

European Electronic Communications Code - digital terrestrial radio in the car

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

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

Despite the impact of the global pandemic, a significant number of EU member countries have already transposed the directive into national legislation, while other EU member countries are in the process of doing so.

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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.

The obligation applies to car entertainment/infotainment units that are intended for the reception of radio services (amongst other functions) – for example, systems that:

- include receivers for AM and/or FM transmissions; or
- are capable of reception of radio services via (mobile) IP networks.

National implementation status

Germany

In September 2019, the German federal parliament reiterated its commitment to DAB+ by passing a revision to its Telecoms Law. The law was approved and made official in November 2019.

According to the revised law, all radios in new cars should be capable of receiving digital terrestrial radio from 21st Dec 2020 – as required by the European Electronic Communications Code.

The obligation only applies to new cars, and does not apply to quads, trucks or other vehicles for goods transport.

The law also requires all new consumer radios, capable of displaying a station's name, to be able to receive digital signals (for example, DAB+ or IP) – from the same date.

The new German national legislation with explanatory text is available in English [here](#).

France

There are two separate pieces of legislation in France related to DAB+ in cars:

(1)

In December 2018 DAB+ coverage reached 21.3% of the French population, which triggered a [law](#) requiring that all radio receivers (including in-car) sold in France be compatible with the broadcasting standards listed in section V of section 19 of the law (see Appendix 1 for a summary of the legislation). The regulator - le Conseil supérieur de l'audiovisuel - notes that DAB+ is the only authorised digital terrestrial radio standard in France. This 2018 law was amended in June 2020 to align with the EECC deadline of 20 December 2020.

(2)

In November 2020, the French parliament voted in favour of a law to transpose the EECC into French legislation. This [law](#) passed the last stage and was made official in December 2020, with the transposition of the EECC into French law officially [published](#) on 28 May 2021.

Other receivers

Other radios (terminals), for which the reception function of radio services broadcast is not purely incidental, and have an alphanumeric screen, must be capable of receiving digital terrestrial radio.

Italy

According to Italian regulation, [all consumer radio receivers](#), as well as automotive radio receivers in new [category M and N](#) vehicles sold by importers, wholesalers and retailers are required to be fitted with DAB+ as standard starting from January 2020. As for new vehicles produced before 1 January 2020 which are not currently factory fitted with DAB+, these can only be sold up to 21 December 2020. The regulation does not apply to devices where the radio function is purely accessory, for example, TV sets, PCs, laptops and tablets.

Switzerland

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

In September 2019, it was announced that Switzerland's radio programs would only be available on the FM Band until the end of 2024 at the latest, at which point a complete digital switchover will take place.

Denmark

In June 2020, the Danish Ministry of Climate, Energy and Supply, in charge of the implementation of the Code, published its [Draft Proposal](#) implementing parts of the EECC Code.

Under chapter 6b on "Applications of regulations", the proposed bill states the obligation for manufacturers and importers of Class M vehicles to ensure that a car radio receiver which is built into new class M vehicles, consists of a receiver that can receive and reproduce radio services broadcast via digital terrestrial radio transmission.

The public consultation period for the draft legislation ended on 11 November 2020, and the [new law](#) was passed ensuring that car radio receivers in new category M vehicles put for sale after 21 December 2020 need to be capable of receiving a digital terrestrial radio transmission.

Belgium – Flanders

According to new regulation in the Dutch-speaking part of Belgium, new passenger cars sold in Flanders are required to include digital terrestrial capabilities from 4 March 2021.

All new consumer FM receivers sold in Flanders are also required to include digital radio capabilities starting from 1 January 2023. This law does not apply to smartphones and tablets.

The Netherlands

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

United Kingdom

On 1 September 2020, the Department for Transport's new Road Vehicles (Approval) Regulations 2020 came into force. The Regulations include provisions to implement Article 113 of the European Electronic Communications Code, which covers the compulsory fitment of digital radio in passenger cars and buses that come fitted with a radio. The regulation specifies the fitment of digital terrestrial radio broadcasting, rather than IP, and allows automotive manufacturers until 21 December 2020 to meet the requirement.

A link to the explanatory memorandum to the road vehicles (approval) regulation 2020 is available [here](#). The specific regulation on the Interoperability for car radio receivers is available [here](#).

In the UK, 95% of new cars sold have DAB / DAB+ radio as standard (Source: SMMT, Q4 2019).

In July 2019, The UK Department for Culture, Media and Sport (DCMS) published a [consultation](#) setting out the Government's proposed approach to implementation of the European Electronic Communications Code Directive and seeking stakeholders' views. The consultation document states that "In the longer term, we will consider extending this requirement to commercial vehicles and to mandate for the installation of digital connectivity in all domestic radios".

Greece

In June 2020, Greece formally started the process of implementing the EECC directive into national legislation, by publishing a draft proposal that includes the same digital radio requirements and regulations as the EECC directive (article 113 and annex XI).

The draft publication, which was open for consultation until 17 July 2020, is available [here](#).

Malta

In April 2020, the Malta Communications Authority published a document on the Interoperability of Car Radio Devices to ensure compliance with the requirement of the EECC. According to the [regulation](#), any car radio receiver integrated in a new vehicle of category M which is made available on the market for sale or rent in Malta as from 21 December 2020 shall comprise a receiver capable of receiving and reproducing at least radio services provided via digital terrestrial radio broadcasting of type DAB+.

Slovakia

A draft law has been issued in Slovakia regarding the country's implementation of the EEC directive. An inter-ministerial comment procedure is currently taking place and the regulation is expected to be submitted to Parliament in summer 2021, with the new regulation being effective by the end of the year.

Poland

[Regulation](#) published by the Polish Ministry of Digital Affairs on 9 November 2020 states that DAB+ will become mandatory in category M new vehicles on 1 January 2021 according to the Ordinance of the Minister of Digitisation – the mentioned Ordinance is an executive act of the Telecommunications Law and is effective from the date indicated therein.

Background:

On 4 November 2020 the Polish Ministry of Digital Affairs published an amendment to regulation that had been published on 14 February 2020, clarifying the technical and performance requirements for radio equipment intended for the reception of digital radio in category M vehicles. The November amendment came into force on 1 January 2021. In particular, the ordinance clarifies the details of some functions (DL, Slide Show, Service following) and specifies the date of April 1, 2023 as the point from which these requirements will become mandatory. Until that date, they are optional.

Spain

In September 2020, Spain published a draft of its [Telecoms Regulation](#). According to the document in question, starting from 21 December 2020, all car radio receivers that are built into new class M vehicles in Spain will be required to include digital terrestrial broadcasting capabilities.

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