

Europe Radio Regulatory Environment

By : CRAF FM : Waleed Madkour



IUCAF 5th School on Spectrum Management for Radio Astronomy

South African Radio Astronomy Observatory (SARAO)

2-6 March 2020



CRAF

Committee on Radio Astronomy Frequencies



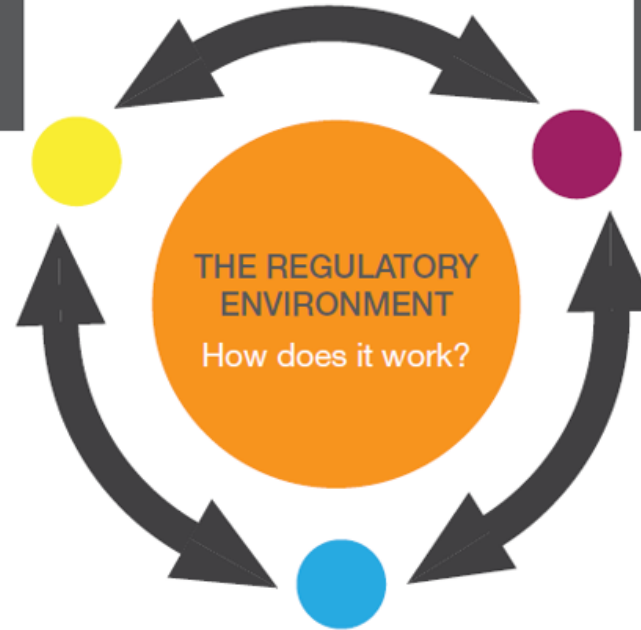
JIVE

Joint Institute for VLBI
ERIC

- 27 EU Member states



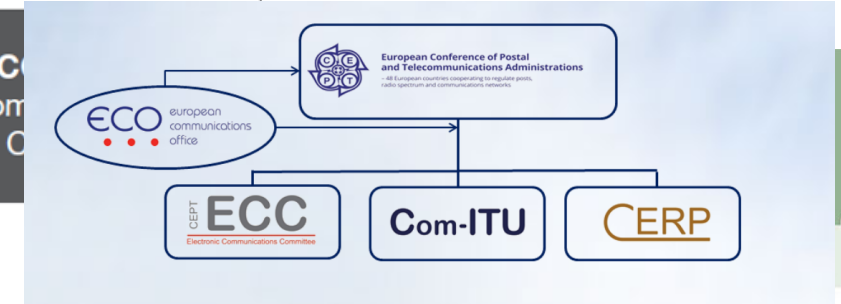
EC
European
Commission



ETSI European
Telecommunications
Standards Institute

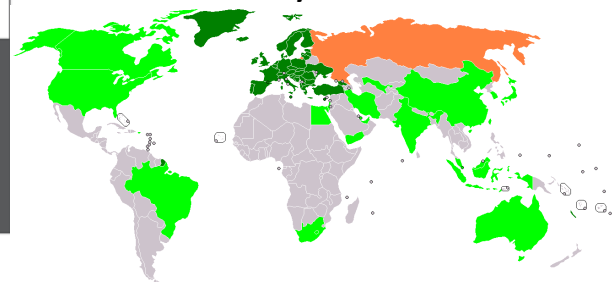


EC
Comm
O



- A division of the European Conference of Postal and Telecommunications (CEPT)
- Founded 1959

- Founded by CEPT in 1988

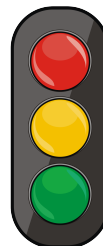
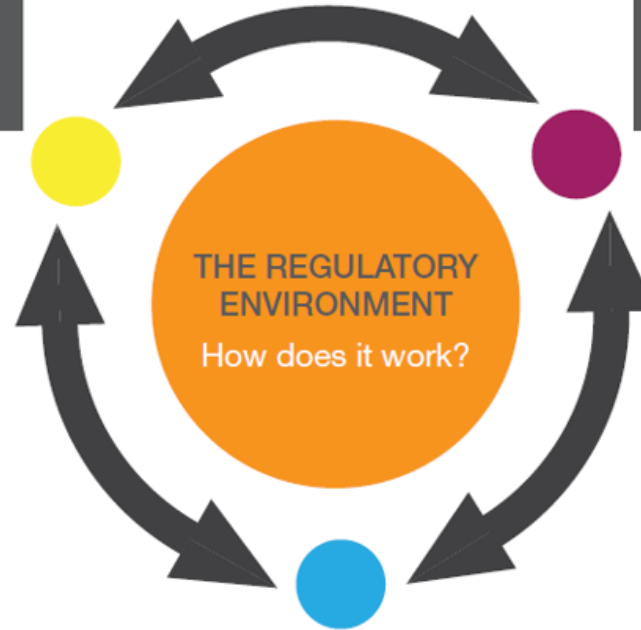


- Full members
- Associate members
- Observers

- General spectrum policy and strategy for the EU member states.
- Single market, fair spectrum use, harmonization, availability, economic growth...etc
- EC Decisions are mandatory for the EU member states



- Technical and regulatory expertise.
- Compatibility studies for spectrum allocation or sharing.
- Decisions not mandatory, but binding if implemented.



