WHITE PAPER OF THE FUTURE OF RADIO

June 2024

SUMMARY

Arcom
The Regulatory Authority for
Audiovisual and Digital Communication

CHAIRMAN'S EDITORIAL

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ROCH-OLIVIER MAISTRE
Chairman of Arcom

« The advantage of radio over cinema is that radio has a wider screen». This quote, attributed to Orson Welles, says it all about the evocative power of a medium that is now a hundred years old: the medium of the voice, of intimacy, the medium we listen to for information, entertainment and culture; the medium we prefer for musical discovery and mobility; the medium with which one in two French people start their day. A constant companion and privileged witness to our times, radio has continued to evolve and grow ever since the first programmes were broadcast from the Eiffel Tower in 1921.

In 2024, the French people's attachment to radio is still a tangible reality, as shown by studies into their media consumption habits. Radio also enjoys a high degree of trust from its listeners, an invaluable asset at a time when two evils are rampant: the manipulation of information and the fatigue born of the abundance of media on offer.

Faced with a revolution in usage, technological innovation, competition from new players and questions about the information and creative professions, radio is today confronted with structural challenges. These are raising legitimate concerns among operators about their audiences and their business model: in a word, their future.

While new vectors of potential growth have emerged and won over audiences, such as podcasts and connected speakers, they alone will not write the new chapter in the history of the radio medium. Only innovative broadcasting technology that improves listening quality, enhances pluralism of choice at a time when the FM band is saturated, and limits the environmental footprint of broadcasting, can enable radio to look to the future with confidence and optimism.

This technology already exists: digital terrestrial radio, or DAB+. Present in most of our European neighbours, it now covers more than 60% of the population of mainland France and has been trialled in overseas territories. Today, DAB+ coexists with FM, but this dual broadcasting generates significant costs for operators. Above all, it leaves the radio medium in the middle of the road, between a tried-and-tested technology that has reached its limits, and a new one that offers high added value but has yet to find its rightful place with radio professionals and the public alike, because it raises a number of questions: how can it be made better known? what tools should be used to measure its audience? what legal and financial arrangements should be put in place to support its roll-out?

61.1%

of the population of mainland France covered by DAB+ in March 2024

To move towards its future, the radio medium needs to move beyond uncertainty: that is the objective of this White Paper initiated by Arcom. In a context where the importance of IP listening is set to grow, the switchover of radio to all-digital broadcasting now seems both necessary and desirable, while ensuring that the sovereignty of terrestrial broadcasting is preserved. However, such a decisive deadline needs to be carefully prepared to ensure a successful transition for the benefit of all audiences and all radio stations. The French radio landscape is diverse, with a strong local dimension and a long history of public service broadcasting: each station has its own specific characteristics and all contribute to the richness of the national offering. No player should be left behind in the dynamics of the future.

This is why this White Paper proposes a clear strategy, based on an analysis of the needs and prerequisites to prepare for this migration, and on a trajectory and timetable that include several milestones. Drawing on the experience of our main European neighbours and a very broad consultation of the entire radio sector, it presents for public debate a coherent set of measures and actions to strengthen the resilience and economic solidity of the medium and, in particular, to create the conditions for migration to all-digital radio, IP and DAB+.

The mobilisation of the entire ecosystem, in concert with that of the public authorities, now seems essential to translate the path thus mapped out into action and enable radio to remain the medium of the heart. It is now up to those involved in radio to take collective ownership of the proposed strategy, in a spirit of shared responsibility. The broadcasting regulator will always be at their side to support them in their transformations, fostering an environment conducive to these changes and making available its expertise - but above all, its deep attachment to radio.

Roch-Olivier Maistre, Chairman of Arcom

SUMMARY

With close to 40 million listeners every day, radio represents an intimate part of everyday life for over 70% of the French population. Ever since this form of broad-casting was pioneered in the 1920s, radio has cemented its status as a mass medium. Every household has at least one device for listening to the radio, whether at home or on the move.
Radio is a powerful audiovisual medium in terms of the audience it attracts. However, its model is facing a number of challenges as the trends in radio audience metrics, listener media consumption behaviors, and broadcasting technologies.

This White Paper responds to the chorus of calls from industry professionals to adapt the radio model to its new environment and the changes sweeping the sector. It draws inspiration from the work carried out in other European countries, especially the Digital Radio and Audio Review published by the UK Government in October 2021.

To produce this White Paper on the Future of Radio, Arcom consulted extensively with industry stakeholders and the relevant government departments. Close to 30 hearings were held with radio service publishers of all categories and their representatives, service distributors, broadcasters, receiver manufacturers, Médiamétrie, DAB+ advocacy groups, experts, and the relevant public authorities. Hearings covered issues in both mainland France and overseas France. Foreign regulators and foreign players actively involved in switching from FM to DAB+ were also interviewed. To complement these wide-ranging consultations, Arcom carried out a number of legal, technical, and geographical analyses to objectivize and document the trends identified.

40
million
listeners
every day

RADIO IN FRANCE: A WEAKENED BUT RESILIENT MODEL

AN ABUNDANT AND DIVERSIFIED RANGE OF RADIO SERVICES WITH A STRONG LOCAL PRESENCE

There's an abundance of radio on offer. Nearly 900 radio stations are currently licensed to broadcast analogue services in mainland France, with over 210 in overseas France, and the number of applications submitted in response to calls for FM or DAB+ applications is continuing unabated. This situation can be explained by the spate of regulatory models and technological developments that have shaped the industry since 1921. Broadcasting, a State monopoly until 1981 despite the existence of so-called 'peripheral' radio stations, was definitively liberalized with the adoption of the law of 30 September 1986 on freedom of communication. In 1989, the CSA (French Higher Audiovisual Council) was created, which subsequently became Arcom (Digtial and Audiovisual Communication Regulatory Authority) in January 2022. By regulating the industry and awarding broadcasting licenses, Arcep aims to guarantee freedom of communication to the public while safeguarding choice and plurality, ensuring a diverse range of operators, and maintaining competition in the radio market.

