

Comments on the

Consultation on a Policy and Licensing Framework for Spectrum in the 3500 MHz Band

by the

Eastern Ontario Wardens' Caucus (EOWC) and the

Eastern Ontario Regional Network (EORN)

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Introduction

1. Nearly a decade ago, the Eastern Ontario Warden's Caucus (EOWC) recognised that a regional approach was required to address the broadband gaps within the 13 County and Single Tier municipalities, and six First Nation communities, representing in total over 750,000 residents in our region of 50,000 square kilometres. Working with our provincial and federal counterparts, the EOWC developed the Eastern Ontario Regional Network (EORN), and with private and public-sector investment of over \$175M, delivered a successful broadband project that provided access to new or improved broadband services for 89% of our households. The project was completed in late 2014 and was delivered on time and under budget. EORN closely collaborated with its 6 private commercial partners, who actually own and operate the network. Most of our rural residents were provided access through wireless services. Within this network, 60,000 subscribers and approximately 275,000 households can only access the internet through either fixed wireless or satellite, many of which have no competitive choice. This represents just over 40% of the subscribers on our project builds, and an estimated view of 75% of our rural households¹.
2. After our success in delivering a fixed broadband project, the EOWC tasked EORN to investigate solutions to address the mobile broadband gap that residents were identifying as part our ongoing regional consultation process. Using independent expertise, engineering coverage and capacity gap analysis was completed, resulting in a conceptual design and costing model. Funding for the project has been confirmed by both the Federal and Provincial Governments and we are working towards completing the associated agreements and launching the project.
3. Given the importance of 3500 MHz spectrum to the fixed wireless subscribers in our region as a result of our first project, and the potential value of 5G on 3500 spectrum that will result from our upcoming project, our residents are directly affected by the outcomes of this consultation and by the Decision on Revisions to the 3500 MHz Band to Accommodate Flexible Use and Decisions on Preliminary Changes to the 3800 MHz Band (referred to as the 2019 Decision), released on June 5, 2019.
4. As a representative of rural communities, we feel it is important to continue to highlight the challenges faced by rural communities and underserved regions across the country. We continue to advocate on behalf of these communities in the areas of spectrum, the importance of public private funding, and the importance of these programs to address the digital divide.

General Comments

5. EORN continues to see demonstrated the value of competition in urban and rural markets (especially where lucky enough to occur in a rural market) through competitive pricing and service levels. This is most recently demonstrated by the rollout of unlimited data plans in both the fixed and mobile broadband markets in our region.

¹ Households outside of communities greater than 30,000 population

6. While the two Major National Service Providers (MNSPs) provide significant and often the only mobile coverage in some of our rural areas (which we appreciate), they can only do this because they have the deep pockets to be able to purchase spectrum in the past and in current auctions. This certainly limits the competition in a mobile environment, and with the value of 3500 in the fixed wireless environment will preclude any new fixed wireless carrier joining the market, or additional capacity (primarily) and coverage for existing fixed wireless providers.
7. Without pro-competitive measures in the upcoming 3500 auctions, it is highly unlikely that any carriers other than the MNSPs will be able to acquire spectrum in any of the rural areas.
8. EORN continues to be of the opinion, as mentioned in previous consultations and most recently on the Tier Size consultation², that the smaller service areas may facilitate access to spectrum in rural areas, through affordable smaller licenses for non-NMSP in new auctions. In addition, the separation of large urban areas from rural areas is important to ensure accessibility to spectrum in rural areas, where the spectrum may be under-utilised in a larger service area.
9. While the decision has been made on the Tier 4 service area size for the 3500 licenses, and the proposed conditions of license may help ensure that spectrum is utilised in service areas that include both a large urban centre and a rural part, EORN is still concerned that parts of our rural area will continue to have under utilised spectrum where there is a demand.

