

-43.4668°

170.1882°



# C-band Customer Update

Intelsat

01 Sept 2021

# Agenda

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

Please ensure you are on mute

You can raise questions via the CHAT function

# Situational summary



- Initial invoices being submitted from various entities to clearinghouse
- Earth station database now final
- Canada C-band update from July meeting inserted as appendix to this deck



- Filtering of top 46 PEAs started on 01 June 2021
- Initial target for all filtering was 31 August



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

# FCC and Clearinghouse Updates

Tom McNamara

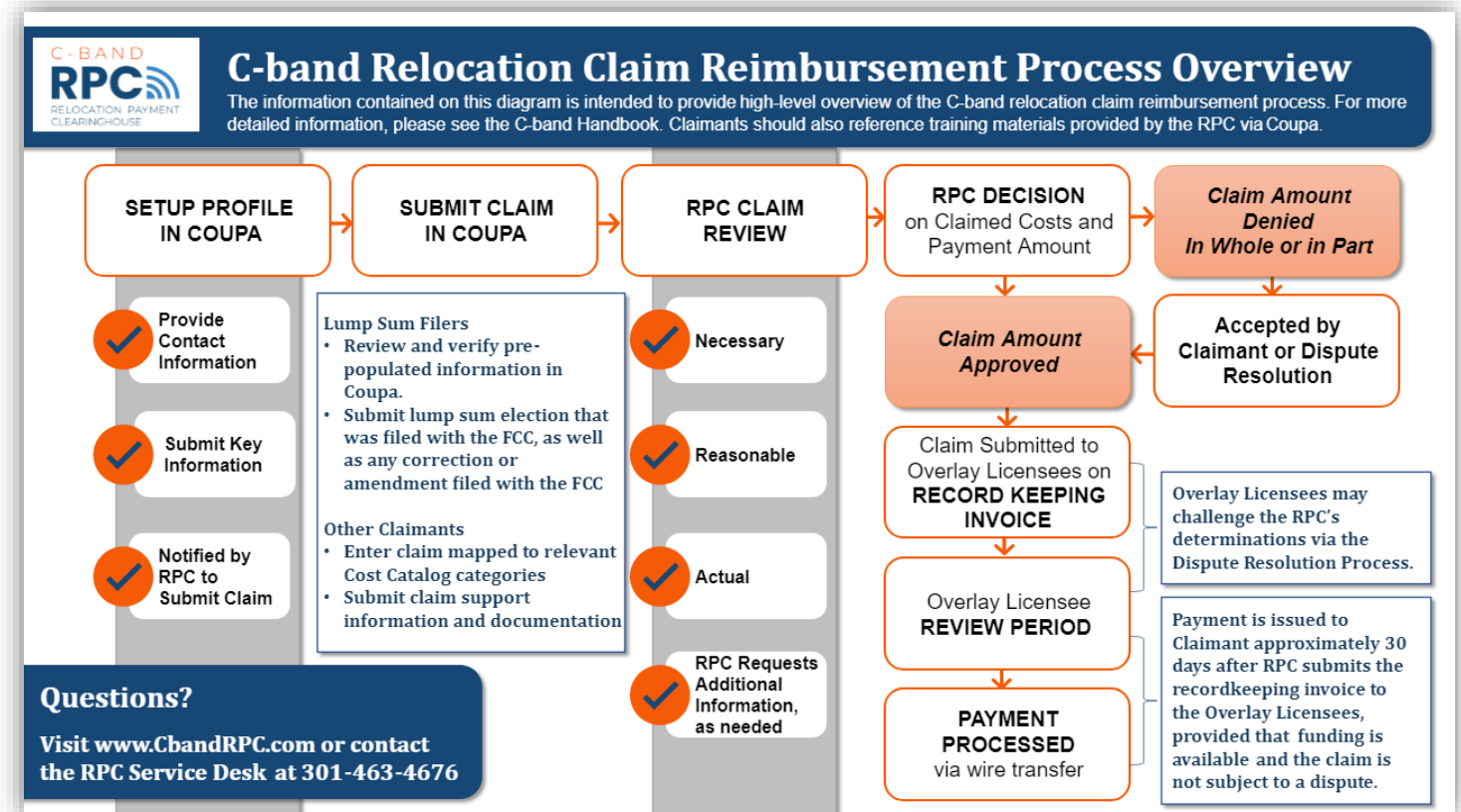
## Continue to move toward clarity around closing out Phase 1

