



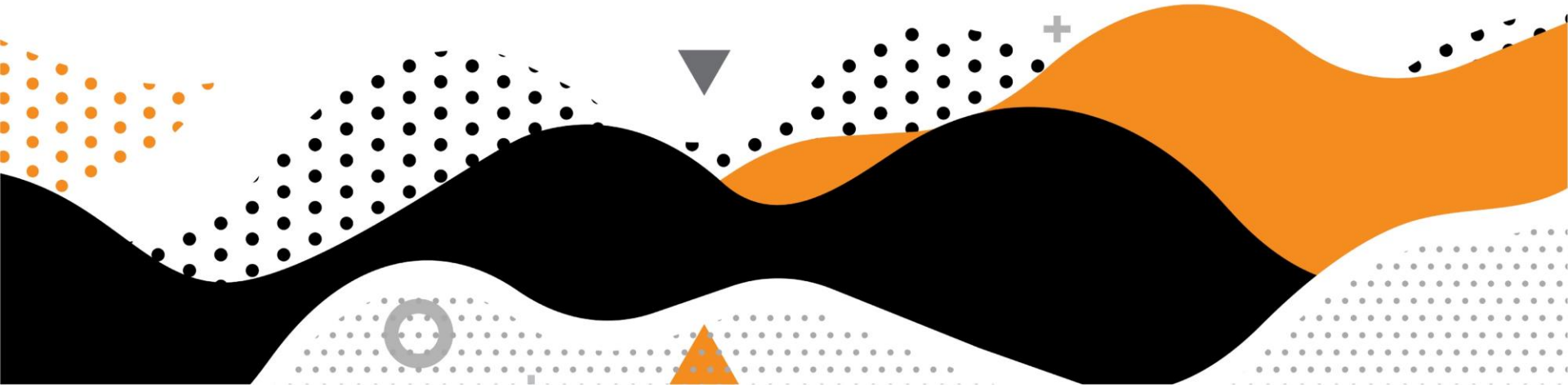
Innovation, Science and
Economic Development Canada

Innovation, Sciences et
Développement économique Canada

Canada

Innovation, Science and Economic Development Canada **Updates**

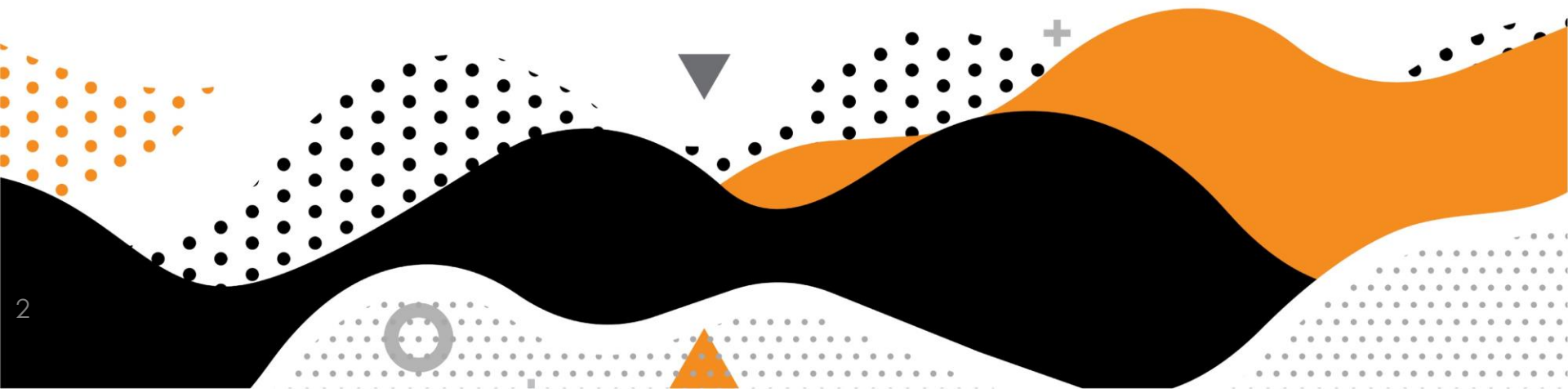
RABC Quarterly Meeting
October 12, 2023





ISED Spectrum Policy Update

Rémi Melanson



Non-Competitive Local (NCL) Licensing Decision

- On May 3rd 2023, ISED released the [Non-Competitive Local Licensing Framework, Including Spectrum in the 3900-3980 MHz Band and Portions of the 26, 28 and 38 GHz Bands](#)
- Targets multiple concurrent objectives, including:
 - simplicity and flexibility in licensing; enabling localized access to shared 5G spectrum to smaller users including wireless internet service providers, innovative industries, and Indigenous communities
- **Key decisions include:**
 - First-come first-served (FCFS) approach, can be applied to multiple bands
 - Custom vector-based covering small and large local areas
 - Licence terms of 1 year with a high expectation of renewal + option for shorter periods
 - Measures to support local access and deployment requirements
 - Access managed through an automated licensing process
 - A phased implementation: NCL licensing in 3900-3980 MHz band first, then, mmWave
 - Early access window for existing WBS
 - WBS licensees have 60-days following publication of the decision to upload site data on ISED's website
 - An addendum will cover NCL licensing in mmWave

New Access Licensing Consultation

- On August 4, 2021, ISED launched the [Consultation on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment](#)
 - Comment period closed on **December 7th, 2021**
- Key proposals include:
 - A new supplementary licensing process (Access Licensing framework) for unused spectrum
 - Clarifications to ISED's framework to streamline subordinate licensing approvals, and encourage greater use of these licences to increase use of spectrum
 - Improvements to white space rules
 - Changes to the rural remote broadband system (RRBS) policy framework

3800 MHz Band

- **Auction begins October 24, 2023**, deadline to apply was July 25, 2023
 - [22 bidders qualified](#) to participate in the auction (list published August 16, 2023)
- Comprehensive information session for qualified bidders was held on September 14, 2023, followed by a number of mock auction sessions
- ISED will not be providing public updates on the status of the auction, but will make all bidding data publicly available following the announcement of results by the Minister and the issuance of licences
 - Reminder that bidders are also prohibited from signalling, publicly or privately, their bidding intentions or post auction plans related to the spectrum being auctioned, including comments or any communication with or via the media

