

Radio Spectrum Decision 1 2002/676/EC

- **Adopted in 2002 with the Electronic communications regulatory framework**
- **"Policy platform"**: policy making for strategic planning and harmonisation of spectrum use
 - Holistic approach
 - Arbitrate among conflicting uses
 - Complemented by *Radio Spectrum Policy Group* - advisory function
- **"Operational"**: EU legal methodology to ensure harmonised conditions for availability and efficient use of spectrum - comitology (Radio Spectrum Committee) for proposing and enforcing "technical implementing measures"
- **"Transparency and information"**: coordinated and timely information on spectrum use.
- **"International dimension"**: codification of practice and ensuring full involvement of EU institutions to defend EU interests at international level.



Radio Spectrum Policy Group – Commission decision 2002/622/EC

- **Composition**
 - Members: high level representatives from MS and Commission
 - Observers: EEA, accession countries, EP, CEPT, ETSI + ad hoc
- **Functioning: advisory**
 - Chairman elected for one year; 3 meetings a year
 - No comitology; opinions adopted upon consensus
 - Transparency: obligation to consult the public.
- **Function:** advises Commission on coordination of policy and harmonised conditions re. spectrum.
- **Adoption of advisory opinions on**
 - Digital switch-over
 - Secondary spectrum trading
 - Wireless Applications Policies for Electronic Communications services (WAPECS)
 - Preparation of WRC-07
- **On-going activities** <http://rspg.groups.eu.int/>
 - opinion and consultations on scientific use of spectrum, introduction of multimedia services in broadcasting spectrum.



Radio Spectrum Decision 2

- **Aim (Art. 1):**
 - co-ordination of policy approaches and harmonisation of conditions related to radio spectrum in the context of relevant EU policies
- **Scope (Art. 1):**
 - covers basically all spectrum matters, even public order and security (incl. indirectly military)
- **Comitology (Art.3 & 4):**
 - adoption (regulatory procedure) of technical implementing measures in order to meet the aim of the Decision
 - mandates to CEPT for allocation and information availability
 - transitional periods in Commission Decisions possible, if duly justified
 - consultation/general policy discussions (advisory procedure -- in complement with RSPG)

Radio Spectrum Decision 3

- **Technical Implementing Measures (Art.4)**
 - Harmonisation measures on conditions of use, binding on MS
 - Complement to equipment regulation (R&TTE Directive)
 - Objectives: internal market including electronic communications, innovation, specific policy objectives (eSafety, eInclusion, transport).
- **Examples of On-going issues**
 - Short range devices
 - Ultra-wide bands
 - Radio frequency recognition devices (RFID)
 - TETS
 - Mobile satellite systems in 2 GHz
 - IMT-2000
 - GSM



Radio Spectrum Decision 4

- **Information availability (Art. 5):**
 - publication of: national allocation tables, rights, conditions, procedures, charges and fees
 - development of appropriate data bases - EFIS
- **International dimension (Art. 6):**
 - Member States and Commission monitor international developments relevant to the Decision
 - Commission reports to EP and Council and may propose measures
 - establishment of common policy objectives to ensure Community co-ordination
- **Reporting to EP and Council (Art. 9):**
 - on activities, measures adopted and actions envisaged (annual report)



Radio Spectrum Committee

- **Advises Commission based on inter-institutional comitology agreement**
 - Advisory procedure for Commission mandates to CEPT
 - Regulatory procedure for Commission decisions
- **Comprises Member States, and observers** (EEA, accession & candidate countries, ECC and ETSI + ad hoc)
- **Chaired by Commission**
- **4 meetings per year**
- **Adopts “technical implementing measures”**
- **Assists the Commission:**
 - examination of radio spectrum usage (Art. 4.6)
 - verification of draft mandates (Art. 4.2)
 - adoption of measures based on mandates (Art. 4.3)
 - adoption of measures not based on mandates (Art. 4.5)

