



Radiocommunications Agency
*Ministry of Economic Affairs, Agriculture and
Innovation*



Civil use under normal
conditions
Governmental use during
crisis

**Frequency use in the
Netherlands**

**By
George J Petersen MSc
Public safety advisor**



**PSCEurope Forum Conference
30 Nov-1 Dec 2010**

07/12/2010



Agenda

- Introduction of the Radiocommunications Agency organization
- Explanation Civil normal, Governmental during crisis
- Conclusion
- Questions / discussion



Introduction

- The Radiocommunications Agency is part of the ministry of Economic affairs, Agriculture and Innovation.
- It is the sole responsible governmental body for frequency management.
- In case of emergency and crisis the ministry has power to reassign frequencies, normally assigned to others. (Government and commercial)



Are we out of frequencies?

- It looks like it. The most competitive part is 100 – 3000 MHz
- This is due to physical aspects like propagation and penetration of buildings
- We cannot invent new frequencies, we can only reform
- Be innovative, leading to more efficiency,
 - Sharing geographical, in time and automated (cognitive)



What about crises and disasters

- During crises and disasters there is definitively an additional frequency demand for public safety users (often also for others)



What about crises and disasters

- The first kind is instantaneous e.g a plane crash or a train crash
 - Frequencies have to be available, capacity can be switched
 - This is not the subject of this presentation!





What about crises and disasters

- The second kind is large scale disruptions of the infrastructure
 - Causes can vary e.g. earth quake, flooding
 - The communication infrastructure also affected
 - Demand is increasing
 - This is what we are talking about!





What about crises and disasters

- Epidemics and pandemics
- Lots of people sick, others needed to take care of them
- All infrastructure theoretically OK
- Preferably no action!





What about a crises and disasters

- There is a legal framework
- There are no fixed rules when to apply what
- That is fine, we never know what the next disaster will be, we can only learn from the past.
- We do have a kind of cookbook which guides the decision makers to the right decisions.



What's in the cookbook

- Impact analyses of the switch of in certain bands
 - Radio amateur and radio astronomy bands
 - Broadcast -> often the only way to inform the public
 - Cell phone -> The cure must be better than the disease
- It is not a public document



What is needed

- First of all the emergency services will use their own equipment
- Emergency services should have equipment that is able to use the additional frequencies
- This should be equipment in daily use
 - lessons learned show us additional special equipment does not work when needed
 - No to minimal difference for the user, so he can concentrate on his job, not on the equipment. This is also known as “train as you fight”
- The equipment should have an extended tuning range!



Conclusion

- An effective mechanism to move scarce frequencies from public to government during crises is needed
- It should cause as little as possible collateral damage
- There are no banned frequencies
- emergency services should invest in equipment with an extended tuning range.



Questions?





Contact

Agentschap Telecom
Public safety department
George Petersen
PO BOX 450
9700AL Groningen
The Netherlands

Phone +31 50 587 7187

FAX +31 50 587 7400

E-mail george.petersen@agentschaptelecom.nl