

January 22, 2013

Marlene H. Dortch, Secretary  
Federal Communications Commission  
The Portals  
445 Twelfth Street, S.W.  
12th Street Lobby, TW-A325  
Washington, DC 20554

**RE:** Promoting Expanded Opportunities for Radio Experimentation and Market Trials Under Part 5 of the Commission's Rules and Streamlining Other Related Rules, ET Docket 10-236

2006 Biennial Review of Telecommunications Regulations – Part 2 Administered by the Office of Engineering and Technology, ET Docket 06-155

Notice of *Ex Parte* Presentation

Dear Ms. Dortch:

Clearwire Corporation (“Clearwire”), a primary licensee in the 2.5 GHz band, is filing this *ex parte* in response to the January 15, 2013 *ex parte* notice filed by BAE Systems Information and Electronic Systems Integration Inc. (“BAE Systems”)<sup>1</sup> and to reiterate its concerns about relaxation of the Experimental Radio Service (“ERS”) consent and coordination process.<sup>2</sup> As Clearwire has made clear in its previous filings in this docket, it has substantial concerns with certain aspects of the existing ERS licensing process.<sup>3</sup> As it has explained numerous times, and contrary to the statements made by BAE Systems, the ERS licensing process must be more protective of primary licensees,

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<sup>1</sup> See Letter from Jeffrey E. Rummel, Counsel to BAE Systems Information and Electronic Systems Integration Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 10-236, ET Docket 06-155 (filed Jan. 15, 2013) (“BAE Systems’ Letter”).

<sup>2</sup> See Letter from Cathy Massey and Nadja Sodos-Wallace, Clearwire Corporation to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 10-236, ET Docket 06-155 (filed May 17, 2012) (“Clearwire’s May 17 Letter”); Letter from Cathy Massey, Clearwire Corporation to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 10-236, ET Docket 06-155 (filed May 31, 2012); Letter from Cathleen A. Massey and Nadja Sodos-Wallace, Clearwire Corporation to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 10-236, ET Docket 06-155 (filed Jun. 21, 2012) (“Clearwire’s June 21 Letter”); Letter from Cathleen A. Massey and Nadja Sodos-Wallace, Clearwire Corporation to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 10-236, ET Docket 06-155 (filed Jul. 11, 2012) (“Clearwire’s July 11 Letter”); and Letter from Cathleen A. Massey and Nadja Sodos-Wallace, Clearwire Corporation to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 10-236, ET Docket 06-155 (filed Aug. 8, 2012) (“Clearwire’s August 8 Letter”).

<sup>3</sup> *Id.*

not less. That being said, Clearwire is willing to modify its proposal for pre-licensing coordination to include certain of BAE's recommendations for achieving greater certainty in the ERS coordination process.

In its notice, BAE Systems states its opposition to Clearwire's common sense proposals with respect to pre-filing coordination and consent conditions imposed on Experimental Radio Service ("ERS") licenses. In particular, BAE Systems suggests that the OET: 1) further relax the existing coordination and consent requirements; 2) reject Clearwire's recommendation for a pre-filing coordination process; and 3) define more precisely when a primary licensee may object to an ERS coordination request.<sup>4</sup> As Clearwire has explained previously, its primary concern in seeking pre-filing coordination is not to place additional burdens on companies such as Boeing and BAE that adhere to the Commission's ERS post-licensing coordination and consent requirements. Rather, it is with the many other ERS licensees that ignore such requirements. Only a pre-filing coordination requirement can solve this problem. In the interest of balancing the "need for speed" expressed by BAE and Boeing with the Commission's stated goal of protecting primary licensee operations, Clearwire proposes below that BAE's recommendations for defining more precisely when a primary licensee may object to an ERS coordination request be incorporated in large measure into a pre-filing coordination process. BAE and Boeing can then be certain that pre-filing coordination will be no more time-consuming than post-filing coordination. In addition, primary licensees will benefit from the certainty that they will receive timely notice and ability to comment before an ERS licensee initiates operations.

I. To Achieve a Balanced Approach, the Commission should Generally Incorporate BAE's Recommended Limitations on a Primary Licensee's Objections to an ERS Coordination Request into a Pre-filing Coordination Process

BAE Systems' claims that the pre-filing consent and coordination process suggested by Clearwire will introduce substantial delay and substantially harm the ERS process. That is not Clearwire's intent. Clearwire recognizes that the "goal of this proceeding is to accelerate and foster ERS licensing."<sup>5</sup> As Clearwire has previously stated, it has been the recipient of ERS licenses in the past, and it understands the critical importance of the experimental process.<sup>6</sup> Clearwire believes that the pre-filing consent and coordination process that it has suggested will actually accelerate the process and possibly save ERS licensees' time and money:

Providing potentially affected primary licensees with prior notice and the ability to comment also would provide both parties with adequate time to assess the potential for interference. In addition, ERS applicants would have greater assurance of the availability of particular frequencies and/or geographic locations,

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<sup>4</sup> BAE Systems Letter.

