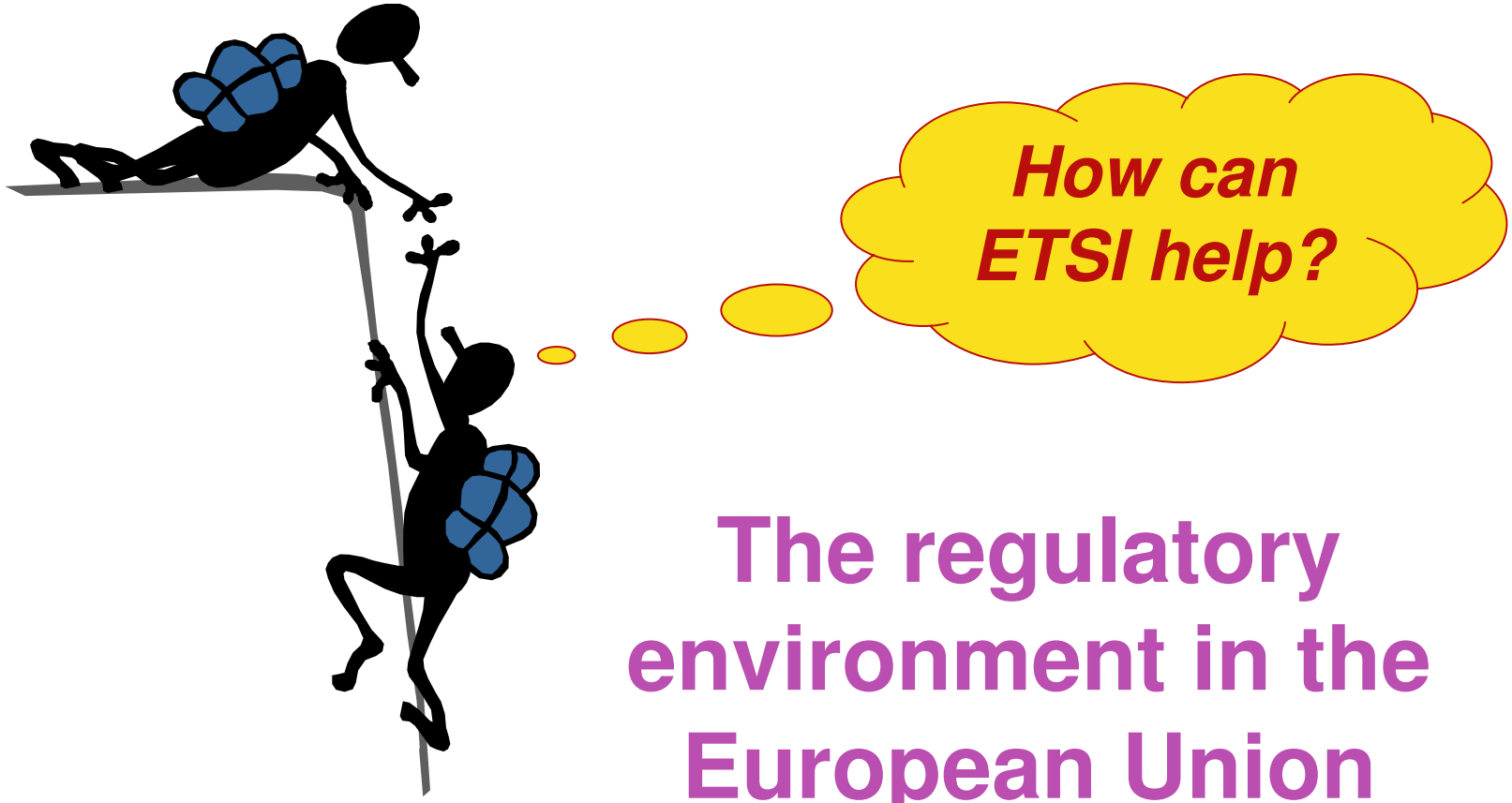
World Class Standards

Harmonised standards and spectrum regulations



The regulatory environment in the European Union

What is ETSI?

European Telecommunications Standards Institute

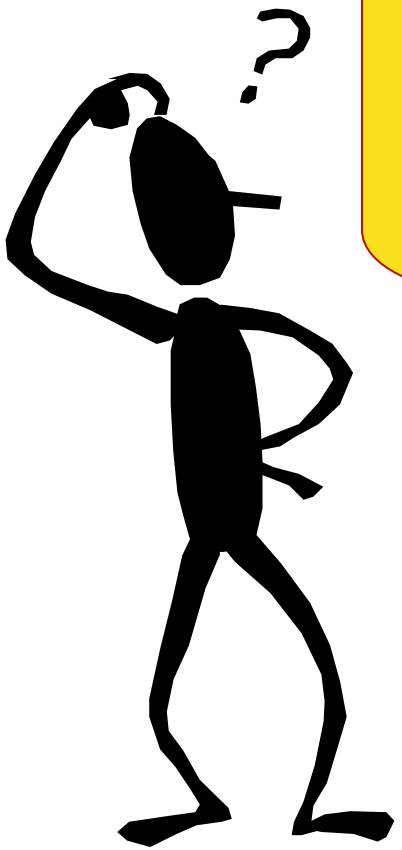
European Standards Organisation (98/34/EC)

