

December 9th, 2015

**VIA ELECTRONIC MAIL**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: Notice of Ex Parte Communication & Presentation of TeleCommunication System, Inc.:  
Discussion Regarding GN Docket No. 13-5, GN Docket No. 11-117, WC Docket No. 05-196,  
PS Docket No. 11-153 and PS Docket No. 10-255.

Dear Ms. Dortch:

On December 7, 2015, Timothy Lorello, Senior Vice President of TeleCommunication Systems, Inc. (“TCS”), and Shannon Scott-Paul of O’Brien, Gentry & Scott, LLC, met in person with David Furth, Deputy Chief, and Eric Schmidt, Attorney Advisor, both of the Public Safety and Homeland Security Bureau (“PSHSB”), as well as Tim May (via phone), all being with the Federal Communications Commission’s (“FCC” or “Commission”) PSHSB.

TCS representatives discussed matters currently before the Commission in the above-referenced petition regarding the deleterious impact of Non-Practicing Entities (“NPE”), often referred to as “patent trolls”, on the 911 ecosystem. Specifically, wireless carriers over the years have been targeted by NPEs which has resulted in the extraction of millions of dollars of potential investment into the 911 systems and services by small and medium-sized businesses who indemnify the wireless carriers.

TCS representatives outlined four key elements for the discussion and provided the attached materials as a more complete explanation of the specific points made in that discussion:

- A potential harm/impact of \$8M to \$16M per patent infringement allegation;
- The establishment of precedence and FCC authority surrounding patent matters;
- A possible action that the FCC could take which would mitigate the harmful impacts; and
- A possible legislative approach which would nonetheless require FCC support.

Pursuant to Section 1.1206 of the Commission's rules, 47 C.F.R. § 1.1206, this letter and a copy of materials presented during this meeting are being electronically filed via ECFS with your office, and a copy of this submission is being provided to the meeting attendees. Please direct any questions to the undersigned.

Marlene H. Dortch  
December 9, 2015  
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Sincerely,

**STINSON LEONARD STREET LLP**

/s/H Russell Frisby, Jr.

H. Russell Frisby, Jr.

*Counsel to TeleCommunication Systems, Inc.*

Enclosure

cc: David Furth  
Tim May  
Eric Schmidt

## **Executive Summary**

## Protecting 9-1-1 Services from Abusive Patent Litigation Practices

### **Problem:**

Abusive patent litigation practices are siphoning off millions of dollars from the 911 ecosystem. Non-Practicing Entities are suing wireless and VoIP operators, asserting that the mere provision of 911 service, a service provided by law, is a justification for establishing claims of infringement. Litigation and settlements cost millions of dollars per patent enforced. When these costs flow down to the 911 technology vendors, most of whom are small- and medium-sized businesses, they create an amplified burden because these vendors often have multiple 911 clients.

This exposure will only increase with the introduction of new location technologies to support indoor location improvements and will be further magnified with the introduction of IP-based Next Generation 911 solutions because of increased number of patents in these technology areas.

At a time when the FCC and the public safety ecosystem requires innovation to meet public expectations and new FCC standards, these abusive patent litigation practices will discourage it. The millions of dollars of impact that these abusive practices generate will, at best, reduce the amount of research and development existing 911 vendors can invest and will, at worst, cause existing vendors to exit the market and dissuade new vendors from engaging and entering the marketplace.

### **Suggested Solution**

911 service is provided by wireless and VoIP operators under tight Federal guidelines provided by FCC-mandated 911 service descriptions found in Title 47 in the Code of Federal Regulations. Chapter I of these regulations outline the role and authority of the FCC and specify the responsibilities of the wireless and VoIP operators.

Because 911 service is mandated by the Federal Government to meet a national public safety and security need, and because wireless and VoIP operators could lose their licenses to provide communication services if their 911 mandates are not met, these operators are exposed to patent litigation where infringement damages models could be tied to the operator's entire revenue stream. Thus, the Federal Government's 911 mandates create disproportional exposure and risk for these operators with regard to patent litigation.

The U.S. Government has recognized this situation in other areas and has created US Statutory Code to protect federal vendors from patent litigation. 28 U.S.C. § 1498 specifies that patent litigation against entities providing a service used by or for the federal government with the government's authorization and consent should be redirected to the Federal Circuit Court of Claims. As the beneficiary of the services, this allows the U.S. Government to become the defendant, thereby creating certain and appropriate limitations to the remedies of the plaintiffs, most importantly limiting the ability to request an injunction of service (that could disrupt a service of national importance) and limiting the ability to treat an infringement as willful. These defenses

make sense in the context of a Federal contract since the vendor/contractor is unlikely to cease service since such service is **provided for the public good**. This statutory code is predicated on the foundation that the service is "by or for the United States Government, with the United States' authorization and consent."

The lack of a contractual document between the FCC and the carriers they mandate has created a prosecutorial gap that should be closed to protect the 911 ecosystem and thereby the federal government's and public's access to increasingly improved and demanded 911 capabilities. TCS is working with other industry participants to clarify that 911 services are "by or for the United State Government", understanding that such an identification would be admissible in court and would allow defendants to invoke 28 U.S.C. § 1498 and its included protections. This can be achieved via FCC authority and declaration or through a more challenging multi-faceted legislative process that would still need FCC support.

**Tab 1**

## Establishing the Harm of Abusive 911 Patent Litigation Practices

### **Problem:**

Abusive patent litigation practices are siphoning off millions of dollars from the 911 ecosystem. Non-Practicing Entities (NPEs) are suing wireless operators, using the fact that they must provide 911 service by law as a justification for establishing claims of infringement. Litigation and settlements cost millions of dollars per patent enforced. When these costs flow down to the 911 technology vendors, most of whom are small- and medium-sized businesses, they create an amplified burden because these vendors often have multiple 911 clients.

This exposure will only increase with the introduction of new location technologies to support indoor location improvements and will be further magnified with the introduction of IP-based Next Generation 911 solutions because of increased number of patents in these technology areas.

At a time when the FCC and the public safety ecosystem requires innovation to meet public expectations and new FCC's standards, these abusive patent litigation practices will discourage it. The millions of dollars of impact that these abusive practices generate will, at best, reduce the amount of research and development existing 911 vendors can invest and will, at worst, cause existing vendors to exit the market and dissuade new vendors from engaging and entering the marketplace.

### **Scope of the Harm**

During testimony on Capitol Hill regarding the most recently proposed patent legislation, the average cost of a single patent court case was described as being in the \$3M to \$8M range, depending on scope of the patents and whether the case proceeds through appeals. The cost of litigation is typically tied to the potential damages risk. A 2015 American Intellectual Property Law Association (AIPLA) report places the cost through discovery as high as \$3.7M per case and as high as \$6.3M per case through trial.<sup>1</sup> TCS can affirm these costs based upon a recent lawsuit in which TCS served as defendant to a 911 patent assertion. According to the AIPLA report, these costs are \$2.6M and \$4.5M respectively when NPEs are involved.

These litigation costs are seen when the potential damages in the case are above \$25M. The 911 patent cases meet these criteria.

Two methods can be used to determine potential damages. The first is based upon the wireless revenues of the carriers because these services are mandated by the Federal Government. The second is determined by considering the 911 service fees that are collected by wireless carriers and then passed on to the States to fund 911 services, using this as a measure of the value of the 911 service.

The table below describes the 2014 annual revenue of the four largest wireless carriers as of Q2 2015, as well as the estimated annual 911 fees, based upon the number of

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<sup>1</sup> "2015 AIPLA Report on the Economic Survey - Summary", 2015, AIPLA

subscribers and NENA's estimate of the per-subscriber 911 fee average of 0.72/month.

Table 1- Wireless Revenue, Subscribers and 911 Fees

Carrier	2014 Annual Revenue	Subscribers <sup>2</sup>	Est. Annual 911 Fees
Verizon Wireless	\$87.6B <sup>3</sup>	135.4M	\$1,170M
AT&T Mobility	\$79.6B <sup>4</sup>	120.6M	\$1,070M
T-Mobile	\$29.6B <sup>5</sup>	58.9M	\$ 509M
Sprint	\$34.5B <sup>6</sup>	57.2M	\$ 494M

Table 2 outlines the potential damages per patent case using these two methods. When determining damages based upon sales/revenues of a company, a general value of 1% to 4% of sales per year for the remaining life of the patent is common.<sup>7</sup> Assuming 10 remaining years on a patent (reasonable given the 17- to 20-year patent lifetime grant) and the low end of the range (1%), this results in absurdly large amounts (\$3.0B to \$8.7B). Even .1% royalty rates would exceed the \$25M damages limit.

Using the 911 fees as a proxy for the value of the service in question, and using the 1% lower end of the reasonable royalty range, also generates potential damages well in excess of the \$25M damages limit.

Table 2- Calculation of Reasonable Royalty Fees

Carrier	Royalty on Revenues (.01%/year; 10 years)	Royalty on 911 Fees (1%/year; 10 years)
Verizon Wireless	\$87.6B x .1% x 10 = \$876M	\$1.17B x 1% x 10 = \$117M
AT&T Mobility	\$79.6B x .1% x 10 = \$796M	\$1.07B x 1% x 10 = \$107M
T-Mobile	\$29.6B x .1% x 10 = \$296M	\$509M x 1% x 10 = \$ 51M
Sprint	\$34.5B x .1% x 10 = \$345M	\$494M x 1% x 10 = \$ 49M

Herein lies the harm that 911 patent assertions place on the 911 ecosystem. Each of the top four carriers, facing a potential court cost of \$6.3M and tens of millions of

<sup>2</sup> "U.S. Wireless Carriers: 2014 in Review"; Forbes, Dec26, 2014; <https://secure.marketwatch.com/investing/stock/vz/financials>

<sup>3</sup> Annual wireless revenue from Verizon 2014 Annual Report, p. 2

<sup>4</sup> Annualized from 4Q 2014 wireless revenue of \$19.9B; <http://www.eweek.com/mobile/att-posts-3.9b-net-loss-while-revenue-rises-to-34.4b-in-Q4.html>

<sup>5</sup> Annual wireless revenue from T-Mobile 2014 Annual Report, p.22

<sup>6</sup> Annual wireless revenue from Sprint income statement; Apr, 2014 – Mar, 2015; <http://amigobulls.com/stocks/S/income-statement/annual>

<sup>7</sup> See [http://www.inventionstatistics.com/Licensing\\_Royalty\\_Rates.html](http://www.inventionstatistics.com/Licensing_Royalty_Rates.html) in which numerous methods for determining royalty rates are discussed

potential damages, would clearly look to settle, regardless of the validity of the claim. A settlement of \$1M to \$3M would be a very tempting value. Adding pre-discovery court costs of approximately \$1M results in \$2M to \$4M of costs per carrier, leading to approximately **\$8M to \$16M of costs to the ecosystem per patent.**

Some may see little concern that wireless carriers should have to bear this burden. However, wireless carriers work with a number of small- and medium-sized businesses to provide the key technologies that actually support 911 service. These companies contractually provide indemnification for patent litigation. Thus, these patent costs can flow down to much smaller companies, far less able to sustain these kinds of costs, per patent. Patent protection for 911 will not be about protecting wireless carriers, even though it could be argued that such protection is deserved given that the 911 service is provided for the sole use of the Federal Government to assist public safety and security. Rather, this is a protection for the 911 ecosystem as a whole, given that the smaller companies that provide these capabilities will not be able to absorb the patent litigation costs, let alone invest in the needed technologies of the future if these inflated 911 patent litigation costs continue to mount. Because of this lopsided attribution of value to the patents, the resulting costs of the litigation process, in and of itself, is a deleterious impact on these smaller companies.

### **Number of Patent Cases Is a Growing Concern**

Table 3 documents past patent litigation based upon or involving 911 patent infringement claims. Four plaintiffs generated 11 court cases involving 33 defendants. Based upon earlier analysis, this would represent between \$32M and \$64M in costs to the wireless 911 ecosystem from the top four carriers alone.

*Table 3- 911 Patent Cases*

<b>Date Filed</b>	<b>Plaintiff(s)</b>	<b>Case #</b>	<b>Defendants</b>
02/06/2007	800 Adept	5:07-CV-00023	AT&T Mobility
			Verizon
			Sprint Nextel
			T-Mobile
03/31/2008	Emsat	4:08CV-822	AT&T Mobility/Cingular
		4:08-CV-821	Alltel
		4:08-CV-816	Verizon
		4:08-CV-818	Sprint Nextel
			Boost Mobile
			Nextel
		4:08-CV-817	T-Mobile
10/07/2008		2:08-CV-381	MetroPCS
			Centennial
			Leap
			Cricket
01/26/2009		3:09-CV-00007	US Cellular

Date Filed	Plaintiff(s)	Case #	Defendants
04/01/2009		2:09-CV-00091	Virgin Mobile
			Tracfone Wireless Inc.
			kajeet, Inc.
03/12/2009	Tendler Cellular of TX	6:09-CV-115	AT&T Mobility
			Verizon Wireless
			Sprint Nextel
			US Cellular
			T-Mobile
02/25/2011	TracBeam LLC	6:11-CV-00096	AT&T Mobility LLC
			MetroPCS
			Sprint Nextel
			Nextel of California
			Nextel Communications of the Mid-Atlantic
			Nextel of New York
			Nextel of Texas
			Nextel West Corp
			Cellico Partnership d/b/a Verizon Wireless

Each of these cases involves Non-Practicing Entities (NPEs). NPE lawsuits are particularly challenging because the NPE can be created to litigate on a particular patent or patent family. While settlements between *practicing* entities are typically settled by licensing entire patent portfolios to avoid future lawsuits, such outcomes are not possible with a *Non-Practicing* Entity. The same NPE later could litigate additional patents against the same plaintiffs because the patents are not associated with any products that would create a linkage to future patents. This creates an unending business model for the NPE that can purchase new patents tied to similar technologies and repeat their attack on an industry they learn to exploit – such as the public safety/911 service industry.

Initiating patent litigation against 911 services is all-to-easy. For example, in one of the cases listed above, Tracbeam v T-Mobile US, the NPE plaintiff was able to successfully present its case into District Court by simply alleging that “*Defendants have directly infringed the ‘153 patent, and will continue to do so unless enjoined, by making, using, providing, selling, and offering for sale products and services that infringed the claims of the ‘153 patent, including Defendants’ (a) e911 location platforms and services....*”<sup>8</sup> The complaint provides no claim charts outlining exactly how the defendant is infringing the patent. And because this complaint was filed in District Court, rather than in the Court of Claims which the proposed remedy demands, the plaintiff can also ask for an injunction which, if granted, would suspend wireless 911 service. Though the District Court is unlikely to grant such an injunction, the fact that such a request is possible

<sup>8</sup> *Tracbeam v T-Mobile US*; paragraph 13

indicates that this type of case is being litigated in the wrong jurisdiction – the Federal Court of Claims is more appropriate since 911 service should never be allowed to be interrupted because of a patent dispute.

Unfortunately, this business model and the patents associated with the 911 service industry are likely to grow. At the same time in which the FCC sees the importance of improved location technology to support 911 calls from indoors, data from the US Patent and Trademark Office (USPTO) indicates that the number of location-based patents is growing. The USPTO classifies all patents issued. The number of patents classified as tied to location (category/class #701) grew by almost 14% in the last year.<sup>9</sup> And the total number of patents including the term “GPS”<sup>10</sup>, “GPS” and “location”<sup>11</sup>, or “location based services”<sup>12</sup> in their abstract grew over 11% in the last year to almost 8800 patents.

Even more important, the 911 ecosystem is moving to internet-based technologies associated with Next Generation 911 (NG911) services. This will expose the 911 ecosystem to internet-based patents, of which there are well over 20,000.

Without added protection for the 911 industry, these trends could drain more than \$100M from the ecosystem with no value added to the system. This will provide huge disincentives to investments, discourage new entrants, and possibly drive existing companies out of the ecosystem.

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<sup>9</sup> [http://www.uspto.gov/web/offices/ac/ido/oeip/taf/stctec/usastcl\\_gd.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/stctec/usastcl_gd.htm)

<sup>10</sup> <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=0&f=S&l=50&TERM1=GPS&FIELD1=ABTX&col=AND&TERM2=&FIELD2=&d=PTXT>

<sup>11</sup> <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=0&f=S&l=50&TERM1=location&FIELD1=ABTX&col=AND&TERM2=gps&FIELD2=ABTX&d=PTXT>

<sup>12</sup> <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=0&f=S&l=50&TERM1=%22location+based+services%22&FIELD1=ABTX&col=OR&TERM2=&FIELD2=&d=PTXT>

**Tab 2**

## Precedence for Protecting 911 Services from Abusive Patent Practices

### **The Challenge of Protecting Regulated Entities:**

One of the most-often-heard concerns with regards to clarifying that 28 USC §1498 applies to patent litigation against mandated 911 entities is that it would create a precedent for protecting all regulated entities. However, the U.S. Government recently intervened in a patent litigation case that bears a striking resemblance to the current situation with mandated 911 carriers. As with wireless carriers, the defendant was performing a service under regulatory guidelines without a direct Federal contract. As with the 911 service, the service provided by the defendant was for the public good. And as with 911, disrupting the service provided by the defendant would cause public harm and thus the defendant would need to willfully infringe the patent. The service was for border security, namely the screening of passengers traveling on an airline in order to insure that such passengers were abiding by Federal identification regulations and that such passengers also had no transport restrictions which were managed by other Federal entities (such as “no fly” restrictions and “terrorist watch lists”). The defendant was Japan Air Lines (JAL), a small commercial airline that was experiencing financial difficulties, making it an easier target for NPEs since their resources for litigation defense were likely strained under the circumstances. A positive litigation outcome for the NPE would establish a precedent and a long line of litigation of other airlines could follow. JAL, however, fought back.

In *Iris v Japan Air Lines*, IRIS Corporation alleged that JAL “infringed the '506 patent under 35 U.S.C. § 271(g) by “using . . . electronic passports in the processing and/or boarding of passengers . . . at . . . JAL services passenger check-in facilities throughout the United States.”<sup>1</sup> JAL was using a scanner to scan passports, thereby electronically collecting data that rapidly could be compared with the Federal travel restriction rules. Just as there are multiple location technologies that would allow wireless carriers to meet the FCC’s 50m location mandate for 911 services, there are multiple ways in which data can be encoded into and retrieved from a passport to rapidly collect and electronically check the information. JAL had multiple options to meet its federal passport scanning requirement, and chose a process which IRIS then alleged violated its patent on information encoding and retrieval and, because the case was put into District Court, asked for willful (treble) damages<sup>2</sup>.

JAL filed for a motion of dismissal, arguing that “IRIS’s exclusive remedy is an action against the United States under 28 U.S.C. § 1498(a).”<sup>3</sup> The District court granted the motion and the Federal Circuit Court upheld the opinion. More important, the U.S. Department of Justice filed an Amicus Curiae brief in support of JAL<sup>4</sup>, affirming the 28 USC §1498 defense and providing a rather extensive explanation and history of the 28 USC §1498 statute justifying their support that 28 USC §1498 applies to the JAL case.

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<sup>1</sup> Federal Circuit Court opinion on *IRIS v Japan Air Lines*, 06-CV-6336, 10/21/2014, p. 3

<sup>2</sup> *IRIS v Japan Air Lines*; Complaint demanding jury trial in the US District Court docket of the Eastern District of New York; Case 1:06-cv-06336-CBA-ALC; 11/28/2006; p. 5

<sup>3</sup> Federal Circuit Court opinion on *IRIS v Japan Air Lines*, 06-CV-6336, 10/21/2014, p. 3

<sup>4</sup> Amicus Curiae for Federal Circuit Court of Appeals, *IRIS v Japan Air Lines*, Case 2010-1051; filed 02/18/2014

### **Is 911 Service Worthy of Protection?**

This case confirms that patent infringement allegations against commercial companies which are compelled to provide a public good under Federal Regulatory action can request that such patent allegations in a Federal District Court be redirected to the Federal Court of Claims.

As discussed earlier, the 911 Service ecosystem needs protection from abusive patent litigation that siphons away much-needed revenue for research into and development of solutions for challenging public safety issues. Without protection, important innovation could be stifled and companies will either be discouraged from entering the 911 market or encouraged to leave this ecosystem for more lucrative applications of their systems that are not targeted because of the mandated nature of the service. The FCC could follow the precedent set by the Department of Justice and publicly acknowledge the importance of the 911 community. By establishing that 911 service, as mandated by the Federal Government, makes such service "by or for the United States Government, with the Government's authorization and consent", the FCC would be protecting all mandated 911 carriers, and ultimately their vendors, from this unnecessary drain on resources.

Given the frivolous and uninformed nature of the cases<sup>5</sup> that have been brought against carriers to date, it can be concluded with reasoned analysis that the Federal

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<sup>5</sup> The requirement for establishing allegations of infringement for patent litigation is surprisingly light. Simply making statements of assertion, without justification or claims chart construction, allows a patent infringement assertion to have its day in court and begins a lengthy and expensive process of defense for the plaintiff. Here are examples from the aforementioned cases:

- 1) 800 Adept v. AT&T Mobility, et. al, establishes its alleged infringement with the simple statement: "Defendants have each infringed and are infringing the [RE 36,111] '111 patent by making, using importing, offering for sale and/or selling in the United States products and/or services, including E911 services, that embody the inventions claimed in the '111 patent...." There is no analysis of claims – just an assertion that E911 services equates to infringement.
- 2) EMSAT v. AT&T Mobility establishes its alleged infringement with an analysis of location-based routing techniques tied to its patents for use in roaming and then asserts that "[u]pon information and belief, some five years after the filing of the first patent application resulting in the Dennison patents [5,946,611; 6,324,404; 6,847,822; 7,289,763], in 1996 the Federal Communications Commission ("FCC") established the Enhanced 911 ("E911") program. Under "Phase 2" of the E911 program, all cellular telephone service providers in the United States must be capable of providing the location of cellular telephones to PSAP's with a specified accuracy for a specified percentage of wireless calls. The methods and systems involved in deploying a mobile E911 system as described above are substantially similar to those required to deploy so-called "commercial" location-based services to cell phone subscribers." These statements are asserted without any analysis or justification of the premise or the conclusions, and a quick review of the patent claims and associated background of the patents by anyone schooled in the art of how E911 works would be able to demonstrate how these claims do not read on E911 services.
- 3) Tendler Cellular of Texas v. AT&T Mobility, et. al., establishes its alleged infringements with the simple statement: "Upon information and belief, Defendants manufacture, make, have made, market, sell and/or use products and/or systems that infringe one or more claims in the [7,447,508] '508 patent; and/or induce and/or contribute to the infringement of one or more of the claims in the '508 patent by others. More specifically, each Defendant's infringement is based, at least in part, on their providing of location based services, including E911 services, to their cellular service subscribers."

Government will not be exposed to serious litigation costs should it provide patent infringement defense for the 911 ecosystem. Whereas NPE's currently anticipate that Carriers will be persuaded to settle a case regardless of the accuracy or validity of the claims, given the high costs of litigation, the Federal Government does not have the same impetus to settle. This establishes an expectation that NPE's will be dissuaded from bringing the same frivolous suit against an entity they know they cannot coerce into settling.

**Tab 3**

## The FCC Can Protect 911 Service Against Abusive Patent Practices

### **The FCC Has Both the Imperative and the Authority to Protect 911 Service**

The lack of a Commission policy as to patent interference management has become a significant roadblock to the provision of E911 – a roadblock that will only increase as Next Generation 911 ("NG911") services are implemented and widely deployed.

As long ago as 1961, in the *Revised Patent Procedures of the Federal Communications Commission*<sup>1</sup>, the FCC recognized the danger that the prejudicial use of patents could pose to the provision of new communications services and expressed the expectation that "[w]henver it appears that the patent structure is or may be such as to indicate obstruction of the service to be provided under the technical standards promulgated by the Commission, this fact will be brought to the Commission's attention for early consideration and appropriate action."

Twice TCS has brought this very serious patent-related problem to the Commission's attention: the first; via its petition on the matter<sup>2</sup>; and the second, via an ex parte filing<sup>3</sup> in the Transition Technology docket. TCS urges prompt action because Commission-mandated E911 regulations have had the unintended consequence of engendering predatory patent litigation. As a result, the public may suffer disruption of current E911 services and faces the real potential for delay or loss of improved location technology or NG911 services due to the research-and-development drain from repeated infringement lawsuits. Further, there is reason for concern that improved technologies, particularly as the use of IP-based technologies expand, will be targeted due to the mere provision of 911 services. These lawsuits are filed primarily by Non-Practicing Entities (NPEs) that seek to enforce their claims by asserting that deployment of the capabilities (including technologies, systems, and methodologies) necessary to provide E911 services (and very soon NG911 services) in compliance with FCC orders, regulations, or standards is the proximate cause of alleged infringement. Taking advantage of the mandatory nature of the Commission's E911 regulations, NPEs have forced wireless carriers and E911 services providers (such as TCS) into the dilemma of either facing the unacceptable consequences of violating or being a party to violating FCC licensing standards or being adjudicated as a patent infringer.

Until now, the Commission has not addressed the question of patent rights in the context of its E911 regulations and standards. However, it has ample authority to do so. Under Title I of the communications Act, as well as the provisions of the NET 911 Act and the 911 Act, the Commission, acting in furtherance of its public safety policies, has authority to provide guidance to make clear the link to 28 U.S.C. § 1498 because the

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<sup>1</sup> *Public Notice- Revised Patent Procedures for the Federal Communications Commission* (December 1961) 3 FCC 2nd pp 26-27

<sup>2</sup> "Petition of TeleCommunication Systems Inc. for Declaratory Ruling and/or Rulemaking", GN Docket 11-117, WC Docket 05-196, PS Docket 11-153, and PS Docket 10-255; July 24, 2012

<sup>3</sup> *Technology Transitions et.al.*, GN Docket 13-5, et. al., 29 FCC Red 1433 (2114) (Technology Transitions Order)

provision of specific 911 capabilities are mandated public safety regulations. The Commission can modify its rules and policies governing E911 to account for the mandatory nature of 47 C.F.R. §§ 9.5, 20.18 and the fact that compliance with these rules is in furtherance and fulfillment of a stated Government policy, and therefore is by or for the government<sup>4</sup>, thus triggering 28 U.S.C. § 1498<sup>5</sup>.

In order to provide the necessary protections for 911 services from flagrant abuses of the patent system, the Commission need only provide an affirming statement that 911 services are "by or for the U.S. Government and Originating Service Providers performing 911 services do so with the authorization and consent of the U.S. Government." The Commission can address this issue in at least two ways: first, the Commission can respond affirmatively to the petition which TCS has presented on the matter; and second, the Commission could incorporate a statement of affirmation in a Report and Order associated with an open docket, such as the Technology Transitions GN docket 13-5.

### **The Regulatory Framework for 911 Services Is Unique and Deserves Protection**

Though the Federal Government provides a broad array of regulatory functions, 911 services are unique in that they provide immediate contribution to the public good. This number, 9-1-1, is arguably the best known telephone number in the country. The U.S. has guided citizens to identify this number with life-saving services; and those services have an immediate impact on the safety of the individual caller as well as extending protection for the property of that caller. U.S. law enforcement and public safety officials are also heavily reliant on the 911 service, again at the prompting of the U.S. Government, to assist their ability to receive prompt alerts to public safety problems and to assist with the coordination and quick response to such incidences. Without U.S. Government affirmation that 911 services are protected from abusive patent practices, just as other vital U.S. Government functions are protected, the 911 system is exposed to injunctions in District Court. The 911 ecosystem will see resources drained and a reluctance to introduce new technologies if the result is to be unsustainably targeted by litigation abuses. At a time when the FCC is expecting, and demanding, more from the carriers and vendors of this 911 ecosystem, the Commission should act to keep the resources intact and the vendor community robust and proactively innovative.

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<sup>4</sup> *Madey v. Duke University*, 413 F. Supp. 2d 601, 607 (2006).

<sup>5</sup> 28 U.S.C. § 1498(a) provides in relevant part:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

**Tab 4**

## Legislatively Protecting 911 Services from Abusive Patent Litigation

### **Request:**

A coalition of carriers, vendors, and advocacy organizations are attempting to seek the inclusion of a provision that will clarify existing law and protect the 911 ecosystem via proposed legislation that will address new patent reforms. The legislative request seeks to address harmful patent litigation practices targeting wireless and IP voice companies providing federally mandated 911 emergency services to public safety, homeland security and law enforcement personnel. The legislative action would specifically clarify that 28 U.S.C. § 1498 is the appropriate defense for mandated 911 carriers that are the target of patent litigation associated with 911 services that they provide.

The FCC can assist with this effort by providing affirmation to the requested legislative action. Such affirmation could be provided in a letter of support to the appropriate Subcommittees in the Senate and House of Representatives.

**LEGISLATIVE ACTION SUPPORTED BY:  
AT&T, Cricket, CTIA – The Wireless Association<sup>®</sup>, INdigital,  
Industry Council for Emergency Response Technologies (iCERT),  
NTCA -The Rural Broadband Association<sup>®</sup>, Sprint,  
TeleCommunication Systems Inc., T-Mobile**

### **Background:**

- Under the FCC regulations wireless carriers (via 47 C.F.R. 20.18) and IP-enabled voice service providers (via 47 U.S.C. 615a-1) are mandated to provide emergency 9-1-1.
- The FCC's 9-1-1 mandate is for the direct benefit of the U.S. government and the public safety of U.S. citizens by ensuring first responders, homeland security, and other public safety officials have the ability to accurately locate wireless E9-1-1 callers.
- The mandatory nature of this service has attracted abusive litigation practices by PAE's seeking to exploit the FCC's standard by asserting a wireless carrier's mere provision of 9-1-1 technologies, systems, or methodologies to comply with FCC mandate is proof of infringement.
- Wireless carriers have the right to dispute these claims, but litigation costs to defend themselves far outweigh settlement costs which often fall on smaller vendors and result in a greenmail environment threatening current access to 9-1-1 and planned implementation of NextGen 9-1-1.
- Existing federal statute was designed to address patent infringement claims against companies providing services or technologies that are provided by or for the United States and with the Government's authorization and consent.
  - 28 U.S.C. §1498 provides that when patents (and copyrights) are used "... by or for the United States... the owners remedy shall be by action against the

United States ...for the recovery of his reasonable and entire compensation..."

- We are seeking to clarification that the provision of mandated 9-1-1 services in accordance with the Communications Act, 47 U.S.C. Section 151 et. seq., are by or for the United States and with the Government's authorization and consent under 28 U.S.C. §1498.

#### **Intent of Legislative Action:**

- This amendment does NOT change any patent statute — it only clarifies existing law.
- This amendment does NOT modify or invalidate any patent, and preserves all patent claims
- This amendment does NOT prevent other types of patent litigation from proceeding in District Court—for example, direct public safety vendor-to-vendor cases, litigation that does not involve 9-1-1 services, and litigation against entities other than mandated wireless or IP voice carriers would continue to be addressed in District Court.
- The purpose of this clarification is to enable wireless carriers and IP-enabled voice service providers to meet their obligation under federal law to provide accurate location based 9-1-1, while permitting patent holders to seek just compensation if a patent has indeed been violated.
- Its only purpose is to specify when a particular type of infringement case should be brought to the U.S. Court of Claims instead of the U.S. District Court, and then only in very limited situations pertaining specifically to the provision of mandated wireless 9-1-1 services.
- **Court of Claims costs are PAYGO exempt.**

#### **Legislative Request**

To clarify that patent litigation invoked against an entity mandated by the Federal Government to provide 9-1-1, enhanced 9-1-1 or other emergency communication services by or for the United States Government and with the authorization and consent of the Government are subject to 28 U.S.C. § 1498 consideration, therefore **35 USC § 271 shall be amended by inserting the following after section (i):**

(j) The use or manufacture of a patented invention in the course of providing 9-1-1, enhanced 9-1-1 or other emergency communication services pursuant to the Communications Act, 47 U.S.C. Section 151 et. seq., or any successor thereto, shall be construed as a use or manufacture for the Government and with the authorization or consent of the Government subject to 28 U.S.C. 1498.