- Certification Public Notice issued on August 4<sup>th</sup>, 2021
  - Details the certification process for Phase 1 for Satellite Operators
  - Requires a full accounting of what has been done to complete the transitions and when
- Request for comments on challenge scenarios and impact on acceleration payments
  - Comments primarily from satellite operators and overlay licensees called for certainty and avoidance of trivial challenges
- Intelsat's certification is forthcoming – date TBD
  - If you are part of Phase 1 and have any issues with your service or affiliates, we want to hear them ASAP
  - [cbandinfo@intelsat.com](mailto:cbandinfo@intelsat.com) or talk to your salesperson

# Clearinghouse Update

## Clearinghouse is open for business; Procedural hurdles still to clear

- Reimbursements of actual expenses and lump sum elections can be submitted through Coupa
- Reasonable, actual expenses must be incurred and deployed before you can submit
- Training resources available on the site
- Timeline for payments is still being determined
  - Overlay invoices
  - Payments
  - Procedural timeline still evolving



# Ground segment update

Dave Miller

# Filter Installation Update



## Filtering on track to complete in September

- MVPD filtering completing this week – focused on final issue remediation
- Non-cable filtering likely extending into late September
- Terrestrial solution delivered for international downlinks – scheduling filter installation at applicable earth stations to after migration of services
- Working with earth station operators, Relocation Coordinator and FCC to modify/surrender licenses and cleanse Incumbent Earth Station list

YTD Phase I Filtering Summary (Sites)												
Vendor	Total Sites	Total Incumbent Antennas	Pending Work Order	Not Scheduled	Scheduled		% Scheduled		Completed		% Completed	
					Sites	Incumbent Antennas	Sites	Incumbent Antennas	Sites	Incumbent Antennas	Sites	Incumbent Antennas
USSI	162	783	3	5	154	740	95%	95%	148	670	91%	86%
Wesco	296	856	2	13	281	798	95%	93%	259	697	88%	81%
ATCi	52	83	0	1	51	79	98%	95%	49	75	94%	90%
Self-Install	17	51	0	0	17	51	100%	100%	13	37	76%	73%
Other	57	83	0	1	56	79	98%	95%	17	30	30%	36%
<b>Total</b>	<b>584</b>	<b>1856</b>	<b>5</b>	<b>20</b>	<b>559</b>	<b>1747</b>	<b>96%</b>	<b>94%</b>	<b>486</b>	<b>1509</b>	<b>83%</b>	<b>81%</b>

