February 28, 2019

Independent Communications Authority of South Africa
Private Bag X10
Highveld Park
0169

Dear Mr. Lumkile Qabaka

TÜV SÜD welcomes the opportunity to formally comment on the draft Conformity Assessment Framework for Equipment Authorization in South Africa. We support ICASA's efforts to streamline and reduce administrative and process times for products being supplied within the South Africa market. We duly support ICASA's approach in ensuring that risk profiling and characterization of devices by technology/type forms a key part of the consideration of the appropriate CAS that would apply to a subject device.

We agree with the elements indicated in Section 1.1, required to determine compliance within the regulatory framework, including:

- Market surveillance, audit and enforcement capabilities (provide concise guidance on market surveillance requirements ensuring high risk and newer technology products are audited).
  Note: The FCC have a clear administrative procedure outlined in a post market surveillance requirements document for CBs to follow (Ref: KDB 610077 D01) for which later this year, their online filing system will integrate within the software functionality to request samples from registered manufacturers and/or take appropriate action in cases of non-compliance observations.
- Test laboratories comply with ISO 17025 requirements (yields higher rates of reliability/valid and repeatable results).
  Note: The FCC determined within 2012-2018 that rates of fake test reports originating from China was prevalent and they took some measures to reduce the occurrence of fake test reports by requiring accreditation of each test laboratory location by an FCC-recognized Accreditation Body.
- Test labs often have mature Certification Departments which work cohesively with regulators, laboratory operations and clients under strict accreditation controls, ensuring activities performed by testing and certification groups are not compromised (free of conflict of interests).
- The use of a recognized accreditation system (Accreditation body is a signatory to the ILAC MRA or a member of a regional cooperation bodies recognized by ILAC).

TÜV SÜD support ICASA's recommended approach for ICT equipment, for which standards and requirements *are outlined for a product type/technology* as being suited to follow an SDoC authorization route, if the Government of South Africa has determined that such equipment types have been manufactured, monitored and authorized for a suitable period of time and for example within the past decade have proven to have very low levels of interference/non-compliance rates.

The applicable conformity assessment route should be dependent upon the risk profile for the device category. For example, last year the FCC relaxed further their requirements for unintentional radiators while the EU do not mandate type examination certification for IT equipment or equipment for which there are harmonized standards available for Radio requirements. The FCC recently updated their rules in the past year for unintentional radiators and digital devices to allow manufacturers to follow a new hybrid of the previously known Verification and DoC authorization procedures, into what is now known as the SDoC procedure, however, the FCC have retained the option for the manufacturer to follow the Certification OR SDoC procedure for the majority of such devices (47 CFR §15.101 refers).

Answers to the Questions asked in Gazette No. 42108

Question 1

In your view, what are the benefits of having conformity assessment to support the regulations?

Conformity assessment procedures ensure that there is a standard set of rules and processes for manufacturers (and other responsible parties), as well as test laboratories, compliance personnel and the federal government employees to operate in accordance with. If structured well, they offer a balanced, reasonable and fair approach to bringing products to the market while ensuring they meet all relevant regulations. Appropriate conformity assessment procedures also improve the quality and integrity of products and ensures a more adequate and sustainable system for the approvals infrastructure enabling deployment of products in an organised, timely and manageable way without hindering progress for the South American market.

Question 2

Do you see any benefits in risk profiling and the categorization of equipment in carrying out the conformity assessment?

In the following paragraph "RL" stands for Risk Level;
We agree that risk profiling of equipment and categorisation of equipment is important in the conformity assessment. We recommend ICASA establishes risk levels (categories), for example: RL1 (exempt products), RL2 (e.g. IT/Digital/ISM non-implantable devices), RL3 (other device technologies) and RL4 (devices known to ICASA to be high risk and or novel devices for which standards/rules are not available in industry). By combining risk and categorization, there would be a way to simplify the determination of the CAS that would apply to a subject device. Each category may have its own CAS and would allow the appropriate essential requirements to be met as appropriate.

Question 3

With the recommended steps for using conformity assessment in support of the regulations (figure 10), which of the steps would you say are missing in the Approval Framework, and how can they help improve the Approval Framework efficiency?

No comment.

Question 4

Can you suggest an appropriate conformity assessment approach that can address the current Approval Framework challenges?

In the following paragraph "RL" stands for Risk Level
The suggested approach would be to have the following categories subject to an SDoC procedure:
RL1 (exempt products), RL2 (e.g. IT/Digital/ISM non-implantable devices),

While devices that are categorised as RL3 (other device technologies), RL4 (devices known to ICASA to be high risk such as higher power implants, novel devices for which standards/rules are not available in industry or devices which cause spectrum, safety or health concerns) can undergo Certification by an acceptably recognised Certification Body

On Page 30 of the Gazette No. 42108, where there is a reference to "registration requirements" we do support a mechanism of notifying to ICASA a set of radio characteristics for RL2 devicesif deemed appropriate, or at minimum for state-of-the art/novel equipment for which standards/rules are not readily available.

