



Future Broadband Spectrum needs for PPDR

Communiqué from Roundtable discussion

23rd May 2013

Summary:

Senior Management from Public Safety organisations, top management of European PPDR operators, top management of sector relevant Associations and representatives from the spectrum regulatory administrations came together to discuss future spectrum needs.

The PPDR user and operator representatives supported the view that it is essential for governments' organisations to control enough dedicated and harmonised spectrum in order for their organisations to deliver service to society. The robustness, availability and security requirements of Mission Critical Operations cannot be ensured relying on commercial spectrum. The meeting could also conclude that there is now unanimous support from the PPDR users and operators to seek such spectrum as part of the World Radio Conference in 2015.

Consequently the entire sector encourages Governments, through their Regulators, to recognise the societal needs for effective PPDR services and to ensure early release of sufficient harmonised frequency resources for PPDR broadband services after WRC-15.

The meeting participants welcomed Report 199, where CEPT/ECC now clearly documents a calculated need for at least 2 x 10 MHz for wide area coverage for PPDR in Europe.

It was recognised that traditional business cases used to produce impact assessments have difficulty in producing a clear view as this subject is highly political. Several regulators have stated that the societal value of effective emergency services cannot be included in traditional business cases. However, there are two overriding factors that will make the political world decide in favour of dedicated spectrum for the emergency services, – disasters and the improved economics of a more effective everyday emergency services provision.

The participating representatives from the regulatory administrations advised the meeting to compare the value of such spectrum with the value of more effective emergency services. Sharing models with other sectors having similar essential needs would also be advantageous. The requirement for documenting the benefits to society of allocating spectrum to PPDR was again highlighted.

The PPDR organisations are not asking for much – today the emergency services use only 0.9% of all available spectrum to deliver mission critical voice and data services. Thus, the PPDR sector is asking for less than 2% out of the 1200 MHz being made available as part of the EU RSPP Decision. Is that too much to ask for?



Individual comments by end-user organisations

- Dutch Police, Jan Biemolt: I am raised with TETRA and we have a dedicated solution – I am not in doubt that we also need a dedicated solution in the future. I don't care if I get service from KPN or a government operator. I only care about if the service can be trusted; always be available and have the required functionality. If spectrum is needed to guarantee that service – then we need to have spectrum.
- French Gendarmerie and National Police, General Papparlardo and Lt Col Taupin: We represent almost 250,000 users and we are considering the global needs of mobility and are aware that important political decisions have to be taken in the coming months and years. We consider – in addition to commercial services – that it is essential with dedicated infrastructure and the ability to benefit from high data rates proximity services (direct mode). We therefore support the initiative for dedicated spectrum in 700 MHz band – a 10 MHz duplex band. We are working with our ministry of Interior to address that need. We also consider that this cannot meet all our future needs with more and more connected devices and services becoming mission critical. We consider that one day, to also use today's narrow band frequencies in 400 MHz for broadband. These frequencies are valuable and should not be given up. We are working with other emergency services to have a resilient infrastructure.
- Belgian Public Safety User Community, Director Claude Jacquard, Federal Police: “Unfortunately there is always a disaster we need to respond to – big or small. Going forward we need more mobile data capability to make our organisations more effective in day to day operations and to be better prepared for future disasters.”
- London Metropolitan Police, John Adams: “Our view is that we need spectrum to exercise control in crisis situations. We need the control in order to ensure we can communicate to do our job. If we only have use of commercial operators spectrum there is no guarantee we will get [to] use the required capacity in a crisis when we need it, as they [*the commercial operator*] potentially will need to remove paying consumers from the network in order to provide service for the emergency services. We need mission critical data and voice delivered to the front line officers that enables them fight a fire or control a riot. Communication has to be guaranteed. When 7/7 or Boston happens, we know that the general public communicate even more than normal and the commercial networks are overwhelmed with traffic. We do need the spectrum and we fully support this initiative.”



Individual comments by PPDR Operators

- German Federal PPDR Operator BDBOS, Head of Directorate “General Policy” Dr. Barbara Held: “I am speaking on behalf of the German Operator BDBOS and its clients, the PPDR as we don’t have a consolidated German position on the broadband spectrum matter at Government level. This is unfortunate. However, the PPDR community is convinced it will need dedicated spectrum for mobile data in the long run to supplement the voice service that will be delivered over the German TETRA-network for a many more years. The PPDR need more and more mobile data services with functionalities we cannot get from the commercial world in the quality [that] critical infrastructures require - and for that purpose we are asking for dedicated spectrum. We have done several studies that support our position. We need spectrum and not too little, i.e. more than two times ten MHz – please.”

- UK PPDR Operator Airwave, CEO Richard Bobbett: “Spectrum is the most valuable resource for an operator. It is the number one resource in the wireless world. It is not about the equipment; what operator you use; what backhaul or how you implement a service. It is also the scarcest resource we have and all reports show that broadband spectrum will become more scarce as we go forward because of the amount of usage that will put more and more pressure on it. So, missing the opportunity now, to take control will be a travesty. We have to be in control – we have control over our voice service – and many many public safety organisation across Europe are benefitting from the best voice service they have ever had.

We have public order situation all the time – go back 10 years – every public order incident lead to an inquiry because of communication problems – that does not happen anymore because we have control over the voice communication. We also have to have control over mobile data spectrum.”

- Norwegian PPDR Operator, Director General Tor-Helge Lyngstøl: “Our advice to the Norwegian Government is to allocate 2 x 10 MHz to PPDR and not let all spectrum in 700 MHz go to commercial. Even though we today cannot say exactly what we will use it for – we cannot let this unique chance slip between our fingers.”

