



Federal Communications Commission
Washington, D.C. 20554

January 13, 2014

Ms. Laura Stefani
Mr. Joseph A. Godles
Goldberg, Godles, Wiener & Wright LLP
1229 19th Street, N.W.
Washington, D.C. 20036

DA 15-42

Re: Request by Itron, Inc. for Waivers of the Commission's Rules

Dear Ms. Stefani and Mr. Godles:

In this letter, we deny Itron, Inc.'s (Itron's) request for waivers of certain of the Commission's rules¹ to operate a half-duplex, non-paging system using its licensees in the 931 MHz band.² As explained below, Itron has not shown under sections 1.3 or 1.925 of the Commission's rules³ that waiver is warranted in this instance.

I. BACKGROUND

In 2010, the Wireless Telecommunications Bureau (Bureau) auctioned 9,603 geographic-area paging licenses, with 1,851 of those licenses being in the upper paging bands (929-931 MHz).⁴ In announcing Auction 87, the Bureau explained that pre-existing paging incumbent licenses existed in the bands, and these "[i]ncumbent (non-geographic) paging licensees operating under their existing authorizations are entitled to full protection from co-channel interference."⁵ Itron was the winning bidder

¹ In its waiver request, Itron seeks waiver of 47 C.F.R. §§ 22.355, 22.515, 22.531, and 22.561. In the *Public Notice* the Commission issued in connection with Itron's waiver request, we stated that "[i]t appears to us that section 22.561 does not apply to Itron's requested waiver, since that rule section does not apply to 931 MHz band paging operations." *Wireless Telecommunications Bureau Seeks Comment on Itron, Inc. Request for Waivers of Part 22 Rules to Facilitate Provision of Non-Paging Operations Over 931 MHz Licenses, Public Notice*, WT Docket No. 13-195, 28 FCC Rcd 11829, 11829 (2013) (*Itron Public Notice*). We further stated that "it does appear that Itron might require a waiver of section 22.531 in order to conduct its half-duplex operations, and we therefore will treat Itron's filings as seeking a waiver of section 22.531 (instead of section 22.561) to the extent necessary." *Id.* We continue to treat Itron's waiver request as seeking a waiver of section 22.531 rather than section 22.561 where applicable.

² Itron, Inc. Request for Waiver, WT Docket No. 13-195, filed Dec. 17, 2012 (Itron Request). The Itron Request is attached to the Universal Licensing System (ULS) record for each of those licenses. *See* <http://wireless.fcc.gov/uls/index.htm?job=home>. Each license's Call Sign is listed in Attachment 1.

³ 47 C.F.R. §§ 1.925(b)(3), 1.3.

⁴ *See* Auction of Lower & Upper Paging Bands Licenses Scheduled for May 25, 2010, *Public Notice*, 25 FCC Rcd 6156 (2009) (*Auction 87 Announcement PN*).

⁵ *Auction 87 Announcement PN* at 6157 ¶ 6 (citing Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, WT Docket No. 96-18, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Rcd 10030, 10059-60 ¶¶ 42-44 (1999); Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, WT Docket No. 96-18, *Second Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 2732, 2764 ¶¶ 57-58 (1997); 47 C.F.R. § 22.503(i)).

in Auction 87 for 155 Major Economic Areas paging licenses in the 931 MHz band,⁶ and the Bureau granted the licenses on November 3, 2010.⁷ On December 17, 2012, pursuant to sections 1.3 and 1.925 of the Commission's rules, Itron filed the Itron Request so that it may use its paging licenses to support and improve its automatic meter reading (AMR) and advanced metering infrastructure (AMI) systems.⁸ The Itron Request includes a two-page technical statement in support of its claim that its system poses no interference risk to other paging licensees.⁹

In its Request, Itron seeks three sets of waivers.¹⁰ “First, to the extent necessary, Itron requests a waiver of Sections 22.[531] and 22.515 of the rules permitting it to engage in half-duplex transmissions so that there can be communications both to and from Itron's meter modules.”¹¹ Section 22.515 provides that, for all paging services, “[m]obile stations may communicate only with and through base stations. Base stations may communicate only with mobile stations and receivers on land or surface vessels.”¹² Section 22.531 provides that “[t]he following channels [specifically including 931 MHz frequencies] are allocated for assignment to base transmitters that provide paging service . . .”¹³ Itron argues that a waiver of these two rules, if needed, would serve the public interest by enabling utilities to conduct time and frequency synchronization of their systems, improve control of the overall system, conduct on-demand reads, and communicate with hard-to-reach customer premises end points, and otherwise make it possible for Itron to provide smart grid services in support of utilities.¹⁴

