



Update on Swiss FM radio switch-off and

“In the past the future was also better”

Karl Valentin

**The original plan of 2021 to
switch off FM radio in
Switzerland by the end of
2024 has faced strong
criticism**

- Switching off FM first planned for end of 2024 created so far strong criticism
- Main argument: It would position Switzerland **in isolation** in the heart of Europe with a black hole for FM radio and still millions of older cars without a DAB+ radio

Because

1. None of the Swiss neighbouring countries has yet a plan to switch-off FM
2. Millions of receiver products with **FM TA/TP** and **RDS-TMC** can no longer receive Traffic warning information – a nightmare for vehicle drivers using cars made before 2021
3. Much more than 10 million radios with FM receivers will become obsolete

Will the lifespan of FM radio now be extended further in Switzerland?

- From a European point of view this would be more reasonable !

**DAB+ is not like FM
a pan-European
system**

- **2011: Portugal put an end to trial DAB broadcasting**
- **2019: Spain wants to keep widely used FM radio**
 - only few private radio stations use still DAB+
- **2022: UK commercial radio – The FM radio licences were prolonged until 2032**
- **Today: There are only four countries in Europe with a DAB/DAB+ listening on a weekly basis of 10% or more: UK, Norway, Denmark, Germany.**
- **For Switzerland no DAB programme listening counts exist;** receiver counts are used instead, but such info cannot be trusted. After all broadcasters live from listeners, not from radio receivers. In addition, **all DAB radios have also FM.**
- **Other European countries switched off DAB or do not want it any longer**
- Finland, Hungary and Ireland

**The future of radio is seen as
IP streaming
with the BBC predicting that
streaming will eventually
overtake FM**

■ The future is IP radio streaming (for smartphones)

- **BBC:** In 2018 the former director radio Bob Shennan made the statement: The majority of radio listening was still on FM, next IP streaming and DAB only third. FM radio will continue until at least 2030.

BBC foresees since then that eventually streaming would overtake FM, because just as many people stream TV rather than watch live so that will become the norm with radio, and DAB would never be the choice of the majority.

References:

[No FM switch off in the UK until at least 2030 says DCMS – RadioToday](#)

[BBC preparing to go online-only over next decade, says director general | BBC | The Guardian](#)

- **We think that**
 - This view from the BBC is correct
 - **DAB+ is only a transitional radio technology**
 - It will not last for long and it will be replaced by IP streaming
 - However, for local and regional and even national radio FM will remain attractive as radio receivers without FM are a rare exception
 - **In Switzerland each DAB+ radio sold is also an FM radio**
 - Thus, there is no reason, other than political, why broadcasters can no longer use FM
 - **As the public service broadcaster SRG/SSR no longer wants to use FM, the then unused FM frequencies should be re-distributed to local radio**

Since 2020 there is also a new standard on 5G Broadcast:

- This is a BC multicast complement to IP Unicast for smartphones
- Is more likely to be used for TV and not for radio

**The future is digital,
but also FM radio
already uses widely
digital technology**

- **Because the future is digital, does radio really need to migrate to DAB+ ?**
- **What is not said in this context is:**
- **Since long already FM also uses digital technology**
 - Transmitters are fed with audio in stereo and metadata digitally
 - Only the audio in stereo is transmitted as an analogue signal
 - All metadata are transmitted digitally using RDS/RDS2
 - New is: Over RDS2 Station logo, Slideshow, and a Link to IP streaming are possible
 - Audio stereo quality from FM radio is better than from DAB+
 - Modern FM transmitters consume up to 40% less energy compared to old ones used in Switzerland / There were no investments in FM any longer since many years
- **Modern FM radios decode with DSP the audio and RDS digitally**
 - There are since long ICs that cost in large quantities only about 1 Swiss franc
 - Modern car radios decode DAB+ and FM and all their metadata only by software
 - **Since FM remains widely popular in Europe, there will be no radios on the Swiss market without FM within the next 10 years !**
 - **Thus, FM radio should continue to be used for radio in Switzerland**

**None of Switzerland's
neighbouring countries
have plans to switch off
FM radio and Switzerland
cannot use the FM band
for other services
as it is bound to
international agreements**

- **One of OFCOM's tasks is the sensible management of frequency spectrum**
 - This is a limited resource
 - This must be done in serving the economic interests of the country, and
 - In harmony with the neighbouring countries
- **For ITU Region 1 (Europe/Africa/Parts of Asia) the FM radio frequency plan of Geneva 1984 remains valid**
 - It can only be modified using the criteria fixed in this agreement
 - This international agreement permits Switzerland to continue FM radio still for many years to come
 - Just like the neighbouring countries continue FM radio
 - If Switzerland discontinues FM radio, it cannot reuse the FM band for other services
 - Thus, Switzerland is deprived of radio spectrum worth millions for its economy
 - That the public broadcaster does not want to continue FM radio is a controversial issue for the Swiss population, since it finances this through the obligatory media reception fee. In consequence, a reduction may then be required and voted for.

