



# Restoring Public Trust in International Communications

An Industry Call to Action

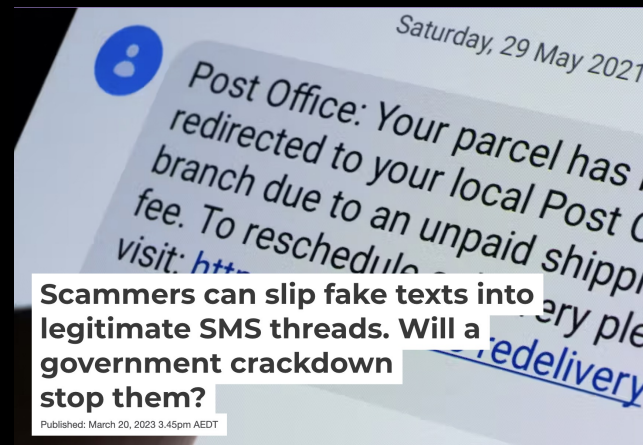
## 'The bad guys aren't just sitting still': Robocall scammers getting more sophisticated



JUNE 6, 2022 / 5:57 PM / CBS PITTSBURGH

TECH

### Consumers Don't Trust Phone Calls From Businesses. Here's How To Restore Their Faith.



PRIVACY

### The Robocalls Problem Is So Bad That the FCC Actually Did Something

A cybersecurity expert explains how we might learn to trust our phones again

## The Loss of Public Trust

## Phone scams are 'exploding' and costing vulnerable Australians millions, new data shows

## Facing the Challenge of our Time

*Spamming, spoofing, robocalling, phishing...*

Unwanted / illegal international communications  
triggering a global telco services crisis

- The **public** - consumers, businesses, administrations - are affected
- National Regulatory Authorities (NRAs) step in to **protect** the public

# Individual national approaches make a consistent approach complex

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

	1. Trusted CLI National Solutions		2. CLI Validating Solutions				3. Roaming Status Checks		4. SMS compliance	5. Vetting Process Traffic Statistics
	Voice	SMS	CLI Sanity Checks	DNO	CLI Removal	Call Blocking Policies	National	International	CLI and DNO	
US	US STIR/SHAKEN	TCR	Yes	Yes	N.a.	No	N.a.	N.a.	CLI Validation and DNO in 2023	N.a.
Canada	Canadian STIR/SHAKEN	N.a.	Yes		N.a.	No	N.a.	N.a.		N.a.
France	French version	N.a.	N.a.		N.a.	Yes	N.a.	N.a.	DNO	N.a.
Australia	On international inbound	N.a.	Industry Code C661		N.a.	Yes	N.a.	N.a.	CLI Validation and DNO	N.a.
Belgium	N.a.	N.a.	CLI guidelines BIPT		N.a.	Yes	N.a.	N.a.		N.a.
Latvia	N.a.	N.a.	CLI guidelines NRA		N.a.	Yes	N.a.	N.a.		N.a.
Norway	N.a.	N.a.	Regulation and Nkom Operator agreement (11 09 22)		N.a.	Yes	N.a.	N.a.		N.a.
UK	Consultation 23 06 23	MHF SenderID	CLI guidelines (from National CLI (except mobile))	Yes	Under study	Yes	Under study	(from recommended)		N.a.
Finland	N.a.	N.a.	Guidelines Traficom National CLI (except mobile)		If CLI not trusted	Yes	Based on API call	Via SS7 SRI-SM access		N.a.
Poland	Under study	N.a.	CLI guidelines UKI		N.a.	Yes	Based on API call	CAMEL triggering		N.a.
Germany	N.a.	N.a.	For specific CLI ranges		If CLI not trusted	No	N.a.	CAMEL triggering		N.a.
Saudi Arabia	N.a.	N.a.	N.a.		N.a.	Yes	Based on SS7 API	N.a.		N.a.
Oman	N.a.	N.a.	N.a.		N.a.	Yes	Based on SS7 SRI-SM	N.a.		N.a.
China	N.a.	N.a.	N.a.		N.a.	Yes	N.a.	N.a.		Realtime monitoring
Ireland	Under study	MHF SenderID	Fixed line	In progress > 70% complete in operators	Under study	??	Under study	Under study		N.a.
India	N.a.	Blockchain registry	AI/ML-based filtering May 2023		N.a.	No	N.a.	N.a.	CLI validation AI/ML-based filtering May 2023	N.a.
Malaysia	N.a.								May 23 – block SMS from local and int. mobile no	
Spain		MHF SenderID								
Sweden								Under discussion		