<sup>5</sup> BAE Systems Letter at 2.

<sup>6</sup> Clearwire's May 17 Letter at 2.

and both ERS applicants and primary licensees would be spared the time and expense of re-working band use plans at the last minute that could have been harmonized during the application process.”<sup>7</sup>

BAE Systems principally objects to pre-filing coordination because it is concerned that it will introduce delay. BAE goes one step further and requests additional restrictions on primary licensees’ ability to object to a post-licensing coordination request. Clearwire is willing to endorse these restrictions – with a number of qualifications – if they are incorporated into a pre-filing coordination process. As Clearwire has stated repeatedly, its aim is not to slow down legitimate, rule-abiding ERS applicants. Its aim is to stop the many ERS licensees that ignore with impunity the coordination and consent requirements that appear on the face of their licenses. Here are Clearwire’s comments to BAE’s specific recommendations regarding the circumstances under which a primary licensee can object to an ERS coordination request:

1. BAE’s Recommendation: The objection be based on interference concerns to the licensee’s actual current operations (i.e., if the service licensee is not actually operating under its license or has not yet constructed, the objection is not valid).<sup>8</sup>
  - a. Clearwire’s comments: This limitation makes sense so long as it does not in any way limit the primary licensee’s ability to use its spectrum in the future. For example, some commenters have endorsed a five-year term for ERS licenses. If the primary licensee constructs or commences operations during the ERS license term, the ERS licensee must cease any interfering use of the spectrum.
2. BAE’s Recommendation: The objection is made in good faith and is accompanied by a fully articulated technical demonstration as to why interference to the licensee’s operations is predicted to occur (i.e., an unsupported and generalized allegation of interference is not a valid basis for an objection).<sup>9</sup>
  - a. Clearwire’s comments: This limitation makes sense so long as the ERS pre-filing coordination request likewise is required to be accompanied by a fully articulated technical demonstration of the ERS proposed use and why it is predicted to be non-interfering (i.e., an unsupported and generalized description of the ERS proposed use is not a valid basis for a coordination request). In Clearwire’s experience, many ERS requests are vague or lack critical technical details that make it impossible to determine whether the ERS use is potentially

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<sup>7</sup> Clearwire’s May 17 Letter at 5.

<sup>8</sup> BAE Systems Letter at 2-3.

<sup>9</sup> *Id.*

- interfering. In addition, since the ERS use is secondary, it should be incumbent upon the ERS applicant to bear the initial burden of showing that its project is non-interfering.<sup>10</sup>
- b. BAE does not specify what constitutes a “fully articulated technical demonstration” but it should be sufficient for the primary licensee or the ERS applicant to provide an industry-accepted analysis documenting interference probabilities.
3. BAE’s Recommendation: The failure to provide a fully articulated technical demonstration within a specified time frame will be deemed to constitute the licensee’s consent or a waiver of the coordination process.<sup>11</sup>
- a. Clearwire’s comments: Clearwire itself has endorsed a 30-day shot clock for responding to ERS pre-filing coordination requests.<sup>12</sup> Clearwire agrees that a primary licensee’s complete failure to respond within a specified time frame should be deemed as a consent or waiver of the coordination process. If, however, the primary licensee responds within the specified time frame in good faith requesting additional information necessary to evaluate the project or responds with interference concerns, consent or a waiver should not be implied.
- b. Again, BAE does not specify what constitutes a “fully articulated technical demonstration” but it should be sufficient for the primary licensee to provide an industry-accepted analysis documenting interference concerns.
4. BAE’s Recommendation: The Commission should adopt specific rules and procedures to allow for resolution of coordination disputes.<sup>13</sup>
- a. Clearwire’s comments: Clearwire has no objection to the recommendation if it is in a pre-filing context. We note, however, that in Clearwire’s experience it is rare that a dispute regarding a proposed ERS use cannot be resolved without Commission intervention.

Again, Clearwire would like to emphasize that it is not trying to stifle experimentation, and to that end has previously proposed a 30 day “shot clock” and has indicated its support for Boeing’s “safe harbor” approach.<sup>14</sup> In a similar vein, Clearwire believes that BAE’s proposals, as qualified, and if incorporated into a pre-application

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<sup>10</sup> 47 CFR §5.85(c) (“Frequency assignments will be made only on the condition that harmful interference will not be caused to any station operating in accordance with the Table of Frequency Allocation of part 2 of this chapter.”).

<sup>11</sup> BAE Systems Letter at 2-3.

<sup>12</sup> Clearwire’s May 17 Letter at 5.

<sup>13</sup> BAE Systems Letter at 3.

<sup>14</sup> Clearwire’s June 21 Letter.

coordination process would be protective of both the need to shield primary licensees from interference and the ERS applicants' need for a quick resolution of the coordination process.