After more than 40 years of regulated freedom, the French radio landscape stands out with its extensive range of content and strong local services; more than 800 of the 900 licensed radio stations are local, whether associations, independent commercial stations, or national network affiliates. This local dimension is a unique feature of the French radio landscape and makes radio in France more than anywhere else a tool for emancipation and social cohesion. There are also around 30 national radio stations, both theme and general interest, as well as 6 road safety and traffic information stations. Although public service radio continues to play a key role in the French broadcasting scene in terms of audience ratings and the number of frequencies used, it now exists alongside a sizeable contingent of private programs delivering a wide variety of content over several coverage areas. In overseas France, radio services tend to feature a more pronounced local bias than in mainland France, while the public service radio is limited to France Inter and Outre-Mer La 1ère.

This wealth of services is provided by many different publishers who vary in terms of size, the content broadcast, and their share of the audience and advertising market. On a national level, some audiovisual and multimedia groups broadcast several radio services and achieve a significant share of the audience. However, the market is fragmented with no single station dominating either the audience or the advertising market.

The French have historically been attracted to radio on account of its abundant choice and accessibility. This is borne out by the number of French people who listen to the radio and the length of time they do so: every morning at 8 am, more than 12 million French people tune into the radio at the same time, representing 22% of the population aged 13 and over. On average, a listener listens to the radio for 2 hours 40 minutes a day. Radio is also one of the country's most trusted sources of information and news.

9,000
frequencies
in mainland France

A RISING NUMBER OF BROADCASTING NETWORKS AND LISTENING DEVICES

The radio model is intimately related to advances in electronic communications technologies and the industrial products that are designed to support those technologies. The rising number of broadcasting modes and listening devices is an intrinsic part of the media industry's activity and continues to gain pace for radio as it has for television.

Radio broadcasting has moved from one dominant broadcasting standard, i.e., FM, to three «broadcasting» standards, namely FM, DAB+, and IP (Internet Protocol).

The FM network (the oldest) comprises 9,000 frequencies in mainland France, which are evenly divided according to the distribution of the population across the country and France's topographical features. It is reaching saturation point and is no longer capable of keeping pace with publishers' frequency demands despite Arcom's efforts to improve the system.

At the same time, the DAB+ network, which is being rolled out on both a metropolitan and local scale, and its audience are growing rapidly in mainland France. The legal and technical framework for this form of digital terrestrial broadcasting has been gradually developed since the mid-2000s, but its rollout has accelerated over the last five years under the impetus of successive Arcom roadmaps. DAB+ technology allows 13 radio services to be broadcast on the same frequency compared with just one per FM frequency. At the time of publication of this White Paper, 62.2% of the population of mainland France was covered by at least one DAB+ multiplex. However, the distribution of frequencies dedicated to DAB+ does not appear to be entirely suited to the needs of the sector as it stands. Overseas, there is currently no permanent DAB+ broadcasting, but three trials are underway.

Finally, live 'broadcasting' of radio services over IP, commonly known as webradios, some of which are only accessible on the Internet, has developed as the Internet has penetrated homes. The Internet has also made it possible to make radio programs and audio content never before broadcast available on demand (native podcasts).

The array of devices for listening to the radio has also increased while listening habits are changing. In addition to dedicated radio equipment such as car radios, clock radios, and transistor radios, listeners can also use multimedia devices including smartphones, televisions, PCs, and smart speakers. Overall, the

French own an increasingly large selection of devices: 99.1% of households had at least one radio device in 2023, with an average of 10.2 devices per household. That same year, 65.7% of radio listeners said that their first choice for listening to the radio was a dedicated radio device. However, the cumulative audience using multimedia devices is growing fast. Although still in the minority, that audience has risen from 5.8 million listeners in 2015 (11%) to 9.2 million in 2023 (16.5%).

MAJOR CHANGES IN USES

Radio is an essential medium: audience figures confirm radio's status as the best local medium by far. Radio is listened to throughout the country, especially in the smallest towns and rural communities. Radio is also the favorite platform for users on the move. Since 2011, the car has been the primary place to listen to the radio, while home listening has declined somewhat.

Despite this significant role, radio faces numerous challenges, not least the ongoing erosion of its audience. Since 2003, the overall daily cumulative audience has fallen by 14.5 points in mainland France, and listening time per listener has dropped by 18 minutes. This decline in audience is more pronounced among young people, particularly those born from the 1990s onwards, and especially for music and local radio stations.

These dynamic trends are tracked and analyzed using radio audience metrics, which are essential for gaining a clearer insight into radio's changes and determining advertising revenues for publishers. There are many existing metrics, primarily provided by Médiamétrie. However, they are mainly declarative and do not include, in a single indicator, the different types of listening according to time (e.g., replay[1]). These measurements, therefore, do not allow us to determine the contribution of each broadcast mode to radio listening. Developments are underway, especially in the form of personal portable audience measurements and watermarking[2], while other advances could be implemented to ensure a more comprehensive and explanatory set of audience measurements.

The erosion in audience numbers can partly be attributed to competition from new services and stakeholders, both within and outside the audio sector. Firstly, the internet's rapid development has fueled an extensive selection of on-demand audio content that competes directly with live radio. This content is often free and can be sourced from radio broadcasts (catch-up podcasts) or produced independently (native podcasts). While the overwhelming majority of people listen to live radio (accounting for 67% of the volume of free audio listening), on-demand listening is growing rapidly. But the success of catch-up services, which attracted some three million listeners daily in 2023, will not stem the tide of falling live audience numbers. Secondly, radio faces stiff competition from new audio content providers. Audio streaming services[3], which account for 21% of the daily volume of audio consumed, have seen their subscriber numbers increase eightfold within the space of eight years. They are narrowing the gap with radio in terms of audience figures and their ability to influence new music, while content aggregators are competing with radio stations in the distribution and availability of their services. Thirdly, radio's audience is being challenged by new non-audio media, particularly for news content, with the rise of 24-hour television news channels and social networks.

