

**IWG -4**

**Inmarsat's Recommendation on LightSquared's  
Draft Proposals for WRC-12 on Integrated MSS Systems**

Inmarsat takes note of LightSquared's three proposals summarized in document IWG-4/074 (r1) for the IWG-4 for its next meeting on the following items:

- 1) Agenda Item 4 to modify Recommendation 206 into a Resolution [IMS 1.5/1.6 GHz (WRC-12)];
- 2) Agenda Item 7, to provide a Resolution [CGC.Notify]; and
- 3) Agenda Item 8.2 to propose a WRC-16 Agenda Item and an accompanying Resolution [CGC.Agenda (WRC-12)].

Inmarsat appreciates the intent of LightSquared's proposals. In fact, Inmarsat has cooperated with LightSquared to enable deployment of Ancillary Terrestrial Components, also known as Complementary Ground Component (ATC/CGC) base stations, including significant modifications to permit higher power operations to provide advanced mobile wireless services in North America. This process has worked well for both operators, notifying Administrations, and consumers. Inmarsat believes that the model that was used for coordination of ATC/CGC base stations in North America and other regions can serve as a framework for deployment of ATC/CGC in other regions as well.

***Disadvantages of the LightSquared Proposals***

In large part because the process followed in North America has worked so well, Inmarsat disagrees with the need for and desirability of proposing new ITU procedures for coordination and notification of ATC/CGC base stations. Inmarsat does not share the view that it is necessary to take the significant step of proposing to modify the ITU Radio Regulations (RRs) to accommodate ATC/CGC base stations. Inmarsat believes that the current RRs provide adequate flexibility to accommodate ATC/CGC base stations in the current ITU procedures.

Any ITU action would have to be preceded by detailed studies at the national and international levels to determine the conditions for ATC/CGC use. ITU studies would tend to be based on worst case assumptions and will delay the implementation of ATC/CGC in other countries and regions while they are pending. It is Inmarsat's belief that such studies are best carried out on a national and system specific basis to take into account actual conditions and concrete systems. Adding ITU studies to the process would create unnecessary duplication and require significant additional resources for all the necessary participants. In short, we

believe that it is preferable to have the introduction of ATC/CGC as an industry-driven process.

The proposed studies and implementation of additional procedures will also increase the administrative burden on the Radiocommunication Bureau (BR) as there could be many thousands of requests to notify terrestrial base stations, further taxing the BR's limited resources for processing satellite and other network filings.

Finally, as has been the case in the past, proposing and advocating for these proposed procedures nationally, regionally and at the upcoming World Radiocommunication Conference (WRC-12) will be contentious and will be enormously resource-intensive for the ITU, Administrations, and operators. Inmarsat, therefore, cannot support the proposals to include ATC/CGC into the ITU coordination process.

### ***Alternative Path***

Inmarsat believes that there is a better approach, based on the successful U.S. precedent, to achieving the goals that LightSquared is trying to obtain without the need to develop interim procedures or permanently modify the Radio Regulations and without the disadvantages of LightSquared's proposals identified above. Inmarsat submits the following alternative roadmap for consideration by the IWG-4 as a path forward for international deployment of ATC/CGC. This approach is intended to demonstrate that the goals that LightSquared is trying to achieve can be obtained more quickly and potentially result in greater flexibility with minimal impact on limited ITU and Administration resources.

There is a well-established international MSS coordination process covered by Article 9 of the RRs. It is Inmarsat's belief that that process can accommodate the goals that LightSquared is trying to achieve. Specifically, proponents of ATC/CGC networks should undertake a review of the current L-band coordination environment for each of the countries where ATC/CGC deployment is contemplated and conduct satellite coordination, if required. If satellite coordination is necessary and complete or well underway, the ATC/CGC proponents can commence discussions with other satellite operators to develop technical solutions to the coordination of ATC/CGC under existing ITU procedures.

Once agreements between the affected operators are in place, the MSS operator can approach regulators to endorse ATC/CGC operation. To facilitate this process, ATC/CGC proponents can educate regulators on already existing regulatory models in other countries, such as that in the United States.<sup>1</sup>

The advantage of the above approach compared to pursuing Recommendations or Resolutions at WRC-12 is that it avoids the potential development of interference rules with unnecessarily conservative or restrictive requirements. Instead, it allows for maximum deployment/operational flexibility based on operator-to-operator agreements under the

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<sup>1</sup> *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-band, and the 1.6/2.4 GHz Bands; Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Report and Order and Notice of Proposed Rulemaking*, FCC 03-15, 18 FCC Rcd 1962 (2003), modified by Order on Reconsideration, 18 FCC Rcd 13590 (2003), reconsidered in part in *Memorandum Opinion and Order and Second Order on Reconsideration*, FCC 05-30, 20 FCC Rcd 4616 (2005), further reconsideration pending.

auspices of notifying Administrations. In addition, the process proposed by Inmarsat would speed deployments by avoiding years of unnecessary study and save resources for the Bureau, Member States, Sector Members and operators.

Inmarsat believes that there is a valid role for regional and ITU organizations to play in facilitating the international deployment of ATC/CGC. For example, regional and ITU organizations could facilitate sharing of information papers on ATC/CGC deployment and hold forums and workshops on the benefits of ATC/CGC and regulatory best practices. Specifically, these fora could be valuable for detailing what ATC/CGC is and how it works, the potential benefits for spectrum efficiency, the potential public interest benefits (e.g., disaster recovery), and how ATC has been implemented from a regulatory and coordination perspective in other countries and regions. In addition, these fora could be a place for regulators to describe recommended procedures or best practices on how to coordinate ATC/CGC networks as part of MSS coordination procedures. We note that such an information paper was prepared prior to the last WRC, but much has happened since then and an update would be appropriate.

### ***Conclusion***

Inmarsat respectfully requests that the IWG-4 consider these factors in evaluating the necessity of proceeding with LightSquared's risky, complex and unnecessary approach to international deployment of ATC/CGC through modification of the ITU Radio Regulations.

Inmarsat also requests that this document be forwarded to the WRC Advisory Committee (WAC) if the IWG-4 decides to send LightSquared's proposals to the WAC without consensus.