

Current ISED Tier Structures

Tier 1 – a single national service area covering the entire territory of Canada

Tier 2 - consists of 14 provincial and large regional service areas covering the entire territory of Canada

Tier 3 - consists of 59 smaller regional service areas covering the entire territory of Canada

Tier 4 - comprises 172 localized service areas covering the entire territory of Canada, based on contiguous groupings of Statistics Canada’s 1996 census subdivisions (CSD)

Imperial Oil Proposal for Tier 5 – This new service area could enable Canadian industries (Utility Companies, Oil & Gas operators, etc.) to deploy next generation wireless communication infrastructure within the boundaries of their operating leases.

Question 1: Design Principles

Q1A - ISED is seeking comments on the proposed design principles when providing responses, include supporting arguments for or against the proposed principles.

Recognize geographic differences: consider the unique characteristics of urban and rural areas in Canada

Imperial Oil Comments:

- Supportive of “alternative licencing approaches for rural and remote areas”, this could enable innovation and expands opportunities for Digital solutions. This will enable industries to obtain license spectrum specifically for the geographic area of their operations.

Foster demand: areas should have either a population base or some economic value to support commercial viability

Imperial Oil Comments:

- Agree “Fostering Demand” through population base or economic value. This would enable industries to secure license spectrum for areas that are not heavily populated but would provide economic value to their specific industry.

Maintain technological and competitive neutrality: not favouring or discriminating against one technology or group of stakeholders over another

Imperial Oil Comments:

- Agree. No further comments.

Ensure boundaries are in low population areas to minimize potential interference issues.

Imperial Oil Comments:

- Agree. Interference can be mitigated though installation and use of Antenna that support down-tilt.

Ensure areas nest within the existing Tier 4 service areas to maintain continuity with ISED’s existing licensing structure.

Imperial Oil Comments:

- Agree. Nesting of Tier 5 into Tier 4 is consistent with the rest of the tier hierarchy.

Use the ISED’s existing grid cells as constituent building blocks.

Imperial Oil Comments:

- Agree. Maintain use of grid cell areas is consistent with the rest of the tier hierarchy. Minimum size of grid cell is appropriate.

Q1B - ISED is seeking any suggestions on additional design principles that should be considered.

Imperial Oil Comments:

- We recommend consideration be given to existing Mine Surface Lease MSL boundaries and existing Operating Lease boundaries. Therefore Tier 5 license boundaries shall align to existing industrial operating leases.

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

Q2A - ISED is seeking comments on the suitability of Option 1 in addressing the proposed design principles.

Imperial Oil Comments:

- Option 1 Address the proposed design principles with the exception of interference minimization. Use of CSDs in large urban areas could create potential interference. This can be mitigated if CSDs are combined (see question 2B).

Q2B - ISED is seeking comments on whether adjacent urban CSDs should be combined into a single service area.

Imperial Oil Comments:

- Combining adjacent urban CSDs into a single service area, will support the proposed design principle addressing interference minimization.

Q2C - ISED is seeking comments on whether there should be a minimum or maximum size for the service areas and if very small CSDs should be amalgamated into the larger surrounding or adjacent CSD.

Imperial Oil Comments:

- The minimum size for service areas shall be sized to prevent disruptive/speculative acquisition of spectrum in CSDs. The maximum size shall ensure that Tier 5 does not exceed current Tier 4 service areas and shall be consistent with operating lease boundaries.

Q2D - ISED is seeking comments to gauge if this option is suitable for northern and rural areas.

Imperial Oil Comments:

- Option 1 is suitable for northern and rural areas where localized industries can apply for license spectrum for their operational lease boundaries. This would facilitate industries such as Utility companies and Oil & Gas operators to license specific MLS areas.

Question 3: Option 2 – Boundaries based on population centres

Q3A - ISED is seeking comments on the suitability of Option 2 in addressing the proposed design principles.

Imperial Oil Comments:

- Option 2 does not address “Foster Demand” or “Technological and Competitive Neutrality” design principles, particularly in rural and northern areas.

Q3B - ISED is seeking comments on the proposed minimum population for small population centre service areas. A rationale should be provided if a different population is proposed.

Imperial Oil Comments:

- No comment.

Q3C—ISED is seeking comments on whether the “other” service areas (remainder areas in each Tier 4) should be licensed differently (e.g. on a shared or first-come, first-served basis).

Imperial Oil Comments:

- Option 2 “other” service areas will mandate a different license process. Shared applications will be required. First come first served basis does not “Foster Demand’ or address ‘Technological and Competitive Neutrality”.

Q3D - ISED is seeking comments on whether this option is suitable for northern or rural areas.

Imperial Oil Comments:

- Option 2 Specifically for Northern and Rural areas is geographically identical to existing Tier 4 areas. Therefore provides no economic value.
- Option 2 Does not address the Technological and Competitive Neutrality design principles, particularly in rural and northern areas.

Q3E - ISED is seeking comments on whether population centres, which have adjacent boundaries, should be amalgamated to form a single service area.

Imperial Oil Comments:

- No comment