This new audio landscape raises questions about the adaptation of quotas for French-language songs. Such quotas are a major constraint for publishers but not for their new competitors. Another in-depth review could be conducted into the topic of exposure to music on the radio to reflect these profound changes.

A BUSINESS MODEL HAMPERED BY A SCISSOR EFFECT

Irrespective of their category, radio revenues are stable or slightly decreasing. Commercial radio stations primarily generate revenues from advertising, which is strictly regulated. This market,

€722
million in radio advertising revenue by 2023

1. Listening to a radio programme at a time chosen by the listener, generally after it has been broadcast, by making it available online. In radio, replayis also known as «catch-up radio».
2. Digital tattooing consisting of the insertion of audio markings inaudible to human beings in the sound stream but which can be identified by specially designed receivers.
3. Streaming services allow users to listen to or view content on demand. Audio streaming services are online music listening platforms.

worth €722 million in 2023, is on a downward trend, with net revenues falling by an average of 2% per year between 2012 and 2022. This decline, linked in particular to the fall in audience numbers, is driven by advertising on digital media. Digital audio advertising will account for €73 million in 2022, an increase of 53% compared with 2021. Moreover, the way the advertising market operates is criticized by a large proportion of the publishers interviewed. Some highlighted the risks associated with excessive advertising pressure, which can have negative effects on the audience. The mandatory general and specific information known as 'legal information' is often mentioned as contributing to a decline in the attractiveness of radio advertising. Without questioning the validity of these rules, radio stations are calling for legal notices to be adapted to their specific characteristics. Public service resources come mainly from public funding, supplemented by own resources which, since 2016, have included revenue from advertising. The public funding, which finances radio publishing as well as other activities, is guaranteed by multi-annual contracts for objectives and resources, which are currently being renewed. For Radio France, it has fluctuated between €570 million and €590 million per year since 2011. Finally, as far as community radio stations are concerned, their business model primarily relies on subsidies from the Ministry of Culture's aid scheme for radio broadcasting. Despite the contraction in advertising revenues, diversification of radio revenue sources remains very weak.

At the Same Time, radio stations are locked into increasingly rigid cost structures, especially smaller providers. It is challenging for Arcom to objectively assess the changes in publishers' costs, as it does not have access to the analytical and harmonized accounting data from the licensed radio stations. However, some trends can be gleaned from the confidential data provided by certain publishers. Regarding operating costs, smaller publishers are more affected by rising energy prices and salaries. They have little room for maneuver, unlike large groups that can harness synergies between their audiovisual activities. For some players, broadcasting costs have slightly decreased on average in the radio market, contrary to the assumption of an overall increase linked to inflation. However, this observation needs to be qualified, as rates depend on the publisher's size and bargaining power, its ability to self-broadcast, and the degree of competition from other broadcasters in the area concerned. Broadcasting costs are also inflated by dual broadcasting, whose effects are expected to become more pronounced.

One of the repercussions of the scissor effect on the radio business model is the growing trend of «co-broadcasting» television and radio programs. Almost all multimedia groups use this model to varying extents, mainly for news programs. However, co-broadcasting is more about economics than editorial content and raises questions about choice and plurality, program diversity, and stations' individuality.

> A review of the industry in France reveals radio's strengths, namely its resilience, its abundant choice of services, including local content, and its loyal and majority audience throughout the country. The review also identifies the model's weaknesses, which could be accentuated if the status quo is maintained. Therefore, it is vitally important to gear the French radio model towards the new trends shaping the sector.

THE ESSENTIAL NEED TO ALIGN THE RADIO MODEL WITH THE CLEARLY IDENTIFIED CONDITIONS FOR SUCCESS

FACED WITH THE RISK OF BEING SQUEEZED OUT BY IP, THE BROADCASTING MODEL NEEDS FURTHER MODERNIZATION

Although the audience for radio on digital media is still in the minority (20% of all listeners in 2023), it is growing (+63% in five years) and carving an ever-stronger foothold in the radio scene. By 2023, over nine million people (or 17% of the population) were listening to the radio every day over the internet, compared to 11% in 2015. The continuing gradual shift from broadcasting to IP listening will persist if the status quo remains unchanged, i.e. if no changes are made to the underlying legislative, regulatory, and economic aspects of the radio market.

IP, on which listening and new uses are increasingly based, will necessarily play a central role in the modernized radio model. However, it is not desirable for this listening mode to dominate or replace terrestrial broadcasting: while terrestrial radio broadcasting is robust, efficient, accessible to all, free to listeners,

Digital audio advertising:

€73

million in 2022,
en 2022 soit une
up 53% on 2021

24.5%

of individuals equipped with a DAB+ receiver

and transparent, its gradual displacement by IP would entail several risks for the sustainability of the radio model as well as for publishers and citizens. For publishers, a dominant position for IP would mean a proliferation of intermediaries (voice assistants, audio content aggregators, smart speakers, and in-car infotainment systems) between radio and its listeners. These intermediaries could take advantage of their market power by charging for broadcasting, discoverability[4], or referencing certain radio stations, transforming themselves into veritable 'gatekeepers' to radio. For the public, 'all-IP' broadcasting would call into question the accessibility and free nature of radio, as well as its anonymous nature. This trend would also have consequences in terms of sovereignty, both in terms of the protection of the public and personal data and the independence and effectiveness of the audiovisual regulation carried out by Arcom.

