

**INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA  
NOTICE 248 OF 2017**



**REGULATORY POSITION ON EQUIPMENT TYPE APPROVAL EXEMPTION**

1. On the 28<sup>th</sup> of September 2016, the Independent Communications Authority of South Africa ("the Authority"), published a Discussion Document on Equipment Type Approval Exemption, General Notice 621 of 2016 (Government Gazette No. 40309) ("the Discussion Document"), in terms of Section 4B of the Independent Communications Authority of South Africa Act, 2000, as amended.
2. The purpose of the Discussion Document was to solicit input from interested parties on prescribing the following:
  - 2.1 the types of equipment, electronic communications facilities and radio apparatus, the use of which does not require approval where such equipment, electronic communications facilities and radio apparatus has been approved for use by the European Telecommunications Standards Associations or other competent standards body where the equipment complies with type approval standards prescribed by the Authority; and

2.2 circumstances under which the use of equipment, electronic communications facilities, radio apparatus and subscriber equipment does not require approval, including uses for research and development, demonstrations of prototypes and testing.

3. The Authority received written representations from interested parties and thereafter held public hearings on 14 December 2016 in order to deliberate on the written submissions.

4. The Authority, hereby publishes this notice to communicate its regulatory position in respect of the equipment Type Approval exemption ("the Position").



**RUBBEN MOHLALOGA**  
**ACTING CHAIRPERSON**  
**DATE: 14/03/2017**

## Table of Contents

1. ACKNOWLEDGEMENTS .....	4
2. DEFINITIONS AND ACRONYMS .....	5
3. INTRODUCTION AND BACKGROUND .....	8
4. LEGISLATIVE FRAMEWORK .....	9
5. CONSIDERATION OF SUBMISSIONS .....	9
6. PROPOSED REFORMS IN CONFORMANCE ASSESSMENT REGIME(S) .....	19
7. THE ANALYSIS .....	24
8. THE AUTHORITY'S POSITION .....	26

## 1. ACKNOWLEDGEMENTS

The Authority would like to acknowledge and thank the following stakeholders for participating in the consultative process aimed at developing the regulatory position on equipment Type Approval exemption:

- 1) Intel South Africa (Intel);
- 2) Underwriters Laboratories (UL);
- 3) Apple International (Apple);
- 4) Tokai Rika Japan (Tokai Rika);
- 5) Information Technology Industry Council USA (ITI);
- 6) American Chamber of Commerce in South Africa (AMCHAM);
- 7) Iridium Satellite South Africa (Iridium);
- 8) Interference Testing and Consultancy (ITC);
- 9) Telkom SA SOC Ltd (Telkom);
- 10) South African Broadcasting Corporation (SABC);
- 11) The National Association of Broadcasters (NAB);
- 12) South African Square Kilometre Array (SKA);
- 13) Juicetel;
- 14) ZEBRA;
- 15) South African Radio League (SARL);
- 16) Martin Venter;
- 17) Brian Jones; and
- 18) Repeater & Trunking Systems (RTS).

## 2. DEFINITIONS AND ACRONYMS

<b>CAA</b>	The South African Civil Aviation Authority.
<b>CE Mark</b>	Means a mark of conformity indicating that a product is in conformity with community harmonisation legislation.
<b>Conformity Assessment Framework</b>	Essential requirements, and the conformity assessment procedures.
<b>ECA</b>	Electronic Communications Act, 2005 (Act No. 36 of 2005).
<b>EU</b>	Means European Union. EU is a unique economic and political union between 28 European Countries.
<b>EMC</b>	Means Electromagnetic Compatibility. The ability of electronic equipment and systems to operate in proximity of electromechanical devices, without causing or suffering unacceptable degradation in output or performance.
<b>EMI</b>	Means Electromagnetic Interference. The disruption of operation of an electronic device when it is in the locale of an electromagnetic field in the radio frequency spectrum that is caused by another electronic device.
<b>ETSI</b>	European Telecommunications Standards Institute.
<b>FCC</b>	Means Federal Communications Commission. An independent agency of the United States of America government regulating interstate communications by radio, television, wire, satellite and cable.
<b>GMPCS</b>	Means Global Mobile Personal Communications Satellite terminal.
<b>HartRAO</b>	Means Hartebeesthoek Radio Astronomy Observatory. A radio astronomy observatory, located in a natural bowl of hills at Hartebeesthoek just south of the Magaliesberg mountain range, Gauteng, South Africa, about 50 km west of Johannesburg.
<b>HERA</b>	Means the Hydrogen Epoch of Reionization Array. A radio telescope dedicated to observing large scale structure during and prior to the epoch of reionization.

