

**Inter-party Interference Adjudication: Reactions from the Spectrum Community**

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## Executive Summary

As the wireless spectrum becomes increasingly crowded, spectrum users face an increased risk of harmful interference caused by other operators. Unfortunately, current enforcement procedures cannot handle this influx of new complaints. In response to the growing problem of enforcement of spectrum interference, the Samuelson-Glushko Technology Law & Policy Clinic (“Clinic”) and Pierre de Vries proposed creating a private right of action for operators which would allow them to bring their claims directly to the Office of Administrative Law Judges for adjudication (inter-party interference adjudication).<sup>1</sup>

For the past few months, I have been talking with interested parties from industry, government, and public interest groups to gauge the reactions to the proposal and the need for updated enforcement processes.<sup>2</sup> While some of their reactions were covered in the initial petition and reply comment, new ideas arose in these discussions that had not been previously addressed. Therefore, this paper examines these new reactions and explains how inter-party interference adjudication would enhance current enforcement procedures by providing clarity to the rules and ensuring that disputes are resolved in a timely, transparent, and fact-based manner.

This paper outlines four possible steps – addressed to different players – for advancing this recommendation: (1) the Commission should move forward on a notice of inquiry, or proposed rulemaking, to solicit and test ways of putting this proposal into practice; (2) parties such as industry groups or companies, public interest groups, or any other group that wish to improve enforcement could decide to form a coalition; and (3) this coalition, and/or others,

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<sup>1</sup> Samuelson-Glushko Technology Law & Policy Clinic (TLPC) and J. Pierre de Vries, Petition for Rulemaking: Spectrum Interference Dispute Resolution, Docket No. RM-11750 6 (May 8, 2015).

<sup>2</sup> Jeffrey Westling worked with the Samuelson-Glushko Technology Law and Policy Clinic on the Reply Comment for the proposal, and has since been working as a Silicon Flatirons Research Assistant with J. Pierre de Vries.

could prepare a transition document for the new administration recommending enforcement reform actions such as the inter-party interference adjudication proposal. Finally, in support of all of these steps, (4) the Commission should improve disclosure about interference events and disputes it is handling.

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## I. Introduction

Spectrum use is increasingly critical for citizens and business. However, operators rely on their neighbors (in terms of both frequency and location) to operate in compliance with the rules that govern radio use. However, operators do not always comply with the rules. Therefore, it is critical that enforcement processes can adequately prevent violators from causing harmful interference to their neighbors.

Enforcement is a catch-all term that includes monitoring, complaint, adjudication, and remediation.<sup>3</sup> Monitoring—by an injured party or the regulator—involves observing degradation in a service’s performance, and/or identifying signals that exceed permitted bounds. Once the interference has been identified, the party affected can bring a complaint to the regulator (which may lead to further monitoring), or the regulator can notify a party of an apparent violation. Adjudication involves determining who (if anyone) is at fault. In remediation, action is taken to ensure that harmful interference ceases; this can range from a rule change (thereby clarifying the scope of the relevant rights), to a notice of apparent liability (suggesting the sanctioning of a party for violating the rights of another operator), to an operator voluntarily changing system parameters (to avoid the alleged interference and end the basis for the dispute). While enforcement involves all of these processes, calls for reform typically focus on the complaint and adjudication phases.<sup>4</sup>

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<sup>3</sup> Cf. FCC Technological Advisory Council, A Study to Develop the Next Generation Systems Architecture for Radio Spectrum Interference Resolution 6-7 (Mar. 9, 2016), *available at* <https://transition.fcc.gov/oet/tac/tacdocs/reports/2016/A-Study-to-Develop-a-Next-Generation-System-Architecture-V1.0.pdf>.

<sup>4</sup> See, *for example*, Comments of AT&T, RM-11750 (July 13, 2015) (Arguing for enhancements to the complaint and adjudication processes by reforming enforcement bureau processes).

