

# FCC Starts Rulemaking on Commercial Mobile Access in 1675-1680 MHz Band, Similar to 2012 Ligado Petition

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By unanimous vote, the FCC launched a rulemaking this past week to consider allocating the 1675-1680 MHz band for co-primary use by flexible commercial terrestrial fixed and mobile operators with incumbent federal operators. The [Notice of Proposed Rulemaking](#) (“NPRM”), released on Monday, May 13, is, in many fundamental ways, similar to a proposal Ligado first made in a 2012 petition for rulemaking, with adjustments over the years, seeking to allow terrestrial mobile operations in the 1675-1680 MHz band.

While the NPRM formally does not act on Ligado’s petition (filed by its pre-bankruptcy predecessor LightSquared), the FCC is incorporating the record from the Ligado proceeding into the new docket. That record includes strong opposition from the National Oceanic and Atmospheric Administration (“NOAA”) and several other federal and non-federal users of the band. NOAA is the primary user of the 1675-1680 MHz band, using it for its weather tracking and monitoring capabilities. Numerous unlicensed receive earth station operators and other stakeholders make operational use of the weather data downlinked from NOAA satellites on a direct read out.

NOAA and other incumbents use the band under the current allocations: Meteorological Aids (“MetAids”) and Meteorological-Satellite (“MetSat”) services. MetAids service (i.e., radiosondes) is already transitioning from the band to other frequencies. But the MetSat service is here to stay, as NOAA’s GOES-N and the recently-launched GOES-R satellites operate at the top of and near the 1675-1680 MHz band. Indeed, GOES-R is expected to operate through at least 2036. Because the federal government’s MetSat earth stations are fixed, and relatively limited in number, the FCC contemplates that large geographic areas should be available for commercial wireless users. These tentative conclusions do not take into account the uncertain number of non-federal earth stations that utilize the direct read out. However, the NPRM invites comment on other ways, apart from direct read out, that non-federal entities that rely on the GOES data can gain access to that data, including a non-radio-based content delivery network. Products generated from GOES data support multiple operational activities including dynamic weather forecasting, anticipation of hurricane movements, water level and flood management, warnings for tornadoes and severe weather, wildfire growth tracking, and condition reports for firefighters.

Comments will be due thirty days after Federal Register publication of the NPRM (which has not occurred as of this writing), with replies due 60 days after publication. The FCC seeks comment on numerous issues, with a strong repeated request for cost/benefit information and data, as well as alternative approaches, including:

- **Coordination with Federal Systems** – How can current federal earth stations in and adjacent to the band be protected from harmful interference? How can future federal earth stations be accommodated by new commercial users in the 1675-1680 MHz band with minimal disruption to their services?
- **Non-Federal Users** – Which non-federal entities operate receive earth stations in the band? Which entities rely on this direct read out data? What other options exist for non-federal users to access the data from NOAA satellites? Is a content delivery system operated over the Internet an acceptable alternative? Would such a system increase the total number of users with reliable access to NOAA satellite data?
- **Band Plan and Licensing** – The Commission proposes to license the full five megahertz on an unpaired, geographic area basis. Should the Commission auction licenses by Partial Economic Area (“PEA”)? Should the spectrum be made available solely for downlinks from base stations to user terminals?
- **License Term and Performance Requirements** – Should the Commission grant 15-year licenses? Should licensees be required to demonstrate reliable signal coverage to 45% of the population within six years and 80% within twelve years, or should other performance measures be utilized? Should there be different performance requirements for Internet of Things (“IoT”) type services, since they may not provide service based on residential population coverage?

Ligado’s plan, laid out in its proposal, which the NPRM does not take up, was to combine the five megahertz in the 1675-1680 MHz band with the adjacent five megahertz block at 1670-1675 MHz, which it has been leasing. Ligado’s larger ultimate plan was to utilize 1670-1680 MHz along with thirty other megahertz in the L-Band, for which Ligado holds operational authority, to provide a terrestrial commercial network under Commission rules that allow satellite spectrum to be used for Ancillary Terrestrial Component services under certain conditions. Ligado has had license modification applications pending for several years before the Commission to implement its plan. Stakeholders that oppose Ligado’s proposals have raised concerns, respective to specific sub-bands, about harmful interference to GPS operations and adjacent satellite communications (“SATCOM”) services. The NPRM does not mention the applications and the Commission has not otherwise indicated whether or when it will act on them.

Apart from Ligado’s reactions to the Commission’s “non-action” on its petition through the NPRM, NOAA continues to do studies using Spectrum Relocation Fund monies into the compatibility of existing meteorological operations in and adjacent to 1675-1680 MHz band with new entrants. One gets the sense that, while the NPRM clearly opens a new chapter in this long story, much of the chapter remains to be outlined, let alone written.