<b>IARU</b>	Means International Amateur Radio Union. An organization consisting of national amateur radio societies around the world, and is recognised as the watchdog and spokesman for the amateur radio community.
<b>ICASA Act</b>	Independent Communications Authority of South Africa Act, 2000 (Act No 13 of 2000).
<b>LPD</b>	Means Low Power Devices. Any equipment with output power of 10 mW or less falls under the category of low power devices.
<b>MeerKAT</b>	Means the South African project established to build an array of dishes as a world class science instrument.
<b>MoU</b>	Means Memorandum of Understanding.
<b>MRA</b>	Means Mutual Recognition Agreements/Arrangements
<b>NRCS</b>	Means National Regulator for Compulsory Specifications. An independent regulatory organization responsible for the administration and maintenance of compulsory specifications and the implementation of a regulatory and compliance system for compulsory specifications.
<b>RF</b>	Means Radio Frequency. The rate of oscillation of electromagnetic radio waves in the range of 3 kHz to 300 GHz, as well as the alternating currents carrying the radio signals.
<b>SAMSA</b>	South African Maritime Safety Authority.
<b>SRD</b>	Means Short Range Devices. Radio devices that offer a low risk of interference with other radio services, usually because their transmitted power, and hence their range, is low.
<b>Spectrum</b>	Means the range of Radio Frequencies.
<b>SDoC</b>	Means Supplier's Declaration of Conformity. It is the procedure by which a first party or supplier conveys assurance that the object of conformity fulfils specified requirements.

<b>TTE</b>	Means Telecommunications Terminal Equipment. Telecommunication equipment that connects at the end of public telecommunications network for sending and receiving functions to subscribers.
<b>Type Approval</b>	Means certifying that a product meets certain requirements for its type. Type approval is granted to a product that meets a minimum set of regulatory, technical and safety requirements by a competent body.
<b>Type Approval Framework</b>	Means the Type Approval Regulations, 2013 ("Type Approval Regulations") <sup>1</sup> and the Labelling Regulations ("Labelling Regulations") <sup>2</sup> .
The <b>RAPEX System</b>	The RAPEX System ensures that information about unsafe non-food consumer and professional products posing a serious risk found in one country Member of the RAPEX network (28 Member States of the European Union and 3 countries from EFTA/EEA) is rapidly sent to the European Commission and circulated among all the other national authorities for follow-up.
<b>WWAN</b>	Means Wireless Wide Area Networks which refers to wireless high-speed data networks covering a large geographic area.

<sup>1</sup> General Notice 871 of 2013, Government Gazette No. 36785.

<sup>2</sup> General Notice 872 of 2013, Government Gazette No. 36786.

### 3. INTRODUCTION AND BACKGROUND

- 3.1. The Authority conducted an international benchmarking study on various countries<sup>3</sup> to review international practices on exemption of electronic communications equipment or electronic communications facility, including radio apparatus from conformity assessment regimes. The international benchmarking study entailed desktop research as well as study visits to selected international regulatory bodies, standard bodies, test facilities and manufacturers.
- 3.2. Pursuant to the information obtained from the afore-stated international benchmark study, on 28 September 2016, the Authority published a Discussion Document inviting interested parties to make written representations in respect of possible equipment to be exempted from Type Approval. The closing date for written submissions was 02 December 2016.
- 3.3. Subsequent to the publication of the Discussion Document, the Authority received written submissions from eighteen (18) stakeholders as listed under acknowledgements.
- 3.4. The Authority held public hearings<sup>4</sup> on 14 December 2016, wherein an opportunity to make oral representations was granted to stakeholders who had submitted written representations.
- 3.5. The Authority has developed its Position based on information gathered through the international benchmarking study and the public consultation process conducted in terms of the ICASA Act.

---

<sup>3</sup> United Kingdom, Ukraine, Russia, United Arab Emirates, Qatar, Egypt, Tanzania, Kenya, Botswana, Brazil, United States of America, Canada, Venezuela, India, China, South Korea, Australia, Nigeria, Zambia, Germany and Thailand.

<sup>4</sup> Public hearings notice, Notice 870 of 2016, Government Gazette 40485.



#### 4. LEGISLATIVE FRAMEWORK

- 4.1 In terms of section 35 (1) of the ECA the Authority is mandated to consider for approval, any type of electronic communications equipment or electronic communications facility, including radio apparatus, used or to be used in connection with the provision of electronic communications.
- 4.2 On 26 August 2013, the Authority published the Type Approval Framework, which comprises of the Type Approval Regulations, 2013 ("Type Approval Regulations") and the Labelling Regulations ("Labelling Regulations") in terms of sections 4(4) and 35 (2) of the ECA.
- 4.3 Section 35 (2) of the ECA, read with regulation 3(1) of the Type Approval Regulations provides that the Authority may prescribe the types of equipment, electronic communications facilities and radio apparatus the use of which does not require approval where such equipment, electronic communications facilities and radio apparatus has been approved for use by the European Telecommunications Standards Associations or other competent standards body where the equipment complies with Type Approval standards and circumstances under which the use of equipment, electronic communications facilities and radio apparatus does not require approval.