**The switch-off date for
FM radio in
Switzerland is now
uncertain, with some
are suggesting a
smooth switch-off
between 2024 and 2026**

13 July 2023:

- The Minister, Albert Rösti, in charge of this issue, announced to the surprise of the whole country that the FM licence owners can continue to use the FM band until the end of 2026 and not already switch-off at the end of 2024, as initially planned.

27 June 2024:

- **The public broadcaster SRG/SSR announces that it will switch-off its three to five radio programmes distributed on FM at the end of 2024.**

The main argument against the switch-off is that it would isolate Switzerland in Europe and leave millions of older cars without DAB+ radios in the impossibility to receive traffic and weather warning messages

- The most important traffic alert messages concern:
 - Persons driving by error on motorway lanes in the opposite direction
 - Lost loads, Animals on the motorway (very frequent dangers)
 - Extreme weather conditions:
 - heavy rain, snowfall and black ice, land slides, avalanches ...
 - Closed roads and railway problems caused by floods, landslides and avalanches as well as ongoing road and railway line maintenance works
 - Tunnel problems caused by road works and accidents
 - Recommendations for alternative routes
 - Railway cancellations and alternative transport services made available
- **NOTE: The SRG/SSR has increasingly become reluctant to provide such information frequently in its radio programmes, contrary to what it did in the past.**

The lack of FM radio in some tunnels created by the Swiss road authority ASTRA has already caused black holes for traffic information, posing safety risks

- **Gubrist (3.2 km) and Lötschberg (14.6 km) tunnels are already without FM radio signals and DAB+ only instead**
 - This kind of safety issue remained up to now totally ignored by Swiss authorities:
- **It will have a strong impact on traffic and on road/tunnel safety**
 - **Millions of cars on Swiss roads without DAB+ radios no longer will receive traffic announcements and updates with coded traffic information on navigation systems using RDS-TMC**
 - **Foreign tourists and cars transiting Switzerland will eventually encounter a black FM hole, unique in the centre of Europe, while FM radio continues to remain the most popular radio system used everywhere !**
 - **Now the worst latest rumour is:**
 - **The Swiss road authority ASTRA will switch-off FM radio in tunnels already at the end of 2024, to save money, they say.**
- **Just terrible from a European point of view:**
 - A clear breach of the EU Tunnel Directive, where for safety reasons also radio shall be used to send messages to all cars inside the tunnel that all have FM, but not yet DAB+ !

Many Swiss broadcasters argue that simulcasting FM and DAB+ is too expensive and only one, DAB+, should be chosen over the other.

Instead, they should be given by the Swiss regulator BAKOM / OFCOM the choice to use for radio either FM or DAB+.

New radio receivers can use both.

There is no technical reason to switch-off FM

- Many Swiss broadcasters say that simulcasting FM and DAB+ is too expensive and therefore needs to be stopped / **We think instead one or the other should be used – at the choice of the broadcaster concerned**
- The public Swiss broadcaster SRG/SSR is wrong in this respect; as it is funded by the public media licence fee, an increase of 5 CHF/year is sufficient to collect the money needed to continue FM by this public service broadcaster – **just a matter of a correct policy in the interest of the population !**
- The annual funds of SRG/SSR are 1550 millions CHF; the expected savings are 15 millions CHF. **Is DAB+ operation really less expensive overall?**
- **Traffic info is perceived by the public as part of the public service mission, because the information service offered so far by the SRG/SSR with Viasuisse has been one of the best in Europe !**
- **BUT the current public service broadcast policy in Switzerland is to minimize traffic announcements which does no longer serve the public interest !**
 - **RDS-TMC is still used on FM with many receivers in use and instead on DAB+ TPEG2 with hardly any receivers on the Swiss market (only one model from GARMIN)**



- **The society as a whole will suffer**
 - **with damage for the population will be larger than the few economic advantages for the broadcasters concerned:**
 - **The social global costs (accidents, repair costs, medical care etc.) for the whole country will rise**
 - Thus, Traffic and Travel Info-services are of a much more added value than just all unspecified information paid via the media-fee
 - **The safety and warning possibilities for the whole population will be reduced**
 - FM radio is much better than DAB+ to broadcast warning messages to the whole population
 - Was the Swiss Civil Protection Organisation ever consulted on this issue?
 - **For the Swiss authorities to take the right decision**
 - **A much broader consideration will hopefully be taken into account by the Swiss federal government, considering also the wishes and needs of the population and not only those of the broadcasters, public and private.**

