

RSSSA Advisory Committee
Notes of Meeting #03
21 Sep 2023

Participants:

Chair – Michelle Mendes (SatCan)
Thomas Gillon, Acting Deputy Director (Global Affairs Canada)
Mathieu Benoit (Natural Resources Canada)
Andrew Davidson (Agriculture and Agri-Food Canada)
Joanne Gabrynowicz (University of Mississippi, USA)
Sarah Gallagher (Western University)
Alex Kaptein (Airbus Defense & Space, Germany)
Eric Laliberté (Canadian Space Agency)
Wade Larson (Earth Daily)
Gordon Rigby (Macdonald Dettwiler and Associates)
Wesley Wark (Centre for International Governance Innovation)

Absence:

Brian Gallant (Space Canada)
Brian Statham (Department of National Defence)
Christine Tovee (Wyvern)

Observers:

Gordon Deecker (Global Affairs Canada)
Daniel Denis (Global Affairs Canada)
Maj Roger Dib (Global Affairs Canada)
Stephanie Ferraira (Macdonald Dettwiler and Associates)
Ruby Szpeflicki (SatCan)

Summary:

This Permanent Advisory Committee Meeting marked the third in a planned series of meetings. This meeting discussed the regulation of Small Sats, the US's 5-year deorbiting requirement, and the US changes related to SAR data.

Agenda – 21 September 2023:

1. Welcome
2. Regrets / New Business / Approval of Agenda
3. Administration
4. Update Section
5. Topic #1: Regulation of SmallSats
6. Topic #2: US 5-year deorbiting requirement
7. Topic #3: Changes related to US SAR data
8. Possible Future Topics
9. New Business
10. Roundtable
11. Adjournment

1. Welcome

- The Chair opened the meeting by welcoming all members.
- Guest introductions:
 - Tom Gillon is the Space Regulatory Section’s Acting Manager until the end of the year. GAC is planning to retain Tom in the new year to be the Manager.

2. Regrets/ New Business /Approval of Agenda

- Regrets from Brian Statham and Christine Tovee. Also from Brian Gallant, who experienced connectivity issues.
- No New Business was raised.
- Agenda approved by Committee.
- Notes for Meeting #1 and Meeting #2 were adopted. GAC will provide a PDF final copy, and share it with SatCan for them to post of their Webpage.

3. Administration

- Topics:
 - To help the flow of the discussion, topics will be accompanied by an “objective.”
 - When the Committee is expected to provide guidelines or communicate views, the assigned Committee Member will initiate the document and send it to the Chair for review. Once agreed by the Committee and the Chair, the Chair will send it to GAC.
 - Complaints will also be written and sent to the Chair.
- Use of “Slido”:
 - The Committee experimented with “Slido” to capture the recommendations from the Committee. Later, the Committee determined that a simple vote was better suited.
- MS Teams:
 - There have been issues with the MS Teams invite; therefore, GAC will follow-up the MS Teams invitation with an email to distribute any attachments.

4. Update Section

The update section is a new addition to the agenda. This will permit GAC or other Committee Members to provide a progress update on specific areas.

Open Data: GAC provided an update.

- GAC will use the definition of “open data” as per the TB Guidelines.
 - Government links (x2):
 - [Directive on Open Government- Canada.ca](#)
 - [Open Data 101 | Open Government, Government of Canada](#)

5G Access to X-Band:

- GAC conducted information sessions on the topic. ISED is the Gov of Canada led department when it comes to radio frequencies (RF).
- A Committee Member informed that some shared awareness with other civil organisations.
- A Committee Member attended the August RF discussion where:
 - Some positive headway in support of the Remote Sensing community.

- ISED and CSA argued in favour of the Remote Sensing community.
- Brazil must internally re-discuss their position.
- X-Band is still a discussion point at the WRC in November 2023.
- There is a possibility that the topics may be deferred to the next WRC in 2027.

CPC Part 2 Update

- Client Procedural Circular (CPC) Part 2 – RSSSA Licence Application Guide, v2, has been published and a PDF version can be requested. The document can not be posted on the GAC Webpage until it is translated.
- Annex D’s language to be refined and published soon.

Regulating AIS

- AIS data is no longer regulated, but the spacecraft and payload still falls under the RSSSA.

5. Topic #1: Regulation of SmallSats.

GAC indicated that SmallSats will be regulated based on its capability. A SmallSat’s application will follow the “multistage” application or the complete application.