Association of Industry players…

…manufacturers, network operators, service providers, administrations, users, industry associations…

… with direct participation

Directives & regulations (equipment)



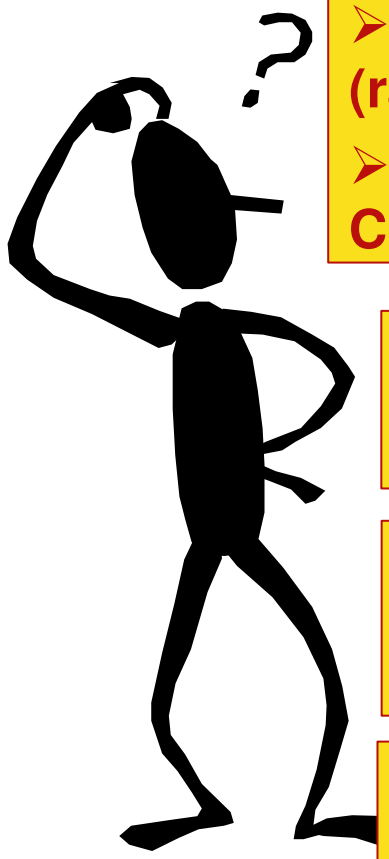
Radio & Telecommunications Terminal Equipment Directive (1999/5/EC)

What does a manufacturer need to do?

Meet the "essential requirements"

- ➢health & safety
- ➢electromagnetic compatibility
- ➢avoidance of harmful interference (radio equipment only)
- ➢possibly others, if invoked by the Commission

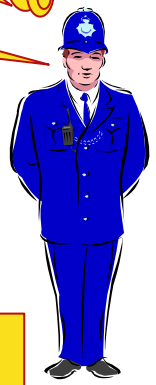
Declare conformity



Carry out « essential radio test suites »

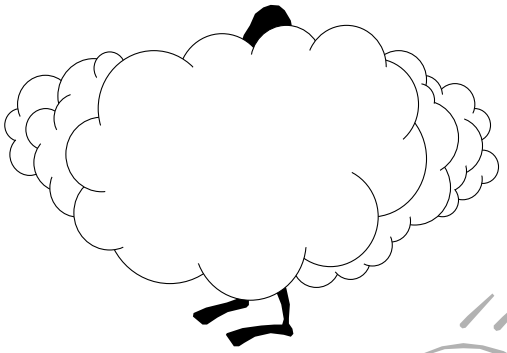
Meet national radio interface regulations

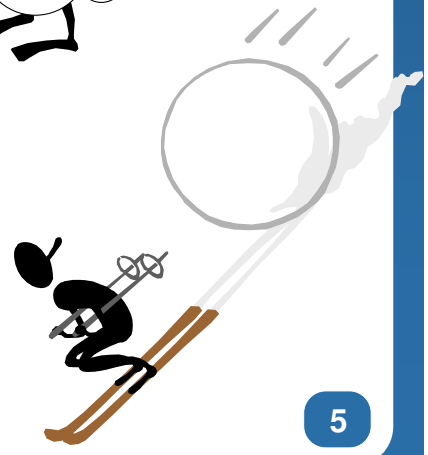
Inform member state (if using non-harmonised radio spectrum)



Other essential requirements

- Access to emergency services (3.3e)
  - Ships using inland waterways (EC Decision 2000/637/EC)
  - Marine distress & safety equipment (EC Decision 2004/71/EC)
  - Marine Identification System (EC Decision 2005/53/EC)
  - COSPAS-SARSAT locator beacons (EC Decision 2005/631/EC)
  - Avalanche beacons (EC Decision 2001/148/EC)





How can ETSI help

How do I meet essential requirements?

Are there any others?

