

Challenges of Modern Spectrum Management

EICTA Views

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EICTA

= European Information, Communications and
Consumer Electronics Technology Industry
Association

- Comprises of **45 member companies** and **31 national associations** from 21 European countries
- Represents more than 10 000 enterprises in Europe with more than 2 million employees.



EICTA Mission

- **Promote the common interests** of the represented Information Systems, Communication Technologies and Consumer Electronics Industry in Europe.
- Support the **harmonious development** of the European ICT and CE industry's overall business interests through related **technical, economic and legal aspects of policy making** at European level.



EICTA Main Committees

- Information Society and E-Commerce (ISEC)
- Legal Affairs and Consumer Policy (LCC)
- Industrial Policy (IPC)
- Technical Affairs (TAC)
- **Radio & Spectrum Policy (RSPC)**
- Environmental Policy (EPC)
- Trade Policy (TPC)
- R&D and Education Policy (RDEPC)

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Challenges of modern spectrum management

- Making spectrum available for what it is really needed and in due time – while maintaining the balance and priority between a wide range of usages
- Wireless usage increases, new broadband/high bitrate applications require more spectrum
- How to predict the future
 - spectrum management = long term up to 10 years
 - business evolves, but on shorter term (up to 18 mths)
 - emerging technologies may need new spectrum utilisation schemes, boundaries between services become unclear



Additional challenges

- National requirements e.g. towards spectrum pricing, licensing policies, technologies etc.
 - some sectors have had to pay more than others
 - differences between countries
- Market and industry pressure for regulatory changes
 - not so easy for regulators to find the coming mainstream demand, the real need
 - vs room for innovative solutions
 - hype vs realism



Influence of New Technologies

- New technologies can offer new opportunities in terms of additional competition, additional capacity, new capabilities, higher spectrum efficiency etc.
- There will be new capabilities for efficient spectrum sharing and flexible spectrum use.
- New technologies are to ease the difficult task of spectrum management, but the need for good spectrum management stays.
- Regulations need to evolve in due time. Resulting regulations need to be balanced, fair and stable.

New spectrum management concepts

- Secondary spectrum trading is in the way of being introduced. Interesting new concepts are under discussion: e.g. Dynamic Spectrum Allocation (DSA), Interference temperature concept, utilisation of spectrum "holes".
- Potential benefits and difficulties need to be understood
- In general there is a requirement for more Flexible Spectrum Use.
- Harmonisation remains important and regulatory certainty needs to be maintained.

Industry wishlist

- Sufficient spectrum is needed to support the current and future wireless services and technologies.
- Administrations need to maintain the control
 - active spectrum management is needed aiming at fostering competitive markets, allowing some flexibility
 - for example Secondary Spectrum Trading to be supervised by administrations
- Spectrum designations are a useful tool
 - facilitate spectrum harmonisation
 - technology neutrality can allow innovative solutions, markets can decide the winning technology



Industry wishlist

- Global spectrum harmonisation is needed.
 - future advanced solutions require global markets, economies of scale must be reached
 - spectrum flexibility can developed gradually over the time
- Light and simple regulation fostering fair and competitive business environment is required.



About spectrum pricing

- Cost aspect needs to be taken into account.
 - 3G auctions + dotcom hype was a disaster
 - administrative costs need to be covered
 - possible refarming costs need a smooth solution
 - caution with other valuation, no excessive pricing schemes should be employed or costs applied to some sectors only



Co-operation with CEPT

- Continue and enhance the co-operation with industry.
 - continuous, open dialogue, open Workshops
 - take industry experts as active participants to groups, delegations, RRC, WRC
- CEPT efforts have been highly appreciated.
 - voluntary harmonisation has gained a lot, even if sometimes a slow process
 - EICTA is a recognized organisation by the ECC to co-operate with, we have access to all ECC groups and documents



Role of the EU

- EU Spectrum Policy work is expected to complement the CEPT work and to offer additional benefits for European spectrum policy environment in the future.
- A common view of Spectrum Policy issues throughout the EU can result in higher degree of harmonisation obtained within shorter timeframe.
- Possibilities for active industry participation in EU Spectrum Policy work are being elaborated.



Conclusions

- Spectrum management needs both longer term visions and shorter term active spectrum management.
- New spectrum management concepts need to be studied thoroughly. Any new steps need to be justified, fair and balanced. Fair, open competition must be maintained.
- Global spectrum harmonisation is needed, flexible spectrum use can be implemented gradually.
- New technologies can help to meet the future challenges of spectrum management.