A Committee Member shared feedback received from universities during their experience in the Canadian CubeSat Project:

- Challenges in obtaining the RF licence.
- There is significant volume of documentation.
- Unfamiliarity with regulations made the application process non-intuitive (both, RF and RSSSA).
- Teams are unsure what can be approved or denied.
- Good support from GAC, ISED and CSA.

GAC indicated that the recent changes in the application process addresses most of the concerns (i.e. amount of documentation). GAC noted to be clearer regarding the iterative process of the application and the licence when discussing with the university teams.

A Committee Member recommended that a workflow be created for the university teams.

6. Topic #2: US 5-year deorbiting requirement

The goal of topic #2 was to discuss the views of the Committee Members regarding the US 5-year deorbiting requirement.

Expressed Committee Members views:

- The US definition of when the 5-year clock starts is vague.
 - Is it at end of mission or when the operator no longer has control of the satellite?
 - One Committee Member indicated that the 5-year is triggered by the end of mission, not the design life.
- Implementing in Canada will be impactful for the mission design.
- Exchanges on the background of the 25-year deorbiting time.
 - This was developed prior to the emersion of “mega constellations”.
 - Now that “mega constellations” exists, the 25-year deorbiting no longer appropriate.

- The 5-year deorbiting is to reduce the probability of collision.
- This could be based on the constellation size, such as small constellation must deorbit in 25 years while larger constellations should respect the 5-year deorbiting requirement.
- A Committee Member shared the following link that described the US 5-year deorbiting: [FCC Adopts New '5-Year Rule' for Deorbiting Satellites | Federal Communications Commission](#)¹
- Is the 25-year deorbiting legal?
 - In the US, it is not legally binding other than for NASA.
 - France made this legally binding by putting this in law.
 - Canada adds this as a Licence Condition in the RSSSA Licence, making this legally binding.
- If something like the 5-year deorbiting is to be adapted by Canada, a clear and concise definition on when the “time starts” is required upon roll-out.
- A reduced deorbiting time is a good concept.
- It was suggested that the deorbiting time could vary by mission types.
- Deorbiting is not limited to remote sensing (RSSSA), but to similar space activities.

Committee Member Tasking:

The Chair tasked the Committee Members to provide comments and recommendations related to a Canadian interest of de-orbiting requirement for space objects in Lower Earth Orbit (LEO). The Chair requested to have this feedback to Sarah by 06 Oct 23 for her to compile and produce a recommendation for the Chair’s review and to create a *Committee Proposal*.

7. Topic #3: Changes related to US SAR data

The aim of this topic is for the Committee Members to express their views.

The US recently de-regulated SAR data, the Committee Members commented:

- Vey strong “pro-commercial” regarding space.
- The US has a well coordinated commercial community influencing regulations.
- In the US, the commercial industry had legitimate complaints with the interdepartmental consultation; namely issues with the defence review.
- It was suggested that circumstances have changed to the point where “privacy” is always overstepped.
- It was observed that in the US, there is a philosophical change. More specifically, a company still underwent launching their space mission after being denied by the FCC.
- It was suggested that a risk assessment on SAR data be conducted to better understand the ramifications.
- There was no Committee Member who could comment what or if there are any US security concerns.
- It was asked what should be done to support industry and maintaining security.
 - A suggestion was to examine Canada’s national interest in space and remote sensing.
 - An example, New Zealand wrote their Space Policy on national interest.
 - Individual departments (such as CSA, DND and ISED) provided great statements on space. Maybe these statements can be used to cover Canada’s national interest.
 - Two Committee Members expressed interest in presenting on this topic at the next meeting (see *Talking Point 8 – Possible Future Topics*).

¹ Link: <https://www.fcc.gov/document/fcc-adopts-new-5-year-rule-deorbiting-satellites>.

8. Possible Future Topics

The Committee Members were asked to “vote” for the next meeting topics and were asked to send their preference to the Chair or Secretariat.

Two Committee Members proposed to provide the Committee with a presentation on the following topics:

- A presentation on Germany’s national space interests and changes to their legislation.
- A presentation on Canada’s commercial space interests.

9. New Business

No new business was discussed.

10. Roundtable

Nil.

11. Adjournment

Agreement to convene the next meeting in around mid-January 2024. GAC to provide potential dates.

The meeting was adjourned.