- Telecommunication equipment harmonized standards.
- Only standardized products and services can be put on the market in Europe.
- Ex: Transmission protocols, antenna requirements, modulation, receiver parameters ...etc

DG Connect : Directorate General for Communications Networks, Content & Technology:

- Develops the strategic plan.

Strategic Plan 2016-2020*

Directorate-General for Communications Networks, Content and Technology



*The current Commission's term of office runs until 31 October 2019. New political orientations provided by the incoming Commission for the subsequent period will be appropriately reflected in the strategic planning process.

DG Connect

Communications Networks, Content and Technology, Services and Services

Brussels, 30 January 2019

RSPG19-007 FINAL

RADIO SPECTRUM POLICY GROUP

STRATEGIC SPECTRUM ROADMAP TOWARDS 5G FOR EUROPE

SPG Opinion on 5G implementation challenges (RSPG 3rd opinion on 5G)



EC
European
Commission

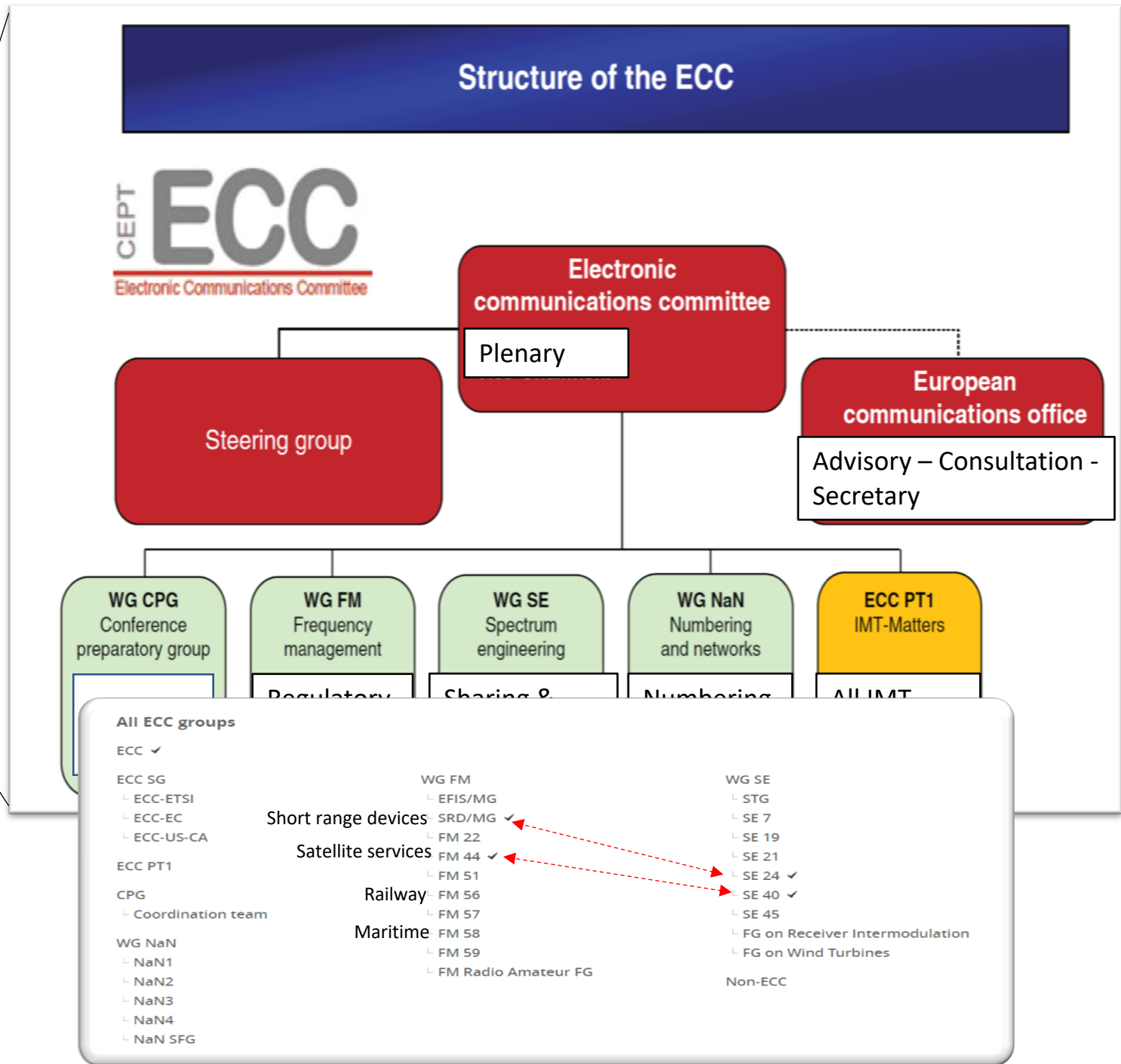


ECC Electronic
Communications
Committee





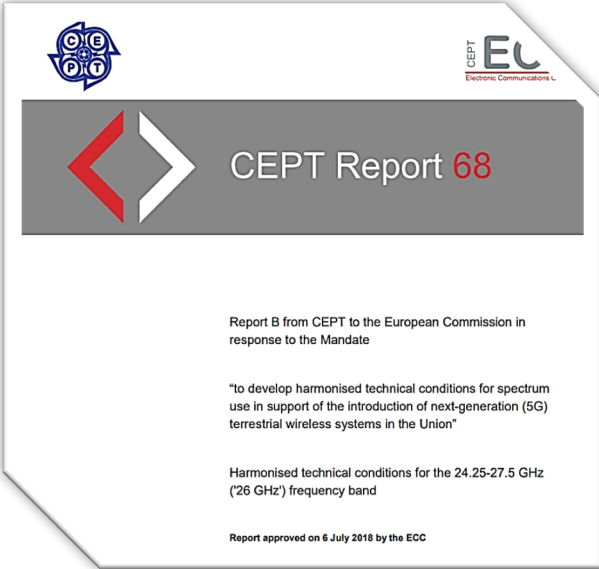
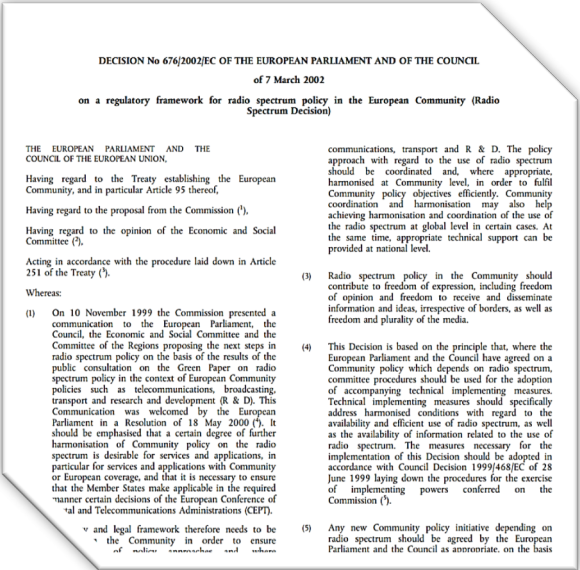
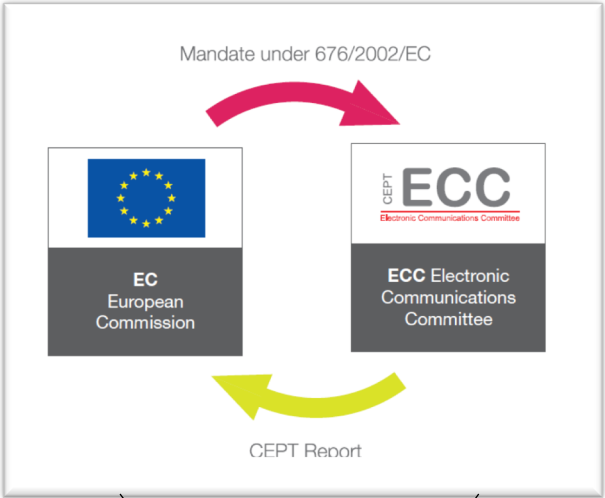
ETSI European
Telecommunications
Standards Institute



