



EU H2020 project  
Nr: 653339

# ITS Spectrum

## **CODECS-Amsterdam Group Workshop** **14-02-2017**

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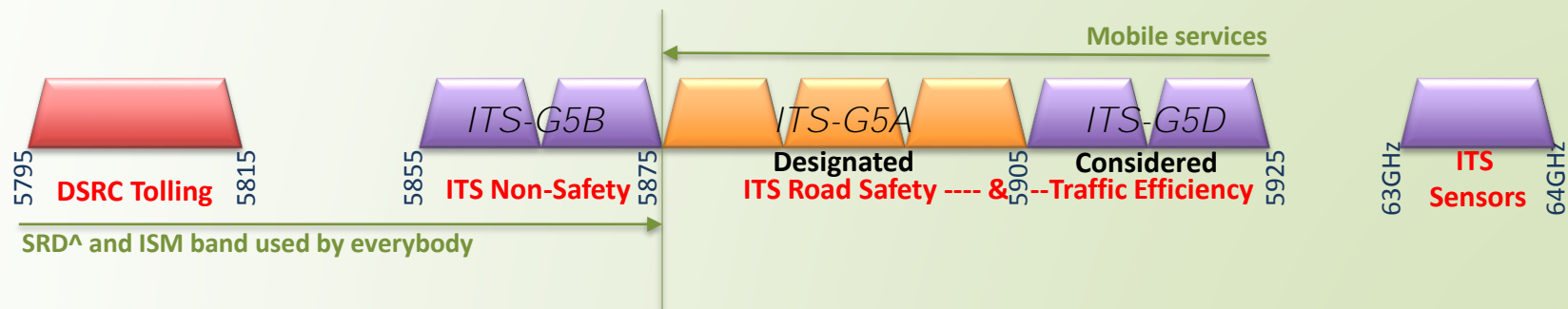
# EU SPECTRUM 5.8-5.9 GHz

## Regulation for deployment

### Current technology agnostic regulation in place

- EU decision (2008/671/EC) Identifies ITS-G5 70 MHz as traffic safety and traffic efficiency related
- ITS-G5A & ITS-G5D (ECC/REC/(08)01, ECC/DEC/(08)01) TRAFFIC SAFETY  
ITS-G5A Designated and the ITS-G5D is Considered, however a number of countries already implemented the ITS-G5D in their spectrum regulation
- ITS-G5B & ITS G5C (ECC/REC/(08)01, ECC/DEC/(08)01) TRAFFIC EFFICIENCY, Considered designated but not implemented and usable by all countries.
- ITS-G63 (ECC/DEC/(09)01) SAFETY (an issue as it is the middle of the 60 GHz ITU allocation)

*Note: Several countries have already include the ITS-G5D and/or the ITS-G5B in their regulation as ITS bands*