#### 5. CONSIDERATION OF SUBMISSIONS

##### 5.1. **(Considerations on Question 1) Objectives of Exemption of Equipment from Type Approval**

- 5.1.1 The Discussion Document had four (4) objectives as follows:
- 5.1.1.1 Reduce regulatory burden for equipment Manufacturers and Importers.
- 5.1.1.2 Encourage investment and innovation in the ICT sector.
- 5.1.1.3 Promote competition in the ICT sector.
- 5.1.1.4 Encourage research and development within the ICT Sector.

- 5.1.2 Martin Venter, Iridium and the NAB concurred that the objectives listed above embodied the overall purpose and reason for type approval.
- 5.1.3 Further, Iridium confirmed that the regulatory burden on manufacturers and importers may be reduced while at the same time requiring conformity to the prescribed standards.
- 5.1.4 Intel, Apple, Zebra and ITI agreed with the objectives set out in the Discussion Document and shared the view that the objectives strongly align with those of the European Union (EU). Further, their view was that the alignment of objectives, technical requirements and of the conformity assessment procedures, and recognition of the approvals between the EU and the Authority would provide significant and wide ranging benefits to the industry and to the South African economy and its citizens. These benefits include but are not limited to:
- 5.1.4.1 Improved consumer choice and minimised cost,
  - 5.1.4.2 Improved speed of market access,
  - 5.1.4.3 The promotion and encouragement of an open environment for innovative and new technologies, and
  - 5.1.4.4 The removal of the burden of overseeing and administering the national conformity assessment regime to enable the Authority `s resources to be re-assigned to key tasks, including market surveillance.
- 5.1.5 Apple`s view was that South Africa should be aligned with new technologies and help develop the industry, provide strong competitive advantage, remove grey market activity, and develop a solid market surveillance platform and leverage the Rapid Exchange of Information (EU RAPEX System) and collaboration with the EU market surveillance body.
- 5.1.6 ITI agreed with the objectives of the exemption of type approval for equipment that has already been assessed in the EU. However, ITI was of the view that the exemption should be based on condition that the exempted equipment does not cause electromagnetic interference (EMI).

- 5.1.7 UL agreed with the listed objectives and confirmed that the objectives may only be achieved by ensuring that the introduction of new technologies is done in a manner that promotes trust for consumers. Furthermore, there is a need for clarity to be provided on the applicable equipment, facilities and apparatus using product categories or some criteria. The manner in which conformity assessment is conducted plays a significant role in determining compliance, hence UL was very concerned that the consideration to allow for equipment to be exempted from Type Approval may lead to significant non-compliance.
- 5.1.8 ITC agreed that the Authority should strive to reduce the regulatory burden on manufacturers, but was of the view that the quality of products must remain of foremost importance.
- 5.1.9 The AMCHAM, Telkom, SARL and SKA agreed with and supported the objectives and suggested additional objectives as listed below:
- 5.1.9.1 To increase competition in the country thereby promoting growth and trade, in turn creating more job opportunities and to increase surveillance and clamping down on non-compliant/dangerous products<sup>5</sup>.
- 5.1.9.2 Promote the development of communication networks and services, reduce the time to market for new equipment and technologies, promote the self-declaration of conformance of equipment to applicable technical standards and create certainty for industry regarding type approval and labelling requirements<sup>6</sup>.
- 5.1.9.3 Encourage the development of Amateur Radio and Amateur Radio experimentation in the science of radio<sup>7</sup>.
- 5.1.9.4 To promote radio astronomy and related scientific activities<sup>8</sup>.

---

<sup>5</sup> Paragraph 3 of the AMCHAM submission.

<sup>6</sup> Paragraph 3 of the Telkom submission.

<sup>7</sup> Paragraph 3 of the SARL submission.

<sup>8</sup> Paragraph 1 of the SKA submission.

- 5.1.10 Telkom cautioned that post market surveillance is very important as the repercussion of mistakes can be severe. Furthermore, remedies need to be identified.
- 5.1.11 Juicetel's view was that Type Approval must not be considered to be a burdensome process but should be seen as a checkpoint to ensure compliance with standards and regulatory requirements. Juicetel held a contrary view to the objective that exemption of equipment from Type Approval would encourage investment and innovation in the ICT sector. Their view was that regulatory and standards compliance should be part of both investment and innovation.
- 5.1.12 Juicetel was also not convinced by the objective of encouraging research and development within the ICT sector through exemption. It was of the view that research and development should be encouraged by establishing forums and R&D hubs using manufacturers to contribute by sharing their experiences and ideas to improve technology.
- 5.1.13 In relation to the promotion of competition in the ICT sector, Juicetel was of the view that competition between compliant and non-compliant devices will pose challenges on the enforcement of compliance for the Authority.
- 5.2. **(Considerations on Question 2) Prescribe the types of equipment, electronic communications facilities and radio apparatus, the use of which does not require Type Approval.**
- 5.2.1 Both the SABC and NAB were of the view that there is a need to prescribe equipment categories that do not require Type Approval, instead of developing a list of specific equipment to be exempted, as such a list will not be exhaustive due to rapid technological developments. The SABC and NAB proposed the following broad categories of equipment as being eligible for exemption from Type Approval: studio consoles, wireless microphones, headphones, broadcast receivers, test and measurement equipment, and systems and equipment used for the production and distribution of content

