

In the Matter of	)	
	)	
Iridium Communications Inc. Petition for Waiver	)	FCC WT Docket No. 19-280
to Permit Use of Iridium Service to Meet GMDSS	)	
Requirements	)	

## COMMENTS OF THE RADIO TECHNICAL COMMISSION FOR MARITIME SERVICES (RTCM)

### Introduction

1. The Radio Technical Commission for Maritime Services (RTCM) is a non-profit organization whose objectives include studying and preparing reports on maritime electronic navigation and telecommunications practices. Established by the U.S. government in 1947 to support technical decision-making in the area of maritime radiocommunications, RTCM is now a membership organization<sup>1</sup> that supports and encourages needed improvements in maritime communications and electronic navigation. RTCM develops and publishes technical standards, and it supports other domestic and international technical standards bodies and regulatory bodies.
  
2. RTCM works intimately with and is a Category A liaison<sup>2</sup> member to the International Electrotechnical Commission (IEC) Technical Committee 80 - Maritime navigation and radiocommunication equipment and systems. RTCM is also a member of the US National Committee Technical Advisory Committee (TAG) for IEC TC80<sup>3</sup>. The scope of TC80 is to prepare certification standards for maritime navigation and radiocommunication equipment and systems used on ships and where appropriate on shore for safety of navigation as well as distress and safety communications purposes.

---

<sup>1</sup> RTCM membership is comprised of the maritime stakeholders from the US and foreign governments, marine equipment manufacturers, maritime communications service providers, marine dealers and distributors, US government contractors, technical standards organizations, technical service organizations, marine pilots organizations, marine transportation services, marine insurance providers and many other interested parties in the marine industry in the US and abroad.

<sup>2</sup> The IEC defines Category A liaisons as "Organizations that make an effective contribution to the work of the technical committee or subcommittee for questions dealt with by this technical committee or subcommittee. Such organizations are given access to all relevant documentation and are invited to meetings. They may nominate experts to participate in a WG". ISO/IEC DIR 1 Edition 15.0 2019-05 §1.17.2.1.

<sup>3</sup> The U.S. National Committee of the International Electrotechnical Commission (USNC/IEC) serves as the focal point for U.S. parties who are interested in the development, promulgation and use of globally-relevant voluntary consensus standards. The USNC is the United States' representative to the IEC and is sponsored by the American National Standards Institute (ANSI). The US Coast Guard administers the IEC TC80 technical advisory group under the USNC.

Many of these IEC TC80 standards are initially developed by RTCM before being incorporated by IEC.

3. The US Coast Guard and the Federal Communications Commission typically implement these RTCM and IEC TC 80 standards incorporating them by reference into Titles 33 and 46 (USCG) and Title 47 Part 80 and 95 (FCC) of the US Code of Federal Regulations. Because the Safety of Life at Sea (SOLAS) Convention mandates that navigation and radiocommunications systems carried aboard ships be type approved, International Maritime Organization (IMO) member administrations use IEC TC80 standards in their type approval process.
4. Because RTCM is involved in developing navigation and radiocommunications equipment standards including GMDSS, it is responding to the FCC's request for comments regarding this waiver request to meet Global Maritime Distress & Safety System (GMDSS) requirements filed by Iridium.

## Comments

5. In July of 2019, IEC published *IEC 61097-16, Global Maritime Distress and Safety System (GMDSS) – Part 16: Ship earth stations operating in mobile satellite systems recognized for use in the GMDSS – Operational and performance requirements, methods of testing and required test results*<sup>4</sup>. This standard was initiated at the request of the United States National Committee to IEC<sup>5</sup> to accommodate Iridium's timeline for acceptance into the GMDSS by the International Maritime Organization (IMO). The Scope as published in IEC 61097-16 incorporate provisions under which IMO accepted Iridium into the GMDSS<sup>6</sup>.
6. Iridium in its petition for waiver seeks waiver to the whole of 47 CFR § 80.1101 – *Equipment Performance Standards*, including all of the standards listed within, without proposing any alternative. *SOLAS IV Regulation 14 Performance standards*, upon which 47 CFR § 80.1101 is based, requires all GMDSS equipment "be of a type approved by the Administration". This SOLAS mandate cannot be met by waiving the whole of 47 CFR § 80.1101 for one manufacturer's GMDSS ship earth station. While Iridium

---

<sup>4</sup> IEC 61097-16 is available for purchase from ANSI or IEC at <https://www.ansi.org> and <https://www.iec.ch> respectively.

<sup>5</sup> See IEC new work item proposal 80/839/NP dated 25 January 2017.

<sup>6</sup> This scope specifies in part that "the minimum operational and performance requirements, methods of testing and required test results for any ship earth stations intended for operation in mobile-satellite systems and services which are recognized by the International Maritime Organization as meeting the criteria required by ... the GMDSS ... This document incorporates the minimum criteria and performance standards of the IMO, currently prescribed in IMO Resolution A.1001(25) in IMO Resolution MSC.434(98) and is also associated with IMO Resolution A.694(17) and IEC 60945."

correctly notes that 47 CFR § 80.1101 currently “names Inmarsat equipment and the performance standards to which each piece of equipment must comply”, IEC 61097-16 was developed and published to meet that gap. Because IEC 61097-16 incorporates appropriate provisions of other relevant standards by reference, including IEC 60945, IEC 61097-16 alone should be sufficient.

7. RTCM requests that Iridium’s waiver application be granted only under the condition that they meet the requirements of IEC 61097-16 in place of equipment performance standards currently listed in 47 CFR § 80.1101. RTCM notes that type approval of ship earth stations to this standard by Iridium rather than by an independent lab should be sufficient to meet this requirement, as specified by IMO Resolution A.570(14).
8. RTCM further notes with appreciation the significant improvement Iridium’s GMDSS ship earth stations may make in maritime safety, including notably in polar latitudes. Consequently, we request FCC act on this waiver in an expeditious manner.



Ed Wendlandt  
President RTCM

10/18/19

date