

The Illusions of the DAB Radio World

Are the politicians presented with a distorted picture of an outdated technology?

Is the credibility of the public broadcasting sector at risk?

The DAB digital radio technology was invented in the 1980s. Test transmissions by the BBC and the public service broadcasters in Norway and Sweden started in 1995.

Since then the promoters of DAB have been targeting politicians and other decision makers with a barrage of "facts" in order to prove that this is a successful technology choice for future broadcasting. Since DAB from the very start is a project by and for public service broadcasters, the main sources for the information output is the *European Broadcasting Union (EBU)* and the closely connected lobbying organization *WorldDAB*.

EBU and mostly also WorldDAB are financed by public funding and are thus organizations with ample financial resources. Promoters of other technologies such as DRM, HD Radio or DVB-T2 are not organized and financed on this level.

It must also be taken in consideration that EBU headquartered in Geneva, Switzerland, has come to be regarded as a semi-official institution in Europe although it is a non-governmental organization without any public transparency, much alike other international organizations as Fifa and IOK. This is an intricate democratic problem as most national public service organizations are public funded (via taxes or licensee fees) with their basic framework set by national governments. *EBU is only formally accountable to its member organisations, not to any national government, the EU or its citizens.*

But in several countries politicians who formally have an overall responsibility for media policy lack technical or economic insights into the public broadcasters, especially when they are created as "independent companies".

Any decision maker or citizen looking for facts about DAB on the Internet will end up on the EBU or WorldDAB web sites. Here they will find impressive but misleading graphic presentations in order to convince you that DAB is conquering the world.

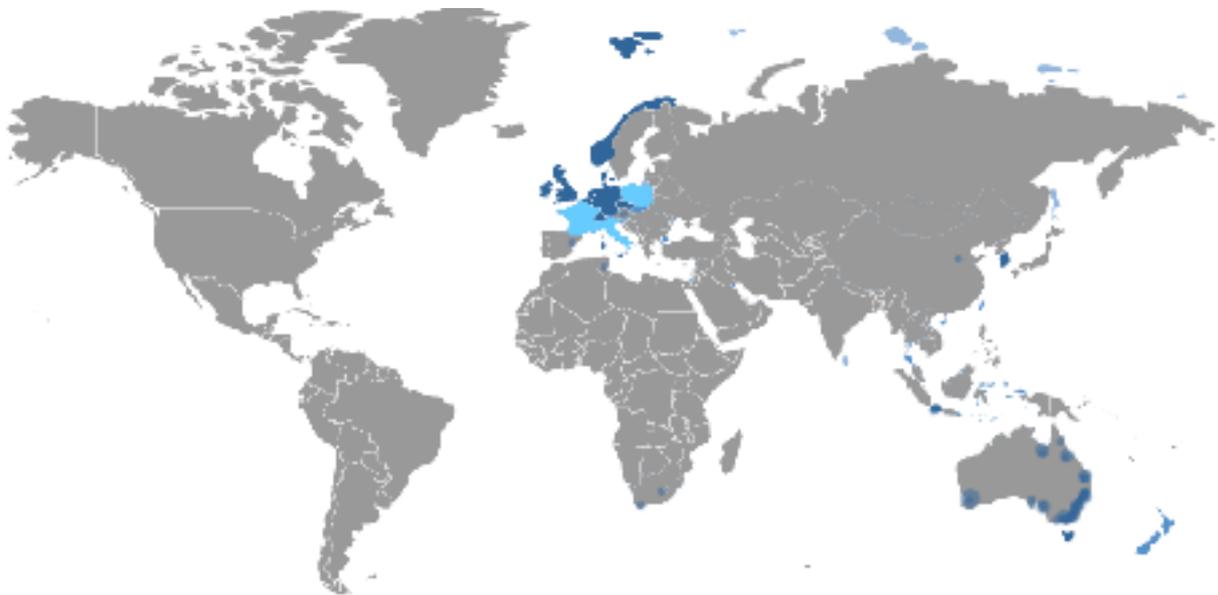
In most countries however, the radio listeners or consumers want to keep their FM radio broadcasting and complement it with on-line radio. But it is difficult for them to question the powerful and continuous DAB information output from EBU/WorldDAB.

Facts about the DAB system presented in various industry publications etc are often based on graphics as presented below. Also you can find Wikipedia pages about DAB, which in most cases are referring mostly to WorldDAB promoting sources. An example is *Countries using DAB/DMB* https://en.wikipedia.org/wiki/Countries_using_DAB/DMB

It is strange that there is *a total absence of market research reports as well as comparative technical and economical assessments* regarding different transmission platforms for digital radio. Such information has yet to be made public by the EBU, WorldDAB and public service broadcasters.