To manage these risks, it is essential to develop a system where broadcast and IP platforms offer complementary services, rather than pitting them against each other. To strike this balance, efforts must be made to increase the appeal of terrestrial radio. However, modernization is the main way to boost its appeal, especially by migrating to DAB+, which offers undeniable comparative advantages over FM and IP.

Digital terrestrial radio in DAB+ not only maintains a direct link with listeners but also avoids saturation of the FM network, breathing new life into terrestrial broadcasting. In the 17,000 or so towns and villages currently covered by DAB+, the average gain in the number of radio services received compared to FM is 22, and this figure is set to rise even further. DAB+ broadcasting also has the ability to deliver a wider range of services than FM with more uniform coverage across mainland France. In addition to this strategic advantage, DAB+ enhances the user experience. Sound quality is increased, on-the-move listening is guaranteed through continuous mobile reception, and radio interfaces feature a more ergonomic design, particularly with alphanumeric screens on all DAB+ devices. DAB+ broadcasting also allows publishers to improve their bottom line through lower broadcasting costs. For national radio stations, the opportunity to extend their coverage also equates to a potential increase in advertising revenues.

Finally, the digital terrestrial broadcasting model offers superior environmental performance compared to FM broadcasting.

A RADICAL TRANSFORMATION WITH THE NEED TO BRING RISKS UNDER CONTROL

Migrating to a terrestrial broadcasting model powered by DAB+ technology is a major transformation, and the hearings conducted by Arcom highlight potential risks. To avoid any pitfalls, risks must be anticipated and managed. In particular, they relate to the business model used by the radio industry stakeholders, the cost of change for consumers, the dynamics of market concentration, and equal access to radio in different regions and communities.

1 / Business Model Repercussions for Industry Stakeholders. As far as publishers are concerned, the main issue with DAB+ frequencies is planning, which appears to be less compatible than the current FM planning model with the practice of «opting out» (broadcasting programs or advertising screens that are specific to one area and therefore separate from those broadcast in other areas). Most of the allocations in the DAB+ planning layers comprise several FM areas. However, the possibility of performing opt-outs plays a decisive role in the business model of certain local radio stations and benefits from subsidies or optimizes their advertising revenues. Additionally, the size of DAB+ allocations is not always consistent with the editorial policies of certain types of radio stations, while traffic information and road safety radio stations are so specific that they would require planning arrangements tailored to their needs.

For broadcasters, whose continued activity is essential to the sustainability of terrestrial broadcasting, the necessary redirection of long-term investment towards DAB+ infrastructure has not yet begun: new investment dedicated to FM infrastructure is even planned for 2024, with a payback period of more than 10 years. Moreover, the profitability of publishers and the attractiveness of DAB+ rates depend on the extent to which broadcasting infrastructures are shared between broadcasters: at TDF and Towercast, the two main broadcasters, DAB+ is essentially being rolled out on sites that already exist for FM and DTT. As things stand, a switch to DAB+ broadcasting for the most part could lead to a drop in revenue or an increase in broadcasters' tariffs.

Transiting to a modernized DAB+ broadcasting platform could also have consequences for receiver manufacturers. Since 2020, DAB+ reception capability must be built into vehicles equipped with car radios marketed in the European Union. However, this does not prevent car manufacturers from producing vehicles offering internet-only radio access, which some manufacturers have already contemplated. When it comes to receivers other than in-car radios, the law requires DAB+ compatibility only for new devices equipped with alphanumeric screens. However, entry-level DAB+ compatible receivers are more expensive than FM sets in the same range. Modernizing the terrestrial broad-

4. The ability of a content or service to be found among a vast array of content or services without a user's search being specifically for that content or service.

casting scene could push radio receivers out of the low-cost market segment currently occupied by certain FM receivers.

2 / Financial and Immaterial Burden on Listeners.
Switching over to DAB+ will require listeners to shoulder the financial and immaterial burden of upgrading their equipment. As of 2023, only 24.5% of the population aged 13 and over had a DAB+ enabled device. Encouraging the remaining three-quarters of individuals to procure a DAB+ device could face three difficulties: (i) a slower rate of renewing their equipment compared to televisions; (ii) the higher average cost of DAB+ receivers compared to FM receivers; and (iii) a significant immaterial cost for the most loyal listeners, due in particular to the generational effect and the lack of promotion about DAB+ broadcasting.

3 / Market Competition Dynamics
The possible consequences of the transition in terms of competition in the radio market must be anticipated. The economic context is already favorable to concentration, and the transition to a new model could lead to a reconfiguration of the landscape and reinforce this dynamic. It would be desirable for sector-specific anti-concentration rules to be stabilized before the transition to a new broadcasting model. The adaptation of these regulations could be envisaged in line with the recommendations recently made by the Inspectorate General of Finance and the Inspectorate General of Cultural Affairs.

4 / Equal Access to Radio in Different Regions
Transiting to a DAB+ terrestrial broadcasting model must not widen any radio coverage disparities between different regions. It is necessary to precisely characterize the territories that could be weakened by the transition to 'all DAB+' broadcasting and see their access to terrestrial radio restricted, in order to design specific support for them, if necessary. In overseas France, introducing DAB+ in areas where few radio stations are licensed to broadcast FM services must not have the effect of weakening the whole of the local radio landscape.

