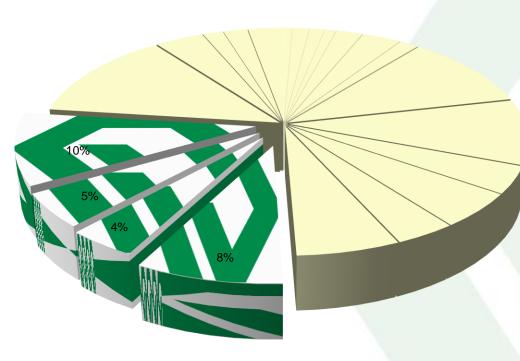
Workshop: Coexistence challenges of the evolution in the use of the UHF band

Brussels, 12. December 2014

of European Manufacturing Production



Production value in 2013

Source: Eurostat

Tobacco products

Textiles

Wearing apparel

Leather and related products

Wood and of products of wood and cork

Paper and paper products

Printing and reproduction of recorded media

Coke and refined petroleum products

Chemicals and chemical products

Basic pharmaceutical products and preparations

Rubber and plastic products

Non-metallic mineral products

Basic metals

- Fabricated metal products
- Computer, electronic and optical products
- Electrical equipment
- Machinery and equipment

Motor vehicles, trailers and semi-trailers

Other transport equipment

Furniture
The European Engineering Industries Association



41 Member associations, 23 countries

130,000 companies, €1,700 billion of annual output, >10 million people employed

National Associations

Austria **FEEI FMMI**



Belgium **AGORIA**



Bulgaria **BASSEL**

DΙ



Croatia Croatian Chamber of Economy





Finland Federation of Finnish **Technology Industries**



Germany **VDMA** WSM ZVEI



Technology Industries

Great Britain BEAMA FAMA GAMBICA

Hungary MAGEOSZ

Ireland **IEEE**

Italy ANIE ANIMA

Latvia MASOC

Lithuania LINPRA

Luxembourg II TM

The Netherlands **FME METAALUNIE**

Norway Norsk Industri

Poland PIGE

Portugal AIMMAP **ANEME**























Slovenia **GZS-MPIA**

Spain CONFEMETAL SERCOBE

Switzerland SWISSMEM





confemetal

Sercobe

SWISSMEM

AFECOR CEIR **EFCEM EGMF FURALARM EUROPUMP**

PNEUROP







Why are we here?





Experiences and expectations

- LTE 800 showed effects on services in adjacent band
 - adjustment costs without additional benefit for the user
 - effects on the installed base: What is the consequence
- More use of SRD systems expected in the future and supported by EU initiatives



What we ask for

Carefully balance societal goals

Consider the less visible

Consider the life cycles

Take your time

Wireless Alarms - LTE



> Alarm systems and 4G networks

Mobile connections / transmissions of alarm signals

- √ 3G networks support primary or back-up alarm transmissions
- √ 4G networks offer added benefits for other applications
- ✓ In Europe, 4G networks use LTE (Long Term Evolution) system
- ✓ There is close proximity of LTE bands (791 to 862 MHz) with Alarm bands covering the range from 863 to 870 MHz
- ✓ "Out of Band" emissions (OoB) of LTE produce unwanted interferences seen by adjacent applications like alarms
- ✓ The unwanted signals are related to the difference between the alarm signal frequency and the 4G/LTE radio frequency
- ✓ Close distances and/ or close frequencies may cause disruption in the transmission of alarm signals, which is unacceptable
- ✓ What can be done? How to reduce the risk? Reduction of OoB?