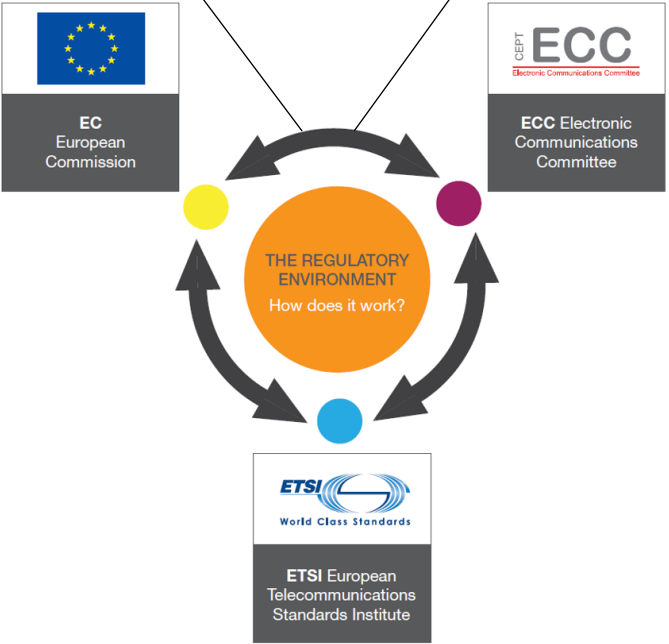


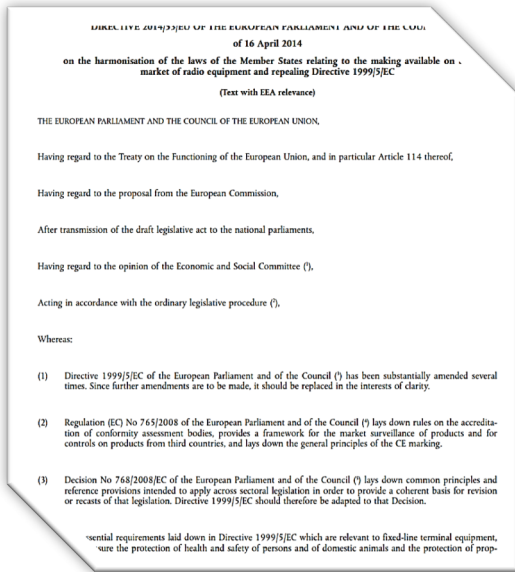
COMMITTEES, PROJECTS & OTHER GROUPS		INDUSTRY SPECIFICATION GROUPS	
ATTM Access, Terminals, Transmission and Multiplexing	BRAN Broadband Radio Access Networks	ARF Augmented Reality Framework	CDM european Common information sharing environment service and Data Model
BROADCAST EBU/CENELEC/ETSI on Broadcasting	CABLE Integrated broadband cable telecommunication networks	CIM cross-cutting Context Information Management	ENI Experiential Networked Intelligence
CYBER Cyber Security	DECT Digital Enhanced Cordless Telecommunications (DECT)	F5G 5th Generation Fixed Network	IP6 IPv6 integration
EE Environmental Engineering	eHEALTH eHEALTH	MEC Multi-access Edge Computing	mWT millimetre Wave Transmission
EMTEL Emergency Communications	ERM EMC and Radio Spectrum Matters	NFV Network Functions Virtualisation	NIN Non-IP Networking

TC - ERM: Technical Committee – EMC and Radio Spectrum Matters



RSC





ETSI TR 103 314 V1.1.1 (2017-05)

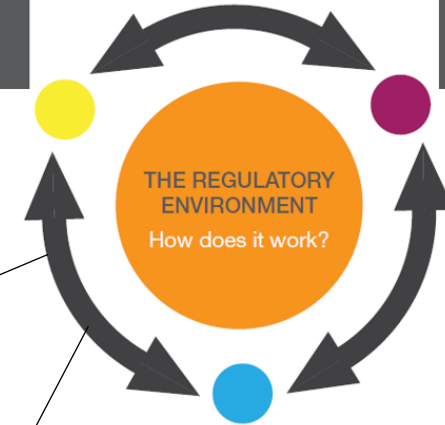


System Reference document (SRdoc);
Short Range Devices (SRD) using Ultra Wide Band (UWB);
Technical characteristics for SRD equipment
using Ultra Wide Band Sensor technology (UWB)
based on amended mitigation techniques for UWB

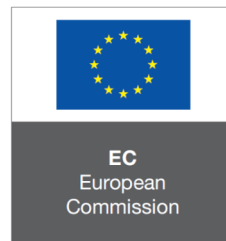
RED: Radio Equipment Directive :

- Requirements that products must meet in order to be placed in the market & put into service.
- No prejudice to regulations for the use of radio spectrum

