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OPEN NETWORK PROVISION COMMITTEE

Working Document

Subject: Regulatory Treatment of Digital Radio in the Member States

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Rue de la Loi 200, B-1049 Bruxelles/Wetstraat 200, B-1049 Brussel - Belgium - Office: BU33 7/11
Telephone: ONP secretariat (+32-2)299.01.82, switchboard 299.11.11. Fax: 296.88.75
Telex: COMEU B 21877. Telegraphic address: COMEUR Brussels.
Internet : infso-dbeg@cec.eu.int

A. BACKGROUND: DBEG[1] WORK ON DIGITAL RADIO

The market for digital radio is hardly taking off. Market players have requested greater support from national and European authorities. They claim that, whereas digitisation of radio is in the public interest, national authorities would be partially responsible for the difficulties and delays of the process. **The arguments of the industry** can be summarised as follows:

First, the appropriate conditions and **regulatory framework** for the development of digital radio are **not yet set in many Member States**.

Secondly, there are **substantial differences between Member States** in that regard. This is negative for the development of digital radio in all countries. Fragmented national regimes prevent the emergence of a sustainable European market for digital radio equipment. In particular, whilst national regulatory approaches to digital radio services largely diverge, manufacturers claim that affordable receiving equipment requires large production volumes and therefore the prospect of a pan-European market.

The industry claims critical mass is necessary for the success of digital radio in Europe. In order to avoid market failure, **converging national strategies must be implemented within a certain time frame**. This would require European co-ordination.

However, the legal **competence for radio is essentially national** or regional, not European. National/ regional competence implies that responsibility rests with Member States. This is the main reason why the Commission services submitted the issue to DBEG.

Digital radio was the subject of various DBEG documents (ONP-DBEG 01 – 07, 15, 15rev, 16, 27 and 27rev1) and was discussed at DBEG meetings on 31 January, 29 March, 12 June, 7 November 2001 and 31 January 2002.

In these discussions, national delegations expressed their concerns about digital radio difficulties and **DBEG agreed that a comparative overview of the situation in the EU Member States would be useful**. To this purpose, the Commission services drafted a questionnaire focusing on three areas under the responsibility of public authorities: regulatory framework; licensing; political strategy/encouragement measures. Member States commented on the draft questionnaire and suggested modifications and additions, which were incorporated to the document.

The results from this consultation are reflected in the present document, which covers phases b) and c) of the **three-step strategy for DBEG work on digital radio** proposed by the Commission services and agreed by DBEG at its meeting on 31.1.02:

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[1] *"Digital Broadcasting Experts Group"*, under the authority of the ONP committee.

a) Gather information and identify relevant issues.

b) Focus on relevant issues under the responsibility of public authorities (see above) compare differences in national approaches and draw the European picture.

c) Identify best practice regarding the relevant issues and possibly propose recommendations.

B. SUMMARY OF NATIONAL REPLIES TO THE DIGITAL RADIO QUESTIONNAIRE[2]

0. PRELIMINARY

The Commission services received 15 replies to its questionnaire on DR, 14 from DBEG members and one from a national delegation with observer status. The replies were summarised following the main headings of the questionnaire in the document ONP-DBEG 02-12. Exhaustive replies were compiled in an annex provided as a separate DBEG document (ONP-DBEG 02-13), ordered by questions and then by countries. These documents were presented at the DBEG meeting on 4 June 2002 and national delegations commented orally. Moreover, they were requested to submit written comments within a certain deadline.

The present document is an updated version of ONP-DBEG 02-12 which incorporates the comments from various Member States. No comments were received on ONP-DBEG 02-13, which therefore remains unchanged and becomes a separate ONP document.

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[2] The following country abbreviations are used: Austria **A**; Belgium-Flanders **B-V**; Denmark **DK**; Greece **EL**; Finland **FIN**; France **F**; Germany **D**; Ireland **EIR**; Italy **I**; Luxembourg **L**; Netherlands **NL**; Norway **NOR**; Portugal **P**; Spain **ES**; Sweden **SV**; United Kingdom **UK**.
Other abbreviations frequently used in this document are: 'DR' for 'Digital Radio', 'DAB' for 'Digital Audio Broadcasting', 'NRA' for 'National Regulatory Authority', 'FTA' for Free to Air.

1 REGULATORY FRAMEWORK

1.1 . Relevant measures

Three main groups of countries can be identified depending on the type of legal framework in place. A first group with detailed specific DR rules; a second group where, in the absence of a specific DR framework, general media/communications rules are also applicable to DR; finally there is a third group of countries having no legislation on DR but, in most of them such legislation is planned or already in preparation. For reasons of coherence and practicality we have also included in the analysis intended measures and objectives specific to DR, trying nevertheless to distinguish, as far as possible, reality from plans or intentions.

– Legislative measures:

- Specific DR legislation is in place in Sweden, Spain, Portugal and Italy[3]. Specific provisions on DR within general communications legislation in the UK, Belgium[4] Denmark and Germany[5].

- No specific legislation on DR in France (however a law exists on experimentation of information services which allows DR operations), Austria, Ireland, Norway, Finland, the Netherlands and Luxembourg, where general media/telecommunications law applies[6].

- Foreseen specific DR legislation: in Belgium/Flanders (when the additional T-DAB spectrum will be known, further to the spectrum re-planning Maastricht Conference in June 2002), Austria and Luxembourg (by the end of 2002).

– Implementing measures:

- DR frequency allocation: general frequency allocation regulation covering DR is mentioned in the replies from Italy, the Netherlands, Denmark, Germany and Portugal[7].

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[3] **SV**: Government Bill on Digital Radio Broadcasting, covering only media aspects and not telecommunications activities, **ES**: National Technical Plan on Terrestrial DR and Regulation on Terrestrial DR, **P**: Administrative Ruling , under general telecommunications legislation, on the operation of terrestrial DR networks, **I**: Regulation on radio broadcasting with digital techniques.

[4] The Belgium reply refers only to the Flemish Community.

[5] **UK:** Broadcasting Act 1990 (relevant sections: 40 to 72), **DK:** Danish Radio and Television Broadcasting (Consolidation Act), **D:** Radio Regulation and/or media laws of the Länder, **B-V**: Decrees on Radio Broadcasting and Television.

[6] **A:** KommAustria Act, Private TV Act and Private Radio Act, **EIR:** Broadcasting Act 2001, **NOR**: Broadcasting Act and Telecommunications Act, **FIN**: Act on Television and Radio Operations**, NL**: Telecommunications Act and Media Act.

[7] **I**: National Frequency Allocation Plan, **NL:** National Frequency Plan for Telecommunications, **DK:** Act on Radio Frequencies and **D**: within the general scope of Telecommunications Regulation. **P:** National Frequency Allocation Table and National Frequency Plan for Radiocommunication Services.

Specific regulation on frequencies for DR exists in Spain[8]. In Sweden frequencies are allocated according to the Wiesbaden and Maastricht allotments.

- Specific licensing regime for DR: In the UK (licensing schemes and related regulations on DR implementing the Broadcasting Act 1990, review foreseen before November 2003), Sweden, Portugal and Spain.

- Foreseen implementing measures: In Italy the NRA will approve the National Frequency Assignment Plan for T-DAB in June 2002 and will issue rules on the release of DR licences in September 2002. In Finland the Government is planning to regulate the use of frequencies for DR broadcasting. In Ireland initial frequency planning is being undertaken within the context of the CEPT planning meetings for T-DAB.

1.2 . Scope

- Elements in the value chain: DR regulatory measures in most countries address mainly transmission and associated technical issues.

- Transmission mode: Terrestrial transmission contemplated in Spain, Portugal, Germany, Belgium/Flanders, Austria, France and Sweden (between 50-100 web-radio stations not subject to licence also exist). In Luxembourg digital radio is already operative from geostationary satellites for fixed reception (non-geostationary satellites may be dedicated to digital radio for mobile reception in cars by 2005). In Denmark DR is also transmitted from satellite and distributed through cable. In the UK some services carried out on the digital multiplex are rebroadcast over cable and satellite (separate licence needed). Regulation on satellite DR services is foreseen in Italy and France.

– Services to be provided:

- FTA radio services: All national measures on DR envisage FTA services (particularly broadcasting content). Pay services or in-built interactivity only contemplated in the UK, Germany and Spain.

- Data services contemplated in the UK, Spain, Portugal, Germany, Italy, Luxembourg, Sweden and Finland –no licence needed. In Sweden licence needed under the Telecommunications Act when “data services” cannot be considered “broadcasting services” (e.g. individual one-to-one datacasting over digital radio networks).

1.3 . Aims, targets, deadlines, etc.

- Analogue switch-off expected between 2010-2015 in Denmark and in 2015 in Germany. UK considers it a medium-term objective. Spain has implemented some targeted migration strategies. No analogue switch off foreseen in the other countries.

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[8] **ES**: National Technical Plan on Terrestrial DR and Order approving plan of blocks of frequencies for local DR.

- Simulcast requirements in the UK (where 80% of the analogue material must be simulcast) in Portugal and Spain. Simulcast subsidisation for public broadcasters envisaged in Germany and Luxembourg.

1.4 . Technical issues

- T-DAB standard mandated in Norway, Italy (also S-DAB mandated) and Portugal. No mandation in the UK, France, Germany (as long as spectral mask ensured), the Netherlands, Finland, Sweden (where DAB encouraged by operators and DRM considered by a public broadcaster for international broadcasting) or Luxembourg (nevertheless encourages European and ITU standards). Germany wishes the implementation of a single European standard.

- Technical parameters for transmission. Detailed rules mentioned in replies from Norway, the Netherlands and Portugal (e.g. specific requirements for minimum usable field strength).

- No receiver requirement in any country.

– Service requirements:

- Bit rate: guidelines in Germany; in Sweden wish by broadcasters that no lower than 224kbit/s.

- Capacity: a minimum of 96 capacity units (c.u) in a total of 144 c.u granted to each broadcaster in the multiplex is imposed to the T-DAB network in Portugal.

- Capacity ratio content/data: 80/20 in the Netherlands, UK and Spain, maximum 10% in Denmark and guidelines in Germany. Portugal allows a maximum of 48 c.u. per program/broadcaster for data. In Sweden freedom for broadcasters to decide which capacity they want to allocate for each service/channel (this will depend on whether the broadcaster has an entire multiplex at its disposal); there is no spectrum capacity reserved for data. Rules on spectrum capacity for data are foreseen in Italy.

1.5 . Planning

- Territorial coverage objectives[9]: in the UK 86% (national multiplex) and of 80% (local multiplexes) by the end of 2002, with 63% receiving two local multiplexes. However, the UK considers that only 75% of the territory can be covered by terrestrial digital transmission (objective is achieving 95% from 2005 onwards through L Band and Band III). Belgium/Flanders expects whole coverage of the Flemish area after the expected decision on new T-DAB allotments in L-Band is taken in Maastricht Conference in June 2002. In Denmark full national coverage of T-DAB networks expected for April 2003 and regional networks coverage for 2004. In Spain national coverage of the 52 provinces is foreseen by 2006. Territorial coverage objectives are 60% in Italy and 90% in Portugal in 2006. In Luxembourg coverage to be widely

[9] Some countries express coverage targets in terms of population (see section 4.1).

decided by market actors (would welcome coverage by neighbouring countries multiplexes).

- Frequencies reserved for DR services in 10 countries[10]. SFN frequency planning is mentioned in replies from Italy, Finland, Germany and Belgium. Portugal and the Netherlands combine SFN with MFN.

- Multiplexes: Most countries have national (generally 6 programmes assigned) and regional multiplexes (some also local)[11].

1.6 . Financing issues: publicity, subsidies, pay services, other

- Pay-services (including data services): potential introduction envisaged in the UK, Spain, Germany and Luxembourg.

- Market competition: The UK, Germany, Denmark, Italy and the Netherlands in favour of increased competition that will come with greater programme offer and new entrants. UK favours creation of larger companies to provide variety of services (considering liberalising ownership rules in draft Communications Bill). Luxembourg considers competition as having a negative impact in the domestic market (pluralism is the priority).

1.7 . Content issue: copyright, cultural aspects, other

- Content regulation: in general, rules and licensing obligations applicable to analogue radio also apply to DR. Specific agreement on copyright in the UK with the PPL ('Phonographic Performance Limited', which represents artists and record producers) requiring a single small payment for new digital services (another with 'Performing Rights Society' envisaged) to serve as an incentive to DR. Otherwise general copyright laws apply.

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[10] in the UK 217.5-230 MHz; in Italy the channel 12 (223-230 MHz); in Portugal 216-230 MHz and 1452-1467,5 MHz; in France 1452-1467,5 MHz; in Sweden 215-240 MHz; in Spain and Finland 174-240 MHz; in Norway and Denmark 174-240 MHz and 1452-1467,5 MHz.; in Luxembourg 1467.5-1492 MHz (for satellite).

[11] National, regional and local multiplexes in the UK; 1 multiplex with national coverage in P (6 programmes); 2 multiplexes per area in D (6 programmes); 2-3 multiplexes in Luxembourg (6-7 programmes); 1 national and 2 regional multiplexes in NL and DK; 3 local multiplexes in F (between 5-7 programmes each); 1 national multiplex (6 programmes) and 19 regional (1-2 programmes) in SV; 1 national and 1 regional multiplex in FIN; in ES 1 national multiplex (6 programmes), 2 regional (up to 3 programmes) and local multiplexes in each region.

2. LICENSING

2.1. Awarding Process

- Specific DR licensing regime in place in the UK, Spain and Portugal, and foreseen in Italy (September 2002).

- Various authorities involved in licensing awarding process, either under general media licensing regime or DR specific regime. The Radio Authority is responsible in the UK. In other countries broadcasting/communications authorities (in most cases there are no separated authorities for broadcasting) award licenses themselves[12] or in collaboration with governments[13]. Governments issue licences in Luxembourg, Spain (Secretary of State for Communications), Finland and Sweden. Also there are regional authorities involved in Italy, Spain and Germany.

- DR licences only for programme operators in Norway, Sweden (automatic licence for public broadcaster and awarding process for private broadcasters), Denmark, Germany, Spain and Luxembourg.

- Licences for multiplex operators (national/local) and programme operators in the UK, Portugal (the programme operators can access the DR network as an extension of their analogue licences) and Finland (to be awarded in 2002). In the Netherlands licence to a consortia including multiplex operators, network and service providers (automatic licence for public broadcaster). Italy also foresees creating a consortium and awarding licences for content, network and service operators. Luxembourg will issue authorisations for multiplex operators.

- Beauty contest procedures in all countries that have replied. No licence fees are charged except for administrative fees in Portugal and Finland, and an annual fee for use of transmitters in Sweden. Fees envisaged but amount yet to be determined in the Netherlands and Denmark (where a fee is planned for commercial broadcasters but not before 2005).

2.2. Licence's characteristics

- Scope of licences varies according to the country and in some of them is currently under study (Italy and the Netherlands). In Spain, the UK and potentially in Luxembourg, apart from traditional radio services it also covers additional services.

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[12] Vlaams Commissariaat voor de Media in Belgium/Flanders, Austrian Communications Authority (KommAustria), Regulatory Authority for Telecommunications and Post in Germany, Conseil Superieur de l'Audiovisuel (CSA) in France, Danish Radio and Television Board in Denmark and the Broadcasting Commission of Ireland (BCI).

[13] Autorita' per le Garanzie nelle Comunicazioni in Italy (AGCOM), Alta Autoridade para a Comunicacao Social –AACS in Portugal (for conducting of radio activity), the Mass Media Authority and the Norwegian Post and Telecommunications Authority in Norway.

Analogue radio obligations (e.g. quotas, daily news, supply requirements, obligations in the case of public broadcasters) also apply to DR.

- National, regional or local territorial scope depending on the type of multiplex. There are national, regional and local multiplexes in Spain; Germany, the Netherlands, Denmark, Sweden and Finland have both national and regional multiplexes; national and local multiplexes in the UK and national coverage in Portugal (one multiplex) and Luxembourg (2-3); finally, France mentions a limited local territorial coverage for several licences.

- Length of licences also varies: 4 years in Sweden (automatically renewed), 5 in Denmark and France (not renewable), 10 (for programme licences) and 20 (for multiplex) in Finland (no automatic extension), 10 in Norway (renewable but not automatically and depends on fulfilment of conditions), 12 years in the UK (sine die for sound programme services and automatic renewal for digital multiplex) and 15 years in Portugal, Germany (no automatic extension) and the Netherlands (renewal to be determined).

2.3. Awarding criteria

- Specific criteria for DR are introduction of innovative attractive services, diversity in programmes and broader offer. Analogue radio licensing criteria (pluralism, financial capacity) also apply to DR. In 5countries (France, Finland, Sweden, Norway and the Netherlands) the public service broadcaster has been given priority. In the UK local analogue commercial broadcasters enjoy an automatic extension for 8 years of their programme licence if they commit to provide digital services. Luxembourg will give priority to existing national stations and analogue radio programmes. Criteria to be determined in Denmark.

2.4. Licensing obligations

- Obligation of national (or quasi) coverage in Portugal, Norway and the UK (only for the national multiplex, no requirements or roll-out targets for local services). Licences in Germany include rules on digitalisation, multiplexing, codifying and transport.

- Ownership rules in France (restrictions in terms of the population reached by the same licensee), Sweden (if there is competition on available licences no candidate will be allowed more than one), Norway (ownership limited to 33% stake for a single shareholder), Belgium/Flanders (general media law restrictions apply) and Germany (partly differ on each Länder). In the UK it is planned to soften media ownership rules, while protecting pluralism, maintaining a “three plus one” rule in the digital age (three commercial local radio service providers plus one State provider). No ownership constraints for S-DAB in Luxembourg.

- Must carry obligations in the UK (analogue independent national radio stations have must-carry status on the national multiplex and local BBC analogue services on the local commercial digital multiplexes). Must-carry obligations envisaged in Finland, Luxembourg and Germany (Länders).

- Simulcast transmission in Spain, Portugal, Italy and the UK (financed by analogue advertising revenues and related to the must carry obligation of commercial radio services, where 80% of the analogue material must be simulcast). Simulcast subsidisation for public broadcasters envisaged in Germany and Luxembourg (for a limited period).

2.5. Financing issues: publicity, subsidies, pay services, other

- General radio rules (e.g. advertising and sponsorship) also apply to DR. No subsidies from Governments and no pay services implemented in any country.

2.6. Practical experience

- Existing services: Either public or private and public operators already broadcasting in Spain, Portugal, the UK, Sweden and Denmark, but few, if any, receivers available. Trials by public operators in Austria and Italy (where there are also private trials). Licences to be granted for the public broadcaster in the Netherlands and for private broadcasters in Sweden and the Netherlands. The BBC (already 2 digital only national stations and 3 more envisaged by the end of the year) will launch new national well-funded DR services.

- Obstacles: lack of DAB receivers at reasonable prices. UK trying to persuade manufacturers and retailers to support DR. Answers stressed the importance of a clear regulatory framework and a strong cooperation between the different parties involved in each country. Some also called for prudence and for the need of introducing new services in the digital offer.

3. POLITICAL STRATEGY AND ENCOURAGEMENT MEASURES

3.1. Past and ongoing activities

- Public promotion schemes, subsidies or other support measures: nothing foreseen in most countries (Denmark, the UK and Spain expressly consider it a market led process). Germany is considering simulcast subsidisation and Luxembourg has already foreseen it in the budget (but not spent). In the UK the aim is to accelerate penetration through coordinated action by public and commercial broadcasters on-air marketing and investment in product (the target is to make 200.000 receivers available by Christmas 2002). In France a financial State aid within R&D programmes is provided for innovative projects in the area of DR and multimedia.

- Platforms gathering interested parties in Spain (Digital Radio Forum –encompassing public and private operators, network operators and manufacturers), Germany (Initiative Digital Broadcasting –IDB, for the creation of progress reports and recommendations), Sweden (DAB Forum –non profit organisation for the promotion of DR) and Austria ("Digital Platform Austria" –integrated by industry, relevant organisations and consumers).

- Trials: non-commercial experimental period in major cities in Sweden, Austria, Italy and the Netherlands before the granting of licences.