CONDITIONS FOR OPERATIONAL SUCCESS CLEARLY IDENTIFIED BY THE INTERVIEWEES

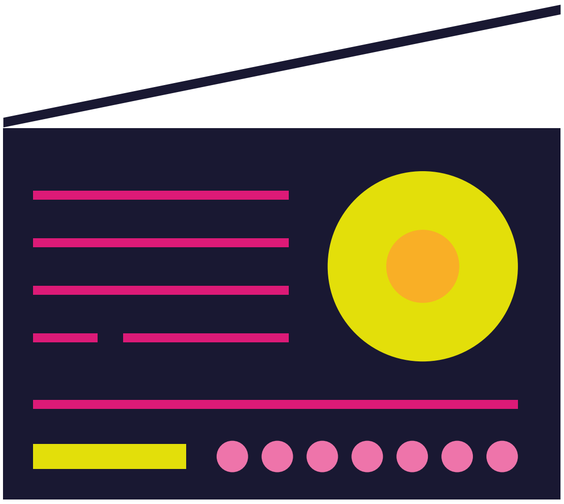
Arcom interviewed a broad range of members from the radio industry in France and abroad, ensuring a representative cross-section of the industry and taking into account their diverse opinions and situations. During each discussion, the issue of the future of the FM network was raised, along with the prerequisites for potentially transitioning to an all-DAB+ platform and the ensuing switch-off of FM. Six universally accepted prerequisites emerged from the hearings:

1 / . A Progressive, Coordinated Method and Timetable
Radio players, including the most proactive, almost unanimously agree that it would be premature to set a date today for the switch-off of FM. They emphasize the need for a gradual, coordinated approach to determine a shared vision of the process leading to the end of FM broadcasting. Public service broadcasters have taken a proactive stance on migrating to 100% digital broadcasting. The position of commercial radio stations varies depending on their size, category, and extent of DAB+ deployment: national radio stations are mostly in favor, while groups owning local stations, publishers of local or regional stations, and community radio stations are more reserved at this stage. There is consensus among French players, supported by European case studies (Belgium, United Kingdom, Norway, Switzerland), on the following points:

- A timetable spread over several years with intermediate objectives and review clauses before deciding whether and when FM should be phased out.
- The need for a market-initiated or market-supported transition.
- The importance of close coordination between the industry and public authorities in setting deadlines.

99.1%

of households equipped to listen to the radio



4 / A Sufficient Level of User Equipment

As of 2023, a quarter (24.5%) of individuals aged 13 and over said they were equipped with a DAB+ receiver. Of the 77.4% of people with car radios, 17.6% had a DAB+ compatible car radio, an increase of 3.4 points over the last two years. Stimulating an increase in the number of DAB+ receivers in France can be achieved through:

- Legislative changes making it compulsory for all new receivers to be DAB+ compatible.
- Ambitious multi-channel marketing plans targeting consumers and distributors.

Regular communication operations by Ensemble pour le DAB+ association, modeled on Belgian, German, and Dutch examples, including advertising campaigns, training for sales forces, and promotional campaigns in collaboration with distributors.

2 / A Review of DAB+ Frequency Planning

Local radio stations (categories A, B, and C) and traffic information and safety radio stations have highlighted the need to align DAB+ frequency planning more closely with current FM planning. Optimizing DAB+ planning with constant resources is necessary but not sufficient on its own. FM planning includes 931 zones in mainland France, whereas current DAB+ planning groups these into just 205 local allotments. Additional frequencies for DAB+ broadcasting are essential. Planning for Channel 5A should be initiated, considering its potential impact on the Ministry of the Interior's services. Channels 12B, 12C, and 12D could be assigned to radio broadcasting across mainland France, as in other countries, to make DAB+ planning more granular without being economically unsustainable.

3 / Increased Awareness of DAB+

According to WorldDAB, spontaneous awareness of DAB+ technology will only reach 4% in France by 2023. The Digital Barometer shows that just over a quarter of French people (28%) have heard of DAB+, with 11% able to say exactly what it is. While these figures are purely declarative, awareness of DAB+ needs to be substantially raised for successful migration to fully digital broadcasting. National associations promoting DAB+ play an essential role, as illustrated by examples from Switzerland, Belgium, and Germany. In France, the Ensemble pour le DAB+ association, created in 2022 by the Bureau de la Radio, Radio France, and SIRTI, in partnership with the Ministry of Culture, is key to this effort.

5 / A Sufficiently High Digital Audience Share

The fifth prerequisite is guaranteeing a minimum digital audience before any migration to all-digital radio. This digital audience represents the 'non-FM' audience, i.e., the sum of DAB+ and IP audiences. Thresholds have been set in Switzerland (65%) and Norway (50%). Achieving a minimum digital audience threshold requires measuring the audience according to broadcasting method and continuing the rollout of DAB+ across the country.

6 / Adequate Support from Public Authorities

Lastly, radio industry professionals call on public authorities to support the industry throughout the transition process. Most stakeholders would like to see an ad hoc aid or support scheme to encourage the population to switch to an all-DAB+ model, similar to existing aid schemes for radio or the media in general. While replicating press aid schemes for the radio sector is unlikely, support mechanisms implemented during the health crisis for the audiovisual sector could inform the development of schemes to support the DAB+ switchover. The transition to all-digital television is a successful example of public support, with relevant principles including shared organization and budget between public and private broadcasters and the State, proactive and diversified communication campaigns, and specific support for the most vulnerable areas and households. Various public support schemes at different industry levels could facilitate the migration to DAB+.

In conclusion, it is essential to adapt the radio model to the new dynamics it is undergoing to achieve a balance and complementarity between listening to radio via terrestrial DAB+ broadcasting and via IP. For the migration to fully digital radio to be successful and inclusive, certain risks will need to be anticipated and managed. The prerequisites have been clearly identified, and there seems to be a consensus within the radio industry: a gradual, coordinated method and timetable to establish a shared vision for the widespread adoption of DAB+, a reorganisation of local DAB+ planning, and an increase in DAB+ awareness are essential to achieve a sufficient level of digital audience and listener equipment. Radio stakeholders are calling for public authorities to support the industry throughout the transition

WHAT PATHWAY CAN BE USED FOR A BALANCED MODERNIZATION OF RADIO?