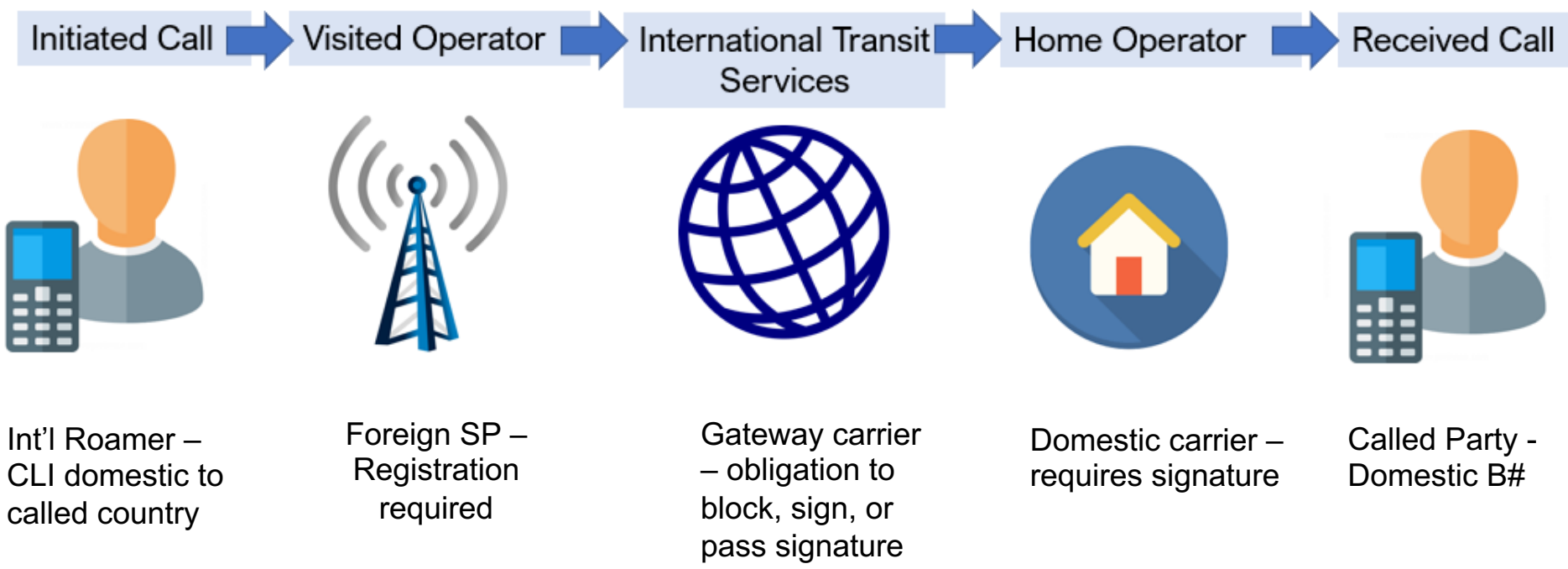
# Fragmentation impacts entire international communications ecosystem

- Substantial and **costly** burden on NRAs – with limited authority internationally
- Confusion and increased complexity in the Telco community results in **slow adoption**
- **Negative outcomes for genuine** international communications presenting as “high risk” traffic

