## Narrow band Point-to-Multipoint (nP2M) technology for Public Safety

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A Narrow band Point-to-Multipoint (nP2M) system is a unidirectional radio system for digital data that pages all or groups of appropriately equipped receivers in a predefined area and delivers short messages.

Characteristics of nP2M technology are; lowest energy consumption per km², lowest Energy consumption for end devices, easy to use, proven technology, millions of critical messaging users today, redundancy for many cases of breaks of other communication technologies

Applications based on nP2M radio systems comprise but are not limited to; alerting services for disasters or any other kind of events of broad relevance, unidirectional information services supporting applications in the area of smart energy management, update or maintenance information provided to industry and consumer products.

Major applications are; General citizen information, helping to control and reduce energy consumption, social alarm with the components all households, educational institutions, and industry, first-responder alerting, support of Cognitive radio applications (Cognitive pilot channel).

## nP2M systems;

- are specified as multi-purpose systems supporting a wide range of applications with different technical requirements on coverage and availability including but not restricted to PPDR and social alerting services,
- need to operate in the 400 MHz band where current paging system infrastructure can be reused,
- need to get allocated a sufficient amount of spectrum (e.g. 300 kHz) in order to benefit from co-funding and bundling effects

Many services will be used by citizens travelling throughout Europe. Therefore, solutions, for supporting roaming and mobility in Europe (or beyond) for the radio as well as the signaling is provided by nP2M.

EMMA is working on a European regulatory framework for the proper operation of nP2M system.