through broadcasting services. The reasons for requesting exemption to the above listed equipment was that such equipment is used by professionals/experts in a controlled broadcast environment and that the equipment does not interface with the public, but it is used to compile and distribute services and the use of the equipment has little or no impact on the public.

- 5.2.2 NAB was also of the view that Type Approval should only apply to equipment that uses spectrum, connects to public networks or have the potential to cause harmful spectrum interference. Equipment that does not radiate radio signal and does not interface with the public communications network should not be subjected to type approval. Furthermore, the NAB believes that equipment that carries the CE mark of approval should also not be subjected to Type Approval.
- 5.2.3 SARL and Brian Jones were of the view that both commercial and self-constructed amateur radio equipment should be exempted from type approval.
- 5.2.4 SARL submitted that radio amateurs are exempted from type approval in EU countries that are members of the International Amateur Radio Union (IARU), and that radio amateur equipment, both self-constructed and commercially available were exempted from any kind of type approval prior to 2013, in South Africa.
- 5.2.5 SARL also submitted that from a South African regulatory perspective, it is quite important to note that the current Radio Frequency Spectrum Regulations provide substantial protection against interference of other services and clarifies the requirements in terms of Part VII, regulation 31 read with Part VI, regulation 23 of the Radio Frequency Spectrum Regulations.

- 5.2.6 SARL explained that radio amateurs operate under a strictly controlled licensing regime that empowers the Authority to instruct a licensed radio amateur to switch off any radio equipment that causes interference to any other licensed service that complies with regulated standards.
- 5.2.7 The SKA was of the view that the following equipment should be considered for exemption from the Type Approval as it is not designed or constructed for use by the general public but is specialized and relevant only to radio astronomy and related sciences: radio telescope equipment, radio telescope receivers, radio telescope calibration and test equipment, radio telescope array and radio astronomy facilities used to study natural occurring radio emissions from stars, galaxies, quasars, pulsars, interstellar clouds and other astronomical bodies.
- 5.2.8 SKA's view was that Type Approval would be impractical for radio astronomy equipment as most of such equipment is subject to continuous development or improvement.
- 5.2.9 Apple and Zebra proposed the exemption of equipment operating within harmonised frequencies to that of the EU and the power levels as per the ETSI standards, as such equipment is deemed to be safe. However, there will be a need for demonstration that the equipment has been assessed by a competent ILAC ISO/IEC 17025 Test Laboratory (ATL).
- 5.2.10 ZEBRA noted that South Africa and the EU belong to the same ITU region, and that there already exists commonality between the respective frequency allocation tables and associated Radio Regulations.
- 5.2.11 Apple provided the following as an example of equipment that should be considered for exemption from Type Approval: Bluetooth devices, WLAN devices, mobile phones operating in bands harmonised with EU and South Africa and short range devices.

- 5.2.12 Apple and ZEBRA noted that the harmonised EU process of self-declaration has been in place for many years and that it is a successful means of governing equipment compliance. However, they also noted that the deployment of a good market surveillance regime is a competent means of controlling product compliance in the market. The EU system has proved to be effective in assisting manufacturers to get their products to market quickly and efficiently without compromising the interests of the national spectrum agencies and/or quality of service to the end user.
- 5.2.13 Tokai Rika requested that SRD and LPD designed to meet the requirements of the European Standards (EN) or the Federal Communications Commission (FCC) rules (49 CFR Part 15) be considered for exemption from Type Approval. The reasons provided for the request are that SRD and LPD have low risk of interference, and that the Authority regulates applicable European Standards.
- 5.2.14 Iridium was of the view that the responsibility for ensuring that products conform with regulated standards should rest with the manufacturers and importers. The importers and manufacturers have the flexibility to use any number of accredited conformity assessment bodies or internal assessment mechanisms. No exemption should lead to non-conformity to the prescribed standards.
- 5.2.15 Iridium agreed that the Authority should list types of equipment that do not require type approval, but which meet the standards adopted by the Authority.
- 5.2.16 Iridium proposed that the types of equipment to be exempted should include GMPCS operating in the L-band (1616-1626.5 MHz) based on the fact that GMPCS system, including terminal equipment, operate worldwide in terms of the GMPCS MoU dated 14 February 1997. South Africa is a signatory to the GMPCS MoU. The GMPCS MoU aims to facilitate arrangements for type approval, licensing, marking, provision of traffic

data, and customs recommendations related to the free circulation of GMPCS terminal worldwide.