Enforcement has come to the forefront in recent years as a critical area in spectrum policy, exemplified by the volume of conferences and workshops, as well as TAC and CSMAC papers, discussing enforcement.<sup>5</sup> There is growing doubt that current dispute resolution processes can handle the influx of new interference issues that will develop as more spectrum users become increasingly crowded together. While there are no facts in the future, and debate about what needs to be done continues, there is widespread agreement about the need for timely, transparent, and fact-based interference dispute resolution. For example, in responses to the proceeding initiated by the Samuelson-Glushko Technology Law & Policy Clinic (“Clinic”), parties ranging from private companies such as AT&T to independent think tanks such as ITIF agreed that trends in spectrum use are pointing to an increased volume of interference issues.<sup>6</sup> Furthermore, most parties who filed comments in the proceeding also agreed with the need for timely, transparent, and fact-based resolution of these issues.<sup>7</sup>

Over the past seven months, I have been discussing this proposal with interested parties from all sectors. During these discussions, new ideas and reactions, which have not been fully addressed by the petition or the reply, have come up. This paper summarizes these reactions, as well as ideas from the comments filed in the proceeding, and examines alternative proposals suggested during these conversations. Finally, it proposes next steps for enforcement reform.

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<sup>5</sup> See ISART 2016: Spectrum Forensics; Technological Advisory Council, Introduction to Interference Resolution, Enforcement and Radio Noise (2014); see also CSMAC, Enforcement Subcommittee Report (Feb. 18, 2015); see also FCC Technological Advisory Council, A Study to Develop the Next Generation Systems Architecture for Radio Spectrum Interference Resolution (Mar. 9, 2016), available at <https://transition.fcc.gov/oet/tac/tacdocs/reports/2016/A-Study-to-Develop-a-Next-Generation-System-Architecture-V1.0.pdf>.

<sup>6</sup> Comments of AT&T, RM-11750 2 (July 13, 2015); see also Comments of ITIF, RM-11750 2 (July 14, 2015).

<sup>7</sup> See Reply of the Samuelson-Glushko Technology Law & Policy Clinic (TLPC) & J. Pierre de Vries, RM-11750 3-4 (2015) (“Reply”).

Readers familiar with the topic may want to skip directly to Section IV, where I discuss reactions to the proposal. The current process and the inter-party interference adjudication proposal are outlined in sections II and III, respectively.

## **II. Current Enforcement Processes**

The Enforcement Bureau has the authority to investigate and has the potential to decide matters between two parties in the event that one of the parties is operating outside of the rules.<sup>8</sup> Merely identifying the root cause through monitoring and talking with the parties is often enough to resolve the interference issue without more formal processes.

In other scenarios, a party clearly violates the rules and the Enforcement Bureau can take action to end the interference. The remediation usually involves issuing a Notice of Apparent Liability (with the option to include a forfeiture order) or Notice of Violation.<sup>9</sup>

The Enforcement Bureau has generally been selective about the cases it tackles due to limited resources; it can't go after every violation. This dynamic has been exacerbated by recent cutbacks in the Bureau's field operations.<sup>10</sup> As a result, there may be cases in which an operator is facing service degradation and a lack of cooperation from the suspected interferer, but cannot get help from the Commission to resolve the issue.

In cases where the difficulty arises from problems with the rules rather than the behavior of an operator, the Enforcement Bureau may escalate the matter to the Commission to

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<sup>8</sup> 47 C.F.R. § 0.111 (2011).

<sup>9</sup> 47 C.F.R. § 1.89 (1983); *see also* 47 C.F.R. § 1.80(f) (2016).

<sup>10</sup> *See* Reorganization of the Enforcement Bureau's Field Operation, 30 FCC Rcd. 7649, 7650 (July 16, 2015), [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-81A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-81A1.pdf).

resolve by rulemaking.<sup>11</sup> However, Commission action may take significant time that parties experiencing interference do not have, or the action may be tied to “voluntary” concessions.<sup>12</sup>

### **III. Inter-party Interference Adjudication: A Proposal to Improve Enforcement**

The Commission has the authority, yet does not, delegate interference disputes the Office of Administrative Law Judges for adjudication.<sup>13</sup> In such proceedings, the adjudication would occur in much the same way as a formal court proceeding. The injured party files a complaint which includes “a complaint, answer, and joint statement of stipulated facts, disputed facts and key legal issues, along with associated affidavits, exhibits and other attachments.”<sup>14</sup> Like traditional court proceedings, the parties would then go through a discovery process to ensure that the record includes the facts that may be pertinent to the case.<sup>15</sup> Upon conclusion of the trial, the ALJ would decide the legal issues and resolve the interference dispute.<sup>16</sup>

