

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
) CG Docket No. 20-93
Protecting Consumers from One-Ring Scams)

Comments of Lanck Telecom

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Table of Contents

Summary	ii
I. Introduction	1
II. Background.....	2
III. Discussion.....	3
a. Anatomy of a One-Ring Scam and Utility of AB Handshake Technology	3
b. The Commission Should Further Its Cooperation with Government Partners in the U.S. and with Foreign Countries to Stop One-Ring Scams	5
c. The Commission Should Allow Carriers to Block Numbers Associated with One-Ring Scams	6
d. The Commission Should Facilitate Industry Cooperation to Encourage Effective Blocking for Numbers Associated with One-Ring Scams	8
e. Use of AB Handshake Process Would Make Verification of Caller ID by Gateway Providers Easy and Accurate	9
f. AB Handshake Process Highly Cost Effective	10
IV. Conclusion	12

Summary

Lanck Telecom wholeheartedly supports the Commission's efforts to eradicate one-ring scams. These abusive and fraudulent practices harm consumers and the nation's telecommunications carriers alike. It is, therefore, in the public interest for the Commission to take strong, effective action to fight one-ring scams.

Lanck Telecom supports a number of the NPRM's proposals. It believes the Commission should take additional steps to work with its government partners in the United States and abroad to prevent one-ring scams. In particular, cooperation with foreign governments is key because one-ring scams, in particular, necessarily originate outside the country. In addition, the Commission should allow carriers to block numbers associated with one-ring scams and require gateway providers to verify the nature or purpose of calls that originate in a foreign country. The Commission should also facilitate industry-wide cooperation to achieve these goals through multi-stakeholder groups organized by industry or through the Commission itself.

However, even with adoption of all of the recommendations in the NPRM, eliminating one-ring scams will remain impossible without effective call verification processes. Whether the Commission requires or merely encourages gateway providers to verify internationally originating calls, providers will need an effective, cost efficient solution for call verification. Lanck Telecom's AB Number Handshake technology offers such a solution. It can be implemented by carriers quickly and inexpensively. The out-of-band nature of AB Number Handshake verifications makes the process highly accurate because it does not rely on an unbroken chain of certifications and because it can be implemented across TDM and SIP networks without necessitating any network upgrades. Therefore, the Commission should

encourage the use of call verification solutions like Lanck Telecom's AB Number Handshake process, and it should do so as quickly as possible.

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Express Teleservices Corp. d/b/a Lanck Telecom (Lanck Telecom), by counsel, respectfully files these comments in response to the Notice of Proposed Rulemaking in the above-captioned proceeding.¹

I. Introduction

One-ring scams account for a large and growing number of consumer complaints, and Lanck Telecom appreciates the Commission’s focus on this important issue. One-ring scams, also known as Wangiri scams, almost always rely on autodialing equipment and are a particularly pernicious type of robocalling. While other types of robocalling can be a nuisance or even disrupt the use of a target’s phone service by tying up phone lines, one-ring scams actively attempt to defraud consumers and/or telecommunications carriers. The sole goal of a one-ring scam is to entice a target of the scam to call back a number that will generate high international toll charges that benefit the scammer.

To stop this and other types of calling scams, the Commission should exercise its full authority to encourage and facilitate carriers’ adoption of verification processes that allow carriers to both verify call origination in real-time and track calling records for later use by a carrier or law enforcement. Specifically, Lanck Telecom’s A&B Number Handshake (AB

¹ *In re Protecting Consumers from One-Ring Scams*, Notice of Proposed Rulemaking, CG Docket No. 20-93, FCC 20-57 (Rel. April 28, 2020) (NPRM).

Handshake) technology offers a powerful tool for fighting one-ring scams. Unfortunately, scammers are a persistent and creative lot. As the Commission knows, enforcement action may succeed in shutting down one scam only for a new operation to take its place the next day. While the Commission certainly should continue its enforcement efforts and continue to work with other governmental agencies (both in the U.S. and internationally), the most powerful tool in fighting one-ring scams will be cooperation among carriers to implement AB Handshake-like technology. Therefore, the Commission should take steps to promote the deployment of such technology throughout the industry as soon as possible.

II. Background

Among other things, the TRACED Act requires the Commission to take steps to protect the public from one-ring scams.² The Commission initiated this proceeding in response to the TRACED Act with the NPRM raising a number of questions regarding how best to address one-ring scams. With respect to Lanck Telecom’s comments, the NPRM asks whether and how the Commission can work with government agencies within the U.S. and the governments of foreign countries to stop one-ring scams,³ whether the Commission should permit carriers to block numbers associated with one-ring scams,⁴ how the Commission can encourage cooperation among entities that provide call blocking services,⁵ and whether the Commission should establish obligations on international gateway providers to “verify with the foreign originator the nature or purpose of calls before initiating service.”⁶

² Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105, 133 Stat. 3274 at § 12 (2019) (TRACED Act).

³ NPRM at ¶¶ 8-10.

⁴ *Id.* at ¶¶ 12-17.

⁵ *Id.* at ¶¶ 18-19.

⁶ *Id.* at ¶¶ 20-22; *see also* TRACED Act at § 12(b)(6).

Lanck Telecom is an international telecommunications provider that operates in every region of the globe. It provides wholesale call termination to 190 countries and carries more than 3 billion minutes of international traffic annually. In addition to its nearly two decades of experience in the international voice market, Lanck Telecom offers a cutting-edge fraud management system, its AB Handshake technology. Development of this system has made Lanck Telecom a leader in telecommunications fraud detection and prevention.

III. Discussion

a. Anatomy of a One-Ring Scam and Utility of AB Handshake Technology

As noted above, scammers are nothing if not creative; therefore, one-ring scams defy a single technical description. In its simplest form, a one-ring scam could involve a caller (the scammer) receiving a kickback from a retail or enterprise telecommunications provider to generate call backs to numbers assigned to the scammer by the provider, thereby generating revenue for the provider that is shared with the scammer. However, because such an operation is relatively easy to identify and shutdown, Lanck Telecom has found that one-ring scams almost always use spoofed caller ID information. When spoofed caller ID information is used in one-ring scams, fraudsters often engage in “short-stopping.”

With short-stopping, the end user and provider to whom a spoofed number are assigned do not participate in the scam. Instead, a one-ring scammer will enter into a relationship with an unscrupulous provider, often an international carrier who would route traffic between the originating and terminating networks.⁷ However, when victims of a one-ring scam call the spoofed caller ID, a carrier participating in a one-ring scam will stop the call before it gets to the

⁷ See, e.g., *International Revenue Share Fraud: Are We Winning the Battle Against Telecom Pirates?*, Black Swan Telecom Journal, November 2012, available at: http://bswan.org/revenue_share_fraud.asp (last visited June 10, 2020).

correct country or before it gets to the appropriate terminating network.⁸ The call can then be terminated to a line assigned to the scammer, sometimes in an entirely different country from where the caller ID for the intended number is assigned.⁹ The participating carrier still bills the call according to the country code called to generate high international toll rates, and the scammer and the participating carrier share the revenue generated.¹⁰

A key takeaway of Lanck Telecom’s analysis of one-ring scams is that they often involve providers actively participating in the scam or operating in a willfully negligent manner. These providers often have few, if any, non-scammer end user customers and, therefore, have limited incentive to opt-in to industry-wide efforts to combat robocalling, caller ID spoofing, or one-ring scams.¹¹ Indeed, in many respects these providers are facilitating fraud on other telecommunications providers in addition to those providers’ customers.

The existence of these unscrupulous providers highlights a crucial advantage of Lanck Telecom’s AB Handshake fraud management service. Rather than rely on a chain of certifications handed off from provider to provider along a call path, Lanck Telecom’s AB Handshake system enables the direct exchange of call information between originating and terminating carriers.¹² AB Handshake uses an encrypted out-of-band channel to allow the originating and terminating carriers to exchange call details in real-time.¹³ For example, upon receiving a call, a terminating carrier might send a request to the purported originating carrier,

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ Lanck Telecom fully supports the Commission’s efforts to implement STIR/SHAKEN and industry initiatives to develop and implement the verification system. However, based on Lanck Telecom’s experience, the STIR/SHAKEN protocol alone is insufficient to stop one-ring scams.

¹² *A&B Number Handshake*, Lanck Telecom, available at <https://abhandshake.com/> (last visited June 10, 2020).

¹³ *Id.*

effectively asking “did you make this call?” Likewise, an originating carrier might contact a terminating carrier, effectively asking “did you get my call” and “if so, what calling number do you see?”

Lanck Telecom’s ability to provide the real-time exchange of call information accomplishes two goals. First and foremost, it allows a terminating carrier to block one-ring scams if the purported originating carrier did not initiate the call. Where a one-ring scammer and an intermediate provider are engaged in short-stopping and both the terminating carrier and the purported originating carrier use the AB Handshake system, one-ring scams can be stopped before they ever reach the victim. Second, the system’s exchange of information provides a powerful data collection tool that carriers can use to improve their blocking technologies and law enforcement and other government agencies can use to prosecute scammers. Finally, in addition to helping fight one-ring scams, Lanck Telecom’s AB Handshake service can help prevent call stretching, PBX hacking, Wangiri 2.0 scams,¹⁴ and other types of telecommunications fraud.

b. The Commission Should Further Its Cooperation with Government Partners in the U.S. and with Foreign Countries to Stop One-Ring Scams

The most effective way the Commission can work with its sister government agencies, both in the U.S. and abroad, to stop one-ring scams is to work towards universal deployment of AB Handshake-like technologies. The NPRM notes the cooperation of the FCC with other U.S.

¹⁴ Wangiri 2.0 scams typically target business with large outbound and international calling centers, customer service or sales for large corporations for example. The scam rarely involves one-ring calling because the target is the sales or other outbound calling response from a company. Instead, scammers often use bots or scripts to initiate the fraud via the company’s online or other outreach options that may prompt the company to call a consumer back. From the standpoint of scammers, large corporations can be tempting targets because the high call volume and routine international call traffic can make it difficult to identify and stop fraudulent calls. *See Lanck Telecom Raises Fraud Alarm for International Brands, Enterprise Call Centers & Carriers: Beware of Wangiri 2.0*, Black Swan Telecom Journal, December 2019, available at http://bswan.org/business_victim_wangiri.asp (last visited June 10, 2020).

agencies and internationally in fighting against telecommunications scams. In particular, the NPRM highlights the Commission's work with the FTC,¹⁵ and the FTC's work on robocall enforcement with India.¹⁶

While laudable, the efforts cited by the NPRM are primarily responsive to one-ring and other telecommunications fraud, rather than actively working to prevent them in the first instance. There is no question that the Commission should continue its efforts to enforce its rules against illegal robocalling and fraudulent or scam calls. It should also continue to work with other government agencies in the U.S. and internationally to enforce those rules. However, *post hoc* enforcement has not and will not stem the tide of illegal and fraudulent calls. Only proactive, preventative measures will work to stop the root causes of these schemes.

In addition to rules enforcement, the Commission should work with its counterpart agencies in countries around the world to speed the deployment of AB Handshake technologies. Lanck Telecom recognizes that it will take time and effort to foster international consensus, but the faster and more completely AB Handshake verification is implemented, the more secure international telecommunications networks will be. Moreover, as described more fully below, the Commission can take steps to incentivize and otherwise encourage or require adoption of the AB Handshake method for carriers operating in the U.S.

c. The Commission Should Allow Carriers to Block Numbers Associated with One-Ring Scams

The Commission should build on its *2017 Call Blocking Report and Order* and allow carriers to block numbers associated with one-ring scams.¹⁷ One-ring scams serve no legitimate

¹⁵ NPRM at ¶¶ 8-9.

¹⁶ *Id.* at ¶ 10.

¹⁷ *In re Advanced Methods to Target and Eliminate Unlawful Robocalls*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9706, 9710-21 (2017) (*2017 Call Blocking Report and Order*).

purpose. Unlike robocalling and caller ID spoofing, which can have lawful uses, one-ring scams are purely fraudulent. Therefore, to the extent carriers can identify the numbers associated with one-ring scams, the justification for permitting carriers to block those numbers is at least as strong as the justification for allowing carriers to block obviously spoofed calls in the *2017 Call Blocking Report and Order*.

The NPRM asks how well providers can identify the numbers associated with one-ring scams.¹⁸ Fortunately, Lanck Telecom's AB Handshake technology is ideally suited to identify numbers associated with one-ring scams with a high degree of accuracy. One-ring scams often use spoofed telephone numbers or blocks of numbers, so the end users to whom those numbers are actually assigned can be harmed if carriers block all calls coming from a number associated with a one-ring scam. By enabling terminating and originating carriers to exchange call information, the AB Handshake method allows carriers to develop highly accurate data to make call blocking decisions. Ultimately, with industry-wide adoption of AB Handshake-like methods, the industry's goal could be to identify one-ring scams on a case-by-case basis in real-time. In that case, carriers would be able to allow non-fraudulent calls made by the end user to whom a number is assigned while simultaneously preventing fraudulent calls made by scammers using spoofed caller ID information. Of course, universal adoption will not happen immediately, but the AB Handshake process can also improve the data analytics that inform carriers' call blocking choices as an interim step prior to full adoption or where an originating carrier has not yet implemented AB Handshake protocols.

¹⁸ NPRM at ¶ 14.

d. The Commission Should Facilitate Industry Cooperation to Encourage Effective Blocking for Numbers Associated with One-Ring Scams

The NPRM correctly notes that a wide variety of companies and telecommunications providers offer call blocking services to carriers or direct to consumers and asks how the Commission should work with these companies to address one-ring scams.¹⁹ Currently, the Commission's role should be to facilitate industry cooperation. Scammers constantly change their attacks to respond to fraud management attempts, and technological changes can outpace the Commission's ability create new rules. Therefore, the Commission should act as a sort of clearinghouse and central point of communications for those companies working to fight one-ring scams. Historically, the Commission has adopted technology neutral rules, and Lanck Telecom recognizes that its fraud management service will be one of many options for carriers and consumers. However, a universal truth for data analytics companies and telecommunications providers trying to stop one-ring scams is that the ability to share information will make each of the blocking technologies stronger. Therefore, to the extent that other AB Handshake-like services are able to communicate seamlessly with Lanck Telecom's AB Handshake service, consumers and legitimate carriers will be better served. Likewise, if STIR/SHAKEN certificates can be further verified using AB Handshake methods, the STIR/SHAKEN protocol will be more reliable. The Commission can play a vital role in enabling the type of industry-wide cooperation necessary to allow various blocking technologies to work in conjunction with one another.

Lanck Telecom takes no position on the specific means by which the Commission supports industry-wide cooperation. The Commission could, for example, create a working group in which it participates to routinely evaluate the state of call blocking technologies and encourage the interoperability of different technologies. On the other hand, the Commission

¹⁹ *Id.* at ¶ 18.

could support the creation of multi-stakeholder groups, including carriers, fraud management providers, and industry associations, that would establish industry best practices with respect to call blocking technology. Regardless of how the Commission moves forward, it must ensure that fraud management providers, such as Lanck Telecom, have a seat at the table because AB Handshake technology offers an effective, complete solution to one-ring scams where it is implemented.

e. Use of AB Handshake Process Would Make Verification of Caller ID by Gateway Providers Easy and Accurate

The Commission should require or strongly incentivize gateway providers to “verify with the foreign originator the nature or purpose of calls before initiating service.”²⁰ The very purpose of Lanck Telecom’s AB Handshake protocol is to seamlessly and in real-time achieve the stated goals of the NPRM and the TRACED Act. Where a gateway provider and the relevant international originator implement the AB Handshake process, there would be essentially no risk that a gateway provider would block lawful calls. Even where a gateway provider cannot obtain real-time verification because the originating provider does not participate in an AB Handshake process, the data analytics enabled by the AB Handshake technology will help gateway providers to more accurately block numbers associated with one-ring scams.

While the Commission may lack jurisdiction to require foreign originating carriers to adopt AB Handshake protocols, it can require gateway providers to adopt the technology, which will allow gateway providers to verify caller ID and other call information in real-time directly with the purported originating carrier. As the NPRM notes, the Commission recently required “voice service providers to implement STIR/SHAKEN technology.”²¹ The TRACED Act

²⁰ NPRM at ¶ 20 (citing TRACED Act § 12(b)(6)).

²¹ *Id.* at ¶ 19, n 41.

specifically contemplates the creation of verification obligations for gateway providers;²² therefore, the Commission should exercise its authority to adopt such regulations.

Alternatively, if the Commission does not require gateway providers to verify the nature of a call before initiating service, it should strongly incentivize providers to do so. The NPRM asks if the Commission should adopt safe harbors to incentivize the blocking of numbers associated with one-ring scams.²³ While use of the AB Handshake process will help ensure any blocked calls are fraudulent in nature, the Commission should adopt safe harbors to protect carriers that block calls associated with one-ring scams, provided that carriers act in good faith based on the use of industry best practice call blocking technologies. The Commission should also consider an additional public notice or further notice of proposed rulemaking to consider additional ways it can incentivize gateway providers to implement AB Handshake-like protocols if the Commission does not require the implementation of such technology.

f. AB Handshake Process Highly Cost Effective

Finally, Lanck Telecom's AB Handshake technology offers a highly cost effective solution. The total start-up costs, including CapEx, initial OpEx, and integration costs, could be as low as ten thousand dollars (\$10,000.00) for smaller providers. In part, AB Handshake can be deployed inexpensively because the technology is an out-of-band verification process. Therefore, there is no need for each carrier in a call chain to certify the call information, and carriers that still rely on TDM networks can utilize AB Handshake without upgrading to SIP. In addition, AB Handshake can run on inexpensive, commonly available hardware, which keeps initial CapEx investment low while ensuring that a single server can be used to handle hundreds of thousands of simultaneous calls. OpEx costs are limited to license costs, which can be kept proportional to

²² TRACED Act § 12(b)(6).

²³ NPRM at ¶ 17.

traffic volume, making the technology affordable for carriers of all sizes. Lanck Telecom also offers a free one-year trial period for its service offering.

Cost effective deployment is a key to fighting one-ring scams and other telecommunications fraud. As the Commission is aware, one-ring scams necessarily originate overseas. Aside from jurisdictional challenges, the cost of implementing fraud management solutions is a major obstacle for some foreign carriers, but Lanck Telecom specifically developed its AB Handshake solution to offer cost effective fraud management capability to carriers around the world. Lanck Telecom understands the Commission cannot mandate that foreign carriers implement call verification processes,²⁴ but as noted above, the Commission should be working with its counterpart agencies in other countries to push for as rapid and comprehensive a deployment of call verification processes as possible. It will be easier for the United States to encourage that deployment if there are relatively inexpensive call verification options available.

The AB Handshake solution is also scalable, so large providers can achieve complete AB Handshake coverage for well under a million dollars. While the cost will ultimately depend on a carrier's traffic volume, Lanck Telecom believes that even the largest U.S. carriers could adopt AB Handshake protocols for a few hundred thousand dollars, at most. One-ring scams are a fraudulent nuisance the Commission must address, but even for a large carrier, every dollar spent trying to address these scams is a dollar that must be paid by end users. Therefore, it is in the public interest to encourage call verification and fraud management services to be as cost effective as possible. Lanck Telecom's AB Handshake technology is just such a cost efficient call verification method that can help eliminate one-ring scams.

²⁴ The Commission may, however, require that U.S. gateway providers seek verification of incoming international calls.

IV. Conclusion

One-ring scams are more than a nuisance. They are an abuse of the country's telecommunications networks for the sole purpose of defrauding customers and their service providers. Victims of these scams suffer real financial damage, and the victims are often among the most vulnerable members of society. Therefore, the Commission should take every available step to work with industry stakeholders to fight one-ring scams and to require the adoption of technologies that enable carriers to verify the nature of incoming international calls and block calls from scammers.

Respectfully Submitted

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