

Optimising the Use of the Radio Spectrum by the Public Sector in the European Union

J. Scott Marcus, Project Manager
Public Workshop, Brussels, April 1, 2008

Objectives of the Project

The Commission asked the consulting team to:

1. Provide advice on how to achieve an appropriate balance between spectrum allocated for public/commercial/private activities
2. Provide advice on how the public sector in EU Member States could adopt a more long-term, pro-active approach to its use of spectrum.
3. Provide advice on how public bodies in EU Member States could improve the public procurement of radio equipment and services, taking into account the need to anticipate spectrum needs in the future.
4. Explore the possibility of new technological approaches being able to assist in more efficient use of spectrum by public agencies.

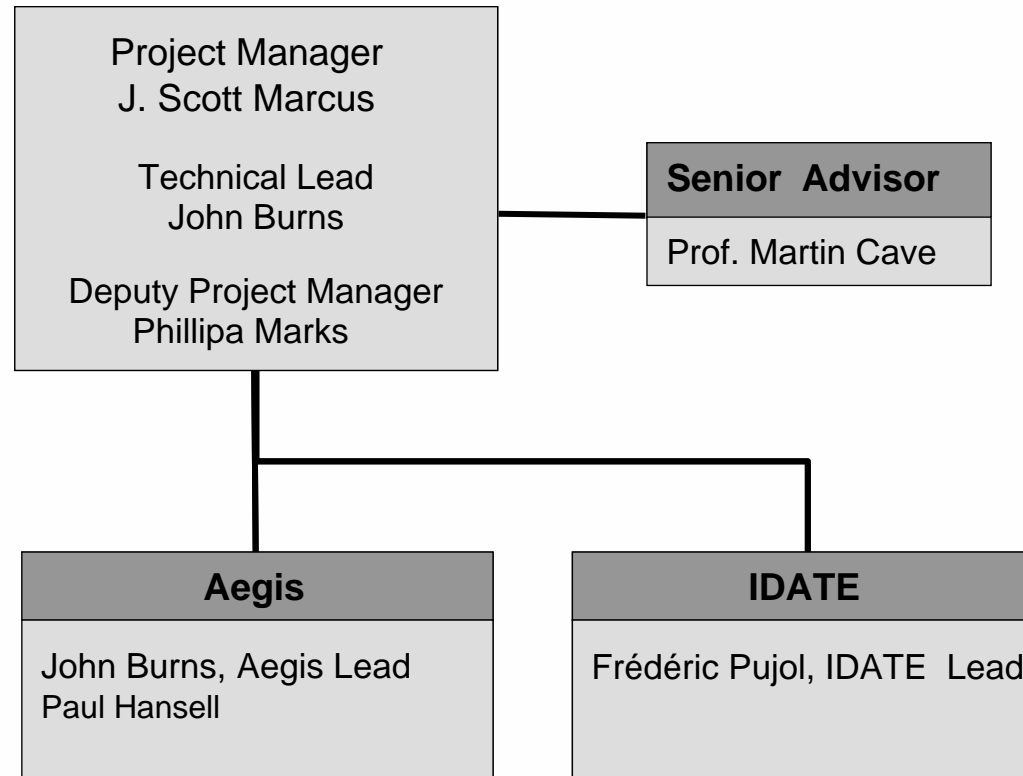
Scope of the Project

- All aspects of public sector use are in principle relevant.
- We were asked to emphasize three specific areas that have particularly significant implications:
 - Defence
 - Transport
 - Emergency services
- In some Member States, many transport users may in fact be private firms. We are treating transport use to meet public interest goals (such as safety, or reducing road congestion) as being in scope for our study. Our main emphasis is on aviation and maritime, because they are by far the biggest users.
- Some Member States may treat public broadcasting as a form of public sector use. We are viewing it as out of scope.

Objectives of the Project

- The main objective of the Study is to give recommendations to the Commission concerning the improvement of spectrum use by the public sector in the EU, particularly for three key sectors (defence, transport and emergency).
- The Commission will consider applying directly appropriate recommendations from the Study where this is possible (such as in transport for civilian purposes).
- To the extent that the study's results are more directly applicable by other stakeholders (national administrations responsible for public use of spectrum, notably in the Radio Spectrum Policy Group, but also other parties such as the European Defence Agency), the Commission will seek to introduce the results of the Study to them.

Team Structure



Note: This differs slightly from that in our proposal.

The Challenge

- Commercial use of spectrum has been progressively modernised and improved in recent years.
 - Increasing emphasis on market-based mechanisms.
 - Spectrum auctions
 - Spectrum leasing and trading
 - New technological options
 - Migration to digital
 - New possibilities for spectrum sharing (collective use)
- How much of this could be, or should be, applicable to the public sector?