Harmonised Standards

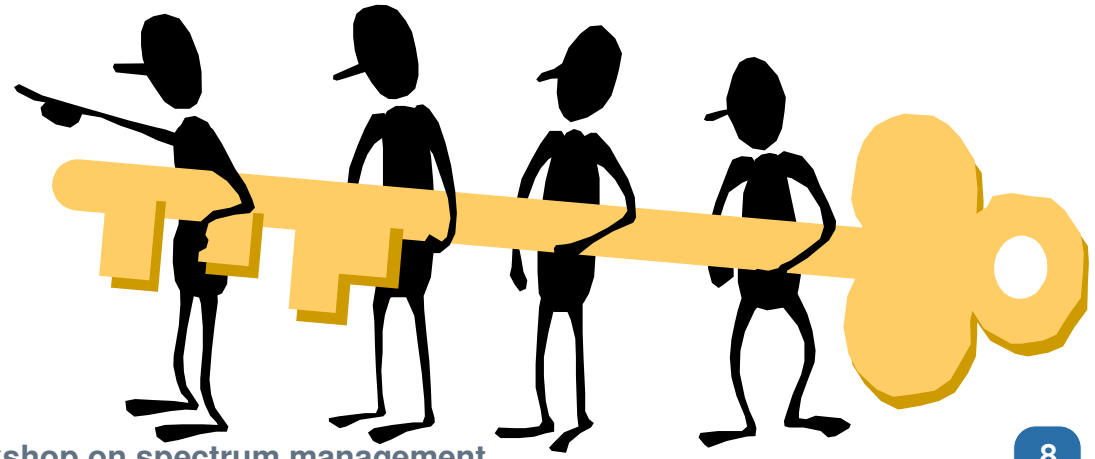
Harmonized Standards??

Harmonised Standards

Where apparatus meets the relevant harmonised standards or parts thereof whose reference numbers have been published in the Official Journal of the European Communities, Member States shall presume compliance with those of the essential requirements referred to in Article 3 as are covered by the said harmonised standards or parts thereof. [Article 5.1]

Harmonised Standards

- European Standards (EN)
- Produced under a mandate from the European Commission
  - And adopted by Member States (98/34 committee)
- Implement essential requirements of a « New Approach » Directive (e.g. R&TTE, EMC)
- Adopted by National Standards Organisations
- Cited in the Official Journal of the European Union
- Member states required to presume conformity



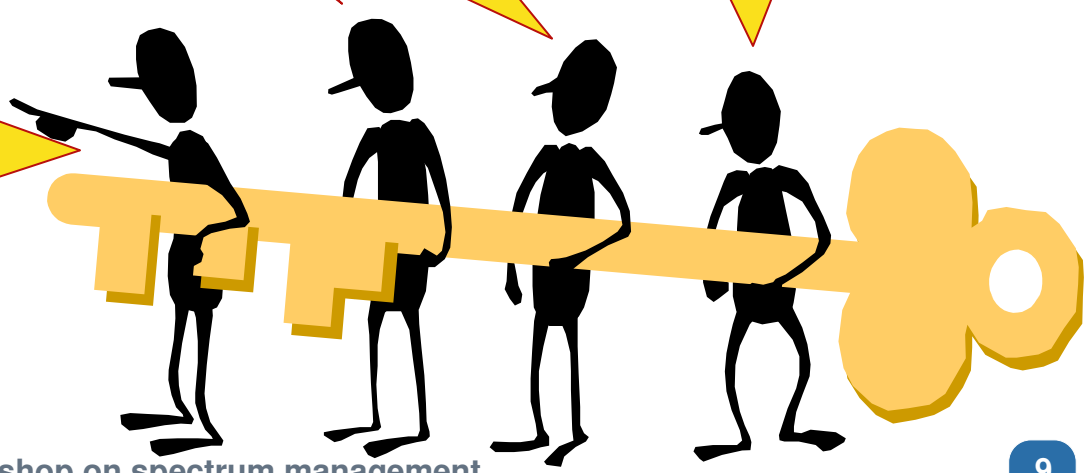
Harmonised Standards

Mandate M/284 (& specific mandates)

Identify technical requirements necessary to meet regulatory objective (essential requirements)