Arcom is proposing a two-phase trajectory, aiming to achieve predominantly digital broadcasting by the end of 2033:

- Phase 1: Preparation (2024-2027)**: Establishing a balanced radio ecosystem within a legislative and technological environment that facilitates continued digitization under optimal conditions.
- Phase 2: Migration (2028-2033)**: Completing the transition to a digital broadcasting model, six years after the preparation phase and nine years after the publication of the White Paper in 2024.

Each of Arcom's recommendations identifies the relevant stakeholders and the legal channels required for implementation. Most actions are interdependent and need to be executed in a coordinated manner.

1. IN THE SHORT TERM (BY THE END OF 2027), CREATE A CONDUCTIVE ENVIRONMENT FOR MIGRATING TO THE RADIO PLATFORM OF TOMMORROW

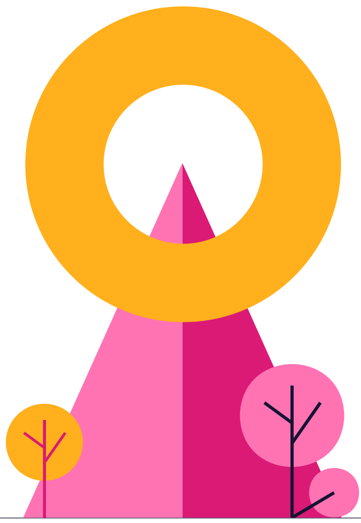
The hearings and analyses conducted by Arcom for this White Paper highlight the need to measure and better understand short-term developments in radio to ensure that any model changes are based on objective, accurate, and shared data. This first phase will allow Arcom and relevant authorities sufficient time to assess the opportunity and conditions for implementing the desired adjustments in terms of planning and regulation. Ultimately, it will be a phase for projecting towards a modernized radio model, with extended industry governance responsible for promoting DAB+ to increase awareness, usage, and equipment levels.

1.1. Reduce unbalanced regulations within the audio sector

- The recommendation is to simplify and streamline certain types of legal information by reviewing the specific details required of advertisers and launching a broader debate on simplifying advertising rules, such as conditions of access to local advertising (decree of 9 November 1994).
- Simultaneously, the regulation governing the quota for French-language songs should align with the new audio landscape. Arcom recommends analyzing ways to adapt radio stations' quotas of French-language songs to changing usage patterns and the emergence of new music radio formats on DAB+.
- The status of distributors and the regulation of digital audio should also be modernized, including at least a review of the issues involved in maintaining a balanced relationship among various players.
- Finally, the rules on concentration within the radio sector should be adapted to the new audio landscape, characterized by the rise of digital technology and increasing synergies within multimedia groups.

1.2. Improve the measurement and understanding of ongoing developments in radio broadcasting

- It is essential to measure awareness of the DAB+ technology twice a year between the second half of 2024 and the end of 2027, particularly to determine where promotional campaigns are effective and make necessary adjustments.
- The Observatoire de l'équipement audiovisuel des foyers should be supplemented to provide a precise tool for measuring household equipment with DAB+ receivers (both domestic and automotive). This survey could be funded by Arcom or the government and conducted twice a year from the second half of 2024.
- Regular and reliable audience measurement by broadcast mode (FM, DAB+, or IP) is crucial. Comprehensive measurement is technically feasible but expensive. The market needs to be organized, and publishers should be encouraged to commission targeted measurements twice a year.



- To enable Arcom to analyze trends in broadcasting costs, it is recommended that Arcom collect analytical accounting data from radio stations, licensed multiplex operators, and, if necessary, broadcasters.

1.3. Review the FM and DAB+ planning model on a national and European level

- To enhance the current DAB+ network, Arcom could be granted more flexibility to accelerate the deployment of DAB+ by strengthening coverage requirements for multiplexes that have already been authorized, extending authorization durations under specific conditions, and expanding allotments that have already been partially tendered.
- In addition to ongoing optimization of the planning process, restructuring the DAB+ planning model is a top priority for the industry. To achieve this goal, several steps need to be taken. Firstly, relevant government services should take action by opening up all or part of channels 5A, 12B, 12C, and 12D to DAB+. Simultaneously, Arcom is committed to identifying alternative planning scenarios for the local DAB+ layer by 2027 to align it more closely with the local FM layer. This alternative planning model will necessitate new negotiations with France's neighboring countries under the guidance of France's National Frequency Agency (ANFR).
- Arcom is also proposing to initiate European negotiations on the conditions for «freezing» FM frequencies in anticipation of potentially phasing out all or part of the FM network. Several Member States have raised questions about the future of the released FM frequencies, but the matter remains unresolved at the European Union level.
- By 2027, Arcom will need to draw conclusions from the DAB+ trial in overseas France and prepare for its rollout if necessary, in coordination with public authorities.
- Arcom has committed to identifying any «dead zones» resulting from a transition to an all-DAB+ platform. Arcom's data could be cross-referenced with Arcep's internet coverage data to identify towns and villages that may lose access to FM, DAB+, or IP radio.
- Finally, in preparation for the migration of broadcasting to DAB+, Arcom will need to cease seeking new FM frequencies once the final general call for FM application under the 2021-2026 roadmap has been launched.

1.4. Transform the *Ensemble for DAB+* asssociation to lead the sector's transition and governance

Whatever its format, a governance body is key to ensuring a successful transition to the DAB+ model. It must encompass the entire industry, feature a high level of representation, organize regular discussions, and maintain close ties with the regulator and the Ministry of Culture. In France, the Ensemble for DAB+ association could step into this role, provided that changes are made to its composition, purpose, and operation.

