or cause to be established a register of its issued Securities in the form prescribed by the Act and the Regulations and maintain such register in accordance with the prescribed standards.

8.10 As soon as practicable after issuing any Securities the Company must enter or cause to be entered in its Securities Register, in respect of every class of Securities it has issued –

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Date: *10/12/2021*
8.10.1

the total number of those Securities that are held in uncertificated form;

8.10.2 with respect to certificated Securities –

8.10.2.1 the names and addresses of the persons to whom the Securities
were issued;

8.10.2.2 the number of Securities issued to each of them;

8.10.2.3 the number of, and prescribed circumstances relating to, any
Securities that have been placed in trust as contemplated in
section 40(6)(d) or whose transfer has been restricted;

8.10.2.4 in the case of Securities other than Shares as contemplated in
section 43, the number of those Securities issued and outstanding, or
the names and addresses of the registered owners of the Securities
and any holders of beneficial interests therein; and

8.10.2.5 any other prescribed information.

8.11 The Securities Register maintained in accordance with the Act shall be
sufficient proof of the facts recorded in it, in the absence of evidence to the
contrary.

8.12 Unless all the Shares rank equally for all purposes, the Shares, or each
class of Shares, and any other Securities, must be distinguished by an
appropriate numbering system;

8.13 A certificate evidencing any certificated Securities of the Company –

8.13.1 must state on its face –

8.13.1.1 the name of the Company;

8.13.1.2 the name of the person to whom the Securities were issued;

8.13.1.3 the number and class of Shares and designation of the series, if any,
evidenced by that certificate; and

8.13.1.4 any restriction on the transfer of the Securities evidenced by that

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Date: 10/12/2021 certificate;

- 8.13.2 must be signed by 2 (two) persons authorised by the Board, which signatures may be affixed or placed on the certificate by autographic, mechanical or electronic means;
- 8.13.3 is proof that the named Security holder owns the Securities, in the absence of evidence to the contrary.
- 8.14 A certificate remains valid despite the subsequent departure from office of any person who signed it.
- 8.15 If, as contemplated in clause 8.12, all of the Shares rank equally for all purposes, and are therefore not distinguished by a numbering system –
- 8.15.1 each certificate issued in respect of those Shares must be distinguished by a numbering system; and
- 8.15.2 if the Share has been transferred, the certificate must be endorsed with a reference number or similar device that will enable each preceding holder of the Share in succession to be identified,

provided that in terms of Schedule 5 of the Act, if the Company is a pre-existing company (as defined in the Act), the failure of any Share certificate to satisfy the provisions of clauses 8.13 to 8.15 is not a contravention of the Act and does not invalidate that certificate.

9 TRANSFER OF SECURITIES

- 9.1 The instrument of transfer of any Security shall be signed by both the transferor and the transferee and the transferor shall be deemed to remain the holder of such Security until the name of the transferee is entered in the Securities Register. The Directors may, however, in their discretion dispense with the signature of the transferee in such cases as they deem fit.
- 9.2 Securities transfer tax and other legal costs payable in respect of any transfer of Securities pursuant to this Memorandum of Incorporation will be paid by the Company to the extent that the Company is liable therefor in


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Date: 10/12/2021 law, but shall, to that extent, be recoverable from the person acquiring such Securities.

- 9.3 Subject to such restrictions as may be applicable (whether by virtue of the preferences, rights, limitations or other terms associated with the Securities in question), and particularly to the provisions of this clause 9 and clause 10, any Shareholder or holder of other Securities may transfer all or any of its Shares or other Securities by instrument in writing in any usual or common form or any other form which the Directors may approve.
- 9.4 Every instrument of transfer shall be delivered to the principal place of business of the Company, accompanied by –
- 9.4.1 the certificate issued in respect of the Securities to be transferred; and/or
- 9.4.2 such other evidence as the Company may require to prove the title of the transferor, or his or her right to transfer the Securities.
- 9.5 All authorities to sign transfer deeds granted by holders of Securities for the purpose of transferring Securities which may be lodged, produced or exhibited with or to the Company or its registered office shall, as between the Company and the grantor of such authorities, be taken and deemed to continue and remain in full force and effect, and the Company may allow the same to be acted upon until such time as express notice in writing of the revocation of the same shall have been given and lodged at such of the Company's offices at which the authority was first lodged, produced or exhibited. Even after the giving and lodging of such notice, the Company shall be entitled to give effect to any instruments signed under the authority to sign and certified by any officer of the Company as being in order before the giving and lodging of such notice.
- 9.6 All instruments of transfer, when registered, shall either be retained by the Company or disposed of in such manner as the Directors shall from time to time decide. Any instrument of transfer which the Directors may decline to register shall (unless the Directors shall resolve otherwise) be returned on demand to the person who lodged it.

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Date: 10/12/2020 **RESTRICTIONS ON THE DISPOSAL OF SHARES**

- 10.1 Save for any disposal of Shares pursuant to the exercise by any Shareholder of an appraisal right in terms of section 164, a Shareholder may dispose of its Shares only if, in one and the same transaction and to the same acquirer, it disposes of that portion of its Loan Claims which bears the same proportion to the whole of its Loan Claims as the Shares disposed of bear to the whole of its shareholding in the Company. Likewise, a Shareholder may dispose of its Loan Claims only if, in one and the same transaction and to the same acquirer, it disposes of so many of its Shares as bear the same proportion to all of its Shares as the Loan Claims disposed of bear to all of its Loan Claims against the Company
- 10.2 Shares may only be disposed of in accordance with the provisions of this Memorandum of Incorporation or the Shareholders Agreement, if any, and no disposal of any Shares which conflicts with any provision hereof (or the Shareholders Agreement, as the case may be) shall be approved nor be permitted to be registered.
- 10.3 Subject to any other express provisions of Memorandum of Incorporation or the Shareholders Agreement, if any, to the contrary –
 - 10.3.1 the Directors shall not register the transfer of a Share unless they are satisfied that the provisions of clause 11 (or the Shareholders Agreement, as the case may be) have been complied with (to the extent that they are applicable), nor shall they register the transfer of a Share where it is disposed of contrary to the provisions of clauses 10.1 and/or 10.2 and/or any relevant provisions of the Shareholders Agreement; and
 - 10.3.2 if the Directors refuse to register the transfer of a Share they shall give notice of that refusal to the proposed transferor and transferee within 14 (fourteen) days immediately following the date on which the relevant transfer form is lodged at the Company's principal place of business.
- 10.4 No beneficial holder of any Share that is registered in the Securities Register in the name of a nominee (such nominee therefore being a

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Date: 10/12/2021 Shareholder in respect of such Share) shall dispose of such Share unless such nominee, in relation to the disposal or intended disposal in question, complies with all of the provisions of this Memorandum of Incorporation (or the Shareholders Agreement, as the case may be) as fully and effectually as if the Share in question was owned by the nominee Shareholder in question.

11 VOLUNTARY DISPOSAL OF EQUITY AND RIGHTS OF PRE-EMPTION

- 11.1 Save for any disposal in accordance with the provisions of any Shareholders Agreement or of any other provision contained herein, a Shareholder who wishes to dispose of all or part of its Equity shall not be entitled to do so unless –
- 11.1.1 such disposal is pursuant to a sale in terms of which the entire purchase price is expressed to be, and is payable, in the currency of South Africa against transfer of the Equity in question; and
- 11.1.2 such sale is permitted in terms of the following provisions of this clause 11 (as read with clause 14).
- 11.2 Any Shareholder who wishes to sell all or part of its Equity or who receives an offer from a *bona fide* third party for the purchase of its Equity and wishes to accept same ("**Transferor**"), shall give notice ("**Transfer Notice**") to the Board that it wishes to transfer such Equity. The Transfer Notice shall specify –
- 11.2.1 the Equity which the Transferor proposes to sell;
- 11.2.2 the intended selling price thereof, distinguishing between the selling price of Shares and the selling price of Loan Claims ("**Equity Consideration**");
- 11.2.3 where the Transferor has received an offer for the purchase of its Equity ("**Third Party Offer**"), the identity of the *bona fide* third party purchaser ("**Third Party Purchaser**") (such identification to be made with sufficient particularity to enable the other Shareholders to establish, if applicable, who is/are the ultimate beneficial owners of the shares or other

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Date: 10/12/2021 economic or voting interests in the Third Party Purchaser), and shall be accompanied by a true copy of the offer from the Third Party Purchaser, to the extent that the offer is in writing; and

- 11.2.4 all the terms and conditions of the Third Party Offer to the extent that such terms and conditions are not in writing.
- 11.3 The Transfer Notice shall not be revocable except with the written consent of the remaining Shareholders and shall be deemed to have designated the Board the agent of the Transferor for the sale and transfer of the Equity at the Equity Consideration.
- 11.4 The Company shall procure that, within 7 (seven) days of the Board receiving the Transfer Notice, notice ("**Board Notice**") shall be given to all other Shareholders of the Equity which the Transferor proposes to sell, the name of the Third Party Purchaser (to the extent applicable), the Equity Consideration and the terms of payment required, together with the terms and conditions of the Third Party Offer, if any, (to the extent that such terms and conditions are not in writing) and, to the extent that such terms and conditions are in writing, a copy of such writing.
- 11.5 The Board Notice shall call on each Shareholder to inform the Board by way of notice by a date stated by the Board ("**Closing Date**") (which stated date shall not be less than 30 (thirty) days and not more than 40 (forty) days after the giving of the Board Notice to the Shareholder which receives such notice last) of the amount of Equity, if any, which such Shareholder is willing to purchase. Any such notification given to the Board by any Shareholder shall, provided it is accompanied by reasonable proof of such Shareholder's ability to pay timeously for the Equity referred to in the notification, be deemed to be an offer by such Shareholder, irrevocable until the lapse of 7 (seven) days after the Closing Date, to purchase (subject to clause 14) the amount of Equity specified in such notification, or such lesser amount of Equity as the Board shall apportion to such Shareholder in terms of clause 11.6, at the Equity Consideration (pro rated appropriately where such Equity is less than the Equity referred to in the Transfer Notice).

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Date: 16/12/2016 After the Closing Date, or after the receipt of replies to the Board Notice from all the Shareholders, whichever is the earlier, but before the lapse of 7 (seven) days following the Closing Date, the Board shall, provided all (and not only some) of the Equity which is the subject matter of the Transfer Notice will be sold in terms of clauses 11.6.1 and/or 11.6.2 and/or 11.6.3, apportion and sell the Equity in question amongst and to the Shareholders (who give the requisite notification timeously to the Board in terms of clause 11.5) at the Equity Consideration subject to and in accordance with the following –

- 11.6.1 such Equity shall be apportioned amongst and sold to the Shareholders who are willing to take up the Equity as nearly as possible in proportion to their respective Shareholdings in the Company, provided always that no such Shareholder shall have apportioned and sold to it a greater amount of Equity than it is deemed, in terms of the foregoing, to have offered to purchase and provided further that the Equity Consideration payable by such Shareholder is pro rated appropriately where such Equity is less than the Equity referred to in the Transfer Notice;
- 11.6.2 such Equity as cannot be disposed in terms of clause 11.6.1 shall be apportioned amongst and sold to the Shareholders, if any, who have offered to purchase Equity in excess of their respective Shareholdings in the Company, as nearly as possible in proportion to the excesses which they have respectively offered to purchase, provided that no such Shareholder shall have apportioned and sold to it a greater amount of Equity than the excess it is deemed, in terms of the foregoing, to have offered to purchase and provided further that the Equity Consideration payable by such Shareholder is pro rated appropriately where such Equity is less than the Equity referred to in the Transfer Notice;
- 11.6.3 such Equity as is not disposed of in terms of clauses 11.6.1 and 11.6.2 may be sold by the Board at the Equity Consideration (pro rated appropriately where such Equity is less than the Equity referred to in the Transfer Notice) in question to any one or more *bona fide* third parties selected by the Board, including the Company itself (subject to complying with the provisions of the Act in relation to the acquisition by a

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Date: 10/12/2021

company of its own Shares). The Board shall be entitled, at any time following the receipt of a Transfer Notice, to take such steps as it in its sole discretion considers necessary to find a purchaser or purchasers for the Equity in anticipation of the possibility that not all of such Equity will be sold in terms of clauses 11.6.1 and 11.6.2. If the Board selects the Company to purchase any such Equity, each Shareholder hereby irrevocably authorises all the other Shareholders (acting individually and not necessarily together with any other Shareholder) to vote all the Shares held by such authorising Shareholder in favour of all resolutions, including any special resolutions, which are required to be passed for the purpose of authorising the Company to make such purchase.

- 11.7 It shall be a term of the sale of any Equity that the purchaser thereof, or the purchasers thereof *pro rata* to their then Shareholdings (after taking into account the Shares purchased in terms of such sale), shall use its or their respective reasonable endeavours to procure the release of the Transferor from all guarantees and suretyships which the Transferor may have given for the liabilities and obligations of the Company and, pending such release, the purchaser indemnifies or the purchasers indemnify proportionately (in proportion to such Shareholdings), as the case may be, the Transferor against all liability under any such guarantees or suretyships.
- 11.8 If, within a period of 60 (sixty) days after receipt of the Transfer Notice or such longer period as may be agreed to in writing between the Board and the Transferor, the Board sells all (and not only some) of the Equity which is the subject matter of the Transfer Notice and gives notice of such sale to the Transferor, the Transferor shall be obliged, on payment to it of the Equity Consideration, to transfer such Equity to the purchaser thereof.
- 11.9 If the Transferor fails to transfer such Equity, the Board may in its name transfer the Equity to the purchaser and may give a good receipt to the purchaser for the purchase price and issue to the purchaser, where appropriate, certificates for the Equity in question and in such event the Board shall hold the purchase price, free of interest, until such time as the Transferor shall have delivered up its Share certificates and any other

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Date: 16/12/2021 documents evidencing the Equity in question, when such purchase price shall be paid in full. For purposes of this clause 11.9, the Shareholders irrevocably appoint any one of the Directors as their attorney and agent to sign all documents and to do all such things that may be necessary to register the transfer of such Equity on their behalf.

- 11.10 If the Board fails to notify the Transferor, within the 60 (sixty) day period prescribed in clause 11.8, that it has sold all (and not only some) of the Equity which is the subject matter of the Transfer Notice, the Transferor shall, at any time within 90 (ninety) days thereafter, but not thereafter without again offering the Equity in terms of clauses 11.2 to 11.9 (inclusive), be at liberty to transfer such Equity to the Third Party Purchaser or (in the absence of a Third Party Offer contemplated in clause 11.2) to any third party at a price and on terms not more favourable to the Third Party Purchaser or such person than the price at, and the terms on which the same was made available to the Shareholders in terms of the foregoing, provided that –
- 11.10.1 the Third Party Purchaser or other third party, as the case may be, agrees in writing to be bound by the provisions of the Shareholders Agreement, if any, on terms approved of by the Board, and selects in writing an address, fax number and a *domicilium citandi et executandi* for the purposes of such agreement;
- 11.10.2 the sale may incorporate such warranties and indemnities to be given by the Transferor in respect of the Equity, and covenants not to compete, as are required by the Third Party Purchaser or other third party, as the case may be, and agreed to by the Transferor.
- 11.11 If all the Shareholders who would have been entitled to a Board Notice in terms of clause 11.4 consent in writing signed by them to the transfer of any Equity to any person (whether a Shareholder or not), such Equity may be transferred to such person without the provisions of clauses 11.2 to 11.10 (inclusive) having to be observed.

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Date: 10/12/2012 **BINDING A PERSON TO THE SHAREHOLDERS AGREEMENT**

Wherever this Memorandum of Incorporation makes provision for a person to be bound to the provisions of any Shareholders Agreement on terms approved of by the Board, the Board shall not act unreasonably in withholding such approval, provided that -

- 12.1 if there is a dispute in this regard, such dispute shall be resolved by the decision of a practising commercial attorney of at least 15 (fifteen) years experience as such, acting as an expert and not as an arbitrator, agreed to in writing by the Shareholders or, failing such agreement within 7 (seven) days of any Shareholder in writing calling for agreement, an independent practising commercial attorney of at least 15 (fifteen) years experience as such appointed, at the request of any Shareholder, by the President for the time being of the provincial Law Society of the province in which the registered office of the Company is situated;
- 12.2 no transfer, or allotment and issue, of the Shares which are the subject matter of such dispute shall be effected until such dispute is so resolved; and

13 CONFLICT BETWEEN VOLUNTARY SALES AND FORCED SALES

- 13.1 If, after a Transfer Notice has been given by a Transferor in terms of clause 11.2 and before the sale of any Equity referred to in such Transfer Notice takes place or is implemented in terms of clause 11, an event occurs which results in such Equity being made available for purchase by the other Shareholders or by the Company in terms of any provisions of this Memorandum of Incorporation or in a Shareholders Agreement, which in effect compel such Transferor to so make its Equity available for purchase (the "**Forced Sale Provisions**"), then at the election of any Shareholder (which election shall be made by notice to such Transferor at any time before the offer in terms of clause 11.2 lapses) the sale process or the sales, as the case may be, under clause 11, in relation to such Equity, shall be deemed to have been abandoned or cancelled and instead such Forced Sale Provisions shall apply.

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13.2 For so long as the Equity of a Shareholder is available for purchase in terms of the Forced Sale Provisions referred to in clause 13.1, such Equity shall not be offered for sale in terms of clause 11.

Date: 10/12/2022

14 REGULATORY APPROVAL

In the event that the lawful implementation of the sale of any Equity ("**Affected Equity**") in terms of this Memorandum of Incorporation to any Shareholder requires the approval of the Competition Commission, the Competition Tribunal or the Competition Appeal Court, whichever has jurisdiction for the purposes of such sale in terms of the Competition Act, No 89 of 1998, or requires the approval of any other regulator or regulatory authority (such approvals being referred to herein as "**Regulatory Approval**"), then notwithstanding anything to the contrary contained or implied herein –

- 14.1 the entire sale in respect of the Affected Equity, or in the event that the sale of Affected Equity arises pursuant to the provisions of clauses 11.2 to 11.10 (inclusive), each of the sales concluded at or about the same time as the sale of the Affected Equity is concluded pursuant to the provisions of clauses 11.2 to 11.10 (inclusive) ("**Sales**"), shall be subject in their entirety to the fulfilment of the suspensive condition that the requisite Regulatory Approval is granted, either unconditionally, or on terms and conditions acceptable to the seller and purchaser of the Affected Equity, which suspensive condition must be fulfilled within such period as may be agreed between all the parties to the Sales; and
- 14.2 the relevant time periods recorded in this Memorandum of Incorporation for the implementation of the Sales shall be extended by such period as may be agreed in writing between all the parties to the Sales in order to accommodate the preparation and lodging of the requisite applications for Regulatory Approval and the consideration thereof and the adjudication thereon by the applicable authorities; and
- 14.3 if all the parties to the Sales do not in writing agree on the periods contemplated in clauses 14.1 and 14.2 within 7 (seven) days of any of such parties calling for agreement, or if there is any dispute as to whether or not a party has acted reasonably or otherwise in regard to the acceptance or

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Date: 12/12/2021

otherwise of the terms and conditions referred to in clause 14.1, then such period(s) or such dispute, as the case may be, shall be determined by a practising commercial attorney of not less than 15 (fifteen) years' experience as such, acting as an expert and not as an arbitrator. Such attorney shall be one agreed to between the parties to the Sales and, failing such agreement within 7 (seven) days of any of such parties in writing calling for agreement, an independent practising commercial attorney of not less than 15 (fifteen) years experience as such appointed by the President for the time being of the provincial Law Society of the province in which the registered office of the Company is situated.

15 TRANSMISSION OF SECURITIES

- 15.1 Subject to the provisions of this Memorandum of Incorporation dealing with restrictions on the transfer of Securities, the executor of the estate of a deceased sole holder of a Security shall be the only person recognised by the Company as having any title to the Security. In the case of a Security registered in the names of 2 (two) or more holders, the survivor or survivors, or the executor of any deceased Shareholder shall be the only person recognised by the Company as having any title to the Security. Any person who submits proof of his appointment as the executor, administrator, trustee, curator, or guardian in respect of the estate of a deceased Shareholder or holder of other Securities ("**Security Holder**") of the Company, or of a Security Holder whose estate has been sequestrated or of a Security Holder who is otherwise under a disability or as the liquidator of any body corporate which is a Security Holder of the Company, shall be entered in the Securities Register of the Company *nomine officii*, and shall thereafter, for all purposes, be deemed to be a Security Holder of the Company.
- 15.2 Subject to the provisions of clause 15.1, any person becoming entitled to any Security by virtue of the death of a Security Holder shall, upon producing such evidence that he has such title or rights as the Directors think sufficient, have the right either to have such Security transferred to himself or to make such other transfer of the Security as such Security Holder could have made: provided that in respect of a transfer other than to

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Date: 16/12/2021 himself..

15.2.1 the Directors shall have the same right to refuse or suspend registration as they would have had in the case of a proposed transfer of such Security by such Security Holder before his death; and

15.2.2 a person becoming entitled to any Security shall not, unless and until he is himself registered as a Security Holder in respect of such Security, be entitled to exercise any voting or other right attaching to such Security or any other right relating to meetings of the Company.

16 DEBT INSTRUMENTS

The Board may –

16.1 authorise the Company to issue secured or unsecured debt instruments, as set out in section 43(2); and

16.2 grant special privileges associated with any debt instruments to be issued by the Company, as set out in section 43(3),

and the authority of the Board in such regard is not limited or restricted by this Memorandum of Incorporation, provided only that the Board is not empowered to offer, or to authorise the Company to offer, any debt instruments of the Company to the public.

17 CAPITALISATION SHARES

The Board shall not, save to the extent authorised by the Shareholders by means of ordinary resolution, have the power or authority to –

17.1 approve the issuing of any authorised Shares as capitalisation Shares; or

17.2 to issue Shares of one class as capitalisation Shares in respect of Shares of another class; or

17.3 to resolve to permit Shareholders to elect to receive a cash payment in lieu of a capitalisation Share,

as set out in section 47.

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Date: 10/11/2018 **BENEFICIAL INTERESTS IN SECURITIES**

The Company's issued Securities may be held by, and registered in the name of, one person for the beneficial interest of another person as set out in section 56(1).

19 FINANCIAL ASSISTANCE

The Board may authorise the Company to provide financial assistance by way of loan, guarantee, the provision of security or otherwise to any person for the purpose of, or in connection with, the subscription of any option, or any Securities, issued or to be issued by the Company or a related or inter-related company, or for the purchase of any such Securities, as set out in section 44, and the authority of the Board in this regard is not limited or restricted by this Memorandum of Incorporation.

20 ACQUISITION BY THE COMPANY OF ITS OWN SHARES

20.1 In accordance with and subject to the provisions of section 48 and subject to the further provisions of this clause 20 –

20.1.1 the Board may determine that the Company acquire a number of its own Shares; and

20.1.2 the board of any subsidiary of the Company may determine that such subsidiary acquire Shares, but –

20.1.2.1 not more than 10% (ten percent), in aggregate, of the number of issued Shares of any class may be held by, or for the benefit of, all of the subsidiaries of the Company, taken together; and

20.1.2.2 no voting rights attached to those Shares may be exercised while the Shares are held by that subsidiary and it remains a subsidiary of the Company.

20.2 Any decision by the Company to acquire its own Shares must satisfy the requirements of section 46 and, accordingly, the Company may not acquire its own Shares unless –

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Date: 15.12.2021 20.2.1 the acquisition –

20.2.1.1 is pursuant to an existing legal obligation of the Company, or a court order; or

20.2.1.2 the Board, by resolution, has authorised the acquisition;

20.2.2 it reasonably appears that the Company will satisfy the Solvency and Liquidity Test immediately after completing the said acquisition; and

20.2.3 the Board, by resolution, has acknowledged that it has applied the Solvency and Liquidity Test and reasonably concluded that the Company will satisfy the Solvency and Liquidity Test immediately after completing the said acquisition.

20.3 A decision of the Board referred to in clause 20.1.1 –

20.3.1 must be approved by a special resolution of the Shareholders if any Shares are to be acquired by the Company from a Director or prescribed officer of the Company, or a person related to a Director or prescribed officer of the Company; and

20.3.2 is subject to the requirements of sections 114 and 115 if considered alone, or together with other transactions in an integrated series of transactions, it involves the acquisition by the Company of more than 5% (five percent) of the issued Shares of any particular class of the Company's Shares.

20.4 Notwithstanding any other provision of this Memorandum of Incorporation, the Company may not acquire its own Shares, and no subsidiary of the Company may acquire Shares of the Company if, as a result of that acquisition, there would no longer be any Shares of the Company in issue other than –

20.4.1 Shares held by one or more subsidiaries of the Company; or

20.4.2 convertible or redeemable Shares.

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21 SINGLE SHAREHOLDERS' AUTHORITY TO ACT

Date: 10/12/2021

21.1 If, at any time, as contemplated in section 57(2), the Company has only 1 (one) Shareholder –

21.1.1 that Shareholder may exercise any and all of the voting rights pertaining to the Company, at any time, without notice or compliance with any other internal formalities as set out in that section, and such power is not limited or restricted by this Memorandum of Incorporation; and

21.1.2 the provisions of clauses 22 (Record Date for Exercise of Shareholder Rights), 23 (Shareholders' Meetings), 24 (Shareholders' Meetings by Electronic Communication), 25 (Votes of Shareholders), 27 (Shareholders' Resolutions) and 28 (Shareholders Acting Other Than at a Meeting) shall not apply to the Company.

21.2 If at any time every Shareholder is also a Director -

21.2.1 any matter that is required to be referred by the Board to the Shareholders for decision may be decided by the Shareholders at any time after being referred by the Board, without notice or compliance with any other internal formalities, provided that –

21.2.1.1 every such person was present at the Board meeting when the matter was referred to them in their capacity as Shareholders;

21.2.1.2 sufficient persons are present in their capacity as Shareholders to satisfy the quorum requirements set out in clause 23.9;

21.2.1.3 a resolution adopted by those persons in their capacity as Shareholders has at least the support that would have been required for it to be adopted as an ordinary resolution or special resolution, as the case may be, at a properly constituted Shareholders' meeting; and

21.2.2 when acting in their capacity as Shareholders, those persons are not subject to the provisions of sections 73 to 78 relating to the duties, obligations, liabilities and indemnification of Directors.

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Date: 16/12/2021 **RECORD DATE FOR EXERCISE OF SHAREHOLDER RIGHTS**

- 22.1 The Board may set a record date for the purpose of determining which Shareholders are entitled to –
 - 22.1.1 receive notice of a Shareholders' meeting;
 - 22.1.2 participate in and vote at a Shareholders' meeting;
 - 22.1.3 decide any matter by written consent or by Electronic Communication;
 - 22.1.4 receive a distribution; or
 - 22.1.5 be allotted or exercise other rights.
- 22.2 A record date determined by the Board –
 - 22.2.1 may not be earlier than the date on which the record date is determined or more than 10 (ten) business days before the date on which the event or action, for which the record date is being set, is scheduled to occur; and
 - 22.2.2 must be published to the Shareholders in a manner that satisfies any prescribed requirements.
- 22.3 If, at any time, the Board fails to determine a record date for any action or event, the record date shall be –
 - 22.3.1 in the case of a meeting, the latest date by which the Company is required to give Shareholders notice of that meeting; or
 - 22.3.2 in any other case, the date of the relevant action or event.

23 SHAREHOLDERS' MEETINGS

- 23.1 The Board, or any prescribed officer of the Company authorised by the Board, is entitled to call a Shareholders' meeting at any time.
- 23.2 Subject to clause 21.1 and to the provisions of section 60 dealing with the passing of resolutions of Shareholders otherwise than at a meeting of Shareholders, the Company shall hold a Shareholders' meeting –

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Date: 19/12/2021 at any time that the Board is required by the Act or this Memorandum of Incorporation to refer a matter to Shareholders for decision; or

23.2.2 whenever required in terms of the Act to fill a vacancy on the Board; or

23.2.3 when required in terms of clause 23.3 or by any other provision of this Memorandum of Incorporation.

23.3 The Board shall call a meeting of Shareholders if 1 (one) or more written and signed demands calling for such a meeting are delivered to the Company and –

23.3.1 each such demand describes the specific purpose for which the meeting is proposed; and

23.3.2 in aggregate, demands for substantially the same purpose are made and signed by the holders, at the earliest time specified in any of those demands, of at least 10% (ten percent) of the voting rights entitled to be exercised in relation to the matter proposed to be considered at the meeting.

23.4 Notwithstanding any provision of the Act to the contrary, and in addition to other meetings of the Company that may be convened from time to time, the Company shall convene an annual general meeting of its Shareholders –

23.4.1 initially, no more than 18 (eighteen) months after the date of its incorporation;

23.4.2 thereafter, once in each calendar year, but no more than 15 (fifteen) months after the date of the previous annual general meeting,

provided that any such annual general meeting shall not be capable of being held by Electronic Communication in accordance with the further provisions of this Memorandum of Incorporation.

23.5 Each annual general meeting of the Company contemplated in clause 23.4 shall provide for at least the following business to be transacted –

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Date: 14/12/22 23.5.1 the presentation of the financial statements for the immediately preceding financial year of the Company;

23.5.2 the election of Directors, to the extent required by the Act or by this Memorandum of Incorporation;

23.5.3 the appointment of an auditor for the following financial year, to the extent that the annual financial statements of the Company are required to be audited in terms of the Act or by this Memorandum of Incorporation; and

23.5.4 any matters raised by the Shareholders, with or without advance notice to the Company.

23.6 Save as otherwise provided herein, the Company is not required to hold any other Shareholders' meetings other than those specifically required by the Act.

23.7 The Board may determine the location of any Shareholders' meeting, and the Company may hold any such meeting in the Republic or in any foreign country, and the authority of the Board and the Company in this regard is not limited or restricted by this Memorandum of Incorporation.

23.8 The minimum number of days for the Company to deliver a notice of a Shareholders' meeting to the Shareholders as required by section 62 is as provided for in section 62(1) and, accordingly, any such notice shall be delivered to all Shareholders as of the record date for the meeting at least 10 (ten) business days before the meeting is to begin.

23.9 The quorum requirement for a Shareholders' meeting to begin or for a matter to be considered are as set out in section 64(1) without variation and, accordingly –

23.9.1 a Shareholders' meeting may not begin until sufficient persons are present at the meeting to exercise, in aggregate, at least 25% (twenty five percent) of the voting rights that are entitled to be exercised in respect of at least one matter to be decided at the meeting; and

23.9.2 a matter to be decided at a Shareholders' meeting may not begin to be

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Date: 10/12/2021 considered unless sufficient persons are present at the meeting to exercise, in aggregate, at least 25% (twenty five percent) of all of the voting rights that are entitled to be exercised in respect of that matter at the time the matter is called on the agenda,

provided that, if the Company has more than 2 (two) Shareholders, a meeting may not begin, or a matter begin to be debated, unless –

23.9.3 at least 3 (three) Shareholders are present at the meeting; and

23.9.4 the requirements of clauses 23.9.1 and 23.9.2 are satisfied.

23.10 The time periods allowed in section 64(4) and (5) apply to the Company without variation and, accordingly, if within 1 (one) hour after the appointed time for a meeting to begin, the requirements of clause 23.9 –

23.10.1 for that meeting to begin have not been satisfied, the meeting is postponed, without any motion, vote or further notice, for 1 (one) week;

23.10.2 for consideration of a particular matter to begin have not been satisfied –

23.10.2.1 if there is other business on the agenda of the meeting, consideration of that matter may be postponed to a later time in the meeting without any motion or vote; or

23.10.2.2 if there is no other business on the agenda of the meeting, the meeting is adjourned, without any motion or vote, for 1 (one) week,

provided that the person intended to chair a meeting that cannot begin due to the operation of clause 23.9 may extend the 1 (one) hour limit allowed in clause 23.10 for a reasonable period on the grounds that –

23.10.3 exceptional circumstances affecting weather, transportation or Electronic Communication have generally impeded or are generally impeding the ability of Shareholders to be present at the meeting; or

23.10.4 one or more particular Shareholders, having been delayed, have communicated an intention to attend the meeting, and those Shareholders, together with others in attendance, would satisfy the

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Date: 10/12/2021 requirements of clause 23.9.

- 23.11 The accidental omission to give notice of any meeting to any particular Shareholder or Shareholders shall not invalidate any resolution passed at any such meeting.
- 23.12 The Company shall not be required to give further notice of a meeting that has been postponed or adjourned in terms of 23.10 unless the location for the meeting is different from –
- 23.12.1 the location of the postponed or adjourned meeting; or
- 23.12.2 the location announced at the time of adjournment, in the case of an adjourned meeting.
- 23.13 If at the time appointed in terms of clause 23.10 for a postponed meeting to begin, or for an adjourned meeting to resume, the requirements of clause 23.9 have not been satisfied, the Shareholders present in person or by proxy will be deemed to constitute a quorum.
- 23.14 After a quorum has been established for a meeting, or for a matter to be considered at a meeting, the meeting may continue, or the matter may be considered, so long as at least 1 (one) Shareholder with voting rights entitled to be exercised at the meeting, or on that matter, is present at the meeting, and the provisions of section 64(9) are not limited or restricted by this Memorandum of Incorporation.
- 23.15 The maximum period allowable for an adjournment of a Shareholders' meeting is as set out in section 64(12), without variation.
- 23.16 The chairperson, if any, of the Board shall preside as chairperson at every Shareholder's meeting.
- 23.17 If there is no such chairperson, or if at any meeting he or she is not present within 15 (fifteen) minutes after the time appointed for holding the meeting or is unwilling to act as chairperson, the Directors present shall choose 1 (one) of their number to be chairperson. If no Director is willing to act as chairperson or if no director is present within 15 (fifteen) minutes after the time appointed for holding the meeting, the Shareholders present shall

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Date: 10/12/2021 choose one of their number to be chairperson of the meeting.

23.18 The chairperson of a Shareholders' meeting may -

23.18.1 appoint any firm or persons to act as scrutineers for the purpose of checking any powers of attorney received and for counting the votes at the meeting;

23.18.2 act on a certificate given by any such scrutineers without requiring production at the meeting of the forms of proxy or himself counting the votes.

23.19 If any votes were counted which ought not to have been counted or if any votes were not counted which ought to have been counted, the error shall not vitiate the resolution, unless -

23.19.1 it is brought to the attention of the chairperson at the meeting; and

23.19.2 in the opinion of the chairperson of the meeting, it is of sufficient magnitude to vitiate the resolution.

23.20 Any objection to the admissibility of any vote (whether on a show of hands or on a poll) shall be raised -

23.20.1 at the meeting or adjourned meeting at which the vote objected to was recorded; or

23.20.2 at the meeting or adjourned meeting at which the result of the poll was announced,

and every vote not then disallowed shall be valid for all purposes. Any objection made timeously shall be referred to the chairperson of the meeting, whose decision shall be final and conclusive.

23.21 Even if he is not a Shareholder -

23.21.1 any Director; or

23.21.2 the company's attorney (or where the company's attorneys are a firm, any partner or director thereof),

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Date: 10/12/2021 may attend and speak at any general meeting, but may not vote, unless he is a Shareholder or the proxy or representative of a Shareholder.

24 SHAREHOLDERS' MEETINGS BY ELECTRONIC COMMUNICATION

24.1 The Company may conduct a Shareholders' meeting entirely by Electronic Communication or provide for participation in a meeting by Electronic Communication, as set out in section 63, and the power of the Company to do so is not limited or restricted by this Memorandum of Incorporation. Accordingly –

24.1.1 any Shareholders' meeting may be conducted entirely by Electronic Communication; or

24.1.2 one or more Shareholders, or proxies for Shareholders, may participate by Electronic Communication in all or part of any Shareholders' meeting that is being held in person,

so long as the Electronic Communication employed ordinarily enables all persons participating in that meeting to communicate concurrently with each other and without an intermediary, and to participate reasonably effectively in the meeting.

24.2 Any notice of any meeting of Shareholders at which it will be possible for Shareholders to participate by way of Electronic Communication shall inform Shareholders of the ability to so participate and shall provide any necessary information to enable Shareholders or their proxies to access the available medium or means of Electronic Communication, provided that such access shall be at the expense of the Shareholder or proxy concerned.

25 VOTES OF SHAREHOLDERS

25.1 Subject to any special rights or restrictions as to voting attached to any Shares by or in accordance with this Memorandum of Association, at a meeting of the Company –

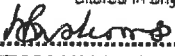
25.1.1 every person present and entitled to exercise voting rights shall be entitled to 1 (one) vote on a show of hands, irrespective of the number of

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Date: 10/12/2021 voting rights that person would otherwise be entitled to exercise; and


- 25.1.2 on a poll any person who is present at the meeting, whether as a Shareholder or as proxy for a Shareholder, has the number of votes determined in accordance with the voting rights associated with the Securities held by that Shareholder.
- 25.2 Voting shall be conducted by means of a polled vote in respect of any matter to be voted on at a meeting of Shareholders if a demand is made for such a vote by –
- 25.2.1 at least 5 (five) persons having the right to vote on that matter, either as Shareholders or as proxies representing Shareholders; or
- 25.2.2 a person who is, or persons who together are, entitled, as Shareholders or proxies representing Shareholders, to exercise at least 10% (ten percent) of the voting rights entitled to be voted on that matter; or
- 25.2.3 the chairperson of the meeting.
- 25.3 At any meeting of the Company a resolution put to the vote of the meeting shall be decided on a show of hands, unless a poll is (before or on the declaration of the result of the show of hands) demanded in accordance with the provisions of clause 25.2, and unless a poll is so demanded, a declaration by the chairperson that a resolution has, on a show of hands, been carried or carried unanimously or by a particular majority or defeated, and an entry to that effect in the book containing the minutes of the proceedings of the Company, shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favour of or against such resolution. The demand for a poll may be withdrawn.
- 25.4 If a poll is duly demanded, it shall be taken in such manner as the chairperson directs, and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded. In computing the majority on the poll, regard shall be had to the number of votes to which each Shareholder is entitled.
- 25.5 In the case of an equality of votes, whether on a show of hands or on a poll,


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Date: 10/12/2021 the chairperson of the meeting at which the show of hands takes place, or at which the poll is demanded, shall not be entitled to a second or casting vote.

- 25.6 A poll demanded on the election of a chairperson (as contemplated in clause 23.17) or on a question of adjournment shall be taken forthwith. A poll demanded on any other question shall be taken at such time as the chairperson of the meeting directs. The demand for a poll shall not prevent the continuation of a meeting for the transaction of any business other than the question upon which the poll has been demanded.
- 25.7 Where there are joint registered holders of any Share, any 1 (one) of such persons may exercise all of the voting rights attached to that Share at any meeting, either personally or by proxy, as if he or she were solely entitled thereto. If more than 1 (one) of such joint holders is present at any meeting, personally or by proxy, the person so present whose name stands first in the Securities Register in respect of such Share shall alone be entitled to vote in respect thereof.
- 25.8 The board of any company or the controlling body of any other entity or person that holds any Securities of the Company may authorise any person to act as its representative at any meeting of Shareholders of the Company, in which event the following provisions will apply –
- 25.8.1 the person so authorised may exercise the same powers of the authorising company, entity or person as it could have exercised if it were an individual holder of Shares; and
- 25.8.2 the authorising company, entity or person shall lodge a resolution of the directors of such company or controlling body of such other entity or person confirming the granting of such authority, and certified under the hand of the chairperson or secretary thereof, with the Company before the commencement of any Shareholders' meeting at which such person intends to exercise any rights of such Shareholder, unless excused from doing so by the chairperson of such meeting.


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Date: 10/12/2026 **PROXIES AND REPRESENTATIVES**

26.1 Any Shareholder may at any time appoint any natural person (or two or more natural persons concurrently), including a natural person who is not a Shareholder, as a proxy to –

26.1.1 participate in, and speak and vote at, a Shareholders' meeting on behalf of that Shareholder; or

26.1.2 give or withhold written consent on behalf of that Shareholder to a decision contemplated in section 60.

provided that a Shareholder may appoint more than 1 (one) proxy to exercise voting rights attached to different Securities held by the Shareholder.

26.2 A proxy appointment –

26.2.1 must be in writing, dated and signed by the Shareholder; and

26.2.2 remains valid for –

26.2.2.1 1 (one) year after the date on which it was signed; or

26.2.2.2 any longer or shorter period expressly set out in the appointment,

unless it is revoked in a manner contemplated in the Act or expires earlier as contemplated in the Act.

26.3 The holder of a power of attorney or other written authority from a Shareholder may, if so authorised thereby, represent such Shareholder at any meeting of the Company and such holder shall deliver the power of attorney or other written authority (if any), or a copy thereof, to the Company before such holder exercises any rights of the Shareholder at a Shareholders' meeting.

26.4 All of the remaining provisions of the Act relating to the appointment and revocation of proxies and the rights of proxies generally shall apply and, in particular –

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Date: 19/12/2021 26.4.1 a Shareholder has the right to appoint 2 (two) or more persons concurrently as proxies as set out in section 58(3)(a);

26.4.2 a Shareholder's proxy may delegate the proxy's powers to another person as set out in section 58(3)(b);

26.4.3 a Shareholder or his proxy must deliver to the Company a copy of the instrument appointing a proxy before the commencement of the meeting at which the proxy intends to exercise that Shareholder's rights ; and

26.4.4 unless the instrument appointing a proxy provides otherwise, a Shareholder's proxy may decide, without direction from the Shareholder, whether to exercise or abstain from exercising any voting right of the Shareholder, as set out in section 58(7),

and none of such rights or powers are limited, restricted or varied by this Memorandum of Incorporation.

26.5 Every instrument of proxy shall, as far as circumstances permit, be substantially in the following form, or in such other form as the Directors may approve from time to time –

"I/We _____

being a shareholder of _____ Proprietary Limited do hereby appoint

_____ or failing him/her

_____ or failing him/her, the chairperson of the meeting as my/our proxy to vote or abstain from voting on my/our behalf at the meeting of the Company to be held at _____ on _____ and at any adjournment thereof as follows:-

	In favour of	Against	Abstain
Special Resolution 1
Ordinary Resolution 1

(Indicate instruction to proxy by way of a cross in space provided above). Except as instructed above or if no instructions are inserted above, my/our proxy may vote as

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Date: 16/12/2021 he/she thinks fit.

SIGNED this day of in the year of .

 SHAREHOLDER'S SIGNATURE

(Note -- A shareholder entitled to attend, speak and vote is entitled to appoint a proxy to attend, speak and vote in his/her stead, and such proxy need not be a shareholder of the Company)."

27 SHAREHOLDERS' RESOLUTIONS

- 27.1 For an ordinary resolution to be approved it must be supported by more than 50% (fifty percent) of the voting rights of Shareholders exercised on the resolution, as provided in section 65(7).
- 27.2 For a special resolution to be approved it must be supported by the holders of at least 75% (seventy five percent) of the voting rights exercised on the resolution, as provided in section 65(9).
- 27.3 No matters, except those matters set out in section 65(11) and any other matter required by the Act or by this Memorandum of Incorporation to be resolved by means of a special resolution, require a special resolution adopted at a Shareholders' meeting of the Company.
- 27.4 In the event that any Shareholder abstains from voting in respect of any resolution, such Shareholder will, for the purposes of determining the number of votes exercised in respect of that resolution, be deemed not to have exercised a vote in respect thereof.

28 SHAREHOLDERS ACTING OTHER THAN AT A MEETING

- 28.1 In accordance with the provisions of section 60, a resolution that could be voted on at a Shareholders' meeting (including in respect of the election of Directors) may instead be –
 - 28.1.1 submitted by the Board for consideration to the Shareholders entitled to exercise the voting rights in relation to the resolution; and
 - 28.1.2 voted on in writing by such Shareholders within a period of 20 (twenty) business days after the resolution was submitted to them.

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Date: 15/12/2012 28.2 A resolution contemplated in clause 28.1 –

- 28.2.1 will have been adopted if it is supported by persons entitled to exercise sufficient voting rights for it to have been adopted as an ordinary or special resolution, as the case may be, at a properly constituted Shareholders' meeting; and
- 28.2.2 if adopted, will have the same effect as if it had been approved by voting at a meeting.
- 28.3 In addition to a resolution passed in terms of clause 28.1, a resolution in writing signed by all the Shareholders entitled to vote thereon shall be as valid and effectual as if adopted at a duly convened general meeting.
- 28.4 Within 10 (ten) business days after adopting a resolution, or conducting an election of Directors in terms of the provisions of this clause 28, the Company shall deliver a statement describing the results of the vote, consent process, or election to every Shareholder who was entitled to vote on or consent to the resolution, or vote on the election of a Director, as the case may be.

29 COMPOSITION AND POWERS OF THE BOARD OF DIRECTORS

- 29.1 In addition to the minimum number of Directors, if any, that the Company must have to satisfy any requirement in terms of the Act to appoint an audit committee, or a social and ethics committee, the Board must comprise at least 1 (one) Director and the Shareholders shall be entitled by ordinary resolution to determine such maximum number of Directors as they from time to time shall consider appropriate.
- 29.2 The Directors shall be elected in terms of section 68(1) by the persons entitled to exercise voting rights in such an election, being the Shareholders of the Company and the holders of any other Securities of the Company to the extent that the terms on which such Securities were issued confer such rights.
- 29.3 Until 1 (one) or more Directors have been so elected, each incorporator of the Company shall, in terms of section 67(1), serve as a Director of the

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Date: 10/12/2021 Company. Where the Company was already incorporated at the effective date of the Act, every person holding office as a Director, prescribed officer, company secretary or auditor of the Company immediately before the effective date will, as contemplated in item 7(1) of Schedule 5 to the Act, continue to hold that office.

29.4 In any election of Directors –

29.4.1 the election is to be conducted as a series of votes, each of which is on the candidacy of a single individual to fill a single vacancy, with the series of votes continuing until all vacancies on the Board have been filled; and

29.4.2 in each vote to fill a vacancy –

29.4.2.1 each vote entitled to be exercised may be exercised once; and

29.4.2.2 the vacancy is filled only if a majority of the votes exercised support the candidate,

provided only that, in the event that the Company only has 1 (one) Shareholder, the above provisions of this clause 29.4 will not apply and the election of Directors shall take place in such manner as the Shareholder shall determine.

29.5 The Company shall only have elected Directors and there shall be no appointed or *ex officio* Directors as contemplated in section 66(4).

29.6 Apart from satisfying the qualification and eligibility requirements set out in section 69, a person need not satisfy any further eligibility requirements or qualifications to become or remain a Director or a prescribed officer of the Company.

29.7 Each elected Director of the Company shall serve for an indefinite term, as contemplated in section 68(1) and a vacancy in the number of Directors shall only arise in the event of –

29.7.1 any elected Director ceasing to hold office or becoming disqualified from holding office as such for any reason; and/or

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Date: 12/12/2021 the Shareholders resolving to increase the number of elected Directors;
and/or

29.7.3 any of the other circumstances contemplated in section 70(1) arising.

29.8 The Board has the power to –

29.8.1 fill any vacancy on the Board on a temporary basis, as set out in section 68(3) (and subject to section 70); and

29.8.2 exercise all of the powers and perform any of the functions of the Company, as set out in section 66(1),

and the powers of the Board in this regard are not limited or restricted by this Memorandum of Incorporation.

29.9 The Directors may at any time and from time to time by power of attorney appoint any person or persons to be the attorney or attorneys and agent(s) of the Company for such purposes and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the Directors in terms of this Memorandum of Incorporation) and for such period and subject to such conditions as the Directors may from time to time think fit. Any such appointment may, if the Directors think fit, be made in favour of any company, the shareholders, directors, nominees or managers of any company or firm, or otherwise in favour of any fluctuating body of persons, whether nominated directly or indirectly by the Directors. Any such power of attorney may contain such provisions for the protection or convenience of persons dealing with such attorneys and agents as the Directors think fit. Any such attorneys or agents as aforesaid may be authorised by the Directors to sub-delegate all or any of the powers, authorities and discretions for the time being vested in them.

29.10 Save as otherwise expressly provided herein, all cheques, promissory notes, bills of exchange and other negotiable or transferable instruments, and all documents to be executed by the Company, shall be signed, drawn, accepted, endorsed or executed, as the case may be, in such manner as the Directors shall from time to time determine.

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29.11 All acts performed by the Directors or by a committee of Directors or by any person acting as a Director or a member of a committee shall, notwithstanding that it shall afterwards be discovered that there was some defect in the appointment of the Directors or persons acting as aforesaid, or that any of them were disqualified from or had vacated office, be as valid as if every such person had been duly appointed and was qualified and had continued to be a Director or member of such committee.

Date: 19/12/2021

- 29.12 The Directors in office may act notwithstanding any vacancy in their body, but if and so long as their number is reduced below the minimum number fixed in accordance with this Memorandum of Incorporation, they may act only for the purpose of filling vacancies in their body in terms of section 68(3) or of summoning general meetings of the Company, but not for any other purpose.
- 29.13 A Director may hold any other office or place of profit under the Company (except that of auditor) or any subsidiary of the Company in conjunction with the office of Director, for such period and on such terms as to remuneration (in addition to the remuneration to which he may be entitled as a Director) and otherwise as a disinterested quorum of the Directors may determine.
- 29.14 A Director of the Company may be or become a director or other officer of, or otherwise interested in, any company promoted by the Company or in which the Company may be interested as shareholder or otherwise and (except insofar as otherwise decided by the Directors) he shall not be accountable for any remuneration or other benefits received by him as a director or officer of or from his interest in such other company.
- 29.15 Each Director and each alternate Director, prescribed officer and member of any committee of the Board (whether or not such latter persons are also members of the Board) shall, subject to the exemptions contained in section 75(2) and the qualifications contained in section 75(3), comply with all of the provisions of section 75 in the event that they (or any person who is a related person to them) has a personal financial interest in any matter to be considered by the Board.

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30 SINGLE DIRECTOR'S AUTHORITY TO ACT

Date: 10/12/2021

If at any time the Company has only 1 (one) Director, as contemplated in section 57(3), that Director may, subject to any restrictions or limitations imposed in terms of section 66(1), exercise any power or perform any function of the Board at any time, without notice or compliance with any other internal formalities, and the provisions of sections 71(3) to (7), 73 and 74 shall not apply in respect of the governance of the Company.

31 DIRECTORS' MEETINGS

- 31.1 Save as may be provided otherwise herein, the Directors may meet together for the despatch of business, adjourn and otherwise regulate their meetings as they think fit.
- 31.2 The Directors may elect a chairperson and a deputy chairperson and determine the period for which each is to hold office. The chairperson, or in his absence the deputy chairperson, shall be entitled to preside over all meetings of Directors. If no chairperson or deputy chairperson is elected, or if at any meeting neither is present or willing to act as chairperson thereof within 10 (ten) minutes of the time appointed for holding the meeting, the Directors present shall choose 1 (one) of their number to be chairperson of such meeting.
- 31.3 In addition to the provisions of section 73(1), any Director shall at any time be entitled to call a meeting of the Directors.
- 31.4 The Board has the power to –
- 31.4.1 consider any matter and/or adopt any resolution other than at a meeting as set out in section 74 and, accordingly, any decision that could be voted on at a meeting of the Board may instead be adopted by the written consent of a majority of the Directors, given in person or by Electronic Communication, provided that each Director has received notice of the matter to be decided;
- 31.4.2 conduct a meeting entirely by Electronic Communication, or to provide for participation in a meeting by Electronic Communication, as set out in

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Date: 10/12/2021 section 73(3), provided that, as required by such section, the Electronic Communication facility employed ordinarily enables all persons participating in the meeting to communicate concurrently with each other without an intermediary and to participate reasonably effectively in the meeting;

31.4.3 determine the manner and form of providing notice of its meetings as set out in section 73(4), provided that –

31.4.3.1 the notice period for the convening of any meeting of the Board will be at least 7 (seven) days unless the decision of the Directors is required on an urgent basis which justifies a shorter period of notice, in which event the meeting may be called on shorter notice. The decision of the chairperson of the Board, or failing the chairperson for any reason, the decision of any (two) directors as to whether a matter should be decided on an urgent basis, and the period of notice to be given, shall be final and binding on the directors;

31.4.3.2 an agenda of the matters to be discussed at the meeting shall be given to each Director, together with the notice referred to in clause 31.4.3.1;

31.4.3.3 no meeting may be held if notice thereof and the agenda therefor is not given in accordance with clauses 31.4.3.1 and 31.4.3.2; and

31.4.3.4 no matter may be discussed at a meeting unless the particular matter has been expressly included in the agenda given in terms of clause 31.4.3.2; and

31.4.4 proceed with a meeting despite a failure or defect in giving notice of the meeting, as provided in section 73(5),

and the powers of the Board in respect of the above matters are not limited or restricted by this Memorandum of Incorporation.

31.5 The quorum requirement for a Directors' meeting (including an adjourned meeting) to begin, the voting rights at such a meeting, and the requirements for approval of a resolution at such a meeting are as set out

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Date: 10/12/2021 in section 73(5), subject only to clause 31.5.5, and accordingly –

- 31.5.1 if all of the Directors of the Company –
 - 31.5.1.1 acknowledge actual receipt of the notice convening a meeting; or
 - 31.5.1.2 are present at a meeting; or
 - 31.5.1.3 waive notice of a meeting,

the meeting may proceed even if the Company failed to give the required notice of that meeting or there was a defect in the giving of the notice;
- 31.5.2 a majority of the Directors must be present at a meeting before a vote may be called at any meeting of the Directors;
- 31.5.3 each Director has 1 (one) vote on a matter before the Board;
- 31.5.4 a majority of the votes cast in favour of a resolution is sufficient to approve that resolution;
- 31.5.5 in the case of a tied vote –
 - 31.5.5.1 the chairperson may not cast a deciding vote in addition to any deliberative vote; and
 - 31.5.5.2 the matter being voted on fails.
- 31.6 Resolutions adopted by the Board –
 - 31.6.1 must be dated and sequentially numbered; and
 - 31.6.2 are effective as of the date of the resolution, unless any resolution states otherwise.
- 31.7 Any minutes of a meeting, or a resolution, signed by the chairperson of the meeting, or by the chairperson of the next meeting of the Board, are evidence of the proceedings of that meeting, or the adoption of that resolution, as the case may be.

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32 DIRECTORS' COMPENSATION AND FINANCIAL ASSISTANCE

Date: 16/12/2021

- 32.1 The Company may pay remuneration to the Directors for their services as directors in accordance with a special resolution approved by the Company's Shareholders within the previous 2 (two) years, as set out in section 66(8) and (9), and the power of the Company in this regard is not limited or restricted by this Memorandum of Incorporation.
- 32.2 The Directors may also be paid all their travelling and other expenses necessarily incurred by them in connection with -
- 32.2.1 the business of the Company; and
- 32.2.2 attending meetings of the Directors or of committees of the Directors of the Company.
- 32.3 The Board may, as set out in and subject to the requirements of section 45, authorise the Company to provide financial assistance to a Director, prescribed officer or other person referred to in section 45(2), and the power of the Board in this regard is not limited or restricted by this Memorandum of Incorporation.

33 MANAGING DIRECTOR

- 33.1 The Directors may from time to time appoint 1 (one) or more of their body to the office of managing Director for such term and at such remuneration as they may think fit (subject only to the requirements of section 66(8) and (9)), and may revoke such appointment subject to the terms of any agreement entered into in any particular case, provided that the period of office of a managing Director appointed in terms of an agreement shall be for a maximum period of 5 (five) years at any one time. A Director so appointed shall be subject to retirement in the same manner as the other Directors except during the period of his agreement, and his appointment shall terminate if he ceases for any reason to be a Director.
- 33.2 Subject to the provisions of any contract between himself and the Company, a managing Director shall be subject to the same provisions as to disqualification and removal as the other Directors of the Company.

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Date: 19/12/2021

33.3 The Directors may from time to time entrust to and confer upon a managing Director for the time being such of the powers exercisable in terms of this Memorandum of Incorporation by the Directors as they may think fit, and may confer such powers for such time and to be exercised for such objects and purposes, and upon such terms and conditions, and with such restrictions, as they think expedient; and they may confer such powers either collaterally with or to the exclusion of and in substitution for all or any of the powers of the Directors in that behalf, and may from time to time revoke, withdraw, alter or vary all or any of such powers.

34 INDEMNIFICATION OF DIRECTORS

34.1 The Company may –

- 34.1.1 advance expenses to a Director or directly or indirectly indemnify a Director in respect of the defence of legal proceedings, as set out in section 78(4);
- 34.1.2 indemnify a Director in respect of liability as set out in section 78(5); and/or
- 34.1.3 purchase insurance to protect the Company or a Director as set out in section 78(7),

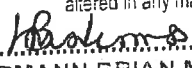
and the power of the Company in this regard is not limited, restricted or extended by this Memorandum of Incorporation.

34.2 The provisions of clause 34.1 shall apply *mutatis mutandis* in respect of any former Director, prescribed officer or member of any committee of the Board, including the audit committee.

35 COMMITTEES OF THE BOARD

35.1 The Board may –

- 35.1.1 appoint committees of Directors and delegate to any such committee any of the authority of the Board as set out in section 72(1); and/or
- 35.1.2 include in any such committee persons who are not Directors, as set out


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Date: 10/12/2022 in section 72(2)(a),

and the power of the Board in this regard is not limited or restricted by this Memorandum of Incorporation.

- 35.2 The authority of a committee appointed by the Board as set out in section 72(2)(b) and (c) is not limited or restricted by this Memorandum of Incorporation.

36 ANNUAL FINANCIAL STATEMENTS

- 36.1 Notwithstanding the provisions of clause 7.1 –

- 36.1.1 the Company shall keep all such accurate and complete accounting records, in English, as are necessary to enable the Company to satisfy its obligations in terms of –

- 36.1.1.1 the Act;

- 36.1.1.2 any other law with respect to the preparation of financial statements to which the Company may be subject;

- 36.1.1.3 the Regulations; and

- 36.1.1.4 this Memorandum of Incorporation; and

- 36.1.2 the Company shall each year prepare annual financial statements within 6 (six) months after the end of its financial year, or such shorter period as may be appropriate to provide the required notice of an annual general meeting in terms of section 61(7).

- 36.2 The Company shall appoint an auditor upon, or as soon as reasonably possible after, its incorporation and each year at its annual general meeting. If the Company appoints a firm as its auditor, any change in the composition of the members of that firm shall not by itself create a vacancy in the office of auditor.


- 36.3 For purposes of the affairs of the Company, with regard to and/or relating to the auditor of the Company, the provisions of sections 90(1), 90(1A), 90(2)(a) and (b), 90(3), 90(5), 90(6)(a)(i) to (iii), 90(6)(b) and (c), 91(1),

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Date: 10/12/2021 91(2), and 93(1) are incorporated, *mutatis mutandis*, into this Memorandum of Incorporation.

- 36.4 In the event that the annual financial statements of the Company –
 - 36.4.1 are required to be audited pursuant to regulations made in terms of section 30(7), as contemplated in section 30(2)(b)(i), or as otherwise contemplated in the Act, the annual financial statements shall be so audited in accordance with the relevant provisions of the Act; and
 - 36.4.2 are required to be audited, independently reviewed, or otherwise assessed in terms of any statute other than the Act, or a regulatory order, the Company shall comply with its relevant obligations in that regard.
- 36.5 Subject to clause 36.4, and notwithstanding any contrary provision in the Act, the annual financial statements shall be audited as set out in clause 36.6.
- 36.6 In the event that the annual financial statements are to be audited pursuant to the provisions of clause 36.5, the annual financial statements shall be prepared on a basis that is not inconsistent with any unalterable or non-elective provision of the Act and shall –
 - 36.6.1 satisfy, as to form and content, the financial reporting standards of IFRS for SMEs, provided that the Board, or the Shareholders by ordinary resolution, may require, either in respect of a particular financial year of the Company or for any other fixed or indefinite period, that the annual financial statements shall be prepared in accordance with IFRS; and
 - 36.6.2 subject to and in accordance with IFRS for SMEs or IFRS, as the case may be –
 - 36.6.2.1 present fairly the state of affairs and business of the Company and explain the transactions and financial position of the business of the Company;
 - 36.6.2.2 show the Company's assets, liabilities and equity, as well as its income and expenses;


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Date: 10/12/2021 36.6.2.3 set out the date on which the statements were produced and the accounting period to which they apply; and

36.6.2.4 bear on the first page thereof a prominent notice indicating that the annual financial statements have been audited and the name and professional designation of the person who prepared them.

37 DISTRIBUTIONS

37.1 Subject to the provisions of the Act, and particularly section 46, the Company may make a proposed distribution if such distribution –

37.1.1 is pursuant to an existing legal obligation of the Company, or a court order; or

37.1.2 is authorised by resolution of the Board.

37.2 No distribution shall bear interest against the Company, except as otherwise provided under the conditions of issue of the Shares in respect of which such distribution is payable.

37.3 Distributions may be declared either free of or subject to the deduction of income tax and any other tax or duty in respect of which the Company may be chargeable.

37.4 The Directors may from time to time declare and pay to the Shareholders such interim distributions as the Directors consider to be appropriate.

37.5 All unclaimed distributions may be invested or otherwise made use of by the Directors for the benefit of the Company until claimed, provided that distributions unclaimed for a period of 3 (three) years from the date on which they were declared may be declared forfeited by the Directors for the benefit of the Company. The Directors may at any time annul such forfeiture upon such conditions (if any) as they think fit.

37.6 Any distribution, interest or other sum payable in cash to the holder of a Share may be paid by cheque or warrant sent by post and addressed to -

37.6.1 the holder at his registered address; or

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Date: 10/12/2021 37.6.2 in the case of joint holders, the holder whose name appears first in the Securities Register in respect of the share, at his registered address; or

37.6.3 such person and at such address as the holder or joint holders may in writing direct.

37.7 Every such cheque or warrant shall -

37.7.1 be made payable to the order of the person to whom it is addressed; and

37.7.2 be sent at the risk of the holder or joint holders.

37.8 The Company shall not be responsible for the loss in transmission of any cheque or warrant or of any document (whether similar to a cheque or warrant or not) sent by post as aforesaid.

37.9 A holder or any one of two or more joint holders, or his or their agent duly appointed in writing, may give valid receipts for any distributions or other moneys paid in respect of a Share held by such holder or joint holders.

37.10 When such cheque or warrant is paid, it shall discharge the Company of any further liability in respect of the amount concerned.

37.11 A distribution may also be paid in any other way determined by the Directors, and if the directives of the Directors in that regard are complied with, the Company shall not be liable for any loss or damage which a Shareholder may suffer as a result thereof.

37.12 Without detracting from the ability of the Company to issue capitalisation Shares, any distribution may be paid wholly or in part -

37.12.1 by the distribution of specific assets; or

37.12.2 by the issue of Shares, debentures or securities of the Company or of any other company; or

37.12.3 in cash; or

37.12.4 in any other way which the Directors may at the time of declaring the distribution determine.

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Date: 10/12/2021 37.13 Where any difficulty arises in regard to such distribution, the Directors may settle that difficulty as they think expedient, and in particular may fix the value which shall be placed on such specific assets on distribution.

37.14 The Directors may -

37.14.1 determine that cash payments shall be made to any Shareholder on the basis of the value so fixed in order to secure equality of distribution; and

37.14.2 vest any such assets in trustees upon such trusts for the benefit of the persons entitled to the distribution as the Directors deem expedient.

