

## Response to Ofcom Consultation (28<sup>th</sup> April 2023): Consultation: Calling Line Identification (CLI) authentication – a potential approach to detecting and blocking spoofed numbers.

i3forum welcomes the opportunity to respond to this consultation. We support Ofcom's open approach to evaluating the numerous areas available to the industry, especially including international origination, which will enable authentication and validation in order to reduce the opportunities for fraud.

### Introduction

The i3forum<sup>1</sup> established in 2007, is a not-for-profit organisation of International Telecommunications ecosystem that brings together all stakeholders (International Carriers, Vendors and Enterprise Service Providers) in order to help define best practices, to promote and foster adoption of industry transformation and encourage innovation and competition.

i3forum membership is open and inclusive and the forum is driving the creation of an agile, adaptable and sustainable carrier business of the future. The aim is collaboration with a diverse and dynamic model with a mission to shape the future of the telecommunications industry.

The membership means our focus is targeted on the international aspects of call and messaging validation and authentication which will have a bearing / overlap with national call and messaging treatment.

### The Current Environment

It is our opinion we are in the midst of an international communications crisis on a global scale, caused by the proliferation of unwanted / illegal communications (e.g. spamming, spoofing, robocalling etc...), a significant portion of which originates from abroad. This has an impact across all levels of society, businesses and citizens which is creating an unprecedented burden on national regulators and the international communications environment.

i3forum believes the different approaches being adopted by NRAs across the world, with multiple variants, to try and eliminate unwanted / illegal communications with an international origination, only creates confusion, complexity and inefficiencies thereby allowing loopholes to be developed allowing opportunities for future exploitation. Our research regarding the fragmented approach being investigated and adopted is demonstrated in Annex 1, highlights the continued increase in unwanted and illegal communications.

This fragmented approach creates a considerable cost burden for the NRAs and international industry (cost and complexity of having to comply with multiple, often inconsistent requirements from various NRAs) and provides limited impact internationally thus resulting in suboptimal efficiencies and slow adoption by industry, particularly impacting those carriers who are active in the global marketplace. This in turn results in negative outcomes for genuine international communications which present as high-risk traffic. We strongly urge Ofcom not to overlook the international angle.

<sup>1</sup><https://www.i3forum.org>

## Lessons Learnt

Ofcom, we are sure, are following the developments in the USA and are aware of the varying results from the initiatives to date. Youmail<sup>2</sup>, for example, although they may not be particularly accurate, shows that:

- a) the trend shows stability at best
- b) consumers continue to be spammed
- c) international service providers still see significant amounts of traffic needing to be blocked regularly and
- d) figures suggest the trend continues to grow (5.1Bn in May 2023).

Even if we leave aside these numbers, end users are still spammed regularly and the end user experience remains very poor.

STIR/SHAKEN is and remains a significant cost to the industry in the USA and the UK's NICC standards body, who have been developing a UK-version of STIR/SHAKEN, support the view that a UK STIR/SHAKEN variant will be equally costly.

The implementation of STIR/SHAKEN in USA has been focused on the networks and not the end user experience. The FCC, by not issuing guidance on how calls are to be presented, failed to provide the end user with informed choice, based network and technology-led solutions. i3forum would argue that regulators must take a holistic approach to spoofing and robocalling.

Coordination is key and must include international carriers as well a local initiatives versus a localised disparate approach which has inherent limitations and will further exacerbate "whack-a-mole", where the improvement in one area only displaces the issue elsewhere TDM verses IP, for example.

Today, in trying to eliminate international inbound illegal/unwanted communications, many NRAs focus on the termination, but little seems to be done to address the root cause of the problem that of the origination side, which the terminating NRA alone cannot address. i3forum propose that collaboration, coordination and inclusivity are the key. Regulators must aim towards creating a global environment which fosters innovation but will not leave international operators isolated and left to interpret and build individual solutions.

Inclusivity will enable international carriers to provide the "link" between terminating and originating NRAs by building on their experience of working together to combat fraudulent activity. Inclusivity will enable solutions such as CLI sanity & validation checks, Branded Calling, national & international Traceback. The application of a variety of solutions, such as these, will not be limited to either TDM or IP, therefore promoting a holistic approach and preventing further avenues of "whack-a-mole" developing.

Also critical is the "adoptability" and "affordability" of the requirements on international players. i3forum believes that the cost of complying with new requirements should not be so prohibitive as to de-facto exclude the smaller players.

<sup>2</sup> <https://robocallindex.com/>

## Mixed Approach

To achieve the aim of eradicating illegitimate international calls we believe it is vital to adopt a new mindset. As an industry we must tackle the issue of public trust by enabling solutions to be agile and to shift as soon as the fraud shifts. All industry stakeholders must work together with strong engagement from the regulators, as international carriers on their own do not have enough teeth.

An approach could be for any of the elements highlighted below be implemented at any time, in any order.

### **Option 1 – Basic Validation on International Calls**

We full support Ofcom's first steps of the initial and basic validations however, CLI validation for both national and international calls is required against National and Global Number Plans. To support this i3Forum advocates the development for an open platform<sup>3</sup> for Global Number plan information sharing.