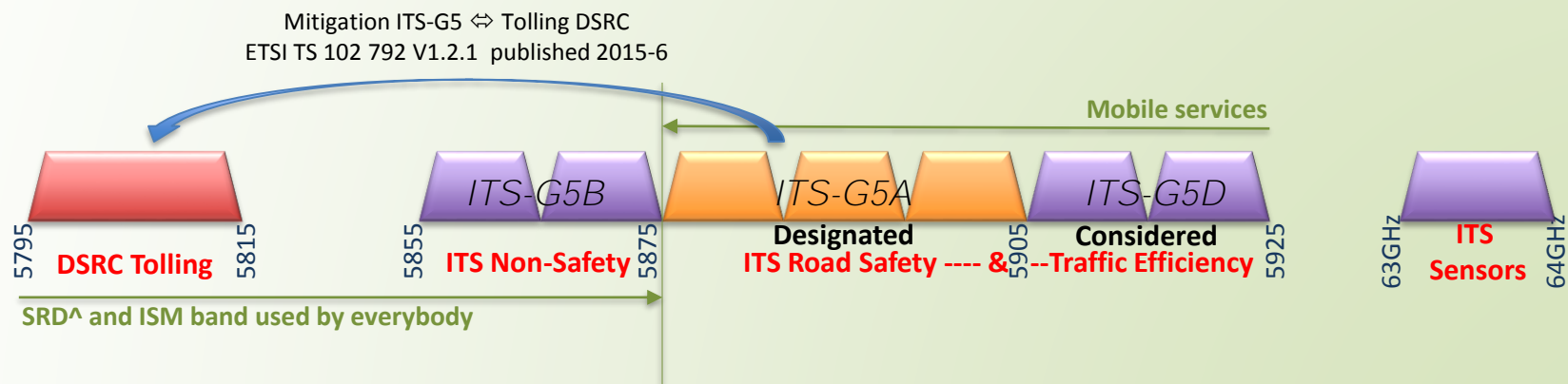


# EU SPECTRUM 5.8-5.9 GHz

## Standardization for deployment

### Current technology agnostic harmonized standards **ALMOST** in place

- **ETSI EN 302 571 V2.0.0 On Approval** (Physical layer standard, only ITS-G5 incorporated) new WI initiated to add LTE related physical layer aspects)
- **ETSI TS 102 727 V1.2.1 Published** (Mitigation 5.8-5.9 GHz)
- **ETSI TS 103 257 V1.0.x Still in Progress** (TS-G5 Channel Models and Performance Analysis Framework) Important for protection to other systems



# EU SPECTRUM 5.9 GHZ FOR C-ITS

## DG GROW comments EN 302 571 Publication

- Harmonized Standard for the 5855MHz to 5925MHz spectrum, the **EN 302 571 ENAP ended February 6<sup>th</sup> and was accepted** and is now waiting for approval.
- While in **ENAP DG GROW and DG CNECT came with comments** while this is a voting phase with no comments.
  - DG GROW: Comment measurement tolerances (specifically to the EN 302 571 this is related to a table which is not even changed in the last update, but this table is not unique, it is in many standards common practice).
  - DG CNECT: Want an editorial update related to listen before talk. This issue is in our view in the EN 302 571 covered by the DCC management and therefor could be only an editorial issue. For LTE V2x with base station management this is a "show stopper"
- **Publication is required** before the Radio Emission Decision (RED) deadline **June 13<sup>th</sup> 2017**.  
The EN 302 571 is not the only harmonized standard with a problem there are many standards with the same or similar problems such as Tolling and Radar.
- **Discussions on the 7<sup>th</sup> and 9<sup>th</sup> of February 2017** between DG GROW, stakeholders, ETSI and with support from DG MOVE Led to understanding.
- **Proposed is to accept** current harmonized standard(s) to follow the process as other wise the publication will take another year and start new work items to realize improvements thereafter.
- They are sensitive for it but we have to wait for the results.



# EU SPECTRUM 5.9 GHZ FOR C-ITS

## Looking ahead to EU/World regulation

- EU Spectrum Mandate closed end of the 2016. A new Mandate investigations is moved to CPG PTD as part of the WRC19. So far the **European position is to go to 50 MHz safety** related (the other 20 MHz are for none critical)
- CEPT position on ITS bands is under discussion. For Safety there is no 70 MHz but 50MHz available as the lower 20MHz has to be shared with SRDs and ISM. These lower 20 MHz will used for none critical ITS use. **At FM the upper 20 MHz are on the way to be opened for ITS safety but with focus on Urban Rail.** Urban Rail wants 5 MHz channels but FM gave clear message of no fragmentation.
- Existing **ITS regulation is technology neutral** thus there are no activities in Workgroup FM of the ECC.
- **European Commission activities closed.** Some month ago a new mandate was under consideration, no news
- **RLAN & ITS-G5** coexistence: the **TR 103 319 at ETSI TC BRAN under finalization**, parameters open but some are proposed, e.g. vacate time of at least 10sec. From C-ITS Industry side only Detect and vacate is relevant.
- **LTE-V2x & ITS-G5** coexistence is **expected** to be **handles at ETSI TC ERM TG37**, for this a new NWI will be realized.
- **Qualcomm** is heavily **lobbying against ITS-G5!** In Europe and US: Main argument as of today: ITS G5 and Wave are old technologies and not future proof!
- **Australia** proposed regulation with the USA and EU spectrum based on Europe ETSI TC ITS standards as they as they have to deal with Tolling in the 5.8 GHz band.





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**Thank you!**

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