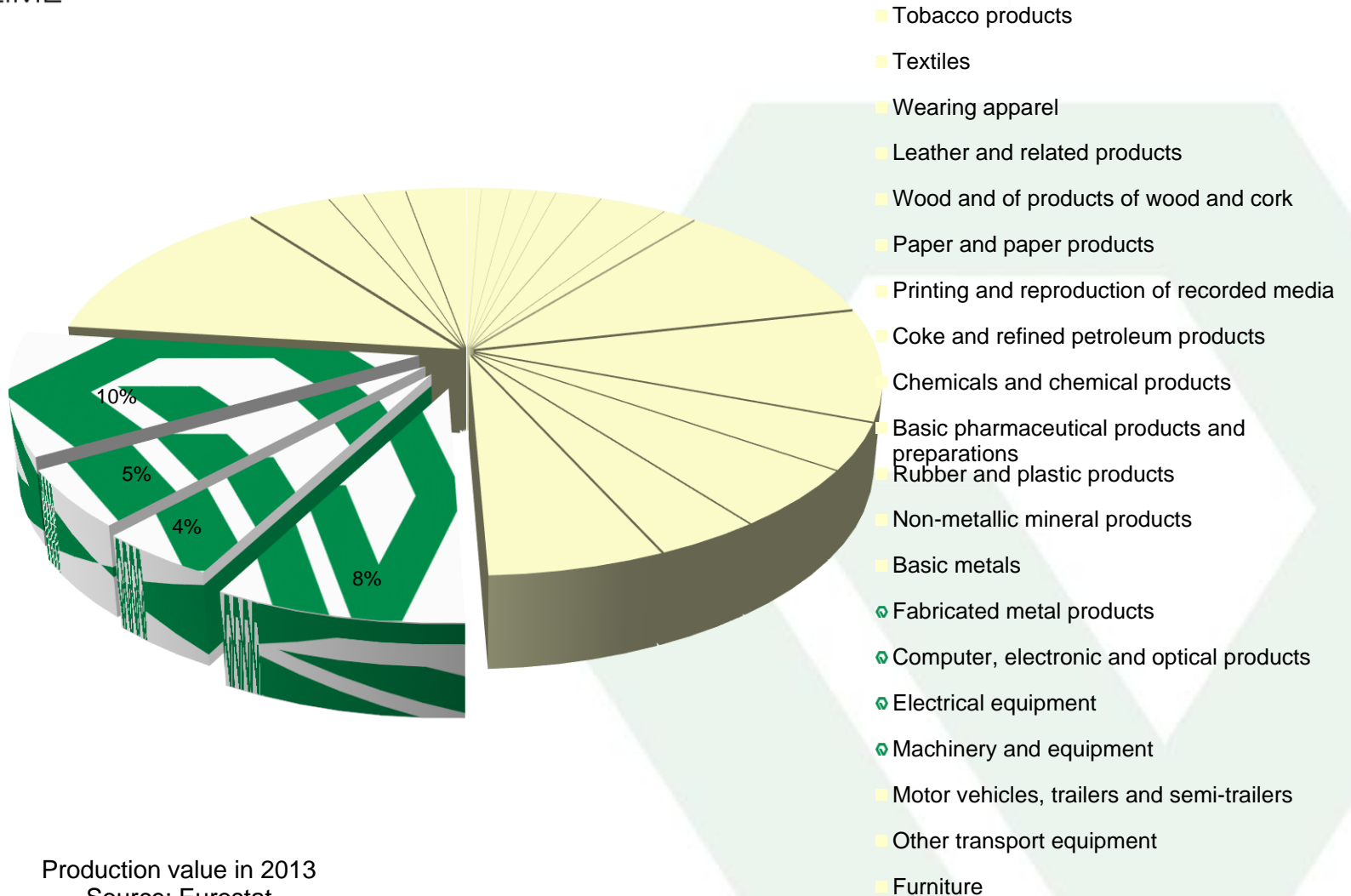


# **Workshop: Coexistence challenges of the evolution in the use of the UHF band**

Brussels, 12. December 2014



# 1/4 of European Manufacturing Production



Production value in 2013  
Source: Eurostat

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



### Croatia

Croatian Chamber of  
Economy  
HUP



### Denmark

DI



### Finland

Federation of Finnish  
Technology Industries



### France

FIEEC  
FIM



### Germany

VDMA  
WSM  
ZVEI



### Great Britain

BEAMA  
EAMA  
GAMBICA



### Hungary

MAGEOSZ



### Ireland

IEEF



### Italy

ANIE  
ANIMA



### Latvia

MASOC



### Lithuania

LINPRA



### Luxembourg

ILTM



### The Netherlands

FME  
METAALUNIE



### Norway

Norsk Industri



### Poland

PIGE



### Portugal

AIMMAP  
ANEME



### Slovenia

GZS-MPIA



### Spain

CONFEMETAL  
SERCOBE



### Switzerland

SWISSMEM



### Sweden

TEKNIKFÖRETAGEN



## Sector Associations

AFECOR

afecor



CEIR

EFCEM



EGMF

euralarm

EURALARM

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**

## ➤ 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 ?