- 5.2.17 Iridium submitted that the Authority may exempt GMPCS terminals from Type Approval in South Africa, in accordance with its international obligations and policy direction, if such equipment is registered with the ITU. In other words, any equipment that is manufactured and imported from abroad, and which is authorized by another administration and is registered with the ITU should be able to operate within South Africa without the need for further approval in South Africa.
- 5.2.18 Intel was of the view that all types of electronic communications equipment, facilities and radio apparatus that are destined for the commercial market should be subjected to Type Approval as this will ensure that the equipment performs within the prescribed technical and safety parameters, and that the market is protected against electromagnetic interference.
- 5.2.19 Intel agreed with the Authority that Type Approval is an essential regulatory instrument that is required to ensure that equipment to be deployed for commercial reasons adheres to the applicable international standards, albeit it being a time consuming process and requires more resources.
- 5.2.20 Intel advised the Authority to look beyond its own capabilities of assessing conformance of equipment to the technical standards. This is largely due to technological advancement which lead to exponential increase of equipment requiring Type Approval and which in turn limits the Authority's capabilities. Intel therefore recommended that the Authority recognizes conformity assessments carried out by the EU Commission, the FCC and other regulatory organisations.
- 5.2.21 UL expressed its concerns about the Authority's intention to allow for equipment to be exempted from Type Approval. UL supported their argument through research conducted in 2015 by International Federation of Inspection Agencies in Europe. The research found that an approach that



relies on Supplier's Declaration of Conformance (SDoC) without the involvement of third parties (accredited test laboratories/certification bodies), results in poor compliance rates. Even if a strong post-market surveillance mechanism was implemented: once non-compliant products are put into the market, they may cause degradation of the networks, harmful radio interference, and increase the risk of safety for humans.

5.3. **(Considerations on Question 3) Circumstances under which equipment does not require approval**

- 5.3.1. Intel and Apple believe that prototypes and products that are put into operation in isolated, temporary and non-commercial settings may be considered for exemption from Type Approval, such as the case of proof of concepts, demonstrations, trade fairs, field trials and test and development. Furthermore, unintentional radiators that operate under extremely low power and equipment that has been approved in the EU and the US should also be considered for exemption from Type Approval.
- 5.3.2. Apple was however of the view that the above mentioned equipment is to be limited in quantities and should be marked as *not for sale*.
- 5.3.3. UL and Martin Venter agreed with the circumstances listed by the Authority. UL reiterated the circumstances with applicable conditions for each as follows:
- 5.3.4. Scientific studies and researches (for temporal and limited area use only);
- 5.3.4.1. Sample testing and demonstrations (for temporal and limited area use only);
- 5.3.4.2. Operations of specialized agencies (for limited area use only);
- 5.3.4.3. Maritime or aeronautical operations (for the limited area use only);
- 5.3.4.4. Commercial exhibition, but not for marketing (for temporal and limited area use only);
- 5.3.4.5. Equipment produced, imported for the purpose of export only and not for sale in South Africa; and

- 5.3.4.6. Spare parts, components used for repairs, if the same part is used in certified product.
- 5.3.5. Martin Venter, however, disagreed with maritime, aeronautical operations, and equipment produced or imported for the purposes of export only. Martin Venter believes that in maritime and specifically aeronautical operations, the safety of the crew and passengers is often dependant on good communication and therefore in such circumstances, prior type approval remains essential to maintain safety. Martin Venter further indicated that it would be very difficult to regulate and ensure that all imports that are received for exporting will indeed be exported.
- 5.3.6. NAB and ITI believe that in cases where the equipment is to be tested in laboratories (test samples), used as a spare part or demonstration unit, for research and development purposes, such equipment should be considered for exemption from type approval.
- 5.3.7. Telkom agreed that there are exceptional circumstances such as when equipment is deployed within national security and defence networks that could warrant exclusion from type approval or consideration for self-declaration. Telkom was of the view that subjecting this type of equipment to the type approval may expose certain confidential technical data, thereby compromising national interests.
- 5.3.8. Telkom suggested that the following circumstances could necessitate the waiving of the current Type Approval process in favour of self-declaration: testing of equipment in an authorised test laboratory in South Africa; commercial pilots or trials; and research and development, including equipment being developed locally for either local market or to be exported.
- 5.3.9. ZEBRA was of the view that equipment put into operation in specific circumstances such as demonstrations, trade shows and field testing should be exempt from any Type Approval, provided the conditions of

operation are controlled and the devices are not placed on the market for sale.