“Second, Itron requests a waiver, to the extent necessary, of Section 22.531 of the Commission's rules so it may provide non-paging data services.”¹⁵ As stated above, section 22.531 limits the assignment of channels in the 931 MHz band to base transmitters that provide paging service, as opposed to the type of non-paging data service Itron proposes. Itron states that grant of a waiver of section 22.531 here would be in keeping with the Commission's policies favoring flexible use of spectrum, including the Part 22 paging spectrum, and where the spectrum might otherwise lie fallow.¹⁶

“Finally, Itron seeks a waiver of Section 22.355, to permit fixed and mobile stations operating with an ERP of less than 2 watts to be subject to a frequency tolerance of 5 ppm rather than 1.5 ppm.”¹⁷

⁶ See Auction of Lower & Upper Paging Bands Licenses Closes Winning Bidders Announced for Auction 87, *Public Notice*, 25 FCC Rcd 18164 (2010).

⁷ See Wireless Telecommunications Bureau Grants Lower & Upper Paging Bands Licenses, *Public Notice*, 25 FCC Rcd 15324 (2010).

⁸ Itron Request at 1, 2. Specifically, Itron seeks “to provide service, on a non-common carrier basis, to support fixed and mobile functions, including smart grid functions, such as system monitoring, system control, and smart metering.” *Id.* at 2.

⁹ See Technical Statement of Dan Seely in Support of Itron's Request for Waiver of Section 22.355 of the Commission's Rules to Permit Operation of Low Power Stations at a Frequency Tolerance of 5 PPM (Itron Technical Statement).

¹⁰ See Itron Request at 3.

¹¹ *Id.*

¹² 47 C.F.R. § 22.515.

¹³ 47 C.F.R. § 22.531.

¹⁴ See Itron Request at 5-6.

¹⁵ *Id.* at 3.

¹⁶ See *id.* at 7-8.

¹⁷ *Id.* at 3.

Section 22.355 of the Commission's rules¹⁸ requires that, as relevant to Itron's proposed 931 MHz band operations, the carrier frequency of each transmitter must satisfy a frequency tolerance limit of 1.5 ppm. Itron seeks a waiver of section 22.355 so that its customer premises end points and readers employing frequencies in the 931 MHz band would be subject to a frequency tolerance limit of 5 ppm.¹⁹ Itron asserts that its need for this waiver arises from certain system design constraints and the requirements of its utility customers.²⁰ Itron notes that for a large percentage of time, Itron's customer premises end points and readers will satisfy the 1.5 ppm standard.²¹ Itron contends that certain technical factors would mitigate any potential adverse impact from grant of the requested waiver, including the narrow bandwidth used by the customer premises end points and readers and their low power levels (less than two watts Effective Radiated Power).²²

Despite its stated request for waivers, however, Itron also asserts that waiver of sections 22.515 and 22.531 of the Commission's rules should not be necessary to permit its half-duplex operations.²³ Itron argues that its proposed non-paging data "operations arguably are consistent with these limitations," because, "at any point in time, each transmission path on Itron's system will be inactive or will be used to send messages in only a single direction either [(a)] from a fixed or mobile reader to a fixed customer premises end point or repeater or [(b)] from a fixed customer premises end point or repeater to a fixed or mobile reader."²⁴ Itron also asserts that "[n]either section 22.531 nor the Commission's Table of Frequency Allocations expressly prohibits the assignment of [931 MHz] channels to stations that do not provide paging."²⁵ Itron therefore contends that because data services in the 931 MHz band is not prohibited by rule, a waiver of section 22.531 is not necessary for it to provide non-paging data services.²⁶

On August 8, 2013, the Bureau issued a *Public Notice* seeking comment on the Itron Request.²⁷ Two parties submitted comments in response to the Itron Request, USA Mobility, Inc. (USA Mobility)²⁸ and Space Data Corporation (Space Data).²⁹ USA Mobility opposes the Itron Request, stating that "the proposed waivers would present a potentially serious risk of interference with USA Mobility's paging systems, which are vital to hospitals, emergency responders, and other public safety officials."³⁰ USA Mobility also argues that Itron should obtain two-way paging licenses to conduct its service "rather than

¹⁸ 47 C.F.R. § 22.355.