Individual comments by Associations

- The **TETRA & Critical Communications Association (TCCA)** has concluded that the highest priority is to support the preparatory activities for WRC-15 agenda items 1.2 & 1.3 (in a combination of the two) to maximise the chance of having PPDR taken into account in agenda item 1.2, and to ensure early release of enough harmonised frequency allocation for PPDR broadband after WRC-15.



- **Federation of the European Union Fire Officer Associations, President Dieter Nuessler:** “The key focus of our Strategy for 2020 are:
 - Improve EU citizen Safety
 - Improve Fire fighter safety
 - Improve Influence on Policy Formulation
 - Improved Sharing of Good Practice
 - Improve Crisis Management / Stronger EU Disaster Response

Therefore the FEU will seek to:

- Improve the level of crisis communication among countries (based on the Schengen agreement)
- Improve interoperability between emergency services as a result of greater co-operation
- Improve Incident Command Systems within Europe and possible sharing of resources at an international level
- Involvement of FEU with the EU-CP Mechanism (including Module based training)
- Consider mutual aid agreements for cross border co-operation which could be extended to international level

With that background FEU supports the need for dedicated harmonised broadband spectrum for the emergency services. “

- **PSC-Europe, Chair of User Committee, Manfred Blaha:** “Public Protection and Disaster Relief is a priority subject for our citizens, as well as the National Governments and the European Union and effective communication are an essential element for Public Safety operations.

Public safety services bring value to society by creating a stable and secure environment; this can only be done by building robust, secure and reliable, modern Public Safety mobile communications networks. To fulfil this requirement, it is essential for Public Safety services to have access to appropriate spectrum in all parts of the territory sufficient to meet their evolving operational needs.

Building these modern essential services requires a long project lead time, for example, today’s national digital voice radio system for emergency services, often part of National Critical Infrastructure, typically took 10 years in planning before they were operational.

The mandatory services and facilities required by public safety organizations can only to a limited extent be provided on networks designed for commercial use. There remains a critical need for dedicated Public Protection and Disaster Relief networks and spectrum to support future mission critical operational requirements which will now include video, and other picture and lots of other data applications.”



- British APCO, President Sue Lampard: “We recognise that commercial operators will play a role, but PPDR needs the ability to guarantee mission critical voice delivery as a minimum. Whilst dedicated spectrum would be ideal, the key factor is to achieve spectrum efficiency allowing PPDR access where needed and enabling use by other operators (whether commercial or perhaps military) to use to maximum capacity the rest of the time. We need to have confidence that the operational delivery of public services will work effectively.”



Supporting Arguments

Considering

- Public Protection and Disaster Relief (PPDR) is of vital importance to our societies.
- PPDR organisations – also called Emergency Services - include Police, Fire, Rescue, Health, Ambulance and civil protection services.
- PPDR organisations are mandated by law to deliver a certain level of service to society.
- PPDR organisations perform Mission Critical Operations, and – in order to succeed – require Mission Critical Information and Communication Solutions for voice and broadband data.
- PPDR organisations employ staff that are working in very dangerous situations.

Further considering

- Mission Critical Communication Solutions needs to be secure, reliable and available communication and as a consequence cannot afford the risk of having failures in their individual and group communication (e.g. voice and data or video transmissions).
- Mission Critical voice solutions are today implemented on dedicated spectrum utilising a wide range of business models.
- PPDR organisations have a growing need for more data capable solutions in order to keep their services to society at the forefront of technology and advanced crime
- Delivery of Mission Critical Communication Services should rely on standardised technical platforms, specific implementations as well as economical and legal requirements.
- Harmonisation has proven to be the best route to safeguard lower prices, competition and constant innovation.

We recognise that

- Spectrum is a finite resource
- There are many services that require access to spectrum
- Spectrum is a source of income to treasury
- Spectrum usage has to be agreed internationally.
- Spectrum planning is a very long term process.
- The World Radio Conference in November 2015 will review and revise Resolution 646 for Broadband PPDR.
- WRC in November 2015 is a unique opportunity to have PPDR requirements for dedicated broadband spectrum incorporated into the WRC decision.

We appreciate the

- Council Decision 2008/615/JHA of 23 June 2008 on the stepping up of cross-border cooperation, particularly in combating terrorism and cross-border crime;



- Council Recommendation on improving radio communication between operational units in border areas
- Radio Spectrum Policy Program (RSPP) article 8.3.
- RSPP aims to release 1200 MHz of spectrum to mobile services
- CEPT/ECC Report 199
- EC mandate on 700 MHz including PPDR
- Law Enforcement WP continued work and positions
- European PPDR Operators meeting February 2013: The meeting reiterated – unanimously – the need to allocate sufficient harmonised spectrum for future PPDR services as this would provide their governments with most flexibility.
- ETSI SRDoc: Additional spectrum requirements for future Public Safety and Security (PSS) wireless communication systems in the UHF frequency range.
- Work within RSPG Strategic sectoral Spectrum needs; PPDR probably is the most debated sector – with many diverting views - but recognized as a sensitive issue.

Participating organisations

- a. Public Safety organisations
 - i. French Gendarmerie
 - ii. Belgium Public Safety User Committee
 - iii. Dutch Police
 - iv. Belgian Federal Police
 - v. London Metropolitan Police
 - vi. Hong Kong Police
- b. Government PPDR Operators
 - i. Norwegian PPDR Operator - Nødnett
 - ii. Swedish PPDR Operator - Rakel
 - iii. Danish PPDR Operator - SINE
 - iv. German PPDR Operator - BDBOS
- c. UK PPDR Operator - Airwave
- d. Associations
 - i. PSC-Europe
 - ii. British APCO
 - iii. F-E-U - Federation of the European Union Fire Officer Associations
 - iv. FCS – Federation of Communication Services
 - v. JRC - UK
 - vi. EENA
 - vii. T + CCA