Despite having this option available, the Commission has yet to actually exercise this authority.<sup>17</sup> The inter-party interference adjudication proposal, therefore, would give private parties a right to bring their interference disputes directly to the ALJ to receive timely,

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<sup>11</sup> See generally 47 C.F.R. §§ 1.399-1.430 (2016).

<sup>12</sup> See generally T. Randolph Beard et. al., *Eroding the Rule of Law: Regulation as Cooperative Bargaining at the FCC*, Phoenix Center Policy Paper Number 49 (2015), available at <http://phoenix-center.org/pcpp/PCPP49Final.pdf> (for example, AT&T gave voluntary concessions in a proceeding to be reclassified as a non-dominant carrier); see also J. Pierre de Vries and Philip J. Weiser, *Unlocking Spectrum Value through Improved Allocation, Assignment, and Adjudication of Spectrum Rights*, The Hamilton Project 14 (2014), available at [https://www.brookings.edu/wp-content/uploads/2016/06/THP\\_DeVriesWeiserDiscPaper.pdf](https://www.brookings.edu/wp-content/uploads/2016/06/THP_DeVriesWeiserDiscPaper.pdf) (noting that conclusion to a dispute between Sirius and XM Radio was not the result of an enforcement process, but rather a condition of Sirius’s approval to merger with XM Radio).

<sup>13</sup> See 47 C.F.R. § 0.151.

<sup>14</sup> 47 C.F.R § 1.720; see 47 C.F.R. § 1.311.

<sup>15</sup> Samuelson-Glushko Technology Law & Policy Clinic (TLPC) and J. Pierre de Vries, Petition for Rulemaking: Spectrum Interference Dispute Resolution, Docket No. RM-11750 6 (May 8, 2015) (“Petition”).

<sup>16</sup> *Id.*

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

transparent, and fact-based resolution of the issue. This option would become available only after an initial complaint process within the Enforcement Bureau and an attempt to resolve the issue amongst the parties, requirements that would conserve scarce Commission resources.<sup>18</sup> If the Commission did not act within a given timeframe, a plaintiff would then take their complaint to an ALJ.

The Commission should establish deadlines throughout the process to ensure that a case does not languish, and allocate sufficient resources, including technical expertise, to ensure that the process is effective. While this may sound daunting at a time of limited Commission resources, investment in the ALJ process would ultimately lower costs and provide guidance so that parties can better resolve the issue without ever needing commission resources.<sup>19</sup> Furthermore, any potential costs must be compared against the benefits of preventing cases from lingering at the Commission and providing for transparent, fact-based resolution of spectrum disputes. For a full discussion of the proposal, please see both the Petition for Rulemaking<sup>20</sup> and the Ex Parte Reply.<sup>21</sup>

#### **IV. Salient Points of Discussion**

Over the past few months, I talked with industry and non-profit parties as well as government policy makers to gauge the reaction to the inter-party interference adjudication proposal. While the reactions have been mixed, it is clear that the proposal struck a nerve in the community. These reactions included the effect on parties of different levels of agency

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<sup>18</sup> See Reply at 6.

<sup>19</sup> *Id.* at 12-13.

<sup>20</sup> Petition at 6.

<sup>21</sup> See Reply.

expertise, the effect on the balance between rules and standards, and the inability for the action to proceed.

*A. Different Levels of Agency Experience and Expertise*

Several stakeholders noted that the proposal would affect operators with different levels of access to the Commission in different ways. Under traditional enforcement methods, operators more adept at dealing with the Commission are at a distinct advantage because of their familiarity with the regulators and the process, and would prefer the status quo.

For example, Field Offices may be more likely to handle a complaint by a more experienced company who has a good working relationship with the Commission. Field Offices do not intentionally favor larger firms, but larger companies interact with the office more frequently and may be able to contact them informally. Less experienced operators generally do not have the same level of access.

