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Comments from Yle to the Public Consultation on the Draft RSPG Opinion on the ITU-R World Radiocommunication Conference 2023

Yle welcomes the opportunity to provide comments on the draft RSPG Opinion on the ITU-R World Radiocommunication Conference 2023.

A. Facts about Yle

Yle, the Finnish Broadcasting Company, is Finland's national public service media (PSM) company. Finland is a very sparsely populated country, having the **lowest population density in the European Union**.

Yle operates three national television channels and six nationwide radio channels, complemented by regional radio stations. Currently, TV channels delivered over the broadcasting networks dominate the consumption of video content published by Yle. In addition to its TV and radio channels, Yle publishes linear video and audio, as well as VOD and AOD content through online services. See more details at https://yle.fi/aihe/artikkeli/about-yle/this-is-yle.

Yle's operations are financed by a public broadcasting tax. The company is supervised by an Administrative Council, appointed by the Parliament of Finland.

Yle has a legal obligation to serve the entire Finnish audience with diverse audiovisual and other content. Our legal remit means that the **entire Finnish audience needs to have access to the full selection of our media content**.

B. Yle's views on the changing consumption & delivery of audiovisual media and usage of lower UHF band

B.1 Internet publishing will become our main publishing platform

We expect the share of linear video and VOD viewing through our online services to increase significantly in the future. In addition to changing user preferences, changes in the device base for video consumption are also leading to changes in video consumption. The number of video consumption devices without a broadcasting receiver has already exceeded that of devices with a broadcasting receiver. We

estimate that the share of video content viewing through IP-enabled screens will, over time, surpass viewing through broadcasting receivers.

We foresee that internet publishing will become the main publishing platform of our company by approximately 2026-28. During the coming years, the decisive battle for audience attention will take place on the internet, not in broadcasting networks.

Even though the linear prescheduled channels through broadcasting networks will still bring the majority of viewing and listening minutes for several years, the broadcasting delivery will gradually move to a limited role, as **a major part of Yle´s content will not be available through broadcasting networks**. In terms of radio network technology, this means that the high-power high tower downlink-only DVB-Tx or 5G **broadcast networks on sub-700 band cannot serve the Finnish audience sufficiently**, as Yle´s entire content selection cannot be reached through broadcasting networks.

The peaks of live video viewing will remain or perhaps even increase, so the risk of insufficient capacity of broadband networks will exist, especially in mobile networks in rural areas.

Yle needs to secure the availability of the full content selection for the entire audience through fixed and mobile broadband networks during the peak viewing moments. The key challenge is to secure the **wireless broadband capacity** during the **peak viewing** moments in **rural and sparsely populated** areas**.**

B.2. Only broadband networks can serve the audience with a full selection of audiovisual content

Internet publishing platforms and content delivery over fixed and wireless broadband networks will replace the role of the broadcasting tv-channels as Yle´s primary video publishing service. Yle´s video offering contains several publishing formats, of which all are available only through the internet. Pre-scheduled **tv-channels over broadcasting networks do not contain the complete public service media content,** which needs to be available for the entire audience:

1) Pre-scheduled tv channel as a publishing format will remain beyond the foreseeable future.
- The number of pre-scheduled tv channels will decrease and the broadband networks are also able to carry the pre-scheduled tv channels.

2) Non-pre-scheduled live video streams will develop as a more important part of Yle´s content offering
- these are not available through broadcast networks.

3) The viewing share of the video-on-demand catalogue and catch-up publishing will increase further
- these are not available through broadcast networks.

In addition to the above, new publishing formats for broadband delivery may also evolve over time.

B.3 Open internet delivery over the best effort networks is “the new normal” for media delivery

Currently, broadband subscribers are paying the costs of linear tv-channel and VOD delivery over broadband networks. The **substance of traditional free-to-air (FTA) -access has changed** to “non-surcharge access” or “free at the point of use”, i.e., PSM content and other **public services are available through open internet, upon the condition that the audience and citizens pay for their broadband subscriptions, as they pay their electricity bills.**

Broadband publishing allows more publishing formats and a larger number of programme titles for different target groups than broadcasting publishing. This means that broadband publishing and distribution enable more diversity than broadcast distribution. The broadband publishing market is also more competitive than the broadcast publishing market, and more competition creates better quality content for the broadband publishing market.

B.4. Audiovisual media delivery through broadband networks is a tool to achieve the Digital Decade goals

The “2030 Digital Compass: the European way for the Digital Decade” defines the goal for the digital infrastructure: “By 2030, all EU households should have gigabit connectivity and all populated areas should be covered by 5G.” This **goal requires** both supply of broadband networks (i.e., investments) and **demand for broadband subscriptions**.

A well-managed and planned transition of media content delivery from broadcasting to broadband networks **creates a demand** for high-speed broadband subscriptions, thus **justifying** the needed network **investments**. The audiovisual **media delivery through broadband** networks can, in this way, act also as **a tool** for European governments **to achieve the Digital Decade goals**.

B.5. Audiovisual media delivery through broadband networks as a tool to improve the resilience of European societies

The resilience of modern society requires that broadband infrastructure is redundant, i.e., secured against power failures & external interference. **Decentralised broadband network infrastructure has a lower risk to fail totally than broadcasting network infrastructure with sparse transmitters**. However, the current broadband networks require redundancy of power supply and doubling of critical core network elements. After the improvement of broadband networks´

redundancy, the migration of media content delivery from broadcasting to broadband networks increases the resilience of society.

B.6. The supply of PMSE equipment will adapt to new spectrum band and radio technologies

The market supply of audio-PMSE, i.e., wireless microphones, needs and will be able to adapt to changes on the available spectrum. In the course of time, new spectrum bands and radio technologies will replace the current analogue wireless microphones on UHF band. Early decision making would give a clear signal to PMSE manufacturers and users to develop and invest in new technologies. A sufficient transition period is needed to avoid premature replacement investments in new audio-PMSE technologies.

C. Yle's comments on Draft RSPG Opinion on WRC-23, Section "4.3 WRC-23 Agenda Item 1.5 (UHF Review)"

C.1. Section "4.3.1 Link with EU policies"

RSPG wrote, in 2015, among others (underlining by Yle):

"11. RSPG recommends that, when considering any options for the future usage of the frequency band 470-694 MHz, aspects such as the requirements, technological developments, consumer behaviour, the importance of delivering free-to-air television and the various political, social, cultural and economic general interest objectives, should be taken into account."

Yle suggests that RSPG includes, in this opinion in section "4.3.1 Link with EU policies", a more detailed analysis of these various general interest objectives, taking into account what Yle presented above in the section B.

C.2. Section "4.3.3 RSPG recommendation:"

The draft opinion states as follows:

"The RSPG recommends that the European Commission proposes an EU position to the Council to ensure that the decision of WRC-23 on this Agenda item is compliant with the Decision (EU) 2017/899 providing priority to broadcasting and PMSE usage until at least end 2030."

The Decision (EU) 2017/899 stipulates conclusively the time limit "*until at least end 2030".* As no additional spectrum decisions are needed to secure the priority to broadcasting and PMSE usage, the spectrum allocation decision at WRC-23 can be made regardless of the Decision (EU) 2017/899.

Yle suggests RSPG to recommend a co-primary mobile allocation at WRC-23 without any time restrictions. In case RSPG decides to recommend a co-primary mobile allocation with some delayed date, the

date should be, at the latest, 31.12.2026. This would allow flexibility for those Member States which don´t anymore need the full sub-700 band for DTT but want to allocate some part of the sub-700 for mobile broadband, especially on rural and sparsely populated areas.