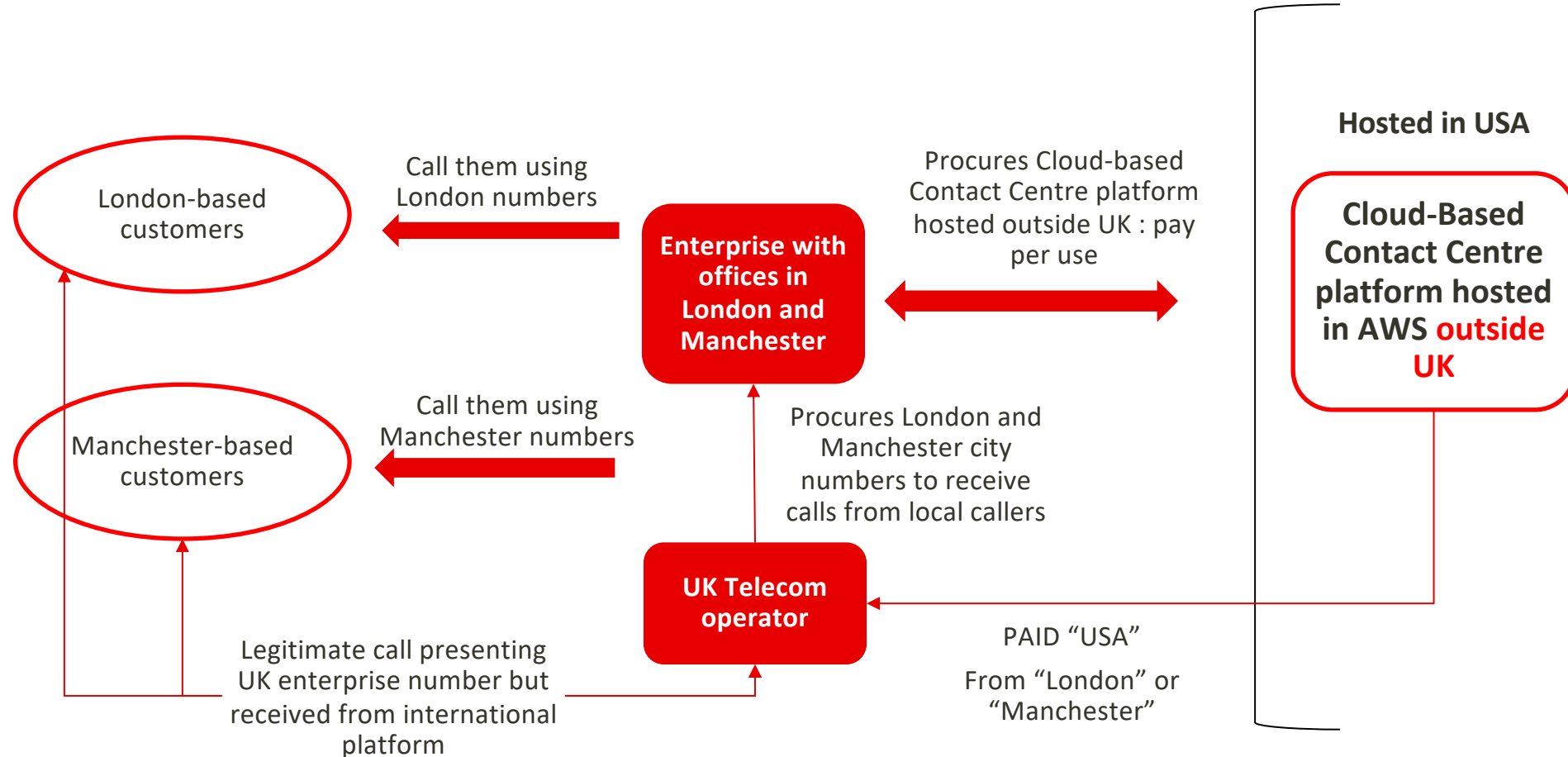
Multiple potential points of failure (blocking) exist based upon the specific mandates in place

- Gateway carrier may block the call if the visited network operator is not registered
- Home network operator may block if the call is not signed or if transit carrier is not registered

Use Case  
International roaming disruption  
(USA regulations)



# Use Case Cloud Based Contact Centre



# Lessons learned (USA regulation)

## Coordination

*Uncoordinated response, driven by NRAs only, has limitations*

- “whack-a-mole” situation
- Address the **origin** end of the problem
- **Compatibility** and **interworking** are key

## Inclusivity

*Int’l Carriers are part of the solution, need to be part of the discussion*

- Can provide the “link” **between NRAs**
- Have **experience** in working together

**Mixed results** in the USA so far



# Need for joint, united response from both Industry and NRAs

**Collaboration:** stakeholders need each other

- Industry players need to engage with NRAs (decision making, enforcement)
- Individual NRAs alone cannot efficiently combat unwanted/illegal communications either as an international angle is needed

**Paradigm shift**

- Complex