RSC

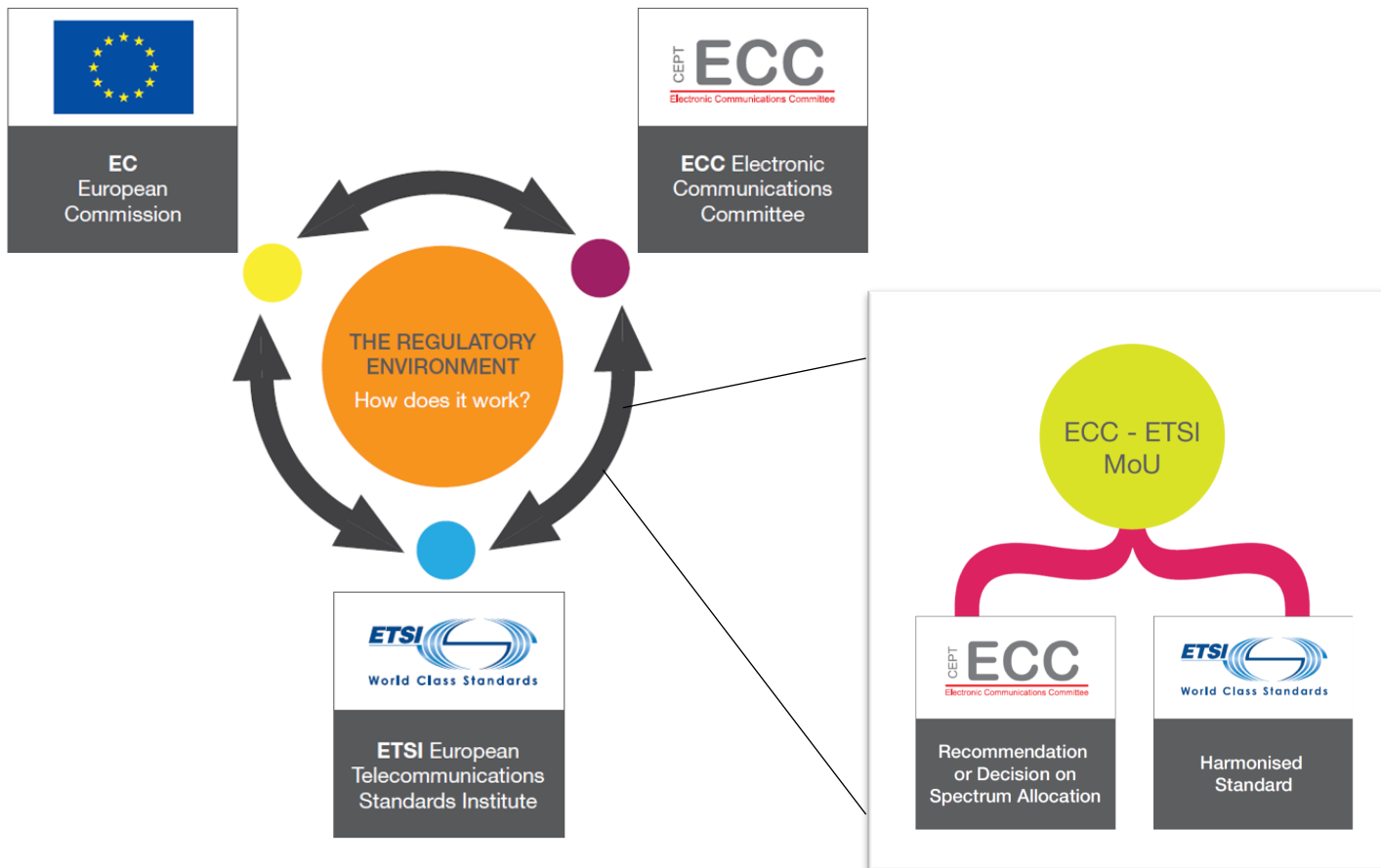


Standardisation request (mandate)
for Harmonised Standard(s) under the RED



Harmonised Standard(s)

ETSI SR-Doc



In the development of Harmonized Standards for radio equipment as well as in relevant ECC deliverables, the provisions of the ETSI-CEPT Memorandum of Understanding MoU are applied.

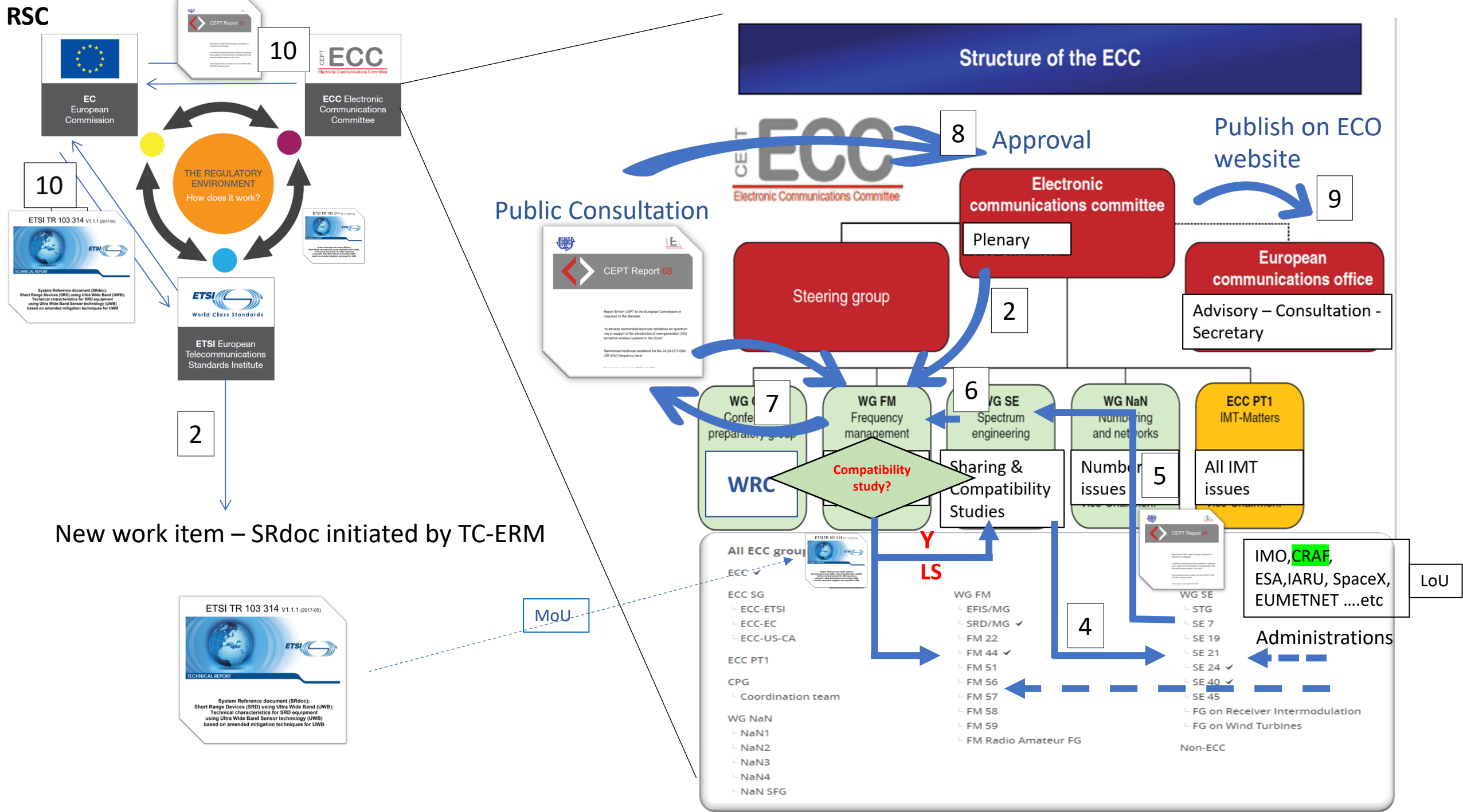
taking into account:

- m) that there are differences in the membership of the EU, EFTA, CEPT and ETSI;
- n) that the ECC has the policy of making technologically neutral regulations, neither imposing nor discriminating in favour of the use of a particular type of technology, unless technically and clearly justified, also taking into account EU legislation as relevant ^(1,2) and obligations with respect to the World Trade Organisation (WTO), for example due to spectrum sharing issues;

agree:

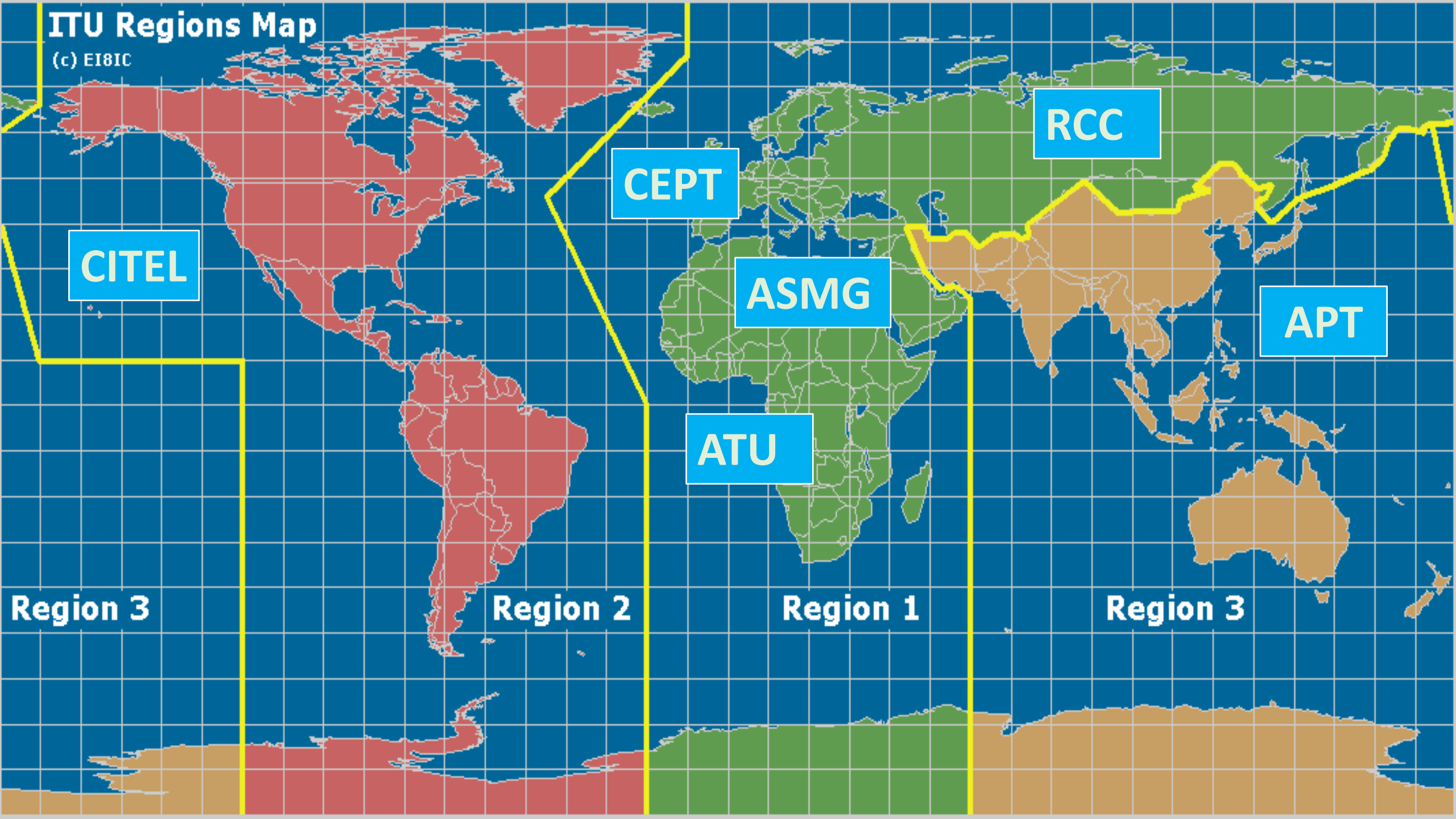
- 1) that ETSI takes into consideration the responsibilities of the ECC, when developing Harmonised Standards or other relevant ETSI deliverables;
- 2) that the ECC takes into consideration the deliverables of ETSI when developing ECC Decisions, ECC Recommendations or other ECC deliverables;
- 3) that therefore a close liaison, flow of information and a process of consultation between the two organisations is essential;
- 4) that consequently there is a need for mutual representation of the organisations in each others' meetings;
- 5) to adopt and use the "Procedures for Co-operation between ETSI and the ECC", annexed to this document;
- 6) that this Memorandum of Understanding is open to review at the request of either party.

