

European Electronic Communications Code - digital terrestrial radio in the car

The European Electronic Communications Code (EECC) entered into force on 20 December 2018, and must be transposed into national legislation by Member States by 21 December 2020. It applies to all EU member states regardless of the status of DAB in each country.

This means that by the end of 2020, across all EU countries, all radios in new cars must be capable of receiving and reproducing digital terrestrial radio.

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Text from the EECC

Article 113

Interoperability of car radio and consumer radio receivers and consumer digital television equipment

1. Member States shall ensure the interoperability of car radio receivers and consumer digital television equipment in accordance with Annex XI.

Annex XI

INTEROPERABILITY OF CAR RADIO RECEIVERS AND CONSUMER DIGITAL TELEVISION EQUIPMENT REFERRED TO IN ARTICLE 113 1.

3) Interoperability for car radio receivers

Any car radio receiver integrated in a new vehicle of category M which is made available on the market for sale or rent in the Union from ... [two years after the date of entry into force of this Directive] shall comprise a receiver capable of receiving and reproducing at least radio services provided via digital terrestrial radio broadcasting. Receivers which are in accordance with harmonised standards the references of which have been published in the Official Journal of the European Union or with parts thereof shall be considered to comply with that requirement covered by those standards or parts thereof.

National implementation status

France

Published on 19 December 19 2018, and appearing in the “Journal Officiel” on 27 December 2018, the French receiver law requiring all new radios (including automotive) to be capable of receiving digital (DAB+) was triggered. See **Appendix 1** for a summary of the legislation.

https://www.legifrance.gouv.fr/jo_pdf.do?id=JORFTEXT000037856950

During the deliberation dated December 19, 2018, the CSA found, in accordance with the last paragraph of article 19 of the law 2007-309 (Loi n° 2007-309 du 5 mars 2007 relative à la modernisation de la diffusion audiovisuelle et à la télévision du future), after having verified, in particular, that some of the programs intended to start in December 2018 had actually begun, that as of December 11, 2018, the broadcasting of digital radio services reached a level of coverage corresponding to 21.3% of the French population. This level of coverage triggers the obligations of radio receivers sold on the French market to be compatible with the broadcasting standards for these services, which appear in section V of section 19 of the aforementioned Act. The Council notes that only the DAB+ standard is used on authorized multiplexes.

This means:

- After 3 months, all receivers intended primarily to receive radio services and including multimedia display (exception: car receivers)
- After 12 months: all domestic receivers intended primarily to receive radio services (exception : car receivers)
- After 18 months: all terminals receiving radio services (car receivers are included)

Germany

There is strong political support for the implementation of the EECC in Germany, with industry stakeholders in ongoing discussions with automotive manufacturers regarding implementation of the EECC.

Germany’s Federal Ministry of Economics and Energy (BMWi) is working to promote digital radio services by mandating certain features in new radios. The [Action Plan for the Transformation of Radio Broadcasting in the Digital Age Roadmap - Progress Report for the Digital Radio Board](#) / [Bill of the Federal Ministry for Economic Affairs and Energy - Fourth Law amending the Telecommunications Act](#) (English translation) suggests that high-quality radio receivers may only be sold if they are suitable for the reception of standards-appropriate digital signals. According to the bill, devices which are “primarily intended for the

reception of sound broadcasting and which are capable of displaying program names must be provided with at least one interface, according to the recognised rules of technology, which allows the user to receive and reproduce digitally encoded contents." Whether that interface is DAB+, LAN or WLAN does not matter, according to the same article.

Read the BMWi [press release](#) from May 2018.

Italy

All domestic and automotive radio receivers are to have digital capability from 1 January 2020. Budget law number 205 of the 27 December 2017 was published on the Official Journal number 302 of the 29 December 2017, and entered into force on the 01/01/2018. See **Appendix 2** for a summary of the legislation.

Switzerland

Switzerland stakeholders have advised they plan to implement the EECC regulation.

The Netherlands

Digital Radio NL is having ongoing consultations with automotive importers, retailers and manufacturers regarding the implementation of the EECC.

United Kingdom

The UK government has said it will consult on the implementation of the EECC in April 2019, including for domestic receivers. Note that currently, 93% of new cars sold in the UK have DAB / DAB+ radio as standard (Source SMMT).

Other markets

All other EU member countries are expected to comply with the directive, and implement it on a national level by 21 December 2020.

Frequently asked questions

1. What does it mean by the wording 'car radio receiver' – does this mean mobile chip or other parts of the infotainment system?