The Number Plan checks need to work in conjunction with a comprehensive national Do-Not-Originate List (DNO).

### **Option 2 – National CLI on International Trunk**

It is reasonable to apply a policy of blocking all calls with a national CLI presented on international trunks. However, it is essential to first implement industry viable solutions for the legitimate cases as shown in the consultation section 5.40:

1. UK mobile users roaming overseas making calls back to UK numbers, i.e. calls with a CLI from the +447 range;
2. calls to a mobile user who is roaming in the UK;
3. where the traffic has originated on a UK network; or
4. where the traffic has originated from UK customers that are hosted on overseas nodes or cloud ser-vices.

i3forum is developing solutions, architectures and governance to support identifying these use cases and we believe this will be very helpful in Ofcom's evaluation of the ways in which these areas can be addressed. For example, "IsRoaming" a check on roaming calls, coupled with Trusted Trunks would be one way to ensure legitimate calls are handled correctly. Elements of these solutions may develop from the i3Forum activities where calls or trunks meet i3Forum standards, governance, approval (including KYC requirements) and viable technology solutions for Trusted CLI, then it would be recommended that these calls are not blocked.

### **Option 3 - International Traceback**

It is vital to enable fraud, spam and spoof calls to be traced back to the originating source, even for international. i3Forum is developing, with other industry associations, a worldwide registry of carriers/operators who meet appropriate standards and conduct which can facilitate traceback solutions. In addition, there will need to be a joint agreement on how to implement, operate and enforce international traceback.

#### **Option 4 - International Trusted CLI solutions – Interworking between national solutions.**

This option remains technology neutral but recognises “Trusted Calls”.

This solution requires the originating operator to carry out the basic validation checks against National and Global Number Plans and national DNO lists. It would then be reasonable to apply a policy to block all calls with national CLI on international trunks. However, it is essential to first implement industry viable solutions for the legitimate use cases of national CLIs on international trunks.

To enable “trusted calls” requires delivery of the call with a trusted CLI indicator (e.g. green tick calls) to display to the end user, that this call is verified, the CLI is attested and can confidently be answered. This solution is further supported by Branded calls and Branded Logo both of which identify the caller and could include a call reason text.

#### **In Conclusion**

i3forum firstly urge Ofcom to support a holistic approach, including international calls and messages which will lead to a genuine “end to end” approach in the future. This will allow for a variety of technology neutral and industry viable approaches which in turn is supported with unified global guidance. We believe this starts with national CLIs on international trunks.

Secondly, we believe two areas of collaboration need to be explored jointly. One to agree global guidance and industry solutions. The second to look at joint governance and a joint regulatory framework to enforce unified guidance & solutions, this can comprise of:

- an opt-in framework for Carriers, NRAs,
- compliance at Carrier or trunk level
- compliance monitoring and enforcement
- compliance may bring “Trusted Carrier” benefits from participating NRAs & fellow Industry players

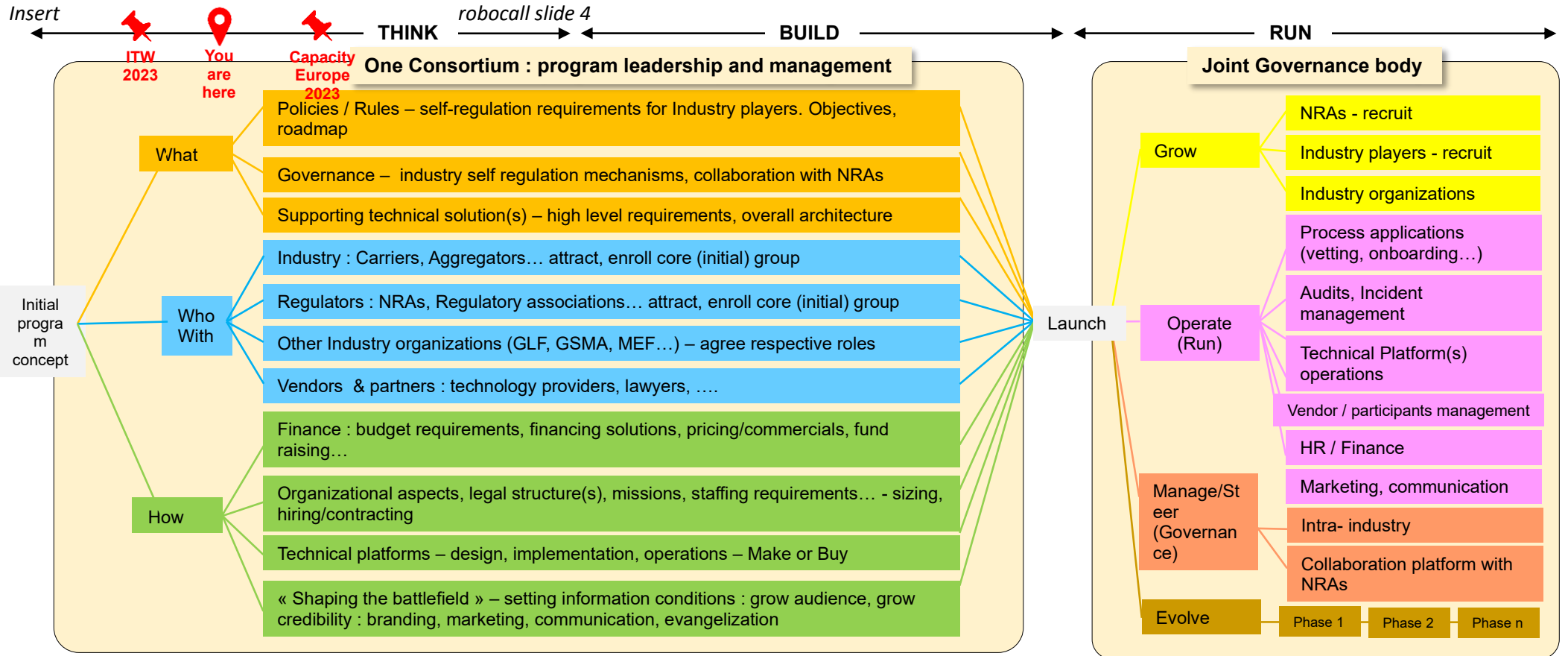
Please see Annex 2 below which explains our thinking.