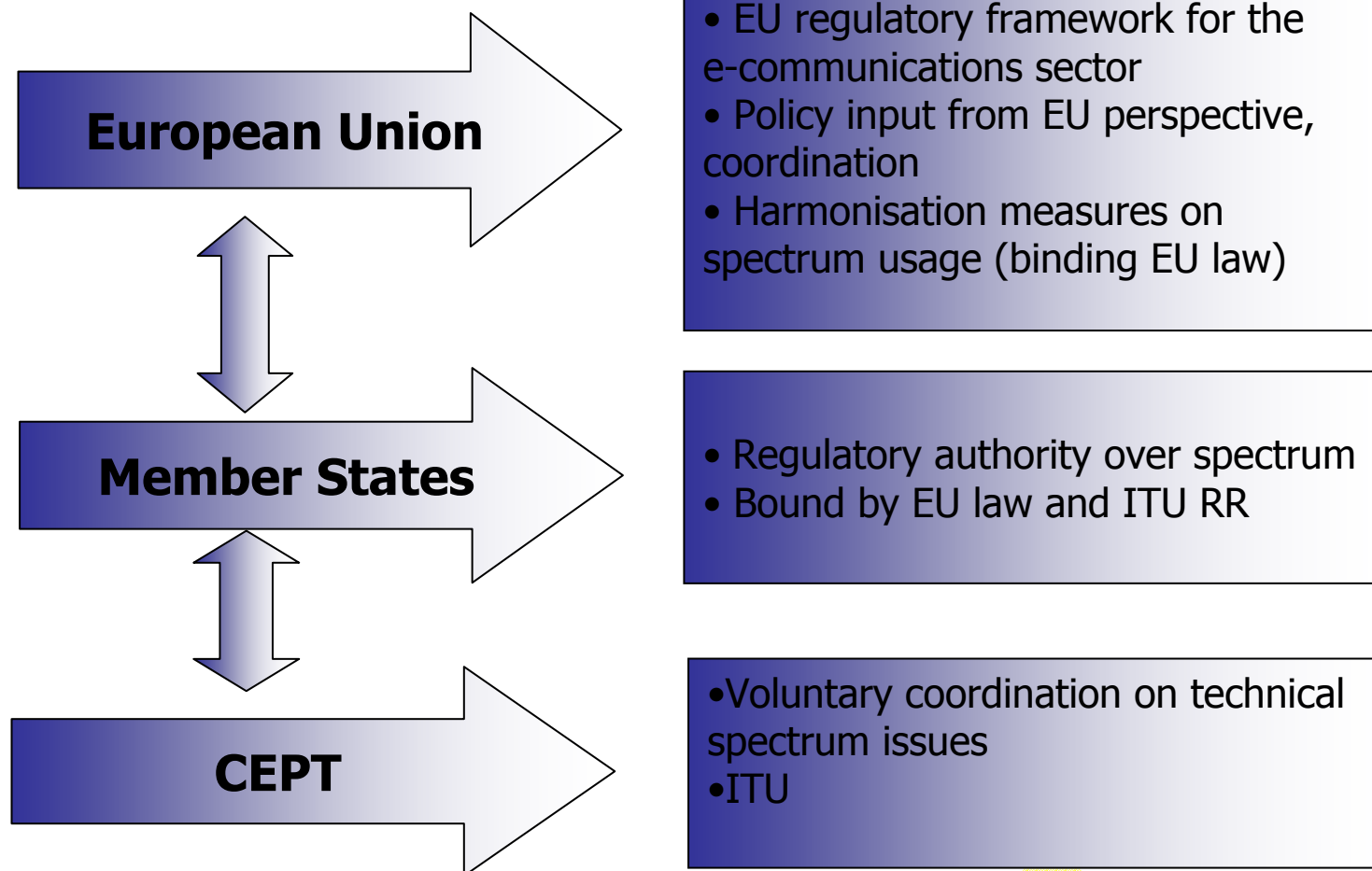


Radio Spectrum Decision in Practice

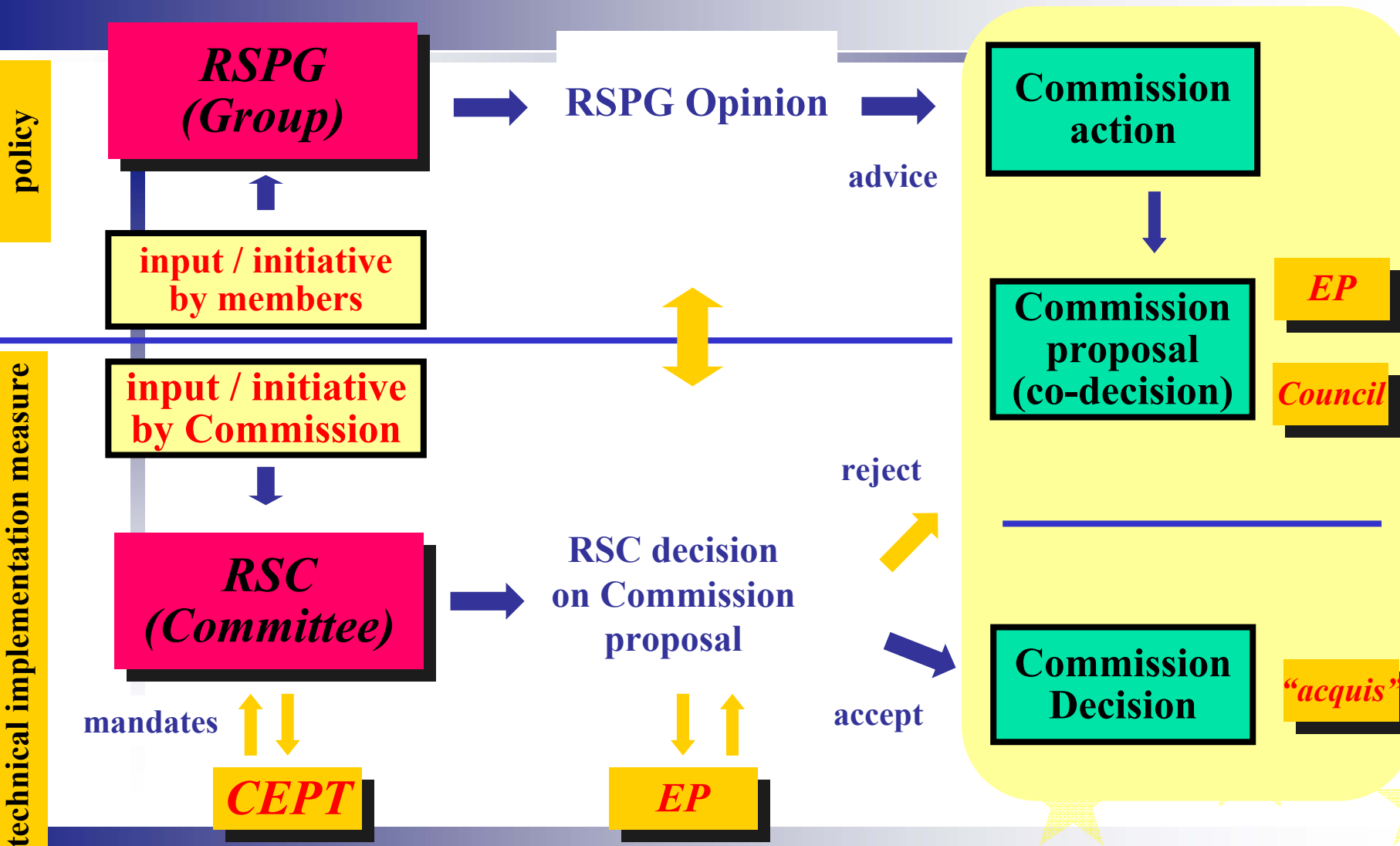
- **Level 1**: Radio spectrum policy issues are submitted for consideration to the RSPG, which gives advice on need for further Community measures.
 - **Level 2**: Commission submits draft measure to RSC, for opinion (subsequent Commission Decision = *acquis communautaire*)
 - **Level 3**: Commission can submit proposals for co-decision (on own initiative, or where Committee or EP do not agree to the Commission's draft measure)
- ⇒ Commission is not bound to follow these steps in chronological order (can be seen as alternatives)



European Setting for Spectrum Policy



EU Spectrum Policy Set Up



International Context

- **Political and economic weight of the EU**
- **Coordination of negotiation strategies : Procedure described in Recital 19 of Radio Spectrum Decision**
 - Inform EP and Council and endorsement by Council of Community policy objectives to be achieved and positions to take.
 - MS and Commission to develop common action and closely cooperate during whole negotiations
- **RRC-06 (“digital dividend”) *Commission Communication COM(2005)461*** EU spectrum policy priorities for the digital switch-over in the context of the ITU RRC-06.
- **WRC-07 (spectrum “beyond 3G”)**
- **Bilateral exchanges with EU trading partners**



Frequency bands harmonised at EU level

- **4 Commission Decisions - "technical implementing measures" - adopted on the basis of the Radio Spectrum Decision**
 - With the assistance of the Radio Spectrum Committee
 - Content based on technical work done by the CEPT
 - Other Decisions under preparation
- **2 'old' Directives still in force**



Short range radars in the 79 GHz band

- **Commission decision 2004/545/EC of 26 July 2004 on the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community**
- **Radar installed on the vehicle for collision mitigation and traffic safety applications**
- **Equipment not yet on the market**



