

Feb. 14, 2019

Innovation, Science and Economic Development Canada c/o Senior Director, Spectrum Operations 235 Queen Street, 6<sup>th</sup> Floor Ottawa, ON K1A 0H5

(sent via email: ic.spectrumoperations-operationsduspectre.ic@canada.ca)

Re: Canada Gazette, Part I, November 2018, Consultation on a New Set of Service Areas for Spectrum Licensing (DGSO-002-18)

We appreciate the opportunity to comment on the proposed approach for adding a new set of smaller service areas for spectrum licensing (Tier 5) to complement Innovation, Science and Economic Development Canada's (ISED) existing suite of spectrum licensing mechanisms. We are pleased to provide our formal input with this letter.

Syncrude Canada Ltd. is the operator of the Syncrude Project, an oil sands joint venture whose facilities include an integrated mining and upgrading operation, which are wholly located north of Fort McMurray. Headquartered for more than 50 years in northern Alberta, Syncrude is dedicated to building a strong and vibrant community. We fully upgrade all the bitumen we mine into a high-quality light, sweet crude oil right here in Canada. We are a significant employer in the Wood Buffalo region and one of the country's largest employers of Aboriginal people. Syncrude is committed to responsible development, including continuous improvement in our environmental performance.

Overall, Syncrude supports the proposal to add a new set of smaller service areas. However, we find the current approach and the options presented in the notice have based the spectrum assignment boundaries on rural or urban populations. Our land use is industrial and we would encourage the government to consider options for an industrial footprint. LTE wireless infrastructure is the current industry trend and product development area for utilization and provision of high-performance, high-reliability wireless infrastructure. It is readily being used for this purpose in the United States, but not available to industry in Canada. Company-owned LTE wireless infrastructure allows the implementation of a support model that is aligned with the company's safety and production goals.

## Question 1: Design principles

For oil sands operators, such as Syncrude, licensing of smaller service areas will enable our company to adopt new and emerging technologies that would result in both environmental and economic benefits. Our position is economic-based and supports design principles #20, #24, #26, #29, #30, #32 and #35. Access to LTE spectrum is necessary for Syncrude to implement high speed wireless data infrastructure that meets our safety, production and reliability goals. Currently, no LTE spectrum is available in the Wood Buffalo region that can be implemented to meet these high performance business goals.

A few examples where our industry would benefit from access to a LTE spectrum include the following:

- Oil sands operators use heavy industrial mobile equipment that requires timely (instant) access to
  operating data. Increased efficiencies from access to the data are significant. Reliability and
  availability are necessary. Currently, WiFi is not reliable and LTE is not accessible.
- Our safety-critical radio infrastructure would be improved with the ability to adopt LTE handheld units
  that would replace both the handheld radio and cellphone, are intrinsically safe and can be used for
  both group conversations and private conversations.
- Currently, there is no high reliability wireless infrastructure suitable for process control and automation. The LTE spectrum has the potential to provide this high reliability wireless infrastructure.

## Question 2: Option 1 – Boundaries based on Statistics Canada 2016 census subdivisions

When considering Option 1 and boundaries based on Statistics Canada census subdivisions, this option is not suitable for our operations, as we are located in an industrial footprint where there is no or low population.

## Question 3: Option 2 - Boundaries based on population centres

When considering Option 2 and boundaries based on population centres, this option is not suitable for our operations, as we are located in an industrial footprint where there is no or low population.

## Question 4: Alternative proposals

Syncrude recommends an additional, alternative proposal be considered alongside the two options presented, which is that surface leases be used to delineate smaller service areas. We request that the same LTE spectrum be allowed for multiple independent oil sands leases and rural centres in the vicinity, based upon coordination similar to the current microwave licensing policy. As LTE is designed for interference-free coexistence, multiple independent LTE systems can be deployed, if they are coordinated. We recommend that LTE spectrum licences be issued on the basis that the LTE technology selected is one that will allow adjacent assignments to be coordinated. We propose this to be mandatory.

We hope our comments are helpful and welcome continued engagement on this important topic. Please do not hesitate to contact me directly at 780.714.7783.

Sincerely,

Alain Moore

Manager of Government and Public Affairs

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