38 ACCESS TO COMPANY RECORDS

38.1 Each person who holds or has a beneficial interest in any Securities issued by the Company is entitled to inspect and copy, upon payment of the prescribed maximum charge for any such copy, the information contained in the records of the Company referred to in section 26(1), being -

38.1.1 this Memorandum of Incorporation, and any amendments or alterations thereof, and any Rules of the Company;

38.1.2 a record of the Directors, including the details of any person who has served as a Director, for a period of 7 (seven) years after that person has ceased to serve as a Director, and any information relating to such persons referred to in section 24(5);

38.1.3 all -

38.1.3.1 reports presented at an annual general meeting of the Company for a period of 7 (seven) years after the date of any such meeting, provided that no such inspection right shall exist if and to the extent that the Company is not required to, and does not, in fact, hold an annual general meeting; and

38.1.3.2 annual financial statements required by the Act for a period of 7 (seven) years after the date on which each such particular statements were issued;

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Date: 10/11/2021 38.1.4 notice and minutes of all Shareholders' meetings, including –

- 38.1.4.1 all resolutions adopted by them, for 7 (seven) years after the date each such resolution was adopted; and
- 38.1.4.2 any document that was made available by the Company to the holders of Securities in relation to each such resolution;
- 38.1.5 any written communications sent generally by the Company to all holders of any class of the Company's Securities, for a period of 7 (seven) years after the date on which each of such communications was issued; and
- 38.1.6 the Securities Register of the Company.
- 38.2 A person not contemplated in clause 38.1 has a right to inspect the Securities Register and the register of Directors of the Company upon payment of the prescribed maximum fee for any such inspection.

39 NOTICES

- 39.1 All notices intended or required to be given by the Company to any Shareholder of the Company shall be given in writing in any manner authorised by the Regulations and particularly Table CR 3 annexed to the Regulations.
- 39.2 Each Shareholder of the Company –
 - 39.2.1 shall notify in writing to the Company an address, which address shall be his registered address for the purposes of receiving written notices from the Company by post and if he has not named such an address he shall be deemed to have waived his right to be so served with notices; and
 - 39.2.2 may notify in writing to the Company an email address and/or facsimile number, which address shall be his address for the purposes of receiving notices by way of Electronic Communication.
- 39.3 Any Shareholder whose address in the Securities Register is an address not within South Africa, and who shall from time to time furnish the

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Date: 10/12/2021 Company with an address within South Africa at which notices can be served upon him, shall be entitled to have notices served upon him at such address.

39.4 Save as determined in this Memorandum of Incorporation or in the Act, no Shareholder other than a registered Shareholder whose address appears in the Securities Register as being in South Africa, shall be entitled to receive any notice from the Company.

39.5 In the case of joint holders of a Share, all notices shall, unless such holders otherwise in writing request and the Directors agree, be given to that Shareholder whose name appears first in the Securities Register and a notice so given shall be deemed sufficient notice to all the joint holders.

39.6 Save to the extent that any of the following provisions of this clause 39.6 may be in conflict with any provision contained in the Act or the Regulations, any notice sent by –

39.6.1 registered post to the last-known address of a Shareholder shall be deemed to have been delivered on the 7th (seventh) day following the day on which the notice or document was posted as recorded by a post office, unless there is conclusive evidence that it was delivered on a different day;

39.6.2 faxing the notice to a Shareholder, if the Shareholder has a fax number, shall be deemed to have been delivered on the date and at the time recorded by the fax receiver, unless there is conclusive evidence that it was delivered on a different date or at a different time;

39.6.3 sending the notice to a Shareholder by electronic mail, if the Shareholder has an address for the receiving of electronic mail, shall be deemed to have been delivered on the date and at the time recorded by the computer used by the sender, unless there is conclusive evidence that it was delivered on a different date or at a different time,

any other means permitted in the said Table CR 3 shall be deemed to have been delivered as provided for that method of delivery in such Table.

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Date: 10/12/2021

39.7 Every person who by operation of law, transfer or other means whatsoever becomes entitled to any Share, shall be bound by every notice in respect of that Share which, previously to his name and address being entered in the Securities Register, was given to the person from whom he derives his title to such Share.

39.8 Any notice or document delivered or sent by post to or left at the registered address of any Shareholder in pursuance of this Memorandum of Incorporation shall, notwithstanding that such Shareholder was then deceased, and whether or not the Company has notice of his death, be deemed to have been duly served in respect of any Shares, whether held solely or jointly with other persons by such Shareholder, until some other person be registered in his stead as the sole or joint holder thereof, and such service shall for all purposes of this Memorandum of Incorporation be deemed a sufficient service of such notice or document on his heirs, executors or administrators, and all persons (if any) jointly interested with him in any such Shares.

40 AMENDMENT OF MEMORANDUM OF INCORPORATION

40.1 Save for the amendments contemplated in clause 40.2, this Memorandum of Incorporation may only be altered or amended in the manner set out in sections 16 (other than 16(1)(b)), 17 or 152(6)(b).

40.2 The Board, or any individual authorised by the Board, may alter this Memorandum of Incorporation in any manner necessary to correct a patent error in spelling, punctuation, reference, grammar or similar defect on the face of the document by –

40.2.1 publishing a notice of any alteration made by delivering a copy of such amendments to each Shareholder by ordinary mail; and

40.2.2 filing a notice of the alteration.

40.3 An amendment of this Memorandum of Incorporation will take effect from the later of –

40.3.1 the date on, and time at, which the Commission accepts the filing of the

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Date: 10/12/2021 notice of amendment contemplated in section 16(7); and

40.3.2 the date, if any, set out in the said notice of amendment,

save in the case of an amendment that changes the name of the Company, which will take effect from the date set out in the amended registration certificate issued by the Commission.

41 COMPANY RULES

41.1 The Board is authorised to make, amend or repeal any necessary or incidental rules relating to the governance of the Company in respect of matters that are not addressed in the Act or in this Memorandum of Incorporation by -

41.1.1 publishing a copy of any Rules or amendments to such Rules made in terms of section 15(3) to 15(5) by delivering a copy of such Rules or amendments to each Shareholder by ordinary mail; and

41.1.2 filing a copy of those Rules.

41.2 Any Rules so made shall take effect and become binding in the manner contemplated in section 15(4).

41.3 The Board, or any individual authorised by the Board, may alter the Rules, in any manner necessary to correct a patent error in spelling, punctuation, reference, grammar or similar defect on the face of the document by -

41.3.1 publishing a notice of any alteration made by delivering a copy of such amendments to each Shareholder by ordinary mail; and

41.3.2 filing a notice of the alteration.

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Date: 10/12/2021

ADOPTION

This Memorandum of Incorporation was adopted by the incorporators of the Company in accordance with section 13(1) as evidenced by the following signatures made by each of them or on their behalf –

Signature of Incorporator	<i>W. Staden</i>
Name of Incorporator	Wilhelmina Louisa van Staden
Registration/Identity Number	601205 0097 087
Date	08/10/2020

SCHEDULE "1"

ADDITIONAL CLASSES OF SHARES

In addition to the Shares contemplated in clause 8.1.1 of the Memorandum of Incorporation to which this schedule is Schedule 1, the Company is authorised to issue no more than the following further Shares –

Nil

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SANDTON 2196

Date: *10/12/2021*
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Appendix 6.1 of FORM G

Provide details of all ownership interests in the applicant and the identity number and address of each holder of an ownership interest in the applicant. Where an applicant is a juristic person only shareholdings (or equivalent) of 5% or more of the total issued shares (or equivalent) in the applicant are relevant.

DFA's current direct shareholding structure is as follows:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage ownership in DFA (where above 5%)
1.	Community Investment Venture Holdings Proprietary Limited (CIVH)	South Africa	2004/010305/07	1 Petunia Street Cnr Main Road and Petunia Street Bryanston Gauteng 2191	47.59%
2.	CIV Fibre Network Solutions Proprietary Limited (CIV FNS), which is a wholly-owned subsidiary of CIVH	South Africa	2007/016989/07	2 nd Floor 476 Kings Highway Lynnwood Pretoria 0081	52.41%

Appendix 6.3 of FORM G

In respect of each holder of any ownership interest in any person holding an interest in applicant, provide the details required in 6.1 in respect of each such holder:

SEE STRUCTURE CHART ATTACHED AS APPENDIX 6.3(a)

(i) Shareholders of CIVH (shareholder of DFA):

As at the date of this Consolidated Transfer Application, the details of all parties which currently hold indirect ownership interests in DFA are as follows :

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in DFA
1.	CIVH, which is the sole shareholder of CIV FNS which holds 52.41% of the shares in DFA (this is excluding the direct shareholding of 47.59% which CIVH itself holds in DFA, as outlined in Appendix 6.1 of Form G above)	South Africa	2004/010305/07	1 Petunia Street Cnr Main Road and Petunia Street Bryanston Gauteng 2191	52.41% (100 % x 52.41%)
2.	Industrial Electronic Investments Proprietary Limited (Remgro), which holds 57.02% in CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	1979/001237/07	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	57.02% (57.02% x 100% x 100%)
3.	The New GX Partnership II (the New GX Partnership II), which holds 27.01% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2008/001782/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	27.01% (27.01% x 100%)
4.	New GX Fund 1 Proprietary Limited (New GX Fund 1), which holds 10.48% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2016/261761/07	4 th Floor 35 Ferguson Road Illovo Gauteng 2196	10.48% (10.48% x 100% x 100%)
5.	Community Investment Holdings Proprietary Limited (CIH), which holds	South Africa	1995/007296/07	180 Garstfontein Road	4.58% ¹ (4.58% x 100%)

¹ Although the indirect shareholding held by CIH in DFA is less than 5%, this has been included for the sake of completeness.

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in DFA
	4.58% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)			Block 3 Ashlea Gardens Office Park Ashlea Gardens Pretoria Gauteng 0181	
6.	Longbay Investments Proprietary Limited (Longbay Investments), which holds 0.92% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2021/401315/07	180 Garstfontein Road Block 3 Ashlea Gardens Office Park Ashlea Gardens Pretoria Gauteng 0181	0.92% ² (0.92% x 100%)

(ii) Shareholders of shareholders of shareholders of DFA:

As at the date of this Consolidated Transfer Application, the details of all parties which currently hold direct ownership interests in the indirect shareholders (as set out above in paragraph (i)) of DFA are as follows:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1.	VenFin Proprietary Limited (VenFin), which holds 100% of Remgro, which holds 57.02% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2004/034954/07	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	57.02% (100% x 57.02% x 100%)
2.	Main Street 651, which is the General Partner of New GX Partnership II, has a 15% participation interest in New GX	South Africa	2008/001782/07	35 Ferguson Road Illovo Johannesburg Gauteng	4.05% ³ (15% x 27.01% x 100%)

² Although the indirect shareholding held by Longbay Investments in DFA is less than 5%, this has been included for the sake of completeness.

³ Although the indirect shareholding held by Main Street 651 in DFA is less than 5%, this has been included for the sake of completeness.

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
	Partnership II, which holds 27.01% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)			2196	
3.	Main Street 652 Proprietary Limited (Main Street 652), which is the Limited Partner of New GX Partnership II, has an 85% participation interest in New GX Partnership II, which holds 27.01% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2008/001788/07	Harith General Partners Block A-1 34 Impala Road Chislehurst Sandton Gauteng 2196	22.96% (85% x 27.01% x 100%)
4.	New GX Investments Proprietary Limited, which currently holds 100% of the New GX Fund 1, which holds 10.48% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2005/038526/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	10.48% (100% x 10.48% x 100%)

(iii) **Shareholders of VenFin which have an indirect shareholding in DFA:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1.	Remgro Limited, which holds 100% of VenFin, which holds 100% of Remgro, which holds 57.02% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	1968/006415/06	Millenia Park 16 Stellantia Avenue Stellenbosch 7600	57.02% (100% x 100% x 57.02% x 100%)

(iv) **Shareholders of Main Street 651 which have an indirect shareholding in DFA:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1.	New GX Investments, which holds 100% of Main Street 651, which has a 15% participation interest in New GX Partnership II, which holds 27.01% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2005/038526/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	4.05% ⁴ (100% x 15% x 27.01% x 100%)

(v) **Shareholders of Main Street 652 which have an indirect shareholding in DFA:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
3.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
4.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
5.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

(vi) **Holders of ownership interests in [CONFIDENTIAL] which have an indirect shareholding in DFA:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(vii) **Shareholders of New GX Investments which have an indirect shareholding in DFA:**

⁴ Although the indirect shareholding held by Main Street 651 in DFA is less than 5%, this has been included for the sake of completeness.

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1	New GX Capital Holdings Proprietary Limited (New GX Capital), which holds 50.24% of New GX Investments, which holds 100% of Main Street 651, which has a 15% participation interest in New GX Partnership II which holds 27.01% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2005/038346/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	2.04% ⁵ (50.24% x 100% x 15% x 27.01% x 100%)
2	New GX Capital which holds 50.24% of New GX Investments, which holds 100% of New GX Fund 1, which holds 10.48% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	2005/038346/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	5.27% (50.24% x 100% x 10.48% x 100%)
Total effective interest held by New GX Capital:					7.31%
3	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
4	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(viii) **Shareholders of New GX Capital which have an indirect shareholding in DFA:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(ix) **Current shareholders of [CONFIDENTIAL] which have an indirect shareholding in DFA:**

⁵ Although the indirect shareholding held by New GX Capital in DFA is less than 5%, this has been included for the sake of completeness.

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in DFA
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(x) **Shareholders of Remgro Limited which have an indirect shareholding in DFA:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in DFA
1.	Public Investment Corporation (PIC), which holds 17.43% of Remgro Limited, which holds 100% of Remgro, which holds 57.02% of CIVH, which holds 100% of the shares in DFA (directly and indirectly through CIV FNS)	South Africa	1968/006415/06	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	9.89% (17.34% x 100% x 57.02% x 100%)

ANNEXURE 6.3(a)

The organizational chart illustrates the ownership structure of New GX Capital Holdings Proprietary Limited and its subsidiaries. At the top is a red triangle representing the ultimate owner. Below it, two blue boxes represent intermediate entities, one of which is 100% owned by the triangle. These lead to a row of five entities: a red box (x%), New GX Capital Holdings Proprietary Limited (50.24%), a red box (x%), and two blue boxes (x% and x%). New GX Capital Holdings Proprietary Limited owns 100% of New GX Investments Proprietary Limited, which in turn owns 100% of New GX Fund 1 Proprietary Limited (10.48%). New GX Capital Holdings Proprietary Limited also owns 15% of Main Street 651 Proprietary Limited, which owns 27.01% of New GX Partnership II. Main Street 652 Proprietary Limited (85%) owns 4.58% of Community Investment Holdings Proprietary Limited. Longbay Investments Proprietary Limited (0.92%) and Industrial Electronic Investments Proprietary Limited (57.02%) are also shown. Community Investment Holdings Proprietary Limited owns 100% of CIVH Fibre Network Solutions Proprietary Limited, which owns 52.41% of Dark Fibre Africa Proprietary Limited. The total ownership of Dark Fibre Africa Proprietary Limited is 47.59%.

```
graph TD; Owner[Owner] -- 100% --> Entity1[ ]; Entity1 -- 100% --> Entity2[ ]; Entity2 -- 50.24% --> NewGXCapital[New GX Capital Holdings Proprietary Limited]; Entity2 -- x% --> Entity3[ ]; Entity2 -- x% --> Entity4[ ]; Entity2 -- x% --> Entity5[ ]; Entity2 -- x% --> Entity6[ ]; Entity2 -- x% --> Entity7[ ]; NewGXCapital -- 100% --> NewGXInvestments[New GX Investments Proprietary Limited]; NewGXInvestments -- 100% --> NewGXFund1[New GX Fund 1 Proprietary Limited]; NewGXCapital -- 15% --> MainStreet651[Main Street 651 Proprietary Limited]; MainStreet651 -- 27.01% --> NewGXPartnershipII[New GX Partnership II]; MainStreet652[Main Street 652 Proprietary Limited] -- 85% --> CommunityInvestmentHoldings[Community Investment Holdings Proprietary Limited]; CommunityInvestmentHoldings -- 4.58% --> LongbayInvestments[Longbay Investments Proprietary Limited]; LongbayInvestments -- 0.92% --> IndustrialElectronicInvestments[Industrial Electronic Investments Proprietary Limited]; CommunityInvestmentHoldings -- 100% --> CIVH[CIVH Fibre Network Solutions Proprietary Limited]; CIVH -- 52.41% --> DarkFibreAfrica[Dark Fibre Africa Proprietary Limited]; PublicInvestmentCorp[Public Investment Corporation] -- 17.43% --> Remgro[Remgro Limited]; Remgro -- 100% --> VenFin[VenFin Proprietary Limited]; VenFin -- 100% --> IndustrialElectronicInvestments; DarkFibreAfrica -- 47.59% --> DarkFibreAfrica;
```

In respect of each holder of any ownership interest in any person holding an interest in applicant, provide details as to the extent to which any ownership interest is held by a historically disadvantaged person.

HDG ownership

The ownership by Black people (as defined in the Broad-Based Black Economic Empowerment Act 53 of 2003 (**BBBEE Act**) (who are also persons from historically disadvantaged groups for the purposes of the Act) in DFA is 44.78%. This is determined in accordance with the ICT Sector Code, excluding the modified flow-through principle, as provided for in the Regulations in respect of the Limitations of Control and Equity Ownership by Historically Disadvantaged Groups (HDGs) and the Application of the ICT Sector Code, 2021 (the **2021 Ownership Regulations**).

The current ownership by Black people in DFA can be broken down as follows:

- CIVH is 44.78% owned by Black people. This is evidenced by CIVH's current BBBEE certificate issued by Cardinal Ratings on 26 November 2021 in terms of the general Codes of Good Practice (the **Codes**), attached as **Annexure 6.4(a)**. As such, the ownership held by Black people in DFA is 44.78% (100% x 44.78%).
- CIVH's ownership by Black people is broken down as follows:
 - New GX Fund 1 Proprietary Limited (**New GX Fund I**), which holds 10.48% of CIVH is an Exempted Micro-Enterprise (**EME**) in the financial sector and is 27.48% owned by Black people. This is evidenced by the sworn affidavit deposed to by Mr Graham Rex McGregor dated 16 September 2021 as **Annexure 6.4(b) [CONFIDENTIAL]**. As such, CIVH's ownership by Black people through New GX Fund 1 is 2.88% (10.48% x 27.48%).
 - The New GX Partnership II, which holds 27.01% of CIVH, is 87.37% owned by Black people. This is evidenced by the Excel spreadsheet attached as **Annexure 6.4(c) [CONFIDENTIAL]**. As such, CIVH's ownership by Black people through the New GX Partnership II is 23.59% (27.01% x 87.37%).
 - Main Street 651 Proprietary Limited (**Main Street 651**), which is the General Partner which holds a 15% participation interest in the New GX Partnership II, which holds 27.01% of CIVH, is 27.48% owned by Black people. This is evidenced by the sworn affidavit deposed to by Khudusela Makwe Pitjie dated 17 September 2021 attached as **Annexure 6.4(d) [CONFIDENTIAL]**. As such, CIVH's ownership by Black people through the General Partner of CIVH's direct shareholder, the New GX Partnership II is 1.11% (15% x 27.01% x 27.48%).
 - Remgro Limited, which holds 100% of Industrial Electronic Investments Proprietary Limited (Remgro), which holds 57.02% of CIVH, is 22.26% owned by Black people. This is evidenced by Remgro Limited's BBBEE certificate issued by AQRate in terms of the Codes, attached as **Annexure 6.4(e)**. As such, CIVH's ownership by Black people through Remgro Limited is 12.69% (100% x 57.02% x 22.26%).
 - Community Investment Holdings Proprietary Limited (**CIH**), which holds 4.58% of CIVH, is 100% owned by Black people. This is evidenced by (i) a letter from CIH dated 25 August 2021 confirming its ownership percentage by Black people, attached as **Annexure 6.4(f)**; (ii) the report prepared by PricewaterhouseCoopers dated 1 September 2021 which provides an overview of the ownership held by Black people in CIH, attached as **Annexure 6.4(g) [CONFIDENTIAL]**; and (iii) a sworn affidavit deposed to by Ms Theresa Mokgokong from the Mantokozo Investment Trust (which is one of the shareholders of CIH) which is an EME in terms of the Codes and which is 100% owned by Black people, attached as **Annexure 6.4(h) [CONFIDENTIAL]**. As such, CIVH's ownership by Black people through CIVH is 4.58% (4.58% x 100%).

*A structure chart detailing DFA's current ownership by Black people is attached as **Annexure 6.4(i)**.*

BBBEE contributor status level

*Although not strictly required for the purpose of this Consolidated Transfer Application, for the sake of completeness and as required in the 2021 Ownership Regulations in due course, DFA is a Level 1 BBBEE contributor, as determined in accordance with ICT Sector Code and as evidenced by DFA's BBBEE certificate issued by Cardinal Ratings on 26 November 2021, attached as **Annexure 6.4(j)**.*



BROAD-BASED BEE VERIFICATION CERTIFICATE

WE CERTIFY THAT

COMMUNITY INVESTMENT VENTURES HOLDINGS (PTY) LTD

COMPANY REGISTRATION NUMBER: 2004/010305/07 VAT NUMBER: 4030243549

1 PETUNIA STREET | CORNER MAIN ROAD & PETUNIA STREET
BRYANSTON | GAUTENG | 2191

HAS BEEN ASSESSED AND VERIFIED WITH THE B-BBEE ACT (NO. 46 OF 2013) AND THE AMENDED ICT SECTOR CODES OF GOOD PRACTICE, GAZETTE 39887 AND HAS ACHIEVED THE FOLLOWING.

**B-BBEE STATUS LEVEL: 2**

B-BBEE PROCUREMENT RECOGNITION LEVEL: 125%

ELEMENT	WEIGHTING	ACHIEVED
OWNERSHIP	25.00	25.00
MANAGEMENT CONTROL	23.00	18.92
SKILLS DEVELOPMENT	25.00	12.91
ENTERPRISE & SUPPLIER DEV	55.00	47.22
SOCIO-ECONOMIC DEV	12.00	12.00
TOTAL	140.00	116.05
PARTICIPATED IN Y.E.S. INITIATIVE		NO
ACHIEVED Y.E.S. TARGET & 2.5% ABSORPTION		NO
ACHIEVED 1.5 X Y.E.S. TARGET & 5% ABSORPTION		NO
ACHIEVED DOUBLE Y.E.S TARGET & 5% ABSORPTION		NO

CERTIFICATE NUMBER	CR-21090101/V3
BLACK OWNERSHIP %	44.78%
BLACK FEMALE OWNERSHIP %	18.10%
BLACK DESIGNATED GROUP %	5.79%
BLACK YOUTH %	5.79%
BLACK NEW ENTRANTS %	3.83%
MODIFIED FLOW THROUGH PRINCIPLE	NO
EXCLUSION PRINCIPLE USED	YES
EMPOWERING SUPPLIER	YES
DISCOUNTING PRINCIPLE USED	NO
EFFECTIVE DATE	26 NOVEMBER 2021
EXPIRY DATE	31 AUGUST 2022
BEE CATEGORY	GENERIC
MEASUREMENT PERIOD	01 April 2020-31 March 2021



NKOSILATHI MTHOMBENI
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OWNERSHIP ASSESSMENT

Company Name	Remgro Limited
Trade Name	Remgro Limited
Location	16 Stellantia Avenue Stellenbosch 7600
Registration Number	1968/006415/06
VAT Number	4480191685
Certificate Number	REL010350 - REV4

VERIFIED B-BBEE OWNERSHIP SCORECARD

	Weighting	Target	% Achieved	Points Achieved
Exercisable Voting Rights by Black People	4	25% + 1 vote	23.02%	3.68
Exercisable Voting Rights by Black Women	2	10%	11.82%	2.00
Economic Interest in the Enterprise to which Black People are entitled	4	25%	22.26%	3.56
Economic Interest in the Enterprise to which Black Women are entitled	2	10%	11.36%	2.00
Economic Interest of any of the following Black natural people in the Measured Entity - Black Designated Groups :			6.62%	
- Black Designated Groups (Black Youth)			(0%)	
- Black Designated Groups (Black Disabled)			(0%)	
- Black Designated Groups (Black Unemployed)			(0%)	
- Black Designated Groups (Rural or Under-Developed Area)			(0%)	
- Black Designated Groups (Black Military Veterans)			(0%)	
Black participants in Employee Ownership Programmes (ESOP)			0.00%	
Black participants in Broad-Based Ownership Schemes (BBOS)			0.00%	
Black participants in Co-Operatives			0.00%	
Involvement in the ownership of the enterprise by Black New Entrants	2	2%	0.00%	0.00
Net Value	8	As defined		6.06
Total Points				20.30

BROAD-BASED BLACK ECONOMIC EMPOWERMENT OWNERSHIP STATUS

Empowering Supplier Status	Not Assessed
Exclusion Principle applied to Ownership	No
Modified Flow-Through Principle Applied	No
Black Ownership	Flow-Through Modified Flow-Through
Voting Rights of Black People	23.02% N/A
Voting Rights of Black Women	11.82% N/A
Economic Interest of Black People	22.26% N/A
Economic Interest of Black Women	11.36% N/A
51% Black Owned	No
30% Black Women Owned	No
51% Designated Group Supplier Status	No
Applicable B-BBEE Codes	Amended Code 100 of 36928, Gazetted 11 October 2013
Measurement Date	30 June 2021
Issue Date	10 September 2021
Original Issue Date	N/A
Expiry Date	09 September 2022

William Smith

William Smith
Technical Signatory



Reg:1995/007296/07

Building 3, Ashlea Gardens
Office Park,
180 Garstfontein Road
Ashlea Gardens, 0181
Pretoria, South Africa

Private Bag X2001
Menlyn, 0063

Tel. +27 (12) 346 9065

To whom it may concern

Dear Sir/Madam

RE: Black youth and black female ownership as reflected on B-BBEE Affidavits of all Community Investment Holdings (Pty) Ltd ("CIH") Subsidiaries and Associates.

You may have become aware that the B-BBEE affidavits presented to you this year has a different ownership composition than what was presented in previous years.

Please be assured that there has been no change in the ultimate shareholding structures.

The change in black ownership contributions during the 2021 financial year was the result of distributions declared to beneficiaries of the various Trusts, which ultimately owns CIH, its subsidiaries and various associate companies.

In the 2021 financial year, distributions were declared to beneficiaries which are at present regarded as black youth under the prevailing B-BBEE legislation.

Kindly take note that the percentages allocated to black youth during the 2021 financial year cannot be guaranteed in future and will change according to the relevant scenario in any given year.

The percentages allocated to black female ownership is also dependent on distributions declared to the black female beneficiaries in any given year and therefore the black female percentages may vary annually.

CIH and its associated companies can however guarantee that it is 100% black owned and that it will have black female ownership.

Should you have any questions, please contact our office.

Yours faithfully

A handwritten signature in black ink, appearing to read "MJ Madungandaba", is written over a horizontal line.

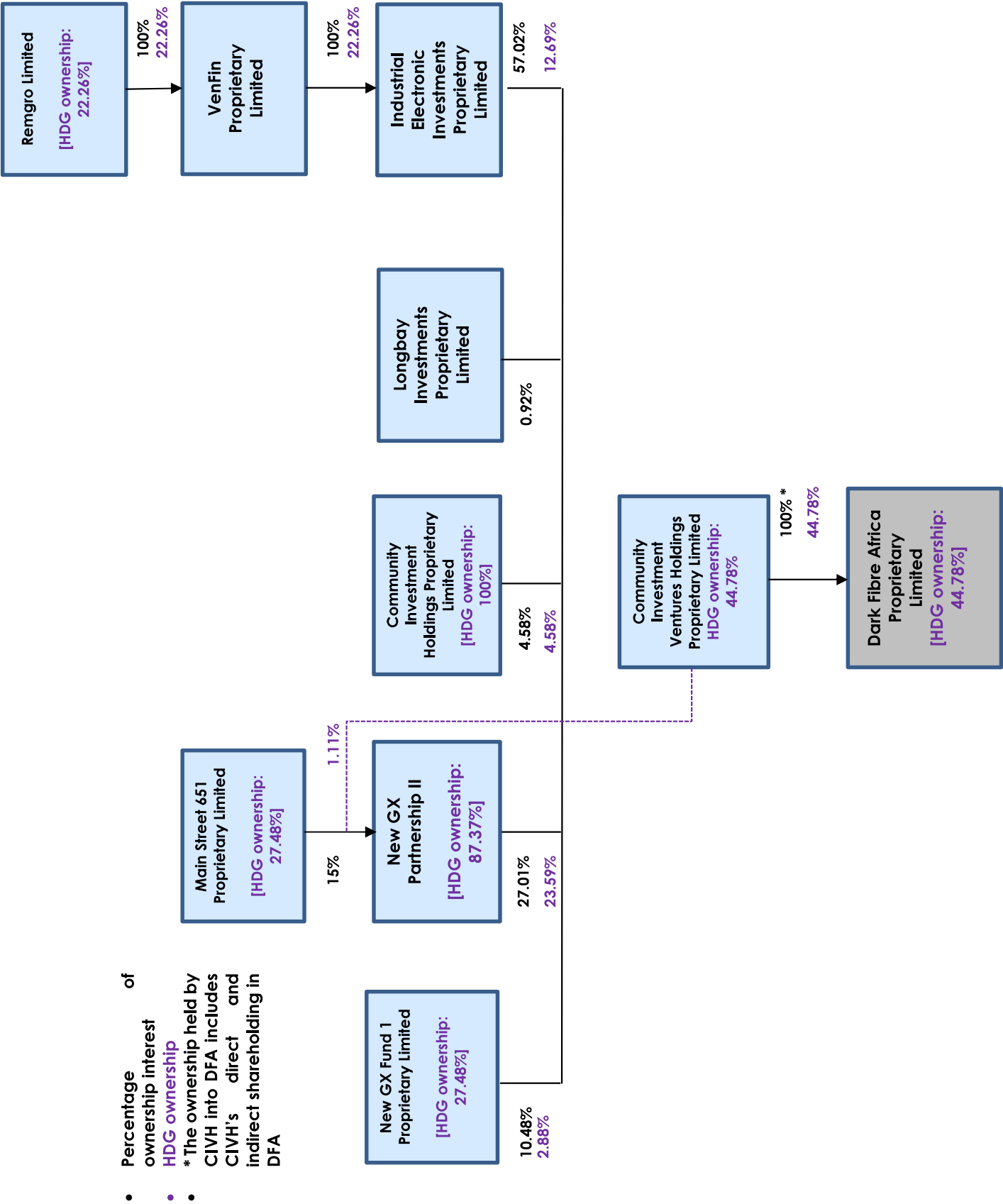
Mr. MJ Madungandaba
Director

25/08/2021

Directors:

MJ Madungandaba (Chief Executive Officer), Dr ATM Mokgokong (Executive Chairperson)

ANNEXURE 6.4(i)





BROAD-BASED BEE VERIFICATION CERTIFICATE

WE CERTIFY THAT

DARK FIBRE AFRICA (PTY) LTD

COMPANY REGISTRATION NUMBER: 2007/013968/07 VAT NUMBER: 4140243116

96 KORANNA AVENUE | DORINGKLOOF | CENTURION | 0157

HAS BEEN ASSESSED AND VERIFIED WITH THE B-BBEE ACT (NO. 46 OF 2013) AND THE AMENDED ICT SECTOR CODES OF GOOD PRACTICE, GAZETTE 39887 AND HAS ACHIEVED THE FOLLOWING.

**B-BBEE STATUS LEVEL: 1**

B-BBEE PROCUREMENT RECOGNITION LEVEL: 135%

ELEMENT	WEIGHTING	ACHIEVED
OWNERSHIP	25.00	25.00
MANAGEMENT CONTROL	23.00	14.23
SKILLS DEVELOPMENT	25.00	14.24
ENTERPRISE & SUPPLIER DEV	55.00	52.77
SOCIO-ECONOMIC DEV	12.00	12.00
TOTAL	140.00	118.24
PARTICIPATED IN Y.E.S. INITIATIVE		YES
ACHIEVED Y.E.S. TARGET & 2.5% ABSORPTION		YES
ACHIEVED 1.5 X Y.E.S. TARGET & 5% ABSORPTION		NO
ACHIEVED DOUBLE Y.E.S TARGET & 5% ABSORPTION		NO

CERTIFICATE NUMBER	CR-21100501/V2
BLACK OWNERSHIP %	44.78%
BLACK FEMALE OWNERSHIP %	18.10%
BLACK DESIGNATED GROUP %	5.79%
BLACK YOUTH %	5.79%
BLACK NEW ENTRANTS %	3.83%
MODIFIED FLOW THROUGH PRINCIPLE	NO
EXCLUSION PRINCIPLE USED	YES
EMPOWERING SUPPLIER	YES
DISCOUNTING PRINCIPLE USED	NO
EFFECTIVE DATE	26 NOVEMBER 2021
EXPIRY DATE	04 OCTOBER 2022
BEE CATEGORY	GENERIC
MEASUREMENT PERIOD	01 April 2020-31 March 2021


NKOSILATHI MTHOMBENI
 TECHNICAL SIGNATORY



BVA 276

Appendix 6.8 of FORM G

Provide details (including name, nationality, identification or passport number, position and address) of each member of the applicant's (i) board of directors or similar body; and (ii) senior management.

The details of the board of directors of DFA are as follows:

	Full name of director	Title / Designation	Nationality	Identity / passport number	Physical address
1.	Neo Priscilla Ralebitso Moshimane	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	Raymond Sibusiso Mbeki Ndlovu	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
3.	Jacques Johan Gryzenhout	Executive director (Chief Financial Officer)	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
4.	Andries Daniel Jan Delpont	Executive director (Chief Executive Officer)	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
5.	Graham Rex McGregor	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
6.	Petrus Johannes Uys	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
7.	Craig Wilton Ceasar	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
8.	Khudusela Makwe Pitje	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
9.	Sipho Daniel Makhubela	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
10.	Andrew Nicholas Louw	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
11.	Merika Johannes Madungandaba	Non-executive director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]
12.	Teboho Basetsana Molebatsi	Non-executive independent director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]

As at the date of this Consolidated Transfer Application, the details for the senior management of DFA are

as follows:

	<i>Full name of senior manager</i>	<i>Title / Designation</i>	<i>Nationality</i>	<i>Identity / passport number</i>	<i>Physical address</i>
1.	<i>Andries Daniel Jan Delpont</i>	<i>Chief Executive Officer</i>	<i>South African</i>	<i>[CONFIDENTIAL]</i>	<i>[CONFIDENTIAL]</i>
2.	<i>Jacques Johan Gryzenhout</i>	<i>Chief Financial Officer</i>	<i>South African</i>	<i>[CONFIDENTIAL]</i>	<i>[CONFIDENTIAL]</i>
3.	<i>Roelof Andreas Uys</i>	<i>Chief Technical Officer</i>	<i>South African</i>	<i>[CONFIDENTIAL]</i>	<i>[CONFIDENTIAL]</i>
4.	<i>Praveen Govender</i>	<i>Chief Sales and Marketing Officer</i>	<i>South African</i>	<i>[CONFIDENTIAL]</i>	<i>[CONFIDENTIAL]</i>
5.	<i>Ntakadzeni Thelma Thokoane</i>	<i>Chief Human Capital Officer</i>	<i>South African</i>	<i>[CONFIDENTIAL]</i>	<i>[CONFIDENTIAL]</i>
6.	<i>Wesley Nash</i>	<i>Chief Operations Officer</i>	<i>South African</i>	<i>[CONFIDENTIAL]</i>	<i>[CONFIDENTIAL]</i>

Appendix 7.1 of FORM G

Provide details of all ownership interests in the transferee and the identity and address of each holder of an ownership interest in the transferee if a natural person. Where a transferee is a juristic person, indicate all; the shareholders and the percentage shares held by each shareholder.

Following the implementation of the Proposed Transaction and Internal Restructure, NewCo's shareholding structure will be as follows:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage ownership in NewCo (5% or more)
1.	CIVH	South Africa	2004/010305/07	1 Petunia Street Cnr Main Road and Petunia Street Bryanston Gauteng 2191	60 - 70% ¹²
2.	Vodacom	South Africa	1993/003367/07	Vodacom Corporate Park 082 Vodacom Boulevard Midrand Gauteng 1685	30 - 40% ¹³ There is a possibility that Vodacom's shareholding may increase to 40% if it exercises the Call Option ¹⁴

¹² CIVH's shareholding in NewCo may decrease to 60% if Vodacom exercises the Call Option described in footnote 14 below.

¹³ This will be achieved by (i) Vodacom's subscription for ordinary shares in NewCo in terms of clause 6.1 and 6.2 of the Subscription Agreement; (ii) Vodacom's subscription for additional ordinary shares in NewCo in terms of clause 6.3.1 of the Subscription Agreement, if necessary; (iii) Vodacom's sale of certain fixed fibre-to-the-home assets, as a going concern, to Vumatel (which will be a wholly-owned subsidiary of NewCo following the implementation of the Proposed Transaction and Internal Restructure and subject to the approval of this Consolidated Transfer Application) in terms of the Sale of FTTH Business Agreement; and (iv) Vodacom's sale of certain fibre assets and infrastructure to DFA (which will be a wholly-owned subsidiary of NewCo following the implementation of the Proposed Transaction and Internal Restructure and subject to the approval of this Consolidated Transfer Application) in terms of the Sale of Transfer Assets Agreement.

¹⁴ Vodacom's shareholding in NewCo, following the implementation of the Proposed Transaction, may increase to 40% if Vodacom decides to exercise the call option to which it is entitled in terms of clause 4 of the Shareholders Agreement (the **Call Option**). In particular, the shares that are the subject of the Call Option will result in Vodacom owning up to or equal to 40%, but not more than 40%, of the issued ordinary shares in NewCo. Vodacom may only exercise the Call Option during the period starting from (and including) the date on which the Proposed Transaction is implemented and ending on (but excluding) the 180th day after the date on which the all the suspensive conditions in the Subscription Agreement have been satisfied (the fulfilment date of the Proposed Transaction).

Provide a written undertaking indicating the correctness of the information stated in 7.1 signed off by Accounting Officer.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

6 April 2021

Dear Sirs

WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN APPENDIX 7.1 TO FORM G ("The Consolidated Transfer Application")

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo, and the Proposed Transaction in terms of which CIVH and Vodacom will own NewCo.
3. I hereby confirm the correctness of the information reflected in Appendix 7.1 of Form G to the Individual Licensing Processes and Procedures Regulations, 2010 as it relates to the shareholding information following the implementation of the Internal Restructure and Proposed Transaction for NewCo.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Provide a written undertaking indicating the correctness of the information stated in 7.3 signed off by Accounting Officer.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

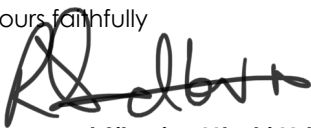
6 April 2022

Dear Sirs

**WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN ITEM 7.3 OF FORM G
("The Consolidated Transfer Application")**

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction following which NewCo will be owned by CIVH and Vodacom.
3. I hereby confirm the correctness of the information reflected in item 7.3 of Form G to the Individual Licensing Processes and Procedures Regulations, 2010, which states that NewCo is not listed on any stock exchange.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Appendix 7.5 of FORM G

In respect of each holder of any ownership interest in any person holding an ownership interest in the transferee, provide the details required in 7.1 in respect of each such holder.

SEE STRUCTURE CHART ATTACHED AS APPENDIX 7.5(a)

Following the implementation of the Proposed Transaction and Internal Restructure, NewCo's indirect shareholding structure will be as follows:

- (i) **Shareholders of CIVH⁹ and Vodacom, which shareholders will have an indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are implemented:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	Remgro, which holds 57.02% of CIVH, which will hold 70% of the shares in NewCo	South Africa	1979/001237/07	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	39.91% (57.02% x 70%)
2.	The New GX Partnership II, which holds 27.01% of CIVH, which will hold 70% of the shares in NewCo	South Africa	2008/001782/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	27.01% (27.01 x 70%)
3.	New GX Fund 1, which holds 10.48% of CIVH, which will hold 70% of the shares in NewCo	South Africa	2016/261761/07	4 th Floor 35 Ferguson Road Illovo Gauteng 2196	7.37% (10.48% x 70%)
4.	CIH, which will hold 4.58% of CIVH, which will hold 70% of the shares in NewCo	South Africa	1995/007296/07	180 Garstfontein Road Block 3 Ashlea Gardens Office Park Ashlea Gardens Pretoria Gauteng 0181	3.21% ¹⁰ (4.58% x 70%)
5.	Longbay Investments,	South Africa	2021/401315/07	180	0.64% ¹¹

⁹ Please note that the indirect shareholding held by the shareholders of CIVH in NewCo is subject to change if Vodacom exercises the Call Option, as described in footnote 14 above, in which case CIVH's shareholding will decrease from 70% to 60% in NewCo.

¹⁰ Although the indirect shareholding that will be held by CIH in NewCo is less than 5%, this has been included for the sake of completeness.

¹¹ Although the indirect shareholding that will be held by Longbay Investments in NewCo is less than 5%, this has been included for the sake of completeness.

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
	which holds 0.92% of CIVH, which will hold 70% of the shares in NewCo			Garstfontein Road Block 3 Ashlea Gardens Office Park Ashlea Gardens Pretoria Gauteng 0181	(0.92% x 70%)
6.	Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	South Africa	1993/005461/06	Vodacom Corporate Park 082 Vodacom Boulevard Midrand Gauteng 1685	30% ¹² (100% x 30%) although there is a possibility that Vodacom's shareholding may increase to 40% (100% x 40%) if it exercises the Call Option ¹³

(ii) **Shareholders of shareholders of CIVH¹⁴ which will have an indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests to be held by them in NewCo:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	VenFin, which holds 100% of Remgro, which holds 57.02% of CIVH, which holds 100% of the shares in NewCo	South Africa	2004/034954/07	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	39.91% (100% x 57.02% x 70%)
2.	Main Street 651, which is the General Partner of the New GX Partnership II,	South Africa	2008/001782/07	35 Ferguson Road Illovo	2.84% ¹⁵ (15% x 27.01% x 70%)

¹² As detailed in the accompanying cover letter, this will be achieved by (i) Vodacom's subscription for ordinary shares in NewCo in terms of clause 6.1 and 6.2 of the Subscription Agreement; (ii) Vodacom's subscription for additional ordinary shares in NewCo in terms of clause 6.3.1 of the Subscription Agreement, if necessary; (iii) Vodacom's sale of certain fixed fibre-to-the-home assets, as a going concern, to Vumatel (which will be a wholly-owned subsidiary of NewCo following the implementation of the Proposed Transaction and Internal Restructure, and subject to the approval of this Consolidated Transfer Application) in terms of the Sale of FTTH Business Agreement; and (iv) Vodacom's sale of certain fibre assets (including fibre-to-the-business assets) and infrastructure to DFA (which will be a wholly-owned subsidiary of NewCo following the implementation of the Proposed Transaction and Internal Restructure, and subject to the approval of this Consolidated Transfer Application) in terms of the Sale of Transfer Assets Agreement.

¹³ There is a possibility that Vodacom's shareholding in NewCo, following the implementation of the Proposed Transaction and Internal Restructure, will increase to 40% if Vodacom decides to exercise the Call Option. See footnote 14 above.

¹⁴ Please note that the indirect shareholding held by the shareholders of the shareholders of CIVH in NewCo is subject to change if Vodacom exercises the Call Option, as described in footnote 14 above, in which case CIVH's shareholding will decrease from 70% to 60% in NewCo.

¹⁵ Although the indirect shareholding that will be held by Main Street 651 in NewCo is less than 5%, this has been included for the sake of completeness.

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
	<i>has a 15% participation interest in the New GX Partnership II, which holds 27.01% of CIVH, which will hold 70% of the shares in NewCo</i>			Johannesburg Gauteng 2196	
3.	<i>Main Street 652, which is the Limited Partner of New GX Partnership II, has an 85% participation interest in New GX Partnership II, which holds 27.01% of CIVH, which will hold 70% of the shares in NewCo</i>	South Africa	2008/001788/07	Harith General Partners Block A-1 34 Impala Road Chislehurst Sandton Gauteng 2196	16.07% (85% x 27.01% x 70%)
4.	<i>New GX Investments, which holds 100% of New GX Fund 1, which holds 10.48% of CIVH, which will hold 70% of the shares in NewCo</i>	South Africa	2005/038526/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	7.37% (100% x 10.48% x 70%)

(iii) **Direct shareholder of VenFin which will have an indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are and relevant ownership interests to be held by it in NewCo:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in NewCo (where above 5%)
1.	<i>Remgro Limited, which holds 100% of VenFin, which holds 100% of Remgro, which holds 57.02% of CIVH, which will hold 70% of the shares in NewCo</i>	South Africa	1968/006415/06	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	39.91% (100% x 100% x 57.02% x 70%)

(iv) **Direct shareholder of Main Street 651 which will have an indirect ownership interest in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interest that it will hold in NewCo:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	New GX Investments which holds 100% of Main Street 651, which is the General Partner of the New GX Partnership II, has a 15% participation interest in the New GX Partnership II, which holds 27.01% of CIVH, which will hold 70% of the shares in NewCo	South Africa	2005/038526/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	2.84% ¹⁶ (100% x 15% x 27.01% x 70%)

- (v) **Direct shareholders of Main Street 652 which will have an indirect ownership interest in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests that will be held by them in NewCo:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
3.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
4.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
5.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

- (vi) **Shareholder [CONFIDENTIAL] which will have an indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests that will be held by them in NewCo:**

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in NewCo
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

- (vii) **Direct shareholders of New GX Investments which will have an indirect ownership interest**

¹⁶ Although the indirect shareholding that will be held by New GX Investments in NewCo is less than 5%, this has been included for the sake of completeness.

in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests that will be held by them in NewCo:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in NewCo
1.	New GX Capital, which holds 50.24% of New GX Investments, which holds 100% of Main Street 651, which has a 15% participation interest in the New GX Partnership II which holds 27.01% of CIVH, which will hold 70% of the shares in NewCo	South Africa	2005/038346/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	1.42% ¹⁷ (50.24% x 100% x 15% x 27.01% x 70%)
2.	New GX Capital which holds 50.24% of New GX Investments which holds 100% of New GX Fund 1, which holds 10.48% of CIVH, which will hold 70% of the shares in NewCo	South Africa	2005/038346/07	35 Ferguson Road Illovo Johannesburg Gauteng 2196	3.13% ¹⁸ (50.24% x 100% x 10.48% x 70%)
Total effective interest held by New GX Capital:					4.55%
3.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
4.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(viii) *Direct shareholders of New GX Capital which will have indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests that will be held by them in NewCo:*

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in NewCo
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(ix) *Direct shareholders of [CONFIDENTIAL] which will have indirect shareholding in NewCo if*

¹⁷ Although the indirect shareholding that will be held by New GX Capital in NewCo is less than 5%, this has been included for the sake of completeness.

¹⁸ Although the indirect shareholding that will be held by New GX Capital in NewCo is less than 5%, this has been included for the sake of completeness.

the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests that will be held by them in NewCo:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of further indirect ownership in NewCo
1.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
2.	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
[CONFIDENTIAL]					[CONFIDENTIAL]

(x) Shareholders of Remgro Limited¹⁹ which will have an indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests that will be held by them in NewCo:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	Public Investment Corporation (PIC), which currently holds 17.43% of Remgro Limited, which holds 100% of Remgro, which holds 57.02% of CIVH, which will hold 70% of the shares in NewCo	South Africa	1968/006415/06	Millenia Park 16 Stellentia Avenue Stellenbosch 7600	7.87% (17.34% x 100% x 64.82% x 70%)

(xi) Shareholders of Vodacom which will have an indirect shareholding in NewCo if the Proposed Transaction and Internal Restructure are implemented and relevant ownership interests to be held by them in NewCo:

	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	South Africa	1993/005461/06	Vodacom Corporate Park 082 Vodacom Boulevard Midrand Gauteng 1685	30% ²⁰ (100% x 30%)

(xii) Shareholders of Vodacom Group²¹ which will have an indirect shareholding in NewCo if the

¹⁹ Please note that the indirect shareholding held by the shareholders of Remgro Limited in NewCo is subject to change if Vodacom exercises the Call Option, as described in footnote 14 above, in which case CIVH's shareholding will decrease from 70% to 60% in NewCo.

²⁰ If Vodacom exercises the Call Option as described in footnote 14 above, thereby increasing Vodacom's shareholding from 30% to 40% in NewCo, and given that Vodacom Group is the sole shareholder of Vodacom, Vodacom Group's indirect shareholding in NewCo will also increase to 40%.

²¹ Please note that the indirect shareholding held by the shareholders of Vodacom is subject to change if Vodacom exercises the Call Option as described in footnote 14 above, in which Vodacom's shareholding will increase from 30% to 40% in NewCo.

Proposed Transaction and Internal Restructure are implemented and relevant ownership interests held by them in NewCo:

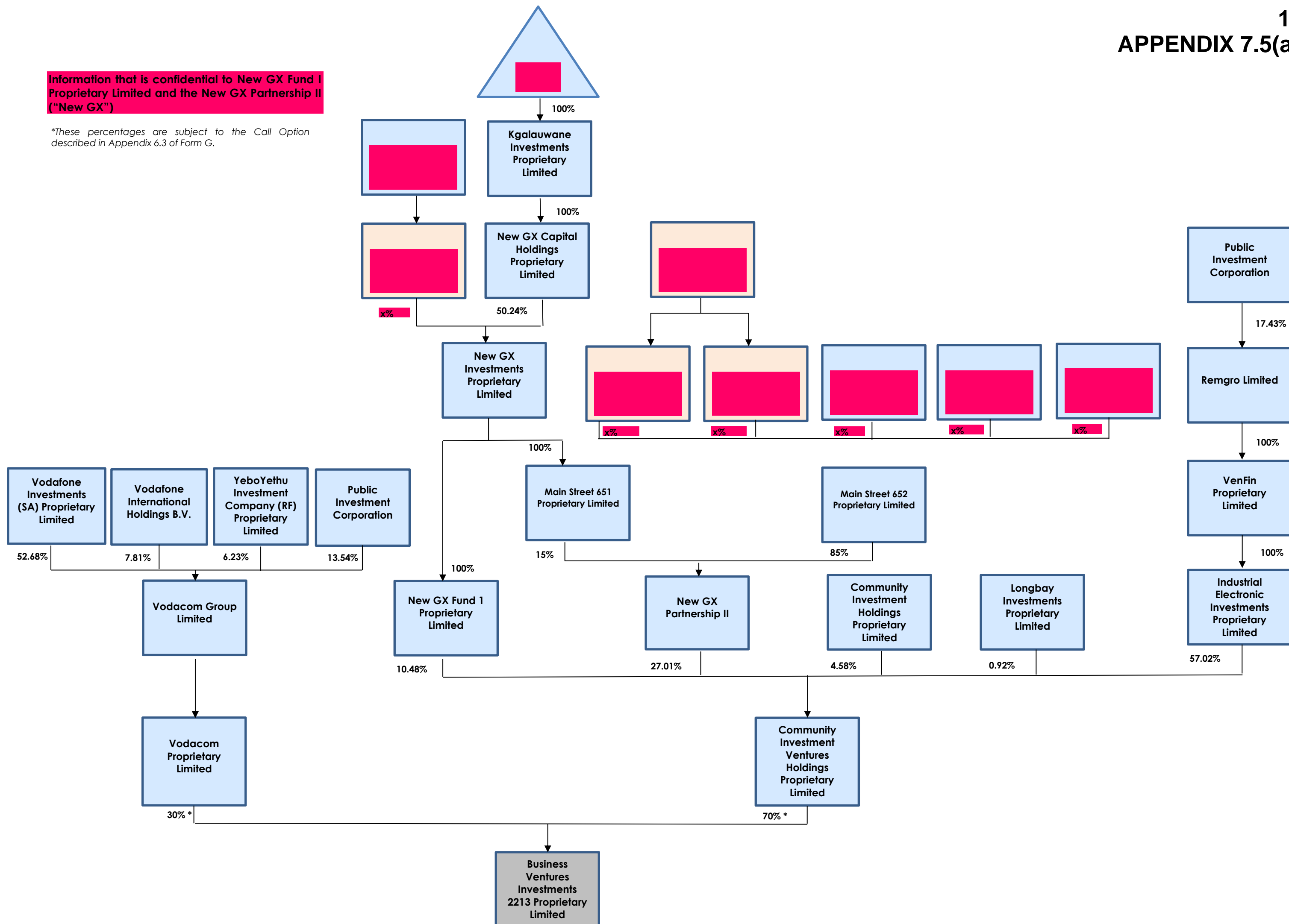
	Name of shareholder	Place / country of incorporation	Registration number	Registered address	Percentage of indirect ownership in NewCo
1.	Vodafone Investments (SA) Proprietary Limited (Vodafone Investments), which holds 52.68% in Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	South Africa	1948/031037/07	9 Kinross Street Germiston South Johannesburg 1401	15.8% (52.68% x 100% x 30%)
2.	Vodafone International Holdings B.V. (Vodafone International), which holds 7.81% in Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	Netherlands	24235177	RiviPlum Quadrant 173 Capelle aan den IJssel 2909 LC Netherlands	2.3% ²² (7.81% x 100% x 30%)
3.	YeboYethu Investment Company (RF) Proprietary Limited (YeboYethu Investment), which holds 6.23% in Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	South Africa	2018/264887/07	082 Vodacom Boulevard Midrand Gauteng	1.87% ²³ (6.23% x 100% x 30%)
4.	Public Investment Corporation (PIC), which holds 13.54% in Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	N/A	N/A	N/A	4.06% ²⁴ (13.54% X 100% x 30%)
5.	General public and institutional shareholders, which hold 19.74% of Vodacom Group, which holds 100% of Vodacom, which will hold 30% of the shares in NewCo	N/A	N/A	N/A	5.92% (19.74% x 100% x 30%)

²² Although the indirect shareholding held by Vodafone International in NewCo is less than 5%, this has been included for the sake of completeness.

²³ Although the indirect shareholding that will be held by YeboYethu Investment in NewCo is less than 5%, this has been included for the sake of completeness.

²⁴ Although the indirect shareholding that will be held by PIC in NewCo is less than 5%, this has been included for the sake of completeness.

*These percentages are subject to the Call Option described in Appendix 6.3 of Form G.



Provide a written undertaking indicating that stated in 7.5 (holders of indirect ownership) signed off by Accounting Officer.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

6 April 2022

Dear Sirs

**WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN ITEM 7.3 OF FORM G
("The Consolidated Transfer Application")**

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 I am the Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) of NewCo.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and an individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction in terms of which NewCo will be owned by CIVH and VOdacom.
3. I hereby confirm the correctness of the information reflected in Appendix 7.5 of Form G to the Individual Licensing Processes and Procedures Regulations, 2010, as it relates to the indirect shareholding information for NewCo.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Provide details on any ownership interest held by a historically disadvantaged person in the transferee.

*The details of the shareholding interests that will be held by HDGs in the intended licence holder (NewCo) following the implementation of the Proposed Transaction and Internal Restructure are set out in **Appendix 9.1**.*

Provide a written undertaking indicating the correctness of the information stated in 7.7 (the extent to which ownership interests in the transferee are held by historically disadvantaged groups) signed off by Accounting Officer.

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

6 April 2022

Dear Sirs

WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN APPENDIX 7.7 TO FORM G ("The Consolidated Transfer Application")

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction in terms of which NewCo will be owned by CIVH and Vodacom.
3. I hereby confirm the correctness of the information reflected in Appendix 7.7 to Form G to the Individual Licensing Processes and Procedures Regulations, 2010 as it relates to the ownership interests that will be held by historically disadvantaged persons in NewCo following the implementation of the Proposed Transaction.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Community Investment Ventures Holdings (Pty) Ltd. Company Registration No.: 2004/010305/07

Postal Address: 1 Petunia Street, Corner of Main Road and Petunia Street, Bryanston, 2191
Tel: +27 (12) 345 7520 Fax: +27 (12) 345 7605

Directors: Basetsana Molebatsi, Craig Ceasar, Joe Madungandaba, Khudusela Pitje, Kobus Viljoen, Pieter Uys, Raymond Ndlovu, Sipho Makhubela, Andrew Louw

Alternate directors: Pete da Silva, Graham McGregor, Kim Brown, Lizeka Matshekg

Provide a written undertaking indicating the correctness of the information stated in 7.9 (whether ownership interest in the transferee is a foreign citizen or an entity registered or incorporated in any country other than South Africa) signed off by Accounting Officer.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa
350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

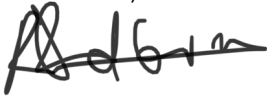
6 April 2022

Dear Sirs

**WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN ITEM 7.9 OF FORM G
("The Consolidated Transfer Application")**

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction in terms of which NewCo will be owned by CIVH and Vodacom.
3. I hereby confirm the correctness of the information reflected in item 7.9 of Form G to the Individual Licensing Processes and Procedures Regulations, 2010 as it relates to the foreign ownership interests held in NewCo.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Provide a written undertaking indicating the correctness of the information stated in 7.11 (whether any person holding an ownership interest in the transferee holds a Licence issued in terms of the Act or holds an ownership interest in any other licensee licensed to provide a service similar to that to which this application relates signed off by Accounting Officer.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

6 April 2022

Dear Sirs

**WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN ITEM 7.11 OF FORM G
("The Consolidated Transfer Application")**

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 (the **Act**) to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction in terms of which NewCo will be owned by CIVH and Vodacom.
3. I hereby confirm the correctness of the information reflected in item 7.11 of Form G to the Individual Licensing Processes and Procedures Regulations, 2010 as it relates to the shareholders and indirect shareholders of NewCo that hold a licence or hold an ownership interest in another licensee under the Act.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Provide a written undertaking indicating the correctness of the information stated in 7.13 (particulars of any interest held by the transferee in another licensee licensed in terms of the Act) signed off by Accounting Officer.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa

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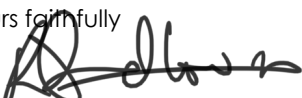
6 April 2022

Dear Sirs

**WRITTEN UNDERTAKING INDICATING THE CORRECTNESS OF THE INFORMATION STATED IN ITEM 7.13 OF FORM G
("The Consolidated Transfer Application")**

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 (the **Act**) to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction in terms of which NewCo will be owned by CIVH and Vodacom.
3. I hereby confirm the correctness of the information reflected in item 7.13 of Form G to the Individual Licensing Processes and Procedures Regulations, 2010 as it relates to the ownership interests which NewCo will have in other licence holders in terms of the Act.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Appendix 7.15 of FORM G

Provide details (including name, nationality, identification or passport number, position and address) of each member of the transferee's: (i) board of directors or similar body; and (ii) senior management.

The details of the board of directors of NewCo are as follows:

	Full name of director	Title / Designation	Nationality	Identity / passport number	Physical address
1.	Raymond Sibusiso Mbeki Ndlovu	Director	South African	[CONFIDENTIAL]	[CONFIDENTIAL]

NewCo does not have any senior management.

NewCo will be the holding company of DFA, Vumatel and SADV, which will be the operating entities in the NewCo group. Each of DFA, Vumatel and SADV has its own board of directors and senior management team.

Vodacom will have the right to appoint directors to NewCo's board following the implementation of the Proposed Transaction.

Appendix 8.6 of FORM G

Provide details of the transferee's 5-year business plan in respect of the application.

[CONFIDENTIAL.]

Attach a comprehensive business plan as stated in 8.6.

[CONFIDENTIAL.]

Copies of the transferee's audited annual financial statements for the previous three years.

[CONFIDENTIAL.]

Appendix 8.9 of FORM G

Provide detailed network architecture layout plan and roll-out plans should this application be granted indicating timeframes and roll-out targets.

As outlined in the cover letter that accompanies this Consolidated Transfer Application, NewCo (the transferee and intended licence-holder following approval of this Consolidated Transfer Application) will be the holding company of DFA, SADV and Vumatel respectively.

DFA (and, by extension, its wholly-owned subsidiary, SADV) and Vumatel will provide licensable services under the IECS Licence and the IECNS Licence to be held by NewCo in line with paragraph 4.3 of the IECS Licence and paragraph 3.3 of the IECNS Licence, in terms of which any or all of subsidiaries of the licence holder may provide any or all of the licensable services contemplated in the licence.

As such, the information set out in this Appendix 8.9 relates to DFA, SADV and Vumatel respectively given that NewCo will be the holding company.

DFA:

Network architecture layout plan:

Please refer to the diagram attached as **Appendix 8.9(a) [CONFIDENTIAL]**.

Roll-out plans:

DFA intends to carry out the following plans on its core network:

- **[CONFIDENTIAL]**.
- **[CONFIDENTIAL]**.

Please refer to the Excel spreadsheet attached as **Appendix 8.9(b) [CONFIDENTIAL]**.

SADV:

Network architecture layout plan:

Please refer to the diagram attached as **Appendix 8.9(c) [CONFIDENTIAL]**.

Roll-out plans:

[CONFIDENTIAL].

Vumatel:

Network architecture layout plan:

Please refer to the diagram attached as **Appendix 8.9(d) [CONFIDENTIAL]** and **Appendix 8.9(e) [CONFIDENTIAL]**.

Roll-out plans:

Please refer to the Excel spreadsheet attached as **Appendix 8.9(f) [CONFIDENTIAL]**.

Appendix 8.10 of FORM G

Provide detailed proposed commercial agreements to be made available in terms of roaming, interconnection, facilities leasing clearly marked.

As outlined in the cover letter that accompanies this Consolidated Transfer Application, NewCo (the transferee in this Consolidated Transfer Application and the intended licence-holder following approval of this Consolidated Transfer Application) will be the holding company of DFA, SADV and Vumatel respectively.

DFA, SADV and Vumatel will provide licensable services under the IECS Licence and the IECNS Licence to be held by NewCo in line with paragraph 4.3 of the IECS Licence and paragraph 3.3 of the IECNS Licence, in terms of which any or all of subsidiaries of the licence holder may provide any or all of the licensable services contemplated in the licence.

As such, the information set out in this Appendix 8.9 relates to DFA, SADV and Vumatel respectively given that NewCo will be the holding company.

DFA:

*A list of DFA's commercial agreements is attached as **Appendix 8.10(a) [CONFIDENTIAL]**.*

DFA does not have any roaming or interconnection agreements given that it does not provide any voice services in terms of the ECA.

SADV:

*A list of SADV's commercial agreements is attached as **Appendix 8.10(b) [CONFIDENTIAL]**.*

Vumatel:

*A list of Vumatel's commercial agreements is attached as **Appendix 8.10(c) [CONFIDENTIAL]**.*

Provide details of how the parties comply with the 30% ownership and control interest by historically disadvantaged groups.

HDG ownership

Following the implementation of the Proposed Transaction and Internal Restructure (and subject to the approval of this Consolidated Transfer Application), the ownership by Black people (as defined in the Broad-Based Black Economic Empowerment Act 53 of 2003 (**BBBEE Act**) (who are persons from historically disadvantaged groups (**HDGs**) for the purposes of the BBBEE Act) in NewCo (as the intended licence-holder) will be 41.02%.

This is determined in accordance with the ICT Sector Code, excluding the modified flow-through principle, as provided for in the 2021 Ownership Regulations. While the Proposed Transaction will result in a small reduction in the percentage of HDG ownership of NewCo and its subsidiaries DFA (and, by extension, SADV) and Vumatel (i.e. by 3.76% following the implementation of the Proposed Transaction and Internal Restructure), the Proposed Transaction will result in a net increase in the value of the shareholding of HDGs in NewCo. This is because, before the Proposed Transaction, NewCo will have an estimated value of R25 billion of which 44.78% or R11,19 billion in value is held by HDGs, and, following the Proposed Transaction, NewCo will have an estimated value of R35.3 billion of which 41.02% or R14,48 billion in value will be held by HDGs. The Proposed Transaction will, therefore, result in considerably more economic benefit to HDGs.