- 5.3.10. SARL and Brian Jones submitted that any equipment in the possession of a licenced radio amateur should be considered for exemption from type approval, provided the said equipment is designed, manufactured and used for the purpose of amateur radio as per the amateur radio Regulations and the licence of the operator.
- 5.3.11. SKA's view was that there are circumstances such as scientific studies, research and development under which the use of equipment would not require type approval.
- 5.3.12. In general, the activities of observatories such as HERA, MeerKAT, HartRAO and SKA telescope fall within the areas of scientific research, instrumental development and maintenance. In many instances these activities have led to the in-house development of specialized electronic equipment the application of which is not intended for the general market or public use.
- 5.3.13. It was the opinion of Tokai Rika and RTS that no prescribed circumstances are necessary to exempt equipment from Type Approval.

## **6. PROPOSED REFORMS IN CONFORMANCE ASSESSMENT REGIME(S)**

- 6.1. Intel believes that commercially available equipment should be considered for type approval, however, it was of the view that it is not always necessary for the approvals to be conducted within the country. Intel encouraged the Authority to consider entering into MRAs with other countries such as those the US has with Europe and Israel.
- 6.2. Intel proposed the following recommendations to the Authority: an adaptation of the FCC and EU approaches, where different equipment is subjected to different levels of assessment rigor, depending on the type of equipment. Since South Africa already aligns with the EU standards to a large extent, it would be advisable to recognize

authorizations to the EU standards authority, and/or where appropriate US approvals.

- 6.3. The FCC uses the following three levels of approval to the (FCC 47CFR) rules, depending on the equipment to be assessed: Certification (the most rigorous level of approval process for RF devices with the greatest potential for harm); Declaration of Conformity (making use of accredited testing laboratories to ensure compliance to technical standards); and Verification (evaluation of test reports and other documents that demonstrate compliance).
- 6.4. The FCC uses the Telecommunication Certification Body (TCB) to perform third-party certification of equipment, subject to the FCC requirements that require the product to be certified.
- 6.5. The EU follows a self-declaration scheme to demonstrate compliance with the Radio Equipment Directive relative to standards developed by the ETSI. In some cases, a Notified Body (NB) is used to evaluate test reports and documentation for compliance, when harmonized standards are not available or used.
- 6.6. Apple and Intel proposed a complete framework reform by profiling equipment into two categories namely low risk and high risk. Apple and Intel further elaborated on the proposed framework by providing a step-by-step process which is shown in figure 1 below.

