



Newsletter

July 2024

Digital & Product Solutions
Business Line **EMC & RF**

innovating safety & security



Europe (EU-27 and UK)

ETSI RED Workprogramme New Standard Versions Updates

ETSI is continuously evolving the EMC/RF Test Standards, table below summarizes the latest updates for most common Test Standards during Q2/2024:

Test Standard	Title	Comments
Draft EN 300 220-2 V3.2.2	Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz with power levels ranging up to 500 mW e.r.p. Part 2: Harmonised Standard for access to radio spectrum for non specific radio equipment	Final Draft. First European Commission assessment completed and comments addressed. Public Enquiry completed and addressing comments received. New version includes the following updates with regard to v3.2.1: - Separation of OBW requirement from frequency stability (drift) clauses. - Clarifications in Spectrum mask at permitted frequency band edges. - Addition of receiver parameters according to ETSI guide EG 203336 v1.2.1. - Addition of tests for timing compliance of equipment using polite spectrum access.
Draft EN 300 440-2 V3.1.1_V0.0.14	Short Range Devices (SRD) Radiodetermination equipment for location tracking applications operating in the frequency range 1 GHz to 40 GHz	Early Draft. Test Standard development work is progressing.
EN 301 908-3 V15.1.1	IMT cellular networks Part 3: CDMA Direct Spread (UTRA FDD) Base Stations (BS)	Already published by ETSI and delivered to European Commission for final assessment. Waiting for its publication as Harmonised Standard in OJEU.
Draft EN 301 908-13 V13.3.1_0.0.12	IMT cellular networks Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)	Final Draft. First European Commission assessment completed and comments addressed. Under Technical Body Approval Process.
Draft EN 301 908-14 V17.1.1_0.0.11	IMT cellular networks Part 14: Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS)	Stable Draft. Ready to send to European Commission for first assessment.
Draft EN 301 908-18 V17.1.1_15.0.8	IMT cellular networks Part 18: NR, E-UTRA, UTRA and GSM/EDGE Multi-Standard Radio (MSR) Base Station (BS)	Stable Draft. Ready to send to European Commission for first assessment.
Draft EN 301 406-1 V3.1.9	Digital Enhanced Cordless Telecommunications (DECT) Part 1: DECT, DECT Evolution and DECT ULE	Stable Draft. Test Standard development work is progressing.



Draft EN 301 783 V0.0.7	Commercially available amateur radio equipment	Early Draft. Test Standard development work is progressing.
Draft EN 302 571 V2.1.1_0.0.25	Intelligent Transport Systems (ITS) Radiocommunications equipment operating in the 5 855 MHz to 5 925 MHz frequency band	Stable Draft. First European Commission assessment completed and currently addressing the comments.
Draft EN 302 064 V0.0.17	Wireless Digital Video Links operating in the 1,3 GHz to 50 GHz frequency band	Final Draft. First European Commission assessment completed and comments addressed. Under Technical Body Approval Process.
Draft EN 302 065-2-5 V1.1.1_0.0.2	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Part 2: Ultra Wide Band location tracking devices Sub-part 5: Requirements for enhanced indoor devices within 6,0GHz to 8,5GHz	Early Draft. Test Standard development work is just starting.
Draft EN 302 065-3-1 V3.1.0_0.2.11	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Part 3: UWB devices installed in motor and railway vehicles Sub-part 1: Requirements for UWB devices for vehicular access systems within 3,8 GHz to 4,2 GHz or 6 GHz to 8,5 GHz	Draft review after Public Enquiry. Under Technical Body Approval Process.
Draft EN 302 065-3-3 V1.1.1_0.0.6	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Part 3: UWB devices installed in road and rail vehicles Sub-part 3: Requirements for UWB radiodetermination applications operating within 6,0 GHz to 8,5 GHz	Early Draft. Test Standard development work is progressing.
Draft EN 302 065-4-1 V2.1.1_0.3.1	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Part 4: Material Sensing devices Sub-part 1: Building material analysis below 10,6 GHz	Draft review after Public Enquiry. Under Technical Body Approval Process.
Draft EN 302 372 V3.1.1_0.0.8	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Tank Level Probing Radar (TLPR) equipment operating in the frequency ranges 4,5 GHz to 7 GHz, 8,5 GHz to 10,6 GHz, 24,05 GHz to 27 GHz, 57 GHz to 64 GHz, 75 GHz to 85 GHz	Stable Draft. Test Standard development work is progressing.
Draft EN 302 217-2 V3.4.1_0.0.4	Fixed Radio Systems Characteristics and requirements for point-to-point equipment and antennas Part 2: Digital systems operating in frequency bands from 1 GHz to 174,8 GHz	Stable Draft. Ready for first European Commission assessment.



