

## Management Summary

This study, “Terrestrial radio broadcasting: Future trends with regard to competing transmission routes”, deals with the options that will be available to the radio broadcasting market in Germany in the near future.

Terrestrial radio broadcasting in Germany currently hangs in the balance: on one side there is the well-functioning but technologically exhausted FM radio market which cannot accommodate any further providers or services due to the lack of free frequencies, and on the other side there is a so far small, relatively slowly expanding digital radio market with its associated technological opportunities based on DAB/DAB+.

In making our assessment of the future of terrestrial radio broadcasting, we consider various technical systems that are, in principle, suitable for the distribution of radio content and modern additional services as well as of traffic and travel information.

The systems are discussed and differentiated from each other on the basis of their technical properties. It turns out that the most advanced solution at present is DAB/DAB+, both regarding the variety and stage of development of services and the coverage of its networks.

At the same time the regulatory framework is analysed that must be taken into account during a transition from analogue to digital broadcasting.

The development of a market is always oriented first and foremost towards the fulfilment of market interests. This makes the situation in radio broadcasting a little more complicated, considering that public service broadcasting fulfils a constitutional mandate whereas the private broadcasters are commercial, profit-making enterprises. As a basic principle for the development of a market economical, technical and also legal aspects must mesh together such that all market participants are ultimately able to fulfil their function / interests.

The following three scenarios for the further development of terrestrial radio broadcasting are described:

1. Open market development

The radio broadcasting market continues to determine by itself to which extent a digitalisation takes place. There is no political involvement. As a result, the status quo is most likely to remain for the time being, unless individual relevant market participants act together to bring about a harmonized, concerted digitalisation.

2. Entry into a rapid, regulatorily initiated digitalisation

The politics, namely the German Federal Government and the Broadcasting Commission of the German Federal States (Rundfunkkommission der Länder), identifies the digitalisation of the terrestrial radio broadcasting as a national infrastructure measure, and submits a specific action plan and schedule for the full digitalisation of radio broadcasting. The associated required legal

groundwork is drafted accordingly. For this, Article §19 of the Interstate Broadcasting Agreement (Rundfunkstaatsvertrag, RStV) serves in the first place as the basis for the public service broadcasting. In parallel, a mandate from the Broadcasting Commission is to be granted to the Broadcasting Referents (Rundfunkreferenten) to develop the above mentioned legal groundwork. While doing so, it is important to ensure that the plurality of opinions across the radio landscape is preserved. This applies to both the public service broadcasting and the private broadcasters. Possible measures could be the exclusive sale of radio equipment with digital receivers or an improved DAB/DAB+ infrastructure. For this purpose it will be necessary to initiate appropriate need-based affirmative actions in accordance with applicable law.

The measures are accompanied by a joint Federal Government / State working group while involving the relevant interest groups.

The duration of the individual measures is to be reconciled with the intended objective of full radio broadcasting digitalisation in order to guarantee investment and planning reliability for all the parties concerned.

Finally, the FM radio requirement notifications are revoked by the responsible Federal State authorities without being reissued to other broadcasters. The revoked FM radio requirement notifications lead to the clearance of the corresponding frequencies.

### 3. Entry into a regulatorily initiated digitalisation at a later date

The politics identifies the digitalisation of terrestrial radio broadcasting as a national infrastructure measure, however, does not consider the necessary framework conditions to be in place at present. In this case, the technical developments must be monitored closely so as to be able to take a decision at the right time. Until this decision is reached, Scenario One applies; from that onwards activities must be developed analogously to Scenario Two.

Scenarios One and Three require no further impact analysis in the first instance since the status quo is maintained for the time being. For Scenario Two the potential impacts are described. The findings indicate that the considerable expenses accompanied with a rapid, regulatorily initiated digitalisation, e.g. for full network expansion or exchange of end-user equipment, will yet be opposed by manifold opportunities. For instance, it will allow expansion of the currently static radio market, yield cost savings for the network operators of up to 40% per channel compared to FM radio, and new commercial concepts will become feasible thanks to the up-to-date technology. The listeners will then also benefit from an improved and more comprehensive range of radio broadcasting services.