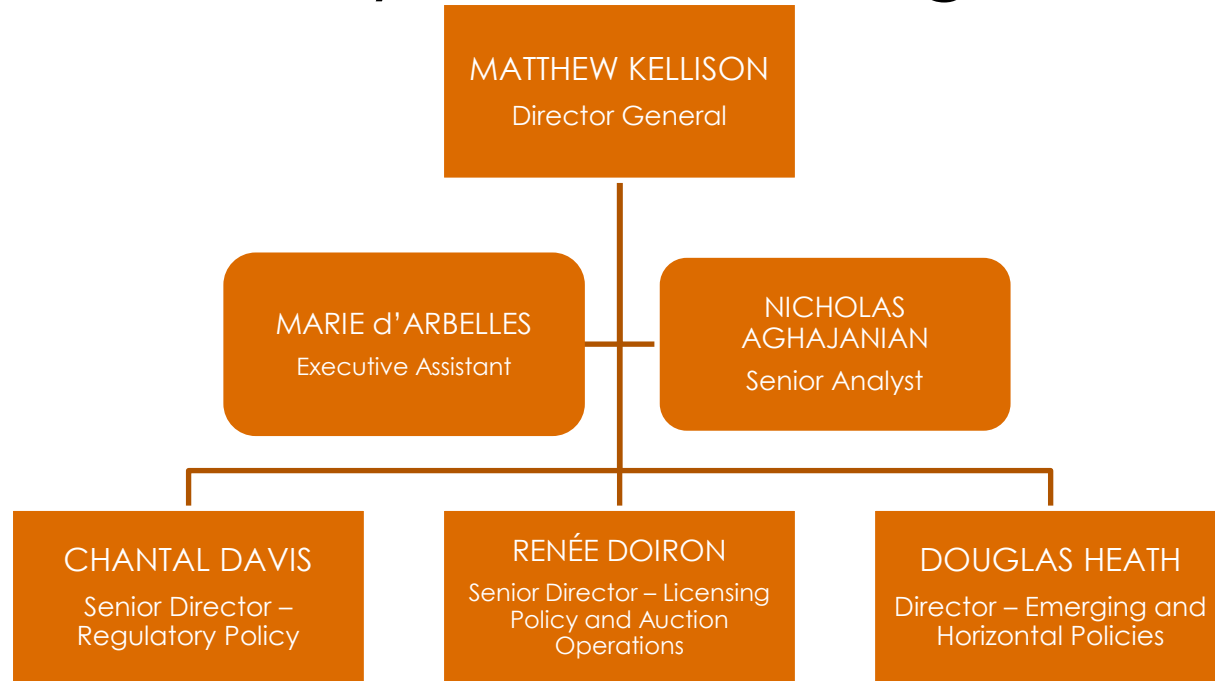
mmWave

- On June 6th, 2022, ISED published the [Consultation on a Policy and Licensing Framework for Spectrum in the 26, 28 and 38 GHz Bands](#)
 - Comment period closed on **October 7th, 2022**
- Key proposals include:
 - Auction 1.6 GHz in the 26/28 GHz bands and 1.6 in the 38 GHz band
 - Additional 200 MHz in 26 GHz band, 50 MHz in the 28 GHz band and 800 MHz in 38 GHz band for future non-competitive licencing process
 - Use of Tier 5 service areas for auction process
 - Also seeking comments on whether some areas should be excluded (e.g. rural or remote)
 - Deployment requirements based on number of stations, as opposed to population
 - Two options for competitive measures, with request for additional proposals:
 - 1) 800 MHz set-aside across 26/28 GHz and 38 GHz bands
 - 2) 800 MHz cross-band cap across 26/28 GHz and 38 GHz bands
 - 10 year licence term
 - Refinements on the sharing between satellite and flexible use operations

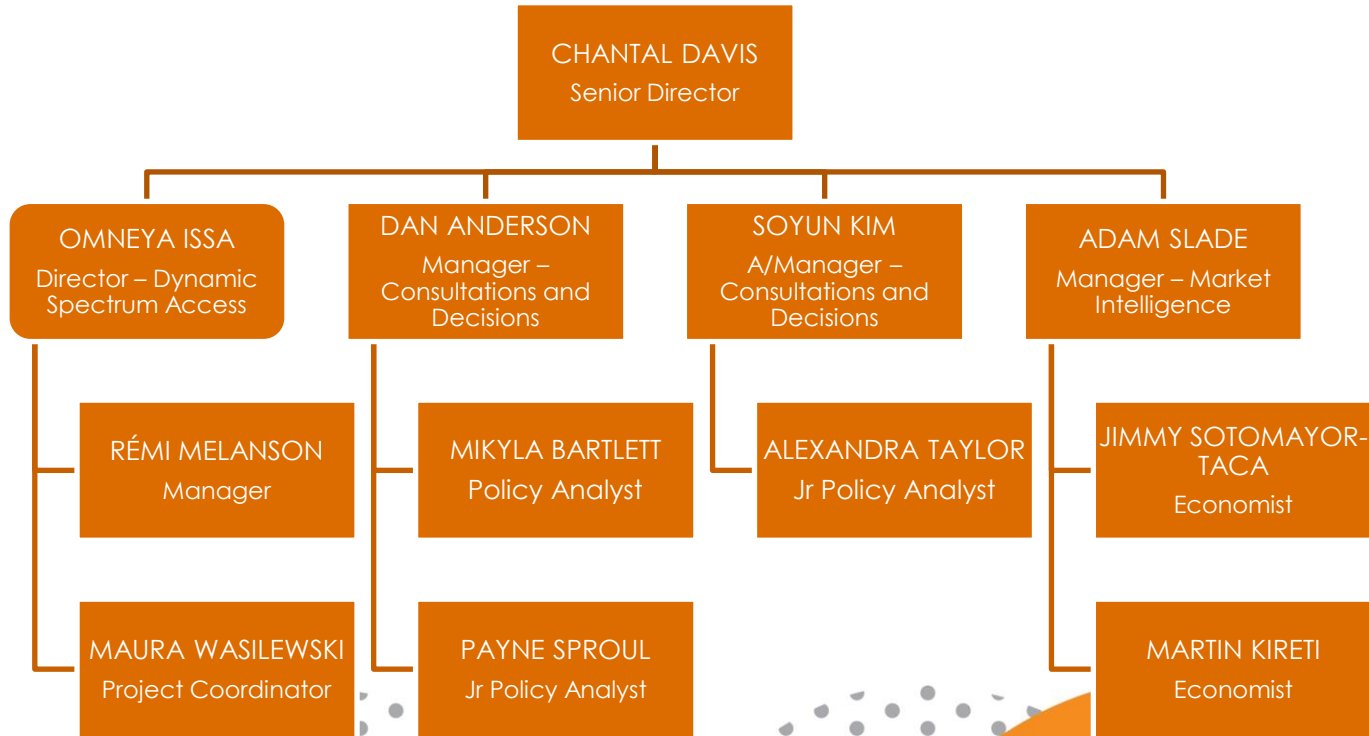
Spectrum Outlook

- On August 11, 2023, ISED published the [Spectrum Outlook 2023 to 2027](#)
- Key aspects include:
 - Priorities for spectrum releases
 - Lays out ISED's proposed spectrum band release priorities over the short-to-medium term
 - New and upgraded bands include 2500 MHz, AWS-3 Unpaired/AWS-4, 3.1-3.45 GHz, 5 GHz for unmanned aircraft, and 24 GHz
 - Priority policy themes, where spectrum policy intersects with larger Government priorities, including:
 - Indigenous connectivity
 - Rural and remote connectivity
 - 5G and climate change
 - Affordability, Competition and Innovation
 - Spectrum as an economic driver and enabler of Industry 4.0
 - Policy objectives and guiding principles for spectrum licence fees