¹⁹ See Itron Request at 9.

²⁰ See *id.*

²¹ See *id.* at 10.

²² See *id.* The Itron Technical Statement specifically supports Itron's request for waiver of section 22.355.

²³ See *id.* at 5.

²⁴ *Id.* Itron states that its network includes customer premises end points located on utility meters and readers that are used to collect information from the customer premises end points and relay information to them. See *id.* at 3-4.

²⁵ *Id.* at 7.

²⁶ See *id.*

²⁷ *Itron Public Notice.*

²⁸ Comments of USA Mobility, Inc., WT Docket No. 13-195, filed Sept. 9, 2013 (USA Mobility Comments).

²⁹ Comments of Space Data Corporation, WT Docket No. 13-195, filed Sept. 24, 2013. Space Data took no position on the merits of the Itron Request. See *id.* at 1. Rather, it took the "opportunity to discuss the importance of smart grid and other critical infrastructure initiatives, and the availability of narrowband personal communications service ("NPCS") spectrum that can help advance those initiatives." *Id.* That issue is outside the scope of this letter and therefore is not addressed herein.

³⁰ USA Mobility Comments at 1.

seeking a fundamental repurposing of the one-way spectrum it acquired,” and that a rulemaking proceeding would be more appropriate here given that these waiver requests would result in “fundamental changes to the technical rules governing one-way paging frequencies”³¹ Itron filed comments in reply to USA Mobility³² reiterating its belief that “[t]he Commission’s rules do not even require one-way communications on Itron’s frequencies,” and that “[e]ven if there were a one-way requirement, Itron’s half-duplex operations will be one-way, [because a]t any given time, each of Itron’s transmission paths will be inactive or will be used to send messages in only a single direction.”³³ Itron also states that “USA Mobility’s technical arguments do not withstand scrutiny,” and that its system “has less interference potential than a traditional paging system operating with maximum facilities.”³⁴ In addition, Itron argues that the USA Mobility Comments are procedurally flawed because USA Mobility provides no engineering statement in support of its technical arguments, and because “USA Mobility has not satisfied the requirement for an affidavit or declaration from a person with personal knowledge of the facts asserted.”³⁵

II. DISCUSSION

As a threshold matter, we disagree with Itron that it does not need a waiver of section 22.531 of the Commission’s rules.³⁶ Section 22.531 provides that systems operating in the 931MHz band only may transmit through base transmitters, whereas Itron proposes operations by which it would utilize non-base transmitters.³⁷ As Itron’s proposed operations do not fit within the architecture put in place by section 22.531, we find that Itron would, indeed, require a waiver of section 22.531 in order to operate its half-duplex non-paging system.

We now turn to the merits of whether Itron has met the waiver standards of sections 1.925 or 1.3 of the Commission’s rules.³⁸ Pursuant to section 1.925, waiver may be granted if the petitioner establishes that: (1) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and the grant of the waiver would be in the public interest; or (2) in light of unique or unusual factual circumstances, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.³⁹ In addition, the Commission may waive any provision of its rules if good cause is shown.⁴⁰ We find that Itron has not met its burden under either rule.

Taken together, the rules that govern the operation of 931 MHz systems provide protection to co-channel site-based incumbents, co-channel geographic licensees, and adjacent-channel licensees from inference caused by a 931 MHz licensee. This interference-protection paradigm presumes that transmissions will be solely through base transmitters. As we described above, however, Itron’s proposed

³¹ *Id.* at 1-2.

³² Reply of Itron, Inc., WT Docket No. 13-195, filed Sept. 24, 2013 (Itron Reply).

³³ *Id.* at 2-3.

³⁴ *Id.* at 3,11.

³⁵ *Id.* at 2.

³⁶ See Itron Request at 5; Itron Reply at 6-8.

³⁷ Section 22.99 defines a base transmitter as “[a] stationary transmitter that provides radio telecommunications service to mobile and/or fixed receivers, including those associated with mobile stations.”