Millions of receiver products with FM capabilities will become obsolete, and to avoid this the lifespan of FM radio should be extended in Switzerland

- **If FM were really switched off in 2027, well functioning FM only radios become then either useless**
 - Or will need to be used with DAB+ adapters
 - Since adapters will not be very popular, millions of FM only receivers will become garbage. **Not very good for the environment.**
 - Or many FM radios will continue to be used receiving only programmes from the neighboring countries
- **The public broadcaster SRG/SSR was an early adopter of DAB**
 - First it started with DAB in the nineties and then it changed to DAB+
 - Thus, more than 500 000 DAB receivers became already garbage as with DAB+ they did not work anymore
 - The Swiss regulator BAKOM/OFCOM supports the upcoming FM switch-off
 - **5 million Swiss Francs were spent to advertise that radio will changeover to DAB+ only**
 - **170 million Swiss Francs were already used to subsidize broadcasters to migrate to DAB+**
 - Since 2020 there is no obligation any longer for the public broadcaster to use FM
 - **But in spite of this regulation in its favor it has not yet switched off, because otherwise it would lose many listeners, like it happened in Norway**

Who will win? Who will lose?

- **The public broadcaster SRG/SSR wants to save the FM radio transmission cost of 15 million francs per year !**
 - The total funds of the SRG/SSR was in 2022 around 1.55 billion CHF
<https://www.srgssr.ch/en/who-we-are/funds>
- **The listeners will pay all this several times**
 - From 2019, the Radio and television licence fee became mandatory for all households
 - New DAB receivers for car and home must be purchased
 - Much more than 10 million* **perfectly working FM receivers** ** will become obsolete (which is very environment unfriendly...)
 - Their value is estimated at over 1 billion Swiss francs
 - Many existing navigational devices will no longer be updated with RDS-TMC messages and their adaptation to DAB+ with TPEG2 is technically not possible (and all these devices will also become obsolete and will need to be replaced)
- **What does the Swiss Automobile Club TCS say to all this?**
 - There is some concern since July 2021 that millions of cars will no longer receive traffic and travel info (TTI)

* This figure is estimated and represents only the order of magnitude: With 3.8 million households and 4.7 million registered cars this figure can be more than twice as high !

** That FM car radios produce a noisy audio signal is simply “fake news”, spread around by the SRG/SSR/RTS/RSI on 2021-06-04 in its 19:30 h tv news

The SRG/SSR was happily using FM for over 60 years !

- Only since 2021 all new cars in Switzerland **may have** a DAB tuner onboard
 - 300 000 new cars are being sold each year
 - **Thus, only after 2030 almost all cars are likely to have DAB+ in their Infotainment system**
- Swiss authorities pretend that
 - Old cars can use DAB adapters that cost only 50 Swiss Francs
 - This is simply misinformation caused by technical incompetence
- Car makers install Infotainment systems that contribute to road safety
 - It is not correct to encourage users to modify such systems
 - **FM and DAB+ radio functionalities for traffic and travel information to be automatically received are internationally standardized and totally equivalent**
 - **All car radios have a TI/TP/TA key to activate this functionality**
 - **TI: Traffic Information – TP: Traffic Program - TA: Traffic Announcement**
 - Car radios can be used to play own recorded or IP streamed music
 - **FM and DAB+ radios, both interrupt such music players with traffic announcements when TI is activated**
 - The loudness level of traffic announcements is pre-set high compared to the one used for other content

**Reflect yourself on the question
of whether Switzerland
is on the right way
to go for a total FM radio switch-off
in the
heart of Europe**

Over the course of 2017, Norway gradually switched off most of its FM transmitters. At the beginning of 2018, it became the first country in the world to complete the change of the radio standard.

- Since then, nationwide radio has only been available on DAB+.
- FM is only allowed for some local radio stations.

The consequences for radio are dramatic:

DAB transition in Norway contributed to radio losing listeners at a faster rate than in other countries.

This is contrary to its world unique objective in 2017 of replacing FM with DAB.

[Norwegen: DAB+ lässt Radionutzung einbrechen \(radioszene.de\)](https://radioszene.de)

Switching-off FM: Bavaria and Saxony agreed on **Forget it !!!**

Saturday 28 October 2023

Political Agreement Call Off FM Radio Switch-off in Bavaria

Strong industry opposition put an end to the media authority's plans

The threatened FM shutdown in Bavaria in 2025 is off the agenda, as evidenced by the coalition agreement signed on October 26, 2023 by the CSU and the Free Voters. The agreement states that they want to extend the FM frequencies until 2035. "FM will only be switched off when the financial viability of the private radio industry allows this," the parties write.