Draft EN 302 729-1 V0.3.0	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Part 1: Level Probing Radar (LPR) equipment operating in the frequency ranges 6 GHz to 8,5 GHz, 24,05 GHz to 26,5 GHz, 57 GHz to 64 GHz, 75 GHz to 85 GHz for strictly vertical downward installation	Final Draft. First European Commission assessment completed and comments addressed. Under Working Group Approval Process.
Draft EN 302 217-2 V3.4.1_0.0.4	Fixed Radio Systems Characteristics and requirements for point-to-point equipment and antennas Part 2: Digital systems operating in frequency bands from 1 GHz to 174,8 GHz	Stable Draft. Test Standard development work is progressing.
Draft EN 302 326-2 V2.2.1_0.0.5	Fixed Radio Systems Multipoint Equipment and Antennas Part 2: Harmonised Standard for access to radio spectrum	Stable Draft. Test Standard development work is progressing.
Draft EN 302 480 V0.0.7	Mobile Communication On Board Aircraft (MCOBA) systems	Stable Draft. European Commission first assessment received. Standard requires minor or limited number of changes.
Draft EN 303 940-1 V1.1.1_0.0.5	Short Range Devices (SRD) using Ultra Wide Band technology (UWB) Part 1: Millimeter Wave Security Scanners operating in 60-82 GHz	Early Draft. Test Standard development work is just starting.
Draft EN 303 354 V1.1.8	Amplifiers and active antennas for TV broadcast reception in domestic premises	Final Draft. First European Commission assessment completed and comments addressed. Under Public Enquiry Process.
Draft EN 303 659 V0.0.18	Short Range Devices (SRD) in Data Networks Radio equipment to be used in the frequency ranges 865 MHz to 868 MHz and 915 MHz to 919,4 MHz	Final Draft. First European Commission assessment completed and working to address comments received.
EN 303 661 V1.1.1	Short Range Devices (SRD) Ground Based Synthetic Aperture Radar (GBSAR) in the frequency range 17,1 GHz to 17,3 GHz and High Definition Ground Based Synthetic Aperture Radar (HD-GBSAR) in the frequency range 76 GHz to 77 GHz	Already published by ETSI and delivered to European Commission for final assessment. Waiting for its publication as Harmonised Standard in OJEU.
Draft EN 303 687 V1.1.5	6 GHz WAS/RLAN	Early Draft. Test Standard development work is just starting.
EN 303 753 V1.1.1	Wideband Data Transmission Systems (WDTS) for Mobile and Fixed Radio Equipment operating in the 57 - 71 GHz band	Already published by ETSI and delivered to European Commission for final assessment. Waiting for its publication as Harmonised Standard in OJEU.



Draft EN 303 851 V0.0.8	Radio Frequency Identification Equipment operating in the band 2 446 MHz to 2 454 MHz with power levels up to a maximum of 500 mW e.i.r.p. and up to a maximum of 4 W e.i.r.p.	Final Draft. First European Commission (EC) assessment completed and comments addressed. Second EC assessment requested and received. Standard requires minor or limited number of changes.
Draft EN 304 220-1 V1.2.0	Wideband data transmission SRD operating in the frequency range 25 MHz to 1 000 MHz Part 1: Wideband data transmission devices: network access points operating in designated bands	Final Draft. Second European Commission assessment completed and comments addressed. Under final ETSI Approval Process. Once it is completed, the final assessment form European Commission is required.
Draft EN 304 220-2 V1.2.0	Wideband data transmission SRD operating in the frequency range 25 MHz to 1 000 MHz Part 2: Wideband data transmission devices: terminal node operating in designated bands	Final Draft. Second European Commission assessment completed and comments addressed. Under final ETSI Approval Process. Once it is completed, the final assessment form European Commission is required.
Draft EN 305 550-6 V1.1.1_0.2.1	Short Range Devices (SRD) to be used in the 40 GHz to 260 GHz frequency range Part 6: Specific radiodetermination applications - Tank Level Probing Radar (TLPR) and Level Probing Radar (LPR) equipment operating in the frequency ranges 116 GHz to 148,5 GHz; 167 GHz to 182 GHz and 231,5 GHz to 250 GHz	Stable Draft. First European Commission assessment completed and currently addressing the comments.
Draft EN 301 489-5 V2.2.8	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech) and Terrestrial Trunked Radio (TETRA)	Stable Draft. European Commission first assessment received. Standard requires minor or limited number of changes. Currently, working to address those comments.
Draft EN 301 489-28 V0.0.11	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services Part 28: Specific conditions for wireless digital video links	Draft review after Public Enquiry. Second European Commission Assessment completed. Comments received from EC addressed and ready to start with Standard Approval.
Draft EN 301 489-52 V0.0.5	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services Part 52: Specific conditions for Cellular Communication User Equipment (UE) radio and ancillary equipment	Final Draft. First European Commission assessment completed and comments addressed. Under Technical Body Approval Process. Includes in the scope 5G FR2.
Draft EN 301 489-55 V0.0.7	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services Part 55: Specific conditions for ground based equipment for air navigation operating on 1030 MHz and 1090 MHz	Early Draft. Test Standard development work is progressing.