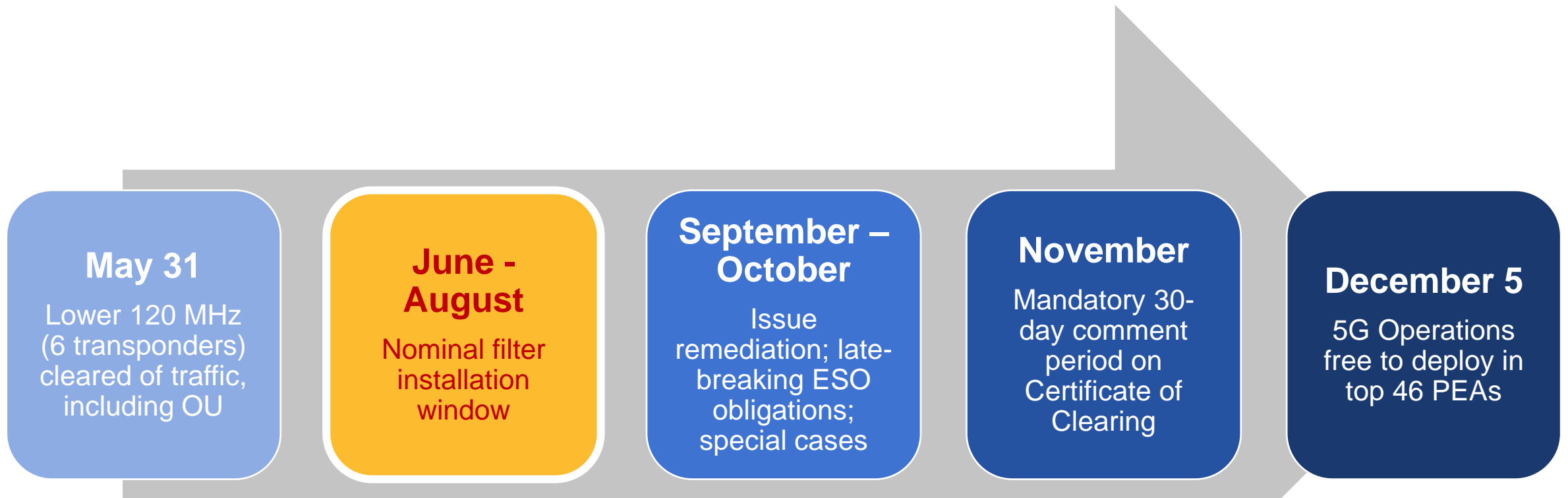
  

Phase 1 Filter Completion	
83%	17%
■ % Completed	■ Remaining



# 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 06 Oct 2021**

# Appendix

# Canada Update

Haz Moakkat

# Canada – C-band decision highlights

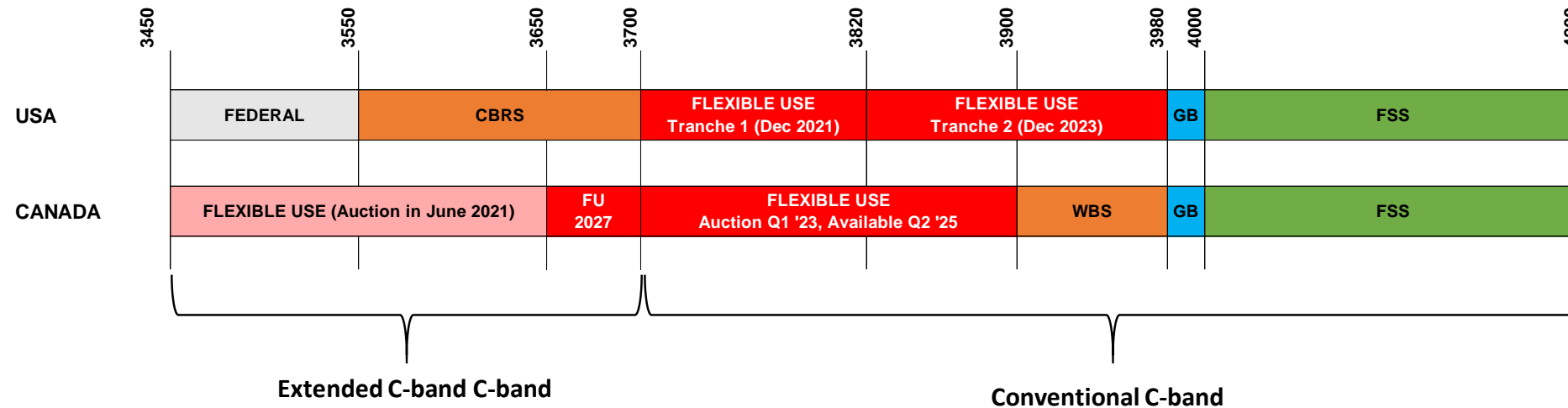
**no incentive, no compensation**

## Key Highlights:

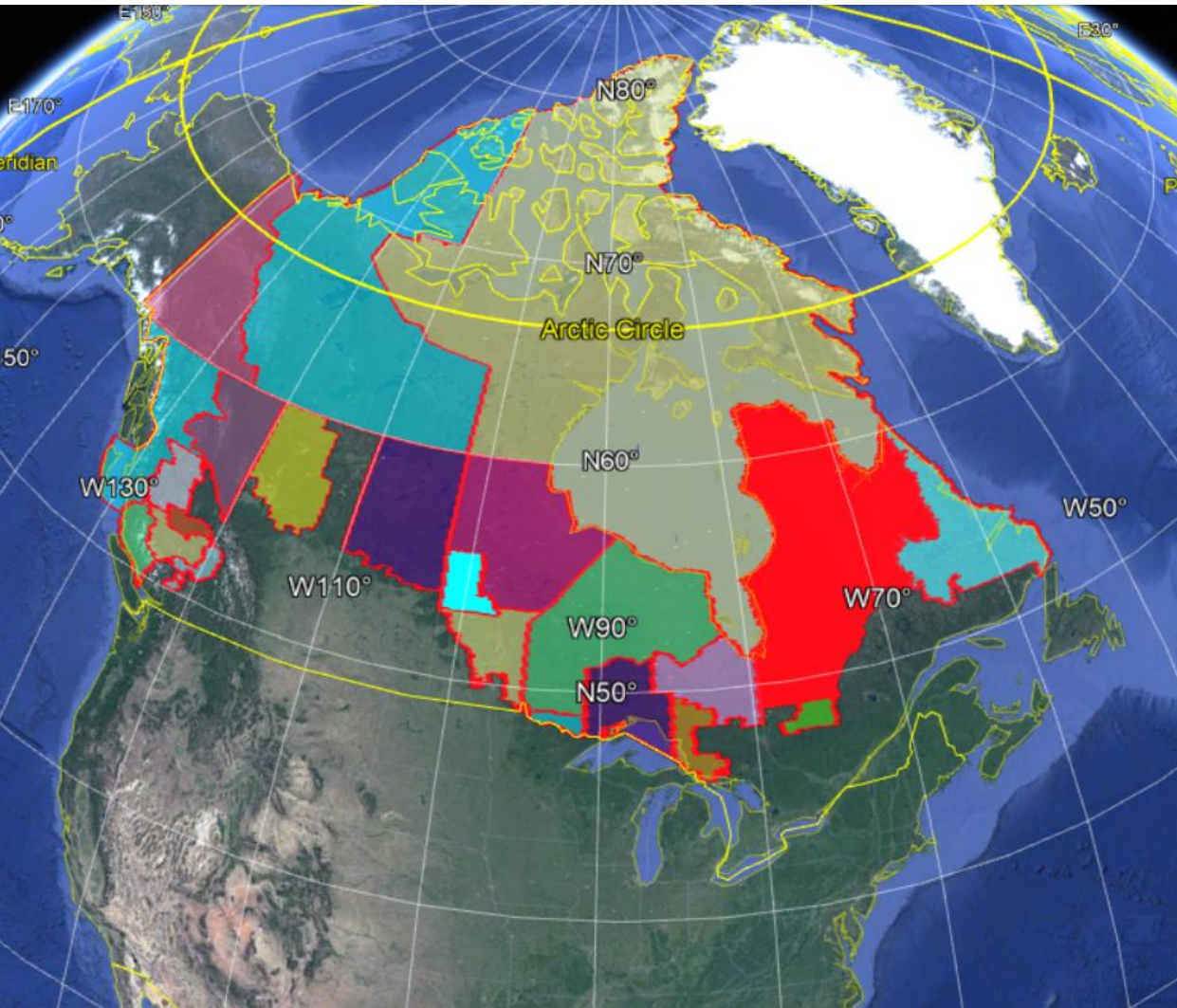
- Decision **released** on **21 May 2021**
- **No incentive, No compensation**
- Telesat proposal was NOT adopted
- Band plan: similar to the FCC's (clear 3.7-4.0 GHz)
- Auction in **Q1 2023** - FSS must exit spectrum by **31 March 2025**
- **No technical rules yet** but adopted 20 MHz guard band
- Further 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