The shareholding by Black people in NewCo can be broken down as follows:

- CIVH's ownership by Black people is 44.78% on the basis that: (i) 50.24% of voting rights are held by Black people; and (ii) 44.78% of economic interest is held by Black people, as indicated in CIVH's current BBBEE certificate issued by Cardinal Ratings on 26 November 2021 and attached as **Annexure 9.1(a)**. A breakdown of CIVH's Black ownership is set out in Table 9.1.1 and Table 9.1.2 below. As such, NewCo's ownership by Black people through CIVH will be 31.35% ($44.78\% \times 70\%^{25}$).
- Vodacom's ownership by Black people is 32.25% on the basis that (i) 35.02% of voting rights are held by Black people in Vodacom; and (ii) 32.25% of economic interest are held by Black people, as indicated in Vodacom's BBBEE certificate issued by EmpowerLogic on 28 May 2021, attached as **Annexure 9.1(b)**. As such, NewCo's ownership by Black people through Vodacom will be 9.71% ($32.25\% \times 30\%^{26}$).

The shareholders of NewCo, being CIVH and Vodacom (subject to the implementation of the Proposed Transaction and Internal Restructure), have each committed, in terms of clause 8.1 of the Shareholders Agreement, to maintain at least 30% HDG ownership, as determined in accordance with the ICT Sector Code, excluding the modified flow-through principle, and as provided for in the 2021 Ownership Regulations. This is to ensure that, for as long as they are each shareholders of NewCo and indirect shareholders of NewCo's subsidiaries (DFA and, by extension, SADV and Vumatel), NewCo and its subsidiaries will continue to achieve at least 30% HDG ownership, as determined in accordance with the ICT Sector Code, excluding the modified flow-through principle, and as provided for in the 2021 Ownership Regulations.

In addition, Vodacom has a substantial and sustainable track record of implementing BBBEE initiatives,

²⁵ Please note that this percentage is subject to change if Vodacom exercises the Call Option, as described in footnote 14 above, in which case CIVH's shareholding will decrease from 70% to 60% in NewCo and the Black ownership held in NewCo will, accordingly, decrease on this basis (but increase by virtue of Vodacom's increased shareholding as described the footnote immediately below). If Vodacom exercises the Call Option, the Black ownership of NewCo will be 39.77% with a corresponding economic value in NewCo will be R14,038 billion.

²⁶ Please note that this percentage is subject to change if Vodacom exercises the Call Option as described in footnote 14 above, in which Vodacom's shareholding will increase from 30% to 40% in NewCo and the Black ownership held in NewCo will, accordingly, decrease on this basis.

having maintained a BBBEE status above Level 4 for 12 consecutive years and having achieved a Level 1 BBBEE status for the past 3 financial years. Furthermore, Vodacom's Level 1 BBBEE contributor status has been achieved through significant financial contributions towards skills development, supplier and enterprise development, and socio-economic development. Please refer to **Annexure 9.1(c)** containing further details on Vodacom's BBBEE contributions **[CONFIDENTIAL]**. This demonstrates Vodacom's commitment and ability to ensure that NewCo's BBBEE contributor status is also improved going forward. In addition, Vodacom will, through its vast experience with implementing BBBEE initiatives, actively contributes towards the enhancement of NewCo's and, by extension, DFA's, BBBEE initiatives, including supplier and enterprise development.

Given that DFA, SADV and Vumatel will be wholly-owned subsidiaries of NewCo following the implementation of the Proposed Transaction and Internal Restructure, the ownership by Black people in DFA (and, by extension, SADV) and Vumatel will be identical to the ownership held by Black people in NewCo, as determined in accordance with the ICT Sector Code, excluding the modified flow-through principle, and as provided for in the 2021 Ownership Regulations.

A. Ownership by Black people in CIVH

CIVH is an impact investment firm that offers financing and investment to businesses in the ICT sector. The ownership by Black people in CIVH based on CIVH's direct shareholders is broken down as follows:

Item	Name of shareholder	Percentage ownership in CIVH	Voting rights held by Black people	Economic interest held by Black people	Ownership by Black people in CIVH
1.	New GX Fund 1 Proprietary Limited (New GX Fund I)	10.48%	N/A – New GX Fund is an Exempted Micro-Enterprise (EME) in the Financial sector and is 27.48% owned by Black people.		2.87% (10.48% x 27.48%)
2.	The New GX Partnership II	27.01%	92.55%	87.37%	23.59% (27.01% x 87.37%)
3.	Remgro Limited, which holds 100% of Industrial Electronic Investments Proprietary Limited (Remgro), which holds 57.02% of CIVH	57.02% (100% x 57.02%)	23.02%	22.26%	12.69% (100% x 57.02% x 22.26%)
4.	Community Investment Holdings Proprietary Limited (CIH)	4.58%	N/A – CIH is 100% owned by Black people.		4.58% (4.58% x 100%)
TOTAL:					43.73%

Table 9.1.1

The information in Table 9.1.1 is evidenced as follows:

- In support of the information provided in item 1 of Table 9.1.1, please refer to the sworn affidavit deposed to by Mr Graham Rex McGregor dated 16 September 2021 in respect of New GX Fund I, attached as **Annexure 9.1(d) [CONFIDENTIAL]**.
- In support of the information provided in item 2 of Table 9.1.1, please refer to the Excel spreadsheet attached as **Annexure 9.1(e) [CONFIDENTIAL]**.
- In support of the information provided in item 3 of Table 9.1.1, please refer to Remgro Limited's BBBEE

certificate issued by AQRate on 10 September 2021 in terms of the Codes, attached as **Annexure 9.1(f)**.

- In support of the information provided in item 4 of Table 9.1.1, please refer to the following:
 - a letter from CIH dated 25 August 2021 confirming its ownership percentage by Black people, attached as **Annexure 9.1(g)**;
 - the report prepared by PricewaterhouseCoopers dated 1 September 2021 which provides an overview of the ownership by Black people in CIH, attached as **Annexure 9.1(h) [CONFIDENTIAL]**; and
 - a sworn affidavit deposed to by Ms Theresa Mokgokong from the Mantokozo Investment Trust (which is one of the shareholders of CIH) which is an EME in terms of the Codes and which is 100% owned by Black people, attached as **Annexure 9.1(i) [CONFIDENTIAL]**.

The ownership by Black people in the New GX Partnership II is further broken down as follows:

Item	Name of shareholder	Percentage ownership in CIVH	Voting rights held by Black people	Economic interest held by Black people	Ownership by Black people in CIVH
1.	Main Street 651 Proprietary Limited (Main Street 651), which is the General Partner which holds a 15% participation interest in the New GX Partnership II, which holds 27.01% of CIVH	4.05% (15% x 27.01%)	N/A – Main Street 651 is an EME in the Financial sector and is 27.48% owned by Black people.		1.11% (15% x 27.01% x 27.48%)
TOTAL:					1.11%

Table 9.1.2

The information in Table 9.1.2 is evidenced by the sworn affidavit deposed to by Khudusela Makwe Pitjje dated 17 September 2021 attached as **Annexure 9.1(j) [CONFIDENTIAL]**.

The total ownership by Black people as indicated in Table 9.1.1 and Table 9.1.2 above is 44.84%.

B. Ownership by Black people in Vodacom

Vodacom provides mobile and fixed services in terms of the licences issued to it under the Act. The ownership held by Black people in Vodacom (as defined in the **BBBEE Act**) (who are persons from historically disadvantaged groups (**HDGs**) for the purposes of the Act) in Vodacom is 32.25%, determined in accordance with the ICT Sector Code, excluding the modified flow-through principle, as provided for in the 2021 Ownership Regulations. This is broken down as follows:

Item	Name of shareholder	Percentage ownership in Vodacom	Voting rights held by Black people	Economic interest held by Black people	Ownership by Black people in Vodacom
1.	Vodacom Group Limited (Vodacom Group)	100%	35.02%	32.25%	32.25% (100% x 32.25%)
TOTAL:					32.25%

Table 9.1.3

- In support of the information above, Vodacom's HDG ownership is evidenced by its current BBBEE certificate issued by EmpowerLogic on 28 May 2021, attached as Annexure 9.1(b). This also accords with the consolidated BBBEE certificate of Vodacom Group Limited, which is the sole shareholder of Vodacom, attached as **Annexure 9.1(k)**.
- Vodacom Group's Black ownership is as depicted in the structure chart attached as **Annexure 9.1(l) [CONFIDENTIAL]**. As depicted in the structure chart:
 - YeboYethu (RF) Limited (**YeboYetho**) is listed on the BBBEE segment of the Johannesburg Stock Exchange. The rules for listing on this segment restrict ownership of YeboYethu's shares to Black people and entities that qualify as Black-owned. YeboYethu is required to maintain information about each shareholder to ensure that they qualify at all times.
 - The Black ownership contributed by Vodacom Group's mandated investments is set out in the independent competent person's report dated 21 April 2021, which is attached as **Annexure 9.1(m) [CONFIDENTIAL]**.
 - In respect of the shareholding by Vodacom's Black executives, please refer to the discussion attached as **Annexure 9.1(n) [CONFIDENTIAL]**.
 - In respect of the Black ownership contributed by the Innovator Trust, please refer to the Innovator Trust's sworn BBBEE affidavit, attached as **Annexure 9.1 (o)**.

BBBEE contributor status level

Although not strictly required for the purpose of this Consolidated Transfer Application, for the sake of completeness and as will be required by the 2021 Ownership Regulations in due course, NewCo is currently a Level 4 BBBEE contributor in terms of the ICT Sector Code. This is evidenced by the sworn affidavit deposed to by Raymond Sibusiso Mbeki Ndlovu and dated 9 December 2021, attached as **Annexure 9.1(p)**.

The BBBEE contributor status levels of NewCo's shareholders (following the implementation of the Proposed Transaction and Internal Restructure, and if this Consolidated Transfer Application is approved) are as follows:

- CIVH is a Level 2 BBBEE contributor in terms of the Codes of Good Practice (the Codes), as evidenced by its BBBEE certificate attached as Annexure 9.1(a) above; and
- Vodacom is a Level 1 BBBEE contributor in terms of the ICT Sector Code, as evidenced by its BBBEE certificate attached as Annexure 9.1(b) above.

The BBBEE contributor status levels of NewCo's subsidiaries (following the implementation of the Proposed Transaction and Internal Restructure, and subject to the approval of this Consolidated Transfer Application), DFA (and, by extension, SADV) and Vumatel, are as follows:

- DFA is a Level 1 BBBEE contributor, as determined in accordance with ICT Sector Code and as evidenced by DFA's BBBEE certificate issued by Cardinal Ratings on 26 November 2021, attached as **Annexure 9.1(q)**; and
- Vumatel is a Level 4 BBBEE contributor, as determined in accordance with ICT Sector Code and as evidenced by Vumatel's BBBEE certificate issued by Cardinal Ratings on 26 November 2021, attached as **Annexure 9.1(r)**.



BROAD-BASED BEE VERIFICATION CERTIFICATE

WE CERTIFY THAT

COMMUNITY INVESTMENT VENTURES HOLDINGS (PTY) LTD

COMPANY REGISTRATION NUMBER: 2004/010305/07 VAT NUMBER: 4030243549

1 PETUNIA STREET | CORNER MAIN ROAD & PETUNIA STREET
BRYANSTON | GAUTENG | 2191HAS BEEN ASSESSED AND VERIFIED WITH THE B-BBEE ACT (NO. 46 OF 2003) AND THE AMENDED ICT SECTOR CODES OF
GOOD PRACTICE, GAZETTE 39887 AND HAS ACHIEVED THE FOLLOWING.

B-BBEE STATUS LEVEL: 2

B-BBEE PROCUREMENT RECOGNITION LEVEL: 125%

ELEMENT	WEIGHTING	ACHIEVED
OWNERSHIP	25.00	25.00
MANAGEMENT CONTROL	23.40	18.92
SKILLS DEVELOPMENT	25.00	12.91
ENTERPRISE & SUPPLIER DEV	55.00	47.22
SOCIO-ECONOMIC DEV	12.00	12.00
TOTAL	140.00	116.05
PARTICIPATED IN Y.E.S. INITIATIVE		NO
ACHIEVED Y.E.S. TARGET & 2.5% ABSORPTION		NO
ACHIEVED 1.5 X Y.E.S. TARGET & 5% ABSORPTION		NO
ACHIEVED DOUBLE Y.E.S TARGET & 5% ABSORPTION		NO

CERTIFICATE NUMBER	CR-21090101/V3
BLACK OWNERSHIP %	44.78%
BLACK FEMALE OWNERSHIP %	18.10%
BLACK DESIGNATED GROUP %	5.79%
BLACK YOUTH %	5.79%
BLACK NEW ENTRANTS %	3.83%
MODIFIED FLOW THROUGH PRINCIPLE	NO
EXCLUSION PRINCIPLE USED	YES
EMPOWERING SUPPLIER	YES
DISCOUNTING PRINCIPLE USED	NO
EFFECTIVE DATE	26 NOVEMBER 2021
EXPIRY DATE	31 AUGUST 2022
BEE CATEGORY	GENERIC
MEASUREMENT PERIOD	01 April 2020-31 March 2021



NKOSILATHI MTHOMBENI
TECHNICAL SIGNATORY


BVA 276

Broad Based Black Economic Empowerment Verification Certificate

A Consolidated Verification Certificate Issued to

Vodacom SA (Pty) Ltd

Level 1 Contributor

Measured Entity

Company Name Vodacom SA (Pty) Ltd
Registration Number Refer to page 2 of Certificate
VAT Number Refer to page 2 of Certificate
Address Vodacom Corporate Park
 082 Vodacom Boulevard
 Vodavally
 Midrand - 1685

B-BBEE Status

B-BBEE Status Level

Level 1

Total Points Obtained	123.19	EO: 23.23 points; MC: 19.4 points; SD: 21.47 points; ESD: 47.09 points; SED: 12 points	
Discounting Principle Applied	No	Measurement Period Year End	31/03/2021
Empowering Supplier	Yes	Participated in Y.E.S initiative	No
Black Voting Rights	35.02%	Achieve Y.E.S Target and 2.5% Absorption	No
Black Women Voting Rights	18.09%	Achieve 1.5 x Y.E.S Target and 5% Absorption	No
Black Economic Interest	32.25%	Achieve Double Y.E.S Target and 5% Absorption	No
Black Women Economic Interest	16.19%	Black New Entrants	2.80%
51% Black Owned*	No	Black Designated Groups	5.15%
30% Black Women Owned*	No	Black Youth	2.49%
Normal Flow Through Principle Applied	Yes	Black Disabled	0.10%
Modified Flow Through Principle Applied	No	Black Unemployed	1.72%
Exclusion Principle Applied	No	Black People Living in Rural Areas	4.02%
		Black Military Veterans	0.00%

BEE Procurement Recognition Levels

Level	Qualification	%
1	≥ 120 Points	135%
2	≥ 115 but < 120	125%
3	≥ 110 but < 115	110%
4	≥ 100 but < 110	100%
5	≥ 95 but < 100	80%
6	≥ 90 but < 95	60%
7	≥ 75 but < 90	50%
8	≥ 55 but < 75	10%
Non Compliant	< 55	0%

Enquiries Tel: 086 111 4003

www.empowerlogic.co.za

Issue Date 28/05/2021
Expiry Date 27/05/2022
Certificate Number ELC10190RGENBBICT
Version Final
Applicable Scorecard Amended ICT - Generic
Applicable BBBEE Codes Amended ICT Codes Gazetted on 7 November 2016

*Black Owned: ≥=51% and full points for Net Value

*Black Women Owned: ≥=30% and full points for Net Value



SANAS Accredited

EmpowerLogic (Pty) Ltd

Reg. No. : 1995/000523/07

BBBEE Verification Agency

Govender

Per Prebhashini Govender

Member - Verification Committee



BVA018

This certificate supersedes any previous certificates issued to the Measured entity. This certificate is the result of an independent and impartial verification of the BBBEE status of the measured entity measured against the Codes of Good Practice on Broad Based Black Economic Empowerment. This certificate has been issued in accordance with the EmpowerLogic Verification Certificate Policy. EmpowerLogic uses the Law Trust advanced electronic signature system (AeSign) which is compliant with the Electronic Communications and Transactions Act no 25 of 2002. The validity of the certificate is ensured as long as the digital signature details corresponds with the Technical Signatory's details as displayed on the certificate.

**A Consolidated Verification Certificate issued to
Vodacom SA (Pty) Ltd**

BBBEE Status: Level 1 Contributor

Entities Included in the Consolidated Verification Certificate

[illegible]

BBBEE Verification Agency

Gender

Member - Verification Committee

SANAS Accredited



BVA018

This certificate supersedes any previous certificates issued to the Measured entity. This certificate is the result of an independent and impartial verification of the BBBEE status of the measured entity measured against the Codes of Good Practice on Broad Based Black Economic Empowerment. This certificate has been issued in accordance with the EmpowerLogic Verification Certificate Policy. EmpowerLogic uses the Law Trust advanced electronic signature system (AeSign) which is compliant with the Electronic Communications and Transactions Act no 25 of 2002. The validity of the certificate is ensured as long as the digital signature details corresponds with the Technical Signatory's details as displayed on the certificate.

Amended ICT - Generic Scorecard - Condensed Report

Objective	Indicator	Weight	Actual Achieved	Target	Achieved against Target	Points
Broad Based Black Economic Empowerment Contribution		130.0				123.19
Objective : Ownership		25.00			92.91%	23.23
Equity Ownership	Exercisable Voting Rights by Black People	4.00	35.02%	30.00%	100.00%	4.00
	Exercisable Voting Rights by Black Women	2.00	18.09%	10.00%	100.00%	2.00
	Economic Interest to which Black People are entitled	4.00	32.25%	30.00%	100.00%	4.00
	Economic Interest to which Black Women are entitled	2.00	16.19%	10.00%	100.00%	2.00
	Economic Interest to which BDG's, EOS, BBOS and Co-op's are entitled	3.00	8.94%	3.00%	100.00%	3.00
	Involvement in the ownership by Black New Entrants	2.00	2.80%	2.00%	100.00%	2.00
	A - Net Value	8.00	23.35%	30.00%	77.85%	6.23
B - Economic Interest			32.25%	30.00%	100.00%	
Objective : Management Control		23.00			84.37%	19.40
Objective: Board Participation and Other Executive Management		23.00			95.23%	12.38
Management Control	% Exercisable Voting Rights of Black Board Members	3.00	72.73%	50.00%	100.00%	3.00
	% Exercisable Voting Rights of Black Women Board Members	2.00	45.45%	25.00%	100.00%	2.00
	% Black Executive Directors	2.00	66.67%	50.00%	100.00%	2.00
	% Black Women Executive Directors	1.00	44.44%	25.00%	100.00%	1.00
	% Black Executive Management	3.00	58.14%	60.00%	96.90%	2.91
	% Black Women Executive Management	2.00	22.09%	30.00%	73.64%	1.47
Objective : Employment Equity		10.00			70.24%	7.02
Employment Equity	% Black People in Senior Management	2.00	33.34%	60.00%	55.56%	1.11
	% Black Women in Senior Management	1.00	18.56%	30.00%	61.85%	0.62
	% Black People in Middle Management	2.00	46.96%	75.00%	62.62%	1.25
	% Black Women in Middle Management	1.00	20.43%	38.00%	53.77%	0.54
	% Black People in Junior Management	1.00	65.65%	88.00%	74.60%	0.75
	% Black Women in Junior Management	1.00	34.06%	44.00%	77.42%	0.77
	Black People Living with Disabilities as a % of All Employees	2.00	1.98%	2.00%	99.21%	1.98

Vodacom SA

BBBEE Verification Report

Final

Amended ICT - Generic Scorecard - Condensed Report

Objective	Indicator	Weight	Actual Achieved	Target	Achieved against Target	Points
Objective : Skills Development		20.00		-	107.34%	21.47
Skills Development	Skills Development Expenditure on Black People as a % of Leivable Amount	8.00	5.62%	6.00%	93.63%	7.49
	Skills Development on Black People with disabilities as a % of Leivable Amount	4.00	0.33%	0.30%	100.00%	4.00
	Black People Participating in Learnerships, Apprenticeships and Internships as a % of Total Employees	4.00	2.50%	2.50%	100.00%	4.00
	Unemployed Black People Participating in the Learning Matrix as a % of Total Employees	4.00	2.50%	2.50%	100.00%	4.00
	Bonus Point: Number of Black People Absorbed	5.00	39.55%	100%	39.55%	1.98
Objective: Enterprise and Supplier Development		50.00			94.17%	47.09
Objective : Preferential Procurement		25.00			85.01%	21.25
Preferential Procurement	Weighted BEE Procurement Expenditure - All Suppliers	5.00	89.12%	80.00%	100.00%	5.00
	Weighted BEE Procurement Expenditure - Qualifying Small Enterprises	3.00	9.35%	15.00%	62.31%	1.87
	Weighted BEE Procurement Expenditure - Exempted Micro Enterprises	1.00	2.68%	15.00%	17.87%	0.71
	Weighted BEE Procurement Expenditure - Suppliers that are at least 51% Black Owned	8.00	34.08%	40.00%	85.20%	7.67
	Weighted BEE Procurement Expenditure - Suppliers that are at least 30% Black Women Owned	4.00	43.39%	12.00%	100.00%	4.00
	Bonus Points: Procurement Expenditure from Designated Group Suppliers that are at least 51% Black Owned	2.00	2.73%	2.00%	100.00%	2.00
Objective : Enterprise and Supplier Development		25.00			103.34%	25.83
Enterprise and Supplier Development	Annual Value of all Supplier Development Contributions as a % of NPAT	10.00	1.57%	2.00%	78.34%	7.83
	Annual Value of all Enterprise Development Contributions as a % of NPAT	15.00	3.11%	3.00%	100.00%	15.00
	Bonus Point: Graduation	1.00	Yes	Yes	100.00%	1.00
	Bonus Points: Creating New Jobs up to 11% of the Workforce	2.00	Yes	Yes	100.00%	2.00
Objective : Socio Economic Development		12.00			100.00%	12.00
Socio-Economic Development	Annual Value of all Socio-Economic Development Contributions as a % of NPAT	12.00	2.14%	1.50%	100.00%	12.00

Independent Credible Assurance.

AQRate

VERIFICATION SERVICES

AQRate (Pty) Ltd (Reg no. 2002/001384/07) | Unit OL 012 Ground Floor Oak Leaf Terrace, Old Oak Office Park, 1 Edmar Street, Bellville, 7530 | Tel: 086 12 77 283 | www.aqrate.co.za

OWNERSHIP ASSESSMENT

Company Name Remgro Limited
Trade Name Remgro Limited
Location 16 Stellantia Avenue
Stellenbosch
7600
Registration Number 1968/006415/06
VAT Number 4480191685
Certificate Number REL010350 - REV4

VERIFIED B-BBEE OWNERSHIP SCORECARD

	Weighting	Target	% Achieved	Points Achieved
Exercisable Voting Rights by Black People	4	25% + 1 vote	23.02%	3.68
Exercisable Voting Rights by Black Women	2	10%	11.82%	2.00
Economic Interest in the Enterprise to which Black People are entitled	4	25%	22.26%	3.58
Economic Interest in the Enterprise to which Black Women are entitled	2	10%	11.36%	2.00
Economic Interest of any of the following Black natural people in the Measured Entity - Black Designated Groups:			6.62%	
- Black Designated Groups (Black Youth)			(0%)	
- Black Designated Groups (Black Disabled)			(0%)	
- Black Designated Groups (Black Unemployed)			(0%)	
- Black Designated Groups (Rural or Under-Developed Area)			(0%)	
- Black Designated Groups (Black Military Veterans)			(0%)	
Black participants in Employee Ownership Programmes (ESOP)			0.00%	
Black participants in Broad-Based Ownership Schemes (BBOS)			0.00%	
Black participants in Co-Operatives			0.00%	
Involvement in the ownership of the enterprise by Black New Entrants	2	2%	0.00%	0.00
Net Value	8	As defined		6.08
Total Points				20.30

BROAD-BASED BLACK ECONOMIC EMPOWERMENT OWNERSHIP STATUS

Empowering Supplier Status Not Assessed
Exclusion Principle Applied to Ownership No
Modified Flow-Through Principle Applied No
Black Ownership **Flow-Through** **Modified Flow-Through**
Voting Rights of Black People 23.02% N/A
Voting Rights of Black Women 11.82% N/A
Economic Interest of Black People 22.26% N/A
Economic Interest of Black Women 11.36% N/A
51% Black Owned No
30% Black Women Owned No
51% Designated Group Supplier Status No
Applicable B-BBEE Codes Amended Code 100 of 36928,
Gazetted 11 October 2013
Measurement Date 30 June 2021
Issue Date 10 September 2021
Original Issue Date N/A
Expiry Date 09 September 2022

William Smith

William Smith
Technical Signatory

sanas

BVA021

AQRate has assessed and verified the relevant B-BBEE Elements of the above mentioned entity, to provide an independent and impartial opinion on the B-BBEE Status of the entity, based on the Broad-Based BEE Codes of Good Practice (Codes 000-500), as amended by Gazette No. 38928 (11 October 2013), Gazette No. 41658 (28 August 2019) and Gazette No. 42496 (31 May 2019).

ANNEXURE 9.1(g)



Reg:1995/007296/07

Building 3, Ashlea Gardens
Office Park,
180 Garstfontein Road
Ashlea Gardens, 0181
Pretoria, South Africa

Private Bag X2001
Menlyn, 0063

Tel. +27 (12) 346 9065

To whom it may concern

Dear Sir/Madam

RE: Black youth and black female ownership as reflected on B-BBEE Affidavits of all Community Investment Holdings (Pty) Ltd ("CIH") Subsidiaries and Associates.

You may have become aware that the B-BBEE affidavits presented to you this year has a different ownership composition than what was presented in previous years.

Please be assured that there has been no change in the ultimate shareholding structures.

The change in black ownership contributions during the 2021 financial year was the result of distributions declared to beneficiaries of the various Trusts, which ultimately owns CIH, its subsidiaries and various associate companies.

In the 2021 financial year, distributions were declared to beneficiaries which are at present regarded as black youth under the prevailing B-BBEE legislation.

Kindly take note that the percentages allocated to black youth during the 2021 financial year cannot be guaranteed in future and will change according to the relevant scenario in any given year.

The percentages allocated to black female ownership is also dependent on distributions declared to the black female beneficiaries in any given year and therefore the black female percentages may vary annually.

CIH and its associated companies can however guarantee that it is 100% black owned and that it will have black female ownership.

Should you have any questions, please contact our office.

Yours faithfully

A handwritten signature in black ink, appearing to read "MJ Madungandaba", is written over a horizontal line.

Mr. MJ Madungandaba
Director

25/08/2021

Directors:

MJ Madungandaba (Chief Executive Officer), Dr ATM Mokgokong (Executive Chairperson)

Broad Based Black Economic Empowerment Verification Certificate

A Consolidated Verification Certificate Issued to

Vodacom Group Limited and Subsidiaries

Level 1 Contributor

Measured Entity

Company Name	Vodacom Group Limited and Subsidiaries
Registration Number	1993/005461/06
VAT Number	4450175007
Address	Vodacom Corporate Park 082 Vodacom Boulevard Vodavally Midrand - 1685

B-BBEE Status

B-BBEE Status Level	Level 1		
Total Points Obtained	122.91	EO: 23.23 points; MC: 18.23 points; SD: 21.97 points; ESD: 47.48 points; SED: 12 points	
Discounting Principle Applied	No	Measurement Period Year End	31/03/2021
Empowering Supplier	Yes	Participated in Y.E.S Initiative	No
Black Voting Rights	35.02%	Achieve Y.E.S Target and 2.5% Absorption	No
Black Women Voting Rights	18.09%	Achieve 1.5 x Y.E.S Target and 5% Absorption	No
Black Economic Interest	32.25%	Achieve Double x Y.E.S Target and 5% Absorption	No
Black Women Economic Interest	16.19%	Black New Entrants	2.80%
51% Black Owned*	No	Black Designated Groups	5.15%
30% Black Women Owned*	No	Black Youth	2.49%
Normal Flow Through Principle Applied	Yes	Black Disabled	0.10%
Modified Flow Through Principle Applied	No	Black Unemployed	1.72%
Exclusion Principle Applied	No	Black People Living in Rural Areas	4.02%
		Black Military Veterans	0.00%

BEE Procurement Recognition Levels

Level	Qualification	%
1	≥ 120 Points	135%
2	≥ 115 but < 120	125%
3	≥ 110 but < 115	110%
4	≥ 100 but < 110	100%
5	≥ 95 but < 100	80%
6	≥ 90 but < 95	60%
7	≥ 75 but < 90	50%
8	≥ 55 but < 75	10%

Non Compliant <55 0%

Enquiries Tel: 086 111 4003

www.empowerlogic.co.za

Issue Date	28/05/2021
Expiry Date	27/05/2022
Certificate Number	ELC10191RGENBBICT
Version	Final
Applicable Scorecard	Amended ICT - Generic
Applicable BBEE Codes	Amended ICT Codes Gazetted on 7 November 2016

*Black Owned: ≥51% and full points for Net Value

*Black Women Owned: ≥30% and full points for Net Value



SANAS Accredited

EmpowerLogic (Pty) Ltd

Reg. No. : 1995/000523/07

BBBEE Verification Agency

Govender

Per Prebhashini Govender

Member - Verification Committee



BVA018

This certificate supersedes any previous certificates issued to the Measured entity. This certificate is the result of an independent and impartial verification of the status of the measured entity measured against the Codes of Good Practice on Broad Based Black Economic Empowerment. This certificate has been issued in accordance with the EmpowerLogic Verification Certificate Policy. EmpowerLogic uses the Law Trust advanced electronic signature system (AeSign) which is in accordance with the Electronic Communications and Transactions Act no 25 of 2002. The validity of the certificate is ensured as long as the digital signature details correspond to the Technical Signatory's details as displayed on the certificate.

EMPOWERLOGIC

Broad Based Black Economic Empowerment Verification Certificate

A Consolidated Verification Certificate issued to Vodacom Group Limited and Subsidiaries

Certificate Number: ELC10191RGENBBICT

BBBEE Status: Level 1 Contributor

Empowering Supplier

Entities Included in the Consolidated Verification Certificate

Company Name	Registration Number	VAT Number
Vodacom Group Limited	1993/005461/06	4450175007
Vodacom (Pty) Ltd	1993/003367/07	4010139121
Vodacom Financial Services (Pty) Ltd	2010/009741/07	n/a
Vodacom Insurance Company (Pty) Ltd	2011/117744/06	4560260327
Vodacom Life Assurance Company (Pty) Ltd	2011/117760/06	n/a
Vodacom Payment Services (Pty) Ltd	2007/010688/07	4810254146
Mezzanine Ware RF (Pty) Ltd	2009/009091/07	4400255149
Storage Technology Services (Pty) Ltd t/a Nexio	1999/001781/07	4860190851
XLink Communications (Pty) Ltd	2004/000478/07	4850213580
IoT.Nxt (Pty) Ltd	2015/305236/07	4330273063
Vodacom Business Africa Group (Pty) Ltd	2007/015109/07	n/a
GS Telecoms (Pty) Ltd	1997/008776/07	4930211158

EmpowerLogic (Pty) Ltd

Reg. No. : 1995/000523/07

BBBEE Verification Agency



Per Prebhashini Govender

Member - Verification Committee

SANAS Accredited



BVA018

This certificate supersedes any previous certificates issued to the Measured entity. This certificate is the result of an independent and impartial verification of the BBBEE status of the measured entity measured against the Codes of Good Practice on Broad Based Black Economic Empowerment. This certificate has been issued in accordance with the EmpowerLogic Verification Certificate Policy. EmpowerLogic uses the Law Trust advanced electronic signature system (AeSign) which is compliant with the Electronic Communications and Transactions Act no 25 of 2002. The validity of the certificate is ensured as long as the digital signature details corresponds with the Technical Signatory's details as displayed on the certificate.

ANNEXURE 9.1(p)

SWORN AFFIDAVIT – B-BBEE EXEMPTED MICRO ENTERPRISE ICT SECTOR

I, the undersigned,

Full name & Surname	Raymond Sibusiso Mbeki Ndlovu
Identity number	6607195762089

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a ~~Member~~ / Director / ~~Owner~~ of the following enterprise and am duly authorised to act on its behalf:


Enterprise Name:	Business Venture Investments No. 2213 (Pty) Ltd
Trading Name (If Applicable):	Business Venture Investments No. 2213 (Pty) Ltd
Registration Number:	2020/810311/07
Enterprise Physical Address:	17 Petunia Street Corner Main Road & Petunia Street Bryanston Gauteng 2191
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	Private company ((Pty) Ltd)
Nature of Business:	Investment Holding Company
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization- i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date

3. I hereby declare under Oath that:
 - The Enterprise is **44.78%** Black Owned as per Statement AICT 100,
 - The Enterprise is **18.10%** Black Woman Owned as per Statement AICT 100,
 - The Enterprise is **5.79%** Black Designated Group Owned as per Statement AICT 100
 - Based on the ~~Financial Statements~~/Management Accounts and other information available on the latest financial year-end of **31 / 03 / 2021**, the annual Total Revenue was R10,000,000.00 (Ten Million Rands) or less

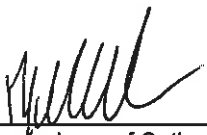
- Please Confirm on the below table the B-BBEE Level Contributor, by ticking the applicable box.

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned	Level Two (125% B-BBEE procurement recognition level)	
Less than 51% Black Owned	Level Four (100% B-BBEE procurement recognition level)	✓

- I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the Owners of the Enterprise which I represent in this matter.
- The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: 

Date: 09/12/2021


Commissioner of Oaths
Signature & stamp

Full name: Michael Benetfeld

Business Address: 40 Riveria Road, Sandton, 2196

Designation: Practising Attorney RSA
Capacity:

I certify that this affidavit was signed and sworn before me at Sandton on this the 9th day of December 2021, by the deponent after he declared that he knew and understood the contents of his declaration, that he had no objection to taking the ^{prescribed} oath and has taken the prescribed oath which he considered binding on conscience, having complied with regulations contained in Government Notice R258 of 21 July ~~1977~~ 1972, as amended



BROAD-BASED BEE VERIFICATION CERTIFICATE

WE CERTIFY THAT

DARK FIBRE AFRICA (PTY) LTD

COMPANY REGISTRATION NUMBER: 2007/013968/07 VAT NUMBER: 4140243116

96 KORANNA AVENUE | DORINGKLOOF | CENTURION | 0157

HAS BEEN ASSESSED AND VERIFIED WITH THE B-BBEE ACT (NO. 46 OF 2013) AND THE AMENDED ICT SECTOR CODES OF GOOD PRACTICE, GAZETTE 39887 AND HAS ACHIEVED THE FOLLOWING.

**B-BBEE STATUS LEVEL: 1**

B-BBEE PROCUREMENT RECOGNITION LEVEL: 135%

ELEMENT	WEIGHTING	ACHIEVED
OWNERSHIP	25.00	25.00
MANAGEMENT CONTROL	23.00	14.23
SKILLS DEVELOPMENT	25.00	14.24
ENTERPRISE & SUPPLIER DEV	55.00	52.77
SOCIO-ECONOMIC DEV	12.00	12.00
TOTAL	140.00	118.24
PARTICIPATED IN Y.E.S. INITIATIVE		YES
ACHIEVED Y.E.S. TARGET & 2.5% ABSORPTION		YES
ACHIEVED 1.5 X Y.E.S. TARGET & 5% ABSORPTION		NO
ACHIEVED DOUBLE Y.E.S TARGET & 5% ABSORPTION		NO

CERTIFICATE NUMBER	CR-21100501/V2
BLACK OWNERSHIP %	44.78%
BLACK FEMALE OWNERSHIP %	18.10%
BLACK DESIGNATED GROUP %	5.79%
BLACK YOUTH %	5.79%
BLACK NEW ENTRANTS %	3.83%
MODIFIED FLOW THROUGH PRINCIPLE	NO
EXCLUSION PRINCIPLE USED	YES
EMPOWERING SUPPLIER	YES
DISCOUNTING PRINCIPLE USED	NO
EFFECTIVE DATE	26 NOVEMBER 2021
EXPIRY DATE	04 OCTOBER 2022
BEE CATEGORY	GENERIC
MEASUREMENT PERIOD	01 April 2020-31 March 2021


NKOSILATHI MTHOMBENI
 TECHNICAL SIGNATORY



BVA 276



BROAD-BASED BEE VERIFICATION CERTIFICATE

WE CERTIFY THAT

VUMATEL (PTY) LTD

COMPANY REGISTRATION NUMBER: 2014/138808/07 VAT NUMBER: 4020266740

17 PETUNIA ROAD | BRYANSTON | GAUTENG | 2191

HAS BEEN ASSESSED AND VERIFIED WITH THE B-BBEE ACT (NO. 46 OF 2013) AND THE AMENDED ICT SECTOR CODES OF GOOD PRACTICE, GAZETTE 39887 AND HAS ACHIEVED THE FOLLOWING.

**B-BBEE STATUS LEVEL: 4**

B-BBEE PROCUREMENT RECOGNITION LEVEL: 100%

ELEMENT	WEIGHTING	ACHIEVED
OWNERSHIP	25.00	25.00
MANAGEMENT CONTROL	23.00	9.90
SKILLS DEVELOPMENT	25.00	12.62
ENTERPRISE & SUPPLIER DEV	55.00	46.11
SOCIO-ECONOMIC DEV	12.00	12.00
TOTAL	140.00	105.63
PARTICIPATED IN Y.E.S. INITIATIVE		NO
ACHIEVED Y.E.S. TARGET & 2.5% ABSORPTION		NO
ACHIEVED 1.5 X Y.E.S. TARGET & 5% ABSORPTION		NO
ACHIEVED DOUBLE Y.E.S TARGET & 5% ABSORPTION		NO

CERTIFICATE NUMBER	CR-21093001/V2
BLACK OWNERSHIP %	44.78%
BLACK FEMALE OWNERSHIP %	18.10%
BLACK DESIGNATED GROUP %	5.79%
BLACK YOUTH %	5.79%
BLACK NEW ENTRANTS %	3.83%
MODIFIED FLOW THROUGH PRINCIPLE	NO
EXCLUSION PRINCIPLE USED	YES
EMPOWERING SUPPLIER	YES
DISCOUNTING PRINCIPLE USED	NO
EFFECTIVE DATE	26 NOVEMBER 2021
EXPIRY DATE	29 SEPTEMBER 2022
BEE CATEGORY	GENERIC
MEASUREMENT PERIOD	01 April 2020-31 March 2021


 NKOSILATHI MTHOMBENI
 TECHNICAL SIGNATORY



BVA 276

Appendix 9.2 of FORM G

Provide an independent competition analysis report regarding the impact of this transaction on the relevant market.

This Appendix 9.2 contains two independent competition analysis reports prepared by two separate independent economists / experts as follows:

- a report prepared by FTI Consulting on behalf of CIVH in respect of the impact that the Proposed Transaction and Internal Restructure will have on competition if DFA's individual licences are transferred to NewCo and on the basis that NewCo is owned by CIVH and Vodacom; and*
- a report prepared by Compass Lexicon on behalf of Vodacom, given that it provides certain licensable services in the relevant markets, in respect of the impact that the Proposed Transaction and Internal Restructure will have on competition on the basis that NewCo is owned by CIVH and Vodacom.*

[Note: In this non-confidential version of this Consolidated Transfer Application, the CIVH Group and Vodacom have annexed redacted versions of the reports i.e. to redact the specific paragraphs, pages, tables, figures etc. that they have each claimed as confidential.]

Competition Analysis of the Proposed CIVH/ Vodacom Transaction

15 DECEMBER 2021

FINAL REPORT

LEGALLY PRIVILEGED AND CONFIDENTIAL

LEGEND:

Counsel-to-counsel (highly confidential) information belonging to Vodacom

Clean team information belonging to Vodacom

Counsel-to-counsel (highly confidential) information belonging to CIVH

Clean team information belonging to CIVH

Counsel-to-counsel (highly confidential) – combination of Parties

Clean team – combination of Parties' information

Counsel-to-counsel (highly confidential) information belonging to the Khuno Share Trust

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Glossary

Term	Definition
4IR	Fourth Industrial Revolution
Access network	The 'last mile' part of the network that connects the customer premises to the aggregation point. Also referred to as the 'local loop', usually in the context of a copper access network.
Active Equipment	Infrastructure associated with transmitting or receiving the optical signal on fibre optic cable.
AEX	Automation Exchange (Pty) Ltd
Backhaul	The part of a network that comprises the wireless or fixed links between the access network and network aggregation points or the core network.
Base station	A wireless transceiver in a fixed location. The base station serves as the central point within a specific local area for a wireless device to communicate.
Britelink	Fibrehouse (Pty) Ltd trading as Britelink
CIH	Community Investment Holding (Pty) Ltd
CIVH	Community Investment Ventures Holding Proprietary Limited. CIVH owns Newco, which in turn owns DFA (including SADV) and Vumatel, collectively, "Newco".
Commission	Competition Commission
Core network	The core network provides a variety of services to customers who are interconnected by the access network. Some of its functions include aggregation, authentication, call control or switching, charging, service invocation and gateways.
Core site	Location of a data centre that hosts core network equipment.
Dartcom	Dartcom SA (Pty) Ltd
Dartcom Fibre	Dartcom Fibre Solutions (Pty) Ltd
DFA	Dark Fibre Africa (Pty) Ltd
ECA	Electronic Communications Act
ECS	Electronic communications service
ECNS	Electronic communications network service
FNO	Fixed Network Operator
FTI Consulting	FTI Consulting (SA) (Pty) Limited, a subsidiary of the FTI Consulting, Inc. group.
FTTB	Fibre-to-the-Business. An access network structure in which the optical fibre network runs from the aggregation point to the business premises.
FTTB BE	FTTB Best Effort
FTTB QoS	FTTB Quality of Service
FTTH	Fibre-to-the-Home. An access network structure in which the optical fibre network runs from the aggregation point to the customer's home.
FTTS	Fibre-to-the-Site. An access network structure in which the optical fibre network runs from the aggregation point to a base station.
GIS	Geographic Information System
HDP / HDG	Historically disadvantaged persons or groups meaning Black people, women, youth and persons with disabilities

ICASA	Independent Communications Authority of South Africa
IEI	Industrial Electronic Investment (Pty) Ltd
IoT	Internet-of-things
IoT.nxt	IoT.nxt (Pty) Ltd
IRU	Indefeasible Rights of Use
ISP	Internet Service Provider. Firm that provides retail internet connectivity services.
Layer 1	Layer 1 in the OSI Model: The Physical Layer (Transmission and reception of raw bit streams over a physical medium, e.g. passive infrastructure, such as dark fibre).
Layer 2	Layer 2 in the OSI Model: The Data Link Layer (Reliable transmission of data frames between two nodes connected by a physical layer, e.g. Managed Ethernet services).
Layer 3	Layer 3 in the OSI Model: The Network Layer (Structuring and managing a multi-node network, including addressing, routing and traffic control, e.g. basic network services, such as managed IP services).
Link	A fixed or wireless communications channel that connects two or more endpoints. Links connect access sites to aggregation nodes. Access core links connect aggregation nodes to core sites and have higher capacity than normal links.
Managed network services	The delivery and management of network-based services, applications, and equipment to enterprises, residences, or other service providers.
MCT	MCT Telecommunications (Pty) Ltd
MOI	Memorandum of Incorporation
Mezzanine	Mezzanine Ware (Pty) Ltd
Microwave links	A wireless link which uses radio frequency spectrum to enable short distance connectivity between base stations and aggregation nodes, and also between aggregation nodes. Typically ranges from approximately 1GHz to 100GHz in frequency.
MNO	Mobile Network Operator
NDP	National Development Plan
NettVest	NettVest (Pty) Ltd
Newco	Business Ventures Investments No 2213 (Pty) Ltd
New GX	New GX En Commandite Partnership II
Nexio	Storage Technology Services (Pty) Ltd trading as Nexio
NLD routes	National Long Distance fibre routes
OSI Model	The Open System Interconnection layer model is a conceptual framework used to describe and standardise the functions of a networking system. The model partitions the flow of data in a communication system into seven abstraction layers, from the physical implementation of transmitting bits across a communications medium to the highest-level representation of data of a distributed application.
Ownership Regulations	ICASA's Regulations in respect of the limitations of control and equity ownership by historically disadvantaged groups (HDG) and the application of the ICT Sector Code, 2021
Parties	CIVH and Vodacom
PC4IR	Presidential Commission on the Fourth Industrial Revolution.

Proposed transaction	Vodacom intends to acquire a shareholding of 30% in Newco, through a cash subscription, the sale of Vodacom's FTTH business to Vumatel, and the sale of certain Transfer Assets to DFA. This will ensure that Vodacom has sufficient shareholding to have a minority controlling shareholding in Newco.
POP	Point of Presence: An access point, location or facility that connects to and helps other devices establish a connection.
Remgro	Remgro Ltd
SA Connect	South Africa's National Broadband Policy
SADV	SA Digital Villages (Pty) Ltd
Seacom	Seacom South Africa (Pty) Ltd
Sites	A physical location at which infrastructure required for the operation of a telecommunications network is installed.
SME	Small and medium-sized enterprises
Spectrum	The electromagnetic radio frequencies used as medium upon which wireless communication is realised. Only specific portions of spectrum are allocated for mobile communications.
SSNIP	Small but Significant Non-transitory Increase in Price
Transfer Assets	Transfer Assets means fibre infrastructure on metro fibre routes and FTTB access routes into buildings that will be sold by Vodacom to DFA in return for shares in Newco. The Transfer Assets will exclude all active equipment, apart from active GPON equipment on the FTTB infrastructure.
Transmission	The process of sending and receiving an analogue or digital information signal over a physical point-to-point or point-to-multipoint transmission medium, either wired or wireless. This usually refers to signals sent between the access network and core networks or other interconnected networks.
Tribunal	Competition Tribunal
Vodacom	Vodacom Proprietary Limited
Vodacom Group	Vodacom Group Limited
VoIP	Voice Over Internet Protocol: A process of sending and receiving voice communication signals over a packet data network (such as the Internet).
VPN	Virtual Private Network: A network that uses shared public telecommunication infrastructure such as the Internet to provide secure access to remote offices and users in a more efficient way than an owned or leased line.
VumaCam	VumaCam (Pty) Ltd
Vumacam Infrastructure	VumaCam Infrastructure Pty) Ltd
Vumatel	Vumatel (Pty) Ltd
XLink	XLink Communications (Pty) Ltd

1 Introduction

1.1 Our instructions

1. FTI Consulting has been jointly instructed by DLA Piper and CDH to analyse the economic aspects of the proposed transaction between Community Investment Ventures Holdings Proprietary Limited (“CIVH”) and Vodacom Proprietary Limited (“Vodacom”), referred to jointly as “the Parties”.
2. The proposed transaction involves Vodacom acquiring a shareholding in Business Ventures Investments No 2213 (Pty) Ltd (“Newco”), which is a wholly owned subsidiary of CIVH. This will occur through: (i) a cash subscription, (ii) the sale of Vodacom’s Fibre-to-the-Home (“FTTH”) business to Vumatel (Pty) Ltd (“Vumatel”), and (iii) the sale of certain Vodacom Transfer Assets to Dark Fibre Africa (Pty) Ltd (“DFA”). This will ensure that Vodacom has sufficient shareholding ([CONFIDENTIAL]) to have joint control over Newco in the form of minority rights.
3. This report focuses on the competitive assessment of the joint control that Vodacom will have post the transaction, but with a specific focus on the sale of the Transfer Assets, which will comprise metro fibre infrastructure and Fibre-to-the-Business (“FTTB”) access routes. The accompanying report by Compass Lexecon focusses on the sale of the FTTH business.
4. We proceed to analyse the transaction on this basis. If there are changes to the transaction structure, this report will be amended to reflect such changes.

1.2 Structure of this report

5. The report is structured as follows:
 - in Section 2, we summarise our conclusions;
 - in Section 3, we discuss the Parties and the proposed transaction;
 - in Section 4, we set out the activities of the Parties and identify overlaps between them;
 - in Section 5, we define the relevant markets;
 - in Section 6, we assess potential horizontal effects relating to national [CONFIDENTIAL];
 - in Section 7, we assess potential horizontal effects relating to metro fibre;
 - in Section 8, we assess potential horizontal effects relating to wholesale FTTB;
 - in Section 9, we assess potential horizontal effects relating to retail fixed services to enterprises;
 - in Section 10, we assess potential vertical effects relating to the Transfer Assets;
 - in Section 11, we assess additional vertical overlaps relating to Newco’s other subsidiaries; and
 - in Section 12, we assess pro-competitive effects and public interest issues.
6. Further support for our work is set out in the Appendices.

2 Summary of Conclusions

2.1 Proposed transaction

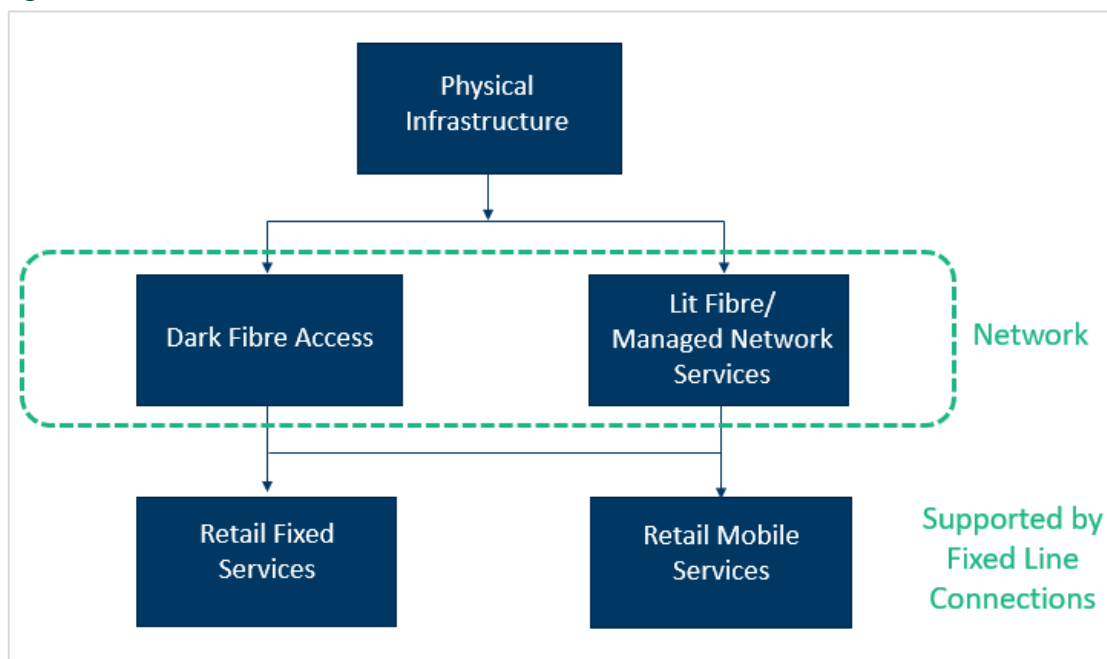
7. The proposed transaction involves Vodacom acquiring a shareholding [CONFIDENTIAL] in Newco, whereby Vodacom will qualify for certain veto rights that will give it a minority controlling shareholding in Newco. Vodacom intends to acquire this shareholding through:
 - a. [CONFIDENTIAL];
 - b. the sale of Vodacom's FTTH business to Vumatel; and
 - c. the sale of certain Transfer Assets to DFA.
8. Vodacom's FTTH business is comprised of its FTTH network infrastructure and related assets, including contracts, fixed assets, and software. The FTTH assets comprise approximately [X] households passed, and [X] households connected as of June 2021. Along with the infrastructure, all of Vodacom's contracts with ISPs for FTTH services will be transferred to Vumatel.
9. According to the Sale of Transfer Assets Agreement, the Transfer Assets comprise fibre infrastructure on metro fibre routes and FTTB access routes into buildings. [CONFIDENTIAL]. [CONFIDENTIAL]. Vodacom will transfer the infrastructure relating to metro fibre and FTTB networks to DFA, but it will retain all of its services customers. In other words, Vodacom will continue to provide its fibre-based managed services to its customers, based on long-term lease-back agreements from DFA. Vodacom will also retain its national long-haul fibre routes (which are excluded from the Transfer Assets) and continue to provide wholesale access to these routes.
10. The proposed transaction will stimulate investment in new fibre infrastructure by improving Newco's capacity to fund infrastructure investments. It will also promote access to, and thus result in a more efficient use of, Vodacom's fibre assets. [CONFIDENTIAL]. [CONFIDENTIAL]. The proposed transaction, through the disposal of the Vodacom FTTH business and fibre assets, [X].
11. Newco will be [CONFIDENTIAL].

2.2 Overlaps between the Parties

2.2.1 Fixed line value chain

12. To understand the overlaps between the Parties and the competitive assessment of the proposed transaction, it is important to consider the value chain for telecommunications services. The telecommunications industry extends across different technologies and consists of an extensive and complex value chain. Figure 1 provides an adapted version of the simplified structure used by Ofcom in their recent Market Review of Wholesale Fixed Telecoms Markets.¹ Ofcom's review is very recent, forward-looking, and provides a useful framework for this complex value chain. The aim is to consider competition in all the relevant markets that support retail telecommunications services.

¹ Ofcom (2021). Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review. 2021-26, Volume 2: Market assessment, Vol. 2.

Figure 1: Fixed telecommunications services value chain

Source: Adapted from Ofcom (2021)

13. The figure illustrates three different levels of the value chain: the physical infrastructure layer, the network layer, and retail services. Ofcom defines the physical infrastructure layer as referring to all parts of a network which can be used to host elements of a telecoms network, including pipes, masts, ducts, inspection chambers, manholes, cabinets, buildings or entries to buildings, antenna installations, towers, and poles.² The network layer includes dark fibre access and lit fibre services, referred to by Ofcom as wholesale access and leased lines (i.e. Ethernet services and dark fibre). The final level refers to retail fixed and mobile services, which are supported by this fixed line infrastructure. This simplified value chain assists in understanding the overlaps between the Parties.
14. The main focus of this transaction is [CONFIDENTIAL].
15. [CONFIDENTIAL].
16. [CONFIDENTIAL].
17. [CONFIDENTIAL].
18. The next level is the metropolitan backhaul network. When a national fibre link lands in a city or large town, the traffic is carried through metro backhaul networks to a point that is close to the customer. The metro networks connect larger switches and aggregation points in metropolitan areas to the access network (i.e. the last mile). The metro backhaul networks typically use fibre or microwave links and are often leased out by providers to other firms.
19. FTTH and FTTB refer to the last-mile connection between the aggregation point and the end user. Last mile operators roll out their fibre infrastructure networks to residential houses and/or estates, referred

² Ofcom (2021). Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review. 2021-26, Volume 2: Market assessment, Vol. 2, para 3.6.

to as FTTH, and to businesses, referred to as FTTB. These firms provide last mile access to ISPs, which typically sell value-added services to end consumers.

20. Finally, in the downstream retail market, ISPs provide value-added services to end consumers, using wholesale infrastructure and/or services as an input. These value-added services include VPN, voice, Internet access, video conferencing, managed security services, hosted infrastructure, and hosted application management.³ It is possible to make a distinction between retail services to consumers and retail services to enterprise customers.

2.2.2 Overlaps

21. [CONFIDENTIAL].

Table 1: [CONFIDENTIAL]

Source: FTI Consulting based on information provided by parties

22. [CONFIDENTIAL].
23. [CONFIDENTIAL].
24. [CONFIDENTIAL]. We do not find it necessary to define separate markets for dark and lit fibre. This is in line with the approach of Ofcom in their Market Review of Wholesale Fixed Telecoms Markets.⁴ As we explain in more detail in Section 5, Ofcom concluded that dark fibre, when used to supply or self-supply wholesale services, is in the same product market as lit fibre services. As explained below, all other FNOs like Openserve can start offering access to dark fibre in a very short timeframe, in the case of a Small but Significant Non-transitory Increase in Price (“SSNIP”) for dark fibre.
25. [CONFIDENTIAL]. Vodacom has not previously provided access to this dark fibre to any third parties (with the exceptions noted above). The benefit of this transaction is therefore that more third parties will get access to this infrastructure. [CONFIDENTIAL].
26. [CONFIDENTIAL].
27. [CONFIDENTIAL].
28. It is important to note that Vodacom owns limited FTTB infrastructure, and that it does not offer wholesale access to this infrastructure. Thus, there is technically no overlap in the market for wholesale FTTB services between the Parties.
29. [CONFIDENTIAL].⁵ [CONFIDENTIAL].
30. This report assesses the competitive impact of the proposed transaction in all these markets, except for the FTTH business, the market for retail fixed internet access services to consumers, infrastructure hosting/co-location services and CCTV services, which are discussed in the accompanying Compass Lexecon report.

³ Competition Commission. (2014). *Vodacom/Neotel merger*. Case No: 2014Jul0382

⁴ Ofcom (2021). Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, Volume 2: Market assessment, Vol. 2, para. 6.78 and 6.96(b).

⁵ [CONFIDENTIAL].

31. In terms of vertical overlaps, Vodacom is a customer of DFA for metro fibre services, mostly Peregrine and Titan, as well as access services (FTTB). The only fixed services that DFA currently purchases from Vodacom are [CONFIDENTIAL] services between the secondary towns [CONFIDENTIAL]. In addition, we analyse other potential vertical overlaps involving CIVH/Newco's other subsidiaries in Section 11.

2.3 Relevant markets

32. Given overlaps identified between the Parties, we consider in more detail the different transmission and services markets. [CONFIDENTIAL].⁶
33. We recognise that the Electronic Communications Act ("ECA") includes fibre (or fibre optic cables) under the term "electronic communications facility", a system of which is an "electronic communications network" ("ECN"), and not under electronic communications network services although these services would be conveyed over an ECN. However, for current purposes, we are interested in the narrowest market that can be monopolised by a player. Therefore, based on relevant precedent and supply-side substitution, we include physical fibre and wholesale network services supplied over such fibre in the same market. This is because the network part (dark fibre) is constrained by lit fibre and by players who currently offer lit products that can easily also supply dark fibre access.
34. We define a separate market for national long-haul fibre connectivity, as there is no viable substitute available for this level of infrastructure. The market for national long-haul fibre may be analysed at the national level. However, limits on demand-side and supply-side substitution mean that the relevant market may be narrower than national in scope and may be limited to individual routes.
35. We define separate markets for metro fibre and microwave backhaul links. This is because of asymmetric substitution from microwave backhaul links to fibre: there would be no substitution from fibre to microwave links if fibre were available. In line with the Ofcom approach, we do not define separate markets for metro fibre supplied to MNO base stations (i.e., mobile backhaul or FTTs) and metro backhaul fibre. Nevertheless, where relevant, we consider the implications of the proposed transaction on fixed and mobile backhaul customers separately. We follow the Commission's approach to geographic market definition in previous cases (e.g. the CIVH/Vumatel merger⁷) by defining regional markets for metro backhaul.
36. We define separate markets for FTTH and FTTB, based on differences in prices, speed, reliability, redundancy, guarantees and other value-added services. There seems to be some convergence between FTTB Best Effort ("BE") and FTTB Quality of Service ("QoS") services as the technology develops. We do not definitively conclude on whether FTTB QoS and FTTB BE should be defined as separate markets, but present results of market shares for both permutations (separate markets and a single market).
37. In the CIVH/Vumatel merger, the Commission defined a single national market for the provision of downstream fixed retail services.⁸ The Compass Lexecon report defines and analyses a national market for retail internet access and other associated services offered over fibre and DSL, which excludes specialist services for enterprise customers. We therefore analyse retail fixed services provided over fibre to enterprise customers specifically, on the basis that this is the narrowest product market where

⁶ Ofcom. (2021). Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, Volume 2: Market assessment, Vol. 2, para. 6.78 and 6.96(b).

⁷ Competition Commission. (2018). *CIVH/Vumatel merger*. Case No: 2018Jun0032

⁸ Competition Commission. (2018). *CIVH/Vumatel Commission Report*, para. 208.

the Parties' activities overlap, and because this is not analysed in the Compass Lexecon report. We define a national market because ISPs are readily able to supply services in different areas if they are able to obtain wholesale access from the FTTH/FTTB providers in the relevant areas.

2.4 Horizontal effects relating to national long-haul fibre

2.4.1 Infrastructure overlaps and market shares

38. [CONFIDENTIAL].⁹

39. [CONFIDENTIAL].

40. [CONFIDENTIAL].

2.4.2 Competitive effects assessment

41. We analyse potential horizontal theories of harm relating to national long-haul fibre that may arise from the proposed transaction. [CONFIDENTIAL]. This means that there can be no classic unilateral effects theory of harm, as the market shares of Newco do not change. The only thing that changes is that Vodacom will have a minority controlling shareholding in Newco. This may raise the concern that Vodacom's financial interest in Newco may create an incentive for Vodacom to raise prices (or reduce output or lower quality) of its [CONFIDENTIAL], causing some customers to switch to other providers, and potentially to Newco.
42. However, this theory has no substance, as Vodacom currently has a [X] market share and Newco a [X] market share, with minimal overlaps nationally. This makes it virtually impossible for Vodacom to increase prices with a strategy to divert sales to Newco's [CONFIDENTIAL]. It would also not make financial sense to do so, as Vodacom owns only a minority interest in Newco. For each Vodacom customer that switches to Newco [CONFIDENTIAL], Vodacom would lose 100% of its direct revenue, but gain only [CONFIDENTIAL] of the revenue through Newco for that customer that switches to Newco.
43. While these are national market shares, the fact is that a diversion strategy (increasing prices and benefitting from increased sales generated by Newco) will only be possible if Vodacom and Newco are the only competitors on a specific route. However, on the specific routes where there is an overlap between the Parties' networks, there are other providers present, such as [X].¹⁰ This implies that customers could switch to those alternatives (and not necessarily to Newco) in response to any price increase from either of the Parties, which could result in Vodacom forfeiting 100% of its direct revenue as a result of engaging in a price-raising strategy to divert sale to Newco. We understand that [X].¹¹ This means that it will not be a feasible strategy for Vodacom to increase prices.

⁹ On the Johannesburg-Durban route via Ermelo, we understand that MTN, Liquid and Seacom offer services, and that these three providers also offer long-haul between Johannesburg and Durban via Harrismith. On the Vereeniging-Potchefstroom route, as well as the Springs-Ermelo route, we understand that MTN also offers lit services in addition to Vodacom and DFA. We understand that various providers such as Openserve, Broadband Infraco and Liquid offer services on the short Yzerfontein-Cape Town route, and this route is often classified as metro backhaul fibre (because of its short distance).

¹⁰ Vodacom information provided to FTI.

¹¹ CIVH information provided to FTI.

44. The second concern may be that the acquisition of the minority controlling shareholding in Newco makes it possible for Vodacom to influence the decisions of Newco in a way which softens competition with Vodacom. For example, Vodacom might gain the ability to raise Newco's prices and influence its commercial strategy.
45. From Newco's perspective, if it were to raise the price of [CONFIDENTIAL], it would lose some customers, but not gain any revenue from the customers that moved to Vodacom long-haul (if that were possible on a specific route), since it does not have an interest in Vodacom. Hence, there would be no incentive for Newco to raise its prices. Newco will only be able to raise the price of long-haul access (and lit services) if it were the only provider on a route, which is not the case on any of the routes. Since no Vodacom long-haul assets are part of the transaction, there is also no change in Newco's market share.
46. [CONFIDENTIAL].
47. [CONFIDENTIAL].