EN 301 843-2 V2.3.1_0.0.1	ElectroMagnetic Compatibility (EMC) standard for marine radio equipment and services Part 2: Specific conditions for VHF radiotelephone transmitters and receivers	Early Draft. Test Standard development work is just starting.
Draft EN 301 843-7 V1.1.1_0.0.2	ElectroMagnetic Compatibility (EMC) standard for marine radio equipment and services Part 7: Specific conditions for Maritime Broadband Radiolink equipment	Early Draft. Test Standard development work is just starting.
Draft EN 301 843-8 V1.1.1_0.0.3	ElectroMagnetic Compatibility (EMC) standard for marine radio equipment and services Part 8: Specific conditions for radio beacons and locating devices	Stable Draft. Test Standard development work is progressing.

European Commission published a Guidance for the Interpretation of the Common Charger Directive

On May 7, 2024 the European Commission released a document is to give guidance on certain matters and procedures covered by the Common Charger Directive, amending the RED. The document brings together information stemming from exchanges of information with the relevant national authorities and stakeholders, following the adoption of the Common Charger Directive.

The rules of the Common Charger Directive will be applicable for handheld mobile phones, tablets, digital cameras, headphones, headsets, handheld videogame consoles, portable speakers, e-readers, keyboards, mice, portable navigation systems and earbuds, as of December 28, 2024. These rules will be applicable for laptops as of April 28, 2026.

This Guide clarifies main questions/doubts about Common Charger requirements. Main highlights are:

- **USB-C receptacle is mandatory.** The use of other receptacle is not prohibited as long as the covered radio devices are also equipped with the USB-C receptacle as described in standard EN IEC 62680-1-3.
- **6-pins USB-C receptacles cannot be used for charging.** Only USB-C receptacles that are specified in standard EN IEC 62680-1-3 can be used (12, 16 and 24 pins).
- **Adaptor cables are not allowed.** Devices only with a proprietary charging receptacle cannot be sold with an adaptor that converts the proprietary charging receptacle to a USB-C receptacle.
- **Devices that charges through a charging case, box or station are in the scope of the Directive.** All radio equipment belonging to a category or class of radio equipment listed in Part I of Annex Ia that can be recharged by means of wired charging must incorporate the harmonised charging solution. Only earbuds are to be considered together with their charging case or box, the charging case or box for earbuds is not considered part of the charging device.



- **Devices that can only be recharged via wireless charging are not in scope of the Directive.** Radio equipment cannot be recharged via wired charging, it does not need to incorporate the harmonised (wired) charging solution.
- **Equipment with removable battery that can only be recharged separately from the radio equipment (in a battery charger) are not in the scope of the Directive.** Such radio equipment does not fall under the definition of a 'radio equipment capable of being recharged via wired charging'. Such a product is 'similar' to a product which is powered by non-rechargeable batteries ('AA-type'). Such a product is not subject to the rules of the RED introduced by the Common Charger Directive if it has a receptacle that is used only to feed power. In other words, it is not subject to those rules, if that receptacle cannot be used to (re)charge the radio equipment.
- **Specific products that are designed only for commercial/industrial use only are not exempted from Common Charger Directive.** However, Directive states that digital cameras designed exclusively for the audio-visual sector or the security and surveillance sector should not be required to integrate the harmonised charging solution.
- **Applicable to rechargeable devices only.** Common Charger rules apply to radio equipment that: (a) falls within the categories or classes of radio equipment, listed in Part I of Annex Ia; (b) is equipped with a removable or embedded rechargeable battery; and (c) can be recharged via wired charging.