Identify « essential radio test suites » necessary before placing on the market

Only the part of the standard relevant to the Directive is cited in the OJEU



Harmonised Standards

MSG: **GSM**
DECT: **DECT**
TETRA: **TETRA**

***TM4*: Fixed Radio Links**

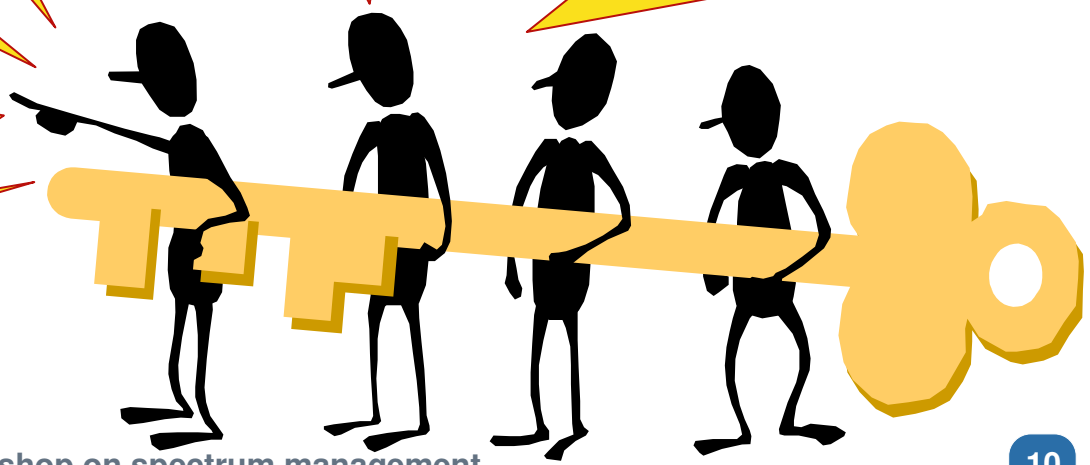
SES: **Satellite Earth Stations**

ERM/MSG
TFES:
IMT-2000

ERM:
Short range devices; Land-mobile radio, Amateur Radio, Citizens' Band

BRAN:
HIPERACCESS, 5 GHz RLAN

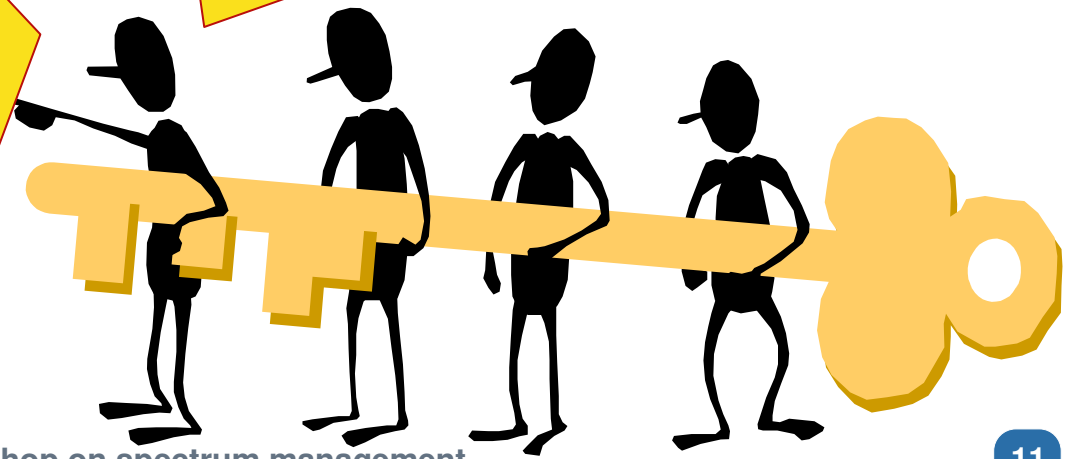
ERM:
2,45 GHz RLAN



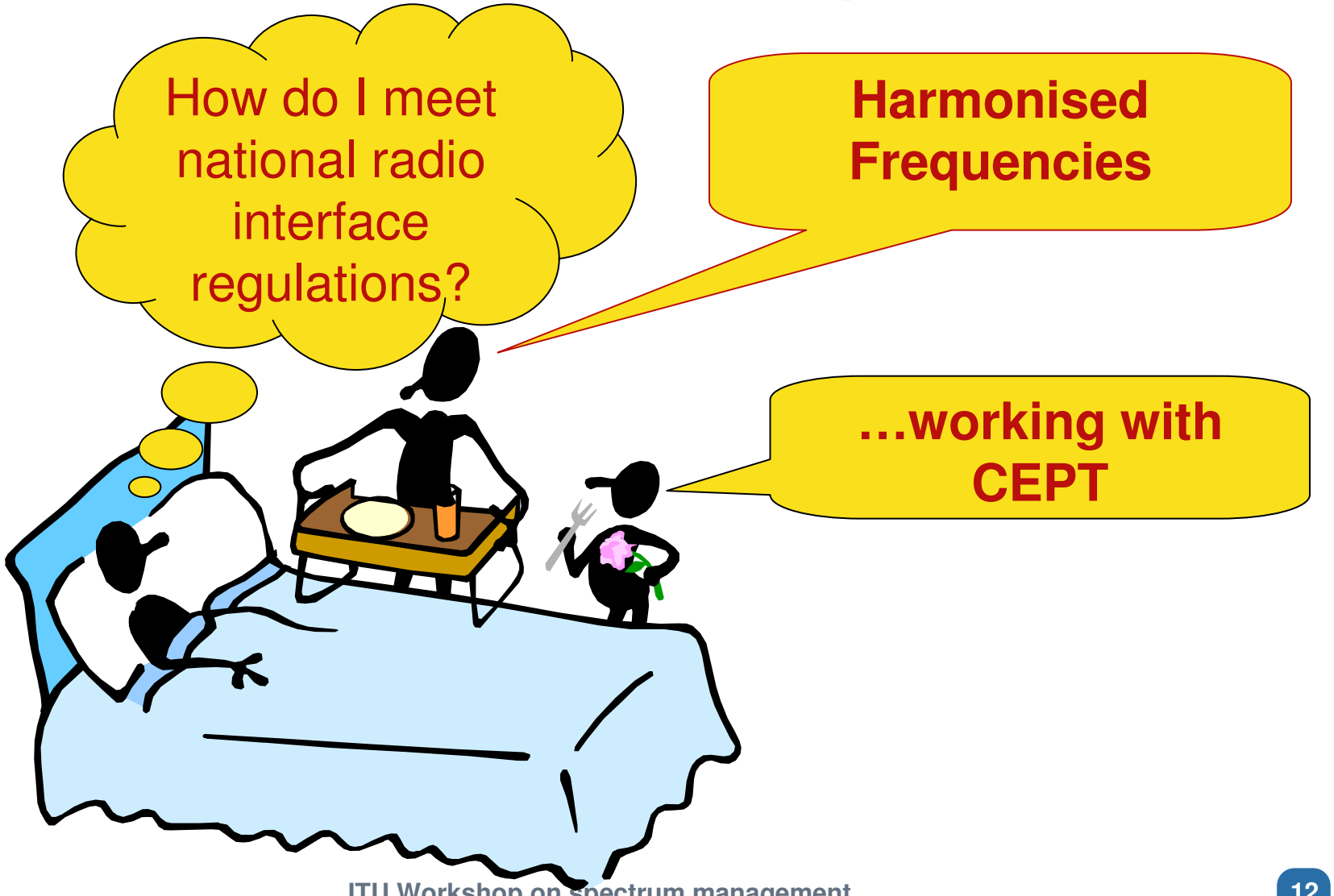
Harmonised Standards

