

-43.4668°

170.1882°

C-band Customer Update

Intelsat

07 July 2021

Agenda

1. Situational summary
2. FCC update
3. Canada update
4. Earth Station Update
5. Questions

Please ensure you are on mute

You can raise questions via the CHAT function

Situational summary



- Clearinghouse still working to establish final rules
- FCC issued updated Incumbent Earth Station List
- Increased clarity in Canada



- Intelsat filed Q2 progress report
- Filtering of top 46 PEAs started on 01 June 2021
- Aiming for all filtering to be completed by 31 August



- Intelsat TT&C consolidation/construction activities are on-schedule
- Spacecraft manufacturing schedule on-track for delivery of replacement satellites

FCC Update

Ray Rutngamlug

FCC Updates Regarding Incumbent Earth Station List

- On June 22, the FCC's International Bureau issued an Order addressing:
 - IB denied two earth station operators from the incumbent antenna list due to noncompliance with the FCC's registration requirements, which denies them interference protection under the R&O.
 - IB also accepted a number of filings correcting minor errors in various earth station operators' lump sum elections.
 - The IB also issued an updated list of incumbent earth stations on June 22, reflecting responses from earth station operators to the IB's January 19 Public Notice to a list of earth station operators that had been identified as no longer operational by the Relocation Coordinator or satellite operators and to earth station operators that did not respond to communications by the RC or a satellite operator. Most of these operators either responded surrendering their license or confirming that their respective antennas are still active and will participate in the transition.

FCC Update, cont'd.



Wireless Bureau Transition Plan Updates

- On June 23, the FCC's Wireless Telecommunications Bureau issued a Public Notice opening a "limited filing window" for satellite operators to file amendments to their Transition Plans, which were originally required to be filed in August 2020 and amended in October 2020. The WTB stated that this new window is intended to allow the satellite operators to make any updates to their Transition Plan since October 2020, and to account for any changes resulting from the new incumbent earth station list.
- Intelsat is filing its amended Transition Plan today, July 7. The WTB anticipates future limited filing windows.

Quarterly Reports and other Issues

- At the end of June, the various satellite operators including Intelsat filed their June 2021 Quarterly Reports updating the status of their C-band clearing activities as required by the FCC's C-band Report and Order. The satellite operators generally reported that they remain on track to complete their clearing activities in accordance with the timeframes stated in their transition plans and with the FCC's R&O.
- We are still awaiting developments on matters discussed in last month's update, including: a new draft of the Relocation Payment Clearinghouse procedures for submitting relocation expenses for reimbursement under the C-band Report and Order, and the issuance of the Auction 107 wireless overlay licenses. As noted last month, the wireless licensees have to be granted their licenses before they can fund Clearinghouse operations and pay for reimbursements.

Canada Update

Haz Moakkat

Canada – C-band decision highlights

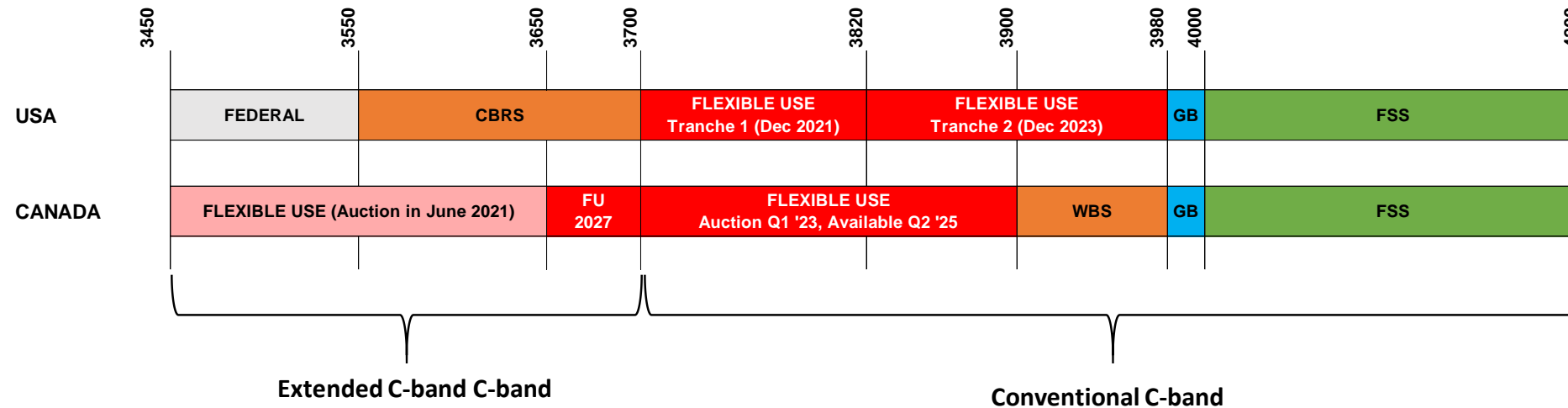
no incentive, no compensation

Key Highlights:

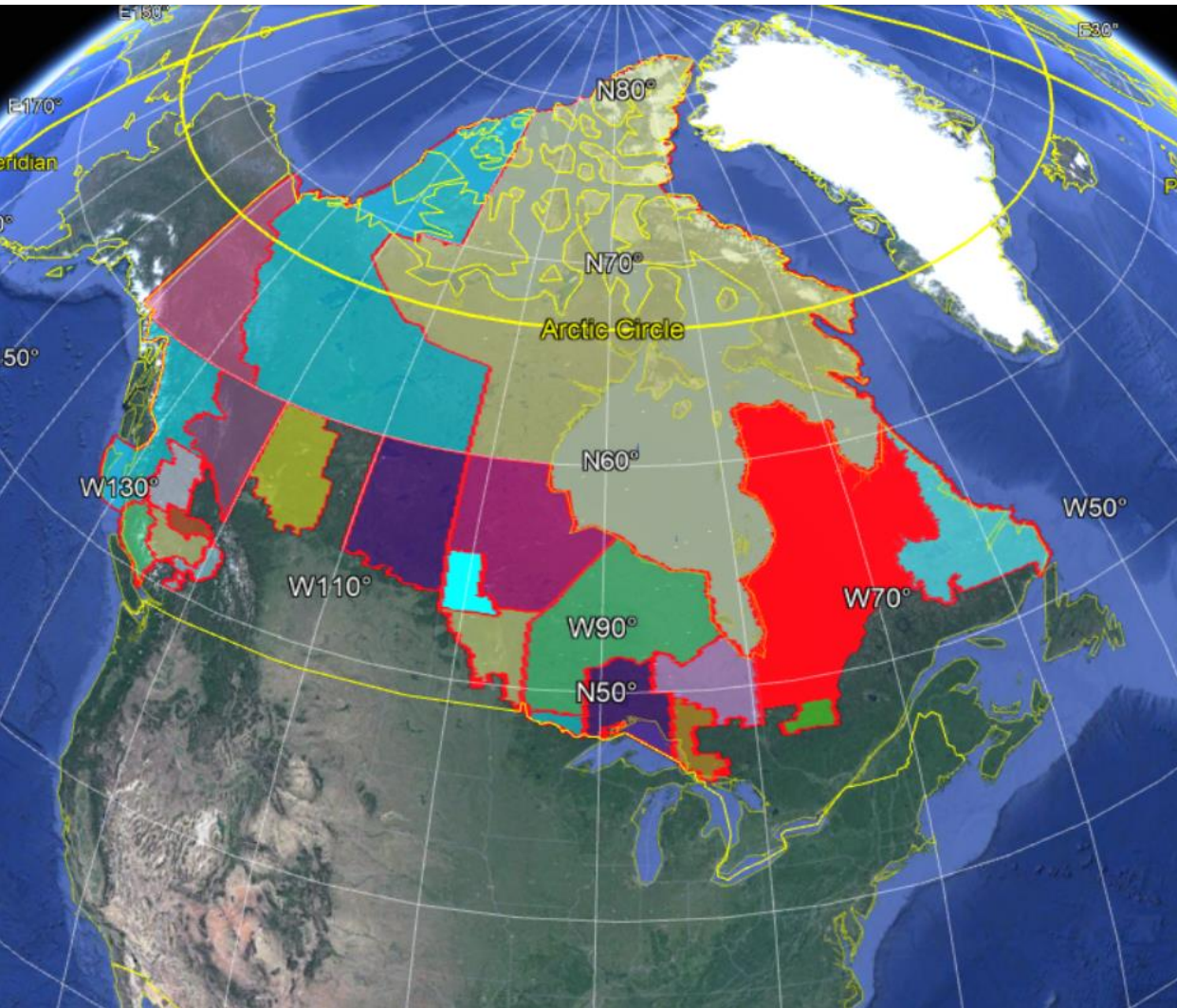
- Decision **released** on **21 May 2021**
- **No incentive, No compensation**
- Telesat proposal was NOT adopted
- Band plan: similar to the FCC's (clear 3.7-4.0 GHz)
- Auction in **Q1 2023** - FSS must exit spectrum by **31 March 2025**
- **No technical rules yet** but adopted 20 MHz guard band
- Further consultation on technical rules will be issued but no time frame
- Full C-band continues in Satellite Dependent Areas (Tier 4 areas) and designated gateway locations.
- FSS will continue to be protected up to 31 March 2025
- License-exempt earth stations will also be protected through an “interim authorization” but only if they are part of a network.