Signed:

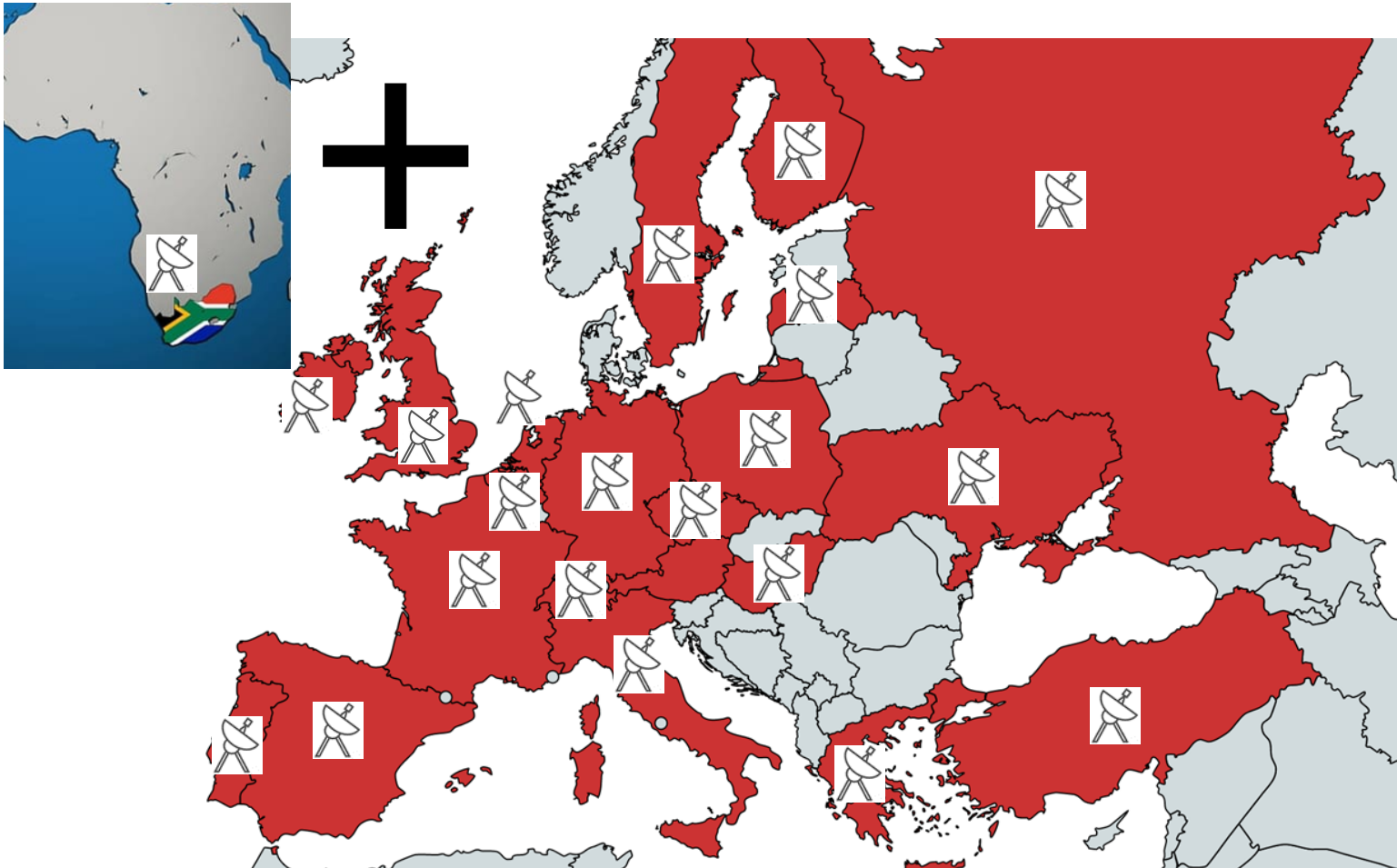


ITU Regions Map

(c) EI8IC

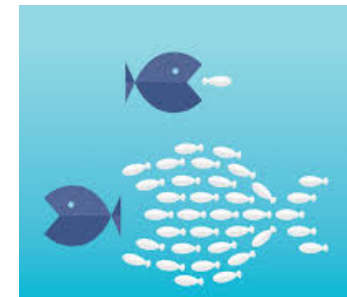


Committee on Radio Astronomy Frequencies (CRAF)



- Expert Committee founded by the European Science Foundation (ESF) in 1988.
- 21 European member institutes + SKA South Africa.
- ITU sector member.
- CEPT observer.