ERM:
Marine radio, Short-range devices (ERM TG28), Paging, Cordless telephones, Radar, Medical Implants, Road Transport & Traffic Telematics

ERM:
Electromagnetic Compatibility, Meteorological Aids, Avalanche Beacons, Ultra Wide Band (ERM TG31a), Broadcast transmitters, professional audio/video



How can ETSI help?

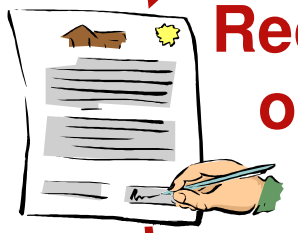


Radio Spectrum Access

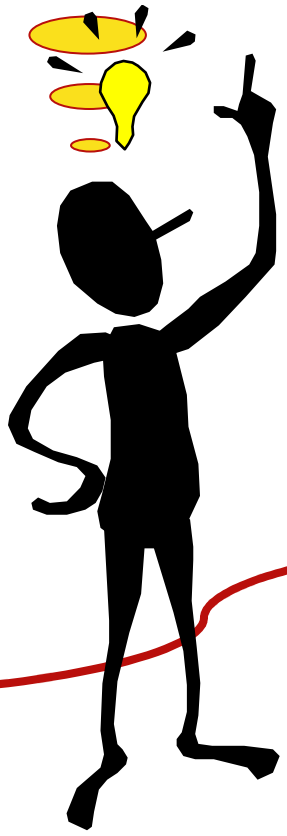
CEPT-ETSI MoU

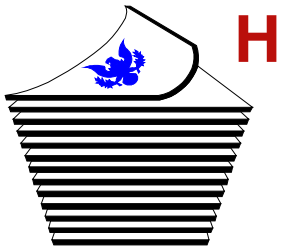
CEPT

ETSI



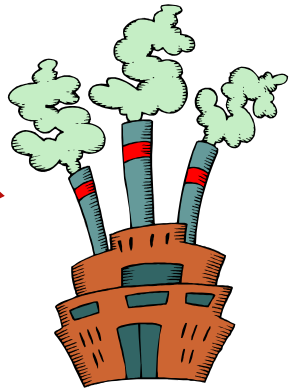
Recommendation or Decision on spectrum allocation





