

ITU WORKSHOP on
SHORT RANGE DEVICES (SRDs)
AND ULTRA WIDE BAND (UWB)
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CEPT SRD Spectrum management principles

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SHORT RANGE DEVICES AND
ULTRA WIDE BAND

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Content



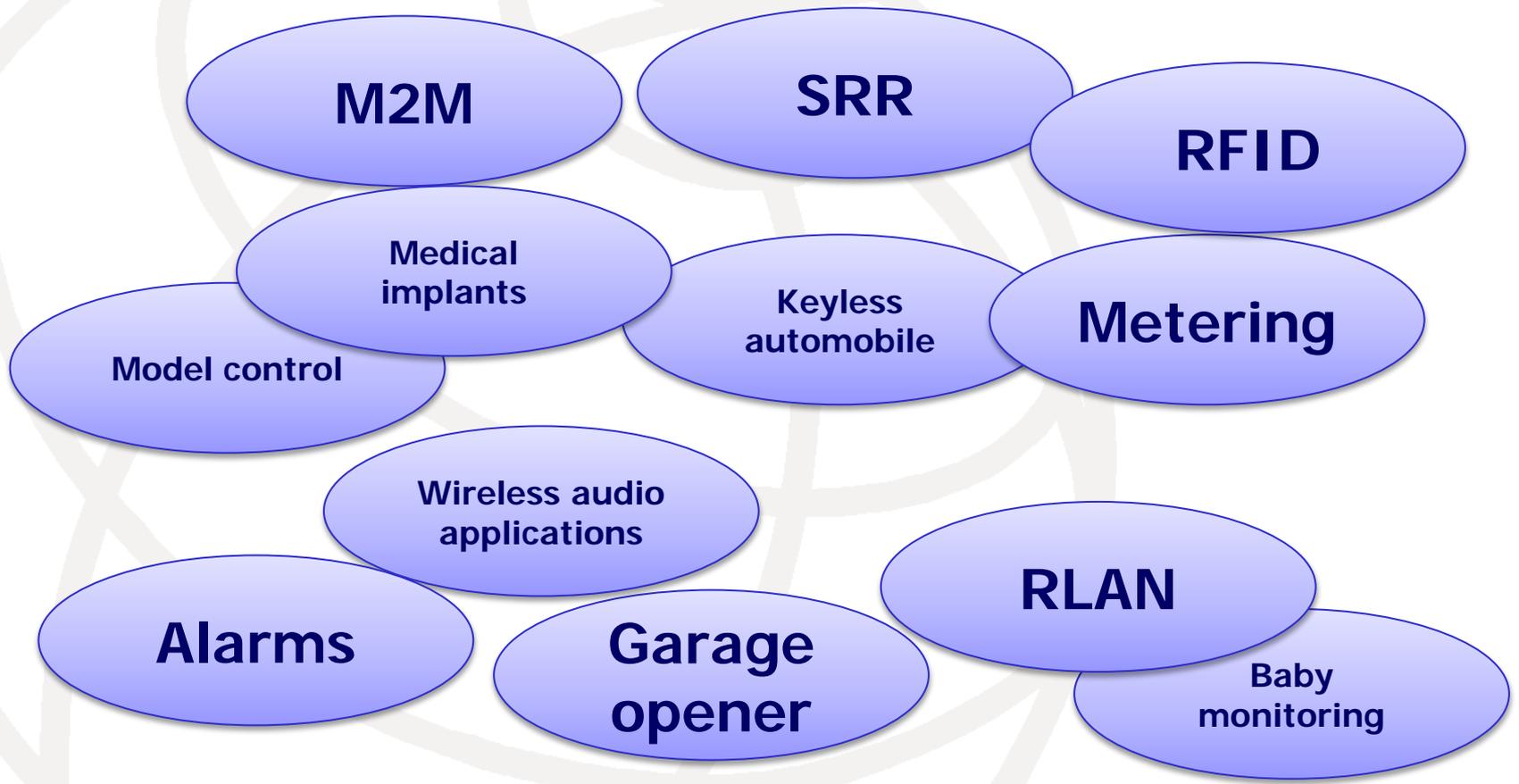
- 1. SRD context**
- 2. Organization scheme in Europe**
- 3. Principles and Strategy in Europe to define the SRD regulatory framework**
- 4. Conclusions**



SRD context



Examples of application which may likely to be considered as an SRD...





SRD context



SRD characteristics :

- SRDs is not a radio service
- SRDs operate in shared bands and are not permitted to cause harmful interference to radio services;
- SRDs cannot claim protection from radio services.
- SRDs are most usually authorized under a general authorizations regime



...and related issues :

- *Shared used of the spectrum*
 - ✓ How to deal with a spectrum environment where devices of different nature have to coexist and where different application are mixed ?
 - ✓ How to ensure efficient use of the spectrum ?
 - ✓ How to define the balance between the levels of operational resilience of considered systems ?
- *General authorization regime*
 - ✓ no exact information about the precise locations of use and real usage densities of SRDs
 - ✓ mass-market and/or portable products which can easily be taken and used across borders
 - ✓ No limit in the number of users.



