In the Matter of

Advanced Methods to Target and Eliminate Unlawful Robocalls

CG Docket No. 17-59

COMMENTS OF INCOMPAS

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INCOMPAS, by its undersigned counsel, hereby submits these Comments in response to the Commission’s Notice of Proposed Rulemaking and Notice of Inquiry (“NPRM” or “NOI”) on mitigating the impact of illegal robocalls.¹

I. INTRODUCTION AND SUMMARY

Competitive voice service providers have found success by concentrating on meeting the needs of their customers. These companies are able to distinguish themselves by simultaneously providing outstanding value and customer service. As unwanted and often illegal robocalls have become pervasive, and potentially criminal, customers are looking to their providers to find permanent solutions that will restore their faith in the nation’s communications networks. Given the serious threat to defraud consumers and harm the reputations of subscribers whose numbers are spoofed by bad actors, INCOMPAS and its members are supportive of the Commission’s policy efforts to stop illegal robocalls and related fraudulent activity.

Like other carriers and VoIP providers, INCOMPAS members have had to deal with spoofing and phishing scams that target their customers. For example, several major technology

companies have had customers contacted using spoofed numbers claiming that technical support is needed to address product defects. Given the ubiquity of the problem, INCOMPAS firmly believes the Commission must take a long-term view of the complex technical issues associated with robocalls, while aiming to achieve as much immediate relief for consumers as possible. Implementing effective technical and operational capabilities that are fair and non-discriminatory across the entire industry is an enormous challenge. Taking clear and meaningful action to stop illicit scams is necessary; however, in doing so, INCOMPAS cautions that Commission action must be circumscribed, protecting consumer choice and consumers’ expectations that legitimate calls will be connected.

The Commission has traditionally rejected requests to allow voice service providers to unilaterally block calls over concerns that this will harm consumers and pose “a threat to the ubiquity and seamlessness of the network[s].” INCOMPAS urges the Commission to take a holistic approach to advancing consumer interests and adhere as closely as possible to its longstanding policy on call blocking by recognizing that blocking in a highly complex communications environment carries a high risk of unintended consequences, including potential anticompetitive behavior by large providers that carry a large portion of the nation’s voice traffic and who have an incentive to block calls originated by competitive providers. Accordingly, in this proceeding, the Commission should exercise the same restraint that has led it to prohibit call blocking except in limited circumstances. The agency should seek to establish rules that prevent unwanted and illegitimate robocalling while simultaneously prohibiting providers from blocking legitimate traffic.

2 NPRM ¶ 9.
In line with this proposal, INCOMPAS supports the Commission’s efforts to codify its 2016 guidance that allows customers to block their own number if they believe it is being spoofed by bad actors for fraudulent purposes, as well as the agency’s proposal to allow voice service providers to block invalid numbers, and calls originating from numbers not allocated to any provider. However, INCOMPAS strongly urges the Commission to reject its proposal to allow blocking of calls that theoretically originate from numbers that are allocated to a provider, but not assigned to a subscriber, as there is currently no known method for accurately tracking subscriber-level assignment status in real time. Endorsing call blocking based entirely on guesswork, particularly in a marketplace where telephone numbers can be allocated to multiple providers in a chain, is the sort of overly-broad approach that can have significant unintended and negative consequences in highly complex interconnected networks. Finally, INCOMPAS encourages the Commission to fully examine any protocols and Caller ID authentication standards developed by industry, such as the Signature-based Handling of Asserted information using toKENS (“SHAKEN”) framework, in concert with its goals of providing consumers with tools to eliminate unwanted and illegal robocalls.

II. COMMISSION ACTION MUST PROTECT CONSUMERS AS WELL AS THE RELIABILITY OF THE NATION’S COMMUNICATIONS NETWORKS.

Despite the threat that illegal robocalls pose to consumers, the NPRM is justified in pointing out that the Commission’s efforts in this proceeding could have an adverse effect on providers’ call completion obligations.³ Consideration of Commission-approved call blocking as a technique to eliminate illegal robocalls requires very careful consideration of the risks this

³ See id.
course creates for lawful calls being inadvertently intercepted before being completed. The Commission needs only to look at the long lasting consequences of schemes to support fraudulent access stimulation to high cost rural areas to appreciate the seriousness of an entire industry adopting broad-brush blocking treatments as one form of relief from fraud and abuse. The Commission “has long had a strong policy against allowing voice service providers to block calls” and has consistently recognized that call blocking “poses a threat to the ubiquity and the seamlessness of the network[s].” A 2007 Declaratory Ruling reiterated that the Commission’s “precedent does not permit unreasonable call blocking by carriers” and the instant proceeding emphasizes that there are only a limited set of circumstances under which the Commission will allow providers to block calls. In support of mitigating illegal robocalls, the Commission also affirmed the ability of voice service providers, subject to offering the adequate disclosures, to implement call blocking technology when their consumers choose this technology to ward off unwanted calls.

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5 NPRM ¶ 9.


8 2015 Omnibus TCPA Order at 8037-38.
Commensurate with this approach, INCOMPAS recommends the Commission use extreme caution when considering any call blocking proposal that could impact the reliability of the voice networks. INCOMPAS agrees with Commissioner O’Rielly’s assessment of the instant proceeding that “the challenge here is finding the right criteria to capture illegal robocalls without also blocking lawful calls.”

Foremost among the competitive industry’s concerns is that call blocking could be used as a way for large providers to discriminate against competitive providers. One of the primary goals of the Telecommunications Act of 1996 was to increase competition in the voice market by allowing for direct or indirect interconnection with existing providers’ facilities and equipment. With this access, competitive providers have been able to bring new and innovative services to market, often times at lower prices than can be offered by large providers.

Despite significant marketplace advances, however, competitors must continue to rely on large providers that control key network interconnection components to complete calls. Large providers that maintain network bottlenecks have an incentive to curtail competitive services and have blocked, choked, reduced, and restricted voice traffic in the past. In 2012, the Commission issued a Declaratory Ruling prohibiting voice providers from engaging in practices that lead to call termination and call quality problems on long distance calls to certain rural areas. The Commission warned these providers not to engage in acts that “adversely affect the ubiquity and

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9 NRPM ¶ 30.


reliability of the nation’s telecommunication network[s].”¹² In this proceeding, large providers could similarly undermine competitive services by intentionally or inadvertently blocking lawful traffic that originates from competitive providers. If this occurs, both consumers who utilize these competitive services and their service providers would be irreparably harmed by their inability to access ubiquitous and seamless voice networks.

INCOMPAS urges the Commission to explicitly state that call blocking cannot be implemented in a manner that results in anticompetitive behavior, and require providers to take reasonable steps to identify and verify presumptively illegal calls. Otherwise, the Commission may unintentionally allow providers to use number assignment questions as a means to restrict or refuse the exchange of traffic with competitive providers. In fact, INCOMPAS members have already seen traffic inadvertently blocked by major U.S. providers. The Commission must take every precaution to ensure that no provider is given unilateral authority to employ routing techniques that discriminate against or improperly capture and block legitimate traffic. The fundamental obligation of voice service providers, whether undertaken by an incumbent or a competitive provider, is inconsistent with unbounded call blocking. To that end, INCOMPAS proposes: (1) that providers be prohibited from anticompetitive call blocking—i.e., blocking legitimate traffic from competitive voice providers; (2) that the Commission require technical standards established for blocking robocalls also prohibit providers from blocking legitimate traffic from competitors; and (3) that the Commission maintain an oversight role to ensure that no one provider is blocking lawful traffic under the auspices of addressing the problem of illegal robocalls. Should the agency be forced to choose between blocking some legitimate calls as a

¹² 2012 Declaratory Ruling at 1355, ¶ 11 (specifying that providers may be liable for a violation of Sections 201 and 202 of the Telecommunications Act).
means to block all robocalls, or letting all legitimate calls through while some robocalls occur, the Commission should consider the latter approach so as not to “degrade the reliability of the nation’s communications network[s]”\textsuperscript{13} and the consumer’s confidence in the services provided over those networks.

Finally, a general adherence to Commission precedent on call blocking is also prudent because these illicit scams are not likely to be fully resolved by the Commission’s proposal to facilitate voice service providers’ blocking of illegal robocalls. Not only has the Commission determined that international originated calls fall outside the immediate scope of the NPRM, but many of these scams are migrating online. Bad actors, fraudulently posing as technology companies, are using pop-ups on laptops and tablets and encouraging customers to call a particular number to resolve vulnerabilities in the software or device. Because this has the same effect as a robocall, expectations must be managed about what incoming call blocking will be able to accomplish if perpetrators are able to easily reestablish schemes on other platforms and through other means.

\textbf{III. \quad THE COMMISSION SHOULD CODIFY ITS GUIDANCE ON BLOCKING AT THE REQUEST OF THE SUBSCRIBER TO THE ORIGINATING NUMBER.}

INCOMPAS supports the Commission’s proposal to amend its rules to codify the Consumer and Governmental Affairs Bureau’s 2016 Public Notice that allows voice service providers to block calls if a subscriber requests such measures in order to prevent its telephone number from being spoofed or otherwise used for fraudulent purposes.\textsuperscript{14} This guidance is

\textsuperscript{13} NPRM ¶ 9.

significant because it keeps decision-making power over blocking unwanted calls in the hands of consumers, while also protecting subscribers who receive annoying robocalls. With the Public Notice, the Commission has given subscribers (be it individuals or companies whose numbers have been spoofed and used in nefarious plots to defraud callers) another tool to prevent direct and reputational harm caused by bad actors. Furthermore, the guidance continues the Commission’s aforementioned aversion to “disturb[ing] providers’ general obligation to complete calls.”

With respect to information sharing, the Public Notice indicated that the Bureau’s guidance was “intended to spur pro-consumer initiatives, such as a ‘Do-Not-Originate’ database” which would allow providers to share numbers that subscribers had asked to be blocked. INCOMPAS supports the concept of a “Do-Not-Originate” proposal as this kind of list can enhance identification integrity by putting the decision-making power in the hands of the subscriber. Furthermore, it can be “an effective tool for addressing certain types of robocalls, when it is applied in a narrow and targeted manner.”

However, both the Commission and the Strike Force should first give attention to several details that, if resolved, would give all voice service providers the means to close any information gaps. First, the Commission must determine who will administer the database. INCOMPAS urges the Commission to take an active role in the development and ongoing maintenance of the database as the agency is uniquely positioned to ensure the accuracy of the

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16 Id. at 1.

information and to enforce any conditions agreed to by database users. Second, the Commission should provide equal access to the database on a technology-neutral basis—in other words, regardless of whether a provider offers its service via wireline or wireless, or TDM or IP. Third, the Commission should consider seeking the assistance of the North American Numbering Council (“NANC”) to ensure that a “Do-Not-Originate” policy does not interfere with number portability. Finally, the Commission must work with industry to develop a robust way to manage the database in order to address the needs of new subscribers. For example, the database must be updated if a new subscriber is assigned a number that was previously blocked but has been returned to a providers’ allocation of numbers. With these concerns addressed, a “Do-Not-Originate” policy can become a powerful, if targeted tool, that providers can use to protect consumers from unwanted and illegal robocalls.

IV. EFFORTS TO ELIMINATE ILLEGAL ROBOCALLS MUST BE CAREFULLY CONSIDERED TO PROTECT LEGITIMATE TRAFFIC AND ENSURE THAT CONSUMER EXPECTATIONS WILL BE MET.

In addition to the proposals put forward in the NPRM, the Commission should primarily consider other solutions that would give consumers the power to alleviate the threat of fraud and harm inherent to unwanted robocalls. INCOMPAS members are currently working in industry standard settings bodies on technology—like the Signature-based Handling of Asserted information using toKENs (“SHAKEN”) framework—that would alert called parties when an incoming call seems suspicious, rather than blocking calls outright. While the SHAKEN

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18 See FCC Chairman Ajit Pai, Consumer Protection Month at the FCC, MEDIUM (June 22, 2017), https://medium.com/@AjitPaiFCC/consumer-protection-month-at-the-fcc-1dea0007d9c6 (explaining that the Commission will take up an initiative at its July 2017 Open Meeting “to address the problem of calls that are made to reassigned numbers” and estimating that 100,000 numbers are reassigned daily by wireless carriers).
standard will not be a “silver bullet” solution,\textsuperscript{19} it does promise to serve the dual purpose of putting the caller on notice that a call may be fraudulent and that the recipient should refrain from releasing personal information to the calling party, and also avoid the unnecessary blocking of legitimate calls. This technology, which could work in concert with a “Do-Not-Originate” database, has the potential to be an effective solution as it provides enhanced protection for consumers and the nation’s communications networks.

With respect to the NPRM, the Commission seeks comment on authorizing providers to block calls of three categories of numbers: (1) invalid numbers; (2) valid numbers that are not allocated to a voice service provider; and (3) valid numbers that are allocated but not assigned to a subscriber.\textsuperscript{20} While call blocking rules should be implemented carefully and in a circumscribed manner, giving providers the authority to block the first two categories of numbers is likely to have a positive impact on the communications ecosystem as a whole. INCOMPAS concurs with the Commission’s assessment that telephone numbers that are not allocated to a provider present a “strong indication that the calling party is spoofing the Caller ID to potentially defraud and harm a voice service subscriber.”\textsuperscript{21} Because these numbers have not been allocated to a specific service provider, blocking these numbers should have no impact on the ubiquity and seamlessness of the networks or the delivery of legitimate calls to their destination, and will protect end users.

\textsuperscript{19} See Presentation of Richard Shockey, NANC Member, to NANC, 4 (Mar. 28, 2017), available at http://www.nanc-chair.org/docs/mtg_docs/Mar17_NANC_Robocall_Spoofing_Update.pdf (suggesting that the NPRM is “a start” and “not the end of the process”).

\textsuperscript{20} NPRM ¶ 11.

\textsuperscript{21} Id. ¶ 16.
On the other hand, while providers are increasingly capable of performing the real-time call analytics necessary to help determine whether an invalid or not allocated number is being spoofed for potentially fraudulent purposes, there is broad consensus throughout the industry that there is no technically feasible solution for accurately identifying in real time the third category of numbers that the Commission proposes to allow providers to block: numbers that are allocated to a provider, but not assigned to a subscriber. A carrier or VoIP provider’s current numbering administration does not contemplate tracking subscriber-level assignment status in real time, particularly when that telephone number is allocated to another provider. Before any provider-initiated call blocking could be implemented, it may be necessary for the Commission to reform a number of fundamental aspects of the North American Numbering Plan as well as intercarrier traffic exchange protocols and standards. Thus, any suggestion that providers could block robocall traffic on such a basis is misplaced, and risks giving providers a blank check to block calls in a manner that would have a deleterious effect on the reliability of the networks.

Complicating this effort, there is not a common database that supplies industry with information about allocated but unassigned numbers in a timely fashion. Should the Commission adopt rules that allow blocking of unassigned numbers, it must strongly consider creating this type of database that would allow service providers to take reasonable steps to confirm that the calls that are being blocked are, in fact, illegal. A real-time repository for unassigned numbers would spare smaller providers from using additional resources to prove the legitimacy of its call traffic to other providers. Like a “Do-Not-Originate” database, the Commission must determine how this industry tool will be governed and controlled, as well as who will be provided access. Like the DNO database, INCOMPAS urges the Commission to make access available to all providers on a real-time basis, since absent API connections to all
providers, a central “real-time” database dip would be required. For competitors, small carriers, and VoIP providers, the operating costs associated with these database dips could prove to be excessive. Without these changes, the Commission’s approach runs a very high risk that a new customer would find their voice service to be incapable of completing calls because a call blocking system may erroneously classify their telephone number as unassigned. Such a result has the potential to severely disrupt competitive market forces.

It should also be noted that the IP transition is occurring more slowly in some corners of the industry than in others. While the Commission has made clear that providers’ blocking of VoIP-PSTN traffic is prohibited, and that interconnected and one-way VoIP providers are similarly prohibited from blocking voice traffic to or from the PSTN, it would be antithetical to the policy objectives the Commission has embraced with respect to the IP transition to provide an exception to its rules and allow last movers and TDM providers to discriminate against innovators and competitors under the auspices of robocall protection when it is undisputed that there is no reliable basis to determine subscriber level number assignment in real time. Indeed, as the Commission plans for an all-IP network environment, the non-discrimination principles of the Act apply to this new environment as well. As the NOI acknowledges, there are industry

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standards being developed that contemplate how IP-to-IP traffic can be exchanged in a manner that can more accurately identify unwanted traffic from legitimate sources in real time.

As noted above, several INCOMPAS members, including VoIP providers, are participating in the testbed for the SHAKEN framework, an operational approach for a trusted identity framework that provides guidance for service providers implementing Caller ID network validation. As proponents of Caller ID Authentication solutions, the providers involved in the development of this standard aim to ensure that the framework is capable of managing any discriminatory behavior, even if it is unintentional. Because the analysis of the framework is ongoing, INCOMPAS urges the Commission to reserve judgment on blocking calls for which Caller ID has not been authenticated until the testbed is complete. Given the high levels of participation in the testbed and the potential to disrupt the threat of fraudulent calls without employing blocking techniques, the Commission would be well served to determine how the framework can be integrated into its array of robocall solutions in the near term.

Participants also anticipate that the testbed will provide answers as to whether the framework can be implemented on networks using various types of technology. Specifically, the testbed will determine if the standards will work not only with TDM calls, but with VoIP calls as well. These IP-based services challenge the inadvertent, but invalid operating assumption that callers have telephone numbers that are allocated to the originating network. In fact, many legitimate callers do not originate calls on the public switched telephone network (“PSTN”) and, therefore, do not have telephone numbers. Outward-bound calling applications such as Skype Out and Viber Out permit calls to be made to PSTN telephone numbers, but do not assign telephone numbers to the calling party. Any arrangement for, or approval of, a trusted identity framework, such as SHAKEN, must ensure that technologies that do not assign telephone
numbers to callers will not be vulnerable to widespread blocking by other voice service providers. Furthermore, the Commission should follow the Commission’s traditional technology neutral approach and not promote any solution that could treat calls differently based on the technology by which the calls are transmitted.

V. CONCLUSION

Given the competitive concerns associated with giving large providers unilateral authority to block suspected robocalls, including degrading the utility of the networks for legitimate calls and the harmful effect this can have on consumers, INCOMPAS urges the Commission to make clear that anticompetitive call blocking—i.e., blocking legitimate traffic from competitive voice providers—is prohibited. Any technology standards adopted should also include this protection.

While INCOMPAS supports the Commission’s efforts to amend its rules to codify its guidance permitting a subscriber to a particular telephone number to request blocking of calls that originate from that number as well as proposals that allow providers to block telephone numbers that are either invalid or not allocated to any provider, there is no technically feasible method to accurately identify numbers that have been allocated to a provider but are not assigned to a subscriber in real time opening up the possibility that high-traffic providers may employ blocking techniques that discriminate against or capture legitimate traffic. For this reason, we encourage the Commission to reject this particular proposal.
Respectfully submitted,

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