³⁸ 47 C.F.R. § 1.925; 47 C.F.R. § 1.3

³⁹ 47 C.F.R. § 1.925(b)(3).

⁴⁰ 47 C.F.R. § 1.3.

operations appear to use a different communications architecture than the one contemplated by our rules (*i.e.*, one involving mobiles and other non-base transmitters). Itron has not described how it envisions the interference-protection paradigm our rules have set in place for 931 MHz licenses (which allows only for base station transmissions) would apply in this context. For example, it is unclear how Itron proposes to provide co-channel protection to other licensees from its mobile transmissions. And while the Itron Technical Statement demonstrates protection to adjacent channel licensees, we find that Itron has not sufficiently shown how it would protect co-channel site-based incumbents or co-channel geographic area licensees from harmful interference (as required by section 22.503⁴¹). Itron therefore has not shown that a waiver here would be consistent with the underlying purpose of the rules it seeks to waive, namely interference protection to other licensees, and so has not met the burden of the first prong of section 1.925(b)(3). In addition, Itron's public interest arguments do not overcome its failure to demonstrate how it would provide adequate protection from interference to other, protected paging licensees given its novel architecture. Itron makes no arguments that any unique or unusual factual circumstances exist such that application of the rules would be inequitable, unduly burdensome, or contrary to the public interest, nor has it argued that it has no reasonable alternative; it therefore also fails to meet the second prong of 1.925(b)(3). Finally, in light of its failure to show that it will not cause interference to co-channel licensees, we find that Itron has failed to establish "good cause" for a waiver pursuant to section 1.3. As such, we deny Itron's request for waiver of sections 22.515, 22.531, and 22.355.

Accordingly, IT IS ORDERED that, pursuant to Section 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and sections 0.331, 1.3, and 1.925 of the Commission's rules, 47 C.F.R. §§ 0.331, 1.3, 1.925, the Itron Request is DENIED.

Sincerely,

Roger S. Noel
Chief, Mobility Division
Wireless Telecommunications Bureau
Federal Communications Commission

⁴¹ 47 C.F.R. § 22.503.

Attachment 1
List of Itron 931 MHz Licenses

Call Sign	Market Code	Channel Block
1. WQMX694	MEA001	AL
2. WQMX695	MEA001	AM
3. WQMX696	MEA001	AN
4. WQMX697	MEA002	AP
5. WQMX698	MEA002	AQ
6. WQMX699	MEA002	BK
7. WQMX700	MEA003	AC
8. WQMX701	MEA003	AF
9. WQMX702	MEA003	AG
10. WQMX703	MEA004	AP
11. WQMX704	MEA004	AZ
12. WQMX705	MEA004	BK
13. WQMX706	MEA005	AJ
14. WQMX707	MEA005	AM
15. WQMX708	MEA005	AN
16. WQMX709	MEA005	BK
17. WQMX710	MEA006	AP
18. WQMX711	MEA006	AQ
19. WQMX712	MEA006	BF
20. WQMX713	MEA007	AC
21. WQMX714	MEA007	AG
22. WQMX715	MEA007	AM
23. WQMX716	MEA008	AW
24. WQMX717	MEA008	AY
25. WQMX718	MEA008	AZ
26. WQMX719	MEA009	AA
27. WQMX720	MEA009	AB
28. WQMX721	MEA009	AC
29. WQMX722	MEA010	AA
30. WQMX723	MEA010	AB
31. WQMX724	MEA010	AC
32. WQMX725	MEA011	AG
33. WQMX726	MEA011	AM
34. WQMX727	MEA011	BD
35. WQMX728	MEA012	AC
36. WQMX729	MEA012	AJ
37. WQMX730	MEA012	AK
38. WQMX731	MEA012	AL
39. WQMX732	MEA013	AB
40. WQMX733	MEA013	AC
41. WQMX734	MEA013	AG
42. WQMX735	MEA014	AB