Finally, we would propose that any and all regulations relating to stopping fraud must be enforced in order to ensure that any national rules actually deter fraudsters.

## Annex 1 - Various National Approaches to Robocall Protection for International Incoming Calls (and Messages)

|              | 1. CLI Securing Solutions |                          | 2. CLI Validating Solutions                       |  |                        | 3. Roaming Status Checks |                         | 4. SMS compliance   |
|--------------|---------------------------|--------------------------|---|--|------------------------|--------------------------|-------------------------|---|
|              | STIR/SHAKEN – Domestic    | International            | CLI Sanity Checks                                 | DNO                                    | Action                 | National                 | International           | CLI and DNO   |
| US           | US/Canadian version       | Intl Gateways (June '23) | Yes   | Yes                                    | No                     | N.a.                     | N.a.                    | CLI Validation and DNO in 2023<br>- Industry : TCR                    |
| Canada       | US/Canadian version       | N.a.                     | Yes   |  | No                     | N.a.                     | N.a.                    |   |
| France       | French version            | N.a.                     | N.a.  | [ Yes ]                                | Blocking               | N.a.                     | N.a.                    | [ DNO ]   |
| Australia    |                           | On international inbound | Industry Code C661                                |  | Blocking               | N.a.                     | N.a.                    | CLI Validation and DNO  |
| Belgium      | N.a.                      | N.a.                     | CLI guidelines BIPT                               |  | Blocking               | N.a.                     | N.a.                    |   |
| Latvia       | N.a.                      | N.a.                     | CLI guidelines NRA                                |  | Blocking               | N.a.                     | N.a.                    |   |
| Norway       | N.a.                      | N.a.                     | Regulation and Nkom Operator agreement 01.09.22   |  | Blocking               | N.a.                     | N.a.                    |   |
| UK           | Consultation June '23     | “                        | CLI guidelines Ofcom National CLI (except mobile) | Yes                                    | Blocking (non mobile)  | Under study              | Consultation (June '23) | - UK Government initiative (May '23)<br>- Industry : MEF SenderID Reg |
| Finland      | N.a.                      | N.a.                     | Guidelines Traficom National CLI (except mobile)  |  | Blocking & CLI Removal | Based on API call        | Via SS7 SRI-SM access   |   |
| Poland       | Under study               | N.a.                     | CLI guidelines UKE                                |  | Blocking               | Based on API call        | CAMEL triggering        |   |
| Germany      | N.a.                      | N.a.                     | For specific CLI ranges                           |  | CLI Removal            | N.a.                     | CAMEL triggering        |   |
| Saudi Arabia | N.a.                      | N.a.                     | N.a.  |  | Blocking               | Based on SS7 ATI         | N.a.                    |   |
| Oman         | N.a.                      | N.a.                     | N.a.  |  | Blocking               | Based on SS7 SRI-SM      | N.a.                    |   |
| China        | N.a.                      | N.a.                     | N.a.  |  | Blocking               | N.a.                     | N.a.                    |   |
| Ireland      | Under study               | “                        | Fixed line  | In progress >75% complete in operators | Blocking               | Under study              | Under study             | Industry : MEF SenderID Reg   |
| India        | N.a.                      |                          | AI/ML-based filtering May 2023                    |  | No                     | N.a.                     | N.a.                    | SMS Blocking of unregistered SenderIDs                                |
| Malaysia     | N.a.                      |                          |   |  |                        |                          |                         | May 2023 – block SMS containing URLs                                  |

# Annex 2 - Various National Approaches to Robocall Protection for International Incoming Calls (and Messages)



## Some key milestones / activities:

