CMFE
COMMUNITY MEDIA FORUM EUROPE

AMARC Europe - World Association of Community Radio Broadcasters

To: The European Commissioner for the Digital Agenda,
Ms Neelie Kroes

Email: Neelie.Kroes@ec.europa.eu

Subject: *Threats and concerns of local and community media towards the adoption of a single standard for digital radio: Let us not leave community radio behind in the digital revolution*

Nijmegen, 19 December 2011

Dear Ms Kroes,

Since your call for EU-wide coordination concerning the digitization of radio in March 2011,[1] many things have happened, especially in the area of terrestrial radio. The Netherlands have given out digital DAB+ frequency licenses, Germany has launched a national DAB+ network. Broadcasters from several countries called for a single European market for digital radio during 'Digital Radio Day' at IFA on 5 September 2011[2] and at the EBU Digital Radio Conference held 11 and 12 October in The European Parliament[3]. Also successful DRM+[4] pilots have taken place in the United Kingdom, Italy, Germany, Brazil, The Netherlands, India and Sri Lanka. The Australian government concluded, 12 October 2011, a preference for DRM and DRM+ above HD Radio to be used to supplement DAB+ services in (some) local and regional areas.[5]

All this is making terrestrial radio far more spectre efficient, much less power consuming and offering high quality reception and audio quality. In this letter we try to answer some of the questions that still remain and also put in a plea for a solution to the predicament that most community (local) radio stations (as well as a lot of local commercial radios) find themselves in.

The progress that is being made for national and regional radio sharply contrasts with digitization of community (local) radio stations[6]

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1 "Radio must not be left behind in the digital revolution" AER 20th Anniversary Conference 2011 Brussels, 3 March 2011
2 http://www.worlddab.org/public_document/file/163/IFA_Digital_Radio_Day_invitation_Eng.pdf
3 http://digitalradioconference.ebu.ch/
4 DRM+ is the name of the Digital Radio Mondiale (DRM) Consortium's project to extend the DRM standard to higher frequencies, e.g. in the FM band (88 to 108 MHz). See also http://www.drm.org/drm_plus
5 "Review of technologies for digital radio in regional Australia", Final report 7 October 2011, http://www.minister.dbcde.gov.au/media/media_releases/2011/261
6 Community Media: participatory, independent and non-commercial media which serve specific (local) communities

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CMFE Office Heliodoorstraat 3 6534 SH Nijmegen The Netherlands *Tel:* + 31 24 3550559 *Mobile:* + 31 6 34150581
www.cmfe.eu We prefer mail to be sent electronically to president@cmfe.eu
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We would like to point out at least two main obstacles facing local terrestrial radio that warrant attention from your Digital Agenda directorate.

- The first concern is that many community radio stations are almost nowhere able to fill up multiplexes of DAB networks. The now widely planned DAB+ multiplexes allow for transmission of 20 programs or more. There are few community radio stations that are providing more than one or two programs and few local areas (in some bigger cities and regional areas) where more then five stations serve a common region. Hence many community radio stations are confronted with structural underutilization of (and therefore relatively expensive) DAB multiplexes, should they use these.
- Secondly there are hardly any countries so far that have assigned suitable band III or L-band frequencies for community (local) radio stations. In most cases areas that will be covered by DAB or DAB+ multiplexes are far larger than the area needed to reach local listeners.[7] This poses economic problems both in terms of transmitting in larger areas than needed and in terms of copyright levies that often are based on the number of potential listeners in an area and not on the subset thereof that constitutes the target audience. Also larger coverage areas could defeat the very purpose of many community radio stations servicing a particular, often local community.

The conclusion must be that DAB(+), although the preferred technology in large(r) coverage areas, is in many cases unsuitable for community (local) radio stations. We therefore plea for: preservation of the FM Band for radio broadcasting and introduction of DRM+ (on FM and eventually even on Band III) standard alongside DAB(+).

We feel supported by two important documents:

- The *Declaration of the Committee of Ministers on the role of community media in promoting social cohesion and intercultural dialogue* as adopted in 2009 by the Committee of Ministers of the 47 members states of the Council of Europe, in where it "*Draws attention to the desirability of allocating to community media, to the extent possible, a sufficient number of frequencies, both in analogue and digital environments, and ensuring that community broadcasting media are not disadvantaged after the transition to the digital environment;*"[8]
- European Parliament resolution of 25 September 2008 on *Community Media in Europe (2008/2011(INI))* [9], in where the European Parliament "*Calls on Member States to make television and radio frequency spectrum available, both analogue and digital, bearing in mind that the service provided by community media is not to be assessed in terms of opportunity cost or justification of the cost of spectrum allocation but rather in the social value it represents;*"

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7 Take the example of The Netherlands, where almost 300 local stations are foreseen to use 117 L-band areas, each much larger than the existing 300 FM areas. The L-band operator is, for economic reasons, looking at combining the 117 areas into 45, thereby immensely increasing the problem. Moreover DAB+ receivers for L-band are scarce since L-Band is internationally not widely used.

8 https://wcd.coe.int/ViewDoc.jsp?id=1409919

9 http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P6-TA-2008-0456&language=EN&ring=A6-2008-0263

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Also in the EBU-document "EBU Technical Report 013 - Future of Terrestrial Broadcasting" one of the conclusions is: "*The future of digital radio is currently anticipated as being DAB/DMB/DAB+, and ideally combined with DRM/DRM+.*"[10]

In attachment 1 to this letter we explain aspects of DRM+,[11] its benefits for community (local) radio stations and two hurdles that still must be taken:

- Enforce suitable revisions of national FM frequency policies, no FM Band II *switch off* policy but FM Band II *switchover* policy;
- Foster collective action to generate sufficient international demand for receiver manufacturers to include DRM+ in their digital receivers. The receiver industry should use the already available multi standard chips, capable of handling DAB, DMB, DRM and also analogue FM. EU regulations should prescribe the use these multi standard chips in hybrid receives, as in other areas EU also forces open standards, multi-band solutions and interoperable systems to protect costumers.

We position the DRM+ solution in its broader context of digitization of terrestrial radio in general. It is widely acknowledged that there is no single (worldwide) radio market in analogue and neither will there be one in digital. Multi standards have never been a major problem in the analogue era and will certainly not have to be a problem in the digital era.

We kindly ask you to enter into a dialogue with us:

- To include necessary actions in the Digital Agenda to accommodate community (local) media to enter the digital broadcasting era;
- To enforce the use of open standard, hybrid digital radio receivers;
- To support and promote the adoption of DRM+ and
- To monitor the revision of national FM frequency policies among member states.

In this way the richness, diversity and pluralism of the media sector is best guaranteed, respecting the contribution of community (local) media.

Sincerely,
Signed on behalf of CMFE and Amarc Europe

Pieter de Wit
President CMFE

Mariano Sanchez
President Amarc Europe,

Attachments:

1. Digital terrestrial radio: actual developments (page 4)
2. Community Media, CMFE and AMARC Europe (page 7)

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10 The Future of Terrestrial Broadcasting, version 1.1, Geneva, November 2011, http://tech.ebu.ch/docs/techreports/tr013.pdf

11 More information can be found at www.drm.org

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***Attachment 1*: Digital terrestrial radio: actual developments**

Introduction
After the formal standardization of improved audio codecs for DAB radio[12] in 2007, as well as revised DAB policies in several countries, among receiver manufacturers and car manufacturers there has been a marked acceleration of the introduction or further rollout of DAB, in many cases DAB+ (e.g.: Switzerland, Germany, Italy, Flemish Belgium and the Czech Republic). DAB+ uses the HE-AAC v2 codec (better known as MP4 or AAC+). This allows equivalent or better subjective audio quality to be broadcast at lower bit rates. The increased efficiency offers benefits for Governments and Regulators (better spectrum efficiency), for national (and often also regional) broadcasters (lower costs per station) and for consumers (a wider choice of stations, more robust reception and multimedia services).

DRM+ provides high quality audio coding using MPEG HE-AAC and was added to the DRM standard in 2009. Successful pilot transmissions have taken place in the United Kingdom, Italy, Germany, The Netherlands, India and Sri Lanka. DRM+ has received the necessary recommendations from the ITU.

This attachment contains brief paragraphs on:
- Digitization of the radio chain
- Internet radio
- The demand question
- Scarcity
- Sustainability
- Quality
- Robustness
- Functionalities
- The importance of DRM+
- Switchover
- Receivers
- Single market
- Coordinated introduction

Digitization of the radio chain
Most links in this chain (recording audio, storing audio, editing audio and even transportation of audio from studio's to transmitters have been digitized today. The last link (from transmitter to receiver) is still mainly facilitated with a technology that dates back many decades and has many drawbacks. Its main strong point is that analogue today (still) is the core business of incumbent radio stations. Transition to digital should aim to profit from the digital advantages and at the same time resolve the economic challenges for incumbent stations. There are examples in the UK and in The Netherlands how licensing policies can do this.[13]

Internet radio
Internet radio is widely seen as an *addition* rather then a *replacement* to terrestrial radio, not an alternative. The server costs for reaching out to many listeners at the same time are high.

12 Digital Audio Broadcasting
13 In different ways links have been established between renewal of analogue and digital licenses.

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The demand question
Are consumers asking for digital radio? No, of course not, at least not yet. But that is nothing new. In the twenties of the last century they were also not asking for Medium Wave (AM) radio and later not for FM radio. These innovations were driven by manufacturers (of receivers and transmitters), organisations with a 'message' and by governments interested in network efficiency, costs and quality.[14] DAB, DAB+ and DRM+ are delivering precisely that: more stations to be carried per MHz in a better quality, cheaper and greener.

Scarcity
Digitization of terrestrial radio helps to overcome existing scarcity in the analogue spectre since the net payload per MHz frequency is much higher. With DAB+ it is possible to transmit 20 programs or more on 1 frequency. DRM+ can transmit up to 4 programs on 1 (FM) frequency.

Sustainability
Digital terrestrial radio, besides offering frequency dividends and other benefits, offers little known sustainability dividends. Digital transmitters carry signals at a fraction of radio waves generated and energy consumed. The Swiss example is impressive, though not representative for less mountainous countries. Broadcasting of four national FM programs in Switzerland takes 666 transmitters, consuming 41 GW/h. Broadcasting of twelve national DAB+ programs takes only 186 transmitters and 3 GW/h. Environmentally there is a lot to be gained, in this example by a factor of 14.[15]

Quality
There is audio quality and reception quality. Audio quality of digital radio depends on bitrates used and for DAB+ is found by the EBU to be considerably higher than for the first generation of DAB, or DAB classic. The same applies to DRM+, which uses similar compression logarithms as DAB+. Reception quality inside the coverage area is flawless. There is no noise or fading, as we know it from analogue radio.

Robustness
Multipath reflections of signals, that cause fading or extinction in analogue radio, serve to reinforce signals in digital radio. The two tower radio incidents[16] in The Netherlands unsolicited demonstrated that digital reception of the national public programs remained uninterrupted in the existing SFN DAB network.

Functionalities
Data casting functionalities of digital radio are already well known, such as transmission of images and data to screens, to navigation receivers, EPG functions and ticker texts. Car manufacturer BMW, who currently equips all of its cars in the UK with DAB receivers, is experimenting with hybrid methods to merge DAB with G3 and G4 telecom networks.[17] The opportunities for digital innovation seem only to open up at this point, also within the DRM+ standard.

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14 We are skipping over military interests regarding MW and SW radio in the early 20th century.
15 From a presentation by Thomas Saner of SRG SSR idée Suisse
16 On July 15 2011 two transmission towers gave up. Lopik had an electric short cut and Smilde had a fire and collapsed.
17 For this they place a “tagging switch” at the steering wheel, that sends a message to a service provider that contains the time and program or add code of a radio station the driver is listening to.

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The importance of DRM+
Several aspects of DRM+ have already been mentioned. Its main characteristic is that it is the only open European standard for viable digitization of local FM radio in a Eureka 147 compatible way.

Switchover
Member states are considering switch-off policies for analogue. But switching off the whole FM-band should not be considered. Analogue radio will eventually be switched off and all terrestrial radio will be digital, also on the FM-band, but community (local) radio cannot be disadvantaged. Switch-off can only take place if all users of analogue FM are suited with proper digital terrestrial possibilities.

Receivers
The future is for multi standard and hybrid radio receivers. Receiver manufacturers are ready to include DRM+ in their products, as soon as there is sufficient international demand for it. Additional action is needed to get to this point, since community radio in many countries are loosely organised and mostly under resourced. The lack of a strong economic basis hinders effective international lobbying. It is crucial that during the transition period from analogue to digital the FM functionality remains included in receivers, since digital-only receivers for years to come threaten to cut off listeners from their local radio stations. The inclusion of L-band in future receivers is questionable, since there is little demand for it internationally. Currently only 10% of all DAB+ receivers have this functionality.

Single market
Contrary to popular perception there is no single radio market in analogue. At its best one can say that underlying technologies such as AM and FM can be found everywhere on the globe. But differences in the implementation of these technologies have actually resulted in transmitters and receivers being different and largely unusable between continents.[18] Looking ahead to a digital radio future it is very likely that this will not be a worldwide single market either. The perspective however is that if there is any radio technology that approaches global dominance, then it is the Eureka 147 family of DAB, DAB+, DMB and the Eureka compatible DRM and DRM+, which are being adopted or tested in many European countries as well as in many countries in Asia, Australia and Latin America.

Coordinated introduction
In order to bring a single EU digital radio market nearer, coordination is needed vertically and horizontally. Vertically in the sense that all levels of broadcasting (national, regional and local) launch digital terrestrial services in roughly the same timeframe. Horizontally in the sense that member countries launch compatible services so that there really will be one international digital radio market for transmitters and receivers, very much like the European FM market today.

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18 This has to do with channel bandwidth uses and frequency spacing. A detailed overview of this can be found at a recent blog of James Cridland: http://james.cridland.net/blog/a-global-standard-for-digital-radio/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+JamesCridlandsBlog+%28James+Cridland%27s+blog%29

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***Attachment 2*. Community Media**

Community Media
The Community Media (CM) sector is recognized as a separate media sector next to the public and commercial media sector. The CM sector exists out of thousands of community (local non-commercial) radio, hundreds of television stations around Europe and a growing number of Internet based media initiatives. Thousands of employed program makers and an estimated more then one hundred thousand of active citizens contribute, mostly as volunteers, to their stations. With millions of hours of local radio and television productions, the CM is one of the largest media sectors in Europe, yet not properly present in European media policy processes. CM fulfil a broad role in the media landscape, particularly as a source of local content, and encourage innovation, creativity and diversity of content. Community radio and TV channels can be an effective means of strengthening cultural and linguistic diversity, media plurality, social inclusion and local identity. CM are one of the existing means of facilitating the integration of immigrants or other minorities and also enabling disadvantaged members of society to become active participants by engaging in debates that are important to them.

Community Media Forum Europe (CMFE)
The CMFE was founded on 5 November 2004 in Halle (Germany) after a series of European and international conferences held over the years before, which had made clear that there was a lack of information and participation of the Third Media Sector on a European level. As a first step in this direction the CMFE has taken part in the consultation process launched by the Council of Europe for the Ministerial Conference on Mass Media Policy in Kiev on 10–11 March 2005. The proposal of the Community Media Sector was endorsed by over 50 national federations, networks and media initiatives from throughout Europe. In 2009 CMFE has been admitted as observer on the Steering Committee on the Media and new Communications Services (CDMC) and the newly formed Group of Specialists on New Media (NC-NM) of the Council of Europe (CoE). CMFE will be continuing its lobbying action to strengthen the community media sector on European policymaking level. CMFE has a total of 90 members from 23 European countries: 39 Individual Members and 51 Organizational Members, of which 25 are (National) Federations. Among its affiliate members it counts also individuals and organisations from Africa, Asia and North America.

AMARC Europe
AMARC, the World Association of Community Radio Broadcasters, is the international non-governmental organisation for the promotion, support and development of community radio worldwide. The international headquarters is located in Montreal, Canada.
AMARC-Europe is the European regional section of AMARC grouping together radios and their national federations from 40 European countries, a network of 1500 community broadcasting services. The headquarters of AMARC-Europe were established in Sheffield, UK following the first AMARC Pan-European Conference of Community Radio Broadcasters held in Ljubljana, Slovenia, in 1994, which also adopted the Community Radio Charter for Europe. From 2009 the main office of Amarc Europe is based in Brussels, where the organization is registered under the Belgian Law as an International NGO The principal activities of AMARC-Europe are policy, research and advocacy; training and exchange of personnel; programme exchange and co-productions; solidarity and co-operation between East, Central and Western Europe and with community radio broadcasters in other regions of the world.
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