Additional Information:

- Commission Notice – Guidance for the interpretation of the Common Charger Directive: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C_202402997

AdCo EMC and RED reports on market surveillance statistics for 2023

AdCo EMC published on June 16, 2024 the market surveillance statistics for Year 2023 campaign which was focus on household appliances used in kitchens. 14 national Market Surveillance Authorities have inspected 88 types of products. In general, the level of compliance with the administrative and technical requirements was considered as low. Overall, 56 % of the Equipment Under Test were assessed as compliant.

Selected devices represented a respectable number of the products available on the market and it is clear that improvements need to be done by manufacturers in terms of compliance.

Group	Devices Checked	Non-Compliance Rate
Administrative	80	68 (15,00%)
CE Marking	78	3 (3,84%)
Declaration of Conformity	76	15 (19,73%)
User Manual	75	4 (5,33%)
Technical Documentation	28	12 (42,85%)
Traceability	74	2 (2,70%)
Compliance with Harmonised Standards		
Emissions	81	21 (25,92%)
Immunity	16	1 (6,25%)



AdCo RED published on June 17, 2023 the market surveillance statistics for Year 2023 campaign. 21 market surveillance authorities have inspected 10.429 radio products in 2023. About 7.490 products (71,82%) were found non-compliant with any of the provisions of the RED. Major part of the non-compliant issues are related with Administrative and Technical Documentation issues (e.g. labelling, Declaration of Conformity, Test Reports,...).

It is important to highlight that statistics showed do not reflect the overall compliance rate of RED products on the European Market because most of the market surveillance authorities are focusing their activities in sectors known as “sectors with high non-compliance rate”.

Group	Devices Checked	Non-Compliance Rate	Comments
Administrative	10.412	7.299 (70,10%)	Main issues are related with: <ul style="list-style-type: none">- Article 10.7: Manufacturer identification (43,80%)- Article 10.8: Instructions and safety information (42,87%)- Article 10.9: Declaration of Conformity (41,15%)- Articles 19 and 20: CE Marking in label (38,99%)
Technical Documentation	501	352 (70,26%)	Main issues are related with: <ul style="list-style-type: none">- Risk Assessment (54,46%)- Annex V(i): Packaging information indicating restriction of use in different EU countries (47,73%)- Annex V(d): Descriptions of the solutions adopted to meet the essential requirements if Harmonised Standards have not been applied (47,31%)- Annex V(h): Test Reports (34,87%)
Essential Requirements	986	336 (34,08%)	Non-compliance rate detected for each essential requirement is: <ul style="list-style-type: none">- Article 3.1.a (EMC): 2,81%- Article 3.1.b (Health & Safety): 6,25%- Article 3.2 (RF): 13,93%- Article 3.3 (Additional Requirements): 8,79%

Additional Information:

- AdCo EMC report on market surveillance 2023: <https://ec.europa.eu/docsroom/documents/59854>
- AdCo RED report on market surveillance 2023: <https://ec.europa.eu/docsroom/documents/60174>

UK Government amended the legislation to extend the recognition of CE Marking indefinitely

On May 23, 2024, UK Government laid legislation to continue recognition of current EU requirements, including the CE marking. New legal framework will apply to 21 product regulations. This will include the 18 product regulations owned by the Department for Business and Trade (DBT), previously announced on August 1, 2023. Following feedback from industry, UK Government is also continuing recognition for a further 3 regulations, covering ecodesign, civil explosives and, in most circumstances, restriction of hazardous substances (in electrical equipment).

The UK Government has included the following changes:



- **Continue CE Marking recognition.** UK Government recognizes indefinitely the CE Marking for main products except for medical devices, construction products, marine equipment, rail products, cableways, transportable pressure equipment and unmanned aircraft systems (UAS) products.
- **Fast-Track UKCA Process.** It allows manufacturers to place products on the GB market where they meet the EU essential requirements and, where required, have been conformity assessed by an EU-recognised conformity assessment body. Manufacturers needs to affix the UKCA marking and draw up the UK declaration of conformity, listing compliance with the relevant EU legislation. This is designed to provide longer-term certainty and flexibility for businesses in case the UK mandates UKCA for certain regulations in the future.
- **Labelling Requirements.** Manufacturers can choose to apply labelling directly on the product, on a sticky label or use digital labeling.