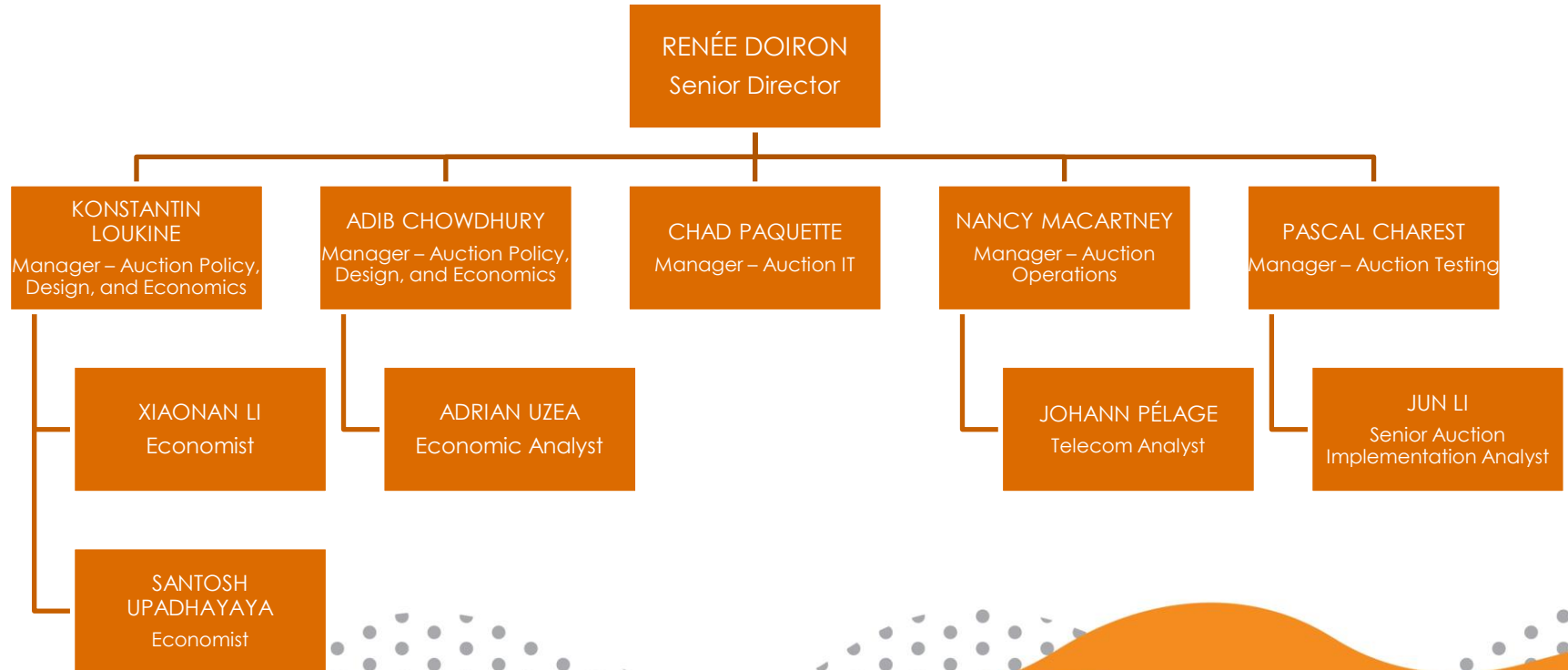
Spectrum Policy Branch – Organization



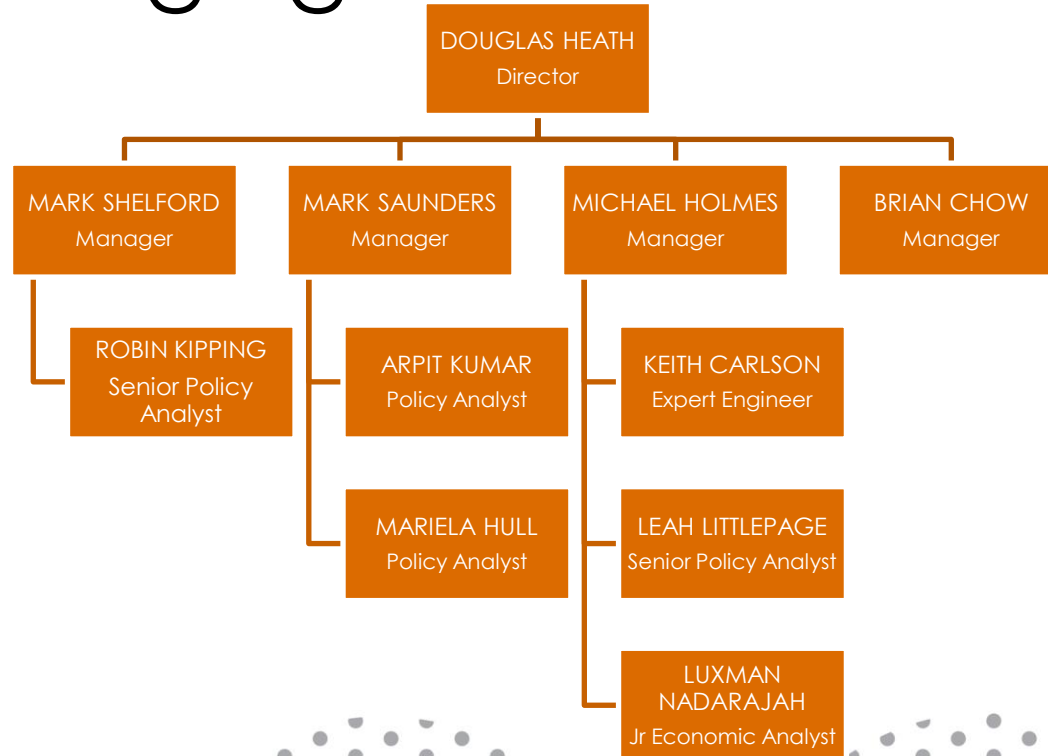
Regulatory Policy



Licensing Policy and Auction Operations



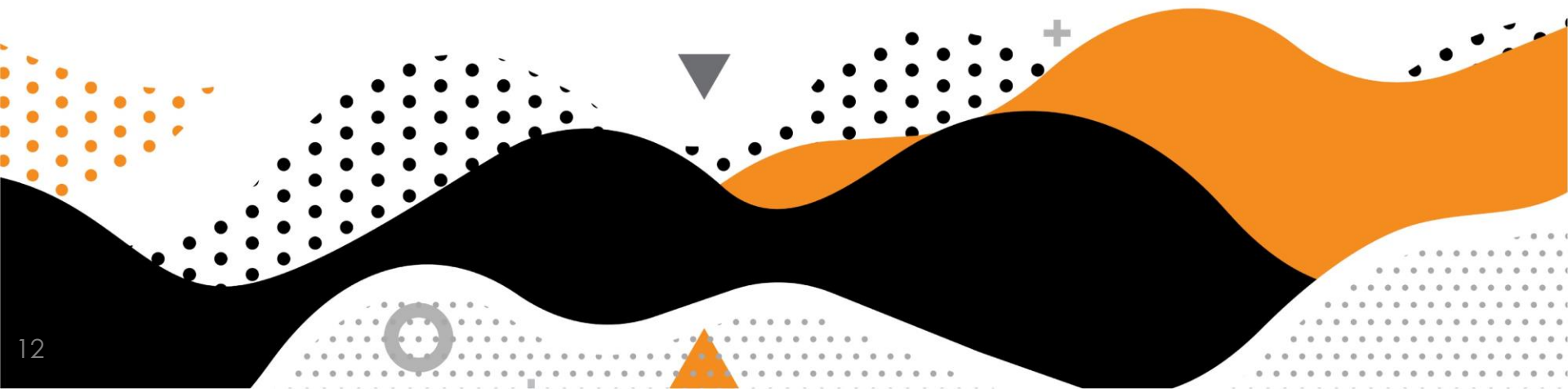
Emerging and Horizontal Policies





ISED Operational Update

Herrick Liu, Matthew Messer, Daniel Jaremek



General updates

- Licence verifications
 - MBS Mid-Term verification for 2024 have started
 - WCS renewal: A decision for the WCS renewal is upcoming, information requests will be sent to licensees
 - FWA licences: Please confirm that station data is up to date. You can now upload your site data using either the existing data site upload or the new system
- 3500 MHz displacements
 - Round 4 intentions processed
 - Displacement application deadline is October 17th
 - Next round to begin December of this year

Site Data Update

- [Decision](#) was published on August 2023
- New site data application was launched on Sept 6
- Licensees are encouraged to start using the new format

New Technical Requirements are listed in the [CPC 2-1-30](#)

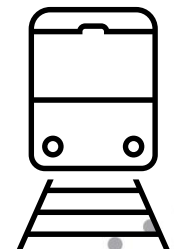
Licensees can still upload using the legacy system requirements in CPC 2-1-23, this will be phased out in the early 2024.

Please contact Spectrum Operations for any questions related to the new site data requirement

Reminder

- 6 GHz band (5925-7125 MHz)
 - Licensees must verify and correct data in the Spectrum Management System as soon as possible
 - Data will be used by Automated Frequency Coordination (AFC) systems to protect licensees
 - See [Spectrum Advisory Bulletin \(SAB\) 002-22](#) for details
- NCLL WBS early access window
 - Opening of the application process for the early access window will be announced in the coming weeks
 - WBS licensees must remain in compliance with their conditions of licence in order to be eligible to apply for local licences through early access application window

Cellular Service in the TTC Subway



*Where there is existing infrastructure

Compliance with Safety Code 6

- Antenna installations must, at all times, comply with the uncontrolled environment (UE) limits of Safety Code 6 (SC6) in any area accessible to the general public.
- Measurement process is outlined in ISED's GL-01, [Guidelines for the Measurement of Radio Frequency Fields at Frequencies From 3 kHz to 300 GHz](#)
- Reporting guidelines are outlined in ISED's GL-08 — [Guidelines for the Preparation of Radio Frequency \(RF\) Exposure Compliance Reports for Radiocommunication and Broadcasting Antenna Systems](#)

Use of Power Limiting Mechanisms

- ISED recognizes the latest developments in massive-MIMO and the benefits associated with it, however, our top priority is the protection of the general public.
- GL-01 allows the use of the actual maximum transmitted power or EIRP provided the site remains compliant with the UE limits of SC6 using power limiting mechanisms.
- Use is conditional on successful validation of the mechanisms on the service provider's network, and approval from ISED – Spectrum Operations.