It's not just a chip – it's the whole radio – i.e. the device which receives and reproduces radio services. This may be part of an infotainment system. In short, if a car has an FM radio, this device will also need to be able to receive and reproduce digital terrestrial signals.

2. Is there a definition of 'digital terrestrial broadcasting'? Does it specifically mention the DAB+ bands anywhere?

“Digital terrestrial broadcasting” is digital broadcasting via terrestrial transmitters – as opposed to via the internet or 3G / 4G.

The Code refers to “harmonised standards the references of which have been published in the Official Journal of the European Union (OJEU)”. Two such standards are listed: DAB (Digital Audio Broadcasting, which includes DAB+) and DRM (Digital Radio Mondiale). A full list of harmonised standards can be found here:

[https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0914\(06\)&rid=1](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0914(06)&rid=1)

DAB+ is widely deployed across Europe with extensive coverage and multiple services available. DRM is not widely deployed in Europe.

Other examples of digital terrestrial broadcasting include:

- IBOC (In-Band On-Channel) also known as HD Radio
- ISDB-TSB (Integrated Services Digital Broadcasting-Terrestrial Sound Broadcasting)

Neither of these is in the OJEU list.

3. What does 2020 mean? Does this mean all cars on the line in 2019 but sold in 2020 direct from the deal or does that mean all cars coming off the line in 2019?

Member States have two years from 20 December 2018 to transpose the EECC into national legislation. Accordingly, radios in cars which are made available on the market (i.e. to consumers or companies) from 21 December 2020 should be capable of receiving and reproducing digital terrestrial radio.

4. Do you have a technical definition of DAB?

A technical definition is provided here:

https://www.etsi.org/deliver/etsi_en/300400_300499/300401/02.01.01_60/en_300401v020101p.pdf

5. Is L band required for DAB / DAB+ receivers?

No.

Appendix 1 - French receiver legislation

Law No. 2007-309 dated 5 March 2007 on the modernisation of audiovisual broadcasting and the television of the future

Article 19, chapter IV and V.

Links :

<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000248397>

https://www.legifrance.gouv.fr/eli/loi/2011/5/17/2011-525/jo/article_143

Amended by Law No. 2011-525 of 17 May 2011 – Article No. 143

V. Within a period of three months from the digital terrestrial broadcasting of radio services over the air to at least 20% of the French population, when they are sold by a business to a private individual, new terminals dedicated mainly to reception of radio services and capable of displaying multimedia content, except terminals which form part of the equipment of motor vehicles, shall allow reception of terrestrial radio services over the air in digital mode in the frequency bands referred to in paragraph 4 of Section II of Article 29-1 of Law No. 86-1067 of 30 September 1986 on freedom of communication.

Within a period of twelve months from the digital terrestrial broadcasting of radio services over the air to at least 20% of the French population, this obligation shall apply to all new terminals dedicated mainly to reception of radio services and capable of displaying multimedia content, except terminals forming part of the equipment of motor vehicles.

Within a period of eighteen months from the terrestrial broadcasting of radio services over the air in digital mode to at least 20% of the French population, this obligation shall apply to all new terminals dedicated to reception of radio services.

Once the broadcasting of digital terrestrial radio services over the air reaches a level of coverage corresponding to 20% of the French population, the Higher Audiovisual Council will render this information public.

Appendix 2 - Italy receiver legislation

Law dated 27 December 2017, n. 205, article 1, paragraph 1044

State budget for the 2018 financial year and the multi-year budget for the three-year period 2018-2020.

<http://www.gazzettaufficiale.it/eli/id/2017/12/29/17G00222/sq>.

1044. In order to promote technological innovation, starting from 1 June 2019 the devices for receiving radiobroadcasting sold by manufacturers to retail electronic equipment distributors in the national territory shall integrate at least an interface that allows the user to receive digital radio services. For the same purpose, starting from 1 January 2020, the equipment to receive radiobroadcasting sold to consumers in the national territory shall integrate at least an interface allowing the user to receive digital radio services.

Amendment / clarification by MISE

Published by DAB Italia (www.dab.it)

The law applies to devices including but not limited to the following:

- Fixed radio receivers
- Portable radio receivers;
- Radio receivers for mobile vehicles
- User terminal for mobile telephony equipped with radio receiver
- Multimedia player equipped with radio receivers

Timeline summary

- Law enters into force - 17 December 2017
- Application to products sold to distributors – 1 Jul 2019
- Application to products sold to consumers – 1 Jan 2020
- 24 months from law published until sale of analogue radios to end