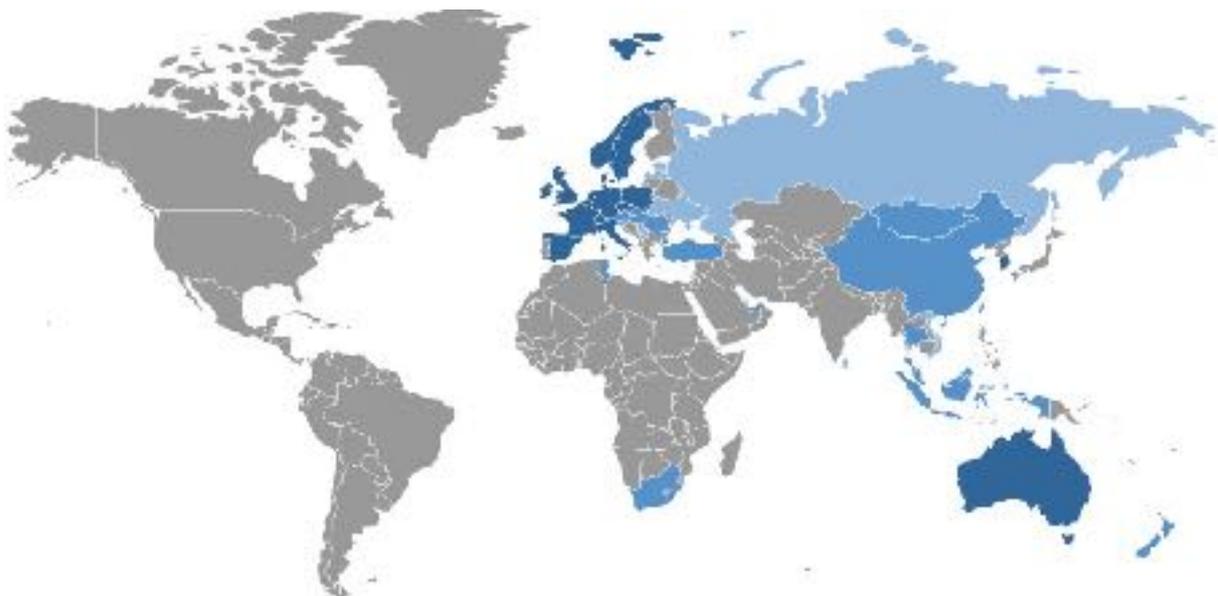
A true map of DAB *radio listening* take-up shows the most honest picture of the real penetration for DAB. Do consumers really want DAB radio?

The true picture of DAB penetration 2015



The core DAB countries (in dark blue colour) are *Denmark, Norway, Germany, Switzerland, and the United Kingdom* with complete or almost complete *geographical* coverage. Partly covered countries are Poland and Italy (light blue). DAB broadcasting is also established in parts of France but the public service and major commercial networks are not participating. In Austria there are test trials in Vienna but the public service ORF is refusing participation. In *Australia* the main metropolitan cities are covered.

The DAB world according to the WorldDAB organisation



(Source: WorldDAB¹)

¹ <https://www.worlddab.org/country-information>

This map is presented in a very professional way at seminars at various international conferences. But the information is often exaggerated or slanted and facts that are not favorable to the DAB technology are omitted. EBU/WorldDAB want to give the impression that DAB is a very successful global endeavour.

A blue coloured country in the EBU/WorldDAB map gives an impression that DAB transmission networks are geographically established in the whole country.

It is of course not correct to colour a whole country blue when you have transmissions in just some local metropolitan areas (i.e. Djakarta, Peking, Sydney, Madrid). Moreover it is not correct to colour a whole country blue just because it has expressed some interest in DAB or has been conducting local test transmissions in a city (Romania, Spain).

Geographically vast nations such as Brazil, China, India, Mongolia and Russia are not on the DAB train and probably never will. It is the same for Australia outside the major metro areas. DAB is not a solution for sparsely populated areas. Norway is the only country with an active switch-off year for FM and Switzerland has plans for 2026. Most countries with established DAB transmissions such as Australia will retain its FM radio.

Spain is not a DAB country just because there has been test trials in Madrid by Radio Maria. A promoting map will of course not indicate nations which earlier have rejected DAB, such as Finland, Hongkong, Latvia, Portugal, Singapore, Taiwan and Canada. We also note that the WorldDAB has not yet understood that Sweden² now has rejected the latest widely promoted proposal for a transition from FM to DAB.³

Where are the listeners? EBU/WorldDAB are not reporting *listening figures*. Outside the five core DAB countries - Denmark, Norway, Switzerland, the United Kingdom and Australia - there is no listening rate on a weekly basis over 10 percent. Even in countries with full national DAB+ coverage - as Germany and the Netherlands - the listening rate is below 5 %.

