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## SPECTRUM COMMITTEE

**Meeting date:** Out of session, submitted XX December 2019  
**Agenda Number:** N/A, information only  
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### SUMMARY OF SUBMISSIONS RECEIVED FOR UPDATE TO FOREIGN SPACE OBJECTS DETERMINATION

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#### TIMING

The matter is important but not urgent. The regulatory amendments are at the request of Kepler Communications (Canada), SpaceX Systems (USA) and Swarm Technologies (USA). [REDACTED]

#### BACKGROUND

1. On 21 October 2019, the ACMA commenced a public consultation ([34/2019](#)) on proposed amendments to the Radiocommunications (Foreign Space Objects) Determination 2014 (the Foreign Space Objects Determination). A summary of the consultation is at **Attachment A**.
2. The consultation closed on 27 November 2019. Eight submissions were received.
3. The paper sought comment on the proposed addition of the following foreign commercial business entities to the Foreign Space Objects Determination:
  - a. Kepler Communications Inc. (incorporated in Canada)
  - b. SpaceX Services Inc. (incorporated in the United States of America)
  - c. Swarm Technologies, Inc. (incorporated in the United States of America).
4. These foreign satellite operators are seeking access to shared satellite radiofrequency bands listed in the Radiocommunications (Communication with Space Object) Class Licence 2015 (the Communication with Space Object Class Licence). The *Radiocommunications Act 1992* requires that a foreign satellite operator must first be included in the Foreign Space Objects Determination before its satellite network can apply to be licensed to operate in bands listed in the Communication with Space Object Class Licence.
5. Inclusion of an entity in the Foreign Space Objects Determination does not confer a right on that entity to obtain a licence nor operate in frequency bands identified in the Communication with Space Object Class Licence. Rather, it is a prerequisite before a space apparatus licence can be issued.

## ISSUES

6. Eight submissions were received from: Foxtel, Goanna Ag, Hivemind, Kepler Communications, Myriota, Space Industry Association of Australia, SpaceX and Swarm Technologies. The [REDACTED] advised they would not be making a submission.
7. There were no objections to the proposed update [REDACTED] and [REDACTED] submitted that the ACMA's assessment of future licensing applications from the three satellite operators must be undertaken to ensure protection of [REDACTED]
8. Kepler, Space Industry Association of Australia, SpaceX and Swarm wrote in support of the amendment. Hivemind, a New Zealand-based apiculture technology company and Goanna Ag, a Queensland-based agriculture technology company also supported the addition of Swarm Technologies to the Foreign Space Objects Determination [REDACTED]  
[REDACTED]
9. The consultation prompted media interest in Australia. On 29 October 2019, Communications Day published an article on the addition of the three operators to the Foreign Space Objects Determination. On 5 December 2019 the ABC published an [article](#) about concerns raised by astronomers that reflected sunlight from Space-X satellite will negatively impact optical astronomy.

## NEXT STEPS

10. We will arrange for submissions to be published as soon as practicable.
11. We anticipate the Authority will be asked to make the proposed amendment to the Foreign Space Objects Determination in January 2020.

## ATTACHMENTS

- A Consultation paper: summary

## Consultation paper: summary

Three new foreign satellite operators—Kepler Communications (Canada), SpaceX Services (USA) and Swarm Technologies (USA)—are preparing to provide satellite-based communication services in Australia such as satellite broadband services (SpaceX), internet of things (IoT) (Kepler and Swarm), and store and forward data services (Kepler). These operators have approached the ACMA to commence the regulatory approvals process to eventually obtain space apparatus licences to operate in Australia.

These operators are seeking access to frequencies specified in the [Radiocommunications \(Communication with Space Object\) Class Licence 2015](#) (Communication with Space Object Class Licence).

Under the [Radiocommunications Act 1992](#) (Radiocommunications Act), a foreign satellite operator must first be included in the [Radiocommunications \(Foreign Space Objects\) Determination 2014](#) (Foreign Space Objects Determination) before its satellite network can be licensed to operate in specific shared satellite radiofrequency bands listed in the Communication with Space Object Class Licence. Inclusion in the determination does not confer a right on that entity to obtain a license, rather it is a prerequisite before a space apparatus licence can be issued.

The ACMA proposes to amend Schedule 1 of the Foreign Space Objects Determination to include these foreign satellite operators.

The ACMA outlined its intention to update the Foreign Space Objects Determination in response to industry requests in the [Five-year spectrum outlook 2019–23](#).