Additional Information:

- UK Government – Placing manufactured products on the market in Great Britain: <https://www.gov.uk/guidance/placing-manufactured-goods-on-the-market-in-great-britain>
- UK Government – CE Marking: <https://www.gov.uk/guidance/ce-marking>



North America (USA and Canada)

FCC KDBs Updates

Main KDBs published/updated during Q2/2024:

KDB	Status	Question	Comments
987594	Draft	What are the requirements for obtaining a Certification for U-NII 6 GHz devices operating in the 5.925-7.125 GHz band under Part 15, Subpart E?	Draft KDB under review and comments period. Updated to add guidance for new unlicensed rules by permitting very low power (VLP) devices under equipment class 6VL in the U-NII-5 (5.925 – 6.425 GHz) and U-NII-7 (6.525 – 6.875 GHz) portions of the 6 GHz band.
996369	Draft	What is the FCC guidance for equipment authorization of transmitter module devices, and equipment that incorporates transmitter modules?	Draft KDB under review and comments period. Revised guidance on Antennas specifically for licensed client modules. Current version in force, was revised in April 2024 and required licensed client modules to be treated like Part 15 Modules (unlicensed module). After considering comments from the TCB module committee, this draft version aligns with how limited client modules have been certified in the past.
364244	New	What Guidance is provided for certifying radar devices under the provisions of §15.255 of the FCC rules?	New KDB explaining the options to certify 57 – 71 GHz radar under FCC Part 15.225. Includes general measurement considerations to perform the testing.
996369	Update	What is the FCC guidance for equipment authorization of transmitter module devices, and equipment that incorporates transmitter modules?	Corrects multiple typos, clarifies items and refers guidance for Grantees and Host's integrators related to RF exposure to KDB 447498. Requires for licensed modules to test each antenna type and to perform a Permissive Change if Host device uses a different antenna type. Specifies requirements for different cases for Limited Modular Approval (LMA), for instance, Non-Shielded Modules, no buffered modulation/data inputs, no voltage regulation,... and the PAG requirements for LMA.
273109	Update	What is the equipment authorization guidance for Part 25 Transceivers?	Provides guidance for Supplemental Coverage from Space (SCS) device approval under FCC Part 25.
388624	Update	What devices require FCC guidance prior to a TCB issuing a grant of equipment authorization, and what are the procedures to obtain this guidance?	Clarifies the procedure for Permissive Changes to devices with approved PAGs. PAG List updated: - Updated HAC5GS, MODLIM and RDR255 - Removed DRGAIN, MEDRAD, UMFLEX and UN5GHz - Replaced PWRDYN, PWRRED and TXSENS with PWRCNG



KDB	Status	Question	Comments
941225	Update	What are the SAR test procedures for 3G/4G devices?	Clarification about the size limit for UMPC Mini-Tablet classification (diagonal dimension ≤ 20 cm). The diagonal dimension to be compared to the 20 cm threshold for considering a device as UMPC Mini-Tablet is to be rounded to the first decimal, i.e., the nearest tenth. In other words, any number less than 20.05 cm will be considered the same as less than 20 cm, while any number 20.05 cm or larger will be regarded as greater than 20 cm.

FCC ET Docket No. 19-138 (C-V2X) update

On April 18, 2024 the FCC granted a waiver to companies listed below following the same requirements as for “C-V2X Joint Waiver Parties”:

- Continental Automotive Systems, Inc.
- Nissan Technical Center North America
- IT-Telecom
- Ettifos Co.
- Pennsylvania Department of Transportation
- Battelle Memorial Institute
- Maine Department of Transportation
- Louisiana Department of Transportation and Development
- Illinois State Toll Highway Authority
- The Contra Costa Transportation Authority
- Prince George’s County Maryland

The following entities have filled recently a waiver request to use C-V2X technology in 5.905-5.925 GHz Band and proposed similar technical requirements as proposed in “C-V2X Joint Waiver Parties”:

- North American Subaru, Inc.
- Keysight Technologies Inc.
- Innowireless Co. Ltd.

Additional Information:

- ET Docket No. 19-138: [https://www.fcc.gov/ecfs/search/search-filings/results?q=\(proceedings.name:\(%2219-138%22\)\)](https://www.fcc.gov/ecfs/search/search-filings/results?q=(proceedings.name:(%2219-138%22)))



ISED Updates

ISED Radio Standards updated in Q2/2024:

Test Standard	Status	Title	Comments
RSS-123 Issue 5	Draft	Wireless Microphones and Wireless Multichannel Audio Systems	Draft under Consultation in Radio Advisory Board of Canada. Main updates are: <ul style="list-style-type: none">- Add Wireless Multichannel Audio Systems (WMAS).- Update the unwanted emissions requirements.
RSS-216 Issue 3	Draft	Wireless Power Transfer Devices	Draft under Consultation in Radio Advisory Board of Canada. Main updates are: <ul style="list-style-type: none">- Increase the maximum separation distance from 10 cm to 50 cm in case of wireless power transfer (WPT) systems for electric vehicles.- Increase the maximum operation frequency from 400 MHz to 40 GHz and added limits for radiated emissions above 1 GHz.- Add specific requirements for WPT devices that can operate while implanted in or worn on the human body.- Adopt ANSI C63.30-2021, with deviations.- Include the limits in RSS-216, instead of referring to ICES-001.- Clarify what equipment is considered industrial, scientific, and medical (ISM) equipment.
RSS-222 Issue 4	Draft	White Space Devices (WSDs)	Draft under Consultation in Radio Advisory Board of Canada. Main updates are: <ul style="list-style-type: none">- Add a new class of WSDs with less stringent first-adjacent channel unwanted emission limits.- Allow the operation of mobile WSDs on channels 3 and 4.
RSS-248 Issue 3	Draft	Radio Local Area Network (RLAN) Devices Operating in the 5925-7125 MHz Band	Draft under Consultation in Radio Advisory Board of Canada. Main update is to add new equipment class for very low-power (VLP) devices with its corresponding power limits and operational requirements.
RSS-295 Issue 1	New	Licence-Exempt Radio Apparatus Operating in the Frequency Bands 116-123 GHz, 174.8-182 GHz, 185-190 GHz and 244-246 GHz	New standard for short-range devices and fixed point-to-point radio equipment. The scope of the standard also fits with Automotive Radar 116-123 GHz.



Test Standard	Status	Title	Comments
RSS-287 Issue 3	Update	Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD)	<p>New standard version has a 6 months transition period.</p> <p>Main updates are:</p> <ul style="list-style-type: none"> - Include Automatic Identification Systems capability (AISs) on 161.975 MHz and 162.025 MHz operating frequencies for EPIRBs, PLBs, and MSLDs. - Include closed loop Digital Selective Calling (DSC) on 156.525 MHz operating frequency for MSLDs.
RSS-210 Issue 11	Update	Licence-Exempt Radio Apparatus: Category I Equipment	<p>New standard version has a 6 months transition period.</p> <p>Standard has been aligned with related FCC Parts. Main updates are:</p> <ul style="list-style-type: none"> - Family Radio Service (FRS)/General Mobile Radio Service (GMRS) and General Mobile Radio Service-M (GMRS-M): Measurements shall be performed and reported in accordance with ANSI C63.26. - Wireless microphones operating in the television bands, in the 614-616 MHz band and in the 653-663 MHz band: Added technical specification for Wireless Multichannel Audio Systems (WMAS). - Devices operating in the band 57-71 GHz: Update use restrictions (Non-Fixed Field Disturbance Sensors and Automotive Radars are allowed and Devices can be used in-flight with certain limitations), define new emissions limits and clarify measurement requirements. - Wideband devices operating within the band 5925-7250 MHz: Clarified measurement procedure requirements.

ISED main General Notices published in Q3/2023:

Notice	Description	Comments
Notice 2024-DRS0004	Guidance on curve-fitting techniques related to measurements associated with nerve stimulation compliance	<p>Provides further guidelines on curve-fitting techniques being used in accordance with section 5.3.1 of RSS-102.NS.MEAS or 7.1.1 of SPR-002 issue 2.</p> <p>Includes an example step by step with different Regression Models explaining how to perform the Curve-Fitting Analysis.</p>
Notice 2024-DRS0005	Updates on internal electric field strength (E-field) assessments using the DASY Module WPT	Clarifies ISED position regarding the internal E-field assessment conducted per Section 5.1 of RSS-102.NS.MEAS when Test Lab uses DASY Module WPT.



ISED releases a new version of Procedure for the Recognition of Testing Laboratories to Test/Assess to Canadian Requirements (REC-LAB)

On June 25, 2024, ISED published REC-LAB Issue 8 updating the requirements for recognition of Testing Laboratories to test/assess to Canadian Requirements.

Main changes included are:

- Revised the Testing Laboratory Technical Assessment Checklist.
- Added requirement that the Testing Laboratory Technical Assessment Checklist be provided with every application.
- Clarified that a separate Testing Laboratory Technical Assessment Checklist is required for each testing location listed on the scope of accreditation.
- Added requirement that the assessment date of the Testing Laboratory Technical Assessment Checklist shall not be older than 12 months.
- Added requirement that the testing Laboratory Ownership documents (Official Government Document or Certificate of ownership) be provided with an initial application and when renewing, if revised.
- Added requirement that a list of the names of employees responsible for testing, reviewing and signing, including the physical address (city/country) where work will be performed be provided with an initial application and when renewing, if revised.