- Reports on digitalisation strategies to be delivered in Austria before the end of 2002; in Ireland a report by an advisory forum (which included representatives of public and independent broadcasters along with regulators) was issued recommending a framework for the introduction of digital radio (currently being considered by the Government). An investigation on the future of DR took place in Sweden and was finalised in mid April 2002 (potentially a Parliamentary committee appointed later this year).

3.2. Suggestions for future national strategy and EU co-ordinated action

- National level: Germany noted that there is not a clearly recognisable increase in value for consumers and that market penetration is still too low. It will develop a plan for the phasing out of analogue transmission. Portugal in favour of industrial policy to implement a mass market terminal production.

- European level: The UK stresses the importance of coordinated action; Belgium/Flanders invites the Commission to encourage the exchange of legislative measures and experiences between MS and Germany suggests EU implementation of DR standards. Luxembourg would welcome a coordinated action on EU level to favour the introduction of DR in Europe including different technologies (improved T-DAB, DRM, T-DVB, S-DAB).

4. MARKET ASPECTS

4.1. Coverage areas: planned and already achieved. Types of programmes. Data services offered

- Coverage in terms of population[14]: 90% of the Flemish Community in Belgium (target is 100%); 50-60% of the population in Norway; decrease in Sweden: from 85 % (with national multiplex) and 35% (four regional multiplexes) in 2001 to 35% (national multiplex) and no regional multiplexes in 2002. In the UK the national commercial digital multiplex currently covers 80% of the population and the 34 licensed local radio multiplexes cover 45%. Targets of 80% in 3 years and 95% in 8 years in Germany. In Spain 50% in 2002 and 80% in 2006.

4.2. Terminals: variety, availability, prices

- Number of receivers sold is limited (3000 in Norway, mostly mobile and around 1000 in Sweden). Availability from manufacturers but not in the retail market. Prices too high: e.g. an average of 500 Euro starting price for in-car radio equipment in Germany and Italy (decreasing) and 750 Euro in Sweden. After a successful market campaign by private operators with receivers at **£**99 the UK supports the provision to retailers of non-subsided but low-cost receivers.

4.3. Marketing strategies: initiatives from network operators, broadcasters, content providers, manufacturers and other private players

- Trials in various countries (e.g. the Netherlands on IP tunnelling, Sweden, Austria and Italy).

- Initiatives: Swedish broadcasters and operators in favour the promotion and support of the DAB standard, within as the European standard for DR. In the UK co-development of a UK based chip to offer portability through reduced power requirements and size. In Germany there is an Initiative in Marketing Digital Radio (IMRD) by transmission network operators, manufacturers and programme providers, which goal is to achieve a consistent introduction of DR through a common appearance (logo), and a common information and sales campaign to raise consumer awareness. Also a campaign in Portugal by the T-DAB operator on the analogue radio system. In Luxembourg broadcasters have created a common structure to co-ordinate their plans and to go ahead with T-DAB. A mobile operator has also shown interest in operating a network.

[14] For **territorial** coverage objectives see section 1.5 on Planning.

4.4. Convergence: e.g. Considerations about merging digital radio with other transmission technologies

- Italy and Germany in favour of product trials to combine GSM, GPRS or UMTS return links for interactivity and IP-based services. Product trials also carried out in Sweden. UK believes in DR chips to be introduced in other devices (particularly mobile phones to provide a back channel and TV set-top-boxes). In Luxembourg there is an interest on DR from mobile operators. The Finish Broadcasting Company broadcasts its DR channels also on the digital television network. In the Netherlands the combination of C2000 applications with T-DAB is being tested. France acknowledges the potential for convergence of technological developments (but considers it too early to draw conclusions).

4.5. Satellite and terrestrial digital radio: prospects for competition/ complementarity between the respective business models.

- UK mentions the fact that the WorldDAB organisation is funding a study on the complementarity and competition between satellite and terrestrial DR.

- <u>Terrestrial focus in most countries</u>. Little interest of Germany and Sweden on satellite radio (no current financial viability) and it is just seen as a complement to terrestrial for large areas. The UK favours concentrating on terrestrial transmission development and sceptical about satellite: radio is a national, local experience, portability is necessary (even if satellite transmission there is still the need for terrestrial repeaters) and there are incompatibilities between current terrestrial/satellite DR technologies. France suggests a mixed development of terrestrial and satellite radio in order to achieve a critical mass at a European level and achieving pan-European services (attract the interest of the car industry, bring countries closer…). Luxembourg is in favour of satellite DR for national radio programmes of big or medium size countries and for international sound transmissions, being better than T-DAB to pass national borders.

C. CONCLUSIONS, RECOMMENDATIONS AND FUTURE WORK

1. General considerations and relevant findings

DR development is slow, as it is generally the case with new broadcasting services, and faces **important market obstacles, notably the lack of affordable receivers**. Overcoming these difficulties is mainly the responsibility of the industry. However, regulation can help by setting the right incentives to market operators. In this regard, there are substantial timing differences across the EU.

Whereas there is a widespread political commitment to DR, **only a few Member States have already established specific regulatory and licensing regimes**. Accordingly, DR services, trials aside, are operational in a few countries only. The others find themselves at different stages in their political reflection and law preparation cycle, but virtually all of them envisage to intervene in this area.

The national regulation already in place or envisaged for the future is **not radically different** from one Member State to the other. The objectives and implementation modalities broadly converge and the differences, where they exist, largely result from the analogue legacy. Indeed, divergence between national regulations is characteristic of broadcasting in general, not just radio. This being said, some relevant differences in the DR regulation, current or planned, are:

- Mainly the existence or absence of regulatory/ licensing regime, as explained above.
- Licences' duration and renewal.
- Licensees categories: multiplex versus programme operators.
- Commercial operators involved from the start or later.
- Awarding authorities (as a result of national differences in administrative structure).
- Ownership restrictions (certainly a legacy issue).
- Simulcast requirements.
- Importance attached to multimedia and data services.
- Mandated standards.

2 Suggested recommendations (based on best practice)

- Clear and stable <u>regulation and licensing regime</u> for DR still to be approved and implemented in several Member States.

- <u>Co-ordinated industry efforts</u>, especially from public and private operators and from manufacturers, to develop DR attractive services and affordable equipment once regulation is in place.

Favourable and flexible <u>licensing conditions</u> as incentives that will help operators to find viable business models with credible prospects of return on investment in the medium term. In particular, based on the observed situation in Member States as reported above, the following appear to be important elements:

- long enough licence periods and possibility of renewal,
- enough spectrum capacity, for all digital radio broadcasting systems, through
  - improved frequency planning methods,
  - efficient frequency use,
  - possible additional spectrum for T-DAB in band III by revision of Stockholm 61 agreement.
- licences by multiplex rather than programme so as to enable licence holders more freedom in the management of their offer,
- soft simulcast and must-carry requirements,
- flexible ownership rules,
- flexible roll-out requirements in terms of timing and territorial coverage.

• Targeted financial incentives such as low or no licence fees, single copyright payment for analogue and digital offer.

3. Past and future work on DR

a) Work completed so far

The Commission services consider that the work on DR in the framework of DBEG is almost finished. As initially agreed, Member Sates have been provided with:

- background information on the issues of their interest;
- a comparative overview of the national regulatory treatment of DR in the EU;
- some suggestions for Member Sates to improve the chances of DR.

b) Possible future work

• Produce a final revised version of the present document incorporating the comments and opinions from Member States, have it endorsed by the Communications Committee and published on the public part of the Communications Committee website.

• Review the status of the DR situation in the EU and the progress achieved at a future date, and perhaps at regular intervals.

• Member States, on the basis of the analysis done in DBEG, to suggest proposals for co-ordinated European approaches in the relevant areas were major divergences have been identified. These areas fall to national competence so, in line with the principle of subsidiarity, it is the Member States' responsibility to undertake actions to achieve an EU critical mass of simultaneous and similar regulations on DR. This will hopefully stimulate the industry and contribute, in particular, to decrease the price of receivers.

• In addition, the possibility of a European recommendation on DR, or a similar non-legally binding measure, could be envisaged as a political boost to this technology.