

Nordic PSB

Representation of Nordic Public Service Broadcasters



Nordic public service broadcasters comments to the RSPG opinion on EU spectrum policy implications of the digital dividend

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Introduction

The Nordic public service broadcasters (DR, NRK, SVT, SR, UR, RUV, and YLE) welcome the opportunity to present their joint comments to the Radio Spectrum Policy Group (RSPG) draft opinion on EU spectrum policy implications on the digital dividend.

Public service broadcasting has a strong position in the Nordic countries, providing reliable and unbiased information and contributing to cultural and social cohesion. A necessary precondition is that programmes from public service broadcasters are freely available to all citizens in our countries. The only means of achieving this is by terrestrial broadcasting with universal coverage.

Digital terrestrial broadcasting is an important development for our countries contributing to innovation and economic growth with a larger and more varied offer of radio and TV programmes, both from public service broadcasters, pay-TV operators and commercial free-to-air broadcasters. Digital terrestrial broadcasting also offers new opportunities for content industry and consumer equipment industries. Digital broadcasting was introduced early in Sweden and Finland and these two markets are already now mature markets for digital TV. Out of the countries where a considerable part of the population relies on terrestrial broadcasting, Finland and Sweden will probably be the first countries to switch off analogue TV (Aug. 2007 and Oct. 2007 respectively). It is expected that although Norway, Iceland and Denmark are starting the switch-over later, the development will happen rapidly and analogue switch off will be completed before 2010. Therefore the Nordic area as a whole can be regarded as a more or less mature market for digital broadcasting. One obvious consequence is that there is a clear need for assigning spectrum to HDTV and TV and radio to handheld

devices to develop those markets. Planning for this must start already now and is a fact in Finland.

Digital terrestrial broadcasting has an important role to ensure universal service. It also has a certain role to enhance competition between the different platforms for broadcasting: satellite, cable, IPTV, and terrestrial TV. Such competition improves the choice for viewers. To ensure that digital terrestrial broadcasting will continue to be a viable platform it is necessary that it is able to offer a wide selection of programmes, including HDTV and TV to handheld devices, in the near future.

The Nordic public service broadcasters in general support the comments from the EBU on the RSPG draft opinion on the digital dividend.

The RSPG proposals

RSPG defines the digital dividend as the spectrum that is available in the broadcasting bands when existing analogue TV-transmissions have been converted to digital. The draft opinion then lists a number of different possible uses of the dividend for broadcasting purposes such as more TV-channels, HDTV, increased coverage, and mobile or portable reception, or for electronic communication such as mobile telephony, broadband access, SAB/SAP and others.

The draft opinion outlines the regulatory framework established by GE-06 and points to the limitations and constraints if introduction of multimedia services (including up-link) in the broadcasting bands is considered. It also points to the difficulties in harmonisation of (sub)bands as this probably requires a re-planning for digital TV.

The main RSPG proposals, as understood by the Nordic Public service broadcasters, are:

Band IV+V:

"There would be EU-wide benefits to the use of the digital dividend by broadcasting services." RSPG considers one or two layers per country for high power downlink, i.e. broadcasting to handheld, for feasible. CEPT should study an optimum way forward for high field strength downlink services, either in channels spread over the whole frequency range or possibilities for a common (but not dedicated) sub-band.

"There may be EU-wide benefits to the use of the digital dividend by fixed/mobile applications (including uplinks) in a harmonised sub-band of the UHF band." RSPG points to a way forward which gives allocation to fixed/mobile services in the entire UHF band and recommends studies in CEPT to identify a sub-band for such use. It is recognised that a dedicated harmonised sub-band for mobile applications (including or not uplinks) would create holes in the GE-06 layers and would therefore require significant re-planning.

"There would be considerable EU wide benefits to the use of more advanced television coding systems."

Comments on the RSPG proposals

The Nordic Public service broadcasters accept the definition of the digital dividend to be the spectrum that is available in the broadcasting bands when existing analogue TV-transmissions have been converted to digital. However, it should be noted that this dividend is not the same for all countries and certainly has a wide variety in time scale, and in addition there are also other primary services in some countries. As the GE-06 Plan was developed in order to achieve as many so-called layers for digital broadcasting as possible, the planning is very tight, i.e. very frequency efficient. This means that although most countries have 7 or even more layers in the UHF frequency range, this does not necessarily correspond to 7 or more full nation-wide coverages.

It should also be noted that those countries that have introduced digital TV early have done so in order to offer more programmes to the public, and the viewers have switched to digital because there was a wider selection than from analogue. The switch to digital would not have happened if the viewers had not seen any advantages.

Furthermore the Nordic Public service broadcasters do see a great advantage in letting the digital terrestrial network having the same opportunity to introduce HDTV as cable, satellite, and IPTV-networks.

