

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	WT Docket No. 07-250
Request For Updated Information)	
And Comment On Wireless Hearing Aid)	WT Docket No. 10-254
Compatibility Regulations)	

COMMENTS OF INMARSAT

Inmarsat, Inc. (“Inmarsat”) respectfully comments on the public notice (“Notice”) issued by the Consumer and Governmental Affairs Bureau and the Wireless Telecommunications Bureau regarding possible changes to the Commission’s hearing aid compatibility (“HAC”) rules.¹ In proposing to expand the scope of the devices covered by the HAC rules, the Notice asks about the effects of amending the HAC rules on communicating “through a satellite.”² Standalone Mobile Satellite Service (“MSS”) has been exempt from the HAC rules since their adoption pursuant to Section 710 of the Communications Act of 1934, as amended (“Act”).³ Given the nature of standalone MSS, the Section 710 standard for revoking the exemption is not met, and the public interest is better served by maintaining MSS’ current treatment.

¹ See Public Notice, *Request For Updated Information And Comment On Wireless Hearing Aid Compatibility Regulations*, 29 FCC Rcd 13969 (CGB, WTB 2014) (“Notice”). The HAC rules are codified at section 20.19 of the Commission’s rules, 47 C.F.R. § 20.19.

² See Notice, 29 FCC Rcd at 13972 ¶ 9.

³ 47 U.S.C. § 610. The exemption is codified at 47 U.S.C. § 610(b)(2)(A); see also *Amendment of the Commission's Rules Governing Hearing Aid-Compatible Mobile Handsets; Petition of American National Standards Institute Accredited Standards Committee C63 (EMC) ANSI ASC C63(R)*, 23 FCC Rcd 3406, 3441, ¶ 85 n. 234 (2008) (rules adopted in that order do not apply to MSS “unless they fall within the existing scope of Section 20.19(a).”)

I. INTRODUCTION

The Commission should maintain its current approach to HAC compliance for MSS: standalone MSS (without an Ancillary Terrestrial Component (“ATC”)) is exempt under Section 710. The HAC rules are geared to terrestrial Commercial Mobile Radio Services (“CMRS”),⁴ and non-ATC MSS services are far different: they serve a limited, niche market with a different and far more limited customer base and far lower volume of handset sales, and there are a *de minimis* number of handset models. Because of these same unique characteristics of MSS, the Commission should not apply the HAC rules to non-ATC MSS.

Inmarsat and its affiliates specialize in providing remote mobile communications solutions, predominantly for government and enterprise customers operating beyond the reach of traditional terrestrial telecommunications. Inmarsat offers standalone MSS, or MSS without ATC, through its Global Satellite Phone Service (“GSPS”), providing mobile satellite voice and data capability via a handheld device. GSPS is not a mass-market consumer offering. The GSPS customer base is limited to public safety and military; critical infrastructure, and other large enterprise users, such as energy exploration companies. Inmarsat is currently producing just *one* GSPS handset on the market worldwide, the ISATPhone II.⁵

Retaining the exemption for standalone MSS, moreover, is consistent with the Commission’s overall approach to this niche service. Just last year, the Commission adopted a text-to-911 order but specifically exempted MSS because it is “a specialized offering with a

⁴ See, e.g., 47 C.F.R. § 20.19(a) (“The hearing aid compatibility requirements of this section apply to digital CMRS providers in the United States to the extent that they offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls, and such service is provided over frequencies in the 698 MHz to 6 GHz bands.”).

⁵ See *The New ISATPhone II*, available at <http://www.inmarsat.com/isatphone/>.

focus on enterprise and government users.”⁶ This decision, moreover, is consistent with other public safety-related 911 treatment differentiating MSS from CMRS services.⁷ As Inmarsat demonstrates herein, the nature of non-ATC MSS offerings, particularly Inmarsat’s GSPS, continues to warrant an exemption from the HAC rules.

II. THE COMMISSION SHOULD PRESERVE THE CURRENT NON-ATC MSS EXEMPTION AS THE SECTION 710 LEGAL STANDARD FOR REVOCATION IS NOT MET

Since the application of the HAC rules to CMRS,⁸ the Commission has maintained an exemption pursuant to Section 710 for standalone MSS. Section 710 dictates that, in order to revoke the existing HAC exemption for standalone MSS, the Commission must find:

- (i) such revocation or limitation is in the public interest;⁹
- (ii) continuation of the exemption without such revocation or limitation would have an adverse effect on hearing-impaired individuals;¹⁰
- (iii) compliance with the [HAC requirements] is technologically feasible for the telephones to which the exemption applies;¹¹ and
- (iv) compliance with the [HAC requirements] would not increase costs to such an extent that the telephones to which the exemption applies could not be successfully marketed.¹²

⁶ *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, Second Report and Order and Third Notice of Proposed Rulemaking, 29 FCC Rcd 9846, 9862 ¶ 35, n. 96 (2014).

⁷ *See* 47 C.F.R. § 20.18(a) (“excluding mobile satellite service (MSS) operators” from CMRS 911 rules).

⁸ *See Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones*, Report and Order, 18 FCC Rcd 16753 (2003).

⁹ *See* 47 U.S.C. § 610(b)(2)(B)(i).

¹⁰ *See id.* § 610(b)(2)(B)(ii).