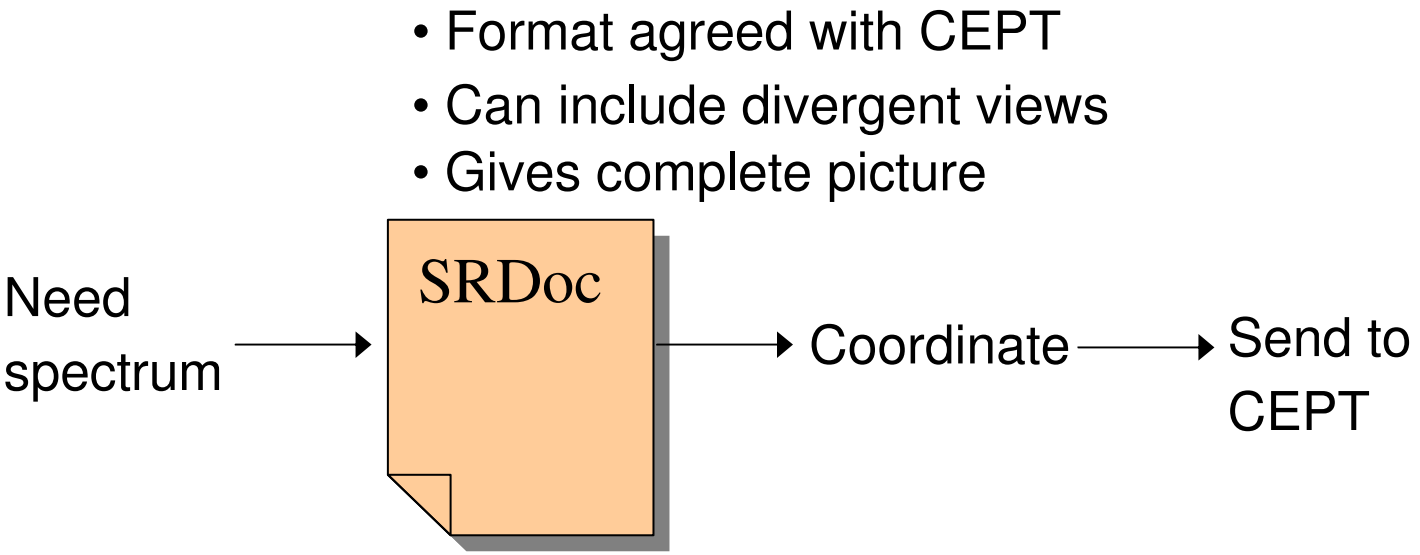
Harmonised Standard

National licence regimes plus interface regulations



ETSI ERM RM: Coordinating ETSI positions on radio spectrum matters

- Coordinates and supports the needs and interests of the entire ETSI membership on radio spectrum matters
- ETSI members with a need for spectrum prepare a 'System Reference Document' and submit it to ERM RM for coordination



SRDoc

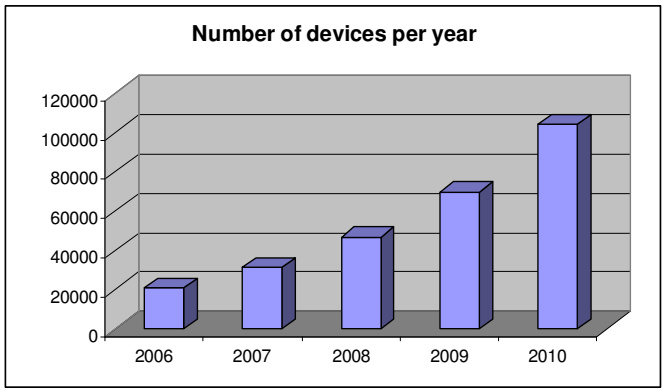
- **Contains information to help understanding the products and supports discussions with regulators:**

Technical parameters

Frequency range [MHz]	Power limit values for unwanted emission (e.r.p.) [dBm/MHz]
< 870	**- 85 (-95 dBm/100kHz)**
> 870 - 1600	**-65.3**
1600 – 2200	**-61.3**
8000 – 9600	**-70**
> 9600	**- 85**

Applications

Number of devices



Sharing issues

Keeping an overview of spectrum: the information

- Frequency focused view: what is happening in a particular frequency band (e.g. xx MHz)
  - Document RM Activities and Coordination Chart

Frequency band	application	ETSI System Reference Document	CEPT Compatibility study and ECC/DEC or REC	ETSI standards

  - OCG supported the ERM-originated idea to add flags to work items for frequency and EFIS category
  - The coordination workload with CEPT and EC could be lightened through better structure of the information (e.g. usage of more database).

- Conceptual view: evolution of the foundations (e.g. more flexibility)

TC ERM – Where next?

- TC ERM continues to:
  - incubate new radio project activities with significant growth potential
  - support and facilitate ETSI members needs regarding radio spectrum matters and EMC

Chairman's contact details:

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Chairman TC ERM
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gabrielle.owen@at-ez.nl

How can ETSI help?

National frequency allocations

What about legal certainty?

I want global markets!

