



# Global Standards in Satellite Communications

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# ETSI Background: European roots, global outreach



- ETSI is a world leading standard developing organisation for Information and Communications Technology (ICT)
- ETSI is highly respected as a producer of technical standards and specifications for worldwide use
- ETSI has over 900 organisations as members, 65 countries, 5 continents who directly participate
- ETSI has over 50 000 Technical Specifications and Standards (ENs)
- ETSI is recognised by the EU as one of 3 standardisation organisations. Provides support to industry, European regulations, and policy
- **ETSI is independent and not for profit**

# Technical Committee - Satellite Earth Stations and Systems



- ETSI standards are drafted in Technical Committees
- Technical Committee (TC) Satellite Earth Stations and Systems (SES) is of one many TCs
- TC-SES is the Technical Body responsible for the preparation of technical standards for all satellite earth stations, systems, services and applications within ETSI
- TC-SES two active Working Groups:
  - Working Group (WG) on Satellite Communications and Navigation (SCN)
  - Working Group on Harmonization under the Radio Equipment Directive (RED) 2014/53/EU-WG HARM

# Terms of reference of TC-SES



- **TC-SES is responsible for the preparation and maintenance of technical standards for all satellite earth stations, this includes:**
- **All types of satellite communication systems, services and applications, such as**
  - **Fixed satellite**
  - **Mobile satellite**
  - **Aeronautical and Maritime**
  - **Broadcasting**
- **Satellite navigation systems and services**

# Importance of TC-SES to satellite industry (1/3)



- **Satellite industry and European administrations form the membership of TC-SES committee of ETSI**
- **The preparation of technical standards at TC-SES is carried out primarily at the request of the European satellite industry—resulting in an ETSI EN**
- **Such requests for the preparation of new standards or the modifications of existing standards are made when industry plans to deploy new satellite terminals or deploy new services in Europe: Deliverable is ETSI EN**

# Importance of TC-SES to satellite industry (2/3)



- The development of standard is also carried out following a request from the European Commission to ETSI and other standardisation organisations- resulting in a Harmonised EN
- The conformity with the Harmonised standards prepared by TC-SES (therefore compliance with the Radio Equipment Directive) provide the basis for making available on the EU market and putting into service.
- Currently 30 Harmonized Standards developed in ETSI TC SES are cited in the Official Journal of the EU

# Importance of TC-SES to satellite industry (3/3)



- **Manufacturers, operators, or conformity assessment bodies can use harmonised standards to demonstrate that products, services, or processes comply with relevant EU legislation**
- **The ETSI standards are also recognised in many other parts of the world, and in some of these countries form the basis for licensing of earth stations**
- **Therefore the work of TC-SES is of critical importance to the satellite industry**

# Recent TC SES activities



- **TC SES continues its work on the development and revision of Harmonised Standards for satellite earth station fixed terminals or terminals on the move, whether in an aircraft, on board a ship or in a vehicle for compliance with the Radio Equipment Directive**
- **Standards for Earth Stations In Motion (ESIM) operating in Ka/Ku band over GSO and NGSO satellites**
- **Integration scenarios for satellite in 5G and the associated architectures**

# In Conclusion...



- **we should endeavour to promote closer alignment between India and Europe with regard to the production and use of Information and Communications Technology (ICT) standards and to harmonise the exchange of statistical data, thereby facilitating trade, increasing interoperability and the ease of doing business for companies, and adding additional weight to European and Indian ICT standardisation efforts at the global level.**

# Any further questions?

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