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| U.S. Radiocommunications Sector  Fact Sheet | |
| **Working Party:** ITU-R WP4C | **Document No:** USWP4C-15 |
| **Ref: WRC-27 agenda item 1.13** | **Date:** 21 March 2024 |
| Document Title: Information paper on the U.S. Supplemental Coverage from Space (SCS) Report and Order and Further Notice of Proposed Rulemaking | |
| **Author(s)/Contributors(s):**  K. Medley  FCC Space Bureau  D. Ibarra  FCC OIA | **Email**: Kathryn.Medley@fcc.gov  **Email**: Dante.Ibarra@fcc.gov |
| **Purpose/Objective:** To provide an informative U.S. summary of the Federal Communications Commission’s Supplemental Coverage from Space (SCS) Report and Order and Further Notice of Proposed Rulemaking | |
| **Abstract:** This R&O establishes a domestic regulatory framework  to enable collaborations between satellite operators and terrestrial service providers to offer ubiquitous connectivity, directly to consumer handsets using spectrum previously allocated only to terrestrial service. SCS would enable expanded coverage to a terrestrial licensee’s subscribers, especially in remote, unserved, and underserved areas, and would increase the availability of emergency communications. | |

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| United States of America |
| INFORMATION PAPER |
| Update on recent U.S. activities on  Supplemental Coverage from Space |

Introduction

On March 17, 2023, the Federal Communications Commission (FCC) issued a Notice of Proposed Rulemaking seeking comment on a proposed regulatory framework necessary to enable Supplemental Coverage from Space (SCS). In the Notice, the FCC surveyed various partnerships between satellite service providers and terrestrial wireless service providers that are facilitating the development of satellite-terrestrial connectivity. Some partnerships rely on the use of spectrum allocated to satellite services, as opposed to spectrum allocated to terrestrial services, to provide expanded service options to subscribers using smartphones. Other partnerships are premised on relationships between satellite operators and terrestrial wireless providers to use terrestrial wireless spectrum.

On March 14, 2024, the Federal Communications Commission (FCC) adopted a Report and Order (R&O) establishing a domestic regulatory framework for Supplemental Coverage from Space (SCS). The framework allows satellite operators collaborating with terrestrial service providers to obtain Commission authorization to operate space stations on certain eligible flexible-use spectrum bands allocated to terrestrial services. The R&O framework would enable expanded satellite-based coverage to a terrestrial licensee’s subscribers, especially in remote, unserved, and underserved areas.

The framework adopted in the R&O is an initial step to encourage the development of SCS while minimizing the risks of harmful interference to existing terrestrial and satellite networks. An associated Further Notice of Proposed Rulemaking (FNPRM) was also adopted to further develop the record on two areas.

This contribution provides WP 4C with information on these recent activities in the United States.

Discussion

The R&O modifies the United States Table of Frequency Allocations to allow bi-directional, secondary mobile-satellite service operations in certain spectrum bands that have no primary, non-flexible-use legacy incumbents, federal or non-federal, other than the participating terrestrial licensee.  For these bands, the R&O would authorize SCS only where one or more terrestrial licensees—together holding all licenses on the relevant channel throughout a defined geographically independent area—lease access to the terrestrial spectrum rights to a participating satellite operator, whose part 25 license reflects these frequencies and the GIA in which the satellite operator and terrestrial wireless provider will offer SCS.

The FNPRM seeks comment on: 1) 911 service for SCS connections, including the use of location-based routing of SCS voice calls and texts and 2) procedures related to the protection of radio astronomy.

Key elements from this R&O and Further Notice of Proposed Rulemaking can be found below. For context and full details, please see the Report and Order and FNPRM available at the following website:

https://docs.fcc.gov/public/attachments/FCC-24-28A1.pdf

Specifically, in the Report and Order, the FCC took the following actions:

* Adopted a spectrum use framework that enables expanded coverage to a terrestrial licensee’s subscribers through a collaboration via lease agreement or arrangement with a satellite operator.
* Adopted a secondary, bi-directional, mobile-satellite service (MSS) allocation in certain frequency bands that have no primary, non-flexible-use legacy incumbents, federal or non-federal.
* Added a secondary MSS allocation in the following bands allocated to terrestrial services services, along with a new non-federal footnote NG33A, which would indicate that MSS operations in the bands are subject to the Commissions SCS rules:
  + 600 MHz: 614-652 MHz and 663-698 MHz;
  + 700 MHz: 698-769 MHz, 775 MHz-799 MHz, and 805-806 MHz;
  + 800 MHz: 824-849 MHz and 869-894 MHz;
  + Broadband PCS: 1850-1915 MHz and 1930-1995 MHz; and
  + AWS-H Block: 1915-1920 MHz and 1995-2000 MHz.
* Adopted the proposal to enable SCS authorizations in in the following defined geographically independent areas: (1) CONUS; (2) Alaska; (3) Hawaii; (4) American Samoa; (5) Puerto Rico/U.S. Virgin Islands; and (6) Guam/Northern Mariana Islands.
* Established a framework in which the Commission would authorize SCS in SCS bands only where one or more terrestrial licensees— holding all licenses on the relevant channel throughout a defined geographically independent area—lease access to the terrestrial spectrum rights to a satellite operator, whose part 25 space station license includes these frequencies and the GIA.
* Adopted entry criteria that satellite operators must meet to apply for or modify an existing part 25 space station license to operate satellites in SCS bands.
* Established a license by rule approach for terrestrial devices as SCS earth stations communicating with a satellite network for purposes of SCS.
* Required modified or new equipment authorizations for terrestrial devices and granted a limited waiver of certain equipment authorization rules.
* Applied—with limited amendments—the existing service rules governing satellite and terrestrial licensees to enable the provision of SCS.
* Imposed technical rules and other recommendations to mitigate potential harmful interference to existing services, including radio astronomy.
* Clarified international coordination obligations, including outlining steps to ensure that SCS operations will be consistent with relevant ITU Radio Regulations.
* Adopted interim 911 call and text requirements to route 911 calls and texts to a Public Safety Answering Point using either location-based routing or an emergency call center.
* Clarified that the SCS framework remains separate from the existing framework for MSS systems.

The Further Notice of Proposed Rulemaking:

* Seeks comment on 911 service for SCS connection including the use of location-based routing of SCS voice calls and texts. The FCC also seeks comment on procedures related to the protection of radio astronomy.

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