

RECEIVER PARAMETERS FOR SRDS

Philippe MAGNERON – EN300220 rapporteur

What type of SRDs in ERM TG28 ?

- A wide variety of SRDs from <9kHz to 246GHz
 - Home Automation
 - Remote control
 - Intruder alarms
 - Social alarms
 - RFID (not UHF)
 - Telemetry
 - Metering
 - Networked SRDs
 - Wideband SRDs
 - Low Throughput Networks
 - ...



Radio Equipment Directive in TG28



- Directive 2014/53/EU (RE-D) stated that radio equipment shall have “an effective and efficient use of radio spectrum”
- From 13th June 2017 on, only RE-D is applicable after 1 year of transition period (12th June 2016).
- Review of all Short Range Devices standards
- **Harmonised Standards (HEN) will contain only minimum essential requirements to demonstrate compliance with RE-D article 3.2**

EN300330 : 9kHz to 30MHz SRDs

- Today: 3 RX categories
- RE-D version
 - Under discussion
 - Minimum required close to existing Rx category 3

EN300440 : 1GHz to 40 GHz SRDs

- Today: 3 RX categories
- RE-D version
 - Under discussion

EN305550 : 40GHz to 246GHz SRDs

- Today: RX spurious
- RE-D version
 - Under discussion
 - Might be technically difficult



- Other standard under revision
 - **EN 300 718** “Avalanche beacon equipment for buried people”
- Standard to become historical
 - **EN 300 761** “Automatic Vehicle Identification (AVI) for railways operating on 2,45 GHz “
- RE-D versions to go for ENAP
 - **EN 302 608** “Radio equipment for Eurobalise railway systems”
 - **EN 302 609** “Radio equipment for Euroloop railway systems “
- Standard under ENAP
 - **EN303204** “Networked based SRDs”



R&TTE-D version v2.4.1

- EN300220-1 : Technical characteritic and test method
- EN300220-2 : HEN part under R&TTE-D article 3.2
- Receiver parameters already included with 3 levels

RE-D version constraints

- 1 part version
- Agreement in ETSI CENELEC JWG with LTE community to remove Receiver category 3 from the market for coexistence reasons



New EN300220 proposed to next TC ERM



- EN300220-1
 - Technical characteritic and tests methods
- EN300220-2
 - HEN for Non specific SRDs
- EN300220-3-1
 - HEN for LDC/HR social alarm in designated sub-band
- EN300220-3-2
 - HEN LDC/HR wireless alarms in designated sub-band
- EN300220-4
 - HEN Metering SRDs in designated sub-band

But what about receiver parameters ??



New EN300220 proposed to next TC ERM



- EN300220-1: Technical characteristic and tests methods
 - Includes RX category definitions
 - EN300220-2: Non specific SRD
 - Minimum RX category 3
 - EN300220-3-1: LDC/HR social alarm in designated sub-band
 - Minimum RX category 1
 - EN300220-3-2: LDC/HR wireless alarms in designated sub-band
 - Minimum RX category 2
 - EN300220-4: Metering SRDs in designated sub-band
 - Minimum RX category 2
- NWI for additional «application standards» EN303xyz for
 - Social alarms
 - SRDs with Receiver category 1.5

Full picture of EN300220-2 proposed to TC ERM



Until 2018

- 🌐 EN300220-2 **v3.1.1**: Non specific SRD
 - Minimum RX category 3

After 2018

- 🌐 EN300220-2 **v3.2.1**: Non specific SRD
 - Minimum RX category 2

Allows to comply with the commitment to LTE community by taking into account a short and realistic transition period for SRD community



Other changes in EN300220 ?



Some hints

- Modulation bandwidth → Occupied bandwidth
- Transient measurement is simplified
- New section on polite spectrum access
- New blocking measurement at $\pm 5\%F_c$ or 15MHz, whichever is the greater



More questions ? Write me



Contact Details:

Philippe MAGNERON
TG28 Vice chairman
magneronp@hager.fr

Thank you!