Validation of Power Limiting Mechanisms

- Each service provider must demonstrate to ISED that the mechanisms being used prevent antenna installations from exceeding SC6 uncontrolled environment limits.
 - Averaged over any 6 minute period (rolling window) at any location accessible to the general public, regardless of traffic load variation.
- Until successful validation, compliance must be demonstrated using the site's theoretical maximum power or EIRP.
- All assessments must take into account the combined effects of nearby antenna installations within the local radio environment.

Information Submitted to ISED

- High-level theory of operation of the power limiting mechanisms to be deployed (typically from the base station vendor).
- Roll-out plan of the power limiting mechanisms, including proposed timeframes and locations.
- Field validation report(s) of power limiting mechanisms from the service provider or base station vendor.

ISED's Assessment and Validation

- Review service provider's field validation report(s).
- May include ISED field validation measurements.
- May request additional information/clarification from service providers.

RF Exposure – Site Compliance and Access Control (CPC-2-0-20)

- Thank you for your feedback on the proposals.
- ISED is still targeting for a public consultation commencing in 2023.
- Consultation period will last at least 60 days.

SRSP-520 issue 3 – Coexistence with Radioaltimeters

- ISED has updated its compliance program to **protect radio altimeters** following changes introduced in issue 3 of SRSP-520:
 - The 3800 MHz band is now included, 9 airports have been added
 - Protection Zones now consist of three types: Low, Medium, and High Power
 - Exclusion and Protection Zone footprints have changed
 - Attestations remain a requirement - Pre-Operation Reports no longer required
 - Sunset dates will modify requirements - on Jan 1, 2026 & Dec 31, 2027
- Protection Zone key requirements:
 - Max antenna height limits based on type of protection zone
 - Max EIRP limits based on ranges of antenna heights
- Canada-wide key requirements:
 - Max antenna uptilt limit
 - Max EIRP limit based on ranges of antenna uptilt

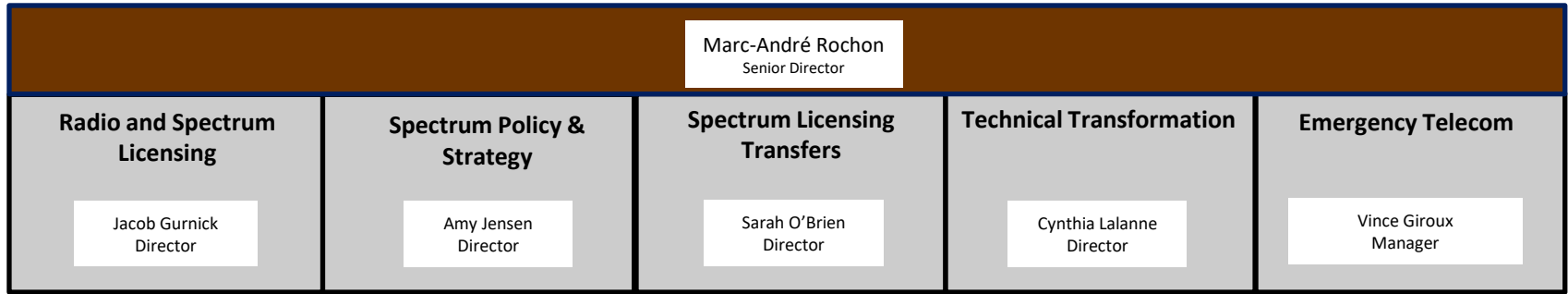
SRSP-520 issue 3 – Coexistence with Radioaltimeters

- Within **Exclusion Zones**, outdoor base stations are **not permitted**.
- Within **Protection Zones**, outdoor base stations **are permitted** provided they comply with SRSP-520, issue 3 and have been included in an **attestation**.
- Attestations must be submitted to ISED **at least 15 days prior** to a station's in-operation date.
- ISED will inspect station details uploaded to SMS Online to verify compliance with SRSP-520 issue 3:
 - Stations located within exclusion or protection zones
 - Max EIRP limits
 - Max uptilt limits
 - Max antenna height limits

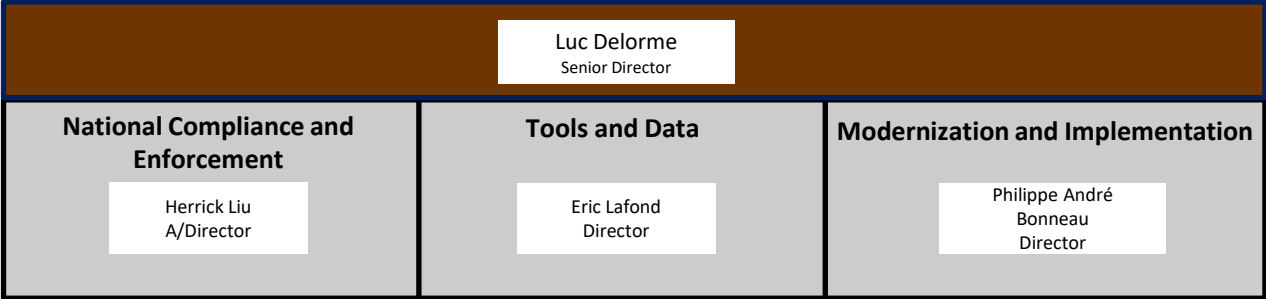
Spectrum Operations Branch (DGSO)

Susan Hart Director General						
Spectrum Operations Directorate Marc-André Rochon Senior Director	Spectrum Management Innovation Luc Delorme Senior Director	Broadcasting, Planning & Coordination Suzanne Macdonald Director	Spectrum Business Intelligence & Transformation Guillaume Dupré-Carrière Director	Atlantic & Ontario Region John Baggio Regional Director	Québec & Nunavut Region Gilles Panneton Regional Director	Western Region Michael Fu Regional Director

Spectrum Operations (DOS)



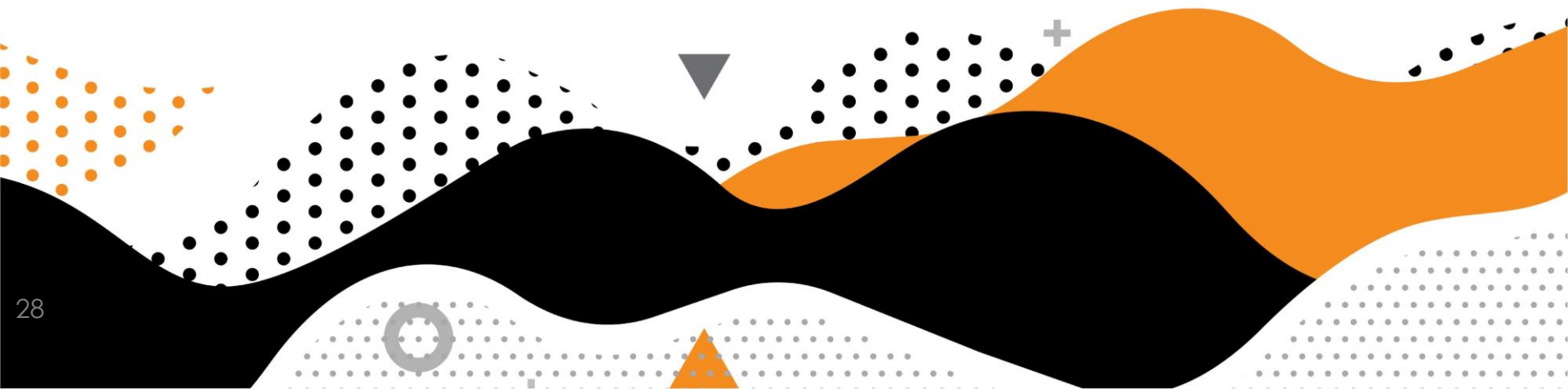
Spectrum Management Innovation





ISED Fixed and Land-Mobile Services Update

Ali Akbari



Dynamic Spectrum Access (DSA)