¹¹ *See id.* § 610(b)(2)(B)(iii).

¹² *See id.* § 610(b)(2)(B)(iv).

Analysis of these statutory factors demonstrates that the HAC rules should not apply to GSPS or other non-ATC forms of MSS.

(i) Revocation of the HAC Exemption is Not in the Public Interest

As discussed above, the public interest supports maintaining the current exemption, not revoking it. Standalone MSS fills a specialized need for remote, global communications among enterprise and government customers. GSPS, like other standalone MSS services, is not a mass-market service and consumers do not constitute the customer base.¹³ As with the Commission's recent decision in the *Text-to-911* proceeding, the Commission should recognize that the "specialized" nature of MSS and its "focus on enterprise and government users" and conclude the exemption should be maintained.¹⁴

Further, development of the GSPS device took years of effort to produce a handset with the special features that enterprise and government users need to reliably access a satellite that is 22,000 miles away, from anywhere on the globe, including the most remote and inhospitable locations on earth. Every MSS system is unique, and therefore Inmarsat's GSPS handset had to be "custom-designed" to ensure reliable and high-quality service using the Inmarsat satellite constellation. As such, the ISATPhone II and competing products from other MSS providers are both innovative and unusual compared to the handsets used in terrestrial CMRS. The Commission should continue to encourage such innovation in handset design, and applying HAC rules would burden their development without clear benefit to consumers.

¹³ See *Notice of Oral Ex Parte Presentation*, Iridium Satellite, LLC, WT Docket No. 07-250 (Jan. 27, 2014).

¹⁴ See *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, 29 FCC Rcd at 9862 ¶ 35, n. 96.

The Notice appears to consider expanding the reach of the HAC rules based on a “technologically neutral approach.”¹⁵ Even under such an approach (which is not mentioned in Section 710 of the Act), extending the rules to reach standalone MSS is not warranted. Technologically, the engineering, operation, and capabilities of MSS handsets, which communicate with satellites under very adverse conditions, are far different from those of conventional terrestrial CMRS handsets, which communicate with terrestrial cell sites or Wi-Fi hot spots.

A strict regulatory environment regarding hearing aid compatibility would harm this niche market and the continuing prospects for the delivery of an innovative service for government and enterprise users.

(ii) There Is No Evidence that the Exemption Has a Material Adverse Effect on Hearing-Impaired Individuals

Because non-ATC MSS in general, and GSPS in particular, is not used for conventional consumer communications, revocation of the existing exemption would not result in material benefit to hearing-impaired individuals, the overwhelming majority of whom do not use GSPS services. And in the highly unlikely event that a person with hearing loss would seek to use a GSPS handset, GSPS can provide some assistance today because GSPS handsets are compatible with third party peripherals for people with hearing loss such as assistive headsets.

(iii) Compliance with HAC requirements is not Technologically Feasible for the GSPS Device

A fundamental difference between CMRS handsets and MSS handsets is that power levels are far higher for MSS handsets than for CMRS, to permit communications with distant

¹⁵ See Notice, 29 FCC Rcd at 13972 ¶ 7.

satellites. This high power requirement means that MSS handsets are not designed pursuant to the ANSI C63.19-2011 technical standard adopted by the Commission as the technological basis for the HAC requirements.¹⁶ Among other things, that standard requires the field strength emitted by a wireless device not to exceed the RF immunity of a hearing aid,¹⁷ which at present is infeasible as a practical matter for MSS devices. In fact, the MSS industry is not part of the ANSI C63.19 standards process, which means that its design engineers have not participated in developing the technical requirements that govern devices subject to the HAC rules.

(iv) Compliance with HAC Requirements Would Increase Costs To Such An Extent that MSS Devices Could Not Be Successfully Marketed

Implementation of HAC for GSPS handsets would raise the cost of each handset substantially, to a point that calls into question whether these devices could be marketed successfully.

Unlike the terrestrial CMRS industry, Inmarsat and other MSS providers do not offer numerous different types of MSS devices, so it is extremely difficult to spread the costs of HAC compliance over multiple devices or models – in fact, Inmarsat offers only the ISATPhone II as a GSPS device. Moreover, handset sales are limited. Inmarsat would have to recover the costs of HAC implementation across relatively few devices, which are sold to specialized, price-sensitive international enterprises to begin with. Moreover, because only a fraction of the GSPS handsets sold annually are imported to the United States, Inmarsat would face difficulties in remaining

¹⁶ See Accredited Standards Committee C63® – Electromagnetic Compatibility, American National Standard Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids, ANSI C63.19-2011 (2011) (“ANSI C63.19-2011 standard”). See also *Amendment of the Commission’s Rules Governing Hearing Aid-Compatible Mobile Handsets*, 27 FCC Rcd 3732 (WTB, OET 2012) (adopting the ANSI C63.19-2011 standard for purposes of the HAC rules).

¹⁷ See ANSI C63.19-2011 standard at 2.

competitive with other providers when offering these devices internationally. Imposition of the HAC requirements on GSPS thus would place a significant additional cost recovery burden on this specialized form of equipment.

III. CONCLUSION

The public interest best would be served by retaining the current exemption from the HAC exemption for non-ATC MSS devices, especially GSPS. None of the statutory requirements are met for revoking the exemption. The pending Notice should not disturb the MSS exemption.

Respectfully submitted,

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