43. WQMX736	MEA014	AC
44. WQMX737	MEA014	AG
45. WQMX738	MEA015	AF
46. WQMX739	MEA015	AG
47. WQMX740	MEA015	AH
48. WQMX741	MEA015	AI
49. WQMX742	MEA016	AB
50. WQMX743	MEA016	AY
51. WQMX744	MEA016	AZ
52. WQMX745	MEA016	BK
53. WQMX746	MEA017	AA
54. WQMX747	MEA017	AB
55. WQMX748	MEA017	AC
56. WQMX749	MEA018	AG
57. WQMX750	MEA018	BI
58. WQMX751	MEA018	BK
59. WQMX752	MEA019	AP
60. WQMX753	MEA019	BB
61. WQMX754	MEA019	BC
62. WQMX755	MEA020	AF
63. WQMX756	MEA020	AG
64. WQMX757	MEA020	BJ
65. WQMX758	MEA020	BK
66. WQMX759	MEA021	AA
67. WQMX760	MEA021	AB
68. WQMX761	MEA021	AO
69. WQMX762	MEA022	AA
70. WQMX763	MEA022	AB
71. WQMX764	MEA022	AC
72. WQMX765	MEA023	AA
73. WQMX766	MEA023	AB
74. WQMX767	MEA023	AC
75. WQMX768	MEA024	BH
76. WQMX769	MEA024	BI
77. WQMX770	MEA024	BJ
78. WQMX771	MEA025	AA
79. WQMX772	MEA025	AB
80. WQMX773	MEA025	AC
81. WQMX774	MEA026	AA
82. WQMX775	MEA026	AB
83. WQMX776	MEA026	AG
84. WQMX777	MEA027	AA
85. WQMX778	MEA027	AG
86. WQMX779	MEA027	AJ
87. WQMX780	MEA027	AK
88. WQMX781	MEA028	AA
89. WQMX782	MEA028	AB

90. WQMX783	MEA028	AC
91. WQMX784	MEA028	AG
92. WQMX785	MEA029	AA
93. WQMX786	MEA029	AB
94. WQMX787	MEA029	AF
95. WQMX788	MEA030	AA
96. WQMX789	MEA030	AB
97. WQMX790	MEA030	AK
98. WQMX791	MEA031	AA
99. WQMX792	MEA031	AE
100. WQMX793	MEA031	AJ
101. WQMX794	MEA031	AK
102. WQMX795	MEA032	AE
103. WQMX796	MEA032	AG
104. WQMX797	MEA032	AW
105. WQMX798	MEA033	AF
106. WQMX799	MEA033	AZ
107. WQMX800	MEA034	AA
108. WQMX801	MEA034	AB
109. WQMX802	MEA034	AF
110. WQMX803	MEA035	BE
111. WQMX804	MEA035	BI
112. WQMX805	MEA035	BK
113. WQMX806	MEA036	AA
114. WQMX807	MEA036	AB
115. WQMX808	MEA036	AC
116. WQMX809	MEA037	BC
117. WQMX810	MEA037	BD
118. WQMX811	MEA037	BE
119. WQMX812	MEA038	AD
120. WQMX813	MEA038	AE
121. WQMX814	MEA038	AW
122. WQMX815	MEA039	AD
123. WQMX816	MEA039	AI
124. WQMX817	MEA040	AL
125. WQMX818	MEA040	AY
126. WQMX819	MEA040	BC
127. WQMX820	MEA040	BF
128. WQMX821	MEA041	AJ
129. WQMX822	MEA041	AK
130. WQMX823	MEA041	AL
131. WQMX824	MEA041	BK
132. WQMX825	MEA042	AJ
133. WQMX826	MEA042	AM
134. WQMX827	MEA042	BE
135. WQMX828	MEA043	AI
136. WQMX829	MEA043	AJ

137. WQMX830	MEA043	AN
138. WQMX831	MEA043	AW
139. WQMX832	MEA044	AD
140. WQMX833	MEA044	AO
141. WQMX834	MEA044	AW
142. WQMX835	MEA045	AV
143. WQMX836	MEA045	AW
144. WQMX837	MEA045	AX
145. WQMX838	MEA046	AT
146. WQMX839	MEA046	AU
147. WQMX840	MEA046	AV
148. WQMX841	MEA047	AA
149. WQMX842	MEA047	AB
150. WQMX843	MEA047	AC
151. WQMX844	MEA048	AF
152. WQMX845	MEA048	AG
153. WQMX846	MEA048	AH
154. WQMX847	MEA050	AA
155. WQMX848	MEA050	AB