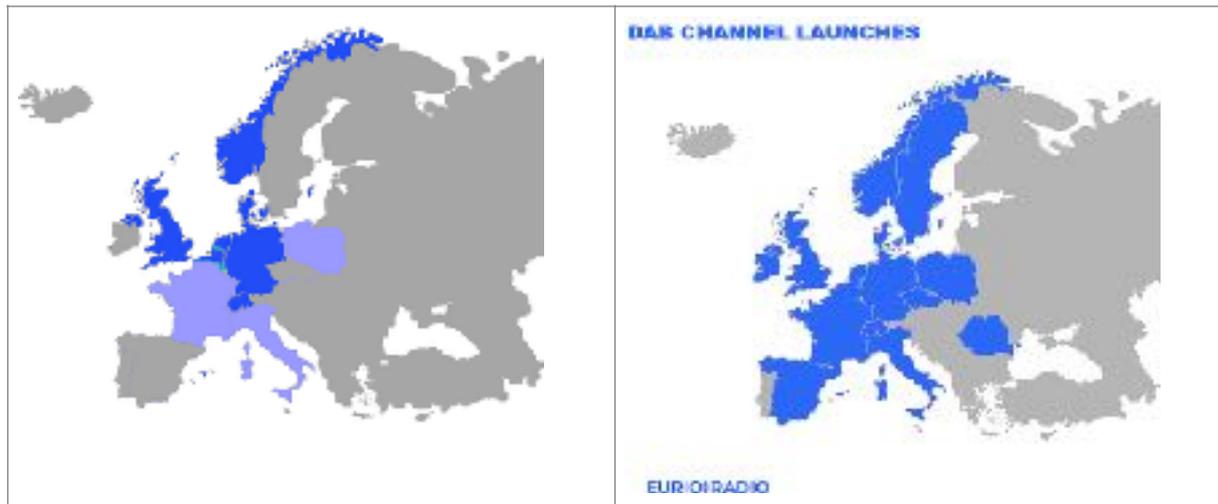
EBU/WorldDAB proudly reports that 60 million DAB receivers have been sold. But they will not tell you that there are more than 6 billion FM receivers in the world. And that the true challenge as a listening platform for radio is mobile and fixed broadband. In 2018 there will be a total of 2,5 billion smartphones in use globally. Still DAB is not built into smartphones.

Typically, EBU is promoting DAB as "digital radio" but of course this term also includes other systems for terrestrial broadcasting as well as on-line radio. For example, "half of the listening in Norway is digital" does not mean DAB only but includes on-line radio and digital television network.

EBU/WorldDAB do not include facts about other competing systems. But an objective picture requires including systems such as HD Radio (North America), ISTB-T (Japan, Latin America) and DRM30/DRM+ (India, Russia) as well as places where radio is broadcast via terrestrial television networks (DVB-T or DVB-T2). Also mobile broadband LTE Broadcast should be considered.

² Public service radio SR is running a DAB/DAB+ pilot with a temporary permit expiring 2019.

³ <http://public-service.net/docu/DABFactsSweden.pdf>



Conclusions

FM radio is in operation all over the world

You may, if you wish, envisage a global map coloured blue all over for FM radio which is in operation in all 210 countries of the world. And this will probably soon be the case also for *radio listening on-line* via mobile and fixed broadband. Any attempt to introduce terrestrial digital radio by trying to force listeners from FM radio will probably become a severe problem for future broadcast radio.

We forecast that analog FM will be retained for some more decades and over time mostly replaced by on-line radio and music listening. Terrestrial digital radio, be it DAB or other systems, will develop further but only as a supplemental service to FM and Internet.

We recommend any political decisionmaker before being coaxed into a transition to the DAB technology to think twice. This means to seek advice from independent economical and technical expertise, which is not connected to EBU, WorldDAB and similar lobbying interests.

How much money will such a deadbeat prestige project cost the European taxpayers and license fee payers? Do the listeners, consumers and citizens really know what is going on?

DAB was an innovative technology when it was developed more than thirty years ago. But it passed its “best before” date many years ago. The letters DAB might soon stand for Dead And Buried. Few will suffer but will the European public service broadcasting sector lose credibility by a mounting DAB radio fiasco?

⁴ from slide presentation by Graham Dixon, EBU Head of Radio in March 2016