The Nordic Public service broadcasters agree that the use of the frequency bands 174-230 and 470-862 MHz, as planned by the GE06 Agreement, has de facto harmonised the technical parameters for digital broadcasting and created a global market for digital broadcasting equipment. The Nordic Public service broadcasters strongly support

the view that there would be EU-wide benefits to the use of the digital dividend by broadcasting services, including broadcasting to handheld devices, i.e. possibilities for high field strength downlinks. However it must be up to each member state to decide on their media policies, including the number of available layers for high field strength downlinks as well as HDTV. It should be noted that the requirements for high field strength downlinks could be alleviated by improved antenna gain in handheld devices. The recommended studies by CEPT on the optimum way forward for high field strength downlinks are supported.

Any re-planning of the GE-06 Plan would be extremely difficult and costly both for administrations, network operators, broadcasters, pay-tv operators, and consumers. For consumers a re-planning could result in a need for new antennas etc. very soon after the digital switch-over.

All possible efforts should be used to find solutions where high field strength downlinks can operate in the full UHF frequency range in order to avoid specific sub-bands for such services. Any decision on a dedicated sub-band would create holes in the existing broadcasting layers, and changes to the plan in one country will in most cases have a knock on effect to all neighbouring countries. It should also be noted that the GE-06 Plan in many areas in reality was developed with existing digital TV stations as the starting point. If a re-planning in the coming years is considered it would be even more difficult to reach an agreed plan as more digital stations are already now in operation, and many countries have issued licenses for digital broadcasting that last for 10 or 15 years.

The second proposition of the RSPG (to seek additional allocation to mobile/fixed services in the entire UHF band, initiate studies in CEPT to identify a sub-band for mobile/fixed services (including uplinks) and seeking endorsement of a non-mandatory harmonised part of the UHF band for specific applications/systems) cannot be supported by the Nordic Public service broadcasters.

The proposal of RSPG deserves some reflection. Introduction of fixed/mobile applications in the UHF band is mainly justified by the prospect of implementing low cost networks for mass distribution or serving sparsely populated areas. Possible services offered in such network may be

- Radio and mobile television (linear services)
- TV on demand (non-linear service)

- Web surfing

TV services with large audiences are most efficiently delivered by broadcasting; for reception on normal screens by DVB-T and for reception on small (handheld) screens by DVB-H or T-DMB. Programmes of high value for small audiences and web-surfing is more efficiently delivered by means of point-to-point networks, for reception on small screens, e.g. by means of UMTS. However, UMTS cell sizes have to be small in order for the network to handle many individual channels and for small cell sizes the higher frequencies already allocated to IMT-2000 are much more suitable than the UHF band.

In addition the required uplinks for fixed/mobile services will require guard bands (unused frequencies) and are therefore not frequency efficient. As acknowledged by the RSPG the identification of a harmonised sub-band for fixed/mobile would create holes in the digital broadcasting layers for all countries, would require significant re-planning, and would limit the possibilities for further development of broadcasting and mean obstacles for a growing and viable digital TV industry. An introduction of a harmonised sub-band for fixed/mobile in addition to high field strength downlinks would seriously aggravate this situation.

As already pointed out in the RSPG Final Opinion on Multimedia Services there are other frequency bands allocated to the broadcasting service which should be investigated with a view to facilitating the deployment of multimedia services in a shorter timeframe (notably 1452 – 1492 MHz, noting that part of this band is available for satellite services). Other bands not allocated to the broadcasting service also offer the opportunity to provide multimedia services, e.g. the bands allocated to the mobile service at 2 GHz and 2.6 GHz (bands designated for IMT-2000), and the bands at 1980-2010 and 2170 - 2200 MHz for mobile satellite services.

Regarding the proposal to consider the introduction of more advanced television coding systems the Nordic Public service broadcasters agree that such newer coding systems may be more efficient than existing systems. However, the expectations on a possible reduction of the frequency demand of affected services should not be overestimated. EBU tests have shown that flat screens require about twice the bit-rate for comparable subjective quality to CRT's due to the higher resolution. Likewise, the migration problems to advanced coding systems should not be underestimated. The migration may require a simulcast period and thereby require even more frequency resources.

On behalf of the Director Generals of the 7 Nordic Public Service Broadcasting companies in the 5 Nordic countries,

Kenneth Plummer
Director General
Danmarks Radio

John G. Bernander
Director General
Norsk Rikskringkasting

Eva Hamilton
CEO
Sveriges Television

Peter Örn
CEO
Sveriges Radio

Christina Björk
CEO
Sveriges Utbildningsradio

Páll Magnússon
Director General
Ríkisútvarpið

Mikael Jungner
Director General
Yleisradio

Sincerely yours,

Marit Ingves,

Head of Office

Representation of Nordic Public Service Broadcasters, Brussels

nordic.ingves@ebu.ch