- 6 GHz Licence-Exempt:
 - Since December 2022, ISED has received a total of 4 AFC applications
 - On August 21st, ISED designated Qualcomm as the world's first AFC database administrator.
 - Information on applications is available on ISED's web site: [List of designated Dynamic Spectrum Access System Administrators \(DSASAs\) \(canada.ca\)](https://www.canada.ca/en/ISED/2023/08/list-of-designated-dynamic-spectrum-access-system-administrators-dsasas.html)
 - RLAN devices which can interoperate with a designated AFCSA will be able to become certified to RSS-248

Dynamic Spectrum Access (DSA)

- TV White Space:
 - ISED is working on revising its standards related to TV White Space rules (DBS-01, RSS-222, CPC-4-1-01)
 - If applicable, implement potential decisions to be made following the [Consultation on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment \(canada.ca\)](#)
 - Consider other technical rule changes to better support ecosystem
 - Other clarification improvements to address common enquiries

Standards & Consultations

- Upcoming Consultation:
 - Internal work under way for revision to SRSP-306.4 to consider
 - enabling the user of smaller antennas and larger channel bandwidths
 - make consequential changes to the adoption of SRSP-300-Gen
 - align other parts of the standard with the 2014 [Decisions on Spectrum Utilization Policies and Technical Requirements Related to Backhaul \(canada.ca\)](https://www.csis.gc.ca/eng/decisions-on-spectrum-utilization-policies-and-technical-requirements-related-to-backhaul/canada.ca)
 - Internal work under way for revision to SRSP-500 (138-144 MHz and 148-174 MHz) to consider:
 - identifying channels for interoperability
 - channel plan and narrowbanding
 - consider if other provisions need modernizing

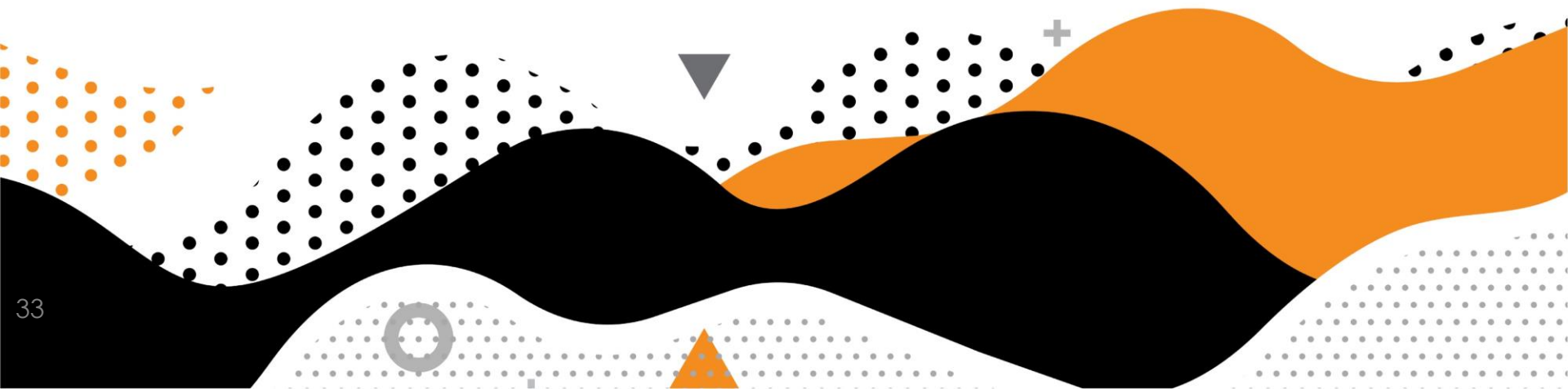
Standards & Consultations

- Upcoming Consultation:
 - Internal work under way for revision to SRSP-512 (220-222 MHz) to consider:
 - Aligning with cross-border arrangement currently under discussion with the U.S.
 - More clearly addressing rules related to train control
 - Reviewing the channel plan and identifications for other applications



ISED Broadcasting Service Update

Mina Dashti



Broadcasting

- BETS-7 — Technical Standards and Requirements for Apparatus Capable of Receiving Television Broadcasting Signals
 - Issue 4 published on 9 June 2023
 - Revised to modernize the certification procedure and update references with latest international standards
- TB-1 — Information Relating to the Regulation of Radio Apparatus Capable of Receiving Television Broadcasting
 - Technical bulletin containing clarification questions on the application of BETS-7 has been revised to align with the new issue of BETS-7
 - Publication process has been initiated

Broadcasting

- Editorial updates of over-the-air TV BPRs:

BPR-4 – Application Procedures and Rules for Television Broadcasting Undertakings

BPR-10 – Application Procedures and Rules for Digital Television (DTV) Undertakings

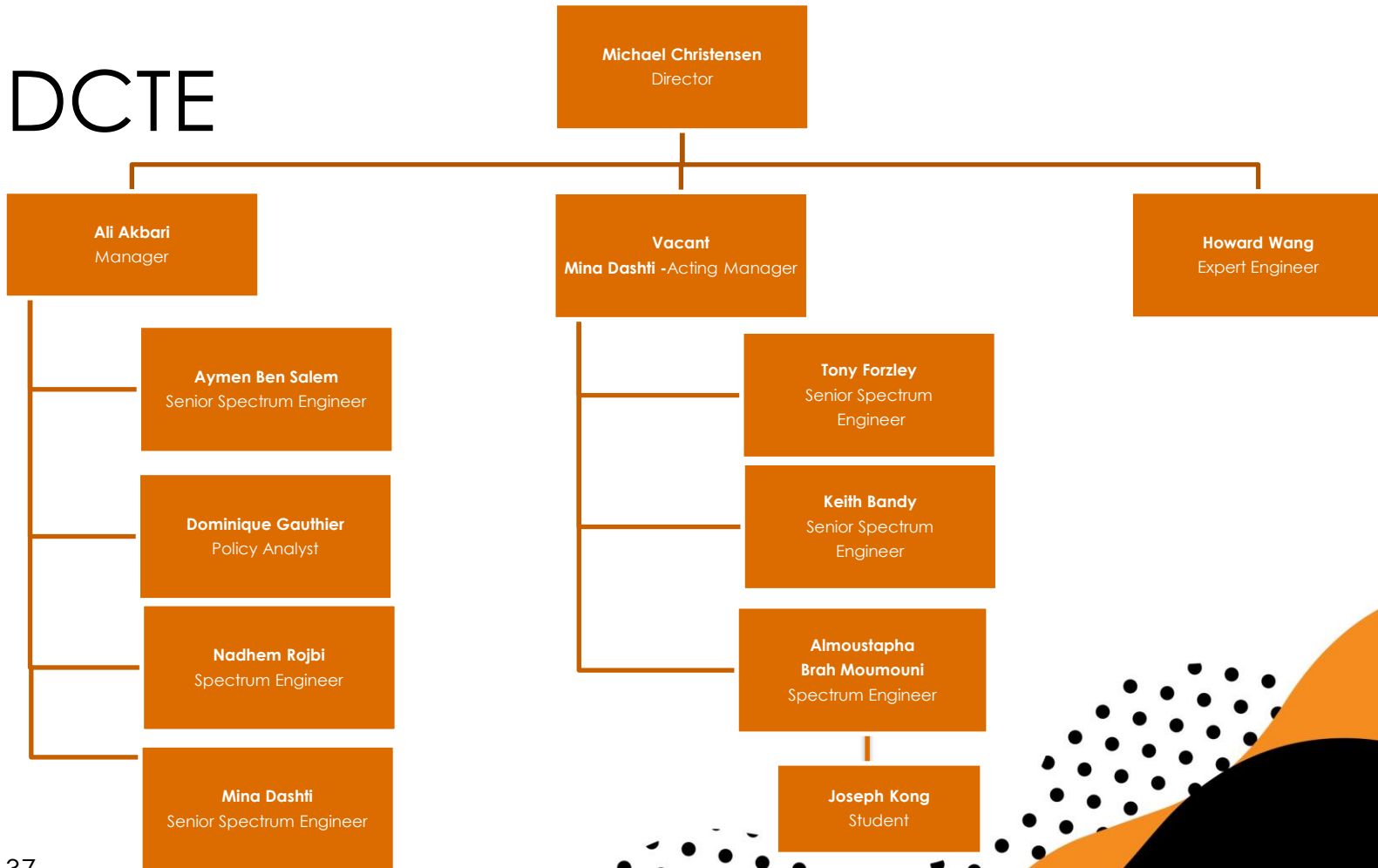
BPR-11 – Broadcasting Television Application Procedures During the 600 MHz Transition