- It would be essential to broaden the association's members so that they are more representative of the industry, by bringing on board the unions representing community radio stations, as well as publishers, device manufacturers, and Médiamétrie. Its links with the public authorities could also be reinforced.
- To act as a real driving force for the DAB+ transition, the association should also widen its purpose, which is currently focused on communication as a simple «interface for exchange,» and align its articles of association with the new objectives of the White Paper.
- This new role would also require the association to employ permanent human resources and bolster its own resources, particularly through an additional contribution from the State, subject to the association's effective transformation.

1.5. Stimulate and promote the adoption of the DAB+ model in terms of receiver ownership and listening habits

- Starting from the second half of 2024, a marketing plan targeting consumers and distributors should be implemented to encourage households to acquire DAB+ receivers. This plan could take inspiration from initiatives carried out by other European countries and the France Télé Numérique public interest group.
- Simultaneously, a series of multi-channel advertising campaigns should be launched at both national and local levels. The campaign initiated in January 2024 by the Ensemble pour le DAB+ association should be continued and strengthened, focusing on the benefits of DAB+ for users. It is recommended to diversify advertising media, both digital and physical, drawing inspiration from campaigns in other European countries. In terms of resources, the association's public and private members could offer free airtime based on volume commitments even than the value of airtime.

2. IN THE MEDIUM TERM (BETWEEN 2028 AND LATE 2033), SUPPORT STAKEHOLDERS IN TRANSITIONING TO THE RADIO BROADCASTING MODEL

The medium-term deadline proposed by Arcom is the end of 2033, which is 6 years after the end of the preparation phase and 9 years after the publication of the White Paper. This second phase of migration will involve a shift towards a predominantly digital broadcasting model. Arcom's proposals include targets for the DAB+ receiver ownership rate and audience figures, which are two prerequisites identified by industry professionals for the FM switch-off. Arcom has also outlined detailed budgetary and legal support mechanisms that would facilitate the achievement of these targets within six years. Most of these systems will rely on the measures and actions taken during the first phase of the process.

2.1. Achieve a DAB+ receiver ownership rate of 70% (homes and cars) by 2033

Attaining a minimum ownership rate for DAB+ compatible receivers in homes is an essential prerequisite for migrating to a DAB+ broadcasting platform and the implementation of an FM extinction plan. Therefore, Arcom is proposing to set a clear, shared objective of achieving a 70% ownership rate for DAB+ compatible receivers by 31 December 2033. This rate of 70% should be seen as an overall rate, including homes and vehicles. To reach this target, several actions could be spearheaded between 2028 and 2033 and fine-tuned to reflect the results achieved in 2027.

- The marketing plan launched in 2024 to encourage the French to buy new devices will need to be continued and stepped up if necessary. The actions, including their location and frequency, must take account of the receiver ownership measurements performed by Arcom every six months since 2024; some areas, for example, may require special communications.
- If the rate of household equipment proves to be too low by the end of 2027 to achieve the target of 70% DAB+ equipment by 2033, this could justify public support for the drive to equip households. This support could take the form of an additional financial contribution to the Ensemble pour le DAB+ association.

2.2. Continue promoting DAB+ with the aim of achieving a minimum digital audience of 50% by 2023

- Based on the Swiss and Norwegian models, it would appear necessary to set a minimum digital audience target for 2033, i.e., an overall «non-FM» audience threshold (the sum of the DAB+ and IP audience figures). Arcom proposes setting this target at a minimum of 50%. To reach this target, the multi-channel campaigns launched in 2024 to promote the merits of DAB+ must continue.

2.3. Implement public support schemes to assist with the transition, if warranted by the measure taken up to 2027

- If aid is needed to support publishers in light of the quantified and objective figures gathered by Arcom, the Ministry of Culture could introduce budgetary aid for dual distribution. This aid, which would be temporary, degressive, and conditional, could be based on the system introduced by Switzerland and should be linked to the increased subsidy paid to category A radio stations. The quid pro quos to which the beneficiary radio stations would commit would aim to accelerate the abandonment of FM broadcasting and the migration to DAB+.
- If necessary, the State will also need to provide support to communities identified as weakened by the switchover to DAB+, where neither DAB+ nor FM, or even possibly IP, would be available. To guarantee continuous terrestrial reception and avoid any regional disparities, aid schemes for these communities could be developed, similar to those for the switchover to all-digital television. Small-scale DAB+ technology could be tested in voluntary communities.

2.4. Roll out the new DAB+ planning model on its renewed foundations before the end of 2027

- From 2028 onwards and where practicable, the new planning model for the local DAB+ layer will have to be implemented even closer to the local FM planning model than is currently the case. Deployment of the new DAB+ planning model can only be phased in and must take place throughout the second phase of the pathway. It will be carried out to coincide with the process of inviting applications for DAB+ broadcasting licenses.

2.5. Preparing for FM switch-off

In any event, the decision to switch off FM in mainland France and the procedures for doing so can only be taken at the end of the two phases of the trajectory proposed by Arcom, i.e., in 2033, or closer to that date if a majority of the proposals put forward by Arcom have been implemented cumulatively.

- During the migration phase, Arcom may begin to 'freeze' the reallocation of certain FM frequencies, if necessary, at the request of the publishers operating them.
- The public authorities will also have to draw up a plan for the switch-off of FM once the above-mentioned prerequisites have been or are about to be met. The date and details of this migration (total or partial extinction of FM, criteria for justifying the maintenance of FM broadcasting, organization, timetable, and final support measures) can only be defined once the transition is well underway. This is why it seems essential to provide for frequent review clauses during the second phase outlined in this White Paper.