Consequences

- ❖ Importance in assessing SRD application parameters
- ❖ Importance of compatibility studies before defining a regulation

To overcome this challenge, defining an SRD regulation in Europe implies all actors and a well established procedure...



Organization scheme



- ❑ All interested parties are involved
The European Commission, ETSI and the Electronic Communications Committee (ECC) of CEPT are involved in the cooperation process dealing with spectrum management decisions by setting standards as well as regulatory decisions.

- ❑ Role of ETSI in SRD matters
The ETSI is responsible for producing System Reference Documents and harmonized European standards for telecommunications and radiocommunications equipment.



Organization scheme



❑ Role of European Commission in SRD matters

European Commission published the EC Decision 2006/771/CE (and subsequent amendments) on SRDs and tasks CEPT to update regularly the technical annex of this Decision based on a permanent mandate.

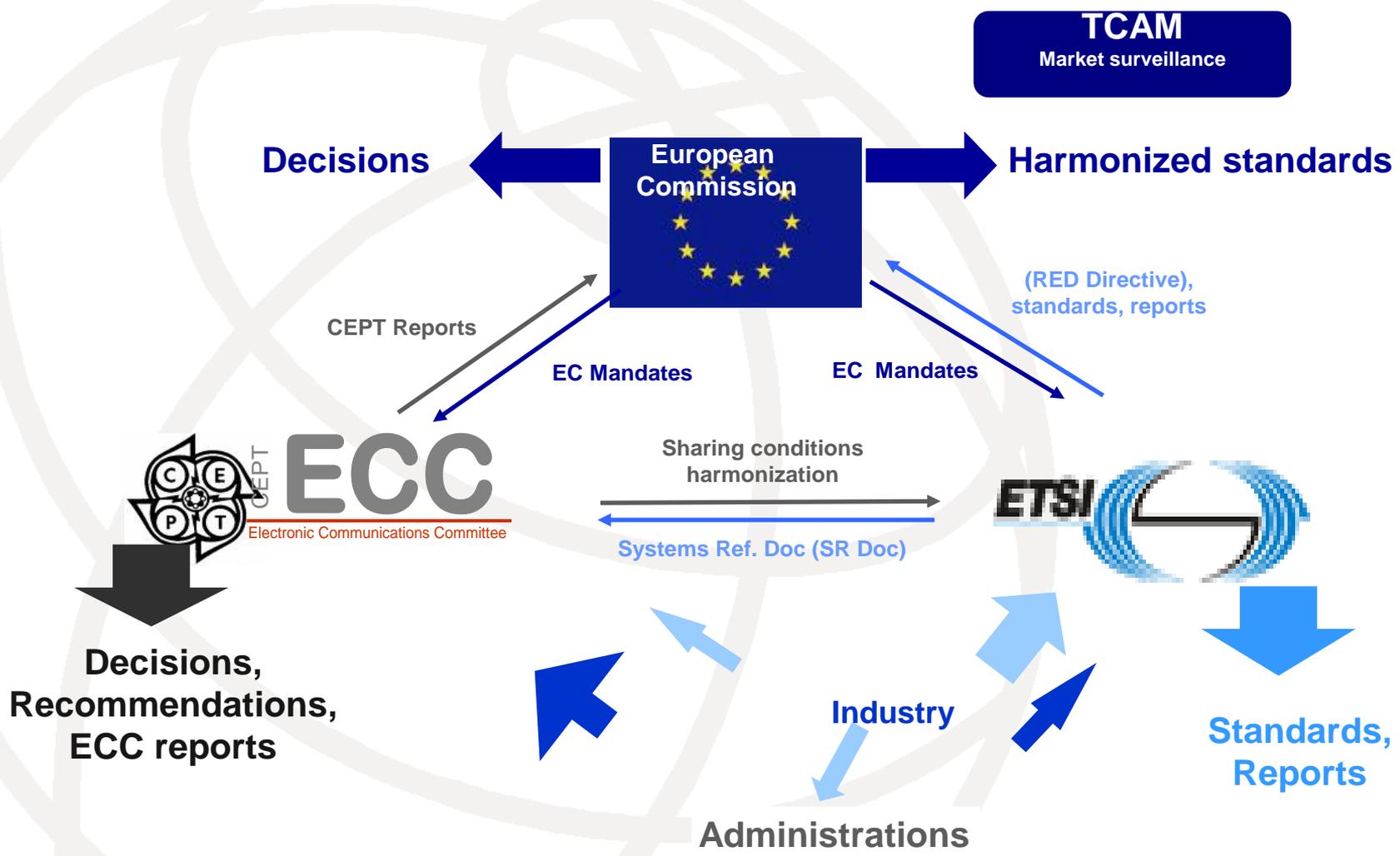
❑ Role of CEPT/ECC in SRD matters

CEPT/ECC ensures the maintenance of Recommendation ERC 70-03. CEPT carries out compatibility studies aiming to propose and/or to define SRD regulation.