… working with ITU

…working with the European Commission…

…Radio Spectrum Decision 676/2002/EC

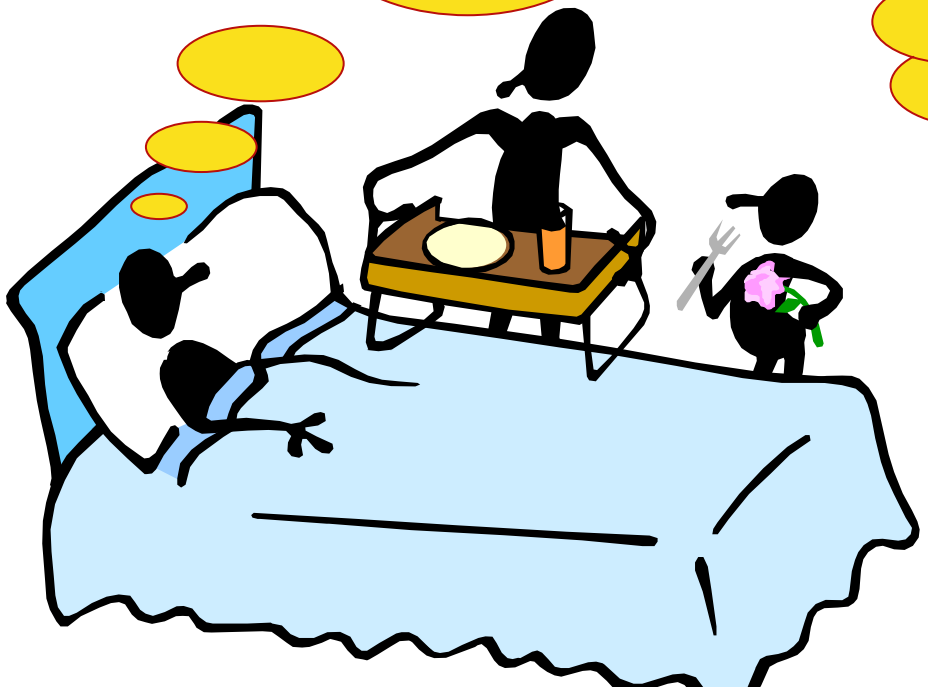
The problem…

Frequencies are managed on a national basis:CEPT Recommendations not enforceable at a European level

Manufacturer needs to know local frequency regulations

Inform member state 4 weeks before marketing equipment

Inform user of national restrictions on use



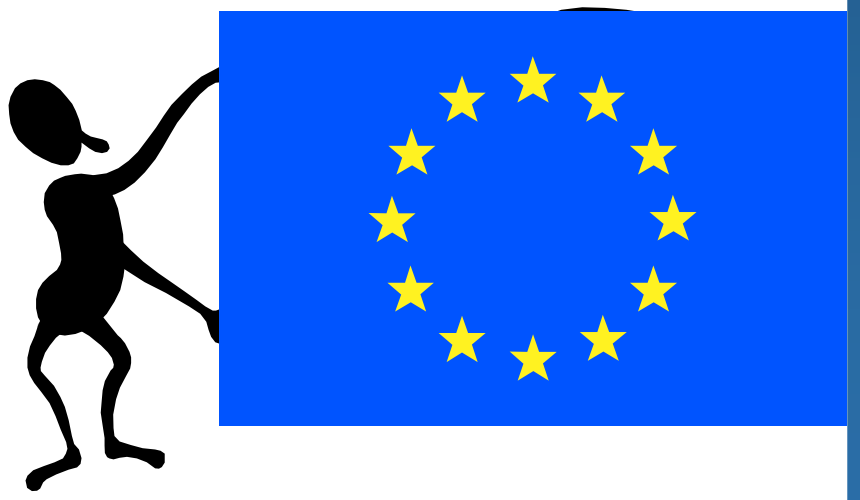
The Radio Spectrum Decision

Radio Spectrum Policy Group

Member states advise EC on spectrum requirements to support EU policy initiatives

e.g. Spectrum trading; switchover to digital TV; Wireless Access Policy for Electronic Communication Systems (WAPECS)

European Parliament, CEPT and ETSI as permanent observers



The Radio Spectrum Decision

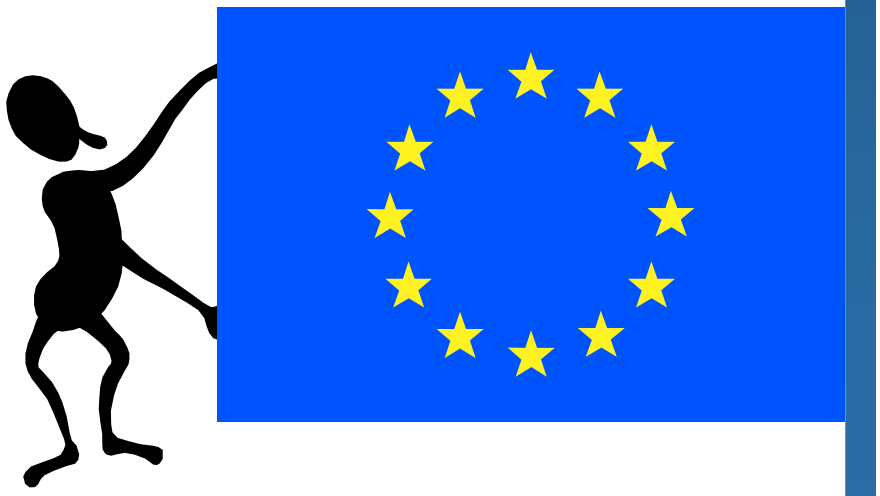
Radio Spectrum Committee

European Commission requests CEPT to provide frequency allocations in support of EU policies

CEPT output codified into a Commission Decision

Legal certainty !