→ Single European voice
→ Greater impact



CRAF Observers



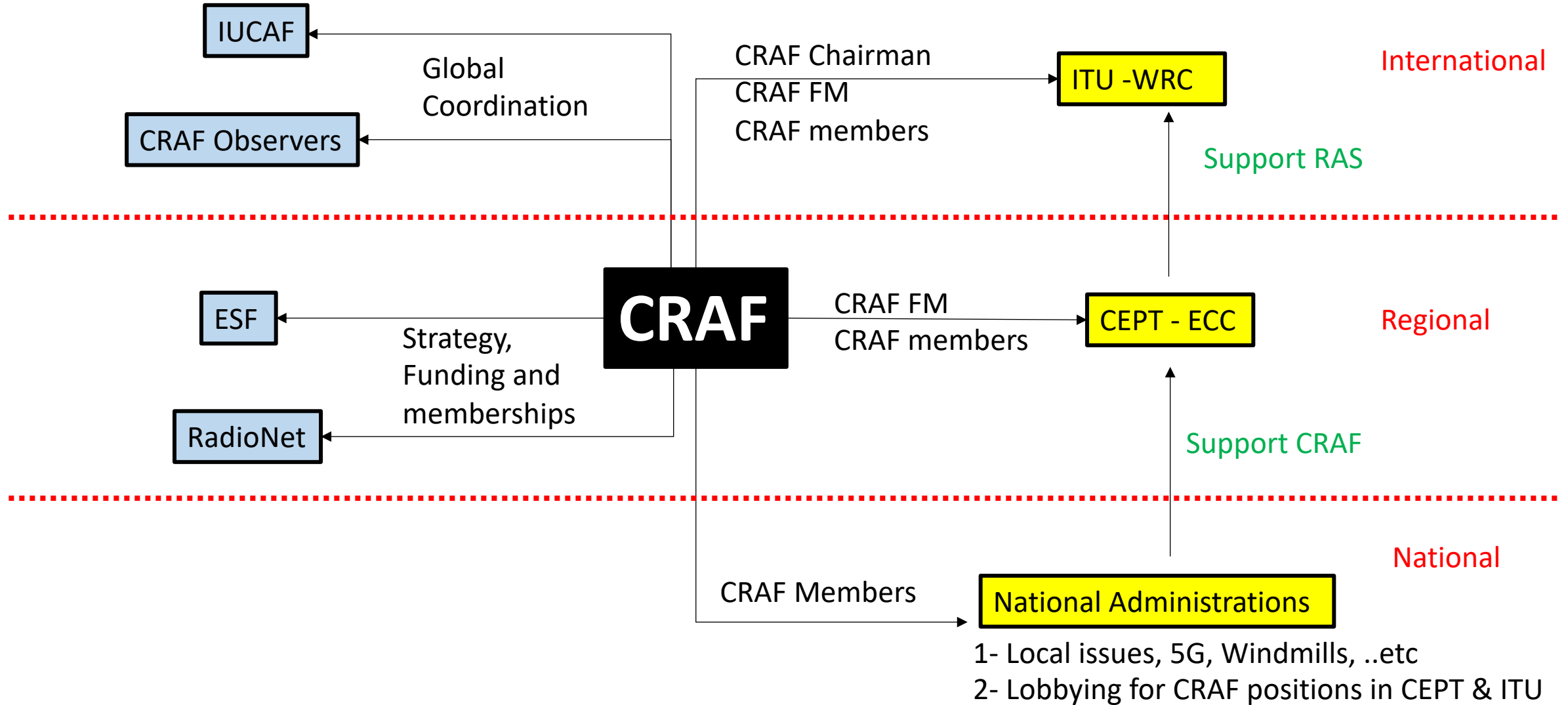
European Southern Observatory



CRAF Mission

- *To argue the scientific needs of radio astronomy for continued access to and availability of the radio spectrum for radio astronomy within the European arena.*
- *To keep the frequency bands used for radio astronomical observations free from interference.*
- *To support related science communities in their needs of interference-free radio frequency bands for passive use. Ex: VGOS*

CRAF Work



CRAF Publications

- CRAF Studies & Position papers for ITU-WRC.
- CRAF Compatibility Studies to CEPT - ECC.

ECC → ECC → Meeting documents

ECC - Electronic Communications Committee

Group Info ▾

Meeting documents

Meeting calendar

Forum

EUMETNET

<input type="checkbox"/>	25/02/20	ECC(20)036	Draft LoU ECC - Access Space Alliance	ECC SG	...
<input type="checkbox"/>	25/02/20	ECC(20)009-A08	Updated list of review of ECC ERC ECTRA Decisions (February 2020)	WG FM	...
<input type="checkbox"/>	25/02/20	ECC(20)031	52nd Iridium vs RAS band 1610.6-1613.8	CRAF	...
<input type="checkbox"/>	25/02/20	ECC(20)032	CRAF_CEPT Satellite monitoring station	CRAF	...
<input type="checkbox"/>	25/02/20	ECC(20)034	Draft LoU - ECC and ITSO 02242020	ECC SG	...
<input type="checkbox"/>	25/02/20	ECC(20)033	Draft LoU - ECC and LoRa Alliance	ECC SG	...