U.S. vs. Canada band-plan



- Same band plan as the U.S.:
 - Clear 3700-4000 MHz
 - 20 MHz guard band 3980-4000 MHz
- All spectrum will be cleared in one go.
- However,
 - Only 3700-3900 MHz will be auctioned
 - 3900-3980 MHz will be licensed without auction to WBS
- WBS will be migrated from 3650-3700 MHz to 3900-3980 MHz
- No technical rules adopted (power levels, OOB, etc.) – all of that will be decided in a future consultation



Satellite Dependent Areas as listed in Annex C

Satellite-Dependent Areas

- ISED decided that clearing of C-band will exclude Satellite Dependent Areas “SDAs”.
- ISED designated certain areas (Tier 4) as SDAs.
- SDA have low density of earth stations based ISED data (see next slide)
- SDAs will continue to have access to the full C-band (3700-4200 MHz) and are NOT part of the clearing process.
- Some SDAs border the U.S. – they will encumber U.S. indefinitely – Bilateral agreements between U.S. & Canada are needed.

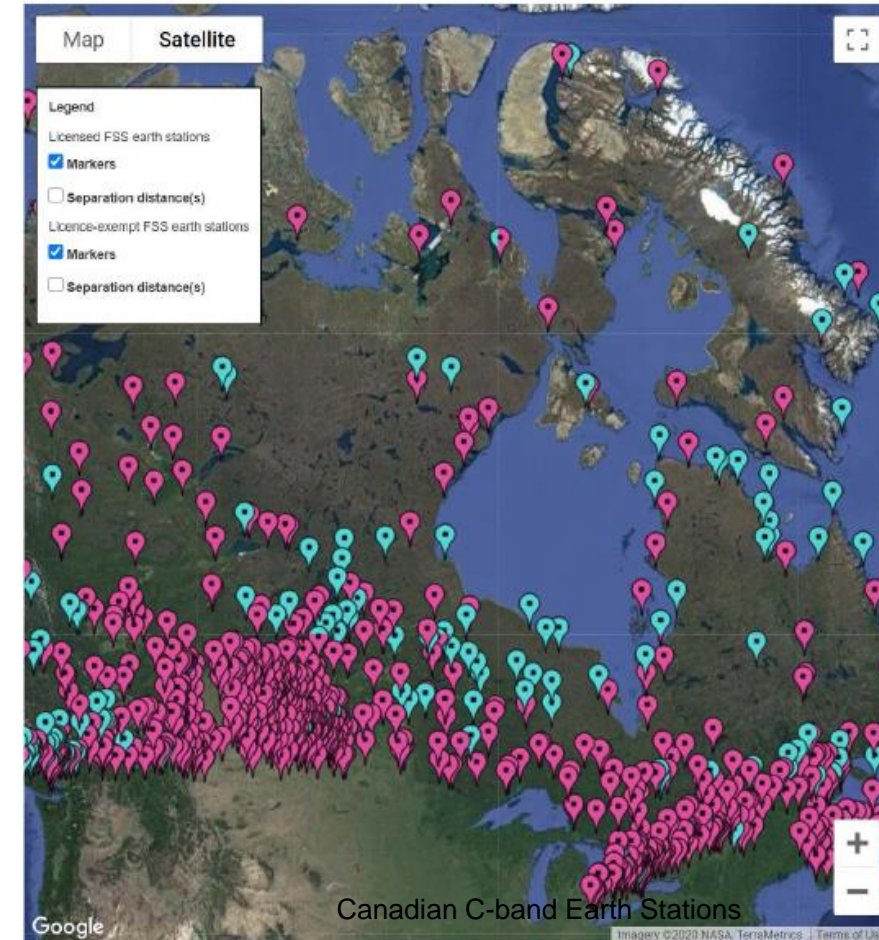
C-band earth stations in Canada

C-band earth stations:

- Over 2500 license-exempt earth stations counted by ISED – but not all are counted
- 56% of these earth stations are pointed at Intelsat satellites (primarily Galaxy 15 and Galaxy 19)
- CBC is completely supported on by Intelsat (364 sites across Canada)

Gateway sites:

- There will be a maximum of 4 gateway locations:
 - Weir, Quebec (55 miles NW of Montreal) → Tata Communications
 - Allan Park, Ontario (80 miles NW of Toronto) → Telesat
 - 2 x TBD locations
- Gateway sites to be used for TT&C and for content ingest for re-distribution by fiber or terrestrial – ISED mandated that GW be available for collocation