2.5 Horizontal effects relating to metro fibre

2.5.1 Infrastructure overlaps and market shares

48. In this market, we begin by analysing overlaps in the infrastructure of the Parties at a regional, as well as metropolitan level. [CONFIDENTIAL]. In this sense, the fibre networks of the Parties are considered to be complementary to each other. [CONFIDENTIAL].
49. In terms of microwave links used to provide backhaul, we do not have access to data on overlaps. [CONFIDENTIAL].
50. We then estimate [CONFIDENTIAL] market shares in the three major metro areas ([CONFIDENTIAL]). [CONFIDENTIAL]. These estimates suggest that the proposed transaction would lead to a very small increase in the merged entity's infrastructure market shares post-transaction.
51. We then estimate national revenue market shares for wholesale services provided on the fibre networks, [CONFIDENTIAL]. The revenue market shares estimated at a national level indicate that Newco had a share of [X] in FY2021, and Vodacom had a share of only [X]. Of course, these would broadly reflect the market shares in the infrastructure market. These market shares will not be combined, since Vodacom will continue providing its services at this level of the market post-transaction, based on lease back agreements from Newco.

2.5.2 Competitive effects assessment

52. In this case, a unilateral effects concern may be that the infrastructure market shares of Newco will increase (albeit to a limited extent) in the metro markets, due to the transfer of the fibre infrastructure. However, the proposed transaction would lead to a very modest increase in infrastructure market shares in the metro areas, as Vodacom's market shares are small in these markets. This means that the status quo is effectively maintained, as this minimal increase does not give Newco the ability to increase prices of metro fibre as a result of this transaction.

53. [CONFIDENTIAL]. We understand that there are various competitors present in the local areas where the Parties' networks do overlap, suggesting that customers of the Parties can switch to other suppliers in these metro areas. The Parties would therefore continue to face competition from a number of competitors, including those with significant fibre networks of their own (especially Openserve). Africa Analysis [X].¹² We therefore do not find that the addition of the Vodacom metro fibre will give Newco any pricing power. The status quo remains largely the same.
54. [CONFIDENTIAL].
55. [CONFIDENTIAL].
56. [CONFIDENTIAL].
57. [CONFIDENTIAL].
58. [CONFIDENTIAL].
59. [CONFIDENTIAL].
60. [CONFIDENTIAL].
61. [CONFIDENTIAL].

2.6 Horizontal effects relating to wholesale FTTB

2.6.1 Infrastructure overlaps and market shares

62. [CONFIDENTIAL].
63. We then present estimates of the market shares based on FTTB QoS and FTTB BE connections (active end points). Due to a lack of data, we are only able to estimate infrastructure market shares at the national level. The estimates show that Vodacom has a [X] share in the FTTB markets of around [X]. Newco (through DFA, Vumatel and SADV) has a [X] share in the FTTB BE market, and a [X] share in the FTTB QoS market. These estimates suggest that the proposed transaction would lead to a very small increase in market shares post-transaction and that the Parties' combined shares would remain low in terms of infrastructure.
64. We then present estimates of national revenue market shares for wholesale services provided over this infrastructure. We find that Newco has small national shares of [X] and [X] in the markets for wholesale FTTB BE and FTTB QoS, respectively. Vodacom [X]. This implies that there is essentially no overlap currently in this market, and that only a very small potential overlap ([CONFIDENTIAL]) exists.

2.6.2 Competitive effects assessment

65. Similar to metro fibre, Vodacom's FTTB infrastructure will be included in the Transfer Assets. Vodacom [X]. Thus, Newco does not currently face a competitive constraint from Vodacom. At most, Vodacom is a potential competitor in this market pre-transaction.
66. The only change is that Newco will have a slightly larger network post-transaction. [CONFIDENTIAL]. The increase in infrastructure or capacity that Newco will gain from the proposed transaction is very small.

¹² [CONFIDENTIAL]

[CONFIDENTIAL]. In instances where there is no overlap in the networks, Newco will not lose a (potential) competitor in Vodacom at the local level (i.e. the Parties are not in the same local market). In the few instances where there is an overlap in the networks, Newco will only lose a potential competitor. In addition, there are numerous other providers of FTTB infrastructure. This implies that the proposed transaction will not lead to a significant increase in market power or associated unilateral effects in this market, even in terms of potential competition.

67. [CONFIDENTIAL].

68. Given the small accretion in market shares, we do not see any ability to coordinate between players in this market resulting from the proposed transaction. We do not find concerns around anticompetitive effects through information exchange (i.e. coordinated effects) or a delay in the deployment of FTTB infrastructure for the same reasons discussed above.

2.7 Horizontal effects relating to retail fixed internet services to enterprises

2.7.1 Market shares

69. We start by estimating market shares based on revenues for fibre-based retail fixed services (i.e. retail FTTB) provided to enterprise customers. We find that the Parties have very small market shares of [X] (Newco) and [X] (Vodacom) in the national market. Even if the Parties' activities in this market were being combined, their shares are so low as to suggest that there would not be any harm to competition.

2.7.2 Competitive effects assessment

70. It is important to note that Vodacom's retail business will not be transferred to Newco and that Vodacom and Newco (through SADV) will continue to compete in this market post-transaction. Importantly, neither party has pricing power, as their market shares are really small and there are numerous other ISPs in this market.

71. Minority controlling shareholding by Vodacom in Newco may change the incentive to compete, but this is only a theoretical concern. If there is a concern that Vodacom will raise prices, it must be clear that they simply do not have the ability, given their small market shares. They also do not have an incentive as they will lose 100% of the revenue, and a remote chance of recouping [CONFIDENTIAL] (assuming enterprises switch to SADV, which has a similarly small market share). [CONFIDENTIAL].¹³ Moreover, [X].

72. The second concern may be that the acquisition of the minority controlling shareholding makes it possible for Vodacom to influence the decisions of Newco in a way that softens competition with Vodacom. However, Newco would have no less incentive to compete post-transaction. From Vodacom's perspective, its national market share is very small, implying that it would only gain a small proportion of customers switching away from Newco. Again, there are numerous other providers present, which implies that customers could switch to those alternative providers in response to a price increase from either of the Parties. This means that it is unlikely to be a profitable strategy for Vodacom to influence Newco to increase prices.

73. For the reasons discussed above, we do not find any concerns related to coordinated effects through information exchange. More generally, we find that coordination is extremely unlikely in this market

¹³ [CONFIDENTIAL].

given the large number of competing ISPs. This is because any profit from coordinating will have to be shared across multiple firms. Any coordination would also not be sustainable, as each firm will have a strong incentive to deviate from the coordination by undercutting other firms to gain market share. Given the Parties' small market shares, and the numerous firms active in this market, we do not see any ability to coordinate between players in this market resulting from the proposed transaction.

2.8 Vertical effects (input and customer foreclosure)

74. [CONFIDENTIAL].

2.8.1 Input foreclosure

75. In terms of input foreclosure, the potential concern may be that Newco could foreclose Vodacom's downstream competitors from accessing Newco's [CONFIDENTIAL], metro fibre or FTTB. This could occur through ceasing supply of wholesale services to the competitors, increasing the prices charged to the competitors, and/or reducing the quality of services supplied to the competitors relative to the quality supplied to Vodacom. This would make it harder for downstream rivals to compete by increasing their costs, making them less competitive in downstream markets.
76. We analyse whether Vodacom and/or Newco would be able to foreclose access to the fibre infrastructure that will be housed within Newco as a result of the proposed transaction. Similar input foreclosure concerns may arise for [CONFIDENTIAL], mobile backhaul fibre supplied to mobile operators to connect base stations (i.e. FTTS), metro backhaul fibre supplied to downstream FTTH/FTTB players, and FTTB infrastructure provided to ISPs.
77. In the [CONFIDENTIAL] markets, Newco will have small post-transaction market shares in terms of both infrastructure and revenues. [CONFIDENTIAL]. There are also other providers present on the few routes where the networks overlap. Similarly, in the wholesale FTTB markets, Newco will have small post-transaction market shares in terms of both infrastructure and revenues, as well as a very limited infrastructure footprint in this market post-transaction. This means that any input foreclosure is extremely unlikely in relation to access to [CONFIDENTIAL] and FTTB infrastructure. We therefore do not consider input foreclosure in these markets.
78. In the metro fibre markets, the proposed transaction will lead to a very modest increase in market shares. [CONFIDENTIAL]. It does not affect the status quo. Downstream rivals can avoid price increases (or decreases in quality) by switching away from this infrastructure. Newco will continue to face competition from various operators in all of the metro areas where it has a fibre network presence.
79. [CONFIDENTIAL].
80. In relation to mobile backhaul, we have not defined a separate market for dark fibre mobile backhaul to MNOs. However, we show that even in such a narrow sub-market, Newco will not have the ability or incentive to engage in input foreclosure. Newco (DFA) has an open access non-discriminatory business model. [CONFIDENTIAL].
81. Vodacom has a very small market share of [X] in the downstream market for retail fixed internet services to enterprises, and it competes downstream with large vertically integrated players, such as MTN, Dimension Data, Openserve, Liquid, etc. It is therefore unlikely that lost revenue at the upstream level will be recouped at the downstream level. Foreclosure would risk Newco losing scale which may

potentially be gained by rival backhaul suppliers. We therefore do not find any incentive to foreclose downstream rivals in the retail fixed services market.

82. The directors appointed by Vodacom will have a fiduciary obligation to act in the interest of the acquired firm as a stand-alone entity. To side with those shareholders with competing interests would be a violation of these duties.¹⁴ The other shareholders in Newco (i.e. CIVH) will clearly not have an incentive to foreclose Vodacom's downstream rivals.

83. [CONFIDENTIAL].

2.8.2 Customer foreclosure

84. In terms of customer foreclosure, a potential concern may be that Vodacom will decrease (or cease) its purchases of metro fibre and FTTB from Newco's rival suppliers. There may be a strong incentive for Vodacom to purchase all of these services from Newco post-transaction because it will have a financial stake in Newco. In principle, similar customer foreclosure concerns may arise for mobile backhaul supplied to Vodacom to connect base stations (i.e. FTTS), metro backhaul fibre and FTTB infrastructure provided to Vodacom's downstream division. In the [CONFIDENTIAL] markets, there are no Newco routes to which Vodacom would switch from other providers.
85. It is therefore necessary to understand if Vodacom will continue leasing fibre backhaul infrastructure from other providers post-transaction, and if not, whether this poses any risk of customer foreclosure. Customer foreclosure would require Vodacom to currently be a critical customer for other suppliers, and to reduce its purchases from rival suppliers in such a way that overall competition is harmed.
86. In terms of mobile backhaul, in addition to self-supply, Vodacom currently leases most of its infrastructure requirements from [X]. The situation is similar if the metropolitan links are broken down by region. This implies that Vodacom is not an important customer for third party mobile backhaul suppliers and that there is no foreclosure concern at this level.
87. A small portion of Vodacom's links are supplied by [X] are large players with a diversified customer base, implying that Vodacom accounts for only a small share of their revenue. As such, these players would not be impacted in a significant way by the loss of Vodacom as a customer.
88. Nevertheless, it is not clear that Vodacom will switch to Newco in all of these cases. Any attempt to move a portion of Vodacom's leased capacity onto Newco's network would be restricted by the limitations of Newco's network in South Africa. In other words, Vodacom could only substitute these leases with Newco's fibre infrastructure where Newco has a presence. We understand that, in some cases, Newco cannot match the infrastructure of all the other suppliers.
89. [CONFIDENTIAL].
90. [CONFIDENTIAL].
91. We therefore find that Vodacom is not likely to be a critical customer for other metro fibre suppliers, and that it is unlikely to reduce its purchases from rival suppliers in such a way that overall competition is harmed. We therefore do not find it necessary to consider customer foreclosure further.

¹⁴ Salop, S.C & O'Brien, D. P. Competitive Effects of Partial Ownership: Financial Interest and Corporate Control. Antitrust Law Journal. Vol 67, p.559-614 (2000) .

2.9 Additional vertical overlaps

92. Based on the services provided by MCT/Britelink we define a national market for the provision of fibre network planning, building and maintenance services. These services are not subject to regulation by ICASA as they are not licensable services in terms of the ECA; instead, these services are provided in support of ECNS licensees. This analysis is, however, included in this report for the sake of completeness. Vodacom is not active in providing similar services [CONFIDENTIAL]. Thus, there is no current [CONFIDENTIAL] horizontal overlap between the Parties in this market. There is a potential vertical overlap between the Parties in that CIVH/Newco is active upstream via MCT/Britelink in providing these, whereas Vodacom is active downstream in providing various fibre network connectivity services.
93. In terms of input foreclosure, a potential concern may be that Newco would foreclose the Parties' downstream competitors from accessing MCT's planning, building, and maintenance services. MCT's major customer is [X]. This implies that MCT mostly supplies to [X] and is not an essential supplier of inputs to the Parties' downstream competitors. We understand that MCT faces several competitors, with its key competitors [X].
94. Britelink's key customer is [X]. We understand that it does not provide services to Vodacom. Again, this implies that Britelink mostly supplies to [X] and is not an essential supplier of inputs to the Parties' downstream competitors. We understand that there are numerous competitors in this market, with its key competitors including but not limited to [X].
95. MCT/Britelink estimates that it has a national market share of around [X]. This, along with the fact that the vast majority of its revenue comes from [X], suggests that there is no input foreclosure concern in this market.
96. In terms of customer foreclosure, the potential concern may be that post-transaction, Vodacom reduces its purchases of planning, building, and maintenance services from Newco's rivals. We understand that [X]. MCT has been [X].
97. [CONFIDENTIAL]. This implies that Vodacom is not a critical customer for other suppliers of planning, building, and maintenance services and that there is no customer foreclosure concern at this level.
98. AEX's portfolio can be broadly divided into two main components, namely software services provided to FNOs and interconnect services provided to ISPs. Based on the services provided by AEX, we define a national market for the provision of fibre network management software to FNOs and a national market for the provision of interconnect services to ISPs. Vodacom is not active in providing similar services to third parties [CONFIDENTIAL].
99. There is a potential vertical overlap between the Parties in that CIVH/Newco is active upstream via AEX in providing fibre network management software to FNOs and ISPs and Vodacom is active downstream in providing various fibre network connectivity services and as an ISP.
100. Similar to the above, in terms of input foreclosure, the potential concern may be that Newco would foreclose the Parties' downstream competitors from accessing Newco's fibre network management software. On the software side, AEX's key customer is [X]. Again, [X] and is not an essential supplier of inputs to the Parties' downstream competitors. We understand that AEX faces several competitors, with its closest competitors in South Africa [X]. [X], has a similar offering to AEX and has recently established a presence in South Africa. This suggests that there is no input foreclosure concern in this market.

101. In terms of customer foreclosure, the potential concern may be that post-transaction, Vodacom reduces its purchases of fibre network management software from Newco's rivals. [CONFIDENTIAL]. This implies that Vodacom is not a critical customer for other suppliers of software services and that there is no customer foreclosure concern at this level.

2.10 Pro-competitive efficiencies

102. We find that the proposed transaction will lead to pro-competitive efficiencies. As discussed under the rationale, it will promote access to, and thus more efficient use of, Vodacom's existing fibre assets. Newco's existing customer base and track record as an open access provider will enable more efficient and widespread usage of both the FTTH business and the Transfer Assets. These assets will become available immediately to Newco's customer base, both existing and new.
103. As part of Newco's open access network, a larger number of operators will therefore have more ready access to these assets and more ways to access them. Vodacom's fibre infrastructure that was not open access before will now become so, meaning that third party providers will have more ready access to these assets. Vodacom's network was built largely for self-supply, and as a result, has lower uptake rates from third parties than Newco's network [CONFIDENTIAL].
104. [CONFIDENTIAL].
105. [CONFIDENTIAL].
106. [CONFIDENTIAL]. This will be to the benefit of all downstream providers, as Newco's network will be available to the market on an open access basis. Moreover, the proposed transaction will mean that Vodacom will not overbuild the Newco network, also leading to less infrastructure duplication, and consequently less inefficiencies.
107. [CONFIDENTIAL].
108. The proposed transaction also brings the ability to increase fibre penetration into areas that are not currently covered, where it is not viable for either firm to do so separately. Currently it is difficult for either firm to motivate for expanding their network into outlying areas because of return-on-investment requirements. The proposed transaction will allow Newco to increase its scale and reduce average costs, increasing its profitability. Hence, it is possible that the combined requirements will improve the return-on-investment to such an extent that it becomes feasible to roll out fibre in outlying areas. As a result, areas that were previously not viable for fibre roll-out will now become viable, allowing increased roll-out. In addition, combining the contiguous networks of Vodacom and Newco will allow Newco to deploy fibre into smaller standalone areas that were previously not viable for deployment. This will allow it to extend coverage and densify the network.
109. CIVH expects network synergies to arise from the proposed transaction in the form of cost savings. [CONFIDENTIAL].
110. The proposed transaction will provide direct benefits to consumers. As more service providers will have access to the increased Newco infrastructure, consumers will benefit from the wider choice of service providers. Consumers will benefit from a wider range of products which are possible through the economies of scale. Cost savings may also be expected to enable lower prices to consumers. Therefore, we find that the proposed transaction will deliver clear benefits for competition and consumers.

2.11 Public interest

111. No adverse employment effects are anticipated to result from the proposed transaction. We are advised that all of the relevant Vodacom staff will be redeployed within Vodacom, and that there will be no adverse effect on CIVH's employees.
112. In terms of BBBEE status and HDP ownership, the proposed transaction will result in a greater spread of ownership by HDPs in Newco. [CONFIDENTIAL].
113. In South Africa, fibre has traditionally been deployed first in high income areas. There is a considerable opportunity to expand infrastructure in secondary cities and outlying areas. Newco (via Vumatel) has already begun rolling out fibre to secondary cities and reach areas. This transaction will provide Newco with the capital to further increase its roll-out programme to these reach areas. This will facilitate the policy goal of increased Internet coverage and speeds and support government plans and policies such as the National Development Plan ("NDP"), South Africa's Broadband Policy ("SA Connect"), as well as the Presidential Commission on the Fourth Industrial Revolution ("PC4IR").
114. In particular, according to the NDP, Information and Communications Technologies will underpin the development of a dynamic and connected information society and a vibrant knowledge economy that is more inclusive and prosperous in South Africa by 2030. In line with the broad vision of the NDP, one of the objectives of SA Connect is that: "by 2020, 100% of South Africans will have access to broadband services at 2.5% or less of the population's average monthly income." One of the recommendations of the PC4IR is to build and accelerate the roll-out of 4IR infrastructure, which it notes is "imperative and should cover mobile, physical, computational and digital infrastructure." This transaction will aid in reaching the above policy objectives.
115. [CONFIDENTIAL].
116. This continued expansion of fibre networks is particularly important, as this will ultimately promote economic growth. Numerous studies have found that greater fibre expansion and penetration can be expected to help drive economic growth. In this regard, the proposed transaction will promote the overall public interest through facilitating increased economic growth.

3 Parties and Proposed Transaction

3.1 CIVH

118. [CONFIDENTIAL].
119. CIVH controls a number of subsidiaries through its ownership of Newco, primarily focused on providing wholesale services to other communication providers. Newco in turn controls DFA and Vumatel.¹⁵ [CONFIDENTIAL].
120. **DFA** is a provider of wholesale, *open access* passive fibre infrastructure and managed network services in both metropolitan and national long-haul telecommunications markets. It leases its backbone and transmission services to connect its metro infrastructure in various towns, while also maintaining, building, installing, managing, and financing the infrastructure and services on its network. DFA does not provide retail services. Its primary activity is deploying metro fibre networks and providing wholesale access to this infrastructure to fixed network operators (“FNOs”) and mobile network operators (“MNOs”). [CONFIDENTIAL].
121. DFA also owns SA Digital Villages (Pty) Ltd (“SADV”).¹⁶ **SADV** operates as an Internet Service Provider (“ISP”), which offers Internet access services to both residential and business customers. In addition, SADV operates a VoIP network and sells voice services to primarily enterprise customers. In providing these services, SADV leases the FTTH or FTTB infrastructure owned and operated by last mile open access fibre network operators. SADV [X].¹⁷ The agreements between DFA and SADV are arm’s length agreements.
122. DFA and Vumatel each own [X] of the shareholding in MCT Telecommunications (Pty) Ltd (“MCT”). **MCT** provides planning, implementation, testing, certification, and maintenance services for fibre optic networks in South Africa. In addition, the business of Fibrehouse (Pty) Ltd trading as Britelink (“Britelink”), [CONFIDENTIAL]. This is an FTTH field services business, installing last-mile fibre for fibre network owners and expanding to deployment and maintenance of core fibre networks. The services provided by MCT and Britelink are not in and of themselves licensable services under the ECA. Instead, they are support services provided ECNS providers.
123. **Vumatel** is a fibre network operator that provides open access FTTH and limited FTTB services at the last mile level to ISPs. Vumatel installs fibre in a suburb and also installs a fibre spur up to the home wall. After the fibre has been installed, Vumatel leases its infrastructure to ISPs, who then provide retail services to end-customers over the last mile infrastructure. In other words, it provides an active network over the fibre infrastructure, allowing ISPs to connect to the network on an open access basis.
124. Vumatel also owns (a) Automation Exchange (Pty) Ltd (“AEX”), (b) VumaCam (Pty) Ltd (“Vumacam”), and (c) Vumacam Infrastructure Pty Ltd (“Vumacam Infrastructure”).¹⁸

¹⁵ [CONFIDENTIAL].

¹⁶ [CONFIDENTIAL].

¹⁷ [CONFIDENTIAL]

¹⁸ [CONFIDENTIAL].

- a. **AEX** is active in the development of specialised software that plugs into a fibre network, allowing the user operational functionality to interact within the network. It also supplies physical network components that connect ISPs with one or more networks.
 - b. **VumaCam** offers a citywide video camera network (CCTV) offering ultrahigh-definition video feeds to security companies and law enforcement agencies.
 - c. **VumaCam Infrastructure** is an infrastructure company facilitating Wi-Fi, mobile network operator opportunities, branding and advertising space.
125. The services provided by AEX, VumaCam and VumaCam Infrastructure are not licensable services under the ECA.
126. In addition to CIVH, Remgro has an interest in various firms in several industries. In the telecommunications industry, Remgro [X].¹⁹
127. [CONFIDENTIAL].

3.2 Vodacom

128. Vodacom is wholly-owned by Vodacom Group Limited (“Vodacom Group”), which is a public company incorporated in South Africa. Shareholders in Vodacom Group on 1 July 2021 include Vodafone Investments (SA) (Pty) Ltd (52.68%), Vodafone International Holdings B.V. (7.81%), YeboYethu Investment Company (Pty) Limited (6.23%), and institutional and retail investors.
129. Vodacom is an MNO primarily active in the provision of *mobile* wholesale and retail voice, messaging, and data services to residential and business customers (including IoT services). Vodacom is also active in the provision of *fixed* wholesale and retail services to residential and business customers. Vodacom’s mobile and fixed services are supported by its own fibre infrastructure and are also provided over third-party infrastructure.
130. Vodacom provides limited fixed wholesale services to other telecommunications providers. These include wholesale fixed managed services, wholesale bitstream access to ISPs, wholesale fibre and microwave backhaul, and managed satellite Internet services. Vodacom also provides wholesale APN services, leases access to its towers, and provides wholesale network management services to [X].
131. Vodacom offers fixed retail broadband services over its own and third-party last mile infrastructure. It also offers retail DSL broadband services to business customers, using wholesale DSL access from Telkom and business satellite Internet services (particularly for customers without alternative access). Vodacom also provides more specialised services to enterprise customers, including:²⁰ unified communications solutions based on interlinking products and services; cloud and hosting services; connectivity services such as leased lines, microwave links, dedicated Internet access, and best effort Internet access; IoT services; security solutions for IT systems and networks; and managed services, such as managed VoIP/telephony/video, managed VPN, and managed LAN services.

¹⁹ Remgro [X].

²⁰ See online: <https://www.vodacombusiness.co.za/business/solutions/solutions>

132. Vodacom holds several licences for the use of mobile and microwave spectrum. It holds licences for 14% of assigned mobile spectrum, including the following: 11 MHz FDD in the 900 MHz band; 12 MHz FDD in the 1,800 MHz band; and 15 MHz FDD and 5 MHz TDD in the 2,100 MHz band.²¹ It also provides wholesale national roaming services to [X].
133. Vodacom has a number of subsidiaries which are active in telecommunications services: (a) Mezzanine Ware (Pty) Ltd (“Mezzanine”), (b) Storage Technology Services (Pty) Ltd trading as Nexio (“Nexio”), (c) XLink Communications (Pty) Ltd (“XLink”), and (d) IoT.nxt (Pty) Ltd (“IoT.nxt”).
- a. Mezzanine is a digital technology company which supplies a range of managed services for business customers, including mobile and cloud-based services and IoT products and services.
 - b. Nexio is a data centre and storage specialist and business systems aggregator. Nexio provides multi-cloud, security, data management and storage solutions.
 - c. Xlink provides secure and managed payment solutions to businesses.
 - d. IoT.nxt provides hardware and software used in IoT solutions. Its technology allows various systems, processes, machinery and ‘things’ to be interconnected.

3.3 Proposed transaction

134. Vodacom intends to acquire a shareholding of at least 30% in Newco, whereby Vodacom will qualify for certain veto rights that will give it a minority controlling shareholding of Newco. CIVH will remain the majority shareholder. Vodacom intends to acquire this shareholding through:
- a. [CONFIDENTIAL];
 - b. the sale of Vodacom’s FTTH business to Vumatel; and
 - c. the sale of certain Transfer Assets to DFA.
135. This will ensure that Vodacom will acquire a shareholding of at least 30%, which provides it with minority joint control. [CONFIDENTIAL].²²
136. Vodacom’s FTTH business is comprised of its FTTH network infrastructure and related assets, including contracts, fixed assets, and software. The FTTH assets comprise approximately [X] households passed, and [X] households connected as of June 2021.²³ Along with the infrastructure, all of Vodacom’s contracts with ISPs for FTTH services will be transferred to Newco. [CONFIDENTIAL].
137. According to the Sale of Transfer Assets Agreement, the Transfer Assets comprise fibre infrastructure on metro backhaul routes and FTTB access routes into buildings. [CONFIDENTIAL]. Vodacom will transfer the fibre infrastructure relating to metro backhaul and FTTB networks to Newco, but it will retain all of its services customers (i.e. wholesale and retail services). In other words, Vodacom will not transfer to Newco, and will continue to provide, its fibre-based wholesale and retail managed services, based on long-term lease-back agreements from Newco. Vodacom will also retain its national long-haul fibre (which are excluded from the Transfer Assets) and continue to provide wholesale access to these routes.

²¹ ICASA. (2019). *Discussion document on the market inquiry into mobile broadband services in South Africa*, Table 3.

²² [CONFIDENTIAL].

²³ See accompanying Compass Lexecon report.

3.4 Rationale for the proposed transaction

- 138. [CONFIDENTIAL].
- 139. [CONFIDENTIAL].
- 140. [CONFIDENTIAL].
- 141. [CONFIDENTIAL].²⁴
- 142. [CONFIDENTIAL].
- 143. [CONFIDENTIAL].

²⁴ [CONFIDENTIAL].

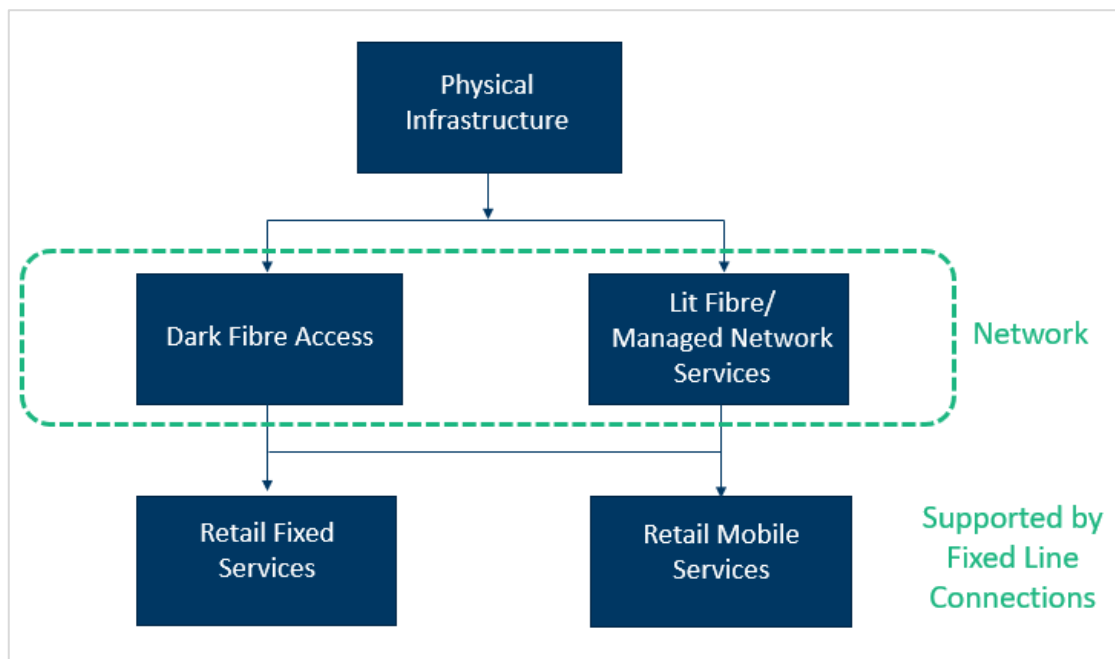
4 Activities and Overlaps

144. In this section we set out the Parties' activities and identify overlaps in their activities. In order to identify these overlaps, we describe the value chain relevant to the proposed transaction and briefly discuss the products offered by the Parties.

4.1 Fixed line telecommunications value chain

145. To understand the overlaps between the Parties and the competitive assessment of the proposed transaction, it is important to consider the value chain for telecommunications services. The telecommunications industry extends across different technologies and consists of an extensive and complex value chain. Figure 2 provides an adapted version of the simplified structure used by Ofcom in their recent Market Review of Wholesale Fixed Telecoms Markets.²⁵ Ofcom's review is very recent and forward-looking and provides a useful framework for this complex value chain. The aim is to consider competition in all the relevant markets that support retail telecommunications services.

Figure 2: Fixed telecommunications services value chain



Source: Adapted from Ofcom (2021)

146. The figure illustrates three different levels of the value chain: the physical infrastructure layer, the network layer, and retail services. Ofcom defines the physical infrastructure layer as referring to all parts of a network which can be used to host elements of a telecoms network, including pipes, masts, ducts, inspection chambers, manholes, cabinets, buildings or entries to buildings, antenna installations,

²⁵ Ofcom (2021). Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review. 2021-26, Volume 2: Market assessment, Vol. 2.

towers, and poles.²⁶ The network layer includes dark fibre access and lit fibre services, referred to by Ofcom as wholesale access and leased lines (i.e. Ethernet services and dark fibre). The final level refers to retail fixed and mobile services, which are supported by this fixed line infrastructure. This simplified value chain assists in understanding the overlaps between the Parties.

147. The main focus of this transaction is the fixed transfer assets and the value chain that supports retail telecommunication services. We do not deal in any detail with physical infrastructure markets, although these form part of the Transfer Assets.²⁷ As the transaction mainly relates to the network layer in Figure 2, our focus in this report is mainly on wholesale networks and downstream services markets. Wholesale network markets are necessary to support fixed and mobile telecommunication services. These assets also provide fibre access to the mobile value chain (e.g. mobile backhaul), with associated retail mobile services. As the transaction mainly relates to the fixed line infrastructure, we do not deal in detail with the mobile value chain.
148. The wholesale network layer of the fixed line value chain can be further segmented into four levels: the international network, the national long-haul network, the metropolitan backhaul network, and the access (or last mile) network.²⁸ These levels have to link with one another for end consumers to connect to the Internet and to access other telecoms services.
149. The link starts from the international network level, where submarine cables connect to different countries and continents. The international fibre infrastructure network is comprised of 5 submarine-laid fibre optic cables that connect South Africa to the rest of the world. These cables are SEACOM, SAFE, WACS, SAT-3, and EASSY, connected at Mtunzini along the KwaZulu-Natal coast and at Yzerfontein on the West Coast. [X]
150. The next level is the national long-haul network, also known as national backbone fibre. This level carries Internet traffic from the submarine landing stations across the country. It comprises high-capacity fibre transmission links between cities and towns and/or service providers' Points-of-Presence ("POPs") across the country. Openserve (Telkom) has the largest national fibre network, with connectivity to most populated areas in the country. Other key players include Broadband Infraco, Liquid Telecom, Vodacom, MTN, Seacom/FibreCo and CIVH/Newco (DFA).
151. The next level is the metropolitan backhaul network. When a national fibre link lands in a city or large town, the traffic is carried through metro backhaul networks to a point that is close to the customer. The metro networks connect larger switches and aggregation points in metropolitan areas to the access network (i.e. the last mile). The metro backhaul networks typically use fibre or microwave links and are often leased out by providers to other firms. Openserve, CIVH/Newco (DFA), Liquid Telecom, Link Africa, Seacom/FibreCo, Vodacom, and MTN are South Africa's main metro network operators.
152. FTTH and FTTB refer to the last-mile connection between the aggregation point and the end user. Last mile operators roll out their fibre infrastructure networks to residential houses and/or estates, referred to as FTTH, and to businesses, referred to as FTTB. These firms provide last mile access to ISPs, which typically sell value-added services to end consumers. Numerous firms are active at this level, including,

²⁶ Ofcom (2021). Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review. 2021-26, Volume 2: Market assessment, Vol. 2, para 3.6.

²⁷ [CONFIDENTIAL].

²⁸ Competition Tribunal. (2018). *CIVH/Vumatel merger*. Case Number LM109Jul2018.

Openserve, Frogfoot, MFN, Octotel, Vodacom and CIVH/Newco. There has been substantial entry by various players at this level, with smaller regional players that are also significant in particular provinces.

153. Finally, in the downstream retail market, ISPs provide value-added services to end consumers, using wholesale infrastructure and/or services as an input. These value-added services include VPN, voice, Internet access, video conferencing, managed security services, hosted infrastructure, and hosted application management.²⁹ It is possible to make a distinction between retail services to consumers and retail services to enterprise customers. Numerous ISPs, including Afrihost, MWeb, Telkom Retail, Vox, WebAfrica, Supersonic, Vodacom and Newco (SADV), are active at this level.

4.2 Activities of the Parties

4.2.1 Newco

154. As explained above, this report focuses mainly on the upstream wholesale markets, at the level of [CONFIDENTIAL], metro backhaul fibre, and FTTB, which relate mainly to the DFA business within Newco. In addition, we analyse the market for retail fixed services to enterprises, which relates to the SADV business within Newco. In addition, this report analyses the other Newco subsidiaries that are relevant, namely MCT/Britelink and AEX. (Although the services provided by MCT/Britelink and AEX are not subject to ICASA's jurisdiction as they are not ECNS or ECS, they are provided in support of ECNS and ECS providers. The analysis is included in any event for the sake of completeness.) The accompanying Compass Lexecon report focuses on the sale of the FTTH business, which relates mainly to the Vumatel business within Newco, downstream retail services to consumers, and additional overlaps relating to Vumacam.
155. DFA owns national long-haul, metro backhaul, and access (FTTB) fibre infrastructure. The DFA network comprises about [X] of fibre, [CONFIDENTIAL].³⁰ DFA has achieved wide network coverage, reaching all of South Africa's major metropolitan areas. DFA was established as a wholesale open access provider of passive (dark) fibre infrastructure, but it has since expanded its activities into managed (lit) services, provided over its infrastructure at each level of the value chain.
156. The provision of dark fibre refers to access to optical fibre strands over which no services are currently provided. Thus, dark fibre is not connected to any network and is not yet transmitting data. Normally, due to the high cost of fibre installation, dark fibre is planned for and installed at a greater rate than needed for current demand, to provide for future expansion. When dark fibre is connected to termination points and transmitting data, it is called lit or managed fibre. Dark fibre therefore needs to be "lit" using equipment at both ends of the line, which then allows for transmission of signals and value-added services. Lit fibre can be used to provide the bandwidth capacity for customer applications, including Internet, email, file sharing, web hosting, data backup, video, VOIP and VPN.

Figure 3: [CONFIDENTIAL]

[X]

Source: FTI Calculations based on shape files submitted by parties

²⁹ Competition Commission. (2014). *Vodacom/Neotel merger*. Case No: 2014Jul0382

³⁰ [CONFIDENTIAL].

157. Figure 4 illustrates where DFA's products fit into the network. We describe these products in detail in Appendix 1. [CONFIDENTIAL].
158. In terms of access or last-mile products, DFA offers dark fibre products in the form of [CONFIDENTIAL].
159. [CONFIDENTIAL]. For example, [X]. These are wholesale products in that they are sold to ISPs (ECS licence holders) and ECNS providers (including ECNS licence holders or exempted operators such as private electronic communications networks). The ISPs then provide the downstream retail fixed services to these enterprises, or the ECNS licence holders will provide these services themselves.

Figure 4: [CONFIDENTIAL]

[X]

Source: CIVH Information Memorandum (October 2019)

160. As mentioned above, Vumatel provides open access FTTH and limited FTTB services at the last mile level to ISPs. In terms of Vumatel's services, we focus on the limited FTTB services provided to ISPs (the Compass Lexecon report considers FTTH). As discussed in more detail below, [X].
161. SADV is an ISP, which offers Internet access services to residential and business customers. We understand that [X].³¹

4.2.2 Vodacom

162. Vodacom is active at all levels of the value chain, using various business models to build, acquire and lease infrastructure and sell services using that infrastructure. It owns national long-haul, metro backhaul, and last mile fibre, including FTTH and FTTB. Figure 5 illustrates Vodacom's long-haul (referred to as Vodacom Core)³² and metro fibre network (referred to as Vodacom Access).³³ Currently, Vodacom has about [X] of long-haul fibre and [X] of metro backhaul fibre.³⁴ Vodacom also leases and builds last-mile fibre to connect end consumers (i.e. FTTH and FTTB) and uses this infrastructure to sell directly to consumers and enterprise customers (i.e. downstream retail services). It has deployed local area networks that connect around [X] households and [X] businesses.

Figure 5: Vodacom's Core (red) and Access (blue) fibre networks, November 2021

[X]

Source: FTI Calculations based on shape files submitted by parties

163. Vodacom uses self-provided fibre to offer wholesale managed network services and as an input into its downstream fixed and mobile network services.³⁵ Vodacom [X].³⁶ In addition to its self-provided fibre, Vodacom leases dark and lit fibre where self-supply is not viable, [X], which it uses as an input into its downstream fixed and mobile network services [CONFIDENTIAL].³⁷
164. Vodacom's Wholesale division offers wholesale managed network services, provided only over

³¹ Information provided to FTI by CIVH: *Draft SADV Board Minutes of 10 August 2021*

³² Vodacom [X].

³³ Vodacom builds and leases metropolitan rings and access transmission to its base stations for mobile backhaul.

³⁴ Vodacom information provided to FTI

³⁵ Vodacom information provided to FTI

³⁶ [CONFIDENTIAL].

³⁷ CIVH information provided to FTI

Vodacom-owned fibre and microwave links to ECNS licence holders. The relevant products offered by Vodacom Wholesale are called Carrier Connect NLD (offering access to the long-haul network), Carrier Connect Metro (offering access to the metro backhaul network) and Carrier Connect Access (offering access to the mobile backhaul network). Vodacom Wholesale [X].

165. Vodacom EBU sells retail managed services using Vodacom-owned and leased third party infrastructure [X]. These products are offered to large, medium, and small enterprises, and public sector customers. The relevant products include Business Internet Fibre, Business Connect Fibre, IP Connect, LAN Connect, and Data Centre Connect.
166. Business Internet Fibre offers Internet connectivity over broadband fibre, supplying a broadband router, and username and password for authentication. It is available as uncapped Internet service that provides a fair usage policy, in terms of maximum usage allowed in a month, after which the throughput is throttled. Business Connect Fibre is an Internet service provided over broadband and/or Metro Ethernet fibre with a higher specification router and no throttling.
167. IP Connect is the last mile connectivity provided to the customer [CONFIDENTIAL].

4.3 Overlaps between Newco and Vodacom

168. In terms of international connectivity, Vodacom [X]. [X] provides capacity that is available for its own use, and specifically to connect to Internet content originating on other continents. Vodacom therefore [X]. Remgro [X]. As there are unlikely to be competition concerns arising in relation to international connectivity, we do not analyse this market further.
169. Figure 6 illustrates the overlap between the DFA network (green) and Vodacom's national long-haul (red) and metro backhaul (blue) networks. It shows that the Parties networks are complementary for the most part, with limited overlaps between them. This is due to [X].³⁸

Figure 6: Overlap between DFA (green) and Vodacom's core (red) and access (blue) networks

[X]

Source: FTI Calculations based on shape files submitted by parties

170. To identify overlaps, it is important to understand the products offered by both Newco and Vodacom. Table 2 focuses on the most important overlaps in the levels of the value chain that are assessed in detail in this report. The table then categorises the products provided by the Parties into these levels of the value chain. We identify horizontal overlaps at the level of national long-haul fibre, metro fibre, FTTB, and retail fixed services to enterprises. The table excludes microwave links, although we discuss this in this report where relevant, and fixed wireless access.³⁹ The accompanying Compass Lexecon report assesses overlaps relating to FTTH, retail internet services to consumers, infrastructure hosting/co-location services and CCTV services.
171. [CONFIDENTIAL].

³⁸ Vodacom information provided to FTI

³⁹ Fixed Wireless Access (FWA) does not fall in the same market as fibre access, and therefore we do not deal with this further in the report. This was also the finding of the Commission in the CIVH/Vumatel merger (case 2018Jun0032).

Table 2: [CONFIDENTIAL]

Source: FTI Consulting based on information provided by parties

172. The Transfer Assets include both metro fibre and FTTB fibre. [CONFIDENTIAL].
173. Vodacom is not transferring the services offered over its fibre network. Essentially, Vodacom is only selling the fibre as well as the supporting physical infrastructure. Vodacom has not previously provided access to this dark fibre to any third parties ([CONFIDENTIAL]). The benefit of this transaction is therefore that more third parties will get access to this infrastructure. As Vodacom was not a player in the dark fibre market before, they were not a competitor to Newco (DFA) in this market. The only change is that Newco will now be able to offer more dark fibre, as well as lit fibre products over this enlarged network.
174. We do not find it necessary to define separate markets for dark and lit fibre, as explained in more detail below. This is in line with the approach of Ofcom in their Market Review of Wholesale Fixed Telecoms Markets. Ofcom⁴⁰ concluded that dark fibre, when used to supply or self-supply wholesale services, is in the same product market as lit fibre services. As explained below, other players like Openserve can start offering access to dark fibre in a very short timeframe, in the case of a SSNIP for dark fibre.
175. [CONFIDENTIAL].
176. [CONFIDENTIAL].
177. [CONFIDENTIAL]. Thus, there is technically no overlap in the market for wholesale FTTB services between the Parties.
178. [CONFIDENTIAL].

⁴⁰ Ofcom. Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, Volume 2: Market assessment, Vol. 2, para. 6.78 and 6.96(b).

5 Market Definition

179. In this section we define the relevant markets. We follow the approach of the Competition Authorities in previous cases relating to similar transactions in the telecoms industry (e.g. the Telkom/BCX merger⁴¹, the proposed Vodacom/Neotel merger⁴², and the CIVH/Vumatel merger⁴³).

5.1 Defining the relevant product markets

180. As explained above, the fixed line value chain can be divided into a number of levels, from international undersea fibre cables, to national long-haul, to metro backhaul, to last mile FTTH or FTTB, and downstream retail services. In the proposed Vodacom/Neotel merger and the Telkom/BCX merger, the Commission defined an upstream market for wholesale leased lines, which was further segmented into international, national, metropolitan, and last-mile. We broadly follow the Commission's approach to defining the relevant product market. We focus on the network layer which includes fibre and wholesale transmission services. Given overlaps between Vodacom and CIVH, we consider in more detail the markets for (i) [CONFIDENTIAL], (ii) metro fibre and microwave links, (iii) last mile fibre that relates to FTTB, and (iv) retail fixed internet access services to enterprises.
181. The one question that is important is whether dark/passive and lit/active fibre services should be defined as separate relevant product markets. In the CIVH/Vumatel⁴⁴ merger, for instance, [CONFIDENTIAL]. As explained above, dark fibre is a fibre connection provided between two sites which does not include any active equipment supplied by the network provider, allowing the customer, or another supplier, to provide the equipment. Customers will purchase dark or lit fibre depending on their requirements. Access to dark fibre is given to ISPs and MNOs who have the necessary licences (i.e. ECNS licences) to light up the fibre. The benefit of leasing or owning a dark fibre route is that it ensures that the ISP or MNO retains control over the network.
182. [CONFIDENTIAL].⁴⁵ Similarly, Ofcom⁴⁶ concluded that dark fibre, when used to supply or self-supply wholesale services, is in the same product market as lit fibre services. This was on the basis of supply-side substitution, and the provision of the active equipment being the difference between passive and active products. When networks are already connected with fibre, providers would be able to switch between supplying dark and lit fibre sufficiently quickly and at minimal cost in the event of a SSNIP.
183. This implies that dark fibre providers (such as Newco) will be able to supply lit services in the event of a SSNIP, by installing active equipment at each end of the circuit. Indeed, DFA supplies both dark fibre and lit fibre services at all levels of the value chain (national metro and FTTB). Similarly, providers of lit fibre (e.g. Vodacom or Openserve) will be able to provide dark fibre services in the event of a SSNIP. We

⁴¹ Competition Tribunal. (2015). Telkom SA/Business Connexion Group/Dimension Data. Case No. LM065Aug14

⁴² Competition Tribunal. (2014). Vodacom (Pty) Ltd vs. Neotel (Pty) Ltd. Case No. LM059Jul14; Competition Commission. Vodacom/Neotel. Case No. 2014Jul0382.

⁴³ Competition Commission. (2018). CIVH/Vumatel merger. Case No: 2018Jun0032

⁴⁴ Competition Commission. (2014). Vodacom/Neotel merger. Case No: 2014Jul0382.

⁴⁵ [CONFIDENTIAL].

⁴⁶ Ofcom. Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, Volume 2: Market assessment, Vol. 2, para. 6.78 and 6.96(b).

understand that Vodacom [X]. This suggests that dark and lit fibre may be included in a single relevant product market, due to supply-side substitution.

5.1.1 National [CONFIDENTIAL] connectivity

184. National [CONFIDENTIAL] connectivity involves fibre links that carry Internet traffic from the submarine landing stations across the country. It comprises high-capacity fibre transmission links between different cities and towns and/or service providers' POPs across the country. As there is no viable alternative medium available for this level of infrastructure, we define a market for national [CONFIDENTIAL] fibre connectivity.

5.1.2 Metro fibre connectivity

185. Metro fibre connects the national long-haul network and the last mile network. Metro fibre is typically used to carry large amounts of data that has been aggregated through the FTTH/FTTB providers' POPs, or to provide backhaul to MNO base stations (i.e. mobile backhaul). Similar to Ofcom's conclusions, we do not consider it necessary to define separate relevant product markets for different sets of customers (i.e. MNOs and FTTH/FTTB providers), or indeed products (such as Titan and Peregrine). This is because competitive conditions at particular locations are largely the same for different customers and are largely determined by the presence of rival networks.⁴⁷ Nevertheless, where relevant we consider the implications of the proposed transaction on fixed and mobile backhaul customers separately.
186. In more outlying areas, metro backhaul to mobile sites may be provided via a microwave links,⁴⁸ typically in cases where fibre is not available or feasible, such as in rural areas. Backhaul provided through microwave links is therefore mostly used to fill gaps where demand is lower, and it is not cost-effective or practical to use fibre.
187. In the proposed Vodacom/Neotel merger, the Commission found that there was limited use of technologies other than fibre to provide metro connectivity, due to capacity and reliability constraints. In that case, and in the CIVH/Vumatel merger, the Commission defined a separate market for metro backhaul fibre. Similarly, Ofcom found that microwave links were a poor substitute for fibre-based backhaul, due to its lower capacity, requirement for line of sight connectivity, lower transmission range, and higher risk of failure. We therefore define separate markets for fibre-based backhaul and for backhaul provided through microwave links. This is because of asymmetric substitution from microwave links to fibre. In other words, if fibre is a viable alternative, it would always be preferred to microwave (i.e. there would be no substitution from fibre to microwave links if fibre were available).⁴⁹

⁴⁷ Ofcom decided to include mobile backhaul within the same market with other backhaul customers, rather than define a separate market for this customer group. This was because, in both cases, competition is determined by the presence of rival networks to the customer site. On that basis, competitive conditions at particular locations are largely the same whether the end customer is a mobile network operator or an enterprise customer. Moreover, MNOs and enterprise customers had broadly the same geographic distribution, generally relied on the same set of suppliers for their connectivity needs, and the density of rival infrastructure was broadly the same for both customer groups in each geographic market defined.

⁴⁸ Microwave links or microwave spectrum refer to spectrum in frequency bands that enable short distance connectivity between base stations or other POPs. These typically range from approximately 1 GHz to 100 GHz in frequency.

⁴⁹ In some cases, backhaul can also be provided via satellite, but we do not consider this a substitute for metro backhaul fibre, for the same reasons.

5.1.3 Last mile connectivity

188. In terms of last mile connectivity, it is important to understand the distinction between FTTH and FTTB (i.e. whether the access market should be segmented by customer type). [CONFIDENTIAL].
189. [CONFIDENTIAL].
190. [CONFIDENTIAL].
191. We agree with the Commission's conclusions on separate relevant markets for FTTB and FTTH. The prices paid for FTTB services are significantly higher than the prices for FTTH services. Africa Analysis [X].

Figure 7: Average price difference between FTTH & FTTB BE and FTTB QoS

[X]

Source: [CONFIDENTIAL]

192. [CONFIDENTIAL] [X].⁵⁴ Ultimately, business customers typically require risk management and guarantees from a fibre provider which residential customers do not require (or at least not to the same degree). Business customers also require flexible configurations that facilitate a high-performance network and typically also require access to data centres and cloud services (such as hosted cloud or colocation vendors).⁵² The technical specification of a business consumer is also sometimes tailored to the specific business, which is not possible in the mass (residential) market.
193. Moreover, the operating capacities for business consumers are also typically superior to those demanded by residential consumers.⁵³ For instance, [X].⁵⁴ FTTB also has a wider range of technical options for access, such as leased lines, which, due to the substantial costs involved, are not available to residential consumers.⁵⁵ Broadly speaking, the network architecture used to provide FTTB differs from that used to provide FTTH.
194. We therefore define separate markets for FTTH and FTTB, based on differences in prices, speed, reliability, redundancy, guarantees and other value-added services. Note, however, that in addition to the FTTH market, the Compass Lexecon report considers business customers, particularly SMEs, who acquire similar services to residential customers, as the supply of services to these customers could be considered part of the same market as FTTH.
195. A further consideration in terms of market definition, is whether separate markets should be defined for FTTB BE and FTTB QoS. [CONFIDENTIAL].⁵⁶

⁵⁰ [CONFIDENTIAL]

⁵¹ [CONFIDENTIAL]

⁵² Available: <https://www.atlantech.net/blog/whats-the-difference-between-residential-and-business-fiber-internet>

⁵³ European Commission. (2003). *Commission Decision in Wanadoo Interactive*. Case No: COMP/38/233. Para. 171

⁵⁴ [CONFIDENTIAL]

⁵⁵ European Commission. (2003). *Commission Decision in Wanadoo Interactive*. Case No: COMP/38/233. Para. 171

⁵⁶ [CONFIDENTIAL].

196. According to CIVH, [X].⁵⁷ According [CONFIDENTIAL], [X].⁵⁸ As a result, we do not definitively conclude on whether FTTB QoS and BE should be defined as separate markets. We do, however, present results of market shares for both permutations (separate markets and a single market) in Section 8.

5.1.4 Downstream fixed retail services

197. In the downstream retail market, ISPs provide value-added services to end customers, using wholesale infrastructure and/or services as an input.⁵⁹ [CONFIDENTIAL].⁶⁰
198. [CONFIDENTIAL].⁶¹
199. The next question is whether there are separate markets for downstream retail services provided to consumers and enterprises (i.e. segmented by customer type). In terms of the SSNIP test, defining separate consumer and enterprise markets may make intuitive sense. A retail consumer with low speed and bandwidth requirements cannot switch to the enterprise product as a result of a price increase. The same is true for enterprise customers.
200. [CONFIDENTIAL].⁶²
201. In contrast, according to the European Commission, retail services to enterprise customers are separate from other fixed line services to the mass market (including residential and small business customers). This stance has also been taken by the Commerce Commission of New Zealand, where a separate downstream market was defined for business fixed-line services. The reason for this was that, typically, “larger businesses have a need for customised fixed-line services and/or managed data services. Often the sophistication and complexity of the product offering increases with the size of the business customer as the number and type of connections, security requirements and volume of data to be managed increases.”
202. The Compass Lexecon report defines and analyses a national market for retail internet access and other associated services offered over fibre and DSL, which excludes specialist services for enterprise customers. We therefore analyse retail fixed services provided over fibre to enterprise customers specifically, on the basis that this is the narrowest product market where the Parties’ activities overlap, and because this is not analysed in the Compass Lexecon report.

5.2 Defining the relevant geographic markets

203. According to Ofcom, if a stringent SSNIP test is followed in telecoms markets, there is a tendency to define artificially small geographic markets. From a demand-side perspective, residential or business customers cannot access services from a location other than where they are located and are unlikely to move location in response to a SSNIP. From a supply-side perspective, fixed line infrastructure suppliers are unlikely to enter a market which already has installed infrastructure in response to a SSNIP,

⁵⁷ Some of the technologies that would drive this would be cloud service adoption, network function virtualisation and SDWAN.

⁵⁸ [CONFIDENTIAL]

⁵⁹ Competition Commission. (2014). *Vodacom/Neotel merger*. Case No: 2014Jul0382

⁶⁰ [CONFIDENTIAL].

⁶¹ [CONFIDENTIAL].

⁶² [CONFIDENTIAL].

particularly in the case of fibre, which has high capital costs and excess capacity. Thus, a strict SSNIP may delineate a multitude of narrow individual markets for each customer.

204. [CONFIDENTIAL]. We broadly follow this approach by analysing markets both at a national level and at a regional/local level where relevant.

5.2.1 National [CONFIDENTIAL]connectivity

205. The market for national [CONFIDENTIAL] fibre may be analysed at the national level. However, limits on demand-side and supply-side substitution mean that the relevant markets may be narrower than national in scope and may be limited to individual routes. Ofcom,⁶³ for instance, concluded that connections to one exchange are not a substitute for connections to another exchange and that competitive conditions may vary on a route-by-route basis, depending on the presence of rival networks. We therefore analyse the infrastructure on specific routes as well as the national market for [CONFIDENTIAL].

5.2.2 Metro fibre connectivity

206. In the proposed Vodacom/Neotel merger, the Commission found that the market for wholesale leased lines was national in scope, as the leased lines were supplied across South Africa, although it noted that there were regional or local dynamics, as Vodacom and Neotel primarily offered access to their fibre networks in metro areas.
207. [CONFIDENTIAL].
208. However, as the competitive conditions in these local markets were likely to be generally homogenous within each of the metro areas, the Commission analysed the impact of the merger based on regional metro markets for metro fibre. This is similar to Ofcom's approach in aggregating geographic areas into areas where conditions of competition are similar or sufficiently homogenous, noting that competitive conditions do not have to be perfectly homogeneous across all geographic areas included within a single market.
209. An additional consideration is whether pricing varies between metro areas. National pricing may indicate national competitive constraints and may suggest a single national market. [CONFIDENTIAL]. If this is the case for all providers, it would imply a national market.
210. We broadly follow the Commission's approach in these cases by defining regional markets. We specifically analyse infrastructure in the three largest metro areas, Cape Town, eThekweni (Durban), and Johannesburg, as well as some of the relevant smaller metro areas. In addition, we analyse the national market for metro fibre where detailed data on the individual metros are not available.

5.2.3 Last mile connectivity

211. [CONFIDENTIAL]. Such a strict interpretation of a SSNIP would be indicative of a multitude of local geographic markets.

⁶³ Ofcom. Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26, Volume 2: Market assessment, Vol. 2, para. 6.78 and 6.96(b).

212. [CONFIDENTIAL]. The dynamics of competition for first-stage last mile entry will therefore vary by metro region, depending on how many, and which, rivals are present and competing in these markets.
213. [CONFIDENTIAL]. This means that the competition at this stage exists, to a large extent, before an area gains coverage from a provider.
214. [CONFIDENTIAL].
215. [CONFIDENTIAL]. Similarly, for reasons of practicality, Ofcom has assessed competition in wholesale fixed broadband markets according to postcode.⁶⁴ It then aggregated postcode sectors in which competitive conditions were similar and distinguished between postcodes where there is deployment by rival networks to the incumbent and postcodes without rival networks.⁶⁵
216. A further factor to consider, as discussed in detail in the Compass Lexecon report, is the extent of national pricing. In the CIVH/Vumatel merger, the Commission found evidence of uniform national pricing by market participants who operate in both monopoly and competitive local markets, as well as across metropolitan regions. However, the Commission noted that there were some instances of localised pricing and that the market may shift to regional pricing in the future.⁶⁶
217. We follow the same approach as the Commission and the Compass Lexecon report, by defining local markets for FTTB (e.g. business parks and malls). In addition, we assess national market shares for FTTB where detailed data on local areas are not available.

5.2.4 Downstream retail fixed services

218. In the proposed Vodacom/Neotel merger, the Commission defined a downstream market for retail fixed line services to be national in scope. That merger focused on services provided to enterprise customers which typically had a national footprint and required their service provider to provide connectivity to offices across South Africa.
219. [CONFIDENTIAL].
220. [CONFIDENTIAL]. The Commission ultimately did not conclude on the geographic scope of the relevant market but considered it to reflect the geographic scope of the intermediate last-mile fibre market.
221. Ofcom found that UK ISPs use a national average to price services and had national advertising strategies, despite vastly differing competitive conditions in various regions. They concluded that this was evidence of a national market with local characteristics, while acknowledging that a purely national or separate local markets would not capture all competitive constraints.
222. We follow the approach of the Commission and Compass Lexecon report, in defining a national market for retail fixed services provided to enterprise customers over fibre. This is because ISPs are readily able to supply services in different areas if they are able to obtain wholesale access from the FTTH/FTTB providers in the relevant areas.

⁶⁴ Ofcom, *Wholesale fixed telecoms market review*, Volume 2, January 2020, para 7.17.

⁶⁵ Ofcom, *Wholesale fixed telecoms market review*, Volume 2, January 2020, para 7.6.

⁶⁶ Commission report. CIVH/Vumatel, para 131-134.

5.3 Summary

223. We have defined the following relevant markets:

- a. route-specific markets for the provision of national [CONFIDENTIAL] connectivity;
- b. regional markets for metro fibre connectivity (including mobile backhaul), distinguishing between fibre and microwave links;
- c. local markets for last mile connectivity, distinguishing between FTTH and FTTB, while leaving the question as to whether FTTB BE and FTTB QoS are in the same market open; and
- d. a national market for retail fixed services for enterprise customers provided over fibre.

6 Horizontal Assessment: National [CONFIDENTIAL]

224. In this section, we begin by analysing overlaps in the networks of Newco and Vodacom on specific routes and find that there is minimal overlap on the national [CONFIDENTIAL] routes. We do not have route specific market shares, but we find that there are no routes where the Parties are the only players. We then estimate national market shares based on fibre distances and revenues for wholesale services provided on these networks to provide a sense of the size of the main providers. We find that both Parties have small market shares in the national market for [CONFIDENTIAL] services.
225. We analyse potential horizontal theories of harm relating to national [CONFIDENTIAL] fibre that may arise from the proposed transaction. It is important to note that Vodacom's national [CONFIDENTIAL] fibre will not form part of the Transfer Assets and will not be transferred to Newco. This means that Vodacom and Newco will continue to compete in this market post-transaction and therefore the normal horizontal theories of harm that would arise under a full merger do not apply in this market. Instead, we analyse the impact of partial ownership, in terms of potential unilateral and coordinated effects, as Vodacom will have a minority controlling shareholding in Newco post-transaction.

6.1 National [CONFIDENTIAL] infrastructure

226. There are currently five national [CONFIDENTIAL] operators in South Africa, in addition to the two MNOs (MTN and Vodacom) who have their own national [CONFIDENTIAL] networks. According to [CONFIDENTIAL], [X].⁶⁷ The main competitors in the national [CONFIDENTIAL] fibre market are [X]⁶⁸, [X]⁶⁹, [X]⁷⁰, [X]⁷¹, [X]⁷², [X].⁷³ Figure 8 illustrates the routes of the main providers, excluding the routes operated by the MNOs.

Figure 8: [CONFIDENTIAL]

[X]

Source: CIVH

227. Vodacom's national [CONFIDENTIAL] network consists of [X],⁷⁴ with [X], as illustrated in Figure 9.⁷⁵ The details of Vodacom's national long-haul (core) network are reported in Table 3. Vodacom⁷⁶ [X].⁷⁷ It [X]. In addition, Vodacom [X].⁷⁸

⁶⁷ [X]

⁶⁸ [X]

⁶⁹ [X]

⁷⁰ [X]

⁷¹ [X]

⁷² [X]

⁷³ CIVH information provided to FTI

⁷⁴ These include, for example, [X].

⁷⁵ Vodacom information provided to FTI

⁷⁶ Vodacom information provided to FTI

⁷⁷ Vodacom information provided to FTI

⁷⁸ Vodacom information provided to FTI

Figure 9:

[X]

Source: Vodacom

Note: [X]

Table 3: [CONFIDENTIAL]

Source: Vodacom

228. The majority [X].
229. DFA's network is small compared to the other operators [X].⁷⁹
- [X].
230. DFA provides [CONFIDENTIAL] and services on this infrastructure in the form of Peregrine Long Haul (dark fibre) and Calypso Long Haul (lit fibre). The majority [X].
231. [CONFIDENTIAL]. We understand that several other providers offer long-haul access on these routes. [CONFIDENTIAL].
232. It is important to note that both Vodacom and Newco will still offer their services on these routes independently post-transaction, as Vodacom's national long-haul infrastructure will not form part of the Transfer Assets. Below, we discuss potential theories of harm in these markets that relate to Vodacom's partial ownership in Newco post-transaction.

6.2 Market shares

233. [CONFIDENTIAL]. This means that a customer will always have the ability to switch to another competitor. [CONFIDENTIAL].
234. We use the Parties' [CONFIDENTIAL] fibre distances in kilometres to determine national infrastructure market shares. The best estimate for the total size of the market comes from the ICASA Priority Markets Discussion Document. [CONFIDENTIAL]. Therefore, the total size of the market in the table is likely understated and therefore the market share of the Parties is likely overstated.
235. Nevertheless, based on these estimates, reported in Table 4 below, the Parties' market shares are small at [X] (Newco) and [X] (Vodacom) respectively. Openserve has by far the largest infrastructure market share and is dominant in the national market. The other operators, Openserve, Liquid, Broadband Infraco, Seacom/FibreCo, and MTN will remain strong competitors in terms of infrastructure post-transaction.

