

ITU Workshop on  
Spectrum Management for  
Internet of Things Deployment  
(Geneva, 22 November 2016)

***CEPT activities on  
Spectrum Management for M2M/IoT  
applications***

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ITU WORKSHOP ON SPECTRUM  
MANAGEMENT FOR INTERNET  
OF THINGS DEPLOYMENT

**GENEVA, SWITZERLAND  
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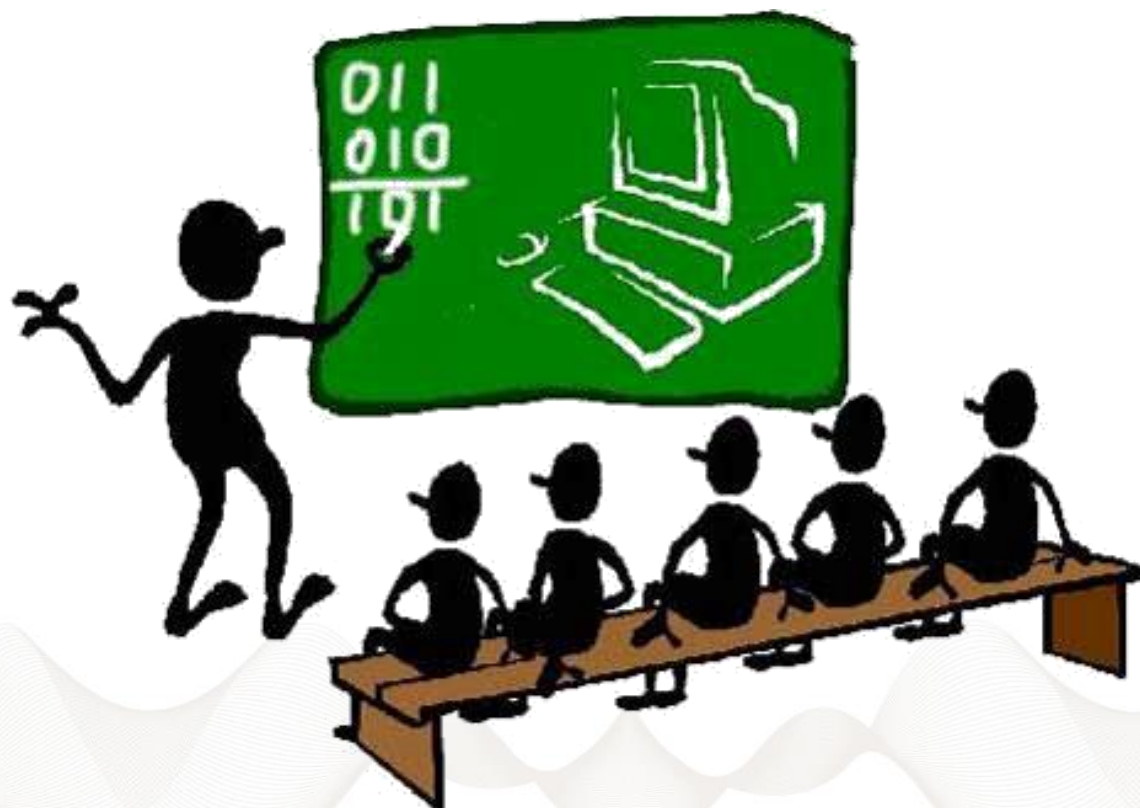
[www.itu.int/go/ITU-R/RSG1SG5-IoT-16](http://www.itu.int/go/ITU-R/RSG1SG5-IoT-16)

Organised by:



## CEPT activities on Spectrum Management for M2M/loT applications

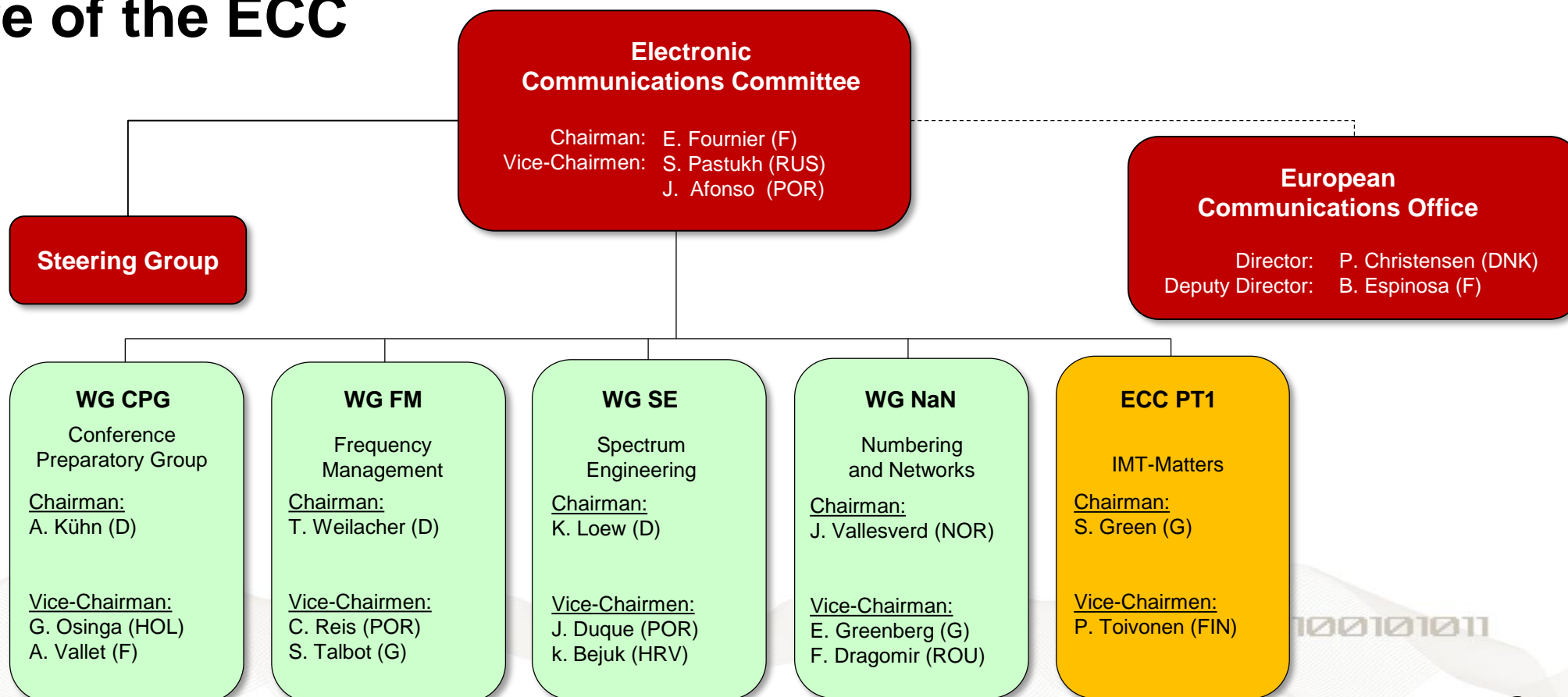
...but this a P2P (person 2 persons) presentation....



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# CEPT activities on Spectrum Management for M2M/IoT applications

## Structure of the ECC



# CEPT activities on Spectrum Management for M2M/IoT applications





## CEPT activities on Spectrum Management for M2M/IoT applications

### Current ECC views on M2M:

- ***“In principle, M2M communications could be realised in any mobile band”***
- ***“.....but also other radio applications may be suitable for some scenarios, e.g. Short Range Devices or even PMR.”***
- ***“There does not seem to be a strong case for the specific designation of specific frequency bands for M2M, .....no single frequency band defines M2M (i.e. no single frequency band should be viewed in isolation) per se...”***

## CEPT activities on Spectrum Management for M2M/IoT applications

**But that doesn't mean CEPT is not doing anything;**

- **ECC PT1 Work Item – MFCN framework for M2M (PT1\_SWG\_C\_18)**
- **ECC Working Group FM**
  - **Meeting #85 (May 2016) – admins to review regulatory environment**
  - **Meeting #86 (Oct 2016) – SRD/MG important to be tech. neutral**
  - **Reviewing ITS at 5.9 GHz**
- **ECC PT1 WRC-19 issue 9.1.8 (Narrow/Wideband machine comms)**

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## CEPT activities on Spectrum Management for M2M/loT applications

### Activities with an M2M flavour;

- **PT1: 700 MHz, 200 kHz to 3 MHz, ECC Rpt 242 – noted in ECC/DEC(15)01**
- **ECC Working Group FM;**
  - **LTE in the band 450-470 MHz (and possibly in 410-430 MHz) – PT54**
  - **LTE studies (via FM54/SE7) potentially take into account NB-IoT**
  - **SRD/MG – usage in 870-876/915-921 MHz: authorisation types**
  - **SRD/MG – ECC Rpt. 189 & Addendum to CEPT Rpt 59 (EC SRD Dec)**
  - **Correspondence M2M via satellite <https://goo.gl/2voqCN>**

## CEPT activities on Spectrum Management for M2M/IoT applications

### **ECC Numbering Activities;**

- **ECC published ECC Report 153 November 2010**
- **Core conclusions;**
  - **Expected annual growth rate of M2M numbers 20% (to 2020), but..**
  - **Rough estimate, actual figure may differ significantly**
  - **Number of CEPT countries do not have sufficient capacity, but...**
  - **Harmonised approach on M2M numbering, not needed in Europe**



## CEPT activities on Spectrum Management for M2M/IoT applications

### On going ECC activities:

- **Recognition of M2M usage in GSM**
- **Potentials for bands?: 870-876 & 915-921 MHz, 1900-1920 MHz, 5 GHz RLAN**
  - **870-876 & 915-921 MHz 1900-1920 MHz, 5 GHz Wi-Fi and others.**
  - **Keep reviewing existing harmonisation measures in ECC**
- **However must continue to come from technology neutral perspective**
- **Current CEPT view on WRC-19 9.1.8, under development**

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***Thanks ...***