- No substantive changes to the three documents
- Editor's notes will be added to the three documents to provide clarifications on the application procedures following the completion of the 600 MHz transition
- BPR-11 will continue to be the main reference until further notice
- ISED plans to do a detailed review of BPR-10 and BPR-11 in the future in order to have a single document. We will keep the RABC up-to-date.

Broadcasting

- BPR-3 — Application Procedures and Rules for FM Broadcasting Undertakings (HD Radio)
 - Draft update of **BPR-3** to Issue 7 to regulate In-band on-channel (IBOC)
 - Consultation with RABC and stakeholder published on July 20, 2023
 - Comment period closed on October 2nd, 2023
 - ISED is currently reviewing received comments, working toward publication in the near future

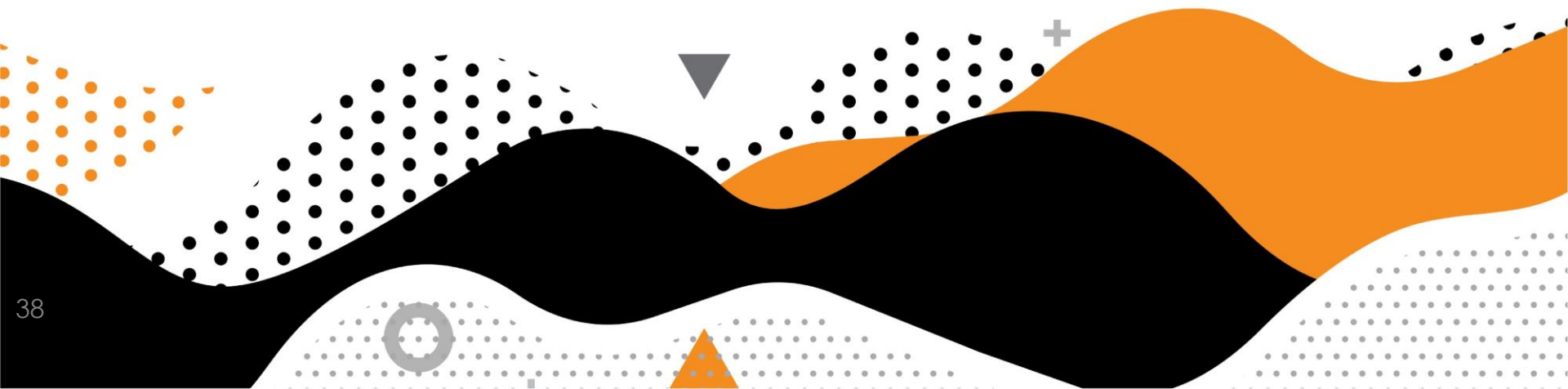
DCTE





ISED Commercial Mobile Service Update

Paramita Melanson



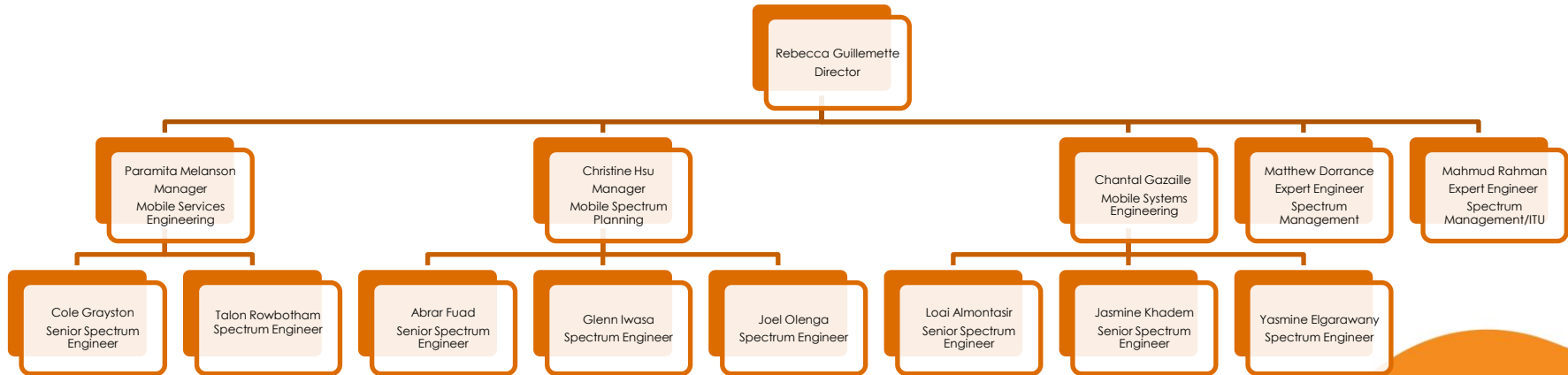
Standards – commercial mobile services

- SRSP-520 decision on 3500 MHz and 3800 MHz new RadAlt, FSS and FS coexistence rules published in July 2023
- Standards related to the BRS band (2500 MHz) published in July 2023
- Standards related to the WBS band (SRSP-303.65) published in September 2023

Work continues to:

- Update the sub-6 GHz commercial mobile band SRSPs to include provision for AAS MIMO
 - Standards related to the PCS band are currently being drafted
- Develop standards and rules related to mmWave satellite earth stations (ES) and commercial mobile systems
- Develop technical rules for Non-Competitive Local Licensed (NCLL) bands
 - RABC comments closed on September 8, 2023