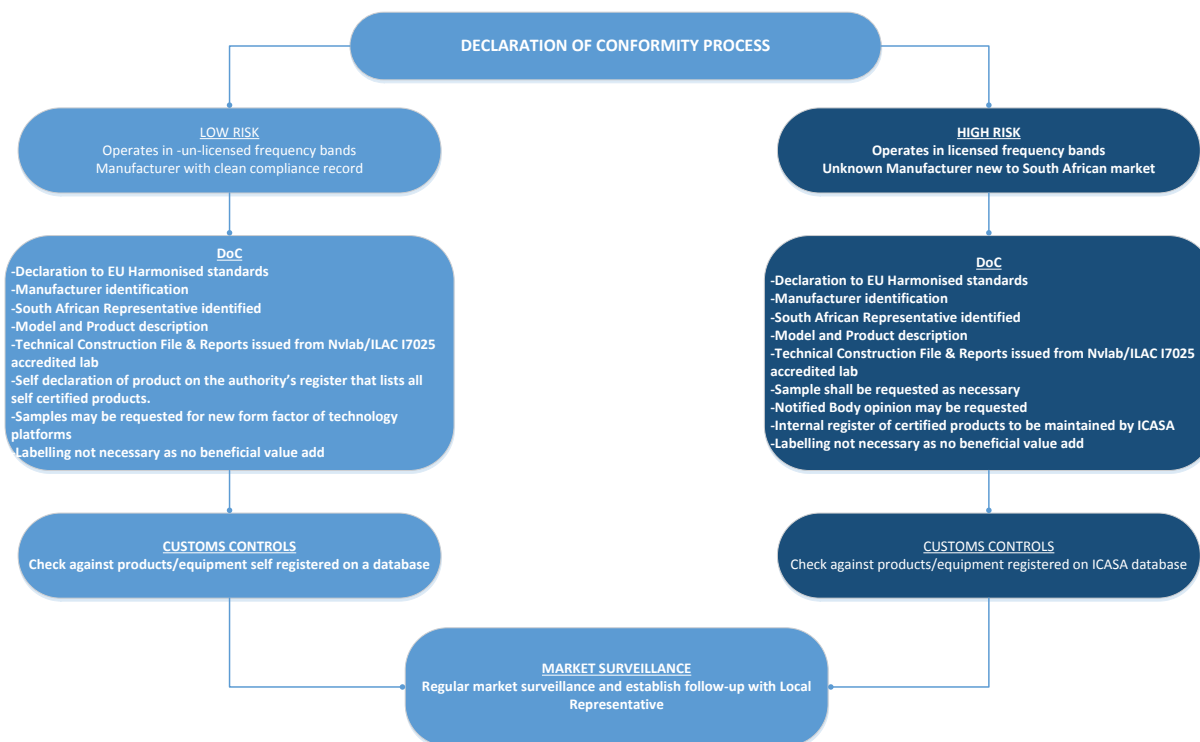


Figure 1: Proposed Type Approval Framework – DoC Based

- 6.7. UL recommended having a “check mechanism” for Declaration of Certificate and therefore proposed that either the Authority develops a “check mechanism” or accredits third parties to offer certification on its behalf.
- 6.8. Iridium supports the implementation of the SDoC procedure. Iridium was of the view that this procedure is used in several other jurisdictions and is efficient and effective in ensuring compliance with adopted standards.
- 6.9. Iridium, also supports as an alternative a simplified process whereby an applicant submits proof of approval of the terminal equipment by the European Telecommunications Standards Association or other competent standards body, which is specifically sanctioned in the ECA, upon which South African type approval is granted.

- 6.10. UL further recommended that the Authority develop a process to recognize test laboratories to reduce regulatory burden, and simplify the certification process keeping conformity level instead of type approval exemption.
- 6.11. RTS believes that the Authority would reduce its workload by accrediting manufacturers, distributors, suppliers or importers to ensure their equipment comply with the relevant technical standards. In addition, RTS was further of the view that the Authority needs to conduct assessment at their premises to check compliance of the relevant test equipment and staff in handling and verifying whether equipment meets standards.
- 6.12. RTS believes that implementation of the above measures will assist the Authority when it comes to the complaints from consumers and time spent on investigating complaints will be reduced. Furthermore, it was of the view that any accredited body that does not comply with the Authority's prescribed requirements may be removed or suspended from the scheme.
- 6.13. The NAB noted that the National Regulator for Compulsory Specifications (NRCS) enforces safety specifications, and is therefore convinced that there is no requirement on the Authority to type approve or enforce safety Regulations that are in the domain of the NRCS. The association instead encourages the Authority to harmonise its standards with those of the NRCS, in order to avoid a situation where manufactures, vendors and retailers need approval from two regulators for the same specifications. The envisioned harmonisation is expected to enable the Authority to focus Type Approval only on those aspects that are not addressed by the NRCS. Furthermore, it believes that a pragmatic approach may be to allow EMC certifications to be vetted by the NRCS while the Authority would be responsible for vetting only the spectral purity of the RF output, and the RF parameters as they apply to the designated band(s) of operation.
- 6.14. The NAB was of the view that Type Approval was previously considered important in contributing to consumer protection. However, the Consumer

Protection Act, 2008 (Act No. 68 of 2008) offers far greater protection of consumers' interests well beyond the limited role the Authority's Type Approval process has played in the past.

- 6.15. The NAB encouraged the Authority to coordinate with the National Consumer Commission on issues of Type Approval of consumer devices given that the Authority has entered a MoU and the understanding of the NAB that the Type Approval of consumer devices is no longer required. The NAB Further encouraged the Authority to explore reciprocal arrangements with other regulatory bodies for Type Approvals and exemptions.
- 6.16. Telkom was of the view that the mutual acceptance of type approval of equipment is aligned with international best practice and therefore supports it. Case in point is the assumption that equipment that has been type approved in one jurisdiction such as Europe and fitted with the CE mark conforms to the prescribed standards. Telkom was therefore of the view that the repetition of type approval for such equipment in South Africa is not always required as it could create unnecessary administrative burden. What is important, according to Telkom, is that the Authority has the means to enforce national standards and ensures compliance with same.
- 6.17. Telkom supported transferring the responsibility of Type Approval to the equipment manufacturers who are best placed to test their own equipment and institute relevant measures to ensure compliance with prescribed national standards. Post market surveillance, coupled with appropriate remedies to rectify non-compliance with prescribed Regulations are critical success factors for the Type Approval.
- 6.18. ITC indicated that some approval processes that could be used are a combination of full compliance tests, partial testing to confirm full compliance as per test reports or a desktop exercise when confidence in submitted data is high.