However, less experienced users may rely on their spectrum as much as the more experienced players. For example, drive through windows use spectrum to take orders from the customer. A small business using this technology would have little experience in the world of telecommunications and would not know who to contact to get potential interference resolved. However, the company relies on this spectrum to operate the business, and its interference issues deserve effective resolution as well.

These problems exist for the more formal Commission processes as well. In rulemaking proceedings, staff is more likely to spend time with parties who have many matters before the Commission, and/or do not have a strong presence in Washington. The Commission does not have the resources to address every issue that comes before it, and less-experienced parties may struggle to get their petitions or complaints to be fully considered.

Inter-party interference adjudication could mitigate this problem by allowing any party to have their dispute addressed. A party whose interference issue is not being attended to by the Enforcement Bureau could simply take their complaint directly to an ALJ who would be required to resolve the dispute as described above.

### *B. Rules vs. Standards*

Many conversations touched on the effect that the proposal would have on the balance between ensuring enforcement flexibility, and clearly defining rules and regulations. Both flexibility and clearly defined rules—that is, both (legal) standards and rules—have advantages and disadvantages.<sup>22</sup>

On one hand, flexible standards enable enforcement personnel to resolve cases using their best judgment. A precisely defined rule may not be applicable in some situations and its blind use may unfairly disadvantage a party acting reasonably. On the other hand, too much flexibility creates uncertainty about what is or is not allowed, discouraging (and perhaps even punishing) innovation and legitimate operation.

Inter-party interference adjudication would move the balance towards clearly defining rules, thereby making it clear to parties what they have to do (and avoid doing) to stay in compliance with the rules. The inter-party interference adjudication proposal empowers an ALJ to decide disputes based on their reading of the rules as they stand. If the Commission disagrees with the interpretation, it could always overrule the ALJ. Furthermore, the ALJ would also have the option of flagging ambiguous rules to the Commission.

The proposal would not be a wholesale restriction on the Commission's flexibility: only cases in which the Enforcement Bureau failed to resolve the issue in a timely manner could go

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<sup>22</sup> See generally, Pierre Schlag, *Rules and Standards*, 33 UCLA L. Rev. 379 (1985).

to an ALJ in the first place. However, ALJ action on orphan cases would not only move along those ignored by the Commission, but may also give parties in other pending and future disputes guidance on how to remediate the situation amongst themselves.

*C. Inability to Move Forward*

Finally, one of the most common reactions that I received after explaining the proposal was the skepticism that the petition for rulemaking would move forward.

For example, this proposal would shift power away from the Commissioners and would delegate authority to the ALJ to resolve disputes according to the Commission's rules. Some are skeptical that the Commission would move ahead with a proposal that would limit its flexibility. However, inter-party interference adjudication would still allow for the Commission to have the final say as any ALJ decision could be overturned by the Commission. Therefore, the Commission would still be able to craft a regulatory structure as it sees fit.

There is also concern that Congress poses an obstacle because initial implementation may require additional resources being dedicated to the Commission. Congress has recently taken the opposite approach, limiting much of the Commission's funding.<sup>23</sup> However, this proposal would actually save money in the long run as more clarity and certainty reduces the number of spectrum disputes, thus actually reducing the overall costs of the Commission. Furthermore, many of the costs associated with this proposal could actually be alleviated by shifting costs to the parties, as described in the reply.<sup>24</sup>

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<sup>23</sup> Jon Brodtkin, *New Tactic in War on Net Neutrality: Strip FCC of Enforcement Funding*, arstechnica (Mar. 24, 2015), available at <http://arstechnica.com/business/2015/03/new-tactic-in-war-on-net-neutrality-strip-fcc-of-enforcement-funding/>.

<sup>24</sup> Reply at 16 (This includes court fees and revenue generated from violations of procedural rules against meritless claims).

Finally, and perhaps most challenging, this is an election year. The current administration will strive to accomplish its top priorities before its time runs out. Unfortunately, enforcement in general, not to mention inter-party interference adjudication, is not a high priority. However, even small steps are important. Since reforming enforcement for the twenty-first century will not be completed in a day, it is vital that it is on the agenda of the next Commission.

## **V. Alternative Proposals**

While not all the people I talked with and commenters on the petition agreed with our proposal in its entirety, there was strong agreement with the basic premise that enforcement procedures needed to be updated to handle the growing influx of spectrum disputes. As a result, the proposal and subsequent FCC proceeding inspired a number of alternative reforms both addressed in comments and during my discussions.

Some suggestions aimed at improving already existing procedures. For example, AT&T called for enhancements to the current Field Office complaint structure.<sup>25</sup> It focused on clarifying the severity of the interference, and how to prioritize and handle these different severity categories.<sup>26</sup> The Clinic agreed with and applauded AT&T's suggestions.<sup>27</sup> However, given the recent cutbacks to Field Offices, it is unlikely that this proposal could adequately handle the influx of new interference issues. Furthermore, enhancements to the complaint process do not provide a way to remove ambiguity about conflicting rules and therefore do little to facilitate dispute resolution looking forward.

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<sup>25</sup> See generally Comments of AT&T, RM-11750 (July 13, 2015).

<sup>26</sup> *Id.* at 4-5.

<sup>27</sup> Reply at 17-19.

Some conversations included discussions about new groups or entities within the Commission but outside of the Enforcement Bureau. For example, it may make sense to have an entirely separate office that focuses solely on spectrum disputes to handle all of the different aspects of enforcement. However, the ALJ path already has existing structure and procedures, so less resources would need to be utilized to facilitate the implementation of the proposal.

Still others suggest going outside of the Commission altogether. For example, the Commission may require alternative dispute resolution in which parties go through a private arbitration process before bringing the complaint to the Commission. Doing so would require the parties to attempt to resolve the dispute among themselves without the need for utilizing Commission resources. If the parties cannot solve the issue, then the arbitration would at least provide a record to minimize the time and resources that the Commission would need to spend on the issue.

## **VI. Next Steps**

While inter-party interference adjudication is one solution to the rising need for more efficient enforcement, it is more important to continue this conversation to devise a suite of responses to the next generation of enforcement challenges.

**Notice of Proposed Rulemaking.** As called for in the petition, the Commission should issue a notice of proposed rulemaking, or at a minimum a notice of inquiry, which addresses ways to improve interference dispute resolution and enforcement. By doing so, the Commission could respond to the basic premise that all parties, in both my discussions and the proceeding, can agree on: the need for timely, transparent, and fact-based resolution of spectrum disputes.

**Creating a Coalition.** Even if the Commission does not act, the spectrum community can keep this conversation moving forward. The Clinic is not alone in the call for timely,

transparent, and fact-based resolution of interference disputes. It would serve the public interest (and their private interests) for parties that wish to improve enforcement processes to form a coalition that can take the lead on advocating for updating the Commission's spectrum interference resolution process.

**Drafting Document Recommending Action.** Another important step in this process may be preparing a document recommending action items for the incoming administration. By developing a document recommending action, interested parties can show to the new administration the vital role that enforcement plays in spectrum management and the need for enforcement reform. A document outlining key issues, areas of consensus, and next steps—perhaps prepared by the coalition suggested above—would be well-received.

**Improving Dispute Transparency.** Finally, the Commission needs to improve disclosure about the volume and nature of interference disputes that it is presented with. The paucity of publicly available data on interference problems hinders diagnosing where the problems lie, and impedes the development of solutions. Both commenters and people I talked with expressed concern about the growing volume and complexity of interference disputes, but it is impossible to cite Commission data to back up this claim. By increasing the amount and quality of information accessible to the public, the Commission could allow for better understanding of the issue, strengthen its case for more resources to address it, and foster more productive spectrum use.<sup>28</sup>

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<sup>28</sup> See FCC Technological Advisory Council, Introduction to Interference Resolution, Enforcement, and Radio Noise 21 (June 10, 2014), *available at* <http://transition.fcc.gov/bureaus/oet/tac/tacdocs/meeting61014/InterferenceResolution-Enforcement-Radio-Noise-White-Paper.pdf> (calling for increasing public information about interference disputes).