II. Contrary to BAE Systems' Statements, Clearwire is Merely Requesting Reimbursement of Expenses Imposed on It By ERS Licensees

BAE Systems also complains about requests from primary licensees for reimbursement of costs associated with coordination of an ERS use and indicates its support for the comments made by Boeing.<sup>15</sup> BAE Systems goes so far as to characterize such payments as "payoffs", an allegation that is unaccompanied by any facts. As Clearwire has already described, for each request it receives from an ERS licensee (and for each request that it discovers, through its own research), Clearwire goes through a series of steps to determine if the proposed ERS use will cause interference and if Clearwire can accommodate the ERS use on its licensed and leased spectrum. Consequently, to protect its operations, Clearwire's network team has to carefully analyze the proposed ERS use and develop a spectrum use plan that will permit the ERS licensee to conduct its experiments while ensuring Clearwire's network and customers remain free from interference.<sup>16</sup> This process includes obtaining additional details from ERS licensees as applications often lack the details necessary to determine whether interference will be experienced.<sup>17</sup> To ensure that both parties are clear on the parameters of the plan, Clearwire's legal team memorializes the plan in an agreement that includes a request for reimbursement of Clearwire's costs associated with coordinating the proposed ERS use.<sup>18</sup> Thus, a single request requires the time and resources of Clearwire's legal, regulatory and technical teams.<sup>19</sup>

As Clearwire has stated previously, "Coordination fees are a commonplace occurrence anytime licensees share spectrum resources. For example, the rules require coordination for the Part 101 Operational Fixed Service and the Common Carrier Service; the Part 74 Broadcast Auxiliary Service; and the Part 78 Cable Antenna Relay Service all require frequency coordination prior to grant of a license." And each of the coordination requirements has costs associated with it. While Clearwire fully supports the goals and benefits of the ERS, it does not agree with the ERS community that Clearwire

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<sup>15</sup> Letter from Bruce A. Olcott, Esq., Squire Sanders, ET Docket Nos. 10-236 and 06-155, at 1-2 (July 23, 2012) (July 23 Boeing Letter"), corrected by Letter from Bruce A. Olcott, Esq. dated July 25, 2012.

<sup>16</sup> Clearwire's August 8 Letter at 3.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> As with Boeing, the vehemence with which BAE seeks to avoid cost-based coordination fees is puzzling. BAE is an enormous, global enterprise that employed 83,600 people as of December 31, 2011, according to its web page. In contrast, Clearwire and its subsidiaries have a total of 952 employees. Neither Boeing nor BAE have attempted to explain why Clearwire should be required to subsidize their experimental activities through the dedication of its scarce resources without cost-based reimbursement. It is doubtful that equipment vendors, consultants, lawyers, engineers and others associated with BAE's and Boeing's experimental activities do so on a *pro bono* basis.

should be responsible for the costs associated with coordinating an ERS use.<sup>20</sup> As we stated previously, we would, however, welcome Commission confirmation of what charges are permitted. For example, Clearwire agrees that “payment for approval” would undermine the goals of ERS and in no way endorses the notion that primary licensees should be permitted to profit from coordination of a legitimate ERS request. Clearwire has assumed, however, based on previous OET staff guidance that cost-based charges directly associated with the staff hours and resources devoted to an ERS coordination request are appropriate and would appreciate confirmation of this practice. By continuing to permit cost-based reimbursement, the Commission would strike the appropriate balance between the burdens imposed on primary licensees by the ERS coordination request and the overarching goals of the ERS program to promote innovation and research.

### III. The Commission Should Ensure that Other Important Issues are Resolved

Other issues raised by Clearwire previously, should also be resolved:

- The Commission should require ERS applicants to provide emergency contact information for a person denominated to handle interference complaints.<sup>21</sup> Without this information, actual interference cannot be resolved expeditiously and customers of the primary licensee may be harmed.
- The Commission should follow its existing rules and limit ERS authorizations, including STAs, to applications related to one of the permitted purposes under the ERS licensing rules.<sup>22</sup> Clearwire has previously cited to several examples where the ERS applicant requested access to spectrum for what appeared to be a commercial use with no discernible research or experimental purpose.
- The FCC should require ERS licensees to abide by its discontinuance rules.<sup>23</sup>

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<sup>20</sup> As described previously, Clearwire typically does not employ a third-party coordinator such as Comsearch to handle ERS requests. Clearwire’s own staff conducts the coordination because Clearwire’s spectrum assets are different from market to market and often within a single market. If, however, a third-party coordinator such as Comsearch could expect payment for its coordination efforts on behalf of an ERS application, Clearwire should also be entitled to reimbursement. Clearwire’s August 8 Letter at n.12.

<sup>21</sup> Clearwire’s May 17 Letter at 6.

<sup>22</sup> Clearwire’s May 17 Letter at 6-8.

<sup>23</sup> Clearwire’s May 17 Letter at 8.

IV. Conclusion

As Clearwire has stated previously, its recommendations, in particular that for ERS pre-filing coordination, serve the public interest. Both ERS and primary licensees will benefit from greater certainty regarding the availability of spectrum for ERS while guarding against interference to existing operations.

Respectfully submitted,

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