Additional Information:

- REC-LAB Issue 8: <https://ised-isde.canada.ca/site/spectrum-management-telecommunications/en/devices-and-equipment/procedures-conformity-assessment-bodies/rec-lab-procedure-recognition-testing-laboratories-testassess-canadian-requirements>



Standards Development Organizations (SDO)

International Electrotechnical Commission (IEC)

Main IEC Publications related with EMC/RF released in Q2/2024:

Publication	Scope
IEC 61000-2-4:2024 PRV	Electromagnetic compatibility (EMC) - Part 2-4: Environment - Compatibility levels in power distribution systems in industrial locations for low-frequency conducted disturbances
IEC 61000-5-6:2024	Electromagnetic compatibility (EMC) - Part 5-6: Installation and mitigation guidelines - Mitigation of external EM influences
IEC 62153-4-3:2013+AMD1:2024	Amendment 1 - Metallic communication cable test methods - Part 4-3: Electromagnetic compatibility (EMC) related test method for measuring surface transfer impedance - Triaxial method
IEC 62153-4-15:2021/AMD1:2024	Amendment 1 - Metallic cables and other passive components test methods - Part 4-15: Electromagnetic compatibility (EMC) related test method for measuring transfer impedance and screening attenuation or coupling attenuation with triaxial cell
IEC 61786-1/AMD1:2024 PRV	Amendment 1 - Measurement of DC magnetic, AC magnetic and AC electric fields from 1 Hz to 100 kHz with regard to exposure of human beings - Part 1: Requirements for measuring instruments
IEC TS 60601-4-6:2024	Medical electrical equipment - Part 4-6: Guidance and interpretation - Voluntary guidance to help achieve basic safety and essential performance with regard to the possible effects of electromagnetic disturbances
IEC 60947-2:2024 PRV	Low-voltage switchgear and controlgear - Part 2: Circuit-breakers
IEC 60947-5-7:2024	Low-voltage switchgear and controlgear - Part 5-7: Control circuit devices and switching elements - Proximity devices with analog output
IEC TS 62271-5:2024	High-voltage switchgear and controlgear - Part 5: Common specifications for direct current switchgear and controlgear
IEC TS 62271-314:2024	High-voltage switchgear and controlgear - Part 314: Direct current disconnectors and earthing switches
IEC 61347-2-3:2024	Controlgear for electric light sources - Safety - Part 2-3: Particular requirements - AC or DC supplied electronic controlgear for fluorescent lamps
IEC 61347-2-13:2024	Controlgear for electric light sources - Safety - Part 2-13: Particular requirements - Electronic controlgear for LED light sources
IEC 62153-4-9:2018/AMD2:2024	Amendment 2 - Metallic communication cable test methods - Part 4-9: Electromagnetic compatibility (EMC) related test method for measuring coupling attenuation of screened balanced cables - Triaxial method
IEC 80601-2-49/AMD1:2024 PRV	Amendment 1 - Medical electrical equipment - Part 2-49: Particular requirements for the basic safety and essential performance of multifunction patient monitors
IEC 62271-100/AMD1:2024 PRV	Amendment 1 - High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers
IEC 62271-200:2021+AMD1:2024	Amendment 1 - High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV



Publication	Scope
IEC 60669-2-1:2021/COR1:2024	Corrigendum 1 - Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic control devices
IEC 60947-1:2020/COR2:2024	Corrigendum 2 - Low-voltage switchgear and controlgear - Part 1: General rules

Additional Information:

- IEC Standards Search: <https://webstore.iec.ch/en/products/>

CEN-CENELEC

Main CEN-CENELEC Publications related with EMC/RF released in Q2/2024:

Publication	Scope
EN IEC 61000-3-2:2019/A2:2024	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current < 16 A per phase)
EN 60601-1:2006/A13:2024	Medical electrical equipment - Part 1: General requirements for safety
EN IEC 62052-11:2021/A12:2024	Electricity metering equipment - General requirements, tests and test conditions - Part 11: Metering equipment
EN IEC 60669-2-1:2022/AC:2024-05	Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic control devices
EN IEC 60947-1:2021/AC:2024-05	Low-voltage switchgear and controlgear - Part 1: General rules
EN IEC 60947-9-2:2024	Low-voltage switchgear and controlgear - Part 9-2: Active arc-fault mitigation systems - Optical-based internal arc-detection and mitigation devices

