

# Nordic PSB

Representation of Nordic Public Service Broadcasters



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Nordic PSB's ID number in the Transparency Register is 65356156848-74

Brussels, 2 May 2013

## **Nordic public service broadcasters' response to the public consultation on the Draft RSPG opinion:**

### **"Strategic Challenges facing Europe in addressing the Growing Spectrum Demand for Wireless Broadband"**

The seven Public Service Broadcasters DR, NRK, RUV, SVT, SR, UR and Yle in the five Nordic countries welcome the opportunity to submit our comments on the draft RSPG Opinion on Strategic Challenges facing Europe in addressing the Growing Spectrum Demand for Wireless Broadband.

The Nordic PSBs especially wish to highlight the following comments in our submission:

- That the DTT platform plays an indispensable role in the realisation of the missions of the Nordic PSBs by ensuring that public service content is available free-to-air to the whole population and by enhancing competition and innovation in the TV distribution market.
- That traditional TV distribution (cable, satellite, DTT) – despite the increasing importance of internet distribution – will still be dominant in the timeframe covered by the RSPG opinion and that the DTT platform therefore will still play a crucial role in fulfilling the missions of the Nordic PSBs.
- That the Nordic PSBs are at the forefront of the new internet paradigm for TV distribution and actively promote the development of a European broadband society – but at the same time emphasise that the vision of a future internet distribution paradigm must not lead to decisions that undermine the DTT platform in a media landscape where traditional TV distribution is still dominant.
- That the capacity required to support a viable DTT platform – in light of the development of new coding, compression and transmission technology on the one hand and the parallel migration to high quality video (HD) on the other hand – must be expected to be at the same level as today.

- That a potential reallocation of the 700 MHz band to wireless broadband could undermine the viability of the DTT platform in most Nordic countries – apart from Finland where alternative frequencies are available – and that a decision on the 700 MHz band should be considered carefully.
- That a decision on the 700 MHz band also should be considered in light of the fact that a reallocation is not realistic in the Nordic countries – except Finland - before 2020/21.
- That stability and predictability are essential in order to ensure the necessary investments in the DTT platform and that these aspects are especially important when considering the future of the UHF band as a whole
- That initiatives to promote a future converged infrastructure for TV distribution should be considered in parallel with the discussion about the future allocation of spectrum in Europe.
- That the Nordic PSBs have remarkably high audience trust ratings. This underlines the importance of securing spectrum for digital radio and TV broadcasting.

The Nordic PSBs remain available for further information regarding this submission and look forward to engaging with the RSPG and other stakeholders in finding a viable solution to ensure the future distribution of public service TV and radio in Europe.

Yours sincerely

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*The Nordic Public Service Broadcasters (Nordic PSBs) every week reach more than 24 million citizens in the five Nordic countries with high quality public service content on TV, radio and the internet. The Nordic PSBs offer independent news and current affairs programmes that stimulate discussions and empower the citizens. They produce prize winning drama, educational and children's programmes and special services for minority language-speakers and disabled groups.*

## **Response to the RSPG Draft opinion**

### **DTT and the realisation of the Nordic public service mission**

The Nordic PSBs emphasise that the discussion of the future frequency allocations in Europe should be seen in the light of the indispensable role of the DTT platform for the realisation of the broadcasters' public service missions:

- The DTT network ensures that public service media content is available free-to-air to the whole populations and without commercial intermediaries.
- The DTT network allows for local/regional transmissions which is a vital aspect of the public service mission.
- The DTT network ensures competition and innovation on the TV distribution market that is dominated by a small number of players with access to network infrastructure (cable, satellite).
- The DTT networks in the Nordic countries are built on a robust infrastructure designed with a high level of redundancy that ensures the high demands of availability requested by the government. No other platform today can deliver an equal performance.
- The DTT network is a very cost effective way to deliver content to a mass audience.

In the current media landscape there is no viable alternative to the DTT network that can fulfil these goals. No alternative distribution channel is available to reach the whole population in the Nordic countries and support free-to-air distribution. If the viability of the DTT platform is undermined by decisions to reallocate DTT frequencies to wireless broadband it will have serious consequences for the fulfilling of the broadcasters' public service missions:

- The Nordic PSBs will not be able to reach the whole population with independent news and quality content that is made available free-to-air
- Competition on the Nordic TV distribution markets will decrease drastically, which in turn could lead to a lack of innovation and increasing distribution costs for Nordic PSBs

Against this background the Nordic PSBs find that it is of utmost importance that a strategic plan for the future use of spectrum resources in Europe ensures that a sufficient amount of frequencies are available to support a viable DTT platform.

### **Public service content in a converged media environment**

The Nordic PSBs acknowledge that new developments in the media and distribution market will change the role of the DTT platform in years to come. Distribution of TV over the open internet will gain increasing importance as an alternative to distribution in designated TV networks (cable, satellite, DTT). This development is driven by a high penetration of broadband connections and the increasing use of new internet devices (tablets, smart phones, smart TV's) to watch television.

Viewed in a longer perspective it is possible that the internet as a TV distribution platform will gain a position where distribution of the Nordic public service broadcasters' free-to-air television can – fully or partly – be realised via the internet and where competition on the distribution market will be ensured by internet distribution.

However, it is very important to understand that this development will not be realised on a short term basis. All market data confirm that traditional broadcast distribution (cable, satellite, DTT) will be dominant on the TV distribution market in the foreseeable future and that existing players on the distribution market must be expected to keep their strong position for years to come. Furthermore it should be noted that a significant part of the development of new internet TV services in the coming years will take place around the broadcast platforms as hybrid services that combine broadband and broadcast, such as the European HbbTV initiative or catch up TV services offered by commercial TV distributors.

The Nordic PSBs are at the forefront of the development of a new internet paradigm for TV distribution offering innovative internet services where high quality public service content is made available live and on demand. The Nordic PSBs will continue to participate and invest in this development offering attractive service to Nordic citizens and thereby supporting the development of a European broadband society. But at the same time the Nordic PSBs emphasise that the realisation of an internet distribution model for TV is still many years into the future and that great uncertainties exist as to if and when the internet will be able to support distribution of public service content on a large scale and without disproportional costs. The Nordic PSBs therefore strongly advise against decisions that could undermine the DTT platform as long as traditional TV distribution is still dominant. In spite of the exciting opportunities offered by the internet development the DTT network will remain indispensable in the timeframe covered by the RPSG opinion (2013-2020) and probably even until 2030.

### **Future capacity of the DTT platform**

If the DTT platform is to fulfil its role of ensuring free-to-air television for the whole population and ensuring competition on the distribution market the DTT platform must be a relevant and attractive platform for the users. To ensure this the DTT-platform must:

- Have sufficient capacity to support both a free-to-air public service offer and an attractive portfolio of commercial channels (as pay TV and free-to-air)
- Have sufficient capacity to offer the TV channels in a video quality that lives up to the quality offered by other distributors on the market
- Have the capacity to support migration to new transmission and compression technologies, e.g. the migration to DVB-T2

In the years ahead new transmission and compression technology will allow for more efficient distribution of broadcast TV in the DTT-network. A migration to DVB-T2 must be expected to be relevant in all Nordic countries before 2020. A migration to the HEVC compression standard will probably also be relevant towards 2020 – although it is still uncertain when HEVC will be supported in a sufficient number of households.

In the same period it must be expected that the distribution market will move towards high quality video. In all Nordic countries HD is already getting a position as the new standard for TV distribution. Towards 2020 it must be expected that virtually all TV channels will be distributed in HD. In a longer perspective UHD (4K, 8K and 3D) might be relevant.

Taken together the Nordic PSBs expect that the increasing demand for HD channels and the parallel development of new transmission and compression standards will “cancel each other out.” The future capacity required to support a viable DTT platform must therefore be expected to be at the same level as today.

### **The 700 MHz band**

In February 2012 the World Radiocommunication Conference, WRC12 decided that the 700 MHz band should be co-allocated for broadcast and wireless broadband after WRC15. Against this background the RSPG identifies the 700 MHz band as a candidate for wireless broadband in Europe.

The Nordic PSBs acknowledge that the WRC12 decision gives rise to a discussion of the long term future of the 700 MHz band in Europe. At the same time the Nordic PSBs emphasise that the decision of the WRC12 is a co-allocation and that the actual use of the frequencies is a matter for individual EU member states. In this context it is important to realise that the consequences of a potential reallocation of the 700 MHz band varies from country to country depending on existing frequency usage and geographical differences, and that national differences must be taken into account when deciding about the future use of the frequencies.

Respect for national differences is especially crucial in the Nordic countries:

- In Finland the existing capacity of the DTT-network is sufficient to allow for a reallocation of the 700 MHz band without undermining the viability of the DTT-platform and the delivery of public service and commercial broadcast services. This is partly due to geographical characteristics and partly due to the fact that frequencies for DTT are available in the VHF-band because Finland has decided not to broadcast digital radio in the VHF-band.
- In all other Nordic countries a reallocation of the 700 MHz band will have a serious impact on the DTT-network. The reallocation of the 700 MHz band will reduce the amount of UHF spectrum available by up to 30 percent and will require an extensive re-planning – including negotiations with neighbouring countries on frequency usage. In

contrast to the situation in Finland no alternative frequencies are available and the potential capacity of the remaining UHF frequencies is constrained by interference from neighbouring countries. The reallocation of the 700 MHz band will therefore require broadcasters to reduce the number of TV channels that are offered on the platform and/or offer some channels in a quality that are below market standards.

Against this background the Nordic PSBs conclude that the reallocation of the 700 MHz band in most Nordic countries must be expected to reduce the attractiveness and commercial relevance of the DTT platform and could have negative effect on the market share of the platform. As a consequence the important role of the DTT-network in ensuring competition on the TV-distribution market might be endangered. The Nordic PSBs therefore strongly advise that the consequences of a reallocation of the 700 MHz band to wireless broadband are studied carefully before a decision is taken on the future use of the frequencies.

### **Specific considerations regarding the 700 MHz-band**

Apart from the broader impact on the viability of the DTT platform of a possible reallocation of the 700 MHz band it is important to consider a number of specific issues when the future of the frequencies is discussed:

#### Timing

In all other Nordic countries than Finland a reallocation of the 700 MHz band cannot be implemented in the near future. In Denmark and Norway licenses for the 700 MHz band have been awarded for DTT until 2020/21. In Sweden the frequencies in the 700 MHz band play an indispensable role in the migration to HD/DVB-T2 towards 2020. In these Nordic countries the reallocation of the 700 MHz band would require extensive negotiations of frequency use with neighbouring countries. Apart from Finland the implementation of a potential reallocation of the 700 MHz band is therefore not realistic before 2020/21.

#### Costs

Reallocation of the 700 MHz band requires extensive re-planning of the existing DTT networks. A re-planning will require significant investments from broadcasters in adaptation and renewal of network equipment. Furthermore broadcasters or radio/TV regulators will have to set aside funds for campaigns that inform the users of the necessary changes in receiving equipment. When deciding about the future of the 700 MHz band these costs should be taken into account and if a reallocation of the 700 MHz band is decided it should be assured that costs are covered by revenues from frequency auctions.

## Citizens

Reallocation of the 700 MHz band will have great impact on the Nordic citizens who rely on the DTT platform for their TV reception:

- Citizens risk losing access to their preferred public service or commercial TV channels because of frequency scarcity
- Citizens will have to invest in new reception equipment and adjustment of antennas
- Elderly citizens and other citizens who are not experienced users of new technology might have difficulties adapting to new means of reception and risk losing access to public service TV content.

When considering a potential reallocation of the 700 MHz band these consequences for Nordic citizens should be taken into account.

## **Perspective for the whole UHF band (470-698 MHz)**

As described above traditional broadcast distribution must be expected to be dominant in the foreseeable future and the DTT-network will remain the only distribution platform that can support universal coverage free-to-air.

Should it be decided to reallocate the 700 MHz band to wireless broadband it is therefore crucial that the remaining UHF frequencies are safeguarded for digital TV in order to ensure sufficient capacity for a viable DTT platform. Long term safeguards for the remaining frequencies are also crucial in order to ensure necessary investments. If regulators do not provide certainty about the remaining frequencies it will be impossible for the Nordic PSBs and for commercial TV distributors in the Nordic countries to justify investments in the DTT platform and there is a risk that the support for the platform will erode.

Finally it should be noted that a long term strategy for the whole UHF band should take into account the availability of frequencies for PMSE-application, not only for broadcasters' use but equally for theatres and public events, and possibly also for white space devices.

## **Shared use of spectrum (LSA)**

It has been considered whether shared use of spectrum between broadcast and wireless broadband would be a solution that could provide new capacity to wireless broadband while at the same time ensuring capacity for digital TV. The Nordic PSBs support these ideas and find that the approach of shared use of spectrum and Licensed Shared Access (LSA) should be studied further in the years to come.

At the same time Nordic PSB conclude that technical solutions which allow for the sharing of frequencies between broadcast TV and wireless broadband are still on a very early stage. Full scale solutions, including the migration of network and receiving equipment, cannot be expected to be in place in the near future.

While shared use of spectrum might play a role in the future allocation of frequency resources in Europe it seems that the approach does not offer viable solutions on short term.

Furthermore the Nordic PSBs emphasise that possible future license models based on shared spectrum should ensure:

- That the resulting capacity for broadcast TV is sufficient to support a viable DTT platform.
- That shared spectrum solutions do not require disproportional investments in the network infrastructure.

### **Promoting a convergent infrastructure**

As described above the Nordic PSBs expect internet distribution of TV to gain increasing importance over the coming years. Although traditional broadcast distribution will still be dominant in the foreseeable future it is relevant to consider possible initiatives that would prepare Europe for a converged infrastructure.

Possible initiatives to support a converged infrastructure for TV distribution could include:

- Initiatives to promote the implementation of multicasting protocols that support efficient TV-distribution in broadband networks
- Initiatives to ensure that telecom operators and internet service providers live up to the principle of network neutrality
- Initiatives to ensure that managed IPTV networks include public service TV channels that have must carry status

The Nordic PSBs find that initiatives to prepare a convergent infrastructure should be considered as part of the overall discussions about the future use of spectrum in Europe.