In Case of Emergency...

An ETSI Summit on Critical Communications

20 November 2014

LTE FOR CRITICAL COMMUNICATIONS

Presented by Vincent LEMONNIER
NEXT GENERATION PPDR

Requirement to follow a global standard
LCL Vincent LEMONNIER
French Ministry of Interior
20 November 2014
Critical communications infrastructures in France: situation

- An extension of users applications: from narrowband data to broadband data
- A difficult Spectrum distribution between commercial valorization and common state requirement
- Despite a permanent availability of those operational networks
Critical communications infrastructures in France: objective

Opportunity of LTE

Public safety
a national dedicated PPDR network
transmitting voice and broadband data
Respectful of international standard

Advantages:
- capacity of large transmissions
- benefits of an economic environment: shared R&D developments costs
- independence from an owner technology

Difficulties:
- waiting for all PPDR functions
- several politics led: viability of juridic and economic orientations, opportunity of dedicated frequency: conjugations needs in a space/time framework

unique PPDR network
Gendarmerie, police, fire brigades,
customs, road services, municipal police
and if possible
several major vital infrastructure operators participating in public safety
(Juridic and economic studies)

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Critical communications infrastructures in France: debate of a dedicated network

Why a dedicated network?

Because today:

- A commercial network unable to maintain the availability of a dedicated network;
- A service guaranteed even in case of crisis;
- A security level more ensured on a dedicated network;
- Legal obligation limited for mobile network operators;
- A commercial cover is not an global cover;
- A commercial service level agreement can not replace state responsibility.
Critical communications infrastructures in France: to go further

- If critical communications need a dedicated network, service also needs dedicated frequencies:
  1. A resource in 700 MHz range to take advantage of economic developments of LTE
  2. An additional resource in 400 MHz range to reuse part of the existing infrastructure

- Commitment in hybrid strategy:
  1. A dedicated network for PPDR critical communications
  2. Commercial network for non-critical and broadband transmissions managed by a MVNO