Additional Information:

- CEN-CENELEC Standards Search: <https://standards.cencenelec.eu/dyn/www/f?p=CEN:105::RESET:::>



International Organization for Standardization (ISO)

Main ISO Publications related with EMC/RF released in Q2/2024:

Publication	Scope
ISO 5474-1:2024	Electrically propelled road vehicles - Functional and safety requirements for power transfer between vehicle and external electric circuit Part 1: General requirements for conductive power transfer
ISO 5474-2:2024	Electrically propelled road vehicles - Functional and safety requirements for power transfer between vehicle and external electric circuit Part 2: AC power transfer
ISO 5474-3:2024	Electrically propelled road vehicles - Functional and safety requirements for power transfer between vehicle and external electric circuit Part 3: DC power transfer
ISO 11451-3:2024	Road vehicles - Vehicle test methods for electrical disturbances from narrowband radiated electromagnetic energy Part 3: On-board transmitter simulation
ISO 11452-3:2024	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy Part 3: Transverse electromagnetic (TEM) cell
ISO 19085-6:2024	Woodworking machines - Safety Part 6: Single spindle vertical moulding machines (toupie)

Additional Information:

- ISO Standards Search: <https://www.iso.org/advanced-search/x/>

CTIA – The Wireless Association

Main CTIA Publications related with Over-the-Air (OTA) Performance released in Q2/2024:

Publication	Scope
CTIA 01.01	Test Scope, Requirements, and Applicability v4.0.5 (May 2024)
CTIA 01.50	Wireless Technology, 3GPP Radio Access Technologies v4.0.2 (May 2024)
CTIA 01.51	Wireless Technology, Location Based Technologies v4.0.4 (May 2024)
CTIA 01.71	Device Setup and Positioning Guidelines v4.0.2 (May 2024)
Wi-Fi CWG	Test Plan for RF Performance Evaluation of Wi-Fi® Mobile Converged Devices v4.0.1 (April 2024)
CTIA 01.01	Test Scope, Requirements, and Applicability v6.0.3 (June 2024)
CTIA 01.03	Normative Reporting Tables v6.0.2 (June 2024)
CTIA 01.04	Informative Reporting Tables v6.0.2 (June 2024)
CTIA 01.20	Test Methodology, SISO, Anechoic Chamber v6.0.2 (June 2024)



Publication	Scope
CTIA 01.51	Wireless Technology, Location Based Technologies v6.0.3 (June 2024)
CTIA 01.71	Device Setup and Positioning Guidelines v6.0.1 (June 2024)
CTIA 01.73	Supporting Procedures v6.0.3 (June 2024)
CTIA 01.90	Informative Reference Material v6.0.1 (June 2024)
Wi-Fi CWG	Test Plan for RF Performance Evaluation of Wi-Fi® Mobile Converged Devices v6.0.0 (April 2024)
CTIA 01.01	Test Scope, Requirements, and Applicability v7.0.0 (April 2024)
CTIA 01.03	Normative Reporting Tables v7.0.0 (April 2024)
CTIA 01.04	Informative Reporting Tables v7.0.0 (April 2024)
CTIA 01.20	Test Methodology, SISO, Anechoic Chamber v7.0.0 (April 2024)
CTIA 01.21	Test Methodology, SISO, Reverberation Chamber v7.0.0 (April 2024)
CTIA 01.22	Test Methodology, SISO, Millimeter Wave v7.0.0 (April 2024)
CTIA 01.40	Test Methodology, MIMO, Static Channel Model, Multi-Probe Anechoic Chamber v7.0.0 (April 2024)
CTIA 01.41	Test Methodology, MIMO, Static Channel Model, Radiated Two Stage v7.0.0 (April 2024)
CTIA 01.50	Wireless Technology, 3GPP Radio Access Technologies v7.0.0 (April 2024)
CTIA 01.51	Wireless Technology, Location Based Technologies v7.0.0 (April 2024)
CTIA 01.52	Wireless Technology, Non-3GPP Radio Access Technologies v7.0.0 (April 2024)
CTIA 01.70	Measurement Uncertainty v7.0.0 (April 2024)
CTIA 01.71	Device Setup and Positioning Guidelines v7.0.0 (April 2024)
CTIA 01.72	Near-Field Phantoms v7.0.0 (April 2024)
CTIA 01.73	Supporting Procedures v7.0.0 (April 2024)
CTIA 01.90	Informative Reference Material v7.0.0 (April 2024)

Additional Information:

- CTIA Test Plans: <https://ctiacertification.org/test-plans/>