CEPT and ETSI are permanent observers



World Class Standards

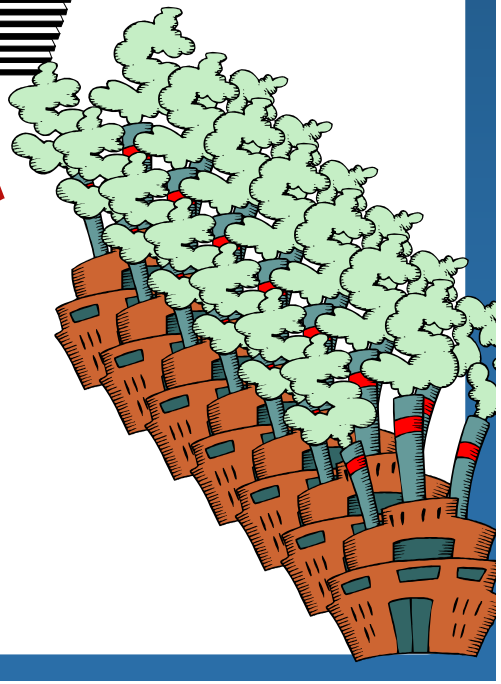
Harmonised Standards and Commission Spectrum Decisions

EC

ETSI

Radio Spectrum Decision

Harmonised Standard

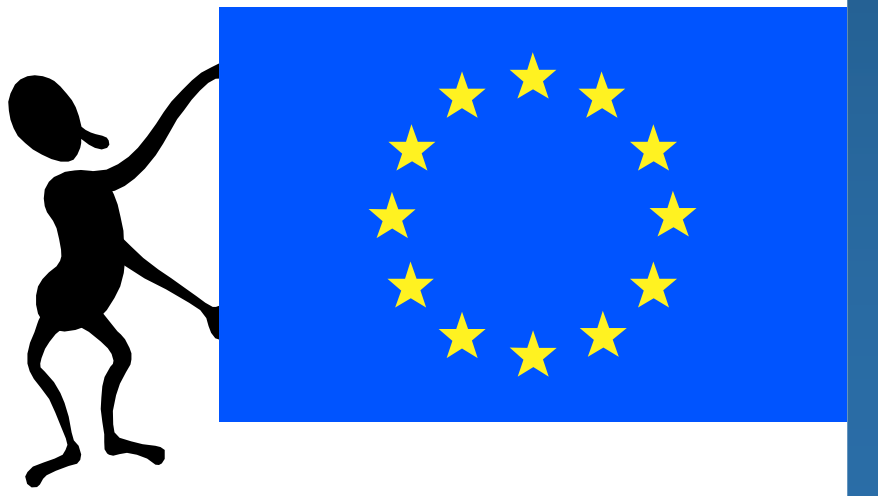


Spectrum allocations with Legal certainty

The Radio Spectrum Decision

International Negotiations
World Radio Conference (WRC)

- CEPT will continue to establish European Common Positions
- Commission to communicate with Parliament & Council for political support
- Aim for global harmonisation where possible



ITU – ETSI Co-operation: general provisions

ITU SGs; WPs

Director General is responsible for the promotion of general ETSI policies and for submitting ETSI material of a general nature to the ITU

Where an *EN (ES)* exists, or the General Assembly has adopted a common position on a matter of strategic importance, ETSI has taken a formal and definitive position which members shall support in the ITU (in so far as such support is compatible with their obligations under European or national law).

International Telecommunication Union

***Technical Body* may approve, and submit, a common contribution to the ITU. ETSI members are encouraged, but not formally obliged, to support the contribution in the ITU.**

ITU - ETSI Co-operation

ITU

Overall ETSI view

ETSI

ETSI Director General

Study groups and Working Parties

ETSI Member

Individual view

How can I contribute?

- Membership of ETSI is open to any organisation with an interest in telecommunications (European or not)
- Harmonised Standards produced by Technical Committees of experts drawn from members
- Funded Specialist Task Forces to accelerate critical work
- Public Approval Process managed by National Standards Organisations

Keeping up to date

- http://portal.etsi.org/radio
- http://www.etsi.org/europe/public-interest
- http://portal.etsi.org
  - RTTE
  - Spectrum
  - Others…
- http://portal.etsi.org/ocg
  - R&TTE Steering Committee
- http://www.newapproach.org
- http://www.europa.eu.int

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Any questions?