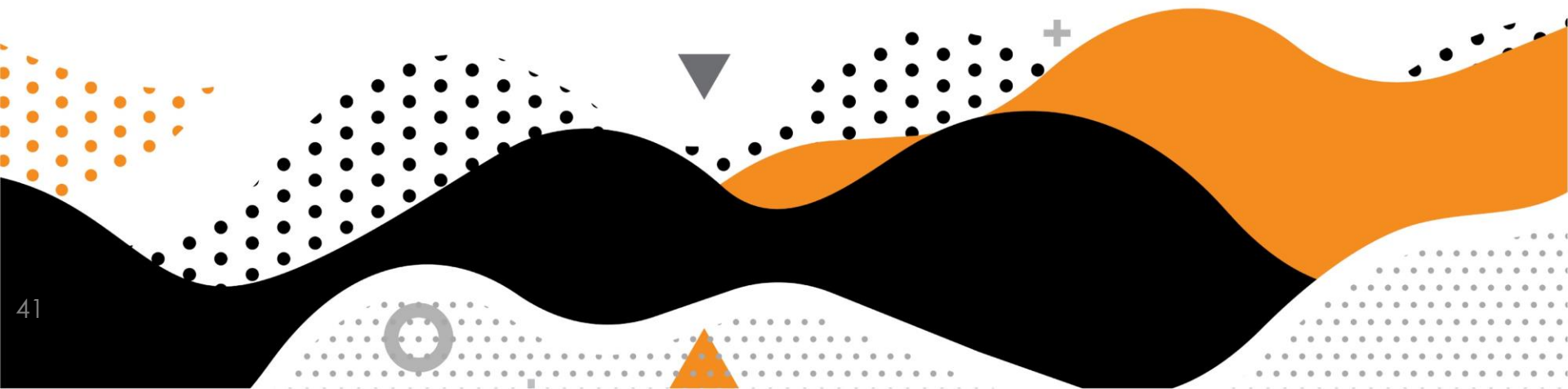
DME





ISED Space Services Update

Suneil Kanjeeekal & Reema Hafez



Consultations/Decisions

- Implementation of New Space and Earth Station Framework
 - [SMSE-08-22 \(May 2022\)](#) Decision on Updates to the Licensing and Fee Framework for Earth Stations and Space Stations in Canada
- Space stations – Implemented April 1, 2023
 - [Space station fee order](#)
 - [CPC-2-6-02 — Procedure for the Submission of Applications for Spectrum Licences for Space Stations](#)
- Earth stations – Implemented October 1, 2023
 - [Earth station fee order](#) (new fees apply for the last 6 months of licensing year and going forward)
 - [CPC-2-6-01 — Procedure for the Submission of Applications for Spectrum Licences and Site Approvals for Earth Stations Requiring Site Approval](#)
 - [CPC-2-6-03 — Procedure for the Submission of Applications for Generic Earth Station Spectrum Licences](#)
 - [CPC-2-6-04 — Procedure for the Submission of Applications to Approve the Use of Foreign-Licensed Satellites in Canada](#)
 - [SRSP 101](#) — Technical Requirements for Fixed Earth Stations Operating Above 1 GHz in Space Radiocommunication Services and Earth Stations in Motion (ESIMs) Operating in the Fixed-Satellite Service and
 - [SRSP 102](#) — Technical Requirements for Earth Stations in the Fixed-Satellite Service
- All applications must now be submitted using the Department's [Spectrum Management System \(SMS\)](#).

Consultations/Decisions

- Work to support the development of technical rules for 3800/3900 MHz.
- Work towards the development of technical rules for mmWave bands.
- **Radio Altimeters:** On July 5, 2023, we published the ***Decision on SRSP-520, issue 3 and RSS-192, issue 5***, with updated rules to limit the potential for interference to Radio Altimeters from 5G operation in the 3500 MHz band.
 - Updated rules based on ISED's lab tests, OTA, computational analysis, input from TC;
 - At 35 airports: exclusion zones with no outdoor base stations and protection zones with tower height limitation, power limitation and power mask at or below the horizon; national power mask at all other locations (max power up to 7° up tilt)
 - Rules apply until January 1, 2026 for 3500 MHz and until January 1, 2028 for 3800 MHz.

Reema Hafez
Director, Space
Services Planning

Suneil Kanjeekal
Director, Space
Services Operations

Michel Olivier Ndi
Director,
International
Regulation

Justine Sider
Manager, FSS/BSS

Muya Wachira
Manager, MSS
and Space
Sciences

Angela Chuang
Expert Engineer

Martin Daigle
Manager, Military
Spectrum Mgt

Caroline Kennedy
Manager, Licensing

Chanel Lahaie
A/Sr. Space Policy
Analyst

Dany Jacob David
Manager,
Coordination

Nicolas Laflamme
Senior Spectrum
Engineer

Fu Chan
Senior Spectrum
Engineer

Maxime Viennot
Spectrum
Engineer

Adoule Rasno
Senior Spectrum
Engineer

Lisa Foley
Satellite
Authorization
Analyst

Christina Gallagher
Senior Spectrum
Engineer

Vahid Sathi
Spectrum
Engineer

Bun-Ret Ly
Senior Spectrum
Engineer

Olivier Pierre
Satellite
Authorization
Analyst

Kathy Ha Hau
Senior Spectrum
Engineer

Andrea Godin
Satellite
Authorization
Analyst

Jordan Cooper
Spectrum Engineer

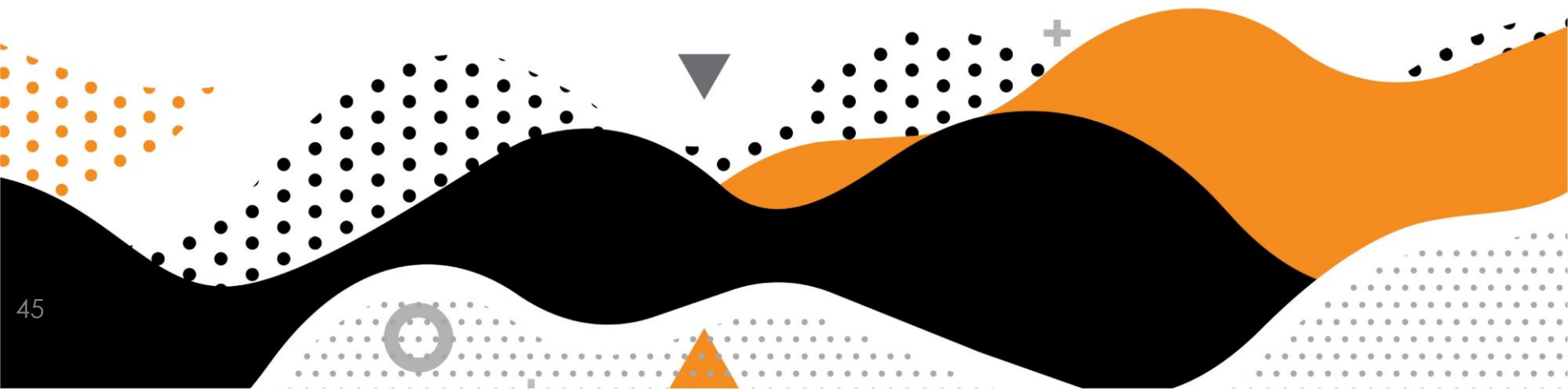
Sandy Xu
Spectrum Engineer

Stephanie El Anbali
Satellite
Coordination
Officer



ISED Regulatory Standards Update

Jonathan Paradis, Yan Losier & Greguy Saint-Pierre



DRS

Stephan Meyer
Director

Jonathan Paradis

Manager

RSS-1xx, ICES, Stakeholder Engagement

Dominique Dussah

Senior Advisor,
Stakeholder
Engagement

Horia Popovici

Senior Spectrum
Engineer

Salman Ahmad

Senior Spectrum
Engineer

Vacant

Spectrum Engineer

Yan Losier

Manager

RSS-2xx, Mutual Recognition Agreements

**Juan Carlos Davila
Mesa**

Denys Shumakov
Senior Spectrum
Engineer

Nenad Jevtic

Senior Spectrum
Engineer

Kelly Hamwi

Senior Spectrum
Engineer

Andrée-Ann Audette

Policy Analyst

Gréguy Saint-Pierre

Manager

RF exposure compliance & Standards

Frédéric Goora

Senior Spectrum
Engineer

Isabel Trujillo

Junior Spectrum
Engineer



Recent Publications

Document	Notes	
RSS-192 Issue 5	Flexible Use Broadband Equipment Operating in the Band 3450-3900 MHz – expanding upper end of frequency range from 3650 to 3900 MHz to allow flexible use.	Transition period ends January 25, 2024
RSS-198 Issue 1	NEW STANDARD for flexible Use Broadband Equipment Operating in the Band 3900-3980 MHz.	In force since August 18, 2023
RSS-199 Issue 4	Broadband Radio Service (BRS) Equipment Operating in the Band 2500-2690 MHz – Added transmitter requirements for Active Antenna Systems (AAS) and non-AAS.	Transition period ends February 18, 2024
RSS-247 Issue 3	Changes primarily related to introduction of requirements for devices operating from 5850-5895 MHz and channels that span across 5850 MHz, arising from the publication of SMSE-012-22 (5.9 GHz Policy Decision)	Transition period ends February 22, 2024

Upcoming Publications

Document	Notes
ICES-Gen Issue 2	General Requirements for Compliance of Interference-Causing Equipment
RSS-252 Issue 2	Intelligent Transportation Systems — Updates to reflect decision SMSE-012-22 Adding technical requirements pertaining to On-board units (OBU) & C-V2X
RSS-102 Issue 6	RF exposure compliance requirements and methods for portable devices. Modernization and turning into a family of standards