## 7. THE ANALYSIS

- 7.1. The objectives, as they appear in the Discussion Document, are broad and inclusive of the entire ICT sector and in line with the objects of the ECA.
- 7.2. Exempting certain equipment from type approval may be essential provided that the criteria and conditions are clearly defined.
- 7.3. The Authority realises that Type Approval exemption might be confused with permitting non-compliant equipment or opening opportunity for sub-standard or inferior products to be dumped into the South African market.
- 7.4. The Authority takes the Type Approval exemption as an integral part of the Conformity Assessment Regime and market surveillance. The level of rigor for the post market surveillance is purely dependent on the approach or procedure utilized for categories of equipment.
- 7.5. There is general consensus that conformity assessment is important and necessary but that Type Approval is not always necessary as some equipment may be exempted on the basis that it has been approved by Authorities in ITU region 1, in particular, those from the European Union or on the basis of strict self-regulation as in the case of radio amateurs, satellite communications systems and radio astronomy.
- 7.6. Type approval is an essential regulatory instrument that is required to ensure that equipment deployed for commercial reasons adheres to the applicable international standards, albeit being a time consuming process and requires more resources.
- 7.7. AMCHAM, Iridium, Telkom, Martin Venter, ITC, ITI and Apple proposed that the Authority put a strong post-market surveillance mechanism in place. Based on the experience of the International Federation of Inspection Agencies in the EU, UL stated that although there exists a strong post-market surveillance mechanism, non-compliant products still find their way



into the market and may cause degradation of the networks, harmful radio interference, and increase the risk of safety for human.

- 7.8. It was further suggested that the Authority should focus its efforts on post market surveillance activities.
- 7.9. Stakeholders also suggested that it would be fruitful for the Authority to consider a simplified type approval process or adopt the SDoC.
- 7.10. There is a general consensus that conformity assessment on all telecommunications (radio and fixed line equipment) and broadcasting equipment is of utmost important and non-negotiable, the emphasis is put on the manner in which the certification process is carried out.
- 7.11. There is a general consensus on exempting equipment by circumstances such as test and measurement equipment, test samples, equipment used for field trials, research, demonstrations and exhibitions, amateur radio, aeronautical equipment, maritime equipment, equipment developed or imported for export reasons. The exemption of equipment by circumstances is also confirmed by the international benchmark study that was conducted by the Authority.
- 7.12. It was submitted that the collaboration between ICASA and NRCS would be essential to avoid duplication of efforts, especially when it comes to regulating electrical safety.
- 7.13. The Authority has been advised to consider recognition of conformity assessments procedures carried out by the EU Commission, the FCC and other regulatory organization. However, those countries for which regulatory bodies reside must have MRAs with South Africa.
- 7.14. Furthermore, the Authority was advised that the MRAs have been implemented in other jurisdictions, such USA, EU, South Korea, and China

in order to expedite the trade of electronic equipment, the collaboration through development of MRAs on conformity assessment for equipment.

- 7.15. FCC, China and EU implement the approach of having mutual recognition with Conformity Assessment Bodies and designation of the Telecommunication Certification Bodies or Notified Bodies in other markets have proven to be useful in the implementation and streamlining of conformity assessment regimes and to deal with exponential escalation of Type Approval applications due to technological advancement.
- 7.16. The Authority is of the view that it could be more beneficial to consider developing a more robust Conformity Assessment Regime, flexible enough to accommodate the application of different procedures as implemented in other markets.

## **8. THE AUTHORITY'S POSITION**

Based on the International Benchmarking Study, written and oral representations from stakeholders, the Authority has taken the following position in relation to exemption of equipment from Type Approval:

- 8.1. No exemption will be granted on the basis of the type of equipment. The Authority considers such exemption to be pre-mature at this stage and has the potential of possibly yielding irreversible unintended consequences.
- 8.2. The Authority will develop a framework for the exemption of equipment operating under the circumstances included but not limited to those listed in Table 1 below.

Table 1: Circumstances

<b>Equipment Category</b>	<b>Description</b>
Systems and equipment used for the production and distribution of broadcast and content services	All equipment in studios and production facilities that interfaces with the production environment and is under the control and operated by engineering professionals.
Test and measurement equipment	Any test and measurement equipment used by professionals and engineers of a licensed entity in the provision of telecommunications or broadcast services
satellite communications equipment	for temporal and/or limited area use only
Equipment for research and development in a laboratory environment	
Equipment for demonstrations of prototypes and testing	
Equipment for sample testing, demonstrations and field trials.	
Equipment for demonstrations and exhibition.	
Equipment for operations of specialised agencies	
Equipment for maritime or aeronautical operations	
Radio telescope receivers, calibration and test equipment.	
Radio telescope array and radio astronomy facilities	
Amateur radios	
Equipment used by Government Services	Used for national security and defence networks.
Equipment produced or imported for the purposes of exporting.	Not for use in South Africa
Spare parts, components to be used for repairs	Provided such part is used in a certified product

- 8.3. The Authority will consider entering into and amending MoUs with relevant regulatory bodies such as, *but not limited to*: CAA, SAMSA, NRCS to alleviate regulatory burden to affected stakeholders.
- 8.4. The Authority shall embark on the process of reviewing the current Type Approval Framework and work towards a multi-level Conformity Assessment Framework based on the relevant criteria to deal with equipment intended to be made available commercially in the South African market. The broader framework will incorporate the circumstances under which MRA's may be entered into and provide for robust market surveillance activities.