

10 facts about DAB+ that you should know

1. The future of radio is digital

Analog FM terrestrial transmission has been pushed to its limits both in terms of technology and programming; the available frequencies have already been assigned. There is no longer room for new channels, services and technical innovations. The FM radio market has become a playing field that is limited to the present players. This imbalance at the expense of commercial providers is under criticism because —historically-based — public broadcasters have more FM frequencies available to them. DAB+ puts an end to this and revives the competition for the benefit of the listening audience.

DAB+ is the perfect complement to Internet and vice versa but the Internet transmission platform is not a substitute for DAB+. In contrast to the Internet, the terrestrial transmission of radio programs enables their anonymous and free-of-charge use without volume restrictions.

Mobile Internet/LTE is 40x more expensive than DAB+ technology:

For a transmission area with a radius of ca. 70 km, each mobile network operator requires 150 transmitting stations for mobile Internet; on the other hand, it only takes one DAB+ multiplex to fully cover the entire area. The Internet, however, can complement DAB+ especially when it comes to in-house coverage and with regard to connecting users with network-based supplemental services. Conversely, DAB+ contributes significantly to reducing the data transfer volume via mobile radio. The ARD is thus pursuing a hybrid strategy that embraces all radio transmission options that are relevant for users.

2. DAB+ is synonymous with diversity, quality and innovation – and it reaches listeners

DAB+ enables program variety and innovation. Already today, in some regions over 44 programs (23 programs on average) can be received. In addition to this further services, including program information, program guides, event tips and very accurate traffic data for listeners on the road, are also available. DAB+ is technically robust, noise-free and provides excellent reception — even excellent mobile reception.

DAB+ affords innovative radio stations virtually unlimited possibilities for their program development and for new special interest programs. NDR and MDR, for example, have just launched customized radio content for enthusiasts of German pop music (or *Schlager*).

The digital program *BR Heimat* is so popular with listeners that demand for digital receivers temporarily outstripped what retailers could supply. This shows very clearly that listeners definitely take to DAB+ when they know DAB+. This was unequivocally demonstrated by a study conducted in households in Saxony-Anhalt where the Internet and DAB+ can be received over FM: Almost all users readily chose DAB+ after a short trial period.

3. DAB+ is important for the radio genre

While the Internet platform also offers a great variety of audio content, these programs more easily go unnoticed because they are not locatable in the same way that terrestrially transmitted programs are. Instead, they have to compete with all the various services and content in an unregulated environment. Especially for commercial radio broadcasters, capturing the attention of listeners is equivalent to advertising revenues — and this is of existential importance.

DAB+ thus safeguards FM's proven and established business model while also advancing and developing it in a non-disruptive way. DAB+ thus plays a major role in preserving Germany's broad radio landscape.



4. DAB+ is more than just radio – it functions reliably in emergency situations

Radio is the most important source of information when traveling by car. The intelligent traffic systems of the future are digital. They require a reliable digital path to transmit data in order to quickly inform listeners about traffic congestion, detours, travel time delays, availability of parking places etc. That's why the Federal Government is banking on DAB+ to implement the European ITS (Intelligent Traffic Systems) directive.

The DAB+ broadcasting system also ensures that the population can reliably be informed in the event of a catastrophe or crisis. Boasting an own infrastructure, DAB+ is able to warrant comprehensive coverage that is load independent in case mobile networks are overloaded or down.

5. DAB+ is available Germany-wide

By the end of 2016, the number of transmitter sites for the national digital radio multiplex will increase from 61 to 110. At this point, 82 % of the population will be reachable indoors while 92 % can be reached outdoors. Reaching 98%, federal autobahn system will have virtually comprehensive signal coverage. Especially in rural areas where the rollout of mobile networks still lags far behind, DAB+ is an indispensible mobile source. By the end of 2017, transmitter networks of the regional Landesrundfunkanstalten will have over 185 transmitter sites at their disposal thus offering citizens almost 87 % outdoor coverage and over 76 % indoor coverage.

> Source: IRT, Planungsstand Netzte der Landesrundfunkanstalten zum Ende 2017, 6 June 2016



6. The sale of DAB+ devices is growing at an above average rate

The retail trend is conclusive; more and more often people purchase receivers that are both FM *and* DAB+ capable. Currently over 600 models – starting at ca. 25 euro – are available to choose from. The share of DAB+ devices currently stands at ca. 12 %. From the time DAB+ was launched in 2011 to March 2015, GfK (*Gesellschaft für Konsumforschung*) statistics reveal the sale of 1.96 million new receivers in Germany – and this figure doesn't include the initial fitting-out of cars. In September 2014, the portable radio sector in Germany experienced a higher turnover with DAB+ capable receivers than for basic FM radios.

Market penetration could be further accelerated if all radios newly entering the market were equipped with DAB+ reception (smart radio). In Great Britain, already 70 % of all vehicles come with DAB+ capable devices and LG has just introduced a smartphone with DAB+ reception to the European market.

7. Europe is banking on DAB+

Our neighboring countries in Europe are on the way to a digital radio future.

Norway will completely switch over to DAB+ in 2017. Switzerland will follow suit between 2020 and 2024. In Denmark the plan is for the switch to take place when 50 % of radio use is digital. In Italy, France, Belgium, Austria and Poland, digital radio services will be expanded and transmitter networks will be rolled out.



Great Britain too is pushing for the rollout of national and local DAB+ networks. Digital radio is not a national matter.

The ARD and numerous public service and private broadcasters have joined the European Radio Alliance, which was founded in April. Its objective is to promote the expansion of digital terrestrial radio Europe-wide across all national borders.

8. Jointly migrating from FM to DAB+

The ending of the current simulcast phase in which FM and DAB+ exist side-by-side can only take place in cooperation with all market participants and only in unison with private broadcasters. To this end, ARD is conducting talks with private broadcasters, the vehicle and radio industry, the regulatory institutions and lawmakers to agree on a joint, coordinated approach in DAB+ matters.

9. The ARD is advocating a phased model

The ARD views the switch-over to DAB+ as a process. Under the lead of the MDR, the ARD has developed a two-step model for the rollout of DAB+ encompassing an expansion and migration phase. The ARD will quickly roll out networks – jointly with *Deutschlandradio* – to reach the envisaged target of 95 % coverage in Germany between 2018 and 2020. The ARD takes the view that a concrete procedure to phase out FM must be decided during the migration phase. According to the ARD, the discussions should not be reduced – right from the outset – to a set deactivation date for FM.

10. Germany needs a clear roadmap

A glance to Europe shows that in countries where a publically-communicated timetable is in place DAB+ markets develop more quickly than where this is not the case. In this context, a very important signal is being given by an initiative of the Federal Ministry for Traffic and Infrastructure. State Secretary Dorothee Bär has established the "Digital Radio Board" for all involved players. This is a forum in which open questions can be systematically addressed and steps toward solutions can be recorded.

The Federal Government and the *Länder* are urged to establish the regulatory framework for the rollout of a digital radio infrastructure, for the development of new programs and additional services (also traffic information services), for the sale of digital receivers as well as for the fitting of vehicles with DAB+. A clear-cut regulatory framework that reaches beyond future technological changes is needed to ensure that the entire breadth of opinion is represented in radio broadcasting. Achieving this requires material, organizational and procedural provisions.

In its 20th report, KEF – an independent commission that determines the financial requirements of broadcasters – has hinged funding approval for DAB+ on media policy makers' adoption of a clear position. This is necessary, not least, to ensure that parallel operations of economical DAB+ and expensive FM transmission are limited to a time period that is as short as possible.

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