Over

1,100

licensed FM radio stations
in France

Summary of the White Paper's recommendations for a balanced modernisation of radio in France

	Stakeholders concerned	Legal instrument
1.1. In the short term (by the end of 2027), create a conducive environment for migrating to the radio form of tomorrow		
1.1. Reduce unbalanced regulations within the audio sector		
Simplify or even streamline certain types of legal information	Ministry of Culture, Ministry of the Economy, radio publishers and their representatives.	Statutory or regulatory
Align quota regulations with the new audio landscape	Parliament, Ministry of Culture, Arcom, SACEM (Society of Authors, Composers and Publishers of Music), SNEP, UPFI, CNM (National Music Centre), radio publishers and their representatives.	Statutory
Modernise distributors' status and the regulation of the digital audio sector	Parliament, Ministry of Culture, Ministry of the Economy, Arcom	Statutory
Align anti-concentration rules with the audio landscape in the digital era	Parliament, Ministry of Culture, Ministry of the Economy, Arcom, ADLC (Competition Authority)	Statutory
1.2. Improve the measurement and understanding of ongoing developments in the radio broadcasting scene		
Measure awareness of the DAB+ technology twice a year between the second half of 2024 and the end of 2027	Association Ensemble pour le DAB+, Arcom	
Create a system for measuring the number of households owning a DAB+ receiver and carry out the measurement twice a year from the second half of 2024	Arcom, Ministry of Culture	
Encourage publishers to commission audience measurements for each broadcasting platform (FM, IP and DAB+) at least twice a year from the second half of 2024	Publishers, Radio France, Médiamétrie	
Enable Arcom to analyse changes in broadcasting costs based on the analytical accounting data collected by Arcom	Arcom, licensed radio stations and multiplex operators, and potentially broadcasters.	

	Stakeholders concerned	Legal instrument
1.3. Review the FM and DAB+ planning model on a national and European level		
Launch negotiations on a European level on the prospect of «freezing» FM frequencies in the event of a switchover to DAB+	Ministry of Culture, Ministry of the Economy, Permanent Representation of France to the European Union, General Secretariat for European Affairs, National Frequency Agency	Amendment of French law, communication from the European Commission or amendment of the European Electronic Communications Code
Give Arcom more leeway in accelerating the roll-out of DAB+	Parliament, Ministry of Culture, Arcom	Statutory
Generalise the planning of channel 5A and study the reallocation of channels 12B, 12C and 12D to broadcasting	Arcom, Ministry of the Interior and Overseas France, Ministry of Culture, Ministry of the Economy, Ministry of the Armed Forces, National Frequency Agency	Order of the Prime Minister (amending the national frequency band allocation table), or amendment to the International Telecommunication Union's Radio Regulations
Identify an alternative planning model for the local DAB+ layer to bring it closer to the FM planning model and coordinate it with neighbouring countries	Arcom, National Frequency Agency	International agreements on frequency coordination
Identify any communities with zero coverage resulting from a switchover to an all-DAB+ platform	Arcom, in liaison with Arcep	
Draw conclusions from the DAB+ trial in overseas France and pave the way for its roll-out if necessary	Arcom, France Télévisions	
Stop looking for new FM frequencies once the 2021-2026 roadmap has been completed	Arcom, radio publishers	
1.4. Transform the Ensemble pour le DAB+ association to lead the transition		
Expand the membership of the Ensemble pour le DAB+ association	*Ensemble pour le DAB+* association, professionals in the extended radio sector	
Broaden the association's purpose and align its articles of association with the new guidelines set out in the White Paper	*Ensemble pour le DAB+* association, professionals in the extended radio sector, Ministry of Culture	Amendment to the association's articles of association
Ensure permanent human resources in the association to maintain its momentum	*Ensemble pour le DAB+ association*	
Increase the association's own resources	*Ensemble pour le DAB+* association, professionals in the extended radio sector, Ministry of Culture	

	Stakeholders concerned	Legal instrumente
1.5. Stimulate and promote uptake of the DAB+ model in terms of receiver ownership and listening habits		
Implement a marketing plan focusing on consumers and distributors to encourage households to procure DAB+ receivers	*Ensemble pour le DAB+* association, distributors, professionals in the extended radio sector	
Implement a wave of multi-channel advertising campaigns on both a national and local level	Arcom, *Ensemble pour le DAB+* association, Radio France	
2. 1. In the medium term (between 2028 and late 2033), support stakeholders in migrating to the radio broadcasting model		
2.1. Achieve a DAB+ receiver ownership rate of 70% (homes and cars) by 2033		
Continue, step up and, if necessary, adjust the marketing plan that was launched in 2024	*Ensemble pour le DAB+* association, distributors, professionals in the extended radio sector	
Implement, where appropriate, public support to achieve the 70% DAB+ device ownership target	Ministry of Culture, Ministry of the Economy	
2.2. Continue promoting DAB+ with the aim of achieving a minimum digital audience of 50% by 2033		
Continue promoting DAB+ with the aim of achieving a minimum digital audience of 50% by 2033	Arcom, Ensemble pour le DAB+ association, Radio France	
2.3. Implement public support schemes to assist with the transition, if warranted by the measures taken up to 2027		
Introduce a temporary, decreasing and conditional budgetary aid scheme from the State for dual broadcasting	Parliament, Ministry of Culture, Ministry of the Economy, Arcom	Statutory
Where necessary, support the communities that have been identified as weakened by the switchover to DAB+	Parliament, Ministry of Culture, local authorities, Ministry of the Economy, Arcom	Statutory
2.4. Roll out the new DAB+ planning model on its renewed foundations before the end of 2027		
Implement the new planning model for the local DAB+ layer	Arcom	
2.5 Preparing to switch off FM		
Start freezing the released FM frequencies in case of successful European negotiations or changes in related legislation	Arcom	
Once the prerequisites have been met, draw up a plan to extinguish FM, including if necessary a public support system to help the most vulnerable households procure a DAB+ receiver»	Parliament, Ministry of Culture, Ministry of the Economy, Arcom	

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