Summary

10. In summary EORN makes the following key points:
 - i. Ensure that the auction process facilitates competition in the market, including the options for smaller carriers to participate
 - ii. Ensure that the license conditions do not leave spectrum unused for long periods of time where there is demand especially in rural areas.
11. EORN is only responding to the questions in this Consultation process that we believe will affect our residents, and that we have relevant expertise or opinions.
12. We thank ISED for the opportunity to comment on the consultation and would be more than willing to respond to any subsequent questions.

² EORN Response to the Consultation on a New Set of Service Areas for Spectrum Licensing
DGSO-002-18, February 2019

Comments on the questions

7. Pro-competitive measures

Q1A—ISED is seeking comments on its proposal to implement pro-competitive measures in the 3500 MHz auction.

Q1B—ISED is seeking comments on the use of a set-aside, an in-band spectrum cap, or a combination of both, including the amount of spectrum that should be applied for the use of a set-aside, and/or the amount of spectrum that should be subject to an in-band spectrum cap. Provide supporting rationale for your responses.

If a set-aside is to be applied:

Q1C—ISED is seeking comments on its proposal to limit the eligibility criteria to bid on set-aside spectrum licences to those registered with the CRTC as facilities-based providers* that are not National Mobile Service Providers, and that are actively providing commercial telecommunication services to the general public in the relevant Tier 2 service area of interest, effective as of the date of application to participate in the 3500 MHz auction.

Q1D—ISED is seeking comments on its proposal that any set-aside licences acquired by set-aside-eligible bidders would not be transferable to set-aside-ineligible entities for the first five years of the licence term.

Q1E—ISED is seeking proposals for other eligibility criteria along with supporting rationale.

If a spectrum cap is to be applied:

Q1F—ISED is seeking comments on the inclusion of grid-cell and sub-divided licences towards the spectrum cap, and the proposal to allow the return of these licences in order to increase a licensee's eligibility to bid on additional spectrum within the related licence area.

* An applicant would need to be registered on one of the CRTC lists of facilities-based providers by the date that applications are due.

13. EORN supports pro-competitive measures to encourage competition and support regional carriers and WISPs. The 3500 spectrum is an important spectrum for rural service providers, and is one of the few spectrums that can deliver the fixed wireless capacity required to deliver 50/10 services. It is only by use of pro-competitive measures that any of this spectrum can potentially be available for this use by WISPs, as opposed to being completely obtained by the NMSPs. We agree with the observation made by ISED, that NMSPs have the means and incentive to prevent other service providers from obtaining spectrum licenses in an open auction.
14. While a competing demand to fixed wireless, we also see value in making the spectrum available to regional carriers for use as a mobile spectrum. Regional carriers are slowly expanding facilities based services in some of the more attractive financially areas, but are limited by the availability of spectrum among other things. Pro-competitive measures could help to make the spectrum available.

15. EORN supports set-asides for qualified ISPs as per the eligibility criteria in Q1C and Q1D of “set-aside-eligible bidders”. Spectrum caps alone will not be enough and will just allow deep pocket investors to come in.
16. EORN has no opinion on set-aside block size.
17. EORN has no comments on Q1F comments on inclusion of grid cell and subdivided licenses towards the spectrum cap.

8. License areas

Q2—ISED is seeking comments on its proposal to use Tier 4 service areas for the 3500 MHz licensing process.

18. Given that the existing 3500 licenses are in Tier 4 service areas, the complexity of managing the transition licenses, and the objective of providing services for flexible use in both urban and rural licenses, ISED has no real choice apart from using the Tier 4 service areas. Generally, this provides a reasonable separation between urban and rural areas, but there are some significant areas in EORN’s region where the separation of urban and rural is not made in the Tier 4 service area.
19. As mentioned in our response to the consultation on the new set of service areas³ EORN is concerned about proposals that group a rural population in a spectrum service area, with a large or midsize urban area. Of the 14 Tier 4 service areas in our region, 2 include large urban population centers (Cities of Ottawa and Kingston), 3 others include cities with populations over 30,000. These service areas that include a population center of greater than 30,000 represent 54% of the area of the total region or approximately 47% of the households.
20. Of particular concern in our region is the Ottawa/Outaouais 4-055 service area, that not only includes the City of Ottawa (~1M population), but parts of the United Counties of Prescott Russell, Unites Counties of Stormont, Dundas and Glengarry, United Counties of Leeds and Grenville, as well as the entire county of Lanark, and a large area north of Ottawa in Quebec. This is a mixture of a reasonably well served urban area, and a large rural geography.
21. The existing spectrum in this license service area is generally not utilised by its NMSP owners, but is in demand by smaller WISPs. With the current proposal, anything not protected by a set-aside will be purchased by the NMSPs, the set aside amounts will be purchased by the regional carriers for use only in the urban Ottawa area, while the remaining rural spectrum will continue to be under - utilised.