A big row about FM and DAB had arisen in the German state of Bavaria

<http://digitalradioinsider.blogspot.com/2023/10/political-agreement-stops-fm-radio.html>

UKW-Abschaltung ist Geschichte: Sächsischer Landtag hat Privatrundfunkgesetz verabschiedet

Von owy / 📅 Donnerstag, 21. März 2024 / 💬 0 / 📄 Nachrichten / 📁 Privatrundfunkgesetz, Sächsischer Landtag,

<https://www.flurfunk-dresden.de/2024/03/21/ukw-abschaltung-ist-geschichte-saechsischer-landtag-hat-privatrundfunkgesetz-verabschiedet/>

Digital Radio FM Insider

News and opinion about future FM radio, terrestrial and online digital radio broadcasting.

News

Q&A - Digital or FM

Broadcast Frequency Bands 2024

Documents & Press

Publisher Policy

Monday 20 May 2024

DAB radio without any government support in Sweden

Politicians reject demands for DAB expansion for public broadcaster. FM will remain as the major platform for radio.

The Public Service Committee, with representatives from all eight parties in the parliament, has now submitted its final report to the Minister of Culture. On many issues there was disagreement between the government side and the opposition, however, not regarding the question of a DAB expansion for public broadcaster Sveriges Radio (SR). All parties remained cold-hearted to break a 30-year stalemate regarding the DAB system as an alternative to terrestrial FM radio. Now, this might be the beginning of an end for DAB in Sweden. The public service channels have more than a 65 percent share of the radio audience.



Read the full article here:

<https://digitalradioinsider.blogspot.com/2024/05/dab-radio-without-any-government.html>

And this one from 2021:

<https://www.radioworld.com/global/is-there-any-good-year-for-dab>

- **No, not at all:** Almost everything in the transmission chain from broadcast studio to consumer receiver is already digital !
- Only the FM used on transmitters is analogue
- FM radio can now use enhanced metadata with RDS2
- RDS2 is an option, standardized worldwide since 2018, not yet fully implemented
- Implementation on the transmitter side with software only appears to be possible
 - This issue is currently under study by the RDS Forum
- RDS2 permits to add visual information to the radio programme:
 - Station logo
 - Slideshow with music cover art, fully synchronized with music items
- RDS2 permits also to achieve service following for connected cars
 - In this way the IP radio stream can significantly enlarge the programme service range

1. FM sounds better than the DAB+ currently broadcast (with minimum data rates)
 2. VHF has a slowly degrading fringe area and the received audio does not stop there suddenly
 3. FM is extremely cost-effective and used worldwide, both for broadcasters and listeners
 4. FM is broadcast on the most appropriate of all broadcasting frequency bands (Bd II)
 5. FM has additional digital functions/metadata that are in no way inferior to DAB+
 6. FM (although an analogue broadcast signal) can now be made digital from the studio to the software defined receiver
 7. FM broadcasting technology is simple and cheap and no one is dependent on a provider
 8. FM broadcasting technology is also cheap for individual program providers
 9. FM is significantly better than DAB+ for informing people in shelters in the event of a crisis or disaster
 10. FM transmitters (in Switzerland) consume only 2/3 of the electrical energy of all DAB+ stations
- DAB+ is an SFN system and therefore has no multipath propagation problems
 - DAB+ has more program channels than FM (is that really an advantage?)

This is a gain of 10:2 in favour of FM! Why doesn't the Swiss regulator see that?

To consider by politicians supporting the FM switch-off:

- https://www.theregister.co.uk/2018/05/22/digital_future_is_not_dab/
- <http://digitalradioinsider.blogspot.com/2018/03/the-impossible-mission-global-future.html>
- https://www.meinungsbarometer.info/beitrag/Haende-weg-von-UKW!_2814.html
- <https://www.presseportal.de/pm/6895/4036268>
- <https://www.radioszene.de/117361/norwegen-radio-armageddon.html>
- <https://www.radioszene.de/175031/dab-radionutzung-norwegen.html>
- <https://www.uplink-network.de/rollout-smartfm-in-deutschland/>
- <https://www.worldcastsystems.com/en/c66m374/press-release/germany-as-the-first-country-to-massively-roll-out-smartfm-taking-action-to-reduce-energy-costs-and-carbon-footprint>

- RDS Forum Members and our other professional contacts have reviewed this presentation for correctness
 - We used also a number of press publications as a reference
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- **Contact us at the RDS FORUM**
 - rdsforum@bluewin.ch
 - **Consult the RDS Forum web site**
 - www.rds.org.uk
 - **Do not forget what Karl Valentin once said**
“In the past the future was also better”