Upcoming Publications (cont'd)

Document	Notes
RSS.102.SAR.MEAS Issue 1	NEW STANDARD based on RSS-102 issue 5 outlining measurement procedures and requirements to assess SAR compliance of devices operating from 100 kHz to 6 GHz
RSS.102.NS.MEAS Issue 1	NEW STANDARD based on SPR-002 issue 2 outlining measurement procedures and requirements to assess NS compliance of devices operating from 3 kHz to 10 MHz
RSS.102.NS.SIM Issue 1	NEW STANDARD based on SPR-002 issue 2 outlining simulation procedures and requirements to assess NS compliance of devices operating from 3 kHz to 10 MHz
RSS.102.IPD.MEAS Issue 1	NEW STANDARD based on SPR-003 issue 1 outlining measurement procedures and requirements to assess incident power density compliance of devices operating in the 60 GHz band
RSS.102.IPD.SIM Issue 1	NEW STANDARD based on SPR-003 issue 1 outlining simulation procedures and requirements to assess incident power density compliance of devices operating in the 60 GHz band

Power control mechanism validations

- ISED has been validating power limiting mechanisms being used by 2 service providers
- ISED expects other service providers to reach out as well
- **The successful network implementation of the power limiting mechanisms have to be demonstrated before they can be rolled out (see GL-01 for details)**

Upcoming Consultations

Document	Notes
RSS-133 Issue 7	2 GHz PCS standard: Modernizing to include latest equipment requirements such as Active Antenna systems (AAS).
RSS-216 Issue 3	WPT standard: Updating measurement methods for Wireless Power Transfer devices and moving RF exposure requirements into the RSS-102 family of standards
RSS-295 Issue 1	NEW STANDARD: Technical requirements for license-exempt devices operating in select bands above 95 GHz
RSS-210 Issue 11	Updates to Annex J (Devices operating in the 57-71 GHz band) and other improvements
RSS-287 Issue 3	Technical requirements related to Digital Selective Calling (DSC) for Maritime Survivor Locator Devices (MSLD) and other improvements

Upcoming Consultations (cont'd)

Document	Notes
REC-LAB Issue 8	Procedure for the Recognition of Testing Laboratories to Test/Assess to Canadian Requirements
REC-CB Issue 2	Recognition Procedure and Requirements for Certification Bodies

Additional Notes

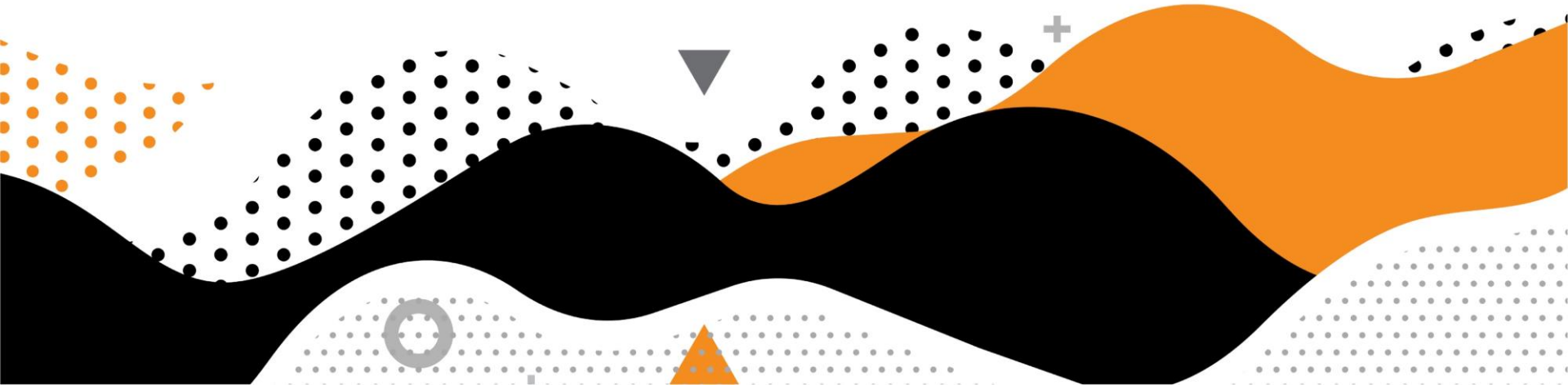
- Refer to our latest [General Notices](#)
 - Notices provide timely guidance to the industry and notification of all publications
- Refer to our list of [Common Q&As](#)
 - Q&As addressing the most recurrent questions pertaining to Standards and Certification
- Make use of our [General Inquiry Form](#)
 - To reach either the DRS or CEB

General Notices		
Notice	Description	Date (YYYY-MM-DD)
Notice 2023-DRS0012	Publication of RSS-182, Issue 6, amendment 1	2023-09-26
Notice 2023-DRS0011	Adoption of C63.10-2020 and C63.25.1-2018	2023-09-12
Notice 2023-DRS0010	Updated August 22, 2023 Publication of RSS-198, Issue 1	2023-08-09
Notice 2023-DRS0009	Publication of RSS-247, Issue 3	2023-08-03
Notice 2023-DRS0008	Publication of RSS-199, Issue 4	2023-07-20
Notice 2023-DRS0007	Publication of RSS-192, Issue 5	2023-07-05
Notice 2023-DRS0006	Consultation closed September 6, 2023 Adoption of C63.10-2020 and C63.25.1-2018	2023-06-28



International Updates

Lisa Amirault



ITU-R and CITEI PCC.II Updates

- ITU-R meetings held since last RABC
 - WP 5D (June 12-22), WPs 4A, 4B, 4C, and SG4 (June 21-July 7), WP 7A (June 26-30), WP 5B (July 10-21), 6A, 6B, 6C, and SG6 (Aug. 30-Sept. 8) , WP 5A and SG5 (Sept. 13-26), WPs 7B, 7C, 7C and SG7 (Oct. 3-12)
- CITEI PCC.II meeting - August 28 to September 1 in Ottawa
 - Very successful meeting hosted by Canada with the exceptional support of RABC
 - Canada submitted 19 contributions to this meeting, with 14 of these contributions resulting in Inter-American Proposals (IAPs)
 - Total of 51 IAPs, with 17 of these relating to AI 10 - proposals for agenda items for WRC-27 or later.

RA-23 and WRC-23



- RA-23 will be held in Dubai from Nov. 13-17
 - Meeting will consider and adopt new and revised Resolutions, Recommendations submitted by Study Groups and others; and
 - Study Group Chairs will be re-confirmed, or decided from new candidates, as applicable
 - Canada will actively support a new Resolution on Gender Equality, Equity & Parity in the ITU-R
- WRC-23 to be held in Dubai from Nov. 20-Dec. 15 at the Dubai World Trade Centre
 - Canada is now in delegation mode
 - Canadian contributions to CITELE PCC.II that did not result in IAPs are being drafted as possible Multi-country Proposals to WRC-23;
 - Strategy being developed on high priority agenda items
 - Bilateral meetings being held with key administrations

WRC-23 Key Agenda Items

- **AI 1.1** - Protecting key aeronautical and maritime mobile services in 4800-4990 MHz, while working to allow additional services in the band
- **AI 1.2** - Spectrum for IMT in five bands between 3300 MHz and 10.5 GHz
- **AI 1.7** - Improving aircraft safety and traffic management in remote areas by enabling satellite use of 117.975 – 137 MHz
- **AI 1.16** - Enabling Non-GSO satellite connectivity for Earth stations in motion (e.g. aircraft/ships) in various bands between 17 – 30 GHz
- **AI 1.17** - Enabling more efficient use of orbital/spectrum resources by opening additional frequency bands to inter-satellite links
- **AI 7** - Improving regulatory procedures for satellite networks
- **AI 10** - Agenda for WRC-27

Engineering, Planning and Standards (DGEPS)