Table 4: [CONFIDENTIAL]

Source: [CONFIDENTIAL]

Note: [CONFIDENTIAL].

236. In terms of revenue market shares, we can use the market size estimates for the national [CONFIDENTIAL] market prepared by [CONFIDENTIAL]⁸⁰ as the basis for the estimates. Figure 10

⁷⁹ CIVH information provided to FTI.

⁸⁰ CIVH information provided to FTI.

illustrates these estimates of the total market size for national [CONFIDENTIAL] fibre in terms of revenue. We understand⁸¹ [X].⁸² Historically, [X].

Figure 10: [CONFIDENTIAL]

[X]

Source: CIVH

237. To calculate market shares, we use the revenues from Peregrine Long Haul and Calypse Long Haul for CIVH/Newco, and the revenues from Carrier Connect NLD for Vodacom. The revenue market share estimates in Table 5 indicate that the parties had very small market shares of [X] and [X] in FY2021. Thus, the Parties have very small infrastructure and revenue market shares measured at the national level. This seems to indicate that even a full merger would not be problematic in this market.

Table 5: [CONFIDENTIAL]

Source: [CONFIDENTIAL]

Notes: [CONFIDENTIAL].

238. In the following subsection, we assess the potential unilateral effects in this market arising from the proposed transaction. It is important to note that Vodacom's national long-haul fibre network will not be transferred to Newco as part of the Transfer Assets, and both Parties will continue to provide services over their national [CONFIDENTIAL] networks. Hence, there can be no classic unilateral effects theory of harm, as the market shares of Newco do not change. The only thing that changes is that Vodacom will have a minority controlling shareholding in Newco. Nevertheless, horizontal concerns may still arise from this minority controlling shareholding. The economic theory on the competitive effects of minority shareholding or partial ownership is discussed in Appendix 2.

6.3 Unilateral effects

239. Vodacom's minority controlling shareholding may raise the concern that such a financial interest may create an incentive for Vodacom to raise prices (or reduce output or lower quality) of its long-haul fibre access. If Vodacom were to raise its prices for services on the national long-haul infrastructure, some customers would switch to other providers, and potentially to Newco.
240. However, this theory has no substance, as Vodacom currently has a [X] market share and Newco a [X] market share, with very minimal overlaps nationally. This makes it virtually impossible for Vodacom to increase prices with a strategy to divert sales to Newco [CONFIDENTIAL] fibre. [CONFIDENTIAL].
241. While these are national market shares, the fact is that a diversion strategy (increasing prices and benefitting from increased sales generated by Newco) will only be possible if Vodacom and Newco are the only competitors on a specific route. However, on the specific routes where there is an overlap between the Parties' networks, there are other providers present, such as [X].⁸³ This implies that customers could switch to those alternatives (and not necessarily to Newco) in response to any price increase from either of the Parties, which could result in Vodacom forfeiting 100% of its direct revenue

⁸¹ CIVH information provided to FTI.

⁸² CIVH information provided to FTI.

⁸³ Vodacom information provided to FTI.

as a result of engaging in a price-raising strategy to divert sale to Newco. We understand [X].⁸⁴ This means that it will not be a feasible strategy for Vodacom to increase prices.

242. [CONFIDENTIAL].

243. [CONFIDENTIAL].

244. [CONFIDENTIAL].

6.4 Coordinated effects

245. [CONFIDENTIAL].

246. [CONFIDENTIAL].

⁸⁴ CIVH information provided to FTI.

7 Horizontal Assessment: Metro Fibre

247. In this section, we begin by analysing overlaps in the infrastructure of the Parties in the metro areas. We find that there is limited overlap in their networks. We then estimate infrastructure market shares based on fibre distances in the main metros and national revenue market share for wholesale services provided on these networks. We find that Vodacom has a small market share in each of the major metros, as well as nationally.
248. We then analyse potential horizontal theories of harm relating to metro fibre that may arise from the proposed transaction. Metro fibre will be included in the Transfer Assets, but Vodacom will continue to provide its lit services over this infrastructure post-transaction. This means that Vodacom and Newco will continue to compete in this market post-transaction. Below, we therefore analyse the impact of Vodacom's minority controlling shareholding.

7.1 Metro fibre infrastructure

249. There are currently several providers of metro fibre infrastructure throughout the country. These providers include [X].⁸⁵
250. Vodacom currently meets its metropolitan connectivity needs [CONFIDENTIAL] [X].^{86,87}
251. Vodacom's strategy has been [X].⁸⁸ [CONFIDENTIAL].
252. DFA owns fibre networks in Johannesburg, Cape Town, Durban, Midrand, Centurion and Twane (Pretoria), as well as in 25 smaller metros, such as East London, Polokwane, Tlokwe (Potchefstroom), Emalahleni and George. DFA provides metro fibre access and services on this infrastructure in the form of Titan (dark fibre connecting base stations), Peregrine Metro (dark fibre), and Calypso Metro (lit fibre). Its key customers in FY2021 were [X].⁸⁹
253. DFA competes directly with many players in larger cities, such as Openserve, Liquid, MTN, Link Africa, Seacom/FibreCo, and Metro Fibre. Openserve's high network coverage makes it the main competitor to DFA in the secondary cities where DFA has a presence. Providers such as Vodacom and Frogfoot use DFA as the underlying infrastructure provider and thus are viewed more as customers than as competitors.
254. Below, we consider the extent of Vodacom and DFA's metro access networks in metro and small-town areas, as well as the overlap between their networks. According to these data, across the entirety of metros and small-town areas in South Africa, DFA has a fibre footprint of [X], while Vodacom has a fibre footprint of [X]. In total, therefore, Vodacom and DFA will have a combined footprint of [X]. However, of this network, only [X] is overlapping between DFA and Vodacom – [CONFIDENTIAL].

⁸⁵ CIVH information provided to FTI.

⁸⁶ Vodacom information provided to FTI.

⁸⁷ Vodacom information provided to FTI.

⁸⁸ Vodacom information provided to FTI.

⁸⁹ CIVH information provided to FTI.

255. As noted in our market definition section, however, we define narrower markets at regional level. To this effect, we consider the extent of overlap between DFA and Vodacom on the combined network at a regional, as well as metro level.⁹⁰ Table 6 reports the Parties' network distances and the overlaps in their networks in the Vodacom regions (a map of these regions is included in Appendix 4). At this regional level, the overlap between the networks is minimal, ranging between [X].

Table 6: [CONFIDENTIAL]

Source: Information provided by parties, FTI Calculations

Note: [CONFIDENTIAL].

256. Further to the above, we consider overlaps between Vodacom and DFA at a metro level. Table 7 reports [CONFIDENTIAL]. We find that in all of these metro areas there is very limited overlap in the network coverage of DFA and Vodacom. The only relatively significant overlap is in [X], but Vodacom and DFA both have a very limited network in this area. This is a consequence of Vodacom's strategy [X]. In this sense, the Parties' fibre networks are complementary. We further understand that the Parties will continue to face competition from Openserve in all of the metro areas where their fibre networks overlap.

⁹⁰ [CONFIDENTIAL].

Table 7: [CONFIDENTIAL]

Source: Information provided by parties, FTI Calculations

Note: [CONFIDENTIAL].

257. [CONFIDENTIAL]. This implies that no competitive concerns arise in relation to backhaul provided over microwave links.

7.2 Market shares

258. [CONFIDENTIAL].

259. Nevertheless, Table 8 shows market shares estimates, for metro backhaul fibre, when Vodacom's metro fibre distances for each province⁹¹ are added to the Commission's estimates. According to these estimates, CIVH/Newco (DFA) has a market share of [X] in Cape Town (Openserve has [X]), while Vodacom has market shares of [X]. In Durban, CIVH/Newco has a market share of [X] (Openserve has [X]), while Vodacom has a market share of less than [X]. In Johannesburg, CIVH/Newco has a market share of [X]⁹² (the Commission found that Liquid was the second largest), while Vodacom has a share of only [X].

Table 8: [CONFIDENTIAL]

Source: [CONFIDENTIAL], Information provided by parties, FTI Calculations

Note: [CONFIDENTIAL].

260. These estimates suggest that the proposed transaction would lead to a very small increase in infrastructure market shares post-transaction. As explained above, the proposed transaction would lead to the benefit that Vodacom's complementary infrastructure would now become available to the market on an open access basis.
261. [CONFIDENTIAL]. Figure 11 illustrates these estimates of the total market size for metro fibre in terms of revenue, [X]. [CONFIDENTIAL] [X].⁹³

Figure 11: [CONFIDENTIAL]

[X]

Source: CIVH

262. The revenue market share estimates are reported in Table 9. For Newco, we use the revenues from Titan, Peregrine Metro, and Calypso Metro. For Vodacom we use the revenues from Carrier Connect Metro and Access (Layer 2). These estimates indicate that Newco had a revenue market share of [X] in FY2021, while Vodacom's market share was only [X]. [CONFIDENTIAL].

Table 9: [CONFIDENTIAL]

Source: [CONFIDENTIAL]

Notes: [CONFIDENTIAL].

⁹¹ These are probably an overestimation of fibre in the metro areas, as the distances for the entire province would not necessarily correspond to the Commission's estimates for the metro area.

⁹² Note that this is most likely a substantial overestimate of DFA's market share – see footnote **Error! Bookmark not defined.**

⁹³ [X]

7.3 Unilateral effects

263. Vodacom's metro fibre will be included in the Transfer Assets. As DFA's product rules prohibit the resale of dark fibre, and this will still be the case post-transaction, nothing changes. [CONFIDENTIAL]. Vodacom will therefore continue to provide its lit services (Carrier Connect Metro and Access) over the transferred infrastructure by purchasing access to the transferred fibre.
264. In this case, a unilateral effects concern may be that the market share of Newco will increase (albeit to a limited extent) in the metro markets, due to the transfer of the fibre infrastructure. However, the proposed transaction would lead to a very modest increase in infrastructure market shares in the metro areas, because Vodacom's market shares are small in these markets. This means that the status quo is effectively maintained, as this minimal increase does not give Newco the ability to increase prices of metro fibre as a result of this transaction.
265. Moreover, there are very limited or no overlaps between the networks of the Parties in the metro areas. As discussed above, Vodacom has relatively limited metro fibre assets of its own, and where it does have infrastructure, there are very limited overlaps with Newco's infrastructure. We understand that there are various competitors present in the areas where the Parties' networks do overlap, suggesting that customers of the Parties can switch to other suppliers in these areas. The Parties would therefore continue to face competition from a number of competitors, including those with significant fibre networks of their own (especially Openserve). [CONFIDENTIAL] [X].⁹⁴
266. As an open access provider, DFA [X] and can be expected to continue to price in this manner to encourage take-up of network. This means that it is unlikely that any loss of competition at the local level would lead to higher [X]. It would require Newco to change its [X] as a result of the loss of Vodacom as an independent competitor on a small part of Newco's network. The right to match also implies that Newco will not be able to increase the input price of the fibre, as Vodacom will retain the right to source from the cheapest provider of the input. This suggests that the proposed transaction is unlikely to lead to higher prices for access to metro backhaul fibre supplied over Newco's network.
267. [CONFIDENTIAL].
268. [CONFIDENTIAL].
269. Since Newco will not have the ability to increase prices (as nothing really changes in terms of market structure), it is not imperative to consider how incentives change. [CONFIDENTIAL].

7.4 Barriers to entry

270. When entering a market is sufficiently easy, a merger is unlikely to pose any significant anti-competitive risk. For entry to be considered a sufficient competitive constraint on the merging parties, it must be shown to be likely, timely and sufficient to deter or defeat any potential anticompetitive effects of the merger. When entry barriers are low, the merging parties are more likely to be constrained by entry.
271. In relation to the deployment of fibre infrastructure, we understand that barriers to entry are relatively high in this market, due to capital and regulatory requirements.⁹⁵ Firms also tend to avoid overbuilding where fibre has already been installed. We understand that Openserve is the exception, as it has

⁹⁴ [CONFIDENTIAL].

⁹⁵ According to Vodacom, [X].

relatively low fibre deployment costs because it is able to quickly and cost effectively replace its existing copper lines/DSL with fibre by using the existing supporting infrastructure such as ducts, poles, manholes etc. Nevertheless, once the fibre has been installed, the barriers to entry in this market are low. In other words, to the extent that competitors of the Parties have fibre installed, they can easily supply wholesale access in those areas, as capacity on fibre optic cables is not a constraint. This implies that rival firms, which already have fibre installed in the metro areas, have sufficient capacity, and would find it profitable to expand their output in the event of a price increase.

7.5 Coordinated effects

272. In terms of coordinated effects, the first concern may be that the risk of coordinated effects could arise through information exchange in which Newco acts as a hub through which Vodacom and other customers of Newco can learn of the activities and plans of their competitors. For example, Vodacom could potentially gain information on their competitors' costs or plans via Newco providing backhaul services (e.g. Newco extending coverage to new areas or increasing capacity of existing backhaul). Such information exchange could soften competition, for instance, in the form of geographic market sharing (i.e. avoiding overbuild), higher prices or lower quality service offerings.

273. [CONFIDENTIAL].

274. [CONFIDENTIAL].

7.6 Infrastructure expansion

275. Another concern may be that post-transaction, Newco will deploy infrastructure more slowly or to a lesser extent than CIVH/Newco and Vodacom would have done independently. [CONFIDENTIAL].

276. This concern was raised in the proposed Vodacom/Neotel merger, where the Commission was concerned that Vodacom was likely to alter the focus of its investments primarily towards enterprise and end-customers and this could impact on Neotel's ability to continue to invest in wholesale fixed leased lines, thus potentially reducing competition in the upstream market for wholesale provision of leased lines. However, evidence provided to the Commission suggested that other providers had plans to increase their fixed leased line footprint and were likely to continue to offer alternatives to the merged entity. As such, the Commission found that this was not a concern at the metro level.

277. Similarly, in this case there are many competitors to the Parties in this market that can be expected to respond to any post-transaction reduction in the speed of deployment. These competitors include large national and regional deployers such as Openserve, Liquid, Seacom/FibreCo and MTN. We understand that the main fibre provider in South Africa, Openserve, has a significant cost advantage in rolling out fibre. It faces very low trenching costs due to the available ducts already in place for its ADSL network. The presence of these rivals or ability of these rivals to enter greenfield areas would deter Newco from slowing down deployments in particular areas.

278. Moreover, part of the rationale for the proposed transaction is to improve CIVH's capacity to fund infrastructure investments. Vodacom will lease back the fibre infrastructure from Newco, which will provide a guaranteed anchor tenant for dark fibre capacity. Having Vodacom as an anchor tenant means that there will be less uncertainty around demand and reduced churn risk, which will help to reduce the risk of new fibre deployment and make it easier to plan network expansion. This can be expected to enable Newco to deploy fibre faster and more widely than would have been achieved independently, and the fibre will be available to the market on an open access basis. We discuss this in more detail in Section 12.

8 Horizontal Assessment: Wholesale FTTB

280. In this section, we begin by analysing overlaps in the networks of Newco and Vodacom and find that there are limited overlaps. To provide a sense of the size of the main providers, we then present estimates of the national market shares based on connections and revenues for FTTB QoS and FTTB BE wholesale services provided on these networks. We find that Vodacom has a [X].
281. We then analyse potential horizontal theories of harm relating to FTTB that may arise from the proposed transaction. Similar to the metro backhaul fibre, Vodacom's FTTB will be included in the Transfer Assets. As Vodacom does not currently sell access to this infrastructure, the proposed transaction has the benefit of making this infrastructure available to the market on an open access basis.

8.1 FTTB infrastructure

282. FTTB infrastructure refers to the last mile fibre that is typically used to connect business parks, malls and, in some cases, individual business customers. When FTTB services are delivered to businesses, it can be structured as a wholesale offering or a retail offering.⁹⁶ In this section we analyse the wholesale FTTB market specifically, by which we mean access to the FTTB infrastructure and services, which are sold to ISPs to provide retail services to end consumers, or to vertically integrated ECNS licence holders that provide the downstream retail services themselves. There are currently several providers of FTTB infrastructure throughout the country. These providers include [X].⁹⁷
283. Vodacom [X]. It does not offer access to this infrastructure to third parties. According to the Transfer Asset Agreement, [CONFIDENTIAL].
284. Three of Newco's divisions have small FTTB networks. DFA has a fibre network of [X], with nearly [X] businesses passed and [X] businesses connected (as of September 2021). The DFA network is used to provide wholesale FTTB QoS products in the form of Helios,⁹⁸ Tachyon and Magellan (also Conduct and Precinct), as well as FTTB BE services in the form of Broadband and GPON products.⁹⁹ Vumatel offers limited wholesale FTTB services within its existing FTTH coverage areas, through the ISP channel and not directly to market. The ISPs then provide broadband retail services to end users. We understand that Vumatel offers [X]. We understand that SADV [X].
285. At a national level, according to estimates provided to us by DFA, it passes about [X] buildings [CONFIDENTIAL]. Similarly, Vodacom passes [X] buildings within 1km of their network, which are unique to the Vodacom footprint (i.e. these buildings are not duplicated by DFA). In total, therefore, the combined networks of DFA and Vodacom pass [X] unique buildings. Furthermore, also based on data provide to us by DFA, there are [X] buildings that are passed by both DFA and Vodacom, which are with [CONFIDENTIAL] of one another (this cut-off point is chosen to control for double counting of premises).

⁹⁶ According to Vodacom, wholesale offerings would terminate on an Optical Network Terminal, while retail offerings would terminate at the router. Retail services also offers username and password Internet authentication and peripherals.

⁹⁷ CIVH information provided to FTI.

⁹⁸ It is difficult to classify DFA's dark FTTB product, Helios, as either FTTB QoS or FTTB BE, but we understand that it is generally used by DFA's customers to provide FTTB QoS services.

⁹⁹ As explained above, FTTB QoS services are typically purchased large corporates that consider connectivity critical, typically to connect ERP or financial systems. FTTB BE services are purchased by SMEs who use the connectivity for internet access, but these services typically have reliability and security issues.

It follows, therefore, that on a national level, there is a limited FTTB network overlap between DFA and Vodacom of only [X].

Table 10: [CONFIDENTIAL]

Source: Information provided by parties, FTI Calculations

286. As noted in our market definition section, however, we define narrower markets at a regional level. To this effect, we consider the extent of the overlap between DFA and Vodacom at a metro level. The results for the metro areas where both DFA and Vodacom have an FTTB presence, and where there is an overlap in their networks, are shown in Table 10 below. We find that in all of these metro areas there is very limited overlap in the FTTB network coverage of DFA and Vodacom.

8.2 Wholesale FTTB market shares

287. To gain an idea of the market shares of the Parties, we calculate estimates of national market shares for the FTTB networks. Due to a lack of data, we are only able to estimate market shares at the national level. In terms of infrastructure market shares, the best estimates for the total market size are from [CONFIDENTIAL].¹⁰⁰ The estimates are based on connections (active end points) and were provided for FTTB BE, FTTB QoS and the total FTTB market in March 2021. According to [CONFIDENTIAL], [X].¹⁰¹ As SADV is not included in the estimates, we add its [X] connections in FY2021 to the total.¹⁰²
288. The market share estimates are reported in Table 11. The table shows that Openserve is by far the largest provider of FTTB in each of the markets. Vodacom has a [X] in the FTTB markets. CIVH/Newco has a small share of around [X] in the FTTB BE market, and a [X] share in the FTTB QoS market. These estimates suggest that the proposed transaction would lead to a very small increase in market shares post-transaction and that the Parties' combined shares would remain low in terms of infrastructure.

Table 11: [CONFIDENTIAL]

Source: [CONFIDENTIAL]

289. In terms of revenue market shares, we can use the market size estimates prepared by [CONFIDENTIAL] as the basis for the calculation of national revenue market shares. Figure 12 illustrates the estimates of the total wholesale market size for FTTB QoS and FTTB BE in terms of revenue. [CONFIDENTIAL]¹⁰³ [X].

Figure 12: [CONFIDENTIAL]

[X]

Source: CIVH

290. The revenue market share estimates for FY2021 are reported in Table 12. CIVH/Newco (through DFA) has small market shares of [X] and [X] in these markets, while Vumatel and SADV have [X]. Vodacom [X]. This implies that there is essentially no overlap currently in this market, only a very small potential overlap (in that Vodacom could provide access to this infrastructure).

Table 12: [CONFIDENTIAL]

Source: CIVH

Notes: [CONFIDENTIAL].

8.3 Competitive effects assessment

291. Similar to the metro backhaul fibre, Vodacom's FTTB will be included in the Transfer Assets. Vodacom [X]. Thus, Newco does not currently face a competitive constraint from Vodacom. At most, Vodacom is a potential competitor in this market pre-transaction.

¹⁰⁰ [X].

¹⁰¹ [X].

¹⁰² CIVH information provided to FTI.

¹⁰³ [X].

292. The only change is that Newco will have a slightly larger network post-transaction. This infrastructure will now become available to the market on an open access basis. The increase in infrastructure or capacity that Newco will gain from the proposed transaction is very small. As discussed above, Vodacom has relatively limited FTTB assets of its own, and where it does have infrastructure, there are very limited overlaps with the Newco infrastructure. In instances where there is no overlap in the networks, Newco will not lose a (potential) competitor in Vodacom at the local level (i.e. the Parties are not in the same local market). In the few instances where there is an overlap in the networks, Newco will only lose a potential competitor. In addition, there are numerous other providers of FTTB infrastructure. This implies that the proposed transaction will not lead to a significant increase in market power or associated unilateral effects in this market, even in terms of potential competition.
293. [CONFIDENTIAL].
294. Given the small accretion in market shares, we do not see any ability to coordinate between players in this market resulting from the proposed transaction. We do not find concerns around anticompetitive effects through information exchange (i.e. coordinated effects) or a delay in the deployment of FTTB infrastructure for the same reasons discussed in relation to metro fibre.

9 Horizontal Assessment: Retail Fixed Services to Enterprises

295. In this section, we start by estimating market shares based on revenues for fibre-based retail services provided to enterprises and find that both Parties have small market shares in this market. We then analyse potential horizontal theories of harm relating to the downstream retail market that may arise from the proposed transaction. It is important to note that Vodacom's retail business will not be transferred to Newco and that Vodacom and Newco will continue to compete in this market post-transaction.

9.1 Retail ISP services to enterprises

296. In this market, ISPs provide value-added services to end customers, using wholesale infrastructure and/or services as an input.¹⁰⁴ There are currently numerous ISPs providing retail services to enterprises in South Africa. MyBroadband¹⁰⁵ reported that the retail ISP market in South Africa is highly competitive, with well over 50 service providers selling fibre packages, some of which will focus on providing services to business, while others will concentrate on consumers. The larger ISPs include Telkom Business, Dimension Data, MWeb, Vox/Frogfoot, Afrihost, WebAfrica, Nashua, Cool Ideas, Cell C and Supersonic (MTN). Some of these ISPs are vertically integrated operators that also supply wholesale services.
297. Vodacom EBU sells retail managed services using Vodacom-owned and leased third party infrastructure [X]. These products are offered to large, medium, and small enterprises, and public sector customers. The relevant products include Business Internet Fibre, Business Connect Fibre, IP Connect, LAN Connect, and Data Centre Connect.
298. SADV is an open access ISP, which offers Internet access services to residential and business customers. We understand that SADV [X].¹⁰⁶

9.2 Market shares

299. To provide a sense of the market shares of the Parties, we calculate national revenue market shares for the retail fixed internet services market providing fibre-based services to enterprises (i.e. retail FTTB services). For the estimates of the market size we use the Africa Analysis estimates for the retail FTTB market, illustrated in Figure 13. [CONFIDENTIAL] [X].¹⁰⁷

Figure 13: [CONFIDENTIAL]

[X]

Source: Africa Analysis

300. To calculate market shares, we use the SADV revenues for retail FTTB services, and Vodacom's revenues from Business Internet Fibre, Business Connect Fibre, IP Connect, and LAN Connect (Data Centre Connect revenue are included under IP Connect and LAN Connect). The revenue market share estimates

¹⁰⁴ Competition Commission. (2014). *Vodacom/Neotel merger*. Case No: 2014Jul0382

¹⁰⁵ <https://mybroadband.co.za/news/fibre/258079-how-many-fibre-infrastructure-and-service-providers-there-are-in-south-africa.html>

¹⁰⁶ CIVH information provided to FTI.

¹⁰⁷ [X]

are reported in Table 13, which shows that the Parties have very small market shares of [X] and [X] in the national market for retail FTTB services. Even if the Parties' activities in this market were being combined, their shares are so low as to suggest there would not be any harm to competition.

Table 13: [CONFIDENTIAL]

Source: [CONFIDENTIAL]

Notes: [CONFIDENTIAL].

9.3 Competitive effects assessment

301. The first concern may be that the financial interest that Vodacom will acquire in Newco provides an incentive for Vodacom to raise prices. However, as Vodacom would own only a minority interest in Newco, and because there are numerous competitors in this market, it would most likely gain smaller revenues than it would lose. Moreover, only a small proportion of customers would switch to Newco (SADV), as its national market share is also very small. This implies that customers could switch to those alternatives in response to any price increase from Vodacom, meaning that it will not be a profitable strategy for Vodacom to increase prices. Barriers to entry are also low in this market, as found by the Commission in the CIVH/Vumatel merger: [CONFIDENTIAL].¹⁰⁸ Moreover, [X].
302. [CONFIDENTIAL].
303. For the reasons discussed above, we do not find any concerns related to coordinate effects through information exchange. More generally, we find that coordination is extremely unlikely in this market given the large number of competing ISPs. This is because any profit from coordinating will have to be shared across multiple firms. Any coordination would also not be sustainable, as each firm will have a strong incentive to deviate from the coordination by undercutting other firms to gain market share. Given the Parties' small market shares, and the numerous firms active in this market, we do not see any ability to coordinate between players in this market resulting from the proposed transaction.

¹⁰⁸ [CONFIDENTIAL].

10 Vertical Assessment: Input and/or Customer Foreclosure

304. In this section we consider whether the vertical aspects of the proposed transaction raise any competition concerns in the markets discussed above. Potential vertical effects may arise because Newco (DFA) will be an upstream provider of national [CONFIDENTIAL], metro backhaul, and FTTB infrastructure to Vodacom's competitors in mobile and fixed services (e.g. managed network services to enterprises), and Vodacom is an actual or potential customer of Newco's competitors. [CONFIDENTIAL], we assess whether anything changes if Vodacom obtains joint control of Newco and following the acquisition of the Vodacom FTTH and Transfer Assets.
305. We start by providing a high-level overview of the competition concerns that may arise in traditional vertical mergers. We then assess the potential theories of harm that follow on from this specific transaction structure. We find that the vertical aspects of this transaction do not result in any potential anticompetitive vertical effects.

10.1 Competition concerns in vertical mergers

306. Vertical mergers are generally less likely to give rise to anticompetitive effects than horizontal mergers. In fact, vertical mergers are typically seen as being pro-competitive, particularly due to the resultant reduction or elimination of double marginalisation and other benefits. In other words, vertical mergers generally enable the merging parties to internalise the effects that their respective pricing decisions have on each other, to the benefit of competition and consumers.
307. In certain circumstances, however, vertical mergers may give rise to anticompetitive effects. This may occur if one of the merging parties possesses substantial market power at one of the levels of the supply chain. Post-merger, the merging parties may be able to leverage this market power into other levels of the supply chain, if they possess the ability and incentive to do so (and this is due to the merger), and this results in *anticompetitive* input or customer foreclosure.
308. Input foreclosure refers to a situation where the merged entity will have the ability and incentive to stop supplying its product (e.g. metro backhaul fibre) to other downstream last mile fibre providers or MNOs, as a result of the transaction (or to supply at less favourable prices or terms). In some cases, the other downstream buyers will not be able to procure the input anywhere else, or alternatively the price will be increased to a level where they will exit the market (or the downstream firm of the merged entity will receive favourable prices). The merged entity will then be able to increase prices downstream once these rivals have exited the market. For such a strategy to lead to consumer harm, it must be the case that appropriate substitutes are not available for the upstream merging party's input (in other words that it has market power upstream), and that an increase in the cost of the input, or a refusal to supply, leads to higher prices for consumers.¹⁰⁹
309. Customer foreclosure may occur when a supplier merges with an important customer in the downstream market. If the downstream division of the merged integrated entity constitutes a significant player, then it may foreclose access to a sufficient customer base to its rivals in the upstream market.

¹⁰⁹ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, (2008/C 265/07).

Rivals do not necessarily need to exit the market for customer foreclosure to lead to consumer harm. Consumer harm can be analysed by assessing whether any loss in competition upstream leads to higher input costs and, in turn, to higher downstream prices for consumers.¹¹⁰

310. For input and/or customer foreclosure to be a merger-specific concern, it must be shown that the merged entity has the ability and incentive to foreclose and that this will have a detrimental effect on competition. These steps must be met cumulatively for foreclosure to be a concern. The main issue that needs to be analysed in terms of both input and customer foreclosure, is what changes as a result of the proposed transaction.
311. In terms of input foreclosure, a potential concern may be that Newco would foreclose the Parties' downstream competitors from accessing Newco's metro fibre or FTTB infrastructure¹¹¹ through ceasing the supply of the services, or increasing their price, or reducing their quality relative to that supplied to the Parties. Such input foreclosure could reduce competition in wholesale FTTH/FTTB services, wholesale mobile services, and in downstream retail markets, including fixed and mobile retail markets. This can only be a feasible strategy if Newco will have the ability and incentive to execute this, which we show is not the case.
312. In terms of customer foreclosure, a potential concern may be that post-transaction, Vodacom reduces its purchases of metro fibre and FTTB from Newco's rivals and that this undermines the business case of rival networks. There may be a strong incentive for Vodacom to purchase all of these services from Newco post-transaction because it will have a financial stake in Newco, but the assessment needs to establish whether this is on balance anticompetitive. Such customer foreclosure could impede the rollout of rival fibre networks and reduce competition in these markets. These are the two theories of harm that we assess below.

10.2 Input foreclosure

313. In this case, the potential concern may be that Newco could foreclose Vodacom's downstream competitors from accessing Newco's [CONFIDENTIAL], metro fibre or FTTB infrastructure. This could occur through ceasing supply of wholesale access to such competitors, increasing the prices charged to the competitors, and/or reducing the quality of services supplied to the competitors relative to the quality supplied to Vodacom. This in turn would make it harder for downstream rivals to compete by increasing their costs, making them less competitive in downstream markets.
314. We therefore analyse whether Vodacom and/or Newco would be able to foreclose access to all fibre infrastructure that will be housed within Newco as a result of the proposed transaction (which includes the Vodacom fibre). Similar input foreclosure concerns may arise for [CONFIDENTIAL] fibre, mobile backhaul fibre supplied to MNOs to connect base stations (i.e. FTTS), metro backhaul supplied to downstream FTTH/FTTB players, and FTTB infrastructure provided to ISPs. In this section we analyse whether the Parties will have the ability and incentive to restrict or deny downstream rivals' access to this infrastructure.

¹¹⁰ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, (2008/C 265/07).

¹¹¹ The FTI analysis does not deal with FTTH issues, as these are covered in the Compass Lexecon report.

10.2.1 Ability to engage in input foreclosure

315. For input foreclosure to be a concern, the vertically integrated firm must have a significant degree of market power in the upstream market. It is only in these circumstances that the merged firm can be expected to have a significant influence on the conditions of competition in the upstream market and thus, possibly, on prices and supply conditions in the downstream market.¹¹² In testing whether the fibre assets of Vodacom will substantially increase Newco's market shares and give them the ability to foreclose, it is important to have an overall idea of the Parties' position in these markets.
316. [CONFIDENTIAL].
317. Similarly, in the wholesale FTTB markets, Newco will have small post-transaction markets shares in terms of both infrastructure and revenues, as well as a very limited infrastructure footprint in this market post-transaction. This means that any input foreclosure is extremely unlikely in relation to access to FTTB infrastructure. We therefore do not consider input foreclosure in these markets further.
318. [CONFIDENTIAL].
319. It is important to bear in mind that the market for metro fibre was defined to include both metro fibre and mobile backhaul. Also, we do not define a separate market for dark fibre products. This is in line with Ofcom findings, but importantly for the current vertical analysis also in line with the findings of the CMA in the BT/EE merger. In their final report, the CMA pointed out that as far as mobile backhaul is concerned, where available, dark fibre is used as a substitute for active leased lines. They concluded that even if access to Openreach dark fibre was mandated by regulation, such access would broadly be the same as managed fibre access.¹¹³
320. Moreover, for mobile backhaul fibre, although there may be local markets, it makes sense to aggregate these into larger areas, and probably into metro areas. The CMA found specifically in relation to mobile backhaul that: "... however, in view of our competitive assessment, local markets can be aggregated where the competitive conditions appear to be the same (urban areas, rural areas, and Hull)".¹¹⁴
321. In the relevant market therefore, which is the market for metro fibre including dark and lit products, in the metro areas, the increased market share of Newco (increases between [X] and [X]), is too small to give Newco any ability to increase prices which it did not have prior to the transaction.
322. In general, if downstream rivals can turn to good substitutes for the input in question, the merged firm will be unable to impose a price increase than if there were few alternative providers of the input.¹¹⁵ In this case, downstream rivals can avoid price increases (or decreases in quality) by switching away from this infrastructure. Newco will continue to face competition from various operators in all of the metro areas where it has a fibre network presence (especially Openserve).
323. In relation to mobile backhaul, it is useful to note that MNOs rely on a combination of self-supply, active services (in which Openserve is the major supplier alongside Liquid) and dark fibre. Even if we were to define a very narrow market, e.g. each Titan (dark fibre) link to a base station as a separate market, there are still alternative options available to an MNO, including self-supply. In the BT/EE merger, the

¹¹² European Commission (2008). Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings. Official Journal of the European Union.

¹¹³ CMA BT Group plc and EE Limited. A report on the anticipated acquisition by BT Group plc of EE Limited. 15 January 2016. p. 232

¹¹⁴ CMA BT Group plc and EE Limited. A report on the anticipated acquisition by BT Group plc of EE Limited. 15 January 2016. p. 233

¹¹⁵ Merger Assessment Guidelines, Competition Commission & Office of Fair Trading

CMA investigated potential input foreclosure per customer, by considering options for self-supply as well as the price of alternatives. In most cases they found that even if the merged firm would have the ability to increase the price of mobile backhaul, it would not be profitable.

324. In the current case, there are various reasons why Newco will not have the ability to engage in input foreclosure of mobile backhaul. The main mobile backhaul product supplied by Newco to MNOs is the Titan dark fibre product. Figure 14 illustrates the number of DFA Titan links by customer. [CONFIDENTIAL].

Figure 14: [CONFIDENTIAL]

[X]

Source: CIVH

325. Furthermore, [CONFIDENTIAL]. There is no incentive for Newco to cease supply of all dark products and only supply lit services. The sale of the Transfer Assets also does not add enough Vodacom metro fibre to give Newco the ability to foreclose, as the increases in market shares are minimal. Also, since this is a dark product, quality degradation cannot really be an issue, as the MNO manages the quality themselves.
326. Downstream buyers will therefore be able to switch to alternative upstream suppliers (such as Openserve) or switch to self-supply (as the MNOs have done), especially in the medium term. This implies that there are sufficient credible downstream competitors whose costs are not likely to be raised, because they are themselves vertically integrated or are capable of switching to adequate alternative inputs.
327. Moreover, as we discuss in more detail below, Newco is also prevented from restricting access to its wholesale services because of the conditions imposed by the Tribunal in CIVH/Vumatel. We therefore find no ability to engage in input foreclosure post-transaction, even in a very narrow mobile backhaul dark fibre market. We assess the incentive to engage in input foreclosure next.

10.2.2 Incentive to engage in input foreclosure

328. To assess whether Newco will have an incentive to increase prices charged for the input to downstream rivals, we consider the profitability of such an increase in the input price, and the extent to which these factors change as a result of the proposed transaction. In general, a vertically integrated firm will consider how its supplies of inputs to downstream competitors will affect not only the profits of its upstream division, but also of its downstream division. Essentially, the merged entity faces a trade-off between the profits lost in the upstream market due to a reduction of input sales to rivals, and the profit gained from increasing sales downstream or raising prices to consumers.¹¹⁶
329. In this case, Newco is already vertically integrated pre-transaction and has not previously sought to restrict access to its infrastructure. The Newco business model is designed to provide open access on a non-discriminatory basis, and it is already subject to open access commitments. This business model, by

¹¹⁶ Merger Assessment Guidelines, Competition Commission & Office of Fair Trading

definition, requires as many buyers [CONFIDENTIAL].^{117,118} The aim of the transaction is to make Vodacom's assets that were not open access before, open access.¹¹⁹ Input foreclosure would undermine the business case for the proposed transaction, which is to monetise Vodacom's fibre assets by providing access to as many players as possible. As an open access provider, Newco has every incentive to supply as much fibre as possible to various players.

330. The incentive to foreclose is determined by the potential profitability of such a strategy. The only aspect which changes is Vodacom's minority controlling shareholding in Newco. One may argue that as Vodacom will have joint control, it may have the incentive to attempt to exercise control to foreclose downstream competitors. A total foreclosure strategy will cause significant harm in terms of lost revenue to Newco, and Vodacom will not have the ability to enforce such a strategy.
331. As explained above, the board members appointed by Vodacom will have an obligation to act in the interest of Newco as a stand-alone entity. The other shareholders in Newco (i.e. CIVH) will clearly not have an incentive to foreclose Vodacom's downstream rivals.
332. While we do not define a separate market for mobile backhaul (dak fibre), we nevertheless note that a strategy to increase the price of Titan products, for example, will not be profitable. Vodacom [CONFIDENTIAL].
333. In terms of discounts, [X]. This is indicated in DFA's pricing overview provided in Table 14. We understand that [X].¹²⁰ Any discounts provided to Vodacom will have to be based on these same objective criteria.

Table 14: [CONFIDENTIAL]

Source: CIVH

334. [CONFIDENTIAL].
335. This implies that Newco will have neither the ability nor incentive to engage in input foreclosure post transaction. We analyse potential customer foreclosure concerns in the next section.

¹¹⁷ [CONFIDENTIAL].

¹¹⁸ This is further reinforced by earlier conditions that CIVH has in respect of its FTTH fibre. CIVH is, as a result of the merger between DFA and Vumatel, subject to conditions imposed by the Tribunal that ensure open access for its FTTH infrastructure and services. The FTTH conditions stipulate that CIVH must, for a period of ten years, (i) not refuse access to DFA services to third party FTTH suppliers; and (ii) provide such services on terms and conditions which are transparent and non-discriminatory. The full details of these conditions are copied into Appendix 3 for reference.

¹¹⁹ [CONFIDENTIAL].

¹²⁰ CIVH information provided to FTI.

10.3 Customer foreclosure

336. In general, vertical mergers may affect upstream competitors by increasing their cost to access downstream customers or by restricting access to a significant customer base. In this case, the potential concern may be that Vodacom will decrease (or cease) its purchases of metro backhaul and FTTB from Newco's rival suppliers. There may be a strong incentive for Vodacom to purchase all of these services from Newco post-transaction because it will have a financial stake in Newco. In principle, similar customer foreclosure concerns may arise for mobile backhaul supplied to Vodacom to connect base stations (i.e. FTTs), metro backhaul fibre and FTTB infrastructure provided to Vodacom's downstream division. In the national [CONFIDENTIAL] markets, there are no Newco routes to which Vodacom would switch from other providers.
337. [CONFIDENTIAL].

10.3.1 Ability to engage in customer foreclosure

338. When considering the ability to foreclose access to downstream markets, we examine whether there are sufficient economic alternatives in the downstream market for the upstream rivals to sell their inputs. Generally, for customer foreclosure to be a concern, the transaction must involve a firm which is an important customer with a significant degree of market power in the downstream market. Conversely, if there is a sufficiently large customer base (at present or in future) that is likely to turn to independent suppliers, the transaction is unlikely to raise competition concerns.¹²¹
339. [CONFIDENTIAL].
340. In terms of mobile backhaul, in addition to self-supplying, Vodacom [CONFIDENTIAL] [X]. Table 15 reports the number of metropolitan links utilised by Vodacom for mobile backhaul (also known as metro access fibre), broken down by supplier. This indicates that [X] of Vodacom's metro fibre links are provided by Newco through DFA, [CONFIDENTIAL]. Vodacom self-provides a further [X] of these links. This means that around [X] of Vodacom's backhaul requirements are already supplied by Newco and itself. The remaining links are mainly provided [X].¹²²

Table 15: [CONFIDENTIAL]

Source: Vodacom

341. The situation is similar if the metropolitan links are broken down by region. Figure 15 illustrates the percentages of metropolitan links utilised by Vodacom for mobile backhaul, by supplier, for the different regions of South Africa. Vodacom's regions are illustrated in Appendix 4. In all of these regions, Vodacom obtains the [X]. This implies that Vodacom is not an important customer for third party backhaul suppliers and that there is no foreclosure concern at this level.

¹²¹ European Commission (2008). Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings. Official Journal of the European Union.

¹²² These providers are [X].

Figure 15:

[X]

Source: Vodacom

Note: [X]

342. A small portion of Vodacom's links are supplied by [X]. As such, these players would not be impacted in a significant way by the loss of Vodacom as a customer.
343. [CONFIDENTIAL].
344. [CONFIDENTIAL].
345. We therefore find that Vodacom is not likely to be a critical customer for other backhaul suppliers, and that it is unlikely to reduce its purchases from rival suppliers in such a way that overall backhaul competition is harmed. We therefore do not find it necessary to consider customer foreclosure further.

10.4 Summary

346. In sum, we find that the proposed transaction will not give Newco the ability or incentive to engage in input or customer foreclosure. The addition of the Vodacom fibre is marginal and cannot confer market power on Newco post-transaction. Importantly, the rationale for the transaction is to create an open access Newco. This means that the real incentive is to grow the business and sell as much access to all fibre at all levels. Engaging in any form of input foreclosure would eliminate all the advantages of an open access model and makes no business sense. Neither Newco nor Vodacom is an important customer for any other fibre provider at either national or metro levels, so there is also no potential customer foreclosure.

11 Additional Vertical Overlaps

347. In this section, we analyse additional vertical overlaps between the Parties, arising from Newco's ownership of MCT/Britelink and AEX. The services provided by MCT/Britelink and AEX are not licensable services in terms of the ECA and, instead, are support services provided to providers of ECNS and ECS (whether licence holders or exempted persons). Accordingly, these services are not strictly relevant to ICASA's assessment of the competition impact of the proposed transaction. However, this analysis is included for the sake of completeness.

11.1 MCT/Britelink

11.1.1 Activities and market definition

348. MCT provides planning, implementation, testing, certification, and maintenance services for fibre optic networks in South Africa. MCT's portfolio is broadly divided between civil work and fibre work. Civil work is the actual construction work involving laying new fibre lines, including trenching, manholes, and POPs. Fibre work involves planning, getting wayleaves, floating the fibre, splicing, testing and certification, and fibre maintenance.

349. [CONFIDENTIAL]. Britelink is a fibre field services company, installing core and last-mile fibre for fibre network owners and operators. It also maintains fibre networks on behalf of the network owners and will perform repairs as a proactive and preventative measure.¹²³

350. MCT and Britelink provided similar services. The main difference was around the market segments, with Britelink more focussed on the FTTH market, providing services to FNOs, and MCT more focussed on the enterprise market (FTTB and MNOs). The combined entity will now be able to better service the overall market.

351. We therefore define a market for the provision of fibre network planning, building, and maintenance services. These upstream services include: (i) planning (site surveys, network design and planning, wayleave management); (ii) implementation (project management, civil/site/optic fibre build, quality assurance, health and safety); (iii) network monitoring and maintenance (fault detection, resolution and reporting); and (iv) environmental (and civil) maintenance. For our purposes it is not necessary to conclude on whether the market should be further segmented by customer grouping, i.e. MNOs and FTTB customers (for MCT), and FTTH customers (for Britelink), as our conclusions remain the same.

352. MCT/Britelink operates [X].¹²⁴ This suggests that the market should be defined as national in scope.

353. [CONFIDENTIAL].

11.1.2 Vertical overlap

354. There is a potential vertical overlap between the Parties in that CIVH/Newco is active upstream via MCT/Britelink in providing a range of services to builders and operators of fibre optic networks and

¹²³ CIVH information provided to FTL.

¹²⁴ CIVH information provided to FTL.

Vodacom is active downstream in providing various fibre network connectivity services. In terms of input foreclosure, a potential concern may be that Newco would foreclose the Parties' downstream competitors from accessing Newco's planning, building, and maintenance services.

355. [CONFIDENTIAL]. We understand that MCT faces several competitors, with its key competitors including [X].¹²⁵
356. Britelink provides installations for fibre network owners [X]. Its key customer is [X]. We understand that it does not provide services to Vodacom. Britelink therefore mostly supplies to [X]. Together with an estimated market share of [X], this implies that and is not an essential supplier of inputs to the Parties' downstream competitors. We understand that there are numerous competitors in this market, with its key competitors including but not limited to [X].¹²⁶
357. [CONFIDENTIAL].
358. In terms of customer foreclosure, a potential concern may be that post-transaction, Vodacom reduces its purchases of planning, building, and maintenance services from Newco's rivals. We understand that [X]. The remaining [X]. Figure 16 illustrates Vodacom's total spend per contractor over the past two years. The figure shows that Vodacom is already procuring [X] of these services from MCT.
359. For maintenance services, Vodacom suggested that its share of households/businesses passed of around [X] provides a reasonable proxy for the size of its demand. This implies that Vodacom is not a critical customer for other suppliers of planning, building, and maintenance services and that there is no customer foreclosure concern at this level.

Figure 16: [CONFIDENTIAL]

[X]

Source: Vodacom

11.2 AEX

11.2.1 Activities and market definition

360. AEX is active in the development of specialised software that plugs into a fibre network, allowing the user operational functionality to interact within the network. It also supplies physical network components that connect ISPs with FNOs' networks.
361. AEX's portfolio can be broadly divided into two main components, namely software services and interconnect services. AEX's fibre network management software is a software layer that operates on top of the physical fibre network and manages the network. It is a tool for planning, installing, managing, provisioning, monitoring, and analysing a fibre network system. While AEX's client is the fibre network owner, ISPs and fibre network end users can also access the system.
362. The interconnect product is [X].¹²⁷

¹²⁵ CIVH information provided to FTI.

¹²⁶ CIVH information provided to FTI.

¹²⁷ CIVH information provided to FTI.

363. We therefore define a market for the provision of fibre network management software to FNOs and a market for the provision of interconnect services to ISPs. AEX's software clients are based in [X].¹²⁸ This suggests that these markets should be defined as at least national in scope.

364. Vodacom is not active in providing similar services to third parties [CONFIDENTIAL]. Thus, there is no current [CONFIDENTIAL] horizontal overlap between the Parties in this upstream market.

11.2.2 Vertical overlap

365. There is a potential vertical overlap between the Parties in that CIVH/Newco is active upstream via AEX in providing fibre network management software to FNOs and ISPs and Vodacom is active downstream in providing various fibre network connectivity services and as an ISP.

366. Similar to the above, in terms of input foreclosure, the potential concern may be that Newco would foreclose the Parties' downstream competitors from accessing Newco's fibre network management software. On the software side, AEX's key customer is [X].¹²⁹ Again, this implies that [X] and is not an essential supplier of inputs to the Parties' downstream competitors.

367. AEX indicated that its main competitive constraint is from [X].¹³⁰

368. Again, Newco will have no incentive to foreclose downstream rivals of Vodacom post-transaction, and the directors appointed by Vodacom will have a fiduciary obligation to act in the best interests of Newco. This suggests that there is no input foreclosure concern in this market.

369. [CONFIDENTIAL].

¹²⁸ CIVH information provided to FTI.

¹²⁹ CIVH information provided to FTI.

¹³⁰ CIVH information provided to FTI.

12 Efficiencies and Public Interest

370. In this section, we highlight some of the pro-competitive efficiencies that will result from the proposed transaction, as well as the public interest effects (noting that these are interrelated). In terms of efficiencies, we note that the proposed transaction will lead to pro-competitive efficiencies, in the forms of more efficient and widespread usage of the infrastructure, cost savings, less inefficient infrastructure duplication, and greater investment in fibre network expansion. We find no adverse public interest issues in relation to employment or empowerment. We find that the proposed transaction will support public interest policy objectives of increasing internet coverage and speeds.

12.1 Efficiencies

371. As discussed under the rationale, the proposed transaction will promote access to, and thus more efficient use of, Vodacom's existing fibre assets. Newco's existing customer base and track record as an open access provider will enable more efficient and widespread usage of both the FTTH business and the Transfer Assets. These assets will become available immediately to Newco's customer base and any other new customers.

372. As part of Newco's open access network, a larger number of operators will have more ready access to these assets and more ways to access them. Vodacom's fibre infrastructure that was not open access before will now become so, meaning that third party providers will have more ready access to these assets. Vodacom's network was built largely for self-supply. As part of Newco's network, more ISPs will have access to this infrastructure, allowing better utilisation of the fibre assets. This will [X].

373. In addition, Newco will offer dark fibre access to these fibre assets, which Vodacom does not offer, meaning that third parties will have more ways to access these assets (e.g. lease dark fibre instead of lit fibre). The proposed transaction will allow Newco to expand its product offering on Vodacom's complementary fibre network, particularly its dark fibre products, for which we understand that there is a demand in the market. It will also allow Newco to offer its managed services in smaller metro areas, which were previously under-served due to backhaul constraints. These routes will also be used to connect previously unconnected businesses and consumers.

374. [CONFIDENTIAL].

375. Another benefit of having Vodacom as a shareholder is that Vodacom [CONFIDENTIAL]. For instance, [CONFIDENTIAL]. This will allow Newco to accelerate roll-out into those areas (i.e. it will increase the speed of this roll-out). This will be to the benefit of all downstream providers, as Newco's network will be available to the market on an open access basis. Moreover, the proposed transaction will mean that Vodacom will not overbuild the Newco network, also leading to less inefficient and costly infrastructure duplication.

376. [CONFIDENTIAL].

377. CIVH explains that the proposed transaction also brings the ability to increase fibre penetration into areas that are not currently covered, where it is not currently viable for either firm to do so independently. Currently it is difficult for either firm to motivate for expanding their network into outlying areas and to recover the costs to do so. The proposed transaction will allow Newco to increase

its scale and reduce average costs, increasing its profitability. Hence, it is possible that the combined requirements will improve the return-on-investment on previously unfeasible areas, to such an extent that it becomes feasible to roll out fibre in outlying areas. As a result, areas that were previously not viable for fibre roll-out will now become viable, allowing increased roll-out. In addition, combining the contiguous networks of Vodacom and Newco will allow Newco to deploy fibre into smaller standalone areas that were previously not viable for deployment. This will allow it to extend coverage and densify the network.

378. [CONFIDENTIAL].

379. CIVH expects network synergies to arise from the proposed transaction in the form of cost savings. For instance, through increased economies of scale and scope from managing a larger network, costs will be spread over a wider base, which will lower costs for provision and lead to better prices downstream. [CONFIDENTIAL].

380. The proposed transaction will provide direct benefits to consumers. As more service providers will have access to the increased Newco infrastructure, consumers will benefit from the wider choice of service providers. Consumers will benefit from a wider range of products which are possible through the economies of scale. Cost savings may also be expected to enable lower prices to consumers. Therefore, we find that the proposed transaction will deliver clear benefits for competition and consumers. In the following section we discuss public interest issues.

12.2 Public interest

381. We understand that no adverse employment effects are anticipated to result from the proposed transaction. We are advised that all of the relevant Vodacom staff will be redeployed within Vodacom, and that there will be no adverse effect on CIVH's employees.

382. [CONFIDENTIAL].

383. In South Africa, fibre has traditionally been deployed first in high income areas. There is however a considerable opportunity to expand infrastructure in secondary cities and outlying areas. Newco (via Vumatel) has already begun rolling out fibre to secondary cities and less affluent areas (also referred to as reach areas). [CONFIDENTIAL].¹³¹

384. It will also support government plans and policies such as the NDP, SA Connect, and PC4IR. In particular, according to the NDP, Information and Communications Technologies will underpin the development of a dynamic and connected information society and a vibrant knowledge economy that is more inclusive and prosperous in South Africa by 2030.¹³² In line with the broad vision of the NDP, one of the objectives of SA Connect is that: "by 2020, 100% of South Africans will have access to broadband services at 2.5% or less of the population's average monthly income."¹³³ Furthermore, one of the recommendations of the PC4IR is to build and accelerate the roll-out of 4IR infrastructure, which it notes is "imperative and

¹³¹ [CONFIDENTIAL].

¹³² South African Government. (2012). *South Africa National Development Plan, 2030*. Online: <https://www.gov.za/issues/national-development-plan-2030>

¹³³ Department of Communication South Africa. (2013). *South Africa Connect: Creating Opportunities, Ensuring Inclusion*. Online: https://www.gov.za/sites/default/files/gcis_document/201409/37119gon953.pdf

should cover mobile, physical, computational and digital infrastructure.”¹³⁴ This transaction will aid in reaching the above policy objectives.

385. Moreover, as 5G technology is rolled out and implemented in South Africa by the MNOs, this will increase demand for connectivity, infrastructure and backhaul (i.e. FTTS). Newco will be in a better position to offer these services following the proposed transaction, as the capital injection will allow the company to accelerate its infrastructure investment, unlocking the full potential of 5G technology. To the extent that the proposed transaction improves Vodacom's ability to manage its costs structures, this increases the likelihood of improved mobile pricing and coverage, using fibre as backhaul.
386. This continued expansion of fibre networks is particularly important, as this will ultimately promote economic growth. Numerous studies have found that greater fibre expansion and penetration can be expected to help drive economic growth. In this regard, the proposed transaction will promote the overall public interest through facilitating increased economic growth.

¹³⁴ The Presidency of the Republic of South Africa. (2020). *Report of the Presidential Commission on the Fourth Industrial Revolution*. Online: <https://www.ellipsis.co.za/wp-content/uploads/2020/10/201023-Report-of-the-Presidential-Commission-on-the-Fourth-Industrial-Revolution.pdf>

Appendix 1 [CONFIDENTIAL]

A1.1 [CONFIDENTIAL].

Table A1: [CONFIDENTIAL]

Source: CIVH

Dark Fibre Services

A1.2 [X]

Managed (lit) services

A1.3 [X]

Appendix 2 [CONFIDENTIAL]

A2.1 [CONFIDENTIAL].

A2.2 [CONFIDENTIAL].

A2.3 [CONFIDENTIAL].

[CONFIDENTIAL]

A2.4 [CONFIDENTIAL].

A2.5 [CONFIDENTIAL].

A2.6 [CONFIDENTIAL].

A2.7 [CONFIDENTIAL].

[CONFIDENTIAL]

A2.8 [CONFIDENTIAL].

A2.9 [CONFIDENTIAL].¹³⁵

A2.10 [CONFIDENTIAL].

A2.11 [CONFIDENTIAL].

A2.12 [CONFIDENTIAL].

A2.13 [CONFIDENTIAL].

¹³⁵ [CONFIDENTIAL].

Appendix 3 [CONFIDENTIAL]

Duration

A3.1 [CONFIDENTIAL].

[CONFIDENTIAL]

A3.2 [CONFIDENTIAL]:

(1) [CONFIDENTIAL], or

(2) [CONFIDENTIAL];

(3) [CONFIDENTIAL].

A3.3 [CONFIDENTIAL]:

(1) [CONFIDENTIAL];

(2) [CONFIDENTIAL]; and

(3) [CONFIDENTIAL].

A3.4 [CONFIDENTIAL].

A3.5 [CONFIDENTIAL].

A3.6 [CONFIDENTIAL].

[CONFIDENTIAL]

A3.7 [CONFIDENTIAL].

[CONFIDENTIAL]

A3.8 [CONFIDENTIAL].

A3.9 [CONFIDENTIAL].

[CONFIDENTIAL]

A3.10 [CONFIDENTIAL].

A3.11 [CONFIDENTIAL].

A3.12 [CONFIDENTIAL].

A3.13 [CONFIDENTIAL].

[CONFIDENTIAL]

A3.14 [Confidential]

A3.15 [CONFIDENTIAL].

[CONFIDENTIAL]

A3.16 *[CONFIDENTIAL]*.

A3.17 *[CONFIDENTIAL]*.

A3.18 *[CONFIDENTIAL]*.

A3.19 *[CONFIDENTIAL]*:

(1) *[CONFIDENTIAL]*.

A3.20 *[CONFIDENTIAL]*.

A3.21 *[CONFIDENTIAL]*.

A3.22 *[CONFIDENTIAL]*.

A3.23 *[CONFIDENTIAL]*.

A3.24 *[CONFIDENTIAL]*.

[CONFIDENTIAL]

A3.25 *[CONFIDENTIAL]*.

[CONFIDENTIAL]

A3.26 *[CONFIDENTIAL]*:

(1) *[CONFIDENTIAL]*.

A3.27 *[CONFIDENTIAL]*:

(1) *[CONFIDENTIAL]*.

Appendix 4 [CONFIDENTIAL]

Figure A9:

[X]

Source: Vodacom

Note: [X]

VODACOM / NEWCO

Competitive assessment of wholesale FTTH access, retail residential fixed internet access and certain other services

Paul Reynolds, Andrew Swan, Gabriele Corbetta, Abul Fazal

15 December 2021

Non-Confidential

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Section 1

Introduction

- 1.1 Compass Lexecon has been jointly instructed by CDH and DLA Piper to provide our assessment of the likely competitive effects of a proposed transaction (**‘the Transaction’**) between Business Venture Investments no 2213 Proprietary Limited (**‘Newco’**) and Vodacom Proprietary Limited (**‘Vodacom’**), referred to jointly as ‘the Parties’.¹
- 1.2 The Transaction would involve Vodacom acquiring a shareholding in Newco, which is a wholly owned subsidiary of Community Investment Ventures Holding Proprietary Limited (**‘CIVH’**). This will occur through: (i) a cash subscription by Vodacom, (ii) the sale of Vodacom’s Fibre-to-the-Home (**‘FTTH’**) business to Newco, (iii) the sale of certain Vodacom Transfer Assets to Newco, and (iv) a call option in favour of Vodacom to acquire up to **[Confidential]** of the equity in Newco. This will ensure that Vodacom has sufficient shareholding to have joint control over Newco.
- 1.3 In particular we have been instructed to assess the likely competitive effects of the Transaction with respect to:
 - a. wholesale FTTH access services;
 - b. retail residential fixed internet access services;
 - c. hosting services and CCTV services (in which there is no meaningful competitive overlap between the Parties).

Structure of this report

- 1.4 The report is structured as follows:
 - a. Section 2 provides a summary of our reasons for finding that the Transaction is unlikely to substantially prevent or lessen competition in relation to wholesale FTTH access, retail residential fixed internet access, hosting and CCTV services;

¹ The authors are grateful to Bhargav Bharadwaj and Sakshi Mital for their assistance in the preparation of this report.

- b. Section 3 provides an overview of the South African fixed telecommunications industry, focussing on the supply of wholesale FTTH services;
- c. Section 4 summarises the structure of the Transaction and its commercial rationale;
- d. Section 5 describes the relevant activities of the Parties and the overlaps between them and sets out potential theories of harm relevant to the services which are the focus of this report;
- e. Section 6 defines the relevant markets for the competitive assessment in relation to wholesale FTTH access services;
- f. Section 7 describes the market structure, including shares of FTTH homes passed and connected;
- g. Section 8 and Section 9 respectively set out our assessment of whether the Transaction is likely to cause a substantial prevention or lessening of competition due to unilateral effects and coordinated effects in relation to wholesale FTTH access services;
- h. Section 10 assesses whether the Transaction is likely to substantially prevent or lessen competition in relation to retail residential fixed internet access services;
- i. Section 11 assesses whether the Transaction is likely to generate efficiencies and whether it is likely to have any adverse public interest effects in relation to wholesale FTTH access services; and
- j. Section 12 assesses whether the Transaction is likely to substantially lessen or prevent competition in relation to hosting and CCTV services (in which there is no meaningful competitive overlap between the Parties).

Section 2

Summary

- 2.1 This report provides our economic assessment of the likely competitive effects of the Transaction with respect to wholesale FTTH access, retail residential fixed internet access, hosting and CCTV services.
- 2.2 In summary, we find that:
- a. it is highly unlikely that the Transaction would substantially prevent or lessen competition in wholesale FTTH access, retail residential fixed internet access, hosting or CCTV services;
 - b. the Transaction would not have any adverse public interest effects; and
 - c. the Transaction is likely to give rise to efficiencies and pro-competitive benefits in relation to FTTH services to the benefit of consumers and the public interest.

Rationale for the transaction

- 2.3 The South African fibre sector is growing rapidly to address the increasing demand for data services. CIVH and others have been **[Confidential]** in deploying FTTH networks to meet this demand. As set out in Section 4:
- a. **[Confidential]**.
 - b. **[Confidential]**.

Relevant market

- 2.4 We find that there is a relevant product market for wholesale broadband services supplied to ISPs over FTTH, and that potentially also includes Very high-speed rate Digital Subscriber Line ('VDSL') services supplied over fibre-to-the-cabinet ('FTTC').
- 2.5 We consider that the relevant geographic market can be defined as local given that wholesale demand is derived from end-customer demand for broadband at a fixed location and that the scope for supply-side substitution by network operators across local areas is insufficient to define broader geographic markets. **[Confidential]**.

The Transaction would not reduce existing wholesale FTTH competition

- 2.6 We find that there is no significant risk of unilateral effects arising in relation to the wholesale services supplied using the Parties' existing FTTH networks for the following reasons.
- 2.7 As found by the Competition Commission ('the **Commission**') in the CIVH/Vumatel merger, wholesale FTTH services are mainly supplied in local areas where there is only a single wholesale provider, with the main exception being areas where Openserve has upgraded its copper network to FTTH.² This is central to the competitive analysis.
- 2.8 Over **[Confidential]** of CIVH's wholesale FTTH services are supplied in areas where Vodacom's FTTH network is not present and hence the Transaction does not change competitive conditions across virtually all of its network.
- 2.9 **[Confidential]** of Vodacom's wholesale FTTH access services are supplied in areas where CIVH's FTTH network is not present and hence the Transaction does not change competitive conditions areas across the vast majority of its network.
- 2.10 Of the **[Confidential]** homes which are passed by both Parties, **[Confidential]** are also passed by at least one other FTTH operator and hence ISPs' ability to switch to that other operator will act to constrain the Parties' pricing post-Transaction.
- 2.11 **[Confidential]**.
- 2.12 Openserve is in a different position, in having relatively low costs to deploy FTTH by being able to re-use its existing passive facilities (i.e., ducts and poles). As such, there is the potential for Openserve in particular to overbuild more of Newco's network (i.e., deploy FTTH to the same premises).
- 2.13 **[Confidential]**³.
- 2.14 **[Confidential]**.

The Transaction would not reduce dynamic competition in wholesale FTTH services

- 2.15 We find that there is no significant risk of a reduction in dynamic competition in FTTH deployment due to the Transaction. In particular, we find it unlikely that that Newco would deploy FTTH infrastructure more slowly and/or to a lesser extent than the Parties would have without the Transaction.
- 2.16 **[Confidential]**.
- a. **[Confidential]**

² **[Confidential]** .

³ **[Confidential]** .

b. [Confidential].

2.17 [Confidential] and Vodacom to remain a minor player in FTTH deployment.

a. [Confidential] .

b. [Confidential].

2.18 The Transaction can be expected to improve Newco's economics in deploying FTTH, leading Newco to deploy more quickly and more widely than the likely deployments of the Parties if they were to remain separate. [Confidential] .