Ground segment update

Dave Miller

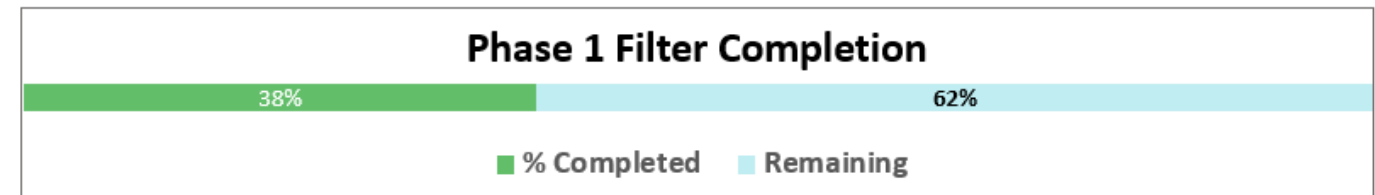
Filter Installation Update



Ended June on pace for August completion for majority of filtering

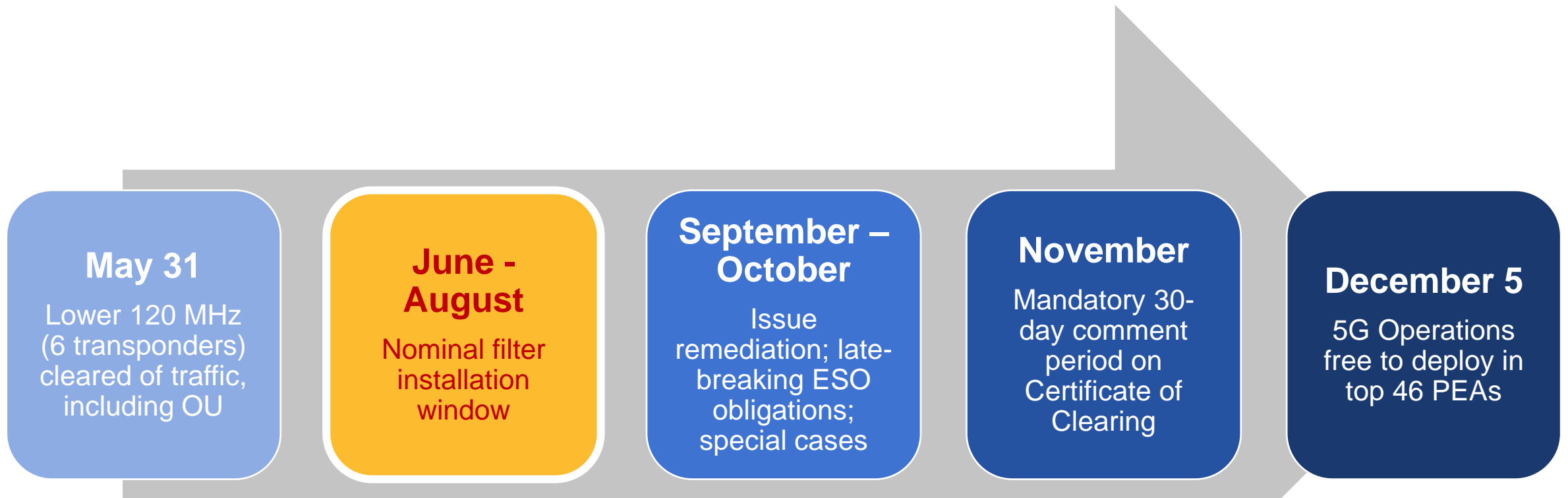
- We've scheduled 62% of Phase I sites, 38% completed
- Minor impacts from FCC's updated incumbent list absorbed into our plan
- Some international downlink filtering will be done in September (IS-11, IS-21, IS-34), where terrestrial solutions required
- Reminder that domestic downlink of content in lower 6 transponders no longer permitted for non-lump sum opt-outs to allow for filtering – please contact us if impacted (CBandInfo@intelsat.com)

YTD Phase I Filtering Summary (Sites)												
Vendor	Total Sites	Total Incumbent Antennas	Pending WO	Not Scheduled	Scheduled		% Scheduled		Completed		% Completed	
					Sites	Incumbent Antennas	Sites	Incumbent Antennas	Sites	Incumbent Antennas	Sites	Incumbent Antennas
USSI	130	545	1	17	112	455	86%	83%	66	239	51%	44%
Wesco	344	1073	32	80	232	668	67%	62%	142	268	41%	25%
ATCi	55	97	1	26	28	47	51%	48%	19	34	35%	35%
Self-Install	62	94	58	3	1	8	2%	9%	0	0	0%	0%
Other	6	29	6	0	0	0	0%	0%	0	0	0%	0%
Total	597	1838	98	126	373	1178	62%	64%	227	541	38%	29%



Phase I Clearing Deadline

Clearing by December 5, 2021 deadline requires filtering completion this Summer



**Thank you to all our programming partners
for working with us through this journey!**

Next call 08 Sept 2021

Appendix

Who's who in the zoo – Intelsat's vendors