Short range radars in the 24 GHz band

- Commission decision *2005/50/EC of 17 January 2005 on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automative short-range radar equipment in the Community*
- Band to be designated and made available by 1 July 2005 and until 30 June 2013
- Use of the band to be monitored and Decision to be reviewed
- Protection of national radio astronomy stations operating in the band 22.21 to 24 GHz



Radio Local Area Networks (RLANs) at 5 GHz

- **Commission decision *2005/513/EC of 11 July 2005 on the harmonised use of radio spectrum in the 5 GHz frequency band for implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs)***
 - Frequency band 5150-5350 MHz restricted to indoor use
 - Mitigation techniques required to protect other services
- **Commission recommendation *2003/203/EC of 20 March 2003 on the harmonisation of the provision of public R-LAN access to public electronic communications networks and services in the Community*** (based on Art 19 of Framework Directive)
 - Provision of public RLAN access in the 2.4 GHz and 5 GHz bands subject only to general authorisation
 - Use of the bands not subject to the grant of any individual right



Reuse of the former 'ERMES' band

- Commission decision *2005/928/EC of 20 December 2005 on the harmonisation of the 169,4-169,8125 MHz frequency band in the Community* (frequency band originally designated for the ERMES paging system)
- Parallel repeal of 'ERMES' Directive (Council Directive 90/544/EEC of 9 October 1990 on pan-European radio paging)
- Decision applicable from 27 December 2005
- Band harmonised for various applications: hearing aids, social alarms, meter reading systems...



GSM in the 900 MHz band (1)

- ***Council directive 87/372/EEC of 25 June 1987 on the frequency bands to be reserved for the coordinated introduction of public pan-european cellular digital land-based mobile communications in the Community***
- ***Council Recommendation 87/371/EEC of 25 June 1987 on the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community***
- ***Council Resolution of 14 December 1990 on the final stage of the coordinated introduction of pan-European land-based public digital mobile cellular communications in the Community (GSM)***



GSM in the 900 MHz band (2)

- **Directive complemented by Recommendation and Resolution reserved the 900 MHz for GSM**
- **Current debate on the use of this band for 3G services**
- **In the future, Directive may be modified or repealed and replaced to allow more flexibility in this band**



Directive on DECT 91/287/EEC

- Complemented by Council recommendation 91/288/EEC
- Directive adopted under old regime
- Coordinated introduction of digital European cordless telecommunications in EC
- Obligation to designate the 1880-1900 MHz for DECT
- Technology conforming to the European Telecommunications standard for digital telecommunications
- In line with CEPT Recommendation T/R 22-02
- DECT has priority over other services and is protected
- Advantage : harmonised band at EU level.



Legacy of UMTS Decision 128/99/EC

- **Purpose:**
 - Harmonise spectrum for introduction of UMTS/IMT-2000 services (3G)
 - Ensure interoperability and pan-European roaming
 - Ensure compatible UMTS networks and services in all Member States
 - No exclusion of other IMT-2000 technologies
 - At least one UMTS system per Member State.
- **Decision expired but obligation remains regarding spectrum harmonisation**
 - 3 mandates issued to CEPT on introduction of IMT-2000 in EU
 - 1 mandate for European Common Proposal for WRC-02.
 - CEPT adopted ERC decisions in line with Commission mandates:
 - **ERC Decision ERC/DEC/(99)25 of 29.11.1999**
 - **ERC Decision ERC/DEC/(00)01 of 28.3.2000**
 - **ECC Decision ECC/DEC/(02)06 of 15.11.2002** designating 2500-2690 MHz for IMT 2000/UMTS

« The Licensing Committee invited EU MS to commit to the implementation of such ECC Decision in due time. »



Spectrum Reform 1

- **Commission Communication COM(2005)411 *A forward looking radio spectrum policy for the EU.***
- Building on exchange of experience with MS
- **Facilitate access to spectrum** – lower hurdles
- **more flexibility in spectrum usage** to overcome ‘scarcity’ and be innovation-friendly
- **Allow spectrum user to decide upon usage** as much as possible
- **Current discussions**
 - Balancing spectrum management models: market based/‘unlicensed’/administrative decisions
 - Information on spectrum usage
 - Flexible spectrum management for wireless electronic communications (“WAPECS”).



Spectrum Reform 2

- **Commission Communication COM(2005)461 on market based approach :**
 - Establishing spectrum markets by 2010
 - > suitable bands
 - > spectrum rights
 - > transition
- **Flexibility of spectrum usage: technology and service neutrality (WAPECS)**
- **Technology and service neutrality**
- **Investigating usage of unlicensed model at EU level**