2.19 Newco will continue to face competition in new FTTH deployment from a host of other fibre network providers including in areas targeted by the Parties, including Openserve (with its particular advantages in FTTH deployment from its existing infrastructure and customer base), Frogfoot, MFN, Octotel and Evotel along with scores of others. In addition, the Parties' rivals both large and small are increasingly active across the country and outside of the main metropolitan areas.

The Transaction will not give rise to coordinated effects in wholesale FTTH services

2.20 We find it unlikely that the Transaction will give rise to substantial prevention or lessening of competition due to coordinated effects in wholesale FTTH service offers or in relation to new FTTH deployment.

2.21 There is no evidence of pre-existing coordination in wholesale FTTH services: multiple operators are making substantial investments in new FTTH infrastructure with significant changes in shares of homes passed; FTTH subscriptions are growing rapidly; and pricing dynamics are not consistent with coordinated outcomes.

2.22 With respect to coordination on wholesale service offers, market features explain why coordination is not occurring and why it would be unlikely to occur following the Transaction. There are a large number of competitors with significant differences between them in terms of their sizes/network coverage, connectivity rates, types of areas/premises covered, cost structures, financial positions and whether they are wholesale-only or vertically integrated into the retail ISP market. These features would make it difficult for providers to reach tacitly a consensus on a set of offers or to maintain that consensus for any length of time.

2.23 With respect to deployment, the market is also highly dynamic with numerous different players rolling out in different areas. Post-Transaction, there would remain four other major providers in addition to Newco as well as a host of smaller providers. The significant differences between them would imply no clear focal point for coordination in terms of the rate or pattern of deployment and, even if the main providers could reach a coordinated understanding, it would soon be undermined by changing demand and cost conditions and external pressure from the threat of expansion by other deployers.

No risk of anticompetitive horizontal or vertical effects in relation to retail residential fixed internet access services

- 2.24 We find that there is a relevant national market for retail residential fixed internet access services supplied over FTTH, DSL and fixed wireless access, mainly reflecting the fact that ISPs can and do supply all of these services on a national basis.
- 2.25 The retail residential fixed internet access market is highly competitive with a large number of providers and low barriers to entry. Vodacom has a share of only [Confidential] and SADV, controlled by Newco, a share of [Confidential]. Given competition from many rivals, the Parties' small shares and that they will continue to offer retail internet access separately (Vodacom's retail activities are not being transferred to Newco and Newco will not gain an interest in Vodacom's activities as a result of the Transaction), the Transaction (in which Vodacom would gain a minority interest and joint control of Newco) would be unlikely to substantially lessen or prevent competition in relation to retail residential fixed internet access services.
- 2.26 We also find that Newco will have neither the ability nor the incentive post-Transaction to restrict the supply of wholesale FTTH services (i.e., to engage input foreclosure) in such a way as to harm competition in retail residential fixed internet access services.
- 2.27 The Transaction would not lead to any unilateral anti-competitive effects in relation to wholesale FTTH services. As such, the Transaction would not create or increase any ability of Newco to foreclose. There is no evidence of the Parties' acting to foreclose the market pre-Transaction and Newco will not have the ability to restrict access to its wholesale FTTH services because of the conditions imposed in the CIVH/Vumatel merger to ensure open access will also apply to Newco. Since the effect of the Transaction will be to transfer Vodacom's assets and activities in wholesale FTTH services to Newco, the conditions imposed in the CIVH/Vumatel merger would apply to the transferred wholesale FTTH services and thus prevent Newco from foreclosing access to them.
- 2.28 In addition, Newco would not have the incentive to withhold access to its wholesale FTTH services. There are clear commercial incentives for providers of wholesale FTTH services to grow take-up rates on their networks given the costs are largely fixed. Moreover, the Transaction does not change CIVH's incentives so as to create an incentive to foreclose. CIVH (i.e., Newco's majority shareholder) is not acquiring any interest in Vodacom's ISP business. As such, they would have no incentive to allow Newco to sacrifice profits by restricting wholesale FTTH supply to benefit Vodacom's business.
- 2.29 [Confidential].
- 2.30 We also find that there is no material risk of Transaction leading to coordinated effects in retail residential fixed internet access given the Parties' small shares of the market and that Transaction will not change the ownership of Vodacom retail ISP business. The market is highly fragmented; and the Transaction will not materially change incentives or ability to coordinate.

No meaningful competitive overlap between the Parties in infrastructure hosting/colocation services or CCTV services

- 2.31 Although the Parties are both nominally active in infrastructure hosting/co-location services and CCTV services, there is no material *competitive* overlap between them thus no competition that could be adversely affected by the Transaction as a result of Vodacom acquiring a minority ownership interest in and joint control of Newco, and in any event Vodacom's activities in these areas are not being transferred to Newco as part of the Transaction such that the Parties will continue to offer them separately.

The Transaction can be expected to deliver pro-competitive efficiencies in the public interest

- 2.32 The Transaction can be expected to generate significant pro-competitive efficiencies in two main ways.
- 2.33 First, the Transaction would improve the Parties' economics in deploying new FTTH infrastructure more quickly and more widely including by:
- a. pooling demand and by providing Newco with greater demand predictability;
 - b. **[Confidential]**; and
 - c. Vodacom's **[Confidential]** billion capital injection, the increased attractiveness of Newco to external funders and efficiencies in deployment enabling a given amount of funds to support more homes passed.
- 2.34 Second, the Transaction is likely to achieve better access to and use of the Parties' FTTH infrastructure including by providing access to Vodacom's FTTH access to Newco's larger number of ISPs, reducing the costs for new ISPs to be on-boarded with Newco rather than having to incur interconnect and other costs for each Party independently and savings in the ongoing costs of FTTH provision.
- 2.35 Greater fibre availability and take-up can be expected to help drive local economic development. A number of studies have confirmed a significant positive relationship between fixed broadband take-up and greater economic activity and higher living standards. In this regard, the Transaction will promote the overall public interest. We have identified no adverse employment effects or any other adverse public interest effects. More generally, improved access to broadband has been found to be a significant driver of overall employment and job creation.

Overall conclusion

- 2.36 Based on the analysis set out in this report, we find that the Transaction would be unlikely to substantially lessen or prevent competition in relation to wholesale FTTH access, retail residential fixed internet access, hosting or CCTV services. As such, we find no material risk of adverse effects on consumers.

2.37 On the contrary, the Transaction would better enable Newco [Confidential] . By improving access to fibre broadband, the Transaction can be expected to help drive local economic development and increase employment opportunities.

[Confidential]

2.38 [Confidential] .

2.39 [Confidential] .

2.40 [Confidential] .

Section 3

Overview of fixed broadband services in South Africa

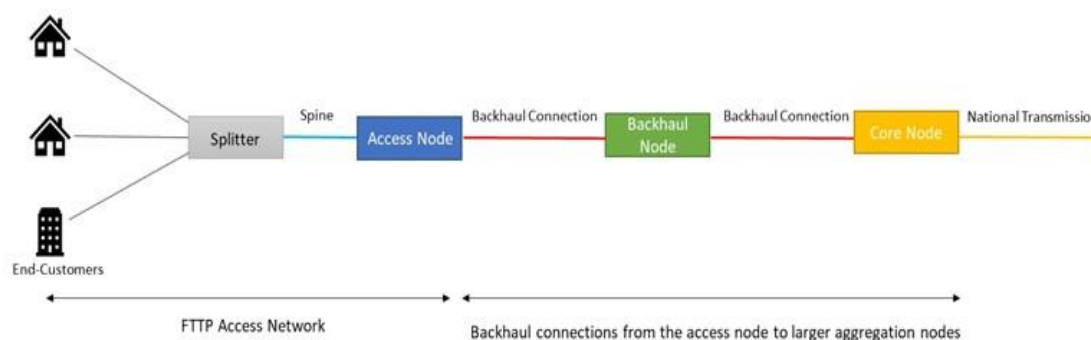
- 3.1 This section provides an overview of the fixed telecommunications industry in South Africa with a particular focus on FTTH services.

Network topology

- 3.2 Communications networks provide for the exchange of information between end-users at different locations. Fixed networks comprise a number of elements including the following main elements:
- a. *Access connections* or 'last mile' links between end-users and a point of concentration/access node such as a local exchange;⁴
 - b. *Backhaul connections* from the access node to larger switches and aggregation points in a metropolitan area; and
 - c. *National and international transmission* links between cities and towns and between countries.
- 3.3 Communications networks may use copper, cable, fibre, wireless/mobile or satellite technologies as media. Figure 1 shows a stylised topology for a FTTH network.

⁴ Services to enterprise customers can differ in having dedicated connections to their sites, and between their sites.

Figure 1: Stylised FTTH network

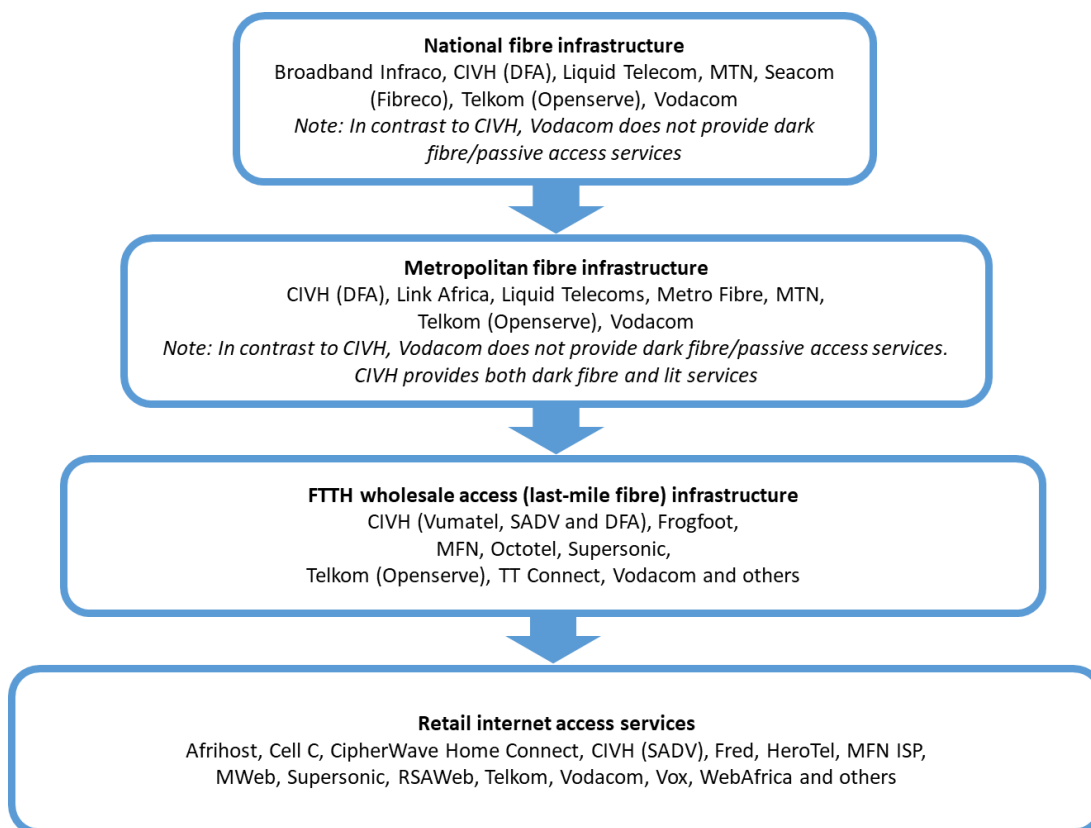


- 3.4 Transmission links and backhaul connections aggregate traffic and have higher capacity than access connections.

Industry structure

- 3.5 Figure 2 provides an overview of the fixed industry value chain. Both Parties are present at each of the four levels shown. However, in relation to metropolitan fibre, Vodacom supplies only lit services while CIVH (DFA) supplies both lit services and dark fibre, i.e., optical fibre capacity without active equipment.
- 3.6 National fibre infrastructure connects the major population centres as well as providing connections to the submarine fibre cables to the international fibre infrastructure. Metropolitan fibre infrastructure provides connections between local sites within major population areas. The report by FTI, *Economic analysis of the proposed CIVH/Vodacom Transaction*, presents the competitive assessment of the Transaction in relation to these services.
- 3.7 Wholesale FTTH access (or 'last-mile fibre') provides the final infrastructure connection from local aggregation nodes to end-users. Figure 2 shows the larger players while there are also many smaller players active in particular areas.
- 3.8 A large number of ISPs supply retail internet access services with many acquiring wholesale access from fibre infrastructure providers rather than having their own networks.

Figure 2: Fixed industry value chain within South Africa



Recent trends

- 3.9 The industry is currently in an expansionary phase driven by the large growth in data demand and take-up of fibre connectivity. Cisco forecasts that consumer fixed internet traffic in South Africa will grow 4-fold from 2017 to 2022, while consumer mobile traffic will grow 7-fold.⁵

- 3.10 **[Confidential]**.

Figure 3: [Confidential]

Source: **[Confidential]**

Deployment

- 3.11 The number of homes passed by FTTH has continued to grow in 2020 and 2021, with an average quarterly growth rate in homes passed of **[Confidential]** across the whole market. Figure 4 shows a breakdown of recent deployments by operator.

⁵ Cisco, "[VNI Complete Forecast Highlights](#)", 27 November 2018, pages 1-2 (accessed on 25 November 2021).

Figure 4: FTTH homes passed by operator, March 2019 – June 2021

Note: [Confidential]
Source: [Confidential]

3.12 [Confidential].⁶

Pricing

3.13 Wholesale FTTH prices are based on a combination of upfront and monthly recurring charges per end-customer connection as well as a fixed Network-to-Network Interface ('NNI') charge. Prices differ for different speeds and other quality parameters as well as in terms of data allowances. Prices have been fallen significantly between September 2020 and September 2021 (see Table 1).

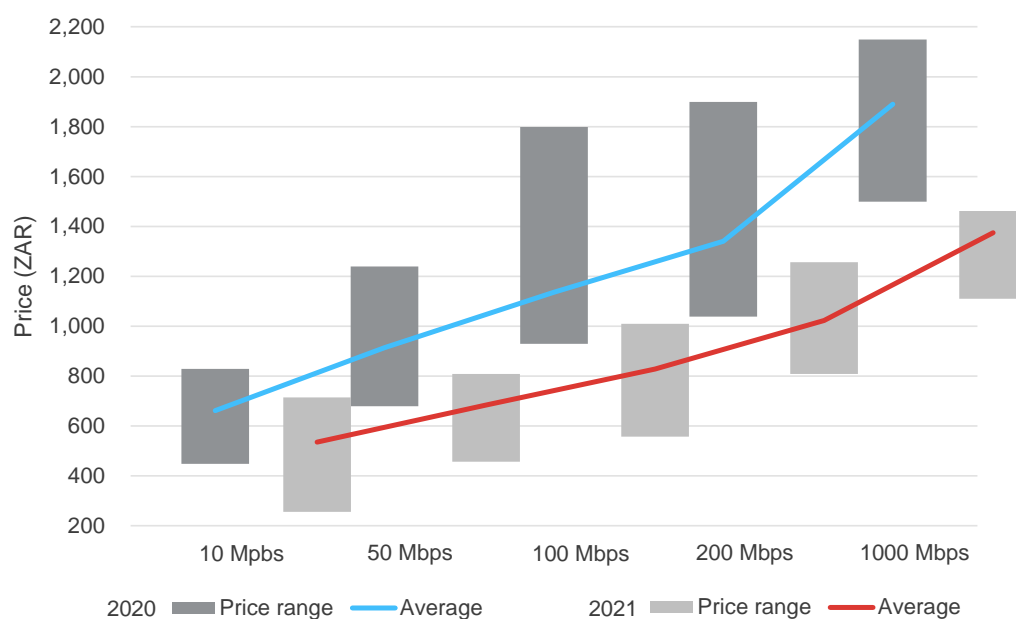
Table 1: [Confidential]

Note: [Confidential]
[Confidential]
[Confidential]
Source: [Confidential]

3.14 Even for similar speeds, there is significant variation in retail prices between operators, but they have been falling on average given declining wholesale prices (see Figure 5).

⁶ [Confidential].

Figure 5: Comparison of retail average prices and price ranges (monthly)



Notes: Analysis excludes prices for estate specific retail packages and products where tariff structure includes a one-off connection fee.

Source: Compass Lexecon analysis, ICASA [“Bi Annual Tariffs Analysis Report 01 Jul To 30 Dec 2020”](#), MyBroadband articles between April and July 2021.

Section 4

Transaction background

- 4.1 This section provides an overview of the Transaction and its commercial rationale.⁷

Parties to the Transaction

Vodacom

- 4.2 Vodacom is wholly owned by Vodacom Group Limited (**'Vodacom Group'**), which is a public company incorporated in South Africa. Shareholders in Vodacom Group on 25 November 2021 include Vodafone Investments (SA) (Pty) Ltd (52.68%), Vodafone International Holdings B.V. (7.81%), YeboYethu Investment Company (Pty) Limited (6.23%), the Government Employees Pension Fund (14.30%) and other institutional and retail investors.⁸ Vodacom is primarily active in the provision of wholesale and retail mobile and fixed telecommunication services.
- 4.3 Vodacom has a number of subsidiaries which are active in telecommunications services including:
- a. Mezzanine Ware (Pty) Ltd (**'Mezzanine'**) is a digital technology company which supplies a range of managed services for business customers, including mobile and cloud-based services and IoT products and services;
 - b. Storage Technology Services (Pty) Ltd trading as Nexio (**'Nexio'**) is a data centre and storage specialist and business systems integrator. Nexio provides multi-cloud, security, data management and storage solutions;
 - c. XLink Communications (Pty) Ltd (**'XLink'**) provides secure and managed payment solutions to businesses; and

⁷ Full details on the Transaction and the Parties are set out in the Parties' notification documents.

⁸ Vodacom group organogram dated 25 November 2021.

- d. IoT.nxt (Pty) Ltd ('IoT.nxt') provides hardware and software used in IoT solutions. Its technology allows various systems, processes, machinery and 'things' to be interconnected.⁹

Newco

- 4.4 Newco is a new limited liability private company wholly owned by CIVH.
- 4.5 [Confidential] .¹⁰¹¹
- 4.6 CIVH will control a number of subsidiaries¹² through its ownership of Newco, which is primarily focused on providing wholesale services to other communication providers. Newco in turn controls DFA and Vumatel.¹³
- 4.7 DFA is a provider of wholesale, open access passive (dark) fibre infrastructure and managed network services connectivity in both metropolitan and long-haul telecommunications markets. Its primary activity is deploying metro fibre networks and providing wholesale access to this infrastructure to FNOs and Mobile Network Operators ('MNOs').
- 4.8 DFA also owns (a) SADV and (b) MCT Britelink.¹⁴
 - a. SADV operates as an ISP which offers retail fixed internet access services to both residential and business customers. In addition, SADV operates a Voice over Internet Protocol ('VoIP') network and sells voice services to primarily enterprise customers. In providing these services, SADV leases the FTTH or Fibre-To-The-Business ('FTTB') infrastructure owned and operated by last mile open access fibre network operators.
 - b. MCT Britelink provides planning, implementation, testing, certification and maintenance services in relation to fibre optic networks.¹⁵
- 4.9 Vumatel is an open access fibre provider of wholesale FTTH and limited FTTB access services to ISPs. [Confidential].

⁹ Further detail on the relevant activities of Vodacom and its subsidiaries are set out in Section 5.

¹⁰ [Confidential] .

¹¹ [Confidential].

¹² [Confidential] .

¹³ [Confidential] .

¹⁴ [Confidential] .

¹⁵ [Confidential] .

4.10 Vumatel also owns (a) Automation Exchange (Pty) Ltd ('AEX'), (b) VumaCam (Pty) Ltd ('Vumacam'), and (c) Vumacam Infrastructure Pty Ltd ('Vumacam Infrastructure').¹⁶

- a. AEX is active in the development of specialised software for the management of fibre networks. It also supplies physical network components/services that connect ISPs with one or more networks.
- b. VumaCam offers a citywide video camera network (CCTV) offering ultrahigh-definition video feeds to security companies and law enforcement agencies.
- c. VumaCam Infrastructure is an infrastructure company facilitating Wi-Fi, mobile network operator opportunities, branding and advertising space.

Structure of the Transaction

4.11 Under the Transaction, Vodacom will acquire a shareholding of at least [Confidential] in Newco, whereby Vodacom will acquire joint control of Newco. CIVH will remain the [Confidential] with at least [Confidential] % of the shareholding.

4.12 Vodacom intends to acquire an interest in Newco through:

- a. [Confidential];
- b. [Confidential];¹⁷
- c. [Confidential];
- d. [Confidential].

4.13 This will ensure that Vodacom will acquire a shareholding of at least [Confidential] which provides it with joint control. Vodacom [Confidential] .

Rationale for the Transaction

4.14 Key elements of Vodacom's rationale for the Transaction include:

[Confidential]

4.15 CIVH's rationale for the Transaction is as follows:¹⁸

[Confidential]

¹⁶ [Confidential] .

¹⁷ [Confidential] .

¹⁸ [Confidential] .

[Confidential]

Section 5

The Parties' activities and overlaps

- 5.1 This section describes the activities of the Parties and overlaps between them as relevant to the services we have been instructed to address in this report, i.e., wholesale FTTH services, retail residential fixed internet access services, hosting services and CCTV services.¹⁹ We then identify potential theories of harm which could hypothetically be raised by these overlaps and refer to the sections in the remainder of this report which address these theories of harm.

Relevant activities of the Parties

- 5.2 Of relevance to the competitive assessment covered by our report are that:
- a. Vodacom supplies wholesale FTTH services to ISPs (including its own ISP);
 - b. Vodacom operates as an ISP in supplying retail fixed internet access services to residential customers;
 - c. Vodacom, including via its Nexio division, supplies data centre and related hosting services including systems integration services;
 - d. Vodacom supplies CCTV solutions to enterprises;
 - e. Newco's subsidiary, Vumatel, supplies wholesale FTTH services to ISPs (including SADV which it controls);
 - f. Newco's subsidiary, SADV, operates as an ISP in supplying retail fixed internet access services to residential customers;
 - g. Newco's subsidiary, DFA, offers co-location services at its network aggregation facilities; and
 - h. Vumatel has a controlling interest in VumaCam which supplies CCTV solutions.

¹⁹ The FTI Report assesses the other overlaps relevant to the Transaction, particularly relating to metro fibre backhaul infrastructure and fibre-to-the-business access.

Overlaps assessed in our report

- 5.3 The overlaps assessed in our report are the following:
- a. a horizontal overlap in that both Parties are active as providers of wholesale FTTH services;
 - b. a horizontal overlap in that both Parties are active as providers of retail residential fixed internet access services;
 - c. a vertical overlap in that upstream wholesale FTTH services are supplied to ISPs active in downstream retail residential fixed internet access services and both Parties are active at both the wholesale and retail level;
 - d. a horizontal overlap in that both Parties offer hosting/co-location services and there is a vertical overlap in that these services are acquired by providers of telecommunications services in which both Parties are also active;
 - e. a horizontal overlap in that both Parties offer CCTV solutions and there is a vertical overlap in that CCTV solution providers acquire fibre connectivity services where both Parties are also active.

Overview of competitive effects assessment

- 5.4 Setting out potential theories of harm provides the relevant framework for analysing the potential competitive effects of a merger. In particular for each potential theory of harm, the specific assumptions that would need to hold for the theory to be satisfied can be identified and market evidence tested to assess whether that theory would likely apply in relation to the merger.
- 5.5 We have identified six potential theories of harm in relation to wholesale FTTH access and retail residential fixed internet access services:
- a. [Confidential];
 - b. [Confidential];
 - c. [Confidential];
 - d. [Confidential];
 - e. [Confidential]; and
 - f. [Confidential].
- 5.6 We have also assessed whether there is any material competitive overlap between the Parties in hosting and CCTV services such that there could be a potential competitive harm from the Transaction in relation to these services. We are instructed that the assessment in relation to

CCTV service is not, strictly speaking, relevant to ICASA's evaluation of the Transaction given that these services are not a licensable activity that are subject to ICASA's jurisdiction but is included for the sake of completeness.

- 5.7 To assess these theories, we have structured our competitive assessment as follows:
- a. Section 6 identifies the relevant markets for wholesale FTTH services;
 - b. Section 7 describes the structure of the relevant wholesale FTTH services markets;
 - c. Section 8 analyses and shows why the Transaction is highly unlikely to lead to a substantial prevention or lessening of competition through unilateral effects i.e., higher prices/lower quality wholesale FTTH services or slower or less widespread FTTH deployment;
 - d. Section 9 analyses and shows why the Transaction is highly unlikely to lead to a substantial prevention or lessening of competition through coordinated effects in relation to FTTH access services and deployment;
 - e. Section 10 analyses and dismisses (i) unilateral horizontal effects in the supply of retail residential fixed internet access services, (ii) anticompetitive vertical effects between wholesale FTTH services and downstream retail residential fixed internet access services and (iii) coordinated effects in retail residential fixed internet access services;
 - f. Section 11 examines whether the Transaction can instead be expected to lead to efficiencies as well as assessing any public interest effects; and
 - g. Section 12 analyses and shows why the Transaction would be unlikely to substantially lessen or prevent competition in relation to hosting and CCTV services.

Section 6

Market definition: wholesale FTTH services

- 6.1 In this section, we assess the relevant market for the competitive assessment of wholesale FTTH services in both product and geographic dimensions. We consider the findings of relevant previous decisions and whether those findings remain appropriate given the specific features of the Transaction as well as market developments since the earlier decisions.
- 6.2 In summary, we conclude that:
- a. there is a relevant product market for wholesale broadband access services supplied over FTTH which potentially also includes VDSL services supplied over FTTC; and
 - b. the relevant geographic markets are local or aggregations of local markets where competitive conditions are homogenous ([Confidential]).

Product market

Precedent

- 6.3 In assessing precedent, we focus on the Commission's and Competition Tribunal's ('**the Tribunal**') findings in relation to the CIVH/Vumatel merger as the most recent relevant South African case. We also consider recent international precedent where relevant.
- 6.4 With regard to the CIVH/Vumatel merger, the Commission found that there was a relevant market for the intermediate supply of last-mile FTTH infrastructure to ISPs.²⁰ The Commission's finding was based on the following observations:
- a. [Confidential].²¹

²⁰ Competition Tribunal of South Africa, CIVH/Vumatel merger (case LM109Jul18), reasons for decision, 28 August 2019, paragraph 48.2, [Confidential].

²¹ [Confidential].

- b. [Confidential] .²²
- c. [Confidential] .²³
- d. [Confidential] .²⁴

6.5 The Commission's findings in the CIVH/Vumatel merger are generally consistent with recent international precedent and regulatory practice. One key difference is that European authorities have generally considered that fixed broadband services of different speeds are in the same market. A reason for this appears to be the role of VDSL services supplied over FTTC which have fibre from the exchange to a street cabinet and then copper from the street cabinet to the house. As a hybrid service, VDSL/FTTC services have speeds and pricing that overlap with both copper asymmetric DSL ('ADSL') services and FTTH services.

- a. The UK regulator, Ofcom, found that there is a single product market for fixed broadband services including all broadband speeds in the UK on the basis that prices for slower speeds were likely to constrain prices for faster speeds during the period when networks are seeking to encourage customers to migrate to faster speeds.²⁵ Ofcom found that the competitive constraint exerted by the slowest services (i.e., services offered over ADSL with copper all the way from the exchange) was likely to become increasingly weak.
- b. The European Commission ('EC') has found that there is a relevant market for wholesale local access which includes FTTH, fibre-to-the-building, FTTC and DSL although noting that DSL might not constrain FTTH in the absence of FTTC (the absence creating a break in the chain of substitution).²⁶ The EC excluded fixed wireless services and noted that even for 5G fixed wireless access "*the capabilities of 5G FWA fall short of the most performant FttH infrastructures, and lie at the lower end of those available via FttH.*"²⁷

²² [Confidential] .

²³ [Confidential] .

²⁴ [Confidential] .

²⁵ Ofcom, "[Wholesale fixed telecoms market review](#)", Volume 2, 18 March 2021, paragraph 6.30, page 92 (accessed on 25 November 2021).

²⁶ EC, "[Commission staff working document accompanying the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive \(EU\) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code](#)", 18 December 2020, page 48 (accessed on 25 November 2021).

²⁷ *Ibid*, page 51.

Assessment of the relevant product market for the Transaction

Substitutability with VDSL/FTTC services

- 6.6 We consider that the Commission's findings on the product market in its CIVH/Vumatel merger report for the supply of FTTH infrastructure to ISPs are generally applicable to the Transaction, with the potential exception that there could be grounds to expand the market to include VDSL/FTTC services.
- 6.7 ISP demand for wholesale FTTH access is derived from consumer demand. What matters for consumers is the speed, quality and price of the service they are receiving, rather than the network technology it is offered over.
- 6.8 The relative performance of the fixed technologies remains in line with the Commission's findings in its CIVH/Vumatel merger report with ADSL generally not able to offer reliable speeds above 25 Mbps with slower speeds further from the exchange and slower upload speeds.²⁸ VDSL supports higher speeds (with Telkom offering 40 Mbps) and FTTH provides the fastest download and upload speeds and the highest reliability.
- 6.9 As noted in Section 3, data demand continues to grow and FTTH subscriptions have increased at the expense of DSL. ICASA reports an average fixed internet download speed in South Africa in 2020 of 38.25 Mbps.²⁹ This suggests many customers will seek speeds which are only reliably offered by FTTC and FTTH. Over time, it can be expected that ADSL services will not be a relevant effective constraint on FTTH services as customer demand for faster speeds grows and as ADSL services are withdrawn. However, an average fixed internet download speed of 38.25 Mbps suggests that VDSL which offers speeds up to 40 Mbps would be able to meet many customers' needs.
- 6.10 It is also the case that FTTC is widely available with Telkom reporting that Openserve's FTTC network passed 2,084,932 homes in September 2021.³⁰
- 6.11 Openserve has noted that FTTC can compete with FTTH:

"This hybrid use of both fibre and copper has proven very successful in many parts of the world including USA, New Zealand and UK to name a few. This hybrid solution, called FTTC (Fibre to the Curb/Cabinet) utilises fibre as a connectivity medium to the nearest point (curb/cabinet on the street) and then harnesses the already existing copper infrastructure which is connected within a house to create a faster, reliable and consistent

²⁸ My Broadband, "[Satellite vs DSL vs Fibre vs LTE – Uncapped prices compared](#)", 4 July 2020 (accessed on 25 November 2021).

²⁹ ICASA, "[State of the ICT Sector Report](#)", March 2021, page 6 (accessed on 25 November 2021).

³⁰ Telkom, "[Telkom Interim Results Booklet 2021](#)", September 2021, page 25 (accessed on 25 November 2021).

broadband connection. It can scale up to speeds of 40mbps thereby competing with FTTH speeds and at more affordable prices at a wholesale level.”³¹

- 6.12 A question can be asked as to why FTTC in South Africa has not achieved the take-up of FTTC in other countries. This appears to reflect Openserve’s choice not to price VDSL more cheaply. For example, Telkom prices its retail VDSL 40 Mbps service at R799, only slightly below its FTTH 50 Mbps service at R806.³² Openserve has previously reduced the effective cost to customers of its FTTC service under regulatory pressure. For example, following the Commission’s data services market inquiry, Openserve launched its Pure Connect service which enables retail customers to obtain VDSL/FTTC services from their ISPs without also having to obtain a copper line from Telkom Retail, significantly reducing the effective cost to customers.³³
- 6.13 Given the widespread availability of FTTC and that a significant part of the cost of supplying FTTC are sunk, FTTC has at least the potential to be a significant constraint on FTTH pricing.
- 6.14 FTTC can also be considered as part of the same market as FTTH on the basis of supply-side substitutability. In particular, Openserve’s existing network infrastructure, particularly its ducts and poles, and its FTTC customer base enables it to deploy FTTH with lower cost, greater demand certainty and less time than other FTTH providers.
- a. [Confidential] .³⁴
 - b. An article from Business Insider South Africa commented, in context of Openserve’s 2021 price cuts, that *“Openserve’s infrastructure rollout has piggybacked on Telkom’s historic telecommunications monopoly, resulting in an easier access to the fibre market compared to independent providers. In turn, Openserve has managed to edge out FNO competitors, like Vumatel and Octotel, on price.”*³⁵
- 6.15 We consider that even if the market is defined conservatively as excluding FTTC, it is nonetheless important to take into account Openserve’s ability to price FTTC more aggressively and to upgrade its network and customer base to FTTH in the competitive assessment.

³¹ Tech Financials, [“Why is Openserve Shutting Down ADSL?”](#), 20 July 2020 (accessed on 25 November 2021).

³² Promotional prices for initial months averaged over the full 24-month contract period. Telkom VDSL uncapped and Telkom FTTH at 50 Mbps has a soft cap of 100 GB (DSL Telecom, [“Telkom unlimited xDSL packages”](#) and Telkom, [“Shop”](#) (both accessed on 22 November 2021)).

³³ Openserve, [“Pure Connect brochure”](#) (accessed on 26 November 2021).

³⁴ [Confidential] .

³⁵ Business Insider South Africa, [“Openserve fibre speeds will soon double – at no extra cost to existing clients”](#), 15 February 2021 (accessed on 12 October 2021).

Substitutability with other technologies

- 6.16 We consider that the reasons as to why the Commission found fixed-wireless and mobile are not in the same market as FTTH in its CIVH/Vumatel merger report continue to apply and some apply to a greater extent with the increased demand for faster speeds.
- 6.17 Fixed wireless/LTE services suffer from the limited capacity which limits speed and reliability. Uncapped fixed wireless services are noticeably more costly than uncapped fibre services, although capped prices have been coming down. For example, the cheapest uncapped LTE service available on Afrihost's website is R949 per month, while uncapped fibre at 20 Mbps is available for R697 per month.³⁶ While 5G could make mobile a better substitute for FTTH, even in countries with existing 5G services coverage remains limited to the major cities.³⁷ Both Ofcom and the EC have also found that fixed wireless services provide a limited constraint on fixed broadband given data caps, capacity constraints, greater interference risks and limited availability.³⁸ Such services may provide a better substitute for customers requiring slower speeds and/or less data.
- 6.18 Substitutability between FTTH and mobile services is likely to be even smaller given key differences in terms of mobility, quality, availability and pricing. For instance, Rain offers unlimited 4G for any device for R479 per month but with speeds up to 10 Mbps.³⁹ Afrihost sells a Frogfoot uncapped fibre service for a price of R497 per month but with download speed of 30 Mbps.

Substitutability of FTTB

- 6.19 As found by the Commission in its CIVH/Vumatel merger report, [Confidential].⁴⁰ The Commission considered that FTTB for businesses with these specific requirements should be considered a distinct market to FTTH.
- 6.20 We consider that the basis for the Commission's finding remains the same today for the reasons set out in the FTI Report including significant differences between FTTH and FTTB in service quality, features and pricing. Further, certain enterprise requirements may not be able to be supplied by locally based FTTH network operators such as where enterprises require dedicated capacity to areas where FTTH has not been deployed or capacity to multiple sites only some of which an FTTH provider has coverage in. We note that the EC reached a similar

³⁶ Afrihost, "[Browse LTE packages](#)" (accessed on 22 November 2021).

³⁷ Ofcom, "[Wholesale fixed telecoms market review](#)", Volume 2, January 2020, paragraph 2.63, page 29 (accessed on 30 November 2021).

³⁸ Ofcom, "[Wholesale fixed telecoms market review](#)", Volume 2, January 2020, paragraphs 2.64-2.69, pages 29-31 (accessed on 30 November 2021) and EC, *Vodafone / Certain Liberty Global Assets* (case M.8864), [EC decision](#), 18 July 2019, paragraph 56, pages 24-25.

³⁹ Rain, "[Shop](#)" (accessed on 26 November 2021).

⁴⁰ [Confidential] .

view: “Therefore, both from the demand side and supply side perspective, some business products cannot be substituted with mass-market retail products.”⁴¹

- 6.21 On the other hand, there may be some business customers, particularly small-to-medium enterprises, whose demand for fixed broadband services is similar to residential customers and who acquire the same types of products. The wholesale supply of services to meet the final demand of to these customers could be considered part of the same market as FTTH. For convenience, our use of the term FTTH in this document should be considered as including services supplied to business end-customers who acquire similar services to residential customers.

Conclusion on the relevant product market

- 6.22 We consider that there is a relevant market for wholesale broadband services supplied to ISPs over FTTH and potentially VDSL/FTTC.

Geographic market

Precedent

- 6.23 In the CIVH/Vumatel merger, the Commission did not conclude on the geographic scope of the wholesale FTTH markets but noted:⁴²
- a. [Confidential] ;⁴³
 - b. [Confidential] ;⁴⁴
 - i. [Confidential] ;
 - ii. [Confidential] .
- 6.24 [Confidential] .⁴⁵

⁴¹ EC, “[Commission staff working document accompanying the Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive \(EU\) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code](#)”, 18 December 2020, page 39 (accessed on 28 November 2021).

⁴² [Confidential] .

⁴³ [Confidential] .

⁴⁴ [Confidential] .

⁴⁵ [Confidential] .

- 6.25 In the MTN/Smart Village merger, the Commission considered that each gated residential estate constituted a distinct separate geographic market since gated residential estates generally do not permit the duplication of fibre infrastructure in the respective gated estates.⁴⁶
- 6.26 The Commission's approach is in line with the approach put forward by the Body of European Regulators for Electronic Communications ('BEREC').⁴⁷ The UK regulator, Ofcom, assesses competition in wholesale fixed broadband (i.e., combining copper, FTTC and FTTH) markets with respect to postcode sectors (e.g., there are around 10,000 postcode sectors in the UK).⁴⁸ Ofcom rejects considering individual premises for reasons of practicality. Ofcom then aggregates postcode sectors in which competitive conditions are similar and divides the UK between (i) postcode sectors where there is some commercial deployment by rival networks to the incumbent, BT; and (ii) other postcode sectors where there is unlikely to be material commercial deployment by rival networks to BT.⁴⁹
- 6.27 The EC in *Vodafone / Certain Liberty Global assets* considered that the market for retail fixed internet access services was national on the basis that competitive conditions did not differ across the country even if some competitors were only active in certain regions.⁵⁰ This finding was particularly based on the national operators applying a national pricing strategy or predominantly national pricing.

Assessment of the relevant geographic market for the Transaction

- 6.28 As recognised by the Commission in the CIVH/Vumatel merger⁵¹, demand and supply-side substitutability imply highly localised fixed broadband markets:
- a. [Confidential] ; and
 - b. [Confidential] .
- 6.29 Three issues in relation to geographic market definition are:
- a. the implications of [Confidential] across each operator's footprint;

⁴⁶ Commission, "[Newsletter Edition 54](#)", June 2016, page 15 (accessed on 29 November 2021).

⁴⁷ BEREC [Common Position on geographical aspects of market analysis](#), 2014, pages 21 ff. (accessed on 30 November 2021).

⁴⁸ Ofcom, "[Wholesale fixed telecoms market review](#)", Volume 2, January 2020, paragraph 7.17, page 86 (accessed on 30 November 2021).

⁴⁹ *Ibid.*, paragraph 7.6.

⁵⁰ EC, *Vodafone / Certain Liberty Global Assets* (case M.8864), [EC decision](#), 18 July 2019, paragraph 56, pages 26-27.

⁵¹ See paragraph 6.24 above.

- b. whether it is reasonable to aggregate local markets where they share similar competitive conditions; and
- c. whether the geographic market definition should differ as between deployment and ongoing service provision.

The implications of [Confidential] across each operator's footprint

- 6.30 [Confidential] .⁵² While the Commission did not conclude on the geographic scope of the intermediate last-mile markets, it considered them to be small and localised in nature, albeit that markets exhibiting similar competitive conditions could be assessed together (e.g., local monopoly areas versus areas with multiple providers).⁵³
- 6.31 [Confidential] .⁵⁴
- 6.32 [Confidential] .⁵⁵
- a. [Confidential]
 - b. [Confidential] .
- 6.33 We also understand that:
- a. other FNOs [Confidential] generally set uniform prices network-wide with some limited departures, similar to the situation found by the Commission in the CIVH/Vumatel merger.
 - b. ISPs tend to set retail prices for access to a particular network at the national level, apart from limited and temporary price promotions and incentives. [Confidential].⁵⁶ [Confidential] .
- 6.34 The continuation of uniform wholesale pricing by FNOs is likely to reflect that it aligns with ISPs tending to set uniform retail prices by network. For ISPs and to some extent wholesale providers, maintaining multiple sets of prices makes it harder to achieve scale economies in marketing and risks damaging the provider's brand if they were to charge more to customers will less opportunity to switch.
- 6.35 Where an FNO is setting a uniform price across its footprint, the level of its prices is likely to be affected by the impact of its prices on its demand across its footprint including end-

⁵² [Confidential] .

⁵³ *Ibid.*, paragraph 136-137, page 70.

⁵⁴ [Confidential] .

⁵⁵ [Confidential] .

⁵⁶ [Confidential]

customers who might choose not to have fibre and, in those areas where there are alternative providers, the ability of ISP or end-customers to switch to rival networks. As BEREC states:

“The result is likely to be a compromise between these two prices [i.e., between commercial optimal prices in monopoly areas and commercial optimal prices in competitive areas], where the price is lower the larger the competitive area is (if the competitive area is larger, it has more “weight” in the decision making of the incumbent operator).”⁵⁷

- 6.36 A theoretical model by Valletti, Hoernig and Barros confirms this result.⁵⁸
- 6.37 The evidence of some differences between operators’ prices in South Africa is consistent with operators pricing based on the individual trade-offs they face in terms of the extent to which their networks are overbuilt and the pricing of other operators in those areas. The more that a network is overbuilt by a second network, the more likely its pricing will be constrained by that second network. As the EC notes: *“Regional competitors can indeed exercise a competitive pressure reaching beyond the area in which they are present when the potential SMP operator applies uniform tariffs and the regional competitor is too large to ignore.”⁵⁹*
- 6.38 It should be noted that uniform pricing by a single operator does not imply that the geographic scope of the market is the full footprint of that operator. This is because competitive conditions may still differ across that footprint depending on whether other operators are present so that in some areas ISPs have a choice of providers and prices while in others they do not.
- 6.39 We consider that both the extent of competition in local areas [Confidential] are relevant to the competitive assessment. For example, the competitive impact of a merger may depend on (i) the extent to which it changes local competitive conditions across the merging parties’ footprint; and, as a consequence (ii) whether it is likely to materially change [Confidential] .
- 6.40 We suggest the following approach:
- a. the markets for wholesale FTTH services be defined as local (e.g., gated estate, business park and residential suburb);
 - b. the impact of the Transaction be assessed by grouping together areas with similarly competitive conditions (e.g., local monopoly areas versus areas with FTTH network overbuild), as put forward by the Commission in the CIVH/Vumatel merger;

⁵⁷ BEREC, [“Common Position on geographical aspects of market analysis”](#), 5 June 2014, paragraph 114, page 27 (accessed on 30 November 2021).

⁵⁸ Valletti, T.M., Hoernig, S. & Barros, P.P. [“Universal Service and Entry: The Role of Uniform Pricing and Coverage Constraints”](#). *Journal of Regulatory Economics* 21, 200, pages 169–190.

⁵⁹ EC in BEREC, [“Common Position on geographical aspects of market analysis”](#), 5 June 2014, paragraph 13, page 8 (accessed on 30 November 2021).

- c. [Confidential] ; and
- d. on the basis of that assessment, the likely impact of the Transaction on prices be determined ([Confidential]).

Conclusions on the relevant geographic market

- 6.41 In summary, we propose that markets for wholesale FTTH access be defined as local.
- 6.42 In the competitive assessment, it will be important to take into account (as we do below):
 - a. [Confidential] and its implications for how the Transaction might impact prices, if at all; and
 - b. whether the Parties and/or other potential providers are likely to enter/expand and the potential timing and extent of their entry.

Section 7

Market structure: wholesale FTTH services

- 7.1 This section describes the structure of the supply of wholesale FTTH services in South Africa.⁶⁰
- a. First, we briefly describe a number of the major FTTH network operators.
 - b. Next, we set out the overlaps between the Parties' networks and between their networks and competitors' FTTH networks.
 - c. Finally, we then set out shares of total and recent deployments of each provider in terms of homes passed and connected nationally.
- 7.2 We analyse the potential unilateral effects of the Transaction on the basis of these market structure findings, among other market features, in Section 8 of this report.

Wholesale FTTH access providers

- 7.3 The main FTTH open access network operators in South Africa are:
- a. Vumatel, an open access fibre provider at the last mile level which provides wholesale FTTH and limited FTTB access services to ISPs.
 - b. Openserve, the functionally separate, open access wholesale division of Telkom, the largest telecommunications infrastructure provider in South Africa, active in deploying fibre (i.e., both FTTH and FTTB) and FTTC infrastructure across the country.
 - c. Frogfoot, which has FTTH infrastructure across South Africa and is expected to continue expanding in both urban and rural areas.

⁶⁰ We conservatively focus on FTTH, although we note that there is a case that FTTC also constrains FTTH as explained in the previous section.

- d. MetroFibre Networks ('MFN'), a major FTTH provider and a "*high-growth player in South Africa's Fibre-To-The-Home ("FTTH") and Fibre-To-The-Business ("FTTB") markets*".⁶¹
- e. Octotel, which has so far focussed on deploying FTTH in Cape Town, but recently indicated its intentions to expand beyond this metropole and the surrounding areas, and possibly outside of the Western Cape.
- f. Vodacom, an MNO primarily active in the provision of mobile services but also active in the provision of fixed wholesale and retail services to residential and business customers.
- g. Evotel, an open access FTTH network which focusses on smaller towns and non-metropolises which are not covered by the major FNOs.⁶²
- h. TTConnect, a last mile open access fibre provider with a presence in eastern Johannesburg.⁶³

7.4 In addition, a number of FNOs have been rolling out infrastructure in smaller towns, including closed access operators such as HeroTel, which focusses on smaller towns and cities (such as Potchefstroom, Worcester, Port Elizabeth, Klerksdorp and East London) and underserved rural areas, and has been strengthening its footprint in these areas through acquisitions (e.g., Safricom, BreedeNet and Truecom) and organic growth.

Network overlaps

7.5 This sub-section summarises our analysis of FTTH network overlaps. The analysis in this sub-section is intended to support our assessment of whether the Transaction would cause any loss in competition for services supplied over the Parties' existing FTTH networks. To do so, we consider the extent of overlap between the Parties' networks, the presence of rival networks and the recent changes in network overlaps.

There is limited overlap between the Parties' FTTH networks

Overlaps between Vodacom's and CIVH's networks based on Vodacom's data

7.6 Table 2 summarizes the overlaps between Vodacom's and CIVH's FTTH networks [Confidential] .

⁶¹ MFN, "[AIIM, SAHIF and STOA sign follow-on acquisition in MetroFibre Network, consolidating their position in South Africa's fibre landscape](#)", 15 June 2021 (accessed on 25 November 2021)

⁶² Evotel, "[Evotel: Providing Fibre for Everyone](#)", 9 July 2021 (accessed on 23 November 2021).

⁶³ TTConnect, "[Coverage](#)" (accessed on 26 November 2021).

- 7.7 Nationally, the overlap between Vodacom and CIVH's footprints in terms of homes passed (fewer than [Confidential] homes) accounts for only [Confidential] of Vodacom's network and less than [Confidential] of CIVH's network. [Confidential]. Further, among the homes passed by both Parties, at least [Confidential] are in precincts where other FTTH open access operators (Openserve, Frogfoot, and/or MFN) are also present.

Table 2: [Confidential]

Note: [Confidential] .

Source: [Confidential] .

- 7.8 [Confidential] .
- 7.9 [Confidential] .⁶⁴
- [Confidential]
- 7.10 [Confidential] .
- 7.11 [Confidential] :
- a. [Confidential] ,
 - b. [Confidential] .
- 7.12 [Confidential] . These are summarised in Table 6 and Table 7 presented later in this section.
- 7.13 [Confidential] June 2021:
- a. [Confidential] .
 - b. In addition to Frogfoot, MFN, and Openserve's FTTH networks, the Parties' overlapping homes are also passed by other FNOs: Netstream ([Confidential] of the Parties' overlaps), LightStruck ([Confidential]), Evotel ([Confidential]), as well as by Openserve's DSL network. This might suggest that other FNOs' networks are present to a greater degree in the areas where the Parties' networks overlap than the [Confidential] figure presented in Table 2, [Confidential] .
 - c. [Confidential] of the Parties' overlapping homes are passed by Openserve (FTTH or DSL). Of these, [Confidential] % are passed by Openserve's FTTH network, and an additional [Confidential] are passed by Openserve's DSL network (but not by Openserve's FTTH network).⁶⁵

⁶⁴ [Confidential] .

⁶⁵ [Confidential] .

Changes in overbuild between the Parties over July 2020 – July 2021

7.14 This section presents evidence on limited changes in the extent of overlap between the Parties between July 2020 – July 2021.⁶⁶ [Confidential] .

7.15 [Confidential] .

Table 3: [Confidential]

Notes: [Confidential] .

Source: [Confidential]

Overbuild between Vodacom and other open access FNOs' networks

7.16 [Confidential].

7.17 We understand from the Parties that Openserve has not avoided areas where other providers have developed a fibre network (and that other FNOs have not avoided overbuilding Openserve's copper network). Partly, this reflects Openserve's pursuit of a defensive strategy of rapidly converting its existing lower-speed copper network to fibre to avoid churn from its copper lines to FTTH competitors, in particular from the period September 2020-March 2021 onwards. Openserve saves costs in being able to use its existing Plain Old Telephone Service ('POTS') and FTTC infrastructure, including ducts and poles, to deploy FTTH without the need for additional wayleaves as well as use of its existing maintenance contracts. Openserve is also likely to have better information on potential local demand as a result of supplying copper and FTTC broadband.

Overbuild by other FNOs of Vodacom's FTTH network

7.18 Table 4 shows the extent to which Vodacom's FTTH is overbuilt by other FNOs' networks.⁶⁷

7.19 [Confidential] of Vodacom's homes are in precincts where Vodacom's footprint overlaps fully or in part with competitors' networks. Vodacom has the largest overlaps with Openserve's FTTH network (which passes [Confidential] of Vodacom's homes), followed by CIVH ([Confidential] MFN ([Confidential]), Frogfoot ([Confidential]), TT Connect ([Confidential]), Octotel ([Confidential]), and MTN ([Confidential]).

Table 4: [Confidential]

Note: [Confidential]

Source: [Confidential] .

7.20 Vodacom's FTTH network [Confidential].

⁶⁶ Systematic data on overbuild between the Parties not available for earlier than this.

⁶⁷ [Confidential].

7.21 [Confidential].

Changes in the extent to which Vodacom's FTTH network is overbuilt over July 2020 – July 2021

7.22 Table 5 shows the evolution in overlaps on Vodacom's network between July 2020 and July 2021. During the July 2020 – July 2021 period, Vodacom's overlaps with competitors increased by up to [Confidential] homes in total,⁶⁸ [Confidential]. In particular:

- a. [Confidential] .
- b. [Confidential] .
- c. [Confidential] .
- d. [Confidential] .

Table 5: [Confidential]

Note: [Confidential] .

Source: [Confidential] .

Overlaps between CIVH's and other FNOs' networks

7.23 Table 6 shows the extent of overlaps between CIVH's and other FNOs' networks.

7.24 [Confidential] of CIVH's homes passed overlap with competitors' FTTH networks. [Confidential]. Openserve's DSL network passes [Confidential] of CIVH's homes.

Table 6: [Confidential]

Note: [Confidential]

Source: [Confidential]

Changes in CIVH's overlaps with other FNOs over November 2020 – June 2021

7.25 Table 7 shows the evolution in overbuild on CIVH's network between November 2020 and June 2021.

7.26 Compared with CIVH's estimates as of November 2020 and June 2021, FTTH overlaps increased with the following competitors:

- a. [Confidential] .
- b. [Confidential]

⁶⁸ [Confidential] .

c. [Confidential] .

d. [Confidential] .

7.27 According to CIVH's [Confidential].

Table 7: [Confidential]

Note: [Confidential] .

Source: [Confidential] .

Homes passed and connected

7.28 This sub-section sets out our analysis of wholesale FTTH homes passed and connected at national level. We present estimates based on the following four metrics at the national level:

- a. number and shares of total FTTH deployments in terms of homes passed (i.e., shares of the 'stock' of deployments);
- b. number and shares of recent FTTH deployments in terms of new homes passed (i.e., shares of the 'flow' of deployments in terms of additional homes passed);
- c. number and shares of total FTTH connections in terms of homes connected; and
- d. number and shares of recent FTTH connections in terms of new homes connected.

7.29 [Confidential] .

7.30 As noted in Section 6, wholesale FTTH services can be considered to be offered in local geographic markets, albeit with pricing constraints also arising from incentives for uniform network-wide pricing. As such, national shares of homes passed/connected should not be considered market shares (given the local geographic scope of the relevant market). Shares of historic/recent homes passed/connected could be relevant for the forward-looking 'potential competition' assessment, although we consider that what matters most in that assessment is the number of credible competitors and not their specific shares of historic homes passed/connected, which may not provide a good guide to their competitiveness going forward save in certain circumstances (e.g., shares of recent deployments may provide an indication of which operators are able to deploy in the future and on the likely pace and pattern of their deployments).

7.31 Further, as noted in Section 6, Openserve is a leading provider of internet access supplied over FTTC/VDSL, which has some degree of substitutability with internet access supplied over FTTH. The shares of supply in this sub-section do not fully reflect the potential competitive constraint from Openserve's legacy copper network on the Parties and other FNOs.

Total homes passed

- 7.32 Table 8 below shows the number of FTTH homes passed by each FNO (and the corresponding shares) as at June 2020 and June 2021.⁶⁹
- 7.33 The table shows that the largest FTTH network operators (in terms of homes passed at June 2021) are CIVH, Openserve, Frogfoot, MFN and Octotel with Vodacom only the [Confidential] largest. Combined, the Parties had a share of total homes passed in June 2021 of [Confidential], down from [Confidential] in June 2020 due to the relatively faster pace of deployments by competitors (see next sub-section).
- 7.34 As shown in the next sub-section, the number of new homes passed by each of Openserve and Frogfoot in the 12 months to June 2021 was [Confidential] than the total footprint of Vodacom's FTTH network in June 2021 (i.e., each of Openserve and Frogfoot deployed new FTTH networks during this period equivalent to [Confidential]. Similarly, MFN and Octotel considered together added [Confidential] new homes to their FTTH networks in the 12 months to June 2021 than the total number of homes passed by Vodacom's FTTH network as at June 2021.
- 7.35 In addition to the FNOs listed in the table below, a large number of FNOs are active in South Africa. Data from Africa Analysis shows that, as of September 2021, as many as [Confidential] FNOs are active in South Africa (up from [Confidential] in December 2019).⁷⁰

Table 8: [Confidential]

Notes: [Confidential]

Source: [Confidential]

New homes passed

- 7.36 Table 9 shows the number of new homes passed by each FNO (and the corresponding shares) during the 12-month period to June 2020 and June 2021.
- Vodacom was the [Confidential] in terms of new FTTH deployments in the 12 months to June 2021, with a share of [Confidential] of new FTTH deployments. Openserve, Frogfoot, and MFN all passed [Confidential] new homes than Vodacom in the period.
 - The Parties had a [Confidential] share of new homes passed in the 12 months to June 2021, down from [Confidential] in the previous 12 months. Vodacom's share of new deployments fell from [Confidential] to [Confidential] and CIVH's share fell from [Confidential] to [Confidential] between these periods, due to the relatively faster pace of competitors' deployments.

Table 9: [Confidential]

Notes: [Confidential].

⁶⁹ [Confidential].

⁷⁰ [Confidential].

Source: [Confidential].

- 7.37 Figure 6 shows each FNO's share of new homes passed in the 12 months prior to each quarter over the period June 2019 to June 2021, for the top five FNOs by number of new homes passed in the 12 months to June 2021, as well as for the remaining FNOs considered as a group.
- 7.38 A number of FNOs recorded significant FTTH growth during the June 2019 – June 2021 period which explain the Parties' declining combined share of homes passed:
- Openserve significantly accelerated its pace of FTTH deployment, accounting for [Confidential] of new homes passed in the 12-month period to June 2021 (up from [Confidential] in the previous period). This reflects Openserve's increasing focus on FTTH deployments (and its advantages in FTTH deployments compared to other FNOs, as described in Section 8) since the end of the 2020 calendar year.
 - Frogfoot has added over [Confidential] homes over the three years up to June 2021, with a [Confidential] share of recent deployments in the 12-month periods to June 2021.
 - MFN accounted for [Confidential] of deployments in the 12-month period to June 2021.
 - Octotel's additions have represented [Confidential] of recent deployments in the 12-month period to June 2021.

Figure 6:

[Confidential]

Note: [Confidential]

Source: [Confidential].

Total homes connected

- 7.39 Table 10 shows the number of wholesale FTTH homes connected (and the corresponding shares) of each FNO as at June 2020 and June 2021.
- 7.40 The table shows that Vodacom has the [Confidential] FTTH network in terms of homes connected as of June 2021, after CIVH, Openserve, Frogfoot, MFN, and Octotel. The Parties had a [Confidential] share of homes connected in June 2021, down from [Confidential] in the previous 12 months: Vodacom's share of connections remained stable at [Confidential] and CIVH's share fell from [Confidential] to [Confidential] in this period, due to the relatively faster pace at which competitors added connections.
- 7.41 The number of new homes connected by each of Openserve and Frogfoot in this period was [Confidential] than the total number of homes connected by Vodacom's network in June 2021 (i.e. each of Openserve and Frogfoot connected a number of new FTTH homes equivalent to [Confidential] the number of Vodacom's total FTTH connections as at June 2021).
- 7.42 Several FNOs recorded strong growth during the June 2020 – June 2021 period. In particular:

- a. Frogfoot has seen its connections share increase from [Confidential] in June 2020 to [Confidential] in June 2021. [Confidential], connecting approximately [Confidential] as many homes as Vodacom.
- b. Octotel's and MFN's connections have grown by around [Confidential] from June 2020 to June 2021. Both competitors maintained a steady connections share of [Confidential] [Confidential]

Table 10: [Confidential]

Notes: [Confidential]

Source: [Confidential].

New homes connected

- 7.43 Table 11 shows the number of new homes connected by each FNO (and the corresponding shares) during the 12-month period to June 2021.
- 7.44 As shown below, Vodacom was the [Confidential] in terms of new FTTH connections in the 12 months to June 2021, with a share of [Confidential].

Table 11: [Confidential]

Notes: [Confidential].

Source: [Confidential].

Section 8

Unilateral effects: wholesale FTTH services

- 8.1 This section sets out our assessment of whether the Transaction is likely to give rise to a substantial prevention or lessening of competition in wholesale FTTH services due to horizontal unilateral effects.
- 8.2 Unilateral effects can arise from a horizontal merger and may result in consumer harm if the removal of a competitive constraint due to the merger allows the merged entity unilaterally to exercise market power (i.e., on its own, without needing to coordinate with its rivals), for instance, by raising the prices of one or both of the merging parties' products.
- 8.3 In this section, we consider (and dismiss) the following two hypothetical theories of harm relating to unilateral effects in wholesale FTTH services:
 - a. [Confidential]; and
 - b. [Confidential].
- 8.4 Since the Transaction involves Newco acquiring ownership and control of Vodacom's FTTH infrastructure and wholesale activities and Vodacom taking joint control of Newco, we describe the theories of harm in relation to Newco's actions post-Transaction (e.g., the risk that Newco would set higher prices than the prices that would have been set by CIVH or Vodacom without the Transaction).

Assessment of whether the Transaction would cause a substantial prevention or loss of competition in wholesale FTTH services supplied over the Parties' existing networks

- 8.5 This sub-section provides our assessment of whether the Transaction is likely to lead to Newco setting higher prices (and/or lower quality) for services supplied over the Parties' existing FTTH networks than would be the case without the Transaction.

8.6 [Confidential]⁷¹:

- a. [Confidential]
- b. [Confidential]
- c. [Confidential].

8.7 [Confidential] .

8.8 [Confidential] .

8.9 [Confidential].

There is very limited current overlap between the Parties

8.10 As set out in Table 2, there is very limited overlap between the Parties' networks. As of June 2021, the Parties' FTTH networks overlapped in relation to only [Confidential] premises, equivalent to [Confidential] of Vodacom's network and less than [Confidential] of CIVH's network. As a corollary, for [Confidential] of Vodacom's network and more than [Confidential] of CIVH's network, the Transaction would not reduce the number of wholesale FTTH access providers that are currently available to ISPs.

8.11 Further, even in the limited areas where the Parties' networks do overlap, other competitors are often present. As set out in Table 2, Openserve's (FTTH), Frogfoot's, and MFN's networks are estimated to cover [Confidential] of the [Confidential] homes overbuilt by the Parties. Additional competitors not captured in the data underlying Table 2 (Netstream, LightStruck, Evotel, and Openserve DSL) are also present in the areas where the Parties' networks overlap.⁷² [Confidential] , [Confidential] of the Parties' overlapping homes are also passed by Openserve (FTTH or DSL).⁷³

The degree of overlap between the Parties would not increase materially if the Transaction does not proceed

8.12 We consider that it is unlikely that the degree of overlap between the Parties would increase materially without the Transaction given:

- a. [Confidential]; and
- b. [Confidential].

⁷¹ [Confidential] .

⁷² Paragraphs 7.11-7.13.

⁷³ [Confidential] .

- 8.13 The relevance of these factors is confirmed by the evidence on limited changes in the extent of overlap between the Parties between July 2020 and July 2021, as shown in Section 7.

The Parties' FTTH network planning policies

- 8.14 [Confidential] .
- 8.15 [Confidential].⁷⁴
- 8.16 [Confidential].⁷⁵ [Confidential] .⁷⁶
- 8.17 [Confidential] .⁷⁷

The economics deterring overbuild

- 8.18 [Confidential].
- 8.19 [Confidential] .⁷⁸⁷⁹
- 8.20 The Commission's Data Services Market Inquiry found:

"FTTH (and previously ADSL) rollout requires a high fixed investment to pass households in an area and the need for at least 40% of those households to take up the service for it to break even. For this reason, there tends to be localised monopolies."⁸⁰

- 8.21 We understand that the economics of fibre deployment have not changed significantly compared to the Commission's assessment in the CIVH/Vumatel merger in a way that makes network duplication an attractive general proposition for FNOs.⁸¹ It is expected that the break-even connection rate will generally remain more difficult to reach in areas with duplicated

⁷⁴ [Confidential] .

⁷⁵ [Confidential]

⁷⁶ [Confidential] .

⁷⁷ [Confidential] 2021.

⁷⁸ Commission, CIVH/Vumatel merger (case 2018Jun0032), "Mergers and Acquisitions' Report", 27 February 2019, paragraph 25, page 10.

⁷⁹ [Confidential] .

⁸⁰ Commission, "[Data Services Market Inquiry Final Report](#)", 2 December 2019, paragraph 42.1, page 29 (accessed on 30 November 2021).

⁸¹ With the exception of Openserve, due to its unique position as the incumbent with a far-reaching copper network, as noted below.

networks, given that overall household take-up of FTTH is expected to [Confidential] in the next five years.⁸²

8.22 Table 12 contrasts Vodacom's connection rates in precincts where it is not overbuilt to its connection rates in precincts where it is overbuilt.⁸³ [Confidential].

8.23 [Confidential] .

Table 12: Vodacom's FTTH connection rates by overbuild status, July 2021

All precincts	Non-overbuilt precincts	Overbuilt precincts
[Confidential]	[Confidential]	[Confidential]

Source: [Confidential]

8.24 [Confidential].⁸⁴

8.25 On the other hand, there is the potential for the degree of overbuild of the Parties' FTTH networks by Openserve to increase including in the areas where the Parties overlap (and in response to a putative price increase). Openserve is likely to have advantages in deployment, including lower costs from its ability to use its existing duct, pole and other passive infrastructure to deploy FTTH as well as use of its existing maintenance contracts and good information on potential local demand from its copper and FTTC (and indeed mobile) activities.

8.26 ISPs faced with higher prices might also seek to sponsor entry through offering purchase commitments to rival FNOs and new entrants in response to higher prices. In the UK, Vodafone has recently reached such an agreement to become an anchor customer for the fibre network operator, CityFibre, to support a major expansion of its FTTH network.⁸⁵

As a consequence, the Parties' [Confidential] prices would not be expected to increase materially

8.27 [Confidential].

⁸² Africa Analysis, "FTTH Market Tracking Programme", prepared for Vodacom, 7 June 2021, pages 27-29. Africa Analysis forecasts a connection rate of [Confidential] to be reached in March 2026, with a market limit of [Confidential]

⁸³ [Confidential] .

⁸⁴ [Confidential].

⁸⁵ CityFibre news release, "[Vodafone anchors CityFibre's nationwide Full Fibre rollout to 8 million homes](#)", 11 November 2021 (accessed on 30 November 2021).

- 8.28 [Confidential].⁸⁶ The importance of consumer take-up in price-setting decisions was also addressed in the hearings in the CIVH/Vumatel merger.⁸⁷
- 8.29 The importance of take-up as a determinant of wholesale FTTH prices arises because take-up rates are critical for operators to recover their investments. As noted above, the Commission found that connection rates of at least 40% were required for FTTH rollout to break even.⁸⁸ Further, with the cost of network deployment being largely fixed with relatively low incremental costs to subsequently connect individual premises to the network, operators are encouraged to price to bring additional customers on to their networks.
- 8.30 [Confidential] .
- 8.31 [Confidential] Thus, combining the two networks would not significantly change the extent to which the Parties face competition in the wholesale supply of FTTH access services. [Confidential] of Vumatel's FTTH network in July 2021 was overbuilt by other networks (including less than [Confidential] overlapping with Vodacom). [Confidential] of Vodacom's network was overbuilt by other networks (including [Confidential] overbuild with Vumatel).⁸⁹ Post-Transaction, around [Confidential] of Newco's network will be overbuilt by other FTTH networks.⁹⁰
- 8.32 [Confidential] .
- 8.33 [Confidential].
- 8.34 [Confidential] .
- 8.35 [Confidential] .⁹¹
- 8.36 [Confidential] ⁹²

⁸⁶ Commission, CIVH/Vumatel merger (case 2018Jun0032), "Mergers and Acquisitions' Report", 27 February 2019, paragraph 58, page 18.

⁸⁷ Competition Tribunal of South Africa, CIVH/Vumatel merger (case LM109Jul18), "CIVH/Vumatel merger hearing transcription", 15 April 2019, pages 541-544.

⁸⁸ Commission, "[Data Services Market Inquiry Final Report](#)", 2 December 2019, paragraph 658.2, page 238 (accessed on 30 November 2021).

⁸⁹ [Confidential] .

⁹⁰ [Confidential] .

⁹¹ [Confidential] .

⁹² [Confidential] .

8.37 For the reasons set out above it is unlikely that the Transaction would lead Newco to set higher [Confidential], due to constraints from ISP switching to rival networks that overlap to a greater degree and ISP participation in non-overlap areas, and that there [Confidential] .

[Confidential]

8.38 [Confidential] :

“[Confidential]

[Confidential]”⁹³

8.39 [Confidential]⁹⁴ .

8.40 [Confidential] .

8.41 As noted above, pre-Transaction, Vumatel has [Confidential] of its network overbuilt by rivals (at July 2021). Post-Transaction, Newco’s combined network will be [Confidential] overbuilt by rivals.⁹⁵ Thus, the Transaction would not significantly change the extent of overbuild of the Parties’ networks. Newco will continue to need to price to try to encourage FTTH take-up and will continue to face a similar extent of overlap with competitor networks.

8.42 It should be noted that the changes that would result from the Transaction are relatively minor compared with the other changes in the market. Assuming no changes by rivals, [Confidential]. However, as noted in Section 7, Openserve in particular has been overbuilding rivals including Vumatel. Thus, it is far from clear whether Newco in practice will face a lower degree of overbuild than Vumatel does, particularly for any length of time.

8.43 Table 7 shows that overbuild against Vumatel's network has increased significantly between November 2020 and June 2021, mainly due to increases in overlaps with Openserve (increased by [Confidential] homes) and Frogfoot (increased by [Confidential] homes). These recent market dynamics have increased the extent to which Vumatel’s network overlaps with rival networks (especially Openserve). [Confidential] .

No adverse effect on the quality and range of wholesale FTTH services

8.44 Next, we consider whether the Transaction could lead to adverse effects in relation to the quality or range of wholesale FTTH services provided by Newco.

8.45 [Confidential] .

⁹³ [Confidential] .

⁹⁴ [Confidential]

⁹⁵ [Confidential] .

8.46 [Confidential] , [Confidential].⁹⁶ [Confidential]⁹⁷

8.47 In addition, each Party offers the same ranges of speeds on their networks nationally, [Confidential].⁹⁸

8.48 There is no reason to expect that our findings above in relation to the effect of the Transaction on prices would not apply to the quality and range parameters set by Newco post-Transaction, [Confidential]

8.49 As such, we consider that our conclusion that the Transaction would not adversely affect FTTH prices to customers would also apply to the quality and range of services offered to customers.

Conclusion on the effects of the Transaction on existing competition in wholesale FTTH services

8.50 In summary, we find that there is no significant risk of Newco setting higher prices due to the loss of competition between the Parties given their current network footprints for the following reasons:

- a. Over [Confidential] of CIVH's wholesale FTTH services are in areas where Vodacom's FTTH network is not present and hence the Transaction does not change the competitive constraint on CIVH across virtually all of its network.
- b. Around [Confidential] of Vodacom's wholesale FTTH services are in areas where CIVH's FTTH network is not present and hence the Transaction does not change the competitive constraints on Vodacom across the vast majority of its network.
- c. [Confidential] .
- d. Of the fewer than [Confidential] premises which are passed by both Parties, [Confidential] are also passed by at least one other FTTH operator and hence ISPs' ability to switch to that other operator will act to constrain prices post-Transaction. The potential for rival FNOs to expand their networks (including Openserve migrating copper customers to FTTH) should a profitable opportunity arise would act to further constrain prices.
- e. [Confidential] .
- f. [Confidential] . The percentage of Newco's network which would be overbuilt by other FNOs post-transaction (around [Confidential]) is similar to the percentage of Vumatel's and Vodacom's networks which are currently overbuilt by rival FNOs (i.e., [Confidential])

⁹⁶ [Confidential] .

⁹⁷ [Confidential] .

⁹⁸ [Confidential] .

and [Confidential] respectively).⁹⁹ Thus, the Transaction would not materially change the competitive conditions on the Parties' pricing. [Confidential].

- g. [Confidential] As such, we consider that there is no significant risk of the Transaction leading to higher prices on the Parties' existing networks.
- h. [Confidential] .

8.51 We also find that the Transaction is unlikely to negatively affect product quality or the range of services offered because quality and services [Confidential] and the Transaction will not materially change competitive conditions.

Assessment of whether the Transaction would cause a substantial prevention or loss of competition in wholesale FTTH services due to a reduction in dynamic competition

8.52 In this sub-section we consider whether the Transaction is likely to lead to a reduction in dynamic competition. In particular, we assess:

- a. whether Newco post-Transaction would deploy FTTH infrastructure more slowly and/or to a lesser extent than would the Parties separately without the Transaction because of the loss of rivalry between them; and
- b. whether this would lead to consumer harm.

8.53 The theory of harm assessed in this sub-section is distinct from the concern that the Transaction might lead to a reduction in competition (or potential competition) in services supplied over the Parties' existing networks.

8.54 Our key findings are as follows.

- a. Pre-Transaction the Parties have tended to follow different FTTH deployment strategies and Vodacom has recently accounted for a modest (and decreasing) share of new deployments.
- b. If the Transaction does not proceed, the Parties can be expected to continue to follow different deployment strategies and [Confidential].
- c. The Transaction can be expected to [Confidential].
- d. Newco will continue to face competition in new FTTH deployment from a host of other fibre network providers including in areas targeted by the Parties.

⁹⁹ [Confidential] .

- e. As such, the loss of Vodacom as an independent deployer of FTTH infrastructure as a result of the Transaction is unlikely to lead to FTTH networks being deployed more slowly and/or to a lesser extent. On the contrary consumers are likely to benefit from quicker and more widespread deployment.

The Parties currently follow different deployment strategies; [Confidential]

8.55 As noted in Section 7, [Confidential].

8.56 [Confidential] .¹⁰⁰

8.57 [Confidential] .¹⁰¹

8.58 [Confidential]

Table 13: [Confidential]

Notes: [Confidential]

Source: [Confidential] .

8.59 As shown in Section 7, [Confidential].

- a. Vodacom was the [Confidential] in terms of new FTTH deployments in the 12 months to June 2021, with a share of [Confidential] of new FTTH deployments [Confidential] , [Confidential].
- b. Moreover, [Confidential].

Prospectively, the Parties can be expected to continue to follow different deployment strategies and [Confidential]

8.60 If the Transaction does not proceed, the Parties' deployment strategies will continue to be informed by different deployment models utilising proprietary information and different product offerings such that they will continue to target and prioritise different areas for deployment.

8.61 As noted earlier in this section, [Confidential] .¹⁰²

8.62 [Confidential]).¹⁰³¹⁰⁴

8.63 [Confidential] .

¹⁰⁰ [Confidential] .

¹⁰¹ [Confidential] .

¹⁰² [Confidential] .

¹⁰³ [Confidential] .

¹⁰⁴ [Confidential] .

Figure 7: [Confidential]

Source: [Confidential]

8.64 In addition to the different focuses of the Parties' deployments being likely to continue absent the Transaction, [Confidential].

8.65 [Confidential]¹⁰⁵¹⁰⁶

Table 14: [Confidential]

Notes: [Confidential]

Source: [Confidential].

8.66 [Confidential].

8.67 Further, where Vodacom has plans to deploy, it can be expected that post-Transaction Newco and/or other providers will deploy in the future. [Confidential]. Other major FNOs are present in areas where Vodacom has been deploying and can be expected to target remaining households in these areas where FTTH deployment is economic (as we explain further below). Moreover, Newco post-Transaction is likely to find additional deployment economic compared with the counterfactual where the Parties remain separate.

Likely future deployment by Newco with the Transaction

8.68 Post-Transaction, Newco will benefit from the combination of its existing strengths including in [Confidential]. In this regard, Newco can also be expected to, at a minimum, deploy to the areas which each Party would have deployed without the Transaction.

8.69 Moreover, as set out in Section 11, the Transaction is likely to significantly improve Newco's economics [Confidential]. In particular, Newco is likely to have an improved incentive and ability to deploy FTTH as a result of:

- a. pooling demand and reduced demand risk particularly for new fibre deployment to increasingly marginal areas;
- b. lower deployment costs; and
- c. improved access to funding.

8.70 As a result, we expect Newco to deploy to more areas and more quickly than without the Transaction. This will help improve the relatively poor fixed market outcomes experienced in

¹⁰⁵ The "FY" or Financial Year runs from April to March. For example, FY22 covers the period from April 2021 to March 2022.

¹⁰⁶ Africa Analysis segments the market for deployment into 'Core' and 'Low Income'. Vodacom has historically been active in the 'Core' segment only.

South Africa.¹⁰⁷ Newco's deployments (including the additional deployments resulting from the combination of the Parties' strengths) will be made available to ISPs on an open access basis.

A host of other FNOs will continue to deploy FTTH in competition with Newco

- 8.71 As set out in Table 8 and Table 9, in addition to Newco, there are several other large deployers of FTTH and many smaller ones. [Confidential]. The Parties' rivals are increasingly active across the country and outside of the main metropolitan areas.
- 8.72 As we explain in this sub-section, the Parties' rivals can be expected to continue to be active alongside Newco in deploying FTTH at pace and in seeking to extend FTTH to areas where commercial deployment is more challenging.

Openserve

- 8.73 Openserve's existing copper network has created mixed incentives in that:
- a. Openserve is much better positioned than rivals to roll out fibre because of its ability to re-use its duct and pole network in the deployment of fibre (while frustrating rivals' access to these facilities¹⁰⁸) and Openserve's existing relationships with copper customers helps facilitate their migration to fibre; and yet
 - b. Customer take-up of fibre effectively cannibalises Openserve's revenues from copper products.
- 8.74 However, the deployment of FTTH by other operators means that Openserve would be likely to lose its copper revenues anyway. This is likely to explain Openserve's switch to now focus heavily on FTTH deployment.¹⁰⁹ As noted in Table 9, Openserve accounted for [Confidential] of new homes passed in the 12-month period to June 2021 (up from [Confidential] in the previous period).

¹⁰⁷ For example, ICASA has reported only 1.5m fixed broadband subscriptions in 2020 compared with 76m active mobile broadband subscriptions and that South Africa ranked only 90th for fixed broadband speeds compared with 60th for mobile broadband speeds. ICASA, "[State of the ICT Sector Report](#)", March 2021, page 7 and pages 106-107 (accessed on 30 November 2021).

¹⁰⁸ For example, the *Data Services Market Inquiry Final Report* found that Telkom provided no access to its duct and pole network to rivals despite passive infrastructure being a large cost of deployment. Commission, "[Data Services Market Inquiry Final Report](#)", 2 December 2019, paragraph 34, page 26 (accessed on 30 November 2021).

¹⁰⁹ Indeed, a potential benefit of the Transaction is that greater deployment by Newco might lead Openserve to respond further in accelerating its own FTTH deployment to avoid losing its current copper customers to rivals.

- 8.75 Openserve reports that in March 2021, its FTTH network passed 549,957 homes while its FTTC network passed 2,275,082 homes.¹¹⁰ Thus Openserve has a large FTTC footprint which could potentially be upgraded to FTTH.
- 8.76 In its March 2021 Annual Report, Openserve further confirmed its future deployment plans aimed at connecting 300,000 additional premises to its fibre network, eventually taking its fibre footprint to over 800,000 premises.¹¹¹
- 8.77 **[Confidential]**¹¹² Openserve is supported in overbuilding rivals through its ability to re-use its infrastructure (with less need for additional wayleaves) to deploy at relatively low cost.
- a. In its report for the CIVH/Vumatel merger, the Commission noted that Openserve has substantially lower costs to install fibre due to its existing copper-infrastructure ducts.¹¹³
 - b. An article from Business Insider South Africa commented, in context of Openserve's 2021 price cuts, that *"Openserve's infrastructure rollout has piggybacked on Telkom's historic telecommunications monopoly, resulting in an easier access to the fibre market compared to independent providers. In turn, Openserve has managed to edge out FNO competitors, like Vumatel and Octotel, on price."*¹¹⁴
 - c. During an interview in July 2021, Openserve's Chief Digital and Strategy office stated that the company is *"upgrading [its] infrastructure nodes that allow [it] to directly connect homes with fibre as the demand for it continues to grow"* and *"collaborating with a number of developers and estate managers to connect their respective properties to the Openserve fibre broadband network"*.¹¹⁵ Telkom has also recently confirmed that it has reduced the overall cost to connect FTTH by approximately 50% in 2021.¹¹⁶

¹¹⁰ Telkom, ["Group Abridged Annual results 2021"](#), 31 March 2021, page 29 (accessed on 26 November 2021). Telkom would also benefit from having passive infrastructure more widely available including for its traditional copper voice telephony service.

¹¹¹ Telkom, ["Telkom group Annual results for the year ended 31 March 2021"](#), March 2021, page 12 (accessed on 12 October 2021).

¹¹² Africa Analysis, "FTTH Market Tracking Programme Quarter Ending: March 2021", prepared for Vodacom, 7 June 2021, page 22.

¹¹³ **[Confidential]**.

¹¹⁴ Business Insider South Africa, ["Openserve fibre speeds will soon double – at no extra cost to existing clients"](#), 15 February 2021 (accessed on 12 October 2021).

¹¹⁵ Mail and Guardian, ["The power of connectivity: Enabling participation in a digital economy"](#), 9 July 2021 (accessed on 12 October 2021).

¹¹⁶ Reuters, ["Edited Transcript of TKGJ.J earnings conference call or presentation 10-Nov-20 8:00am GMT"](#), 10 November 2020, (accessed on 12 October 2021), also available [here](#) (cached version accessed on 30 November 2021).

Other FNOs

8.78 Other FNOs are also pursuing aggressive expansion plans.

8.79 **Vox/Frogfoot** stated in February 2020 that it had become South Africa's third largest FTTH provider and was planning to extend its network to as many as [Confidential] homes passed in coming years including to underserved townships.¹¹⁷ Frogfoot has indicated that it will continue to invest heavily in expansion including to areas outside the major cities:

- a. In June 2021, Vox's CEO said that it expects the Frogfoot network to "pass 1 million homes within the next 18 months."¹¹⁸
- b. Vox recently secured a loan through a consortium of banks, led by Investec, to help Frogfoot expand its network. As part of this financing, it announced that Frogfoot would be shifting its focus from metro cities to reaching smaller towns in South Africa.¹¹⁹
- c. [Confidential] ."¹²⁰ It is also planning deployment in lower income geographic markets.¹²¹
- d. Vox has recently cemented its position as the third largest FNO by purchasing Link Africa's fibre network in the Western Cape.¹²² Previously, in 2019, Frogfoot acquired the network and customer base of Blitz Fibre, which would allow Frogfoot to increase its presence in Gauteng, Eastern Cape and KwaZulu-Natal.¹²³
- e. Frogfoot passed [Confidential] new homes in the 12 months to June 2021, which was [Confidential] of Vodacom's entire FTTH network in June 2021 (see Table 9).

8.80 **MetroFibre Networks ('MFN')** is a major FTTH provider and a "high-growth player in South Africa's Fibre-To-The-Home ("FTTH") and Fibre-To-The-Business ("FTTB") markets".¹²⁴ Like

¹¹⁷ Tech Central, "[Vox more than doubles home fibre roll-out target](#)", 4 February 2020 (accessed on 26 November 2021)

¹¹⁸ IT Web, "[How fibre is driving the future forward](#)", 29 June 2021 (accessed on 12 October 2021).

¹¹⁹ Capacity Media, "[Investec heads loan to Vox to expand South African FTTH](#)", 18 February 2021 (accessed on 12 October 2021).

¹²⁰ [Confidential] .

¹²¹ *Ibid.*

¹²² Biz Community, "[Frogfoot acquires Link Africa's fibre network in the Western Cape](#)", 20 September 2021 (accessed on 11 November 2021).

¹²³ My Broadband, "[Frogfoot acquires Blitz Fibre network](#)", 12 September 2019 (accessed on 12 October 2021).

¹²⁴ MFN, "[AIIM, SAHIF and STOA sign follow-on acquisition in MetroFibre Network, consolidating their position in South Africa's fibre landscape](#)", 15 June 2021 (accessed on 25 November 2021).

Frogfoot, MFN has also relied on acquisitions to support its rapid growth. MFN recently acquired the FTTH network and infrastructure of Link Africa in the provinces of Gauteng and KwaZulu-Natal. This added 10,000 homes to the MFN network, taking the total homes passed by the network to 205,000 across five provinces in South Africa.¹²⁵ MFN's expansion in FTTH has been backed by multiple successful rounds of funding. [Confidential]¹²⁶

- 8.81 Currently, MFN is undertaking a multi-billion Rand expansion plan for its network over the next three years. Recent funding efforts have included:
- a. In November 2020, African Infrastructure Investment Managers acquired a minority stake in the fibre operator through an investment of R980 million.¹²⁷ This was part of a R1.5 billion equity funding, with the incremental funding from existing shareholder STOA Infra & Energy (a France-based investment vehicle) and the founders of the South African Housing & Infrastructure Fund.¹²⁸
 - b. In March 2021, it was reported that MFN has secured debt funding of R2.5 billion from Investec to fund its expansion operations. MFN's CFO commented that it intended to deploy R4 billion to connect 300,000 additional homes and businesses over the next three years.¹²⁹
- 8.82 MFN passed [Confidential] new homes in the 12 months to June 2021 (see Table 9), which represented [Confidential] of new deployments in that period.
- 8.83 **Octotel** is the leading FTTH provider in the Western Cape with an open access fibre network.¹³⁰ For 2021, it plans to expand the total premises passed by 100,000 and connections by 30,000.¹³¹ Octotel, while traditionally focused in Cape Town, is now looking to expand into other areas. [Confidential].¹³² Octotel's CEO has expressed that the fibre operator is looking

¹²⁵ MFN, "[MetroFibre acquires Link Africa's FTTH infrastructure in Gauteng and Kwa-Zulu Natal](#)", 21 April 2021 (accessed on 12 October 2021).

¹²⁶ [Confidential] .

¹²⁷ Business Tech, "[South Africa fibre company reveals R3 billion expansion plan to cover 300,000 homes](#)", 17 November 2020 (accessed on 12 October 2021).

¹²⁸ IT Web, "[African investment firm buys R980m stake in MetroFibre Network](#)", 17 November 2020 (accessed on 12 October 2021).

¹²⁹ Capacity Media, "[South Africa's MetroFibre borrows \\$169 million to expand network](#)", 25 March 2021 (accessed on 12 October 2021).

¹³⁰ MyBroadband, "[Octotel on the hunt to buy fibre networks](#)", 2 February 2021 (accessed on 25 November 2021).

¹³¹ [Confidential] .

¹³² *Ibid.*, page 21.

for other FTTH networks to acquire as part of its expansion plans.¹³³ Octotel has recently acquired Samarlink (Pty) Ltd, a local Plettenberg Bay FTTH operator. According to Octotel's CEO, the "*Octotel Plett project will see over 5,500 homes in Plett passed before April this year*".¹³⁴ Octotel passed [Confidential] new homes in the 12 months to June 2021, which represented [Confidential] of new deployments nationally in that period (see Table 9).

8.84 In addition to the above, we note research from Africa Analysis which suggests that there is a growing number of operators in the market and many are now turning to untapped segments including secondary cities and low income areas:

a. [Confidential] .¹³⁵¹³⁶

b. [Confidential] .¹³⁷

Conclusion on the effects of the Transaction on dynamic competition in wholesale FTTH services

8.85 In summary, South African ISPs and fixed internet users are benefitting from effective dynamic competition in FTTH deployment, with multiple operators aggressively deploying FTTH. Accordingly, we consider that it is unlikely that the Transaction would lead to a substantial prevention or lessening of competition due to slower or less widespread FTTH deployment from the removal of Vodacom as an independent FTTH deployer. Moreover, the Transaction can be expected to position Newco to increase its investment in FTTH compared with the investment that would occur if the Parties remained separate.

8.86 The likely impact of the Transaction in extending FTTH deployment can be expected to benefit consumers and communities in gaining access to fibre broadband (see Section 11),

¹³³ MyBroadband, "[Octotel on the hunt to buy fibre networks](#)", 2 February 2021 (accessed on 25 November 2021).

¹³⁴ *Ibid.*

¹³⁵ [Confidential] .

¹³⁶ [Confidential]

¹³⁷ [Confidential] .

Section 9

Coordinated effects: wholesale FTTH services

- 9.1 In the previous section, we set out why we consider it unlikely that the Transaction would lead to anticompetitive unilateral effects, particularly given the limited competitive overlap between the Parties and because Newco would continue to face effective competitive constraints post-Transaction. In this section, we consider whether the Transaction is likely to give rise to anticompetitive coordinated effects, particularly with respect to service offers (e.g., price/quality combinations) and to new FTTH deployment.
- 9.2 For a merger to result in a substantial prevention or lessening of competition through coordinated effects the merger would need to either make existing coordination (also called tacit collusion) in a market stronger and/or more sustainable, or the merger would need to cause a competitive market to switch to a coordinated outcome.
- 9.3 As set out below, there is no evidence of existing coordination with respect to the supply of existing wholesale FTTH services or with respect to new FTTH deployments. Examining the necessary conditions for coordination to emerge and be sustainable shows that key market features make coordination with respect to pricing or deployment highly unlikely and that these features would not change materially under the Transaction.

Framework for assessing the risk of coordinated effects

- 9.4 A theory of harm based on coordinated effects requires the following necessary conditions to be cumulatively satisfied: ¹³⁸
- a. The firms must be able to tacitly reach consensus over the terms of coordination such as the prices they will charge or the customers they will supply (requirement for *alignment*);
 - b. There must be means by which firms can detect if other firms depart from the terms of coordination and there must be a credible mechanism by which such departures are

¹³⁸ L. Kaplow and C. Shapiro, “Antitrust”, Handbook of Law and Economics, Volume 2, 2007, page 1103, and CMA’s “[Merger Assessment Guidelines](#)”, 2021, paragraph 6.10, page 48 (accessed 30 November 2021), reflecting the criteria in the *Airtours v European Commission* judgement.

effectively punished when they are detected so that firms regard it as in their best interests to adhere to the terms of coordination (requirement for *internal stability*); and

- c. The profitability of coordination must not be able to be undermined by competition from firms outside of the coordinating group, including from potential entrants or customer reactions (requirement for *external stability*); and
- d. The merger must make it likely that the above set of necessary conditions are satisfied or satisfied more strongly (requirement for *merger specificity*).

9.5 In principle, a merger could potentially facilitate coordination in a number of ways. For example, a merger that reduces the number of players in the market may make it easier for the remaining firms to reach a consensus over the terms of coordination. A merger which makes an oligopoly market significantly more concentrated would increase the average share of the market-wide collusive profit that each player gets. As the collusive profit increases for some or all players, it becomes more likely that all players will respect the collusive outcome, and less likely that at least one player tries to increase their own short-term profits by “cheating”, i.e., undercutting the collusive price. A merger that removes a maverick from the market could also make it more profitable for the other players to coordinate.

9.6 Most markets are not found to be conducive to coordination. For example, an analysis of all 3,000 merger decisions by the EC between 1991 and 2004 identified only 62 decisions with a non-trivial discussion of the possibility the merger might involve coordinated effects and the EC intervened by requiring remedies or outright prohibition to avoid coordinated effects in only 0.2% of the total number of markets examined.¹³⁹ Further, in all those cases, except one, the markets at risk of coordination were markets dominated by two, largely symmetric, major players.¹⁴⁰ While concerns regarding coordinated effects have been raised in some subsequent mergers, they remain rare.¹⁴¹

9.7 In the remainder of this section, we examine:

¹³⁹ Davies, S., M. Olczak and H. Coles, [“Tacit Collusion, Firm Asymmetries and Numbers: Evidence from EC Merger Cases”](#), 2007, CCP Working Paper 07-7, page 30.

¹⁴⁰ These decisions covered 30 markets, in 29 of which the Commission expected a duopoly structure post-merger, with only one involving three-firm coordination: Airtours, which was overturned on appeal. Davies, S., M. Olczak and H. Coles, [“Tacit Collusion, Firm Asymmetries and Numbers: Evidence from EC Merger Cases”](#), 2007, CCP Working Paper 07-7, page 4.

¹⁴¹ In *Hutchison 3G Italy/Wind*, the Commission considered that a merger that would reduce the number of mobile operators from four to three, symmetric operators, remove a maverick and in the presence of certain facilitating practices could lead to coordination (EC, *Hutchison 3G Italy/Wind* (case M.7758), [EC decision](#), 01 July 2016, paragraphs 981, 1207, and 1343, pages 187, 239, and 259.)

- a. Whether wholesale FTTH markets in South Africa currently show evidence of coordination with respect to service offers and/or new deployment and find that they do not;
- b. Whether the Transaction would sufficiently change competition so that wholesale FTTH providers which are not coordinating their current offers would start doing so after the Transaction; and
- c. Whether the Transaction could lead to coordination with respect to FTTH deployment.

Assessment of evidence of current coordination in FTTH markets

9.8 Current market outcomes do not show evidence of coordination between FTTH providers (including with respect to current offers or deployment):

- a. Multiple operators are investing heavily in new FTTH deployments;¹⁴²
- b. FTTH deployment is growing strongly, e.g., by 40% (around 800,000 homes passed) between 2020 and 2021 (see Table 8);
- c. [Confidential] ;¹⁴³
- d. Other operators such as Frogfoot and MFN have been rapidly growing their shares of total homes passed (see Table 8);
- e. In its March 2021 Annual Report, Openserve confirmed its future deployment plans aimed at connecting 300,000 additional premises to its fibre network, eventually taking its fibre footprint to over 800,000 premises;¹⁴⁴
- f. FNOs are in a “*price war*” with a series of price cuts this year.¹⁴⁵

9.9 Lack of evidence of past coordination makes it unlikely that a merger will cause coordination unless it substantially changes the relevant market features, as noted in the EU and US Horizontal Merger Guidelines:

¹⁴² See Section 8.

¹⁴³ My Broadband, “[Vumatel overtakes Openserve as biggest fibre-to-the-home operator in South Africa](#)”, 19 July 2019 (accessed on 26 November 2021).

¹⁴⁴ Telkom, “[Telkom group Annual results for the year ended 31 March 2021](#)”, March 2021 page 12 (accessed on 12 October 2021).

¹⁴⁵ ITWeb, “[Evotel plans fibre network expansion amid price war](#)”, 27 September 2021 (accessed on 26 November 2021).

- a. The EC's Horizontal Merger Guidelines state that: *"Evidence of past coordination is important if the relevant market characteristics have not changed appreciably or are not likely to do so in the near future".*¹⁴⁶
- b. Similarly, the US Horizontal Merger Guidelines state that *"The Agencies presume that market conditions are conducive to coordinated interaction if firms representing a substantial share in the relevant market appear to have previously engaged in express collusion affecting the relevant market, unless competitive conditions in the market have since changed significantly."*¹⁴⁷

9.10 We next consider the likelihood that the Transaction would switch the market from a non-coordinated to a coordinated outcome with respect to (i) wholesale FTTH service offers; and/or (ii) FTTH deployment.

Assessment of the risk of coordination with respect to FTTH service offers

9.11 We now consider whether the Transaction would be likely to switch the market so that FTTH providers which are not currently coordinating start to coordinate with respect to the wholesale FTTH access prices and quality they offer.

9.12 In most of South Africa, wholesale FTTH services are supplied by operators which have local monopolies and thus do not compete with each other to supply particular premises. Thus, the main competitive constraint on providers' offers is likely to come from the general incentive to increase the rate of connections per FTTH home passed (i.e., as opposed to competition from rival providers in the minority of areas where FNOs' FTTH networks overlap).

9.13 In addition, and relatedly, a number of other market features make coordination highly unlikely because:

- a. The [Confidential] providers set uniform network-wide prices which can be expected to be determined by factors relevant to their individual overall networks such as their costs of supply, the demand conditions they face across the areas their networks cover and the extent to which their networks overlap with other networks (Figure 5 and Table 1 show significant variation in pricing between operators for similar connections of similar speeds);
- b. There are substantial differences between wholesale FTTH providers including in terms of their network coverage (number of premises passed), connectivity rates, types of

¹⁴⁶ EC, "[Horizontal Merger Guidelines](#)", 2004, paragraph 43. Also N. Fabra and M. Motta, "[Assessing coordinated effects in merger cases](#)", Handbook of Game Theory and Industrial Organization, 2018, Volume II, chapter 5, pages 91-122.

¹⁴⁷ US Department of Justice, "[Horizontal Merger Guidelines](#)", 2010, section 7.2.

areas/premises covered, cost structures, financial positions and the extent of their presence in the retail internet access services markets;¹⁴⁸

- c. Telkom/Openserve is further differentiated from the other fibre providers in that it has relatively low costs in deploying wholesale FTTH services (as noted in Section 8);
- d. Once an operator has incurred the fixed costs of deploying FTTH infrastructure to an area, it faces relatively low costs to connect customers to its network – this creates incentives for operators to price to try to encourage additional customers to take FTTH rather than to set high prices that limit further take-up; and
- e. The market is dynamic with customer demand for faster speeds and additional data volumes growing rapidly and with complex pricing. It is difficult for operators to determine unilaterally optimal pricing with FTTH going from a premium to a mass-market product and with operators needing to set prices for different upload and download speed gradients and whether packages are capped, uncapped or throttled, as well as needing to set the pricing of installation and activation. For operators to reach a coordinated position would require them to be able to reach a consensus on all these aspects and even then coordination would break down if market conditions change so that the previous consensus is no longer optimal for all players.

9.14 These market features explain the absence of evidence of current coordination in FTTH services. They also show why coordination is highly unlikely to emerge as a result of the Transaction. In particular:

- a. the change in the structure of supply resulting from the Transaction is limited (see Section 7);
- b. [Confidential] providers can be expected to continue to set network-wide prices based on the demand and supply conditions specific to their networks as set out in Section 8;
- c. there would be at least four other major FTTH providers (i.e., Openserve, Frogfoot, MFN and Octotel) in addition to Newco (with significant differences between them) as well as a host of smaller providers;
- d. the incentive to price to encourage take-up of FTTH can be expected to continue into the future;

¹⁴⁸ For instance, Openserve and Vumatel are large vertically integrated FTTH providers present with national presence, with more than [Confidential] each of share of homes passed nationally (see Table 8) and a large number of ISPs present on their networks (see Figure 8; [Confidential]). However, there are [Confidential] FNOs are active in South Africa so that many are very small (Active in the sense of having onboarded at least one retail service provider to their network. This may include closed-access networks. [Confidential])

- e. changing demand and cost conditions will continue to make pricing complex and make coordination difficult to achieve even if operators had the incentives to reach a common coordinated position.

Assessment of the risk of coordination with respect to deployment

- 9.15 Coordination with respect to deployment would require operators to reach and sustain a tacitly coordinated understanding to restrict their rate of deployment.
- 9.16 Conceptually this is implausible. In particular, while setting prices above the competitive level would increase operators' profits (up to a point), not deploying FTTH to an area would only increase an operator's profits if it is not profitable to deploy to that area (such that deployment would not occur anyway) or if profits would be greater by deploying later. However, the significant (in some instances essential) advantage of being the first to deploy in an area (conditional on the area being profitable for at least one deployer) mean that reaching a tacitly coordinated understanding to deploy more slowly would be inherently difficult to reach and sustain.
- 9.17 Openserve may have been in a different position from the other providers in this respect because it could earn revenues from its existing copper network. However, the other FNOs do not share this incentive and competition from the other providers seems to have forced Openserve to invest in FTTH deployment as well. In particular, with other FNOs rolling out, Openserve faces losing its copper revenues anyway.
- 9.18 Vodacom only accounted for [Confidential] of recent FTTH deployments (see Table 9) so that it would also be highly unlikely that the loss of Vodacom as an independent competitor would lead the market to switch to a coordinated outcome in deployment. The other major FTTH deployers and the host of smaller providers would be expected to continue to face incentives for rapid deployment.
- 9.19 It also seems difficult to imagine the nature of a coordinated position for FTTH deployment given the number of FNOs and the differences between them. Further, there does not appear to be any credible punishment mechanism. Once one player has rolled out to an area, another operator that sought to overbuild that area would risk significant losses by virtue of being a second mover.

Conclusions on the risk of coordinated effects in FTTH services

- 9.20 In summary, we find that there is no realistic prospect of coordinated effects arising in wholesale FTTH supply from the Transaction with respect to service offers or deployment. Key market features make coordination highly unlikely pre-Transaction and these features are not substantially changed by the Transaction in a way that would make coordination more likely to emerge or be sustained.

Section 10

Retail residential fixed internet access services

- 10.1 This section sets out our assessment of the potential competitive effects of the Transaction on retail residential fixed internet access and other associated services. Both Vodacom and SADV supply these services, with SADV being wholly owned by DFA and DFA wholly owned by Newco. These services will continue to be provided by the Parties' businesses separately. The Transaction will result in a change in ownership to the extent that Vodacom will acquire joint control of Newco. We find no substantial risk of adverse competitive effects arising from horizontal unilateral, coordinated effects, or from vertical effects (i.e., due to input or customer foreclosure).
- 10.2 This section is structured as follows:
- a. First, we set out the reasons for our view that there is a national market for the retail supply of fixed internet access and other associated services by ISPs to residential customers.
 - b. We then assess whether the Transaction is likely to result in unilateral horizontal effects. We find that it will not, given the large number of retail ISP competitors, the modest retail residential fixed internet access market shares of Vodacom and SADV and that the Transaction will result in Vodacom only acquiring joint control rather than full control of Newco.
 - c. Next, we assess whether the Transaction is likely to raise the cost or downgrade the quality of retail residential fixed internet access by restricting ISPs' access to Newco's wholesale FTTH services ('input foreclosure'). We find that Newco will have neither the ability nor the incentive post-Transaction to change the supply of wholesale FTTH services in such a way as to harm competition in retail residential fixed internet access and other associated services.
 - d. We then assess whether the Transaction is likely to foreclose rival wholesale FTTH access providers by restricting their access to the Parties' ISP operations ('customer foreclosure'). We find that there is no realistic risk that the Transaction will lead to the foreclosure of rival wholesale FTTH access providers given the Parties' small retail shares.

- e. Finally, we explain why the changes in the structure of supply of wholesale FTTH services resulting from the Transaction will not give rise to coordinated effects in the retail residential fixed internet access market.

10.3 Appendix D sets out the data and methodology for the analyses presented in this section.

Market definition

Precedent

- 10.4 This sub-section examines market definition for retail residential fixed internet access and other associated services.
- 10.5 In its CIVH/Vumatel merger report, the Commission found a single relevant retail fixed ISP market for internet access and related services, with no further segmentation by technology [Confidential] .¹⁴⁹
- 10.6 The Commission did not conclude on the scope of the relevant geographic market for retail broadband services in relation to the CIVH/Vumatel merger [Confidential] ”.¹⁵⁰
- 10.7 The EC has considered the retail supply of fixed internet services in a number of cases. In its *Vodafone/Certain Liberty Global assets* decision, it found that there was a relevant product market which was the overall retail market for the provision of *fixed* internet access, including all product types, distribution modes and speeds/bandwidths, to residential and small business customers. The EC excluded the supply of fixed Internet services provided through mobile network infrastructure finding that the services were only partially substitutable to low-speed DSL services.¹⁵¹ The EC also excluded services to large business customers on the grounds that they often need specialised infrastructure and customised solutions. The EC also found in that decision that the retail market for fixed internet access is national.¹⁵²

Assessment and conclusion on the relevant market for retail residential fixed internet access and other associated services

- 10.8 Market definition provides a framework for the competitive analysis in that it identifies the demand and supply side substitutes that may potentially constrain the behaviour of the firms under investigation. For example, a firm may be deterred from setting prices above the competitive level if doing so would cause a significant number of customers to switch to other suppliers or if suppliers of another product switch to start supplying a substitute to the firm's product. Market definition can be specific to the competition problem being investigated and

¹⁴⁹ [Confidential] .

¹⁵⁰ [Confidential] .

¹⁵¹ EC, *Vodafone / Certain Liberty Global Assets* (case M.8864), [EC decision](#), 18 July 2019, paragraph 56, pages 26-27.

¹⁵² *Ibid*, paragraph 61, page 28.

can be asymmetric (i.e., product B may be found to competitively constrain product A but not *vice versa*).¹⁵³

- 10.9 As noted by the Commission in its CIVH/Vumatel merger report, ISPs sell fixed internet access with varying speeds either separately or bundled and can include metered-voice, data (capped or uncapped) and/or access to other services such as email, file sharing, web hosting, data back-up, video, VoIP.¹⁵⁴ The Commission considered that consumers do not view internet access services offered over different underlying technologies as substitutable,¹⁵⁵ but that the ability of ISPs to switch between supplying services across the different fixed technologies and to different customer groups supported a single retail market for ISP services.¹⁵⁶ While the Commission's logic would still support fibre and DSL services belonging to the same market, as shown in Section 3, the volume of DSL connections has been declining rapidly such that retail DSL is of diminishing relevance.
- 10.10 In relation to whether fixed wireless¹⁵⁷, mobile and satellite services are in the same retail market as fibre and DSL broadband (i.e., fixed wired services), we note the following.
- a. In terms of demand-side substitution, fixed wireless/LTE, mobile and satellite services are vulnerable to congestion and are unable to match the speed and reliability of fibre. With increasing customer bandwidth demand, it is unlikely on a forward-looking basis that customers who are after the speed and reliability of fibre broadband will regard these other services as close substitutes in areas where fibre is available. Mobile is further distinguished from fixed broadband services in allowing customers to be connected across the mobile operator's coverage footprint. Satellite broadband requires a satellite antenna to be installed and is relatively expensive such that it tends to be used only where there is inadequate coverage from other technologies.
 - b. In terms of supply-side substitution, there are grounds to consider that an ISP which offer fixed wireless services could readily to switch to also supply FTTH services given the presence of open access wholesale FTTH providers that offer standard contracts for ISPs. However, the extent of supply-side substitutability for ISPs supplying FTTH to switch to also supply fixed wireless or satellite services is less clear. We understand

¹⁵³ For example, it is conceivable that branded cola drinks may constrain the prices of private label cola drinks but not *vice versa* if sufficient customers have a strong preference for branded drinks.

¹⁵⁴ [Confidential] .

¹⁵⁵ [Confidential] .

¹⁵⁶ In particular, even if consumers do not regard different technologies as close substitutes, a monopolist supplying only one technology at the retail level would be competitively constrained by the ability of retail providers supplying other technologies to readily switch into also supplying that technology.

¹⁵⁷ We use the term fixed wireless to refer to both (i) line-of-sight (LoS) fixed wireless services between a tower and a radio antenna attached to a customer's house; and fixed LTE/5G services offering using LTE and 5G technology but designed to be used at a fixed geo-location.

that LoS fixed wireless services tend to be self-supplied which would require ISPs to invest in network facilities. We do not have information on ISPs' arrangements with mobile or satellite operators to assess the ease of entry into the retail supply of fixed LTE or satellite services. Differences in the structure of supply between retail FTTH and fixed LTE internet access services suggest that entry conditions differ. For example, Africa Analysis¹⁵⁸ estimates that Rain accounts for [Confidential] and Telkom Retail [Confidential] of retail fixed LTE/5G internet access services, whereas the supply of retail FTTH internet access services is far more fragmented (see Table 15, below).

- 10.11 SADV's supply of retail internet services to residential customers almost exclusively relates to FTTH services.¹⁵⁹ As such, we consider that for the competitive assessment of the Transaction, the relevant market should be identified considering the competitive constraints on the retail supply of FTTH services. For this purpose, we consider that the relevant market is likely to include services supplied over FTTH, DSL and fixed wireless services on the basis of supply-side substitutability. However, the precise market definition could be left open because our conclusions in relation to retail fixed internet services would not change were the market defined more narrowly as FTTH-only or FTTH and DSL only.
- 10.12 We note that where business customers obtain similar services to residential customers and the same ISPs serve both groups then they are likely to form part of the same market. On the other hand, large enterprises and business customers with specialist requirements are served by specialist providers of enterprise services. For example, enterprise customers generally need special infrastructure such as VPNs and dedicated lines and require high transmission quality in terms of availability, latency and bandwidth. As such, the retail fixed internet access market would not extend to include enterprise customers with additional requirements to those provided by basic/residential ISP services.
- 10.13 We consider that the Commission's logic would also support the finding of a national retail ISP market. This is because ISPs are readily able to supply services in different areas if they are able to obtain wholesale services in the relevant areas [Confidential].¹⁶⁰
- 10.14 For the purposes of this assessment, we proceed on the basis that the relevant downstream market is a single, national market for retail residential fixed internet access and other associated services offered over fibre, DSL and fixed wireless, which excludes specialist services for enterprise customers.

¹⁵⁸ Africa Analysis estimates (3 December 2021). These estimates include both consumer and business connections.

¹⁵⁹ [Confidential] .

¹⁶⁰ [Confidential] .

Unilateral horizontal effects in retail residential fixed internet access services

- 10.15 This sub-section sets out our assessment of whether the Transaction is likely to give rise to anticompetitive unilateral horizontal effects in retail residential fixed internet access and other associated services.
- 10.16 Unilateral horizontal effects can arise when firms that are competitors merge and the removal of the competitive constraint they imposed on each other allows the merged entity to increase prices or otherwise degrade their offers to customers. The risk of harm arises where a firm which would have previously lost significant customers to the other party had it raised its price would now be able to recapture sufficient sales from those customers who switch to the offer of the other party making a price increase profitable.
- 10.17 We have shares available for ISPs for the retail supply of residential services internet access services over FTTH. We first present those and then present our estimates of the Parties' market shares for the market defined as including FTTH, DSL and fixed wireless. As set out in Table 15, retail supply of FTTH in June 2021 was relatively fragmented.¹⁶¹ Afrihost is the largest ISP with a [Confidential] share of FTTH homes connected. [Confidential]. SADV's share was only [Confidential].
- 10.18 The market for retail residential fixed internet access also appears dynamically competitive with rapid growth of FTTH connections over recent years including by more than 45% between June 2020 and June 2021.

Table 15 [Confidential]

Notes: [Confidential]

Sources: [Confidential].

- 10.19 Neither SADV nor Vodacom offer DSL services. We estimate SADV's share of the retail supply of FTTH and DSL residential internet access services as around [Confidential] and Vodacom's share as around [Confidential] as at June 2021.¹⁶²
- 10.20 Vodacom does offer retail residential fixed wireless services (in particular fixed LTE) and had [Confidential] fixed wireless connections in 2021, equal to around [Confidential] of total market for fixed wireless services, based on [Confidential] data which estimates the total number of fixed wireless connections as [Confidential] in March 2021 (of which [Confidential] were fixed

¹⁶¹ We assessed market shares based on homes connected by each ISP. To the extent that the type and share of customers taking associated services are similar across ISPs, market shares for the volume of associated services will be similar to the market shares of homes connected.

¹⁶² [Confidential].

LTE connections).¹⁶³ CIVH (via SADV) only had negligible ([Confidential]) fixed wireless connections as of March 2021.

- 10.21 As such, for the retail residential fixed internet access market (comprising FTTH, DSL and fixed wireless), we estimate that Vodacom has a market share in 2021 H1 of [Confidential] and SADV [Confidential] (see Table 16).¹⁶⁴

Table 16: [Confidential]

Note: [Confidential]

[Confidential]

Sources: [Confidential]

- 10.22 Post-Transaction, retail fixed internet access will continue to be offered by Vodacom and SADV separately. As noted above, in relation to the provision of retail fixed internet access, the Transaction will result in a change in ownership to the extent that Vodacom gains joint control of Newco which, in turn, controls SADV.
- 10.23 We consider that the Transaction does not give rise to a risk of adverse unilateral horizontal effects because:
- a. effective competition will be maintained by the large number of retail residential ISP competitors;
 - b. barriers to entry are low as found by the Commission in the CIVH/Vumatel merger: [Confidential];¹⁶⁵
 - c. Vodacom and SADV will continue to offer retail residential internet access separately;
 - d. while Vodacom will become a shareholder of Newco, Newco's other shareholders will have no incentive for SADV to compete less strongly in the retail residential fixed internet access market post-Transaction and Vodacom, as a shareholder, will have a duty to act in the interests of Newco; and
 - e. the Transaction, in which Vodacom gains joint control of an ISP with a [Confidential] market share, will not materially change Vodacom's incentives to compete as an ISP.

Input foreclosure in relation to retail fixed internet access services

No ability to foreclose

- 10.24 We have found in Section 8 of the report that the Transaction would not lead to any unilateral anti-competitive effects in relation to wholesale FTTH services. As such, the Transaction would

¹⁶³ [Confidential] .

¹⁶⁴ [Confidential]

¹⁶⁵ [Confidential] .

not create or increase any ability of Newco to foreclose. Thus, any risk of foreclosure would have to arise from Newco having a pre-existing ability to foreclose competition in the downstream retail fixed internet access market. However, there is no evidence of the Parties acting to foreclose the market.

10.25 [Confidential].

10.26 [Confidential].

10.27 [Confidential].¹⁶⁶

10.28 We understand that the conditions will apply to the relevant Newco subsidiaries that were CIVH subsidiaries at the date of implementation of the CIVH/Vumatel merger (including DFA, Vumatel, SADV). Following the Transaction, Vodacom's FTTH assets and activities will be transferred to Vumatel, and for this reason the conditions will be extended to these assets. As such, these conditions will remove any ability of Newco to engage post-Transaction in input foreclosure in relation to FTTH access subject to the conditions. Indeed, by being extended to the Vodacom assets and services, the Transaction would result in the conditions guaranteeing open access applying to more infrastructure than currently.

10.29 As part of the conditions in the CIVH/Vumatel merger, CIVH is required to provide to the Commission each year a report detailing its compliance with the conditions over the previous twelve months. From the recent reports which we have reviewed, there is no evidence that the conditions have not been adhered to.

10.30 [Confidential]^{167 168169} .

No incentive to foreclose

10.31 Since Newco will not have the ability to engage in input foreclosure it is moot whether it would have the incentive to do so – the theory of harm falls at the first hurdle of no ability.

10.32 In any event, we explain why Newco does not have the incentive to withhold access to its wholesale FTTH services, nor will the Transaction change its incentives in this respect.

¹⁶⁶ Competition Tribunal of South Africa, CIVH/Vumatel merger (case LM109Jul18), reasons for decision, 28 August 2019, paragraphs 139-140, pages 30-31.

¹⁶⁷ Competition Tribunal of South Africa, CIVH/Vumatel merger (case LM109Jul18), order, 29 April 2019, clause 3.4.

¹⁶⁸ [Confidential] .

¹⁶⁹ [Confidential]

- 10.33 In relation to the CIVH/Vumatel merger, the Commission found that there are commercial incentives for providers of wholesale FTTH services not to withhold (whether partially or totally) access from ISPs [Confidential] .¹⁷⁰
- 10.34 This economic incentive helps explain why, even before the conditions, CIVH (i.e., the companies that are now part of CIVH) had operated an open access model for FTTH access to attract and support as wide a pool as possible of ISP customers [Confidential] .
- 10.35 Moreover, the Transaction does not change CIVH's incentives so as to create an incentive to foreclose. CIVH (i.e., Newco's majority shareholder) is not acquiring any interest in Vodacom's ISP business. As such, it would have no incentive to allow Newco to sacrifice profits by restricting wholesale FTTH supply to benefit Vodacom's business.
- 10.36 Accordingly, even putting aside the lack of ability to foreclose ISPs, the Transaction would not create or enhance any incentive for Newco to engage in input foreclosure.

Customer foreclosure of wholesale FTTH service providers

- 10.37 The customer foreclosure theory of harm is that the Transaction would lead to the Parties' ISP businesses ceasing (partially or totally) to use rival wholesale FTTH providers and, by doing so, foreclosing competition in the wholesale FTTH access market.
- 10.38 Customer foreclosure is only possible where the firms account for a large share of downstream demand so that if they reduce their purchases from rival wholesale providers that would force those providers to exit or to significantly curtail their activities.
- 10.39 Neither of the merging parties is an important source of demand nor an essential trading partner for wholesale FTTH providers. As set out in Table 15, CIVH and Vodacom have modest shares of supply in the downstream supply of retail ISP services: in June 2021, CIVH's share in terms of FTTH homes connected was only [Confidential]. Vodacom's share was only [Confidential] . Further, as set out in Table 17, Vodacom's purchases of wholesale FTTH from the main FTTH competitors account for [Confidential] share of their sales. Vodacom's bitstream purchases are between [Confidential] of the number of homes connected by [Confidential], and remain below [Confidential] considering the full set of Vodacom's bitstream providers.

Table 17: Vodacom's bitstream purchases from rival FNOs, July 2021

Note: [Confidential] .
Sources: [Confidential] .

- 10.40 Further, while the Parties do not have the ability to foreclose competition in wholesale FTTH access through restricting their ISPs' purchases from rivals, doing so would be likely to significantly damage their ISP activities. For example, Vodacom's ISP business acquired [Confidential] of its customer connections from rival wholesale FTTH providers (Table 18).

¹⁷⁰ [Confidential] .

Given that wholesale FTTH services are mainly supplied as local monopolies, if the Parties' ISP businesses were to reduce their use of wholesale FTTH providers they would simply lose retail customers in those areas only supplied by rival providers.¹⁷¹ Further, if the wholesale providers are cheaper than alternatives, then refusing to purchase from them would raise the costs of the Parties' ISP businesses relative to other ISPs who continue to use the cheapest suppliers.

Table 18: [Confidential]

Sources: [Confidential].

- 10.41 In conclusion, neither CIVH nor Vodacom is an important source of demand for providers of wholesale FTTH services. Even were CIVH or Vodacom to reduce their purchases of wholesale services from other providers, the other providers would still be able to supply the vast majority of ISPs which account for [Confidential] of all FTTH homes connected. Thus, there would be unlikely to be any benefit to the Parties from limiting their use of rival wholesale providers, while doing so would harm their own ISP businesses.

Coordinated effects in retail fixed internet access

- 10.42 Coordination is extremely unlikely in the retail residential fixed internet access market given the large number of ISPs competing (see Table 15). Where the collusive profit needs to be shared across multiple firms, each firm will only get a small share of the profit from coordinating. However, a firm which deviates from coordination by undercutting other firms would stand to gain market share at the expense of rivals. Thus, even were it possible for a large number of ISPs to arrive at a common coordinated position, the coordination would not be sustainable.
- 10.43 There is also no evidence of any coordination in the retail fixed internet access market currently with different players taking market share from each other (see Table 15) and undercutting each other's pricing (or equivalently offering faster speeds at the same price point).¹⁷² Given this, it is unlikely that the changes in ownership resulting from the Transaction would change the market to the extent that coordination becomes likely.
- a. The Transaction will not change the ownership of Vodacom's retail ISP business.
 - b. The Transaction will result in Vodacom gaining an indirect minority interest in, and effective joint control of, SADV. However, as set out above, SADV has only a [Confidential] share of retail fixed internet connections and Newco's majority

¹⁷¹ If the Parties cease acquiring from a rival FTTH provider, they would lose the retail margins they would otherwise have earned. Further, in areas not covered by their FTTH network, the Parties would also have no potential to gain additional wholesale margins from end-customers switching to their network. Thus, there would be a cost but no benefit.

¹⁷² MyBroadband, "[South African fibre price war – uncapped fibre-to-the-home for under R400](#)", 20 April 2021 (accessed on 2 November 2021).

shareholders will have no incentive to act to benefit Vodacom's ISP. For example, their incentive to reach or maintain a coordinated outcome would not change.

- 10.44 Furthermore, we note that Vodacom's access to information on the activities of Newco and SADV will be significantly restricted in light of Newco's Shareholders' Agreement. However, even if Vodacom were to receive this information, this is unlikely to facilitate coordination in retail ISP services given SADV's very small market share (and Vodacom itself only has a [Confidential] share). Any attempt by the Parties to coordinate by increasing their retail prices is likely to be unprofitable because customers could switch to any of the large number of other ISPs.

Conclusion

- 10.45 In summary, we find that it is highly unlikely that the Transaction would substantially lessen or prevent competition in relation to retail fixed internet access and other associated services, particularly given the vigorous competition in the market, the modest shares of the Parties and that Vodacom will not gain full control of Newco. In particular, we find no material risk of:
- a. anticompetitive unilateral horizontal effects;
 - b. input or customer foreclosure; or
 - c. coordinated effects.

Section 11

Efficiencies and the public interest

- 11.1 This section sets out our assessment of whether the Transaction would be likely to give rise to efficiencies and wider public interest effects with respect to FTTH services.
- 11.2 Key features of the Transaction that are of relevance to the assessment of efficiencies and public interest effects include:
- a. Vodacom will take an interest, alongside CIVH, in Newco with Newco becoming the Parties' jointly owned vehicle for new fibre deployment;
 - b. Newco will combine CIVH's success in deploying new fibre with Vodacom's ability to reduce demand risk and its [Confidential] cash injection, improving the ability of Newco to raise additional funds;
 - c. Vodacom will transfer its FTTH assets to Newco bringing them under its established open access model including a large ISP customer base and enabling it to obtain procurement savings; and
 - d. employees in duplicate roles will be redeployed while accelerated rollout will support employment and benefit the communities and local businesses which gain access to fibre broadband.
- 11.3 The remainder of this section:
- a. assesses potential efficiencies in relation to FTTH deployment;
 - b. assesses potential efficiencies in relation to increased access to and use of existing FTTH infrastructure; and
 - c. assesses potential public interest effects in relation to employment and wider access to fibre broadband.

More rapid and widespread FTTH infrastructure deployment

- 11.4 While significant investment in fibre deployment has taken place, there remains many areas that are yet to be covered by fibre. As ICASA has noted: "*The Authority is concerned with*

access outside of metros, where the rollout of last mile services is limited and ADSL remains the main fixed line access option.”¹⁷³

- 11.5 We have identified three main ways in which the Transaction would improve the Parties’ economics in deploying FTTH infrastructure more widely and more quickly, which will ultimately benefit end-customers:
- a. pooling demand and reducing demand risk;
 - b. reducing deployment costs; and
 - c. improving access to funding.

Pooling demand and reducing demand risk

- 11.6 Expected take-up is a key determinant of the extent and timing of FTTH deployment. The Transaction would improve expected take-up in two main ways.
- 11.7 First, Vodacom’s equity interest in Newco makes it more likely that Vodacom’s ISP will use Newco’s wholesale FTTH access than would be the case without this interest. This will increase Newco’s expected demand for new FTTH deployments and improve its commercial viability when compared with CIVH deploying independently.
- 11.8 Co-investment arrangements have been recognised by the EC as an important means of promoting fibre network investment and downstream retail competition with the European Electronic Communications Code stating:

“Due to current uncertainty regarding the rate of materialisation of demand for very high capacity broadband services as well as general economies of scale and density, co-investment agreements offer significant benefits in terms of pooling of costs and risks, enabling smaller-scale undertakings to invest on economically rational terms and thus promoting sustainable, long-term competition, including in areas where infrastructure-based competition might not be efficient.”¹⁷⁴

- 11.9 Second, as a result of the Transaction, [Confidential]. This will reduce demand uncertainty associated with new FTTH deployments and support additional overall deployment.

Lower deployment costs

- 11.10 Newco can be expected to deploy at lower cost than either Party alone as a result of:

¹⁷³ ICASA, “[Findings document on priority markets inquiry in the electronic communications sector](#)”, 2018, page 28 (accessed on 30 November 2021).

¹⁷⁴ EC, “[Directive 2018/1972 establishing the European Electronic Communications Code](#)”, 17 December 2018, clause 198, page 38 (accessed on 30 November 2021).

- a. Greater scale leading to an improved bargaining position in procuring materials, equipment and construction contracts.
- b. Newco will be able to leverage Vodacom's PoPs and Vodacom's metro fibre assets being acquired as part of the Transaction in its deployment efforts including to help in [Confidential] .
- c. Where resources and funds are combined to enable expanded local coverage footprints there can be savings compared with two operators independently rolling out networks in terms of economies of density (i.e., savings for metro connections, consolidated local planning and landlord approvals, using a single local team) as well as savings in ongoing costs (e.g., shared marketing and maintenance resources, IT and other overhead savings) and the benefit of greater experience, i.e., learning by doing).

11.11 [Confidential] .¹⁷⁵

11.12 [Confidential] .¹⁷⁶

11.13 CIVH expects the new Transaction to support additional deployment including piloting new deployment projects [Confidential] .¹⁷⁷

Improvement in capacity to fund new deployment

11.14 [Confidential] .¹⁷⁸

11.15 The Transaction will help Newco reduce the capital constraints that currently limit CIVH in achieving greater FTTH deployment because of the following reasons:

- a. [Confidential].
- b. Newco is likely to be attractive to external funders by having the backing of both CIVH and Vodacom with Vodacom itself being 60.5% owned by Vodafone, one of the world's largest telecommunications companies.¹⁷⁹
- c. The efficiencies in deployment and other cost savings described above will enable a given amount of funds to support greater deployment as well as improve internal cash flows available for re-investment.

¹⁷⁵ [Confidential] .

¹⁷⁶ [Confidential] .

¹⁷⁷ [Confidential] .

¹⁷⁸ [Confidential] .

¹⁷⁹ [Confidential]

- d. Better utilisation of Vodacom's FTTH and other assets being transferred to Newco (as explained later in this section) will further improve internal cash flows.

11.16 Funding from parent companies and the re-investment of internal cash flows can be expected to be less costly than raising funds externally. Raising funds externally is costly because outside investors with less information on a firm's prospects demand a premium to provide funds.¹⁸⁰ A number of empirical studies confirm that there is a statistically significant positive relationship between firms' cash flows and their level of investment.¹⁸¹ Access to funds at a lower cost would make additional investments economic to undertake, including in extending FTTH infrastructure to underserved areas.

Better access to and use of the Parties' FTTH infrastructure

- 11.17 Access to and use of the Parties' FTTH infrastructure is likely to be promoted through:
- a. Newco supporting more ISPs having access to the Parties' FTTH assets than if those assets are held separately; and
 - b. savings in the ongoing costs of FTTH provision can be expected to be passed through into wholesale prices and thereby support increased FTTH take-up.

Promoting access to the Parties' existing FTTH infrastructure

- 11.18 ISPs face fixed costs in acquiring services from FNOs including in terms of:
- a. interconnecting with the fibre network at a data centre; and
 - b. marketing, developing and maintaining systems and training staff to support the acquisition and provision of products based on that FNO's wholesale products and to update the suite of retail products and systems as the wholesale products, terms and quality parameters change.

¹⁸⁰ The pecking-order theory of financing notes that firms prefer to rely on internal funds over raising debt and prefer raising debt to raising equity and states: "The pecking-order theory stresses the value of financial slack. Without sufficient slack, the firm may be caught at the bottom of the pecking order and be forced to choose between issuing undervalued shares, borrowing and risking financial distress, or passing up positive-NPV investment opportunities" (Brearly, Myers, Allen, "Principles of corporate finance", 2011, page 466).

¹⁸¹ For a detailed survey see Hubbard, R.G., "[Capital-market imperfections and investment](#)", *Journal of Economic Literature*, vol. 36, issue 1, March 1998, pages 193-225. Lewellen and Lewellen find that a dollar of current and prior year cash flow is associated with \$0.32 of additional investment for firms that are least likely to be constrained in their access to external capital and \$0.63 of additional investment for firms that are the most likely to be constrained (J. Lewellen and K. Lewellen, "[Investment and Cash Flow: New Evidence](#)", *Journal of Financial and Quantitative Analysis*, Vol. 51, No. 4, August 2016, pages 1135-1164).

11.19 [Confidential]

11.20 Given the costs of using the products of additional FNOs, smaller ISPs tend to prefer larger networks on which they expect to acquire a significant customer base over which to recover their costs. While the larger operators, Openserve, Vumatel and Frogfoot, each hosted more than [Confidential] ISPs on their networks in September 2021, Vodacom with a much smaller network had just [Confidential] ISPs (see Figure 8).

Figure 8: [Confidential]

Source: [Confidential]

11.21 The Transaction will enable Vumatel's existing ISP customers to gain access (without incurring additional onboarding costs) to approximately [Confidential] additional homes passed, i.e., those in Vodacom's FTTH footprint excluding the few areas where the Parties' networks overlap. Similarly, ISPs on Vodacom's network (such as [Confidential] which are not on the Vumatel network)¹⁸² will be able to use a single supplier for the homes passed by Vodacom's current network and [Confidential] additional households passed by CIVH's network.

11.22 The Transaction will also enable new ISPs to gain access to the Parties' combined FTTH assets through a single onboarding process. This will improve the economics for additional ISPs to access the assets.

11.23 The presence of more ISPs developing retail offers in competition with each other can be expected to support FTTH take-up by end-customers.

Pass-through of savings in FTTH provision to ISPs and end-customers

11.24 The Transaction is also likely to lead to savings in the ongoing cost of FTTH provision including with respect to:

- a. combining maintenance and other functions including extending CIVH's relative efficiency in maintenance costs and DFA's state-of-art Network Operating Centre to Vodacom's FTTH footprint; and
- b. an improved bargaining position in procuring materials and other inputs.¹⁸³

11.25 Vumatel is also a more experienced open access network operator with more established processes which should support a better quality of service for ISPs in Vodacom's footprint.

11.26 Savings on the ongoing costs of FTTH provision which reduce the variable cost of acquiring and servicing end-customers can be expected to be passed through into lower prices for ISPs. Lower prices for ISPs can, in turn, be expected to flow through into lower end-user prices.

¹⁸² [Confidential] .

¹⁸³ [Confidential] .

Lower prices and better quality provision should benefit existing FTTH end-customers as well as increase FTTH take-up by new customers.

Public interest effects

Employment

- 11.27 We understand that there will be no reduction in employees as a result of the Transaction. Staff will be re-deployed. The growth in the FTTH network which the Transaction is expected to support could lead to more employment opportunities, especially through channel partners dedicated to build, sales, installation, and support.
- 11.28 The Transaction is not expected to significantly impact contractor employment. **[Confidential]**.¹⁸⁴
- 11.29 **[Confidential]**.¹⁸⁵

Table 19: **[Confidential]**

[Confidential]

Source: **[Confidential]**

- 11.30 **[Confidential]**.¹⁸⁶
- 11.31 More generally, improved access to broadband has been found to be a significant driver of overall employment and job creation.¹⁸⁷ Katz estimated that an increase of about 8 percentage points in broadband penetration in twelve Latin American countries would lead to an increase of almost 8 percent on average in their employment rate.¹⁸⁸

Greater access to fibre broadband services including for underserved areas

- 11.32 South Africa's Connect policy sets out the objective "*to achieve a universal average download speed of 100 mbps by 2030*" so as to "*underpin the development of a dynamic and connected information society and a vibrant knowledge economy that is more inclusive and prosperous.*"¹⁸⁹ ICASA has stated "*The Authority is not only concerned with fixed line access*

¹⁸⁴ **[Confidential]**.

¹⁸⁵ **[Confidential]**.

¹⁸⁶ **[Confidential]**

¹⁸⁷ T. Kelly and Carlo Maria Rossotto, "[Broadband Strategies Handbook](#)", Washington DC: World Bank, 2012, pages 9-10.

¹⁸⁸ Katz, R., "[Estimating broadband demand and its economic impact in Latin America](#)", presented at the III Conference Acorn-Redecom, Mexico City, 4 September 2009 (accessed on 30 November 2021).

¹⁸⁹ Department Of Communication, "[South Africa Connect: Creating opportunities, ensuring inclusion](#)", 20 November 2013, page 8 and 12 (accessed on 11 November 2021).

for metro consumers, but also for consumers outside of the metros where there is less choice."¹⁹⁰

- 11.33 By significantly improving the economics for the Parties of additional FTTH deployment, the Transaction will help achieve the Government's objective.
- 11.34 Access to funding and lower demand risks will support Newco in extending Vumatel's initiatives to extend fibre into underserved areas. For example, Remgro's Integrated Annual Report 2020 notes:

*"Infrastructure initiatives allowed the business to successfully commercialise fibre into the Lower LSM areas under the Reach product offering and it successfully launched its Reach pre-paid platform. In addition to driving uptake on the current deployed infrastructure, key focus areas in the year included the extension of its Active Ethernet and Gigabit Passive Optic Network (GPON) in Ekurhuleni and Cape Town while creating expansion capability into new Reach areas such as Mitchells Plain, Vosloorus and Soweto."*¹⁹¹

- 11.35 Vumatel's 'Reach' products which offer unlimited data for R378 per month for 20 Mbps and R488 per month for 40 Mbps are available for end-customers.¹⁹²
- 11.36 [Confidential].
- 11.37 [Confidential].¹⁹³¹⁹⁴¹⁹⁵¹⁹⁶
- 11.38 [Confidential].¹⁹⁷
- 11.39 [Confidential].¹⁹⁸

¹⁹⁰ ICASA, "[Findings document on priority markets inquiry in the electronic communications sector](#)", 2018, page 29 (accessed on 30 November 2021).

¹⁹¹ Remgro, "[Integrated Annual Report 2020](#)", page 54 (accessed on 30 November 2021).

¹⁹² Home Connect, "[Vuma Fibre Reach](#)" (accessed on 11 November 2021).

¹⁹³ [Confidential].

¹⁹⁴ [Confidential].

¹⁹⁵ [Confidential].

¹⁹⁶ [Confidential].

¹⁹⁷ Remgro press release, "[Remgro's CIVH partners with Vodacom in pursuit of democratising the internet in South Africa](#)", 10 November 2021 (accessed on 30 November 2021).

¹⁹⁸ [Confidential].

- 11.40 A number of empirical studies have found that increases in fixed broadband take-up are a significant driver of higher living standards. Figure 9 shows the results of studies surveyed in a World Bank report on the relationship between broadband and GDP. For example, Qiang *et al.* found a 10 percentage point increase in fixed broadband penetration was associated with an increase in GDP of around 1.4%.

Figure 9: Estimates of the impact of fixed broadband penetration on GDP

Study	Number of countries	Years	Increase in GDP per 10 percentage point increase in fixed broadband penetration	Comment
Qiang et al. 2009 (High-income economies)	120	1980–2006	1.2	Impact on per capita GDP
Qiang et al. 2009 (Low-income economies)		1980–2006	1.4	Impact on per capita GDP
Czernich et al. 2009	25 OECD (300 observations)	1996–2007	0.9-1.5†	Impact on per capita GDP
Koutroumpis 2009	15 European Union (60 observations)	2003–2006	0.3-0.9†	Impact on GDP
Zaballos and López-Rivas 2012	26 Latin America and the Caribbean (121 observations)	2003–2009	3.2	Impact on per capita GDP

Source: World Bank, “[Exploring the relationship between broadband and economic growth](#)”, January 2015, Table 2-1, page 6 (accessed on 26 November 2021).

Consumer benefits

- 11.41 The Transaction will enable Newco to deploy FTTH infrastructure more widely and more quickly, allowing it to reach a greater number of end-customers.¹⁹⁹
- 11.42 The Transaction is expected to increase the number of ISPs on the Parties' combined ISP assets, bringing benefits to end-customers in terms of greater choice of ISPs.²⁰⁰
- 11.43 **[Confidential]**.²⁰¹

¹⁹⁹ See paragraphs 11.5 and 11.32 and following.

²⁰⁰ See paragraphs 11.18 and following.

²⁰¹ See paragraphs 11.24 and following and paragraph 11.35.

Section 12

Hosting and CCTV services

- 12.1 This section describes two areas in which the Parties are both nominally active, namely infrastructure hosting/co-location services and CCTV services, but in which there is no meaningful competitive overlap between them. Accordingly, we do not assess these activities in any detail save to explain why there is no material competition between the Parties in relation to them that could be affected by the Transaction (in any event, Vodacom's activities in these areas are not being transferred to Newco as part of the Transaction such that the Parties will continue to offer them separately).
- 12.2 We are instructed that the provision of CCTV services is not regulated by ICASA in terms of the Electronic Communications Act 36 of 2005 and is, accordingly, not relevant to ICASA's assessment of the Transaction. This analysis is in any event included for the sake of completeness.

Infrastructure hosting/co-location services

- 12.3 DFA's activities in infrastructure hosting/co-location services are limited to offering rack space, power and cross-connects for rental in the aggregation nodes/PoPs in DFA's network (which themselves are predominantly leased by DFA from third parties).²⁰² The reason that DFA offers this service is to enable purchasers of DFA's dark fibre to install in these nodes the active equipment needed to light the fibre and provide services to their customers (rather than deploying their own cabinets, racks, power, etc.).
- 12.4 Only DFA connectivity can be terminated at these facilities and they are not 'data centres' offering larger scale, carrier-neutral and/or more sophisticated hosting services of the sort offered by providers such as Teraco, African Data Centres, Telkom/BCX, Liquid, MTN, Vodacom and many others. In other words, the infrastructure hosting services offered by DFA are basic services that are essentially ancillary to its dark fibre connectivity offerings. For purchasers of these services, hosting/co-location services offered by other providers, whether Vodacom or others, and whether in data centres or elsewhere in their networks, would not fulfil the function for which the services are being purchased (namely, the use of DFA's connectivity services) and are therefore not a competitive alternative.

²⁰² DFA, "[Tachyon](#)" (accessed on 9 December 2021).

- 12.5 By contrast, Vodacom offers a wide range of managed infrastructure and application hosting services from its seven Uptime Institute-certified Tier-3 datacentres (e.g., cloud, hosting and security services), but does not offer infrastructure hosting services outside of these facilities to any material degree (e.g., in its mobile switching centres or base stations). CIVH does not offer similar data centre-based hosting services nor has the facilities needed to do so.
- 12.6 Vodacom's Nexio division is also active as a 'systems integrator' providing managed network, security and cloud services both internally for Vodacom and to third party enterprise customers, but neither DFA nor any other CIVH entity is active in providing similar systems integration services.
- 12.7 Even in the narrow segment of hosting/co-location services where the Parties do nominally overlap, i.e., provision of telecommunications equipment co-location, BMI-T estimates that DFA has a revenue share of [Confidential] and Vodacom a share of [Confidential]. Based on BMI-T's²⁰³ estimate of the total value of this segment in 2020 of [Confidential], and [Confidential] their shares would be approximately [Confidential] (DFA) and [Confidential] (Vodacom), respectively, thus still not significant, although as noted above the services offered by them are in any event not substitutable for their users. In a broader market for hosting services – for example, including other infrastructure hosting services, cloud, security and application management services – the Parties (but in particular CIVH) would account for an even less significant share of revenues.
- 12.8 Moreover, as noted above, post-Transaction the Parties will continue to provide these services independently and, to the extent there is any overlap between them, will face competition from Teraco, Telkom/Openserve/BCX, Liquid, MTN, BBI and others in the narrow telecommunications hosting segment, and these providers plus a host of others (e.g., Amazon Web Services, Microsoft and Google) in hosting and cloud services more broadly.

CCTV solutions

- 12.9 Newco controls and has a [Confidential] interest in VumaCam. VumaCam operates citywide (currently in Johannesburg and surrounds) active public space surveillance video camera (CCTV) networks and a video management solution (VMS) platform offering ultra-high definition video feeds and artificial intelligence video analytics tools (e.g., number plate recognition, abnormal behavioural monitoring) predominantly to security companies and law enforcement agencies.²⁰⁴ VumaCam describes itself as "South Africa's first and only video management-as-a-service provider".

²⁰³ BMI-T, "SA Wholesale Telecoms Report 2021", page 56.

²⁰⁴ Vumacam, "[Smarter Security Delivered](#)" (accessed on 9 December 2021).

- 12.10 Because of the data-heavy nature of live ultra-high definition video feeds, and to ensure a consistent, reliable and high-quality feed, VumaCam's network is deployed on fibre networks ([Confidential]).²⁰⁵
- 12.11 Neither Vodacom, nor any other firm, currently offers open access citywide public space CCTV surveillance and associated VMS platform services of the type or at the scale offered by VumaCam. Vodacom's activities in CCTV services are limited to providing *ad hoc* customer-specific solutions that are provided as ancillary services mainly to Vodacom's connectivity and IoT offerings. These types of site-specific solutions may be used, for example, to provide CCTV monitoring/recording for a garage forecourt, as opposed to the wide area active surveillance solution offered by VumaCam. Thus, despite being nominally active in providing CCTV services, [Confidential].
- 12.12 [Confidential] .
- 12.13 Accordingly, notwithstanding the nominal overlap between the Parties in CCTV solutions, there is no material *competitive* overlap between them thus no competition that could be adversely affected by the Transaction as a result of Vodacom acquiring a minority ownership interest in and joint control of Newco.

²⁰⁵

[Confidential] .

Appendix A

Glossary

- A.1 **Access network:** The 'last mile' part of the network that connects the customer premises to the local exchange. Also referred to as the 'local loop', usually in the context of a copper access network.
- A.2 **Asymmetric Digital Subscriber Line (ADSL):** See Digital Subscriber Line (DSL).
- A.3 **Bandwidth:** The amount of data that can be transmitted in a fixed amount of time, usually expressed as a bit-rate, as in bits per second (bps) or megabits per second (Mbps).
- A.4 **Backhaul:** The backhaul part of a network, comprising the links between the access network and network aggregation points or the core network.
- A.5 **Bitstream access:** A wholesale broadband access product where the owner of an active broadband connection to a customer premises makes this available to third parties but without providing access to the physical infrastructure or electronic equipment, i.e., the access service is a 'virtual' rather than physical one. An important feature that serves to differentiate bitstream access services is the point at which interconnection with the third party occurs (e.g., whether local, regional or national) and therefore the amount of backhaul that is provided as part of the service.
- A.6 **Dark fibre access:** The leasing of fibre optic cables without the active electronic equipment needed to "light" the fibre.
- A.7 **Digital Subscriber Line (DSL or xDSL):** Umbrella term for the family of Digital Subscriber Line (DSL) technologies used to provide a broadband service over traditional copper telephone networks. DSL connections can be symmetric (SDSL), where the bitrate of data transfer is the same in both directions, or asymmetric (ADSL), where the bitrate of data transfer is greater in one direction (usually downstream) than the other. ADSL is by far the more commonly deployed technology. The term ADSL generically includes higher speed variants such as ADSL2+, VDSL (Very-high-bit-rate DSL) and VDSL2, and G.fast (a high-speed DSL standard that can be used where the last mile copper connection is short, e.g., less than 500m). Telkom offers ADSL, ADSL2+, VDSL, and G.fast.
- A.8 **Fibre To The Business (FTTB):** An access network structure in which the optical fibre network runs from the local exchange to the customer's or business premises.
- A.9 **Fibre To The Cabinet (FTTC):** An access network structure in which the optical fibre extends from the exchange to a street cabinet, usually located only a few hundred metres from the subscriber's premises. The remaining part of the access network from the cabinet to the customer is usually copper but could use another technology, such as wireless.

- A.10 **Fibre To The Home (FTTH):** An access network structure in which the optical fibre network runs from the local exchange to the customer's home.
- A.11 **Homes / business connected:** The number of premises that are actually connected to a network.
- A.12 **Homes / businesses passed:** The potential number of premises that a deployer has the capability to connect to its fibre network – typically connecting the premises to enable the provision of services requires the installation of a drop cable from the premises' passed point (e.g., a duct or pole) to the premises and the installation of customer premises equipment at the premises. The definition typically excludes premises that cannot be connected without deployment of substantial further fibre to reach the area where the customer is located.
- A.13 **Internet Service Provider (ISP):** Firm that provides internet access services.
- A.14 **Plain Old Telephone Service (POTS):** refers to the traditional, analogue voice transmission phone system implemented over physical copper wires (twisted pair).
- A.15 **Very-high-bit-rate digital subscriber line (VDSL):** Very high-speed rate Digital Subscriber Line services supplied over fibre-to-the-cabinet. See Digital Subscriber Line (DSL).

Appendix B

Data sources and methodology: Wholesale FTTH shares of supply

- B.1 This Appendix sets out the data and methodology adopted to calculate the shares of homes passed and connected in this report.

Sources

- B.2 The analysis relies on the following sources:

- a. [Confidential].
- b. [Confidential].
- c. [Confidential].
- d. [Confidential].
- e. [Confidential].
- f. [Confidential]
- g. [Confidential].
- h. [Confidential].

Homes passed

- B.3 [Confidential].

Parties

- B.4 [Confidential]:

- a. **Vodacom**
 - i. [Confidential] .
- b. **Vumatel**

i. [Confidential] .

ii. [Confidential] .

c. **SADV.** [Confidential] .

Competitors

B.5 [Confidential].

B.6 [Confidential],²⁰⁶ [Confidential].²⁰⁷ [Confidential]

a. [Confidential] .

b. [Confidential].

c. [Confidential].

B.7 [Confidential]

Homes connected

B.8 [Confidential].

Parties

B.9 [Confidential]:

a. **Vodacom.** [Confidential].

b. **Vumatel.**

i. [Confidential]

ii. [Confidential] .

c. **SADV.** [Confidential] .

Competitors

B.10 [Confidential].

B.11 [Confidential]:

²⁰⁶ MFN, "[MetroFibre acquires Link Africa's FTTH infrastructure in Gauteng and Kwa-Zulu Natal](#)", 21 April 2021 (accessed on 26 November 2021).

²⁰⁷ MyBroadband, "[Frogfoot expands with acquisition of Link Africa Western Cape FTTH network](#)", 28 September 2021 (accessed on 26 November 2021).".

- a. [Confidential] .
- b. [Confidential].
- c. [Confidential].

B.12 [Confidential].

Appendix C

Data sources and methodology: FTTH network overlaps

- C.1 This Appendix sets out the data and methodology adopted for the analysis of FTTH network overlaps in this report.

Sources

- C.2 The analysis relies on the following sources:

- a. [Confidential].
- b. [Confidential]:
 - i. [Confidential];
 - ii. [Confidential];
 - iii. [Confidential];
 - iv. [Confidential].
 - v. [Confidential].
- [Confidential].
- c. [Confidential].
- d. [Confidential].

Overbuild between Vodacom and other FNOs' networks

- C.3 [Confidential].

Data and coverage

- C.4 [Confidential].
- C.5 [Confidential].

C.6 [Confidential].

C.7 [Confidential].

C.8 [Confidential].

C.9 [Confidential].

Number of Vodacom's overbuilt homes

C.10 [Confidential].

C.11 [Confidential]:

a. [Confidential].

b. [Confidential].

C.12 [Confidential].

LinkAfrica acquisition

C.13 [Confidential].²⁰⁸ [Confidential].

Overbuild between CIVH and other FNOs' networks

C.14 [Confidential].

Data and coverage

C.15 [Confidential].

C.16 [Confidential].

C.17 [Confidential].

Number of CIVH's overbuilt homes

C.18 [Confidential].

C.19 [Confidential].

Assumptions regarding other competitors

C.20 [Confidential].

C.21 [Confidential].

²⁰⁸ [Confidential]

Overbuild on Newco post-Transaction

- C.22 [Confidential]:
- a. [Confidential]:
 - i. [Confidential]and
 - ii. [Confidential];
 - iii. [Confidential].
 - b. [Confidential]:
 - i. [Confidential]), and
 - ii. [Confidential]
 - iii. [Confidential].

C.23 [Confidential].

Vodacom's connection rates in overbuilt and non-overbuilt precincts

- C.24 [Confidential].
- C.25 [Confidential].
- C.26 [Confidential] :
- a. [Confidential] .
 - b. [Confidential] .

Appendix D

Data sources and methodology: Retail Fixed Internet Access Services

- D.1 This Appendix sets out the data and methodology adopted for calculating the shares of supply in the provision of retail internet access services.

Sources

- D.2 The analysis relies on the following sources:

- a. [Confidential] .
- b. [Confidential] .
- c. [Confidential] .
- d. [Confidential] .
- e. [Confidential] .
- f. [Confidential] .
- g. [Confidential] .

Retail connections

- D.3 [Confidential] .

Parties

- D.4 [Confidential] :
- a. [Confidential] .
 - b. [Confidential] .

Competitors and market size

- D.5 [Confidential] .

D.6 [Confidential] . 209, 210

D.7 [Confidential].

D.8 [Confidential] 211 . 212

D.9 [Confidential] .

Vodacom's bitstream purchases from FTTH providers

D.10 [Confidential] .

Competitors' FTTH homes connected

D.11 [Confidential] :

a. [Confidential] .

b. [Confidential] . 213

c. [Confidential] .

d. [Confidential] .

Vodacom's bitstream purchases from FTTH providers

D.12 [Confidential] .

D.13 [Confidential] .

D.14 [Confidential] .

D.15 [Confidential] .

Vodacom's bitstream purchases and self-build

D.16 [Confidential] .

209 [Confidential]

210 [Confidential]).

211 [Confidential] .

212 [Confidential] .

213 [Confidential] .

Appendix E

[Confidential]

- E.1 **[Confidential]** :
- a. **[Confidential]** ; and/or
 - b. **[Confidential]** .

E.2 **[Confidential]** .

[Confidential]

- E.3 **[Confidential]** :
- a. **[Confidential]** ;²¹⁴ and
 - b. **[Confidential]** .

[Confidential]

- E.4 **[Confidential]** :
- a. **[Confidential]** ;
 - b. **[Confidential]** ; and
 - c. **[Confidential]** .

E.5 **[Confidential]** .

E.6 **[Confidential]** .

E.7 **[Confidential]** .²¹⁵ **[Confidential]** .²¹⁶

[Confidential]

E.8 **[Confidential]** .

²¹⁴ **[Confidential]** .

²¹⁵ **[Confidential]**

²¹⁶ **[Confidential]**

[Confidential]

- E.9 [Confidential] :
- a. [Confidential] and
 - b. [Confidential] .

E.10 [Confidential] .

E.11 [Confidential] .

E.12 [Confidential] .

E.13 [Confidential] .²¹⁷ .

E.14 [Confidential] .²¹⁸ .

E.15 [Confidential] .

[Confidential]

- E.16 [Confidential] :
- a. [Confidential] ;
 - b. [Confidential] ;
 - c. [Confidential] ; and
 - d. [Confidential] .
- E.17 [Confidential] .
- a. [Confidential] .
 - b. [Confidential] .²¹⁹ [Confidential] .
- E.18 [Confidential]

[Confidential]

E.19 [Confidential] .

²¹⁷ [Confidential] .

²¹⁸ [Confidential] .

²¹⁹ [Confidential] .

E.20 [Confidential] .

[Confidential]

E.21 [Confidential] .

E.22 [Confidential] .

- a. [Confidential] :
- b. [Confidential] ;
- c. [Confidential] ²²⁰ [Confidential] ²²¹

E.23 [Confidential] :

- a. [Confidential];
- b. [Confidential] .

Table 20: [Confidential]

Notes: [Confidential]
Sources: [Confidential] .

E.24 [Confidential] .

E.25 [Confidential] .

E.26 [Confidential] .

- a. [Confidential] .
- b. [Confidential] .

E.27 [Confidential] .

E.28 [Confidential] .

[Confidential]

E.29 [Confidential] :

- a. [Confidential] ²²² ;

²²⁰ [Confidential] .

²²¹ [Confidential] .

²²² [Confidential] .

b. [Confidential] .

E.30 [Confidential] .

E.31 [Confidential] .

a. [Confidential] .²²³

b. [Confidential] .²²⁴

Table 21: [Confidential]

Notes: [Confidential] .

Sources: [Confidential] .

E.32 [Confidential] .

E.33 [Confidential] .

E.34 [Confidential] :

a. [Confidential] ;

b. [Confidential] ;

c. [Confidential] .

²²³ [Confidential] .

²²⁴ [Confidential] .

Provide a consumer interest analysis report post the transaction.

This Appendix 9.2 contains two independent consumer interest analysis reports prepared by two separate independent economists / experts as follows:

- a report prepared by FTI Consulting on behalf of CIVH in respect of the impact that the Proposed Transaction and Internal Restructure will have on consumers in the relevant markets if DFA's individual licences are transferred to NewCo and on the basis that NewCo is owned by CIVH and Vodacom; and*
- a report prepared by Compass Lexicon on behalf of Vodacom, given that it provides certain licensable services in the relevant markets, in respect of the impact that the Proposed Transaction and Internal Restructure will have on consumers in the relevant markets on the basis that NewCo is owned by CIVH and Vodacom.*

[Note: *In this non-confidential version of this Consolidated Transfer Application, the CIVH Group and Vodacom have annexed redacted versions of the reports i.e. to redact the specific paragraphs, pages, tables, figures etc. that they have each claimed as confidential.]*

Consumer Impact of the Proposed CIVH/ Vodacom Transaction

15 DECEMBER 2021

FINAL REPORT

LEGALLY PRIVILEGED AND CONFIDENTIAL

LEGEND:

Counsel-to-counsel (highly confidential) information belonging to Vodacom

Clean team information belonging to Vodacom

Counsel-to-counsel (highly confidential) information belonging to CIVH

Clean team information belonging to CIVH

Counsel-to-counsel (highly confidential) – combination of Parties

Clean team – combination of Parties' information

Counsel-to-counsel (highly confidential) information belonging to the Khuno Share Trust

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Glossary

Term	Definition
Access network	The 'last mile' part of the network that connects the customer premises to the aggregation point. Also referred to as the 'local loop', usually in the context of a copper access network.
Active Equipment	Infrastructure associated with transmitting or receiving the optical signal on fibre optic cable.
AEX	Automation Exchange (Pty) Ltd
Backhaul	The part of a network that comprises the wireless or fixed links between the access network and network aggregation points or the core network.
Base station	A wireless transceiver in a fixed location. The base station serves as the central point within a specific local area for a wireless device to communicate.
Britelink	Fibrehouse (Pty) Ltd trading as Britelink
CIVH	Community Investment Ventures Holding Proprietary Limited. CIVH owns Newco, which in turn owns DFA (including SADV) and Vumatel, collectively, "Newco".
Core network	The core network provides a variety of services to customers who are interconnected by the access network. Some of its functions include aggregation, authentication, call control or switching, charging, service invocation and gateways.
DFA	Dark Fibre Africa (Pty) Ltd
ECA	Electronic Communications Act
ECNS licence	Electronic Communications Network Service licence
FNO	Fixed Network Operator
FTI Consulting	FTI Consulting (SA) (Pty) Limited, a subsidiary of the FTI Consulting, Inc. group.
FTTB	Fibre-to-the-Business. An access network structure in which the optical fibre network runs from the aggregation point to the business premises.
FTTH	Fibre-to-the-Home. An access network structure in which the optical fibre network runs from the aggregation point to the customer's home.
FTTS	Fibre-to-the-Site. An access network structure in which the optical fibre network runs from the aggregation point to a base station.
IECNS Licence	Individual Electronic Communications Network Service Licence
IECS Licence	Individual Electronic Communications Service Licence
IEI	Industrial Electronic Investment (Pty) Ltd
IoT	Internet-of-things
IoT.next	IoT.next (Pty) Ltd
ISP	Internet Service Provider. Firm that provides retail internet connectivity services.
Link	A fixed or wireless communications channel that connects two or more endpoints. Links connect access sites to aggregation nodes. Access core links connect aggregation nodes to core sites and have higher capacity than normal links.
Managed network services	The delivery and management of network-based services, applications, and equipment to enterprises, residences, or other service providers.
MCT	MCT Telecommunications (Pty) Ltd
Mezzanine	Mezzanine Ware (Pty) Ltd

Microwave links	A wireless link which uses radio frequency spectrum to enable short distance connectivity between base stations and aggregation nodes, and also between aggregation nodes. Typically ranges from approximately 1GHz to 100GHz in frequency.
MNO	Mobile Network Operator
NDP	National Development Plan
NettVest	NettVest (Pty) Ltd
Newco	Business Ventures Investments No 2213 (Pty) Ltd
Nexio	Storage Technology Services (Pty) Ltd trading as Nexio
Parties	CIVH and Vodacom
Proposed Transaction	Vodacom intends to acquire a shareholding of 30% in Newco, through a cash subscription, the sale of Vodacom's FTTH business to Vumatel, and the sale of certain Transfer Assets to DFA. This will ensure that Vodacom has sufficient shareholding to have a minority controlling shareholding in Newco.
POP	Point of Presence: An access point, location or facility that connects to and helps other devices establish a connection.
Regulations	Individual Licensing Processes and Procedure Regulations of 2010
Remgro	Remgro Ltd
SA Connect	South Africa's National Broadband Policy
SADV	SA Digital Villages (Pty) Ltd
Sites	A physical location at which infrastructure required for the operation of a telecommunications network is installed.
Spectrum	The electromagnetic radio frequencies used as medium upon which wireless communication is realised. Only specific portions of spectrum are allocated for mobile communications.
Transfer Assets	Transfer Assets means fibre infrastructure on metro fibre routes and FTTB access routes into buildings that will be sold by Vodacom to DFA in return for shares in Newco. The Transfer Assets will exclude all active equipment, apart from active GPON equipment on the FTTB infrastructure.
Transmission	The process of sending and receiving an analogue or digital information signal over a physical point-to-point or point-to-multipoint transmission medium, either wired or wireless. This usually refers to signals sent between the access network and core networks or other interconnected networks.
Vodacom	Vodacom Proprietary Limited
Vodacom Group	Vodacom Group Limited
VoIP	Voice Over Internet Protocol: A process of sending and receiving voice communication signals over a packet data network (such as the Internet).
VumaCam	VumaCam (Pty) Ltd
Vumacam Infrastructure	VumaCam Infrastructure Pty) Ltd
Vumatel	Vumatel (Pty) Ltd
XLink	XLink Communications (Pty) Ltd

1 Introduction

1. FTI Consulting has been instructed by Bowmans and CDH to provide an independent economic assessment of the consumer impact of the proposed transaction between Community Investment Ventures Holdings Proprietary Limited (“CIVH”) and Vodacom Proprietary Limited (“Vodacom”), referred to jointly as “the Parties”. The proposed transaction involves Vodacom acquiring a shareholding in Business Ventures Investments No 2213 (Pty) Ltd (“Newco”), which is a wholly owned subsidiary of CIVH. This will occur through: (i) a cash subscription, (ii) the sale of Vodacom’s Fibre-to-the-Home (“FTTH”) business to Vumatel (Pty) Ltd (“Vumatel”), and (iii) the sale of certain Vodacom Transfer Assets to Dark Fibre Africa (Pty) Ltd (“DFA”). This will ensure that Vodacom has sufficient shareholding (of at least 30%) to have joint control over Newco in the form of minority rights.
2. Vodacom’s FTTH business is comprised of its FTTH network infrastructure and related assets, including contracts, fixed assets, and software. The Transfer Assets comprise fibre infrastructure on metro fibre routes and Fibre-to-the-Business (“FTTB”) access routes into buildings. The Transfer Assets will exclude all active equipment, apart from active GPON equipment on the FTTB infrastructure. Vodacom will transfer the fibre infrastructure to Newco, but it will retain all of its wholesale and retail services customers.
3. In terms of the Electronic Communications Act 36 of 2005 (“ECA”), DFA holds an Individual Electronic Communications Network Service (“IECNS”) licence and an Individual Electronic Communications Service (“IECS”) licence. The IECNS and IECS Licences held by DFA are intended to be transferred to Newco prior to the proposed transaction, pursuant to an internal restructuring of CIVH.
4. **[Confidential]**. The transfer of relevance for this report is that arising from the proposed transaction with Vodacom.
5. We are instructed that the Individual Licensing Processes and Procedure Regulations, 2010, in respect of the transfer of control of an individual licence, require an assessment of whether the transfer promotes competition, as well as an assessment of the impact on the “interests of consumers”.¹ In this context, this report seeks to be comprehensive insofar as it assesses the expected impact of the proposed transaction on all customers and consumers, specifically relating to the sale of the Transfer Assets. It also assesses the services provided by Newco’s other subsidiaries relating to fibre network planning, building and maintenance services, fibre network management software provided to FNOs and interconnect services provided to ISPs.²
6. The report is structured as follows:
 - in Section 2, we consider the current business operations and customers of the Parties and identify the status quo in the relevant markets to provide the relevant counterfactual;
 - in Section 3, we identify the changes to the business operations of the Parties and the competitive environment that may be anticipated as a result of the proposed transaction; and

¹ Item 9.3 of Form G to the Regulations; regulation 11(4) of the Regulations.

² A separate report by Compass Lexecon provides an independent economic assessment of the consumer impact of the proposed transaction in relation to wholesale FTTH access, retail residential fixed internet access, hosting services, and CCTV services.

- in Section 4, we assess the impact on customers and consumers in light of the identified changes in the business operations and competitive environment.

2 The Parties' Activities and the Counterfactual

2.1 CIVH/Newco

7. CIVH is an investment holding company that is jointly controlled by Industrial Electronic Investment (Pty) Ltd ("IEI") and New GX En Commandite Partnership II ("New GX"). CIVH controls a number of subsidiaries through its ownership of Newco, primarily focused on providing wholesale services to other communication providers.³ Newco will, in turn, control DFA and Vumatel subject to ICASA's approval of the application for the transfer of DFA's individual service licences.⁴
8. **DFA** is a provider of wholesale, *open access* passive fibre infrastructure and managed network services in both metropolitan and national long-haul telecommunications markets. It leases its backbone and transmission services to connect its metro infrastructure in various towns, while also maintaining, building, installing, managing, and financing the infrastructure and services on its network. DFA does not provide retail services. Its primary activity is deploying metro fibre networks and providing wholesale access to this infrastructure to fixed network operators ("FNOs") and mobile network operators ("MNOs").
9. DFA owns SA Digital Villages (Pty) Ltd ("SADV").⁵ **SADV** operates as an Internet Service Provider ("ISP"), which offers Internet access services to both residential and business customers. In addition, SADV operates a VoIP network and sells voice services to primarily enterprise customers.
10. DFA and Vumatel each own **[Confidential]** of the shareholding in MCT Telecommunications (Pty) Ltd ("MCT"). **MCT** provides planning, implementation, testing, certification, and maintenance services for fibre optic networks in South Africa. In addition, the business of Fibrehouse (Pty) Ltd trading as Britelink ("Britelink"), **[Confidential]**.
11. **Vumatel** is a fibre network operator that provides open access FTTH and limited FTTB services at the last mile level to ISPs. Vumatel installs fibre in a suburb and also installs a fibre spur up to the home wall. After the fibre has been installed, Vumatel leases its infrastructure to ISPs, who then provide retail services to end-customers over the last mile infrastructure.
12. Vumatel also owns (a) Automation Exchange (Pty) Ltd ("AEX"), (b) VumaCam (Pty) Ltd ("Vumacam"), and (c) Vumacam Infrastructure Pty Ltd ("Vumacam Infrastructure").
 - a. **AEX** is active in the development of specialised software that plugs into a fibre network, allowing the user operational functionality to interact within the network. It also supplies physical network components that connect ISPs with one or more networks.

³ CIVH's other subsidiaries are not relevant for this assessment: CIV Fibre Network Solutions (Pty) Ltd, Muvoni Weltex Network Technologies (Pty) Ltd, Vumatel Holdings (Pty) Ltd, Dartcom (Pty) Ltd, and LTIP Co (Pty) Ltd.

⁴ Newco also controls CIVH PrefCo (Pty) Ltd, which is a treasury company through which CIVH raises preference share funding. It controls CIVH LoanCo (Pty) Ltd, a treasury company which holds CIVH's debt, and CIVH SecurityCo (Pty) Ltd, a security special purpose vehicle.

⁵ DFA's other subsidiaries are not relevant for this assessment: Conduct Telecommunications (Pty) Ltd, Sqwidnet (Pty) Ltd, Dark Fibre Africa Zimbabwe (Pty) Ltd, and Market Demand Trading 191 (Pty) Ltd.

- b. **VumaCam** offers a citywide video camera network (CCTV) offering ultrahigh-definition video feeds to security companies and law enforcement agencies.
 - c. **VumaCam Infrastructure** is an infrastructure company facilitating Wi-Fi, mobile network operator opportunities, branding and advertising space.
13. We are instructed that the services provided by AEX, VumaCam and VumaCam Infrastructure are not subject to regulation by ICASA as they are not licensable services in terms of the ECA. The analysis in respect of these aspects of Newco's business and the impact on consumer interests is, however, included in this report for the sake of completeness.

2.2 Vodacom

14. Vodacom is wholly-owned by Vodacom Group Limited ("Vodacom Group"), which is a public company incorporated in South Africa. Vodacom is an MNO primarily active in the provision of *mobile* wholesale and retail voice, messaging, and data services to residential and business customers (including IoT services). Vodacom is also active in the provision of *fixed* wholesale and retail services to residential and business customers. Vodacom's mobile and fixed services are supported by its own fibre infrastructure and are also provided over third party infrastructure.
15. Vodacom provides limited fixed wholesale services to other telecommunications providers. These include wholesale fixed managed services, wholesale bitstream access to ISPs, wholesale fibre and microwave backhaul, and managed satellite Internet services. Vodacom also provides wholesale APN services, leases access to its towers, and provides wholesale network management services to **[Confidential]**.
16. Vodacom offers fixed retail broadband services over its own and third party last mile infrastructure. It also offers retail DSL broadband services to business customers, using wholesale DSL access from Telkom and business satellite Internet services (particularly for customers without alternative access). Vodacom also provides more specialised services to enterprise customers.⁶
17. Vodacom holds several licences for the use of mobile and microwave spectrum. It holds licences for 14% of assigned mobile spectrum, including the following: 11 MHz FDD in the 900 MHz band; 12 MHz FDD in the 1,800 MHz band; and 15 MHz FDD and 5 MHz TDD in the 2,100 MHz band.⁷ It also provides wholesale national roaming services to **[Confidential]**.
18. Vodacom has a number of subsidiaries which are active in telecommunications services: (a) Mezzanine Ware (Pty) Ltd ("Mezzanine"), (b) Storage Technology Services (Pty) Ltd trading as Nexio ("Nexio"), (c) XLink Communications (Pty) Ltd ("XLink"), and (d) IoT.nxt (Pty) Ltd ("IoT.nxt").
- a. Mezzanine is a digital technology company which supplies a range of managed services for business customers, including mobile and cloud-based services and IoT products and services.
 - b. Nexio is a data centre and storage specialist and business systems aggregator. Nexio provides multi-cloud, security, data management and storage solutions.

⁶ These include unified communications solutions based on interlinking products and services; cloud and hosting services; connectivity services such as leased lines, microwave links, dedicated Internet access, and best effort Internet access; IoT services; security solutions for IT systems and networks; and managed services, such as managed VoIP/telephony/video, managed VPN, and managed LAN services. See: <https://www.vodacombusiness.co.za/business/solutions/solutions>

⁷ ICASA. (2019). *Discussion document on the market inquiry into mobile broadband services in South Africa*, Table 3.

- c. Xlink provides secure and managed payment solutions to businesses.
 - d. IoT.nxt provides hardware and software used in IoT solutions. Its technology allows various systems, processes, machinery and 'things' to be interconnected.
19. Absent the proposed transaction, we expect that the activities of CIVH and its subsidiaries, as well as Vodacom's activities, will continue in a similar way as they do currently. We therefore assume that the status quo is representative of the counterfactual.

2.3 Rationale for the proposed transaction

- 20. [Confidential].
- 21. [Confidential].
- 22. [Confidential].
- 23. [Confidential]. [Confidential].⁸
- 24. [Confidential].

⁸ [Confidential].

3 Changes due to the Proposed Transaction

25. A transfer of control of licences could potentially impact on consumers through changes in either the business operations of the Parties or the competitive environment. In this section, we examine the changes that are likely to result from the proposed transaction.

3.1 Changes in business operations

26. Vodacom currently does not provide any dark fibre to the market (except [Confidential]), nor access to its FTTB fibre network. Vodacom does provide access to its national long-haul fibre, metro backhaul fibre and Fibre-to-the-Site ("FTTS"), all as lit services.
27. As part of the proposed transaction, Vodacom will transfer the fibre infrastructure relating to metro fibre and FTTB networks to Newco, but it will retain all of its [Confidential].
28. As far as metro fibre is concerned (i.e. mobile backhaul or FTTS and metro backhaul fibre), the physical infrastructure of Vodacom will be transferred to Newco, but Vodacom will still offer [Confidential].
29. [Confidential].
30. [Confidential].
31. The arrangements for the supply of retail fixed internet access services to enterprises will remain the same, except that Vodacom is acquiring a minority interest in and joint control of Newco, which has a subsidiary (SADV) active in supplying these services. Vodacom will continue to offer its existing retail internet access services to enterprises separately.
32. Similarly, the arrangements for the supply of fibre network planning, building and maintenance services (the activities of MCT/Britelink), fibre network management software provided to FNOs, and interconnect services provided to ISPs (the activities of AEX), will also remain the same.

3.2 Impact on competition

33. The impact of the proposed transaction on competition in the relevant markets is assessed in separate reports prepared by FTI Consulting and Compass Lexecon (attached as Appendix 9.2 of FORM G).
34. In relation to the services relevant to this report, our competitive assessment found that:
- it is highly unlikely that the proposed transaction will substantially prevent or lessen competition in the relevant markets for [Confidential].
 - it is highly unlikely that the proposed transaction will substantially prevent or lessen competition in the relevant markets for [Confidential]; and
 - the proposed transaction is likely to give rise to efficiencies and pro-competitive benefits in relation to these services, to the benefit of consumers and the public interest.

4 Impact on Customers and Consumers

35. In this section, we assess the impact on customers and consumers in light of the changes identified in the business operations and competitive environment. We find that the proposed transaction will promote access to, and thus more efficient use of, Vodacom's existing fibre assets. Newco's existing customer base and track record as an open access provider will enable more efficient and widespread usage of both the FTTH business and the Transfer Assets. These assets will become available immediately to Newco's customer base, both existing and new.

4.1 Impact on customers

36. As part of Newco's [Confidential]. Vodacom's network [Confidential]. We understand, for instance, [Confidential]. [Confidential].
37. In addition, Newco will offer dark fibre access to these fibre assets, which Vodacom does not offer, meaning that third parties will have more ways to access these assets. [Confidential].
38. [Confidential].
39. [Confidential].
40. The anticipated changes relative to the counterfactual suggest that the proposed transaction will not have any negative impact on the Parties' customers. In fact, the proposed transaction is more likely to have a positive impact on customers of the Parties, and indeed consumers more generally, due to the pro-competitive effects of the transaction.

4.2 Impact on consumers

41. [Confidential].
42. [Confidential].
43. In South Africa, fibre has traditionally been deployed first in high income areas. [Confidential].
44. [Confidential].
45. [Confidential].

VODACOM / NEWCO

Consumer interest analysis in relation to wholesale FTTH access, retail residential fixed internet access, hosting services and CCTV services

Paul Reynolds and Andrew Swan
15 December 2021

Privileged and Confidential
DRAFT

Colour key for information sharing protocols

[Commercial in confidence – Vodacom] [Commercial in confidence – CIVH]

1 Introduction

- 1.1 Compass Lexecon has been jointly instructed by DLA Piper and CDH to provide an independent economic assessment of the consumer interest impact of the proposed transaction (**‘the Transaction’**) between Business Venture Investments no 2213 Proprietary Limited (**‘Newco’**) and Vodacom Proprietary Limited (**‘Vodacom’**), referred to jointly as **‘the Parties’**. In particular, we have been instructed to assess the consumer interest impact of the Transaction in relation to:
 - a. wholesale FTTH access;
 - b. retail residential fixed internet access;
 - c. hosting services; and
 - d. CCTV services.¹
- 1.2 We refer to these four types of services jointly and severally as **‘the Relevant Services’**.
- 1.3 The Transaction would involve Vodacom acquiring a shareholding in Newco, which is a wholly owned subsidiary of Community Investment Ventures Holding Proprietary Limited (**‘CIVH’**).

¹ A report by FTI provides a separate independent economic assessment of the consumer interest impact of the Transaction in relation to metro fibre backhaul infrastructure and Fibre-to-the-Business access routes.

This will occur through: (i) a cash subscription by Vodacom, (ii) the sale of Vodacom's Fibre-to-the-Home ('FTTH') business to Newco, (iii) the sale of certain Vodacom Transfer Assets to Newco, and (iv) [Confidential]. This will ensure that Vodacom has sufficient shareholding to have joint control over Newco.

- 1.4 DFA, a subsidiary of CIVH, holds the following licences in terms of the ECA:
 - a. Individual Electronic Communications Network Service (IECNS) under licence number **0400/IECNS/AUG/2009** issued to DFA on 12 August 2009 (updated on 3 July 2013) ('the IECNS Licence'); and
 - b. Individual Electronic Communications Service (IECS) Licence under licence number **0400/IECS/AUG/2009** issued to DFA on 12 August 2009 (updated on 3 July 2013) ('the IECS Licence').
- 1.5 The IECNS and IECS Licences held by DFA are intended to be transferred to NewCo as a prior step to the Transaction pursuant to an internal reorganisation of CIVH.
- 1.6 Subsequently, control of the IECNS and IECS Licences (to be held by Newco) will be transferred pursuant to the Transaction.
- 1.7 We are instructed that the Individual Licensing Processes and Procedure Regulations, 2010 ('the Regulations') in respect of the transfer of control of an individual licence² not only require an assessment of whether the transfer promotes competition (in the ICT sector), but also require an assessment of the impact of the transfer on the "interests of consumers"³. We are also instructed that the Regulations provide no further detail on:
 - a. What the 'interests of consumers' may constitute, including whether this is different to the consumer impact resulting from the competitive effects of the transfer;
 - b. Whether 'consumers' should be read narrowly as only including individuals (or households) or more broadly as encompassing all customers, including businesses/enterprises (whatever the size); or
 - c. Whether consumers include both the consumers of the target licence-holder (i.e., NewCo in this instance) or also include the acquiring firm's consumers or even potentially all consumers.
- 1.8 In this context this report seeks to be comprehensive insofar as it identifies what the expected impact of the Transaction will be on all customers in the relevant markets for the Relevant Services which we trust will address the requirements of the Regulations.⁴

² ICASA, Processes and Procedures Regulations for Individual Licences, 2010 (Notice No. 522 of 2010) as amended by Notice 154 of 2016, read with Form G to the regulations.

³ Item 9.3 of Form G to the Regulations; regulation 11(4) of the Regulations.

⁴ We define the relevant markets of interest in Section 6 (wholesale FTTH services) and Section 10 (retail residential fixed internet access services) in Compass Lexecon, *Competitive assessment of wholesale FTTH access, retail residential fixed internet access and certain other services*, December 2021 (Appendix 9.2 of FORM G). For reasons set out in Section 12 of that report (i.e., the lack of any meaningful competitive overlap between the Parties in hosting and CCTV services), we do not define relevant markets for these services.

- 1.9 The CCTV services provided by Newco are not licensable services in terms of the ECA. Accordingly, they will not be provided in terms of the licences to be held by Newco and are not strictly relevant to the consumer interest analysis in this report. Notwithstanding this, the impact of the Transaction for consumers and customers of these services is included for the sake of completeness.
- 1.10 The remainder of this report is structured as follows:
- a. *Outline of the counterfactual.* The impact of a particular event, such as a change in ownership, should be assessed as against the counterfactual to that event. It is typical in such assessments to use the *status quo* as the counterfactual. In Section 2 we identify what the *status quo* is in respect of the Relevant Services on the basis that we consider this to provide the relevant counterfactual.
 - b. *Anticipated changes due to the acquisition.* A transfer of ownership may result in changes to the business operations or the competitive environment, which may ultimately impact on consumers. In Section 3 we identify what material changes to business operations may be anticipated as a consequence of the Transaction. The impact of the Transaction on the competitive environment in relation to the Relevant Services has been considered separately by Compass Lexecon in the accompanying report⁵, and we draw from and summarise at a high level that analysis in Section 4.
 - c. *Impact on consumers of any changes.* The impact on consumers is then considered in light of the identified changes in the business operations and/or competitive environment in Section 5, again drawing from the analysis set out in our other report.

2 The Counterfactual

- 2.1 In this section we consider the current business operations and customers of the respective parties, focusing specifically on the Relevant Services, and describe:
- a. the customer bases of the Parties and the services provided to those customer bases; and
 - b. the rationale for the Transaction.

CIVH/Newco

Customer groups and services provided

- 2.2 Newco's services and customer groups related to the Relevant Services are:
- a. Newco's subsidiary, Vumatel, supplies wholesale FTTH services to Internet Service Providers ('ISPs') including SADV;
 - b. Newco's subsidiary, SADV, operates as an ISP in supplying retail fixed internet access services to residential customers;

⁵ Compass Lexecon, *Competitive assessment of wholesale FTTH access, retail residential fixed internet access and certain other services*, December 2021 (Appendix 9.2 of FORM G).

- c. Newco's subsidiary, DFA, offers co-location services at its network aggregation facilities to telecommunications services providers that use its connectivity services; and
- d. Vumatel has a controlling interest in VumaCam which supplies CCTV solutions predominantly to security companies and law enforcement agencies.

2.3 Without the Transaction, we expect that the activities of CIVH and its subsidiaries in relation the Relevant Services will continue in a similar way as they do currently. [CONFIDENTIAL].⁶

Transaction rationale

2.4 CIVH's rationale for the Transaction is as follows:⁷

[CONFIDENTIAL]

Vodacom

Customer groups and services provided

2.5 Vodacom's services and customer groups related to the Relevant Services are:

- a. Vodacom supplies wholesale FTTH services to ISPs (including its own ISP);
- b. Vodacom operates as an ISP in supplying retail fixed internet access services (including to residential customers);
- c. Vodacom, including via its Nexio division, supplies data centre and related hosting services including systems integration services to enterprises; and
- d. Vodacom supplies CCTV solutions, as services which are mainly ancillary to Vodacom's connectivity and IoT offerings, to enterprises.

2.6 Without the Transaction, we expect that Vodacom's activities in relation the Relevant Services will continue in a similar way as they do currently. We have not seen any documents from Vodacom indicating that it [CONFIDENTIAL].

Transaction rationale

2.7 Key elements of Vodacom's rationale for the Transaction are:⁸

[Confidential]

⁶ CIVH's response to Compass Lexecon's information request of 8 December 2021

⁷ CIVH Board Pack, 27 October 2021, page 11.

⁸ Application for the transfer of control of the IECS and IECNS Licences, 15 December 2021, item 10.1.

3 Anticipated changes due to the proposed transaction

- 3.1 A transfer of control of licences could potentially impact on consumers through either changes in the competitive environment or changes to the business operations of the Parties. In this section, we examine whether any changes to either are anticipated as a result of the Transaction in relation to the Relevant Services.

Business operations

- 3.2 As regards the Relevant Services, under the Transaction:
- a. Vodacom's FTTH network infrastructure and related assets including contracts, fixed assets and software would be sold to Newco;
 - b. Vodacom would acquire a shareholding of at least 30% (and up to 40%) of Newco, which provides it with joint control; and
 - c. Vodacom will not transfer and will continue to operate independently from Newco in relation to retail residential fixed internet access, hosting and CCTV services.

Impact on specific customer groups related to the Relevant Services

- 3.3 We consider that the following changes are likely to result from the Transaction for customers of the Relevant Services.⁹
- a. Newco would become the supplier of wholesale FTTH access to ISP customers which currently acquire wholesale FTTH access from Vodacom. These ISPs (i.e., Vodacom's existing ISPs) will be able to use a single supplier for the homes passed by Vodacom's current network and the over 1 million additional households passed by CIVH's network, rather than incurring costs to connect to and purchase from them or to market the networks to their customers separately.
 - b. [CONFIDENTIAL]. In particular, Vumatel's existing ISP customers will gain access (without incurring additional onboarding costs) to approximately [CONFIDENTIAL] additional homes passed, i.e., those in Vodacom's FTTH footprint excluding the few areas where the Parties' networks overlap.
 - c. [CONFIDENTIAL]
 - d. ISPs are likely to benefit from a degree of pass-through of savings on the ongoing costs of FTTH provision arising from: [CONFIDENTIAL].
- 3.4 The arrangements for the supply of retail fixed internet access services to residential customers, hosting services and CCTV services would not change with the Transaction, except that Vodacom is acquiring a minority interest in, and joint control of, Newco which has subsidiaries active in supplying these services. Vodacom would continue to offer its existing retail residential fixed internet access services, hosting services and CCTV services separately.

⁹ See the analysis set out in Section 11 of the Compass Lexecon, *Competitive assessment of wholesale FTTH access, retail residential fixed internet access and certain other services*, December 2021.

4 Competitive structure of the markets

- 4.1 The assessment as to the impact of the proposed transaction on competition in relevant telecommunications markets is the subject of separate reports prepared by FTI and Compass Lexecon (attached as **Appendix 9.2 of FORM G**).
- 4.2 In relation to the Relevant Services, our competitive assessment found that:
- a. it is highly unlikely that the Transaction would substantially prevent or lessen competition in wholesale FTTH access, retail residential fixed internet access, hosting or CCTV services; and
 - b. the Transaction is likely to give rise to efficiencies and pro-competitive benefits in relation to FTTH services to the benefit of consumers and the public interest.
- 4.3 We summarise these findings in respect of the major customer groups serviced by one or both of the parties:
- a. The current ISP customers of both Newco and Vodacom and potential new ISP customers will benefit from being able to use a single supplier to access additional FTTH homes passed as a result of the Parties' existing FTTH assets being combined;
 - b. ISPs and end-customers will benefit from FTTH being deployed more widely and more quickly as a result of efficiencies created by the Transaction; and
 - c. No adverse effects on the customer groups related to the Relevant Services have been identified.

5 Impact on consumers

- 5.1 The primary anticipated changes relative to the counterfactual suggest that the Transaction will not have any negative impact on the Parties' customers.
- 5.2 In fact, the Transaction is more likely to have a positive impact on customers of the Parties, and indeed ICT customers more generally due to the pro-competitive effects of the transaction.
- a. [CONFIDENTIAL].
 - b. [CONFIDENTIAL].
 - c. [CONFIDENTIAL].

Provide the detailed reasons for the proposed transfer.

[CONFIDENTIAL].

Provide a written undertaking given by the transferee, through its duly authorised representative, that it will comply with the applicant's Licence obligations in the event of the transfer application being approved by the Authority.

Business Venture Investments 2213 (Pty) Ltd

17 Petunia Street
Bryanston
2191

The Independent Communications Authority of South Africa

350 Witch-Hazel Avenue,
Eco Point Office Park
Eco Park
Centurion

6 April 2022

Dear Sirs

WRITTEN UNDERTAKING PURSUANT TO APPENDIX 11.2 TO FORM G ("The Consolidated Transfer Application")

1. I, Raymond Sibusiso Mbeki Ndlovu, confirm as follows:
 - 1.1 I am the sole director of Business Venture Investments No 2213 Proprietary Limited (**NewCo**).
 - 1.2 Given that I am the sole director of NewCo, and given that there is no Accounting Officer (as defined in the ICASA General Licence Fees Regulations, 2012) for NewCo, I am best placed to provide this written undertaking.
2. NewCo is the transferee in the Consolidated Transfer Application to which this undertaking relates. As outlined in the accompanying cover letter and in Form G, the Consolidated Transfer Application is an application for the Authority's approval for the transfer of the individual electronic communications service licence and the individual electronic communications network service licence held by Dark Fibre Africa (**DFA**) in terms of the Electronic Communications Act 36 of 2005 (the **Act**) to NewCo, pursuant to the internal group restructure in terms of which DFA will be wholly-owned by NewCo and the Proposed Transaction in terms of which NewCo will be owned by CIVH and Vodacom.
3. I hereby confirm, for purposes of Appendix 11.2 of Form G to the Individual Licensing Process and Procedures Regulations, 2010, that NewCo will comply with the licence obligations already discharged by DFA in terms of the Act, and which obligations will be assumed by NewCo if this Consolidated Transfer Application is granted by the Authority.

Yours faithfully



Raymond Sibusiso Mbeki Ndlovu
Director

Attach a resolution authorising the persons signing this application to sign this application.

RESOLUTIONS ADOPTED BY WRITTEN CONSENT OF ALL OF THE DIRECTORS OF BUSINESS VENTURE INVESTMENTS NO 2213 PROPRIETARY LIMITED (REGISTRATION NUMBER: 2020/810311/07) (the Company) IN TERMS OF SECTION 74 OF THE COMPANIES ACT, 2008 (the Act)

We, the persons whose names appear below and who have signed this document (or counterparts in the same form), are all the directors of the Company (the **Board**), and hereby resolve that the following resolutions be passed in terms of section 74 of the Act and agree that such resolutions will be as valid and effective as if they had been passed at a meeting of the Board duly convened, constituted and held.

It is recorded that each director has received notice of the matters referred to below.

WHEREAS:

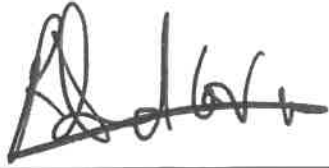
- A. The Company seeks to become the holder of the individual service licences currently held by Dark Fibre Africa Proprietary Limited (**DFA**) issued in terms of the Electronic Communications Act 36 of 2005 (the **Act**) as follows:
 - a. an individual electronic communications service licence under licence number 0400/IECS/AUG/2009, which was issued to DFA on 12 August 2009 and updated on 3 July 2013 (the **IECS Licence**); and
 - b. an individual electronic communications network service licence under licence number 0400/IECNS/AUG/2009, which was issued to DFA on 12 August 2009 and updated on 3 July 2013 (the **IECNS Licence**).
- B. DFA intends to transfer the IECS Licence and the IECNS Licence to the Company pursuant to an internal group restructuring (the **Internal Restructure**). Following the implementation of the Internal Restructure, the Company will be the holding company of DFA (and, by extension, its wholly-owned subsidiary, SA Digital Villages Proprietary Limited (**SADV**)) and Vumatel Proprietary Limited (**Vumatel**). The intention is that DFA (and, by extension, SADV) and Vumatel will continue to provide licensable services under the IECS Licence and the IECNS Licence to be held by the Company in line with paragraph 4.3 of the IECS Licence and paragraph 3.3 of the IECNS Licence, in terms of which any or all of subsidiaries of the licence holder may provide any or all of the licensable services contemplated in the licence.
- C. DFA and the Company wish to apply to the Independent Communications Authority of South Africa (the **Authority**) for its approval to transfer the IECS Licence and the IECNS Licence from DFA to the Company in terms of section 13(1) of the Act (the **Transfer Application**).

- D. At the same time, Vodacom Proprietary Limited (**Vodacom**) seeks to acquire a minority shareholding interest, with control rights, in the Company once the IECS Licence and the IECNS Licence has been transferred from DFA to the Company (the **Proposed Transaction**).
- E. The Company and Vodacom wish to apply to the Authority for its approval to transfer control of the IECS Licence and the IECNS Licence from the Company to Vodacom in terms of section 13(1) of the Act (the **Control Application**).
- F. In addition, DFA holds a radio frequency spectrum licence issued in terms of the Radio Frequency Spectrum Regulations, 2015, published under the Act under licence number 00-552-940-9.
- G. DFA will continue to be the holder of the RFS Licence following the implementation of the Proposed Transaction. DFA and Vodacom wish to apply to the Authority for its approval to transfer the control of RFS Licence from DFA to Vodacom in terms of section 31(2A) of the Act (the **RFS Control Application**).

IT IS RESOLVED THAT:

1. The Company shall submit the Transfer Application, Control Application and the RFS Control Application contemporaneously to the Authority.
2. Any director of the Company be and is hereby authorised, on behalf of the Company, to do or cause to be done, all such things, and sign, and cause to be signed, all such documentation, as may be necessary or desirable to give effect to the foregoing, and insofar as any director has done any of the foregoing prior to the passing of these resolutions, such action be and is hereby ratified and approved, confirmed and approved to the fullest extent permitted by law.

[Signature page to follow]



RAYMOND SIBUSISO MBEKI NDLOVU

Director

Date:

RESOLUTIONS ADOPTED BY WRITTEN CONSENT OF ALL OF THE DIRECTORS OF DARK FIBRE AFRICA PROPRIETARY LIMITED (REGISTRATION NUMBER: 2004/010305/07) (the Company) IN TERMS OF SECTION 74 OF THE COMPANIES ACT, 2008 (the Act)

We, the persons whose names appear below and who have signed this document (or counterparts in the same form), are all the directors of the Company (the **Board**), and hereby resolve that the following resolutions be passed in terms of section 74 of the Act and agree that such resolutions will be as valid and effective as if they had been passed at a meeting of the Board duly convened, constituted and held.

It is recorded that each director has received notice of the matters referred to below.

WHEREAS:

- A. The Company is the holder of the individual service licences issued in terms of the Electronic Communications Act 36 of 2005 (the **Act**) as follows:
 - a. an individual electronic communications service licence under licence number 0400/IECS/AUG/2009, which was issued to the Company on 12 August 2009 and updated on 3 July 2013 (the **IECS Licence**); and
 - b. an individual electronic communications network service licence under licence number 0400/IECNS/AUG/2009, which was issued to the Company on 12 August 2009 and updated on 3 July 2013 (the **IECNS Licence**).
- B. The Company intends to transfer the IECS Licence and the IECNS Licence to Business Venture Investments No 2213 Proprietary Limited (**NewCo**) pursuant to an internal group restructuring (the **Internal Restructure**). Following the implementation of the Internal Restructure, NewCo will be the holding company of the Company (and, by extension, its wholly-owned subsidiary, SA Digital Villages Proprietary Limited (**SADV**)) and Vumatel Proprietary Limited (**Vumatel**). The intention is that the Company (and, by extension, SADV) and Vumatel will continue to provide licensable services under the IECS Licence and the IECNS Licence to be held by the Company in line with paragraph 4.3 of the IECS Licence and paragraph 3.3 of the IECNS Licence, in terms of which any or all of subsidiaries of the licence holder may provide any or all of the licensable services contemplated in the licence.
- C. The Company and NewCo wish to apply to the Independent Communications Authority of South Africa (the **Authority**) for its approval to transfer the IECS Licence and the IECNS Licence from DFA to the Company in terms of section 13(1) of the Act (the **Transfer Application**).

- D. At the same time, Vodacom Proprietary Limited (**Vodacom**) seeks to acquire a minority shareholding interest, with control rights, in NewCo (and by extension, the Company) once the IECS Licence and the IECNS Licence has been transferred from the Company to NewCo (the **Proposed Transaction**).
- E. NewCo and Vodacom wish to apply to the Authority for its approval to transfer control of the IECS Licence and the IECNS Licence from NewCo to Vodacom in terms of section 13(1) of the Act (the **Control Application**).
- F. In addition, the Company holds a radio frequency spectrum licence issued in terms of the Radio Frequency Spectrum Regulations, 2015, published under the Act under licence number 00-552-940-9.
- G. The Company will continue to be the holder of the RFS Licence following the implementation of the Proposed Transaction. The Company and Vodacom wish to apply to the Authority for its approval to transfer the control of RFS Licence from the Company to Vodacom in terms of section 31(2A) of the Act (the **RFS Control Application**).


IT IS RESOLVED THAT:

1. The Company shall submit the Transfer Application, Control Application and the RFS Control Application contemporaneously to the Authority.
2. Any director of the Company be and is hereby authorised, on behalf of the Company, to do or cause to be done, all such things, and sign, and cause to be signed, all such documentation, as may be necessary or desirable to give effect to the foregoing, and insofar as any director has done any of the foregoing prior to the passing of these resolutions, such action be and is hereby ratified and approved, confirmed and approved to the fullest extent permitted by law.

[Signature page to follow]



RAYMOND SIBUSISO MBEKI NDLOVU
Director
Date:



PRISCILLA RALEBITSO
Director
Date:



JAKOBUS JOHANNES VILJOEN
Director
Date:



ANDRIES DANIEL JAN DELPORT
Director
Date:



JACQUES JOHAN GRYZENHOUT
Director
Date: