RESPONSE TO

NATIONAL BROADBAND PLAN – SEA PUBLIC CONSULTATION

Version 2
30 Jan 2018

1. Introduction

SIRO is responding to this consultation solely in order to comment on the High Speed Broadband map and not to comment on environmental impact issues. As such we address Question 4 of the consultation only.

We note that the current High Speed Broadband map ("the Map") is, to our knowledge, the only resource that holds validated information regarding the broadband speeds offered on a national basis. As such, the Map is used for a wide variety of purposes – far more than simply the purpose of NBP rollout planning for which it was originally envisioned[1]; for example, the Map is a valuable resource for FDI companies to assess the availability of broadband services for employees and remote workers.

While the current Map has significant value, we would request that DCCAE consider three enhancements:
- Additional speed detail
- Actual speeds vs advertised speeds
- Number of providers

These are discussed below.

2. Additional speed detail

Currently the Map shows only a binary value for speeds up to 30Mbps and speeds greater than or equal to 30Mbps. While delivering 30Mbps is of course an admirable goal, it should be noted that this will not meet the needs of large portions of the population in the near future. For example, this minimum speed would carry only a single Netflix UHD stream[2], and would be insufficient to support all but the most basic VR experiences[3][4][5].

It is widely acknowledged that higher speeds will be expected by most consumers in due course[6]. Provision of speeds higher than 30Mbps should be straightforward where fibre is provided (for example as part of the NBP or commercial FTTH rollouts), and certain urban areas may benefit from upgraded VDSL v35b services to move from 80Mbps to higher speeds[7]. However, it is important to

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[1] *Managing the High Speed Broadband Map*, https://www.dccae.gov.ie/documents/Managing%20IA%20Map%20-%20Consultation%20Paper%20FINAL%2021-12-15.pdf

[2] *Netflix bandwidth requirements guidelines*, https://help.netflix.com/en/node/306

[3] *Bandwidth and Latency Requirements for Virtual Reality*, IEEE 2017, https://mentor.ieee.org/.../3-17-0057-00-0002-bandwidth-and-latency-requirements-for-virtual-reality.docx

[4] *ADVA Virtual Reality Check*, https://blog.advaoptical.com/en/virtual-reality-check-are-our-networks-ready-for-vr

[5] Qualcomm 2017, https://www.qualcomm.com/media/.../files/vr-and-ar-pushing-connectivity-limits.pdf

[6] For example, Germany has committed to making 50Mbps universally available nationally by the end of this year; See Telegeography, https://www.telegeography.com/products/commsupdate/articles/2017/12/05/77-of-german-homes-can-access-speeds-of-50mbps/

[7] The v35b deployment currently planned in Ireland will provide benefits only to customers within 620 meters of a VDSL cabinet, who currently receive 80Mbps or higher

note that **areas which are currently served by copper in the 30Mbps-80Mbps range are unlikely to see any increase in available speeds in the foreseeable future** under current copper plans and NBP. Without investment in new infrastructure, these areas will become the "left behind" zones of 2020 that require government intervention.

By publishing more detailed speed indications, DCCAE would allow operators to focus investment in areas which are likely to require physical infrastructure upgrades in the near future and avoid the need for future government intervention and subsidies. We suggest that the Map be enhanced to show for example:

- <30 Mbps
- 30-50 Mbps
- 50-80 Mbps
- 80-100 Mbps
- >100Mbps

This would significantly enhance the value of the Map as a national planning asset.

3. Actual speeds vs advertised speeds

The current map shows speeds based on self-reporting of aspirational or "up to" speeds by operators; there appears to be a nontrivial number of premises where the actual delivered speed ends up significantly lower than the headline speeds advertised by operators. This disparity is the subject of EU Regulation 2015/2120[8], which ComReg is currently in the process of commencing to enforce[9]. In addition, BEREC has issued technical guidelines on appropriate mechanisms for measuring of achieved speeds[10]. The application of actual measured speeds, rather than "up to" or advertisied speeds, would greatly enhance the usefulness of the Map for all users.

4. Number of providers

At present the Map only shows data regarding the maximum speed available in a location from any provider; however no data is shown regarding the number of physical networks offering this service[11]. From a competition perspective there is a significant difference between an area that is served by a single high-speed service compared to one that is served by multiple physical infrastructures.

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[8] *REGULATION (EU) 2015/2120 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2015*, https://publications.europa.eu/en/publication-detail/-/publication/8fdf5d08-93fc-11e5-983e-01aa75ed71a1/language-en

[9] See for example *Implementation of EU Net Neutrality Regulations in Ireland*, ComReg 17/61, https://www.comreg.ie/media/dlm_uploads/2017/06/ComReg-1761.pdf

[10] *Net neutrality measurement tool specification*, BoR (17) 179, http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/7296-net-neutrality-measurement-tool-specification

[11] Note that we differentiate here between *retail operators*, several of which may serve a premises using one physical network, and *physical networks* which provide true competition.

As with our suggestion regarding additional speed detail, making available data on the number of networks serving each premises would allow for smarter allocation of investment by network operators, which provides efficiencies to the country's infrastructure as a whole and helps to avoid future "black spots".

5. Summary

In summary, we welcome the work done to date by DCCAE on the High Speed Broadband Map and encourage the Department to continue to enhance the Map to ensure that future commercial network rollouts are aligned with the future needs of the country.