Project Schedule

- Kick-Off Meeting with the Commission occurred on January 10.
- Data gathering is ongoing:
 - Desk research
 - Interviews of some 40 stakeholders
 - This workshop also provides input
- Once data gathering and analysis are sufficiently far along, we will be developing conclusions and recommendations.
- Presentation of final results: currently planned for October 1.
- Liaison with the RSPG PUS working group is ongoing.

Schedule for this Workshop

- **9:30 h European Commission's Introduction**
 - *Commission Representative*
- **9:45 h Introduction, welcome and overview**
 - *J. Scott MARCUS, wik-Consult*
- **10:00 h Public policy aspects**
 - *Phillipa MARKS, Plum Consulting*
- **10:30 h Break / Snack**
- **10:45 h The current situation in the EU**
 - *Frédéric PUJOL, IDATE*
- **11:15 h Applications and Technologies**
 - *John BURNS, Aegis*
- **11:45 h The RSPG Working Group on Public Use of Spectrum (PUS)**
 - *Stelios HIMONAS, Working Group Rapporteur*

Schedule for this Workshop

- **13:30 h Spectrum Management Authority Panel**
 - Chair: J. Scott MARCUS, wik-Consult
 - *Laurence GREEN, Ofcom (UK)*
 - *Jean-Yves MONTFORT, ANFR (FR)*
 - *Peter ANKER, Ministry of Economic Affairs (NL)*
- **14:15 h Defence Panel**
 - Chair: John BURNS, Aegis
 - *James NIXON, Ministry of Defence (UK)*
 - *Benno EDELMANN, Bundeswehr (DE) (invited)*
 - *Karel ANTOUSEK, Ministry of Defence (CZ)*
 - *Paul BROOK, Thales (invited)*
- **14:45 h Emergency Services Panel**
 - Chair: Frédéric PUJOL, IDATE
 - *Eric OLLIVIER, Ministry of the Interior (FR)*
 - *Hans BORGONJEN, TETRA Association, Public Safety Radiocommunication Group, and Vts Police (NL)*
 - *Philippe MEGE, EADS*

Schedule for this Workshop

- **15:30 h** **Transport Panel**
 - Chair: Phillipa MARKS, Plum Consulting
 - *Andy KNILL, Civil Aviation Authority (UK)*
 - *Barbara D'AMATO, IATA*
 - *Urban HALLBERG , Swedish Maritime Authority and DGTREN*
- **16:00 h** **Policy overview, practical experience**
 - *Prof. Martin CAVE, Warwick Business School*
- **17:00 h** **Wrap-Up**
 - *Commission Representative*
 - *J. Scott MARCUS, wik-Consult*

Questions for Discussion: Spectrum Management Authorities

- We have asked panelists from Spectrum Management Authorities to address the following:
 - What steps is your agency taking to ensure that spectrum use by the public sector is efficient?
 - Is your agency involved in determining which bands are allocated for public versus private use? If so, what is your approach making the determination? If not, how does your country achieve a balance of public/private allocations?
 - Any measures that your agency has taken to introduce market-based mechanisms into public sector usage: For example, whether there is any use of Administrative Incentive Pricing (AIP), or of spectrum trading or leasing involving the public sector.
 - Your view as to how spectrum requirements for the public sector are likely to evolve in your country over the next few years.

Questions for Discussion: Defence

- We have asked panelists from the Defence sector to address the following:
 - How spectrum requirements for defence applications are likely to evolve over the next few years.
 - Possibilities to extend the degree of spectrum sharing between defence and other users / applications, both in the public sector (e.g. civil aviation) and commercial sector (perhaps extending the technical approach that currently allows sharing between WiFi and defence systems in the 5 GHz band).
 - What steps the defence sector is taking to ensure it uses spectrum in the most efficient manner.
 - How spectrum efficiency can be factored into equipment procurement policy.

Questions for Discussion: Emergency Services

- We have asked panelists from the Emergency Services sector to address the following:
 - How spectrum requirements for emergency services applications are likely to evolve over the next few years
 - Cross boarder cooperation: current status and evolution
 - Possibilities to extend the degree of spectrum sharing between emergency services and other users / applications, both in the public sector and commercial sector.
 - What steps the emergency services sector is taking to ensure it uses spectrum in the most efficient manner
 - How spectrum efficiency can be factored into equipment procurement policy.

Questions for Discussion: Transport

- We have asked panelists from the Transport sector to address the following:
 - Describe the role of your organisation in spectrum issues.
 - Outline the two or three most significant challenges you face:
 - For meeting future spectrum requirements.
 - For using technology to achieve more efficient spectrum use.
 - For improving the efficiency of spectrum use in your sector, including identification of any barriers.