In general, this establishes a process of co-regulation in which administrations, industry and operators/users participate to find the best suitable regulatory approach for SRD applications.



Organization scheme

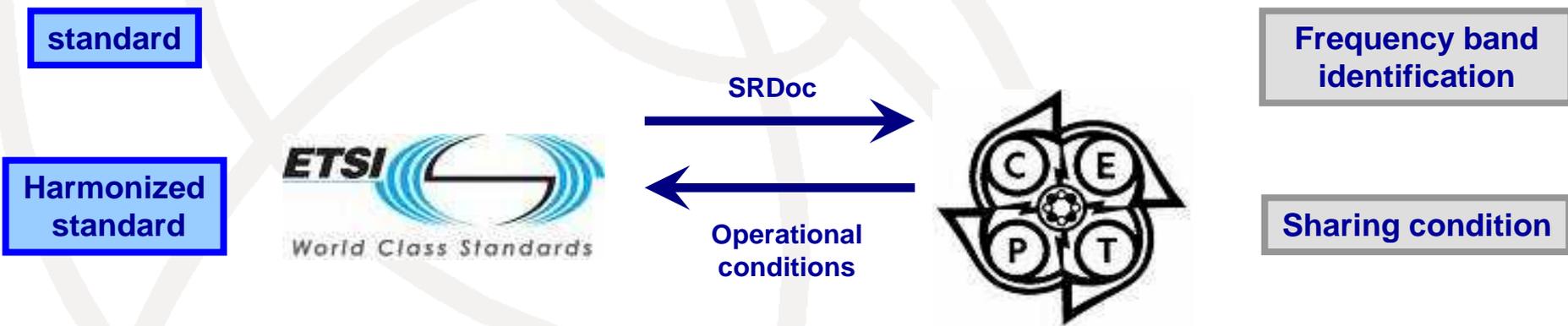




Organization scheme



ETSI provides a SRDoc to CEPT including a proposal for a frequency range



**CEPT responds to this request by providing the results of compatibility studies including an identified frequency band and sharing conditions
ETSI elaborates harmonized standard based on these information**



Organization scheme



The benefits of this regulatory process include:

1. Defined entry points into the process for industry;
2. Following neutral studies:
 - a) compatibility with existing users;
 - b) maximum/efficient use of the spectrum;
 - c) reliable operation of new applications by defining appropriate operating conditions;
3. Public consultation intended to ease the process of national implementation.

ECC Policy Goal aims to increase the efficiency of the regulatory process, particularly the compatibility studies, to provide a rapid frequency designation process and to give a higher degree of certainty for industry. A key element of this is to encourage the industry to provide initial spectrum studies to support its proposals



Strategy and Principles



First step....categorizing the SRD application

- 1. Generic SRD application,**
- 2. Specific SRD application.**

This allows to identify the nature of the compatibility studies which need to be achieved.

One of the key information in this assessment is the expected usage density.



Strategy and Principles



Second step....Frequency considerations

when defining the appropriate operating frequency band, administrations need to consider grouping different SRD application in order to foster the collective and the efficient use of the spectrum.



Third step....Technical considerations

Neutrality approach applied

This approach aims to group different SRDs in a same frequency band according to either their technology or the type of application. Both approaches foster the collective use of the spectrum but their applicability depends on different factors.

Predictable Sharing Environment

This addresses a second-level of compatibility (i.e. intra-SRD sharing) which needs to be established to ensure that SRDs do have equal access to bands and therefore have to protect each other (instead of being protected by regulators)



Strategy and Principles



Fourth step...Mitigation techniques

- ❑ In order to ensure an efficient use of the spectrum by considering different SRD applications in a same frequency band, mitigation techniques are systematically considered.
- ❑ Most mitigation techniques would require clear specifications in international standards, so administrations can use them in their regulatory approach.



Strategy and Principles



....Authorization regime considerations

SRDs are usually associated with general authorizations. However, individual authorizations could also fall within the SRD approach. This may be particularly relevant in relation to 'light licensing regimes' where, for example, there may be a need to coordinate with an incumbent user;

This alternative is however considered as an exceptional measure.



Conclusion



Objectives of this general organization:

- Foster the collective use of the spectrum
- Achieve an efficient use of the spectrum
- Provide certainty to industry in defining a stable regulatory framework
- Ensure an appropriate protection to radio services
- Encourage innovation
- Ensure an equal access to the spectrum
- SRD regulation based on a Recommendation is a way to also promote a 'soft harmonization' approach



End



Thank you for your attention!

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