Question 5

In South African context, what are the benefits for the Authority collaborating with other regulatory institutions/organizations/states?

It has been found that the schemes set up by the FCC, ISED Canada, MIC Japan and EC for example, have undergone maturation and by establishing conformity assessment procedures which involve criteria for accepting test reports from other countries and involving foreign CBs they have experiences an increase in synergies and rapid developments and sharing of information and methodologies, especially with newer

technologies and handling of future threats. Such collaboration has for example helped with market surveillance activities and saved resource in development of technical and administrative procedures for common areas of concern/development. Annual meetings such as those held by the TCB Council, the RED CA (in Europe), and MIC Japan facilitate sharing of critical conformity assessment updates in their procedure as well as regulatory/standards/technical updates. This provides underpinning knowledge and skills for the attendees at meetings. Collaboration aids greatly in ensuring resource is kept abreast of global developments in the ICT arena in an efficient timeframe and organised manner.

Question 6

Given table 3, which SDoC scheme/s would best suit the South African market, and why?

For RL1 and RL2 and EMC only devices, SDoC II may be suitable and to include: -
- testing using accredited lab
- technical brief which includes test results
- marking or labelling

For RL3 and RL4 devices, Certification may be suitable and to include: -
- testing using accredited lab
- technical brief which includes test results
- marking or labelling
- operating instructions and user manual
- equipment photographs, block diagram, circuit diagrams
- registration requirements for equipment

Question 7

In your definition/understanding, what ICT equipment can be classified as low risk and may be considered for equipment authorization exemption?

The items listed in Table 4, look mainly acceptable. We are not accustomed to satellite comms being exempted unless used solely by federal services.

ICASA may wish to consider creating exemption thresholds for equipment which are very low power i.e. ISM equipment operating at very low field intensity levels.

The MIC in Japan have a classification called “Extremely Low Power Radio Station” where the test lab can establish the level of the electric field intensity for Intentional Radiators (operating up to 1000 GHz), where if devices are below the threshold indicated, then the device is not subject to full testing, certification or labelling and there is no restriction on the purpose of use of such a device.
(Ref: https://www.tele.soumu.go.jp/e/ref/material/rule/)

The FCC and ISED Canada also have an exemption from full testing and certification for Intentional Radiators operating under 490 kHz, provided all emissions are at least 40 dB below the limits in FCC rule part §15.209/ ISED Canada RSS-Gen. The device would be subject to FCC SDoC and ISED Canada self-declaration using RSS-310. The FCC and ISED Canada have established different requirements for wireless charging devices as well (as either requiring SDoC or Certification authorization route).

Question 8

What are the risks associated with exempting ICT equipment from Approval Framework, and how can they be mitigated or eliminated?

With the FCC, ISED Canada, MIC Japan and European Commission (as well as individual Member States in the EU), market surveillance activities form an integral part of their work and so they perform surveillance audits themselves annually sampling different types of products to determine compliance levels (they provide reports). In Europe, there is effective cross-border cooperation between market surveillance authorities in different EU countries to ensure efficient, comprehensive and consistent market surveillance activities are achieved.

We recommend exemption criteria are clearly published and are easy to follow. Some of the exemptions mentioned from the EU RED and FCC rule part §15.103 can be considered.

Question 9

What would you propose the Authority do to effectively execute its responsibilities on market surveillance considering the current fiscal challenges?

ICASA could require CBs perform market surveillance on 2% of products certified in a given year, and typically test labs would then charge the manufacturer for the small sample test. Across the various CB’s, this would accumulate a good amount of device checks.

Question 10

What are the prevalent equipment authorization challenges that may be experienced by manufacturers, distributors, suppliers and retailers post- and pre-market surveillance?

Manufacturers need guidance on:-

- Available spectrum for their equipment to operate on
- Standards/Rules that apply to their equipment (complex devices, or devices for which there are no standards published yet)
- Labelling, User Manual, Packaging guidance (administrative)
- Making changes to products during the testing cycle, and after authorisation is performed (they require a set of rules on what changes they can make to their product without the need for further testing/evaluation/ authorisation

Additional Feedback:

- Table 1, Procedure IV, in the "with radio part" column should state "not complying or only partially complying with Radio Spectrum requirements (due to the Annex IV only being mandatory if Article 3.2 or 3.3 harmonized standards are not available or have not been applied/met in full)
- On Page 30 where there is a reference to "registration requirements" for equipment for SDoC, we do support a mechanism of self-notifying to ICASA a set of radio characteristics for Licensed equipment if deemed appropriate, or at minimum for state-of-the art/novel equipment for which standards/rules are not readily available.

We look forward to further collaborating and strengthening synergies with ICASA.

Please do not hesitate to contact us with further questions or feedback.

Best regards

TÜV SÜD