³ EORN Response to the Consultation on a New Set of Service Areas for Spectrum Licensing DGSO-002-18, February 2019

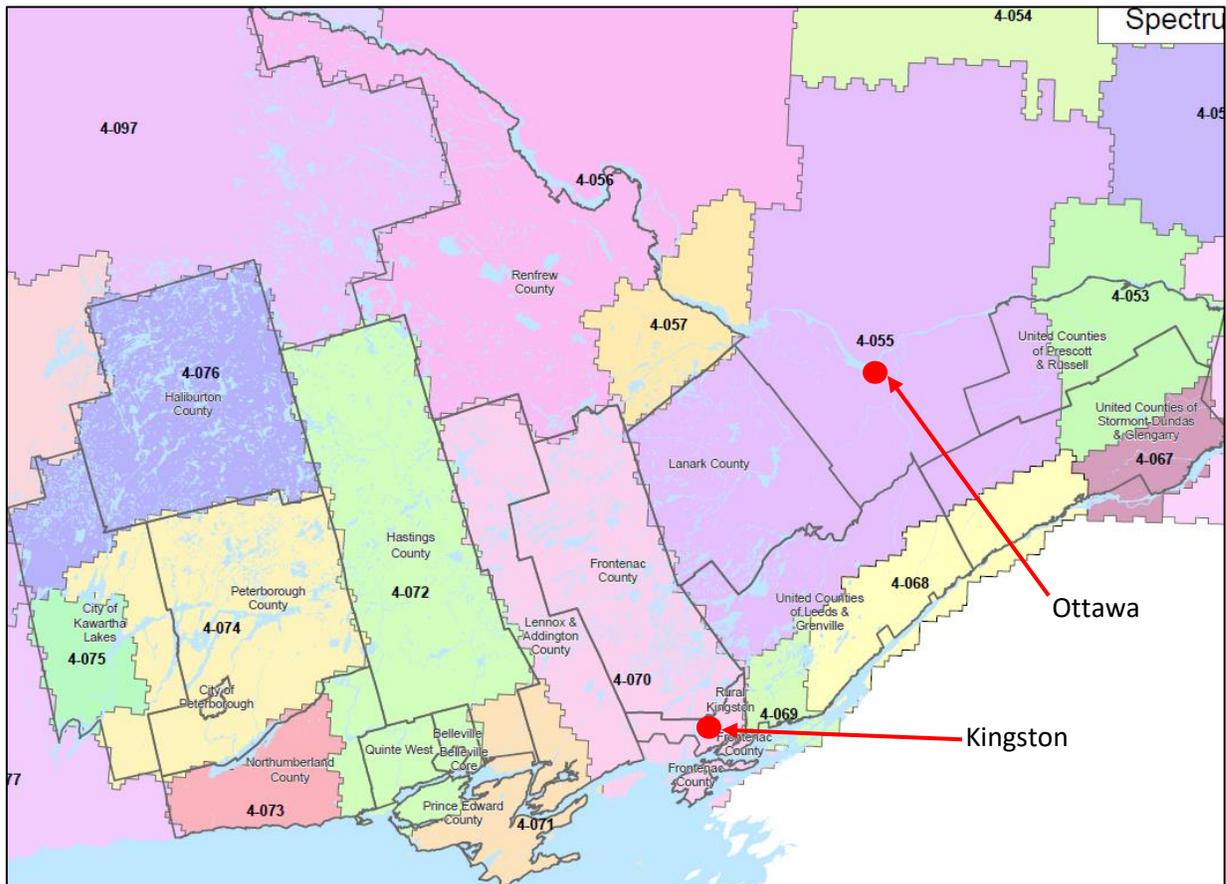


Figure 1: Tier 4 Service areas in Eastern Ontario

22. EORN is proposing for the 4-055 service area that for the purposes of the 3500 MHz licenses that the service area be broken into three sub-Tier 4 service areas, such that say 4-055-A refer to the area in Quebec, 4-055-B refer to the City of Ottawa, and the remaining rural regions be consolidated in 4-055C or potentially a further subdivision.
23. A similar splitting of the Tier 4 service area 4-070 that includes the City of Kingston and Counties of Frontenac and Lennox and Addington, could separate the urban area from the rural area, and would help to ensure that the rural spectrum is accessible and affordable to rural providers, considering the value of the urban spectrum. This might also apply to 4-072 that includes the City of Belleville and Quinte West, and the more rural County of Hasting.
24. Other similar areas such as 4-136 Calgary, and 4-141 Edmonton that include a large urban population and a much larger rural area should also potentially have different treatment than other Tier 4 areas.

EORN - Who We Are

The Eastern Ontario Wardens' Caucus (EOWC) was created to support and advocate on behalf of the property taxpayers across rural Eastern Ontario. The EOWC covers an area of 50,000 square kilometres from Lindsay to the Quebec border, and includes 13 upper-tier and single-tier municipalities as well as 90 local municipalities. www.eowc.org

The Eastern Ontario Mayors' Caucus (EOMC) is made up of the Mayors of the 11 urban municipalities (separated, single-tier) of Eastern Ontario.

The Eastern Ontario Regional Network was created in 2010 as a not-for-profit corporation controlled by the Eastern Ontario Wardens' Caucus, with the objective of improving Broadband connectivity in the region. EORN's Board consists of members from the EOWC, the EOMC and members of the public. www.eorn.ca

Nearly a decade ago, the Eastern Ontario Warden's Caucus (EOWC) recognised that a regional approach was required to address the broadband gaps across the region. Working with our provincial and federal counterparts, the EOWC developed the Eastern Ontario Regional Network (EORN), and with private and public-sector investment of over \$175M resulted in a successful broadband project that provided access to new or improved broadband services for 89% of our households at up to 10Mbps and a further 9% from 1.5Mbps to 9Mbps. The project was completed in late 2014 and was delivered on time and under budget⁴. EORN closely collaborated with its 6-private commercial Internet Service Provider (ISP) partners, who own and operate the network.

EORN was able to create a partnership that brought together federal, provincial, and municipal governments with private sector partners to deliver broadband access. Our success can be attributed to four main components of our model⁵

- A. Regional leadership – rural municipalities worked together to create sufficient critical mass
- B. Evidence based – detailed mapping and economic analysis quantified the problem, allowing us to break the region into smaller zones – allowing local carriers to bid within their markets, only intervened where there were clear cases of market failure, addressed needs in both easy and hard to serve areas.
- C. Efficient and Effective Oversight – Not-for-profit corporation with a consistent team of staff and consultants for the duration of the project, resulting in overall management costs of less than 6% of total project, long term binding contracts which included service level agreements
- D. Public-Private Partnership – leveraged private investments, diverse partnership including major carriers and local service providers, flexible funding model allowed governments share of funding to vary based on local needs, created win-win relationships for project partners

⁴ *Connecting Eastern Ontario to the World Final Report*. Retrieved from https://www.eorn.ca/en/resources/project-updates/EORN_Final_Report_2014_EN.pdf

⁵ *EORN Model*. Retrieved from <https://www.eorn.ca/en/resources/fact-sheets/EORN-Model-FINAL.pdf>



Map of Eastern Ontario

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