

1. Fixed BU model

Description / reference to fixed BU model sheets
Dimensioning
<i>Row 18 - On-net voice call and SMS provisioning / demand factor</i>
- Telkom Fixed Line SMS is not functional (decommissioned).
<i>Row 23 - Call assumptions - Unsuccessful calls - percentage</i>
- Telkom would like to understand what release causes (for unsuccessful calls) are deemed to be unsuccessful calls for ICASA in a fixed network? The assumption of 5% seems a bit low.
- Telkom would like to understand how this value will be used to calculate the FTR.
<i>Row 24 - Call assumptions - Minutes per call</i>
- Telkom's pre-liminary measurement is just under 4 minutes i.e., 3.75 minutes.
<i>Row 25 - Call assumptions - Idle time</i>
- Telkom does not measure idle time.
<i>Row 28 - Busy hour assumptions</i>
- Telkom needs to understand the source of the assumptions that is made on the following parameters:
- % of calls made during working days
- % of calls made in a working day during the busy hour
- % of annual traffic in the busy hour
- Telkom wants to understand how this value will be used to calculate the FTR.
<i>Row 45, 46, 47, 48 - Proxy / Interrogating - Call session control function hardware/software</i>
- Telkom's network uses Legacy and NGN with no internet connectivity provided by the IMS as one would find in a Mobile IMS scenario [busy hour call attempts].
<i>Row 69, 82, 92, 105, 117, 130, 144, 155</i>
- Telkom would like more clarify on the meaning of "Outgoing mobile traffic to fixed networks". Telkom's interpretation is "Incoming calls from Mobile and fixed networks"?

2. Mobile BU model

Description / reference to mobile BU model sheets
Summary
Frequency allocation above 1 GHz only allocates spectrum to TDD. Telkom currently has 2 FDD carriers in this space.
Volumes
Telkom's volumes are not split between technologies.
Dimensioning
Row 33 - No provisioning is made for LTE TDD where Telkom is carrying VoLTE. The ratio for downlink (DL) needs to change for TDD carriers.
Row 40 - Telkom has decreased the number of GSM carriers in use in the network to typically 1 carrier where GSM is equipped, currently Telkom has 1500 sites where GSM may be equipped on 1 or 2 sectors.
Row 76 - Telkom has a combination of LTE TDD and FDD carriers in its network. Telkom has 3 FDD LTE and 3 TDD LTE carriers in use in its network
Row 147, 148, 149 - Telkom has different values; These values change y-o-y.
Row 327 - Busy Hour calculation, the spread merely takes a 24 hour period and divides the number. This is not representative of the real busy hour that most networks would encounter, it is merely an average of any day in a 24 hour cycle. The cell value shows "=D264*MB_GB*mb_min_2g/mins_hour"
Geography
Telkom's classification of geotypes is as follows - Metro, Metro-fringe, Tier2 cities, sub-urban, rural, which is different from ICASA's classification.
Section key parameters - this makes no allowance for frequency. Low frequencies have better penetration but higher frequencies are more prone to attenuation. Also makes no allowance for clutter types in the radio planning space.
Coverage sites - classification of sites has been raised in Telkom's submission for clarification.
Row 35 - Cell radius values appear questionable as they do not factor frequency ranges or clutter types into account. These are mathematical formulas not actual radio planning data, also they do not account for antenna types on the BTS, i.e. Omni antenna compared to Panel antenna.
Row 62 - Telkom does not split traffic between site types by geotype? Telkom would like to understand how the split is relevant to calculating the MTR.
Row 77 - Telkom does not measure traffic between geotypes?
Row 88 - Telkom does not measure traffic volumes by technology/geotype.

Mobile BU model (cont.)

4A Network Demand - RAN
Row 18 - Where GSM is equipped - there is only 1 channel per sector.
Row 24, 25 - Telkom currently only has 2 MHz assigned to GSM.
Row 57 network demand traffic - Telkom will not be able to define the sites at the level of classification requested.
Row 166 - Telkom would like to understand how this caters for sites with TDD/FDD LTE.
Row 237, 240, 243 - Telkom would like to understand how type of tower information is relevant to calculating the MTR.
Row 311 - Telkom does not intend building any new BSC's.
4B Network Demand – Core; 5A cost capital; 5B cost capital; Core cost
Telkom would like to understand how GGSN is relevant to calculating the MTR.
Telkom would like to understand how SGSN is relevant to calculating the MTR.
Telkom would like to understand how SGW is relevant to calculating the MTR.
Telkom would like to understand how PDN/PGW is relevant to calculating the MTR.
5A cost capital
There is no individual costing for 2G / 3G / LTE radios because they are combined into a single RRU (Remote Radio Unit).
RAN details - Tranceiver, Controller, Backhaul
Row 14 (C14) - All Telkom Mobile equipment is located in the same radio for 1800/2100 MHz.
Row 19 (C19) - No new BSC's built in the last 9 years.
Spectrum license fees
Rows 46 - 63 Telkom mobile procures all Microwave links via Openserve.
Fixed links
Rows 21 - 29 and 46 - 51. Telkom mobile procures all Microwave links via Openserve.
5A Geography – MP
see comment above - first row under "Geography" (highlighted in red)
Row 8 (O8) - This implies that South African has in excess of 85 million people ?
Row 7 (O7) - This indicates that no population is located in the rural area's. This disputes the number reported.
The last full population census was conducted in 2011 - Telkom is not sure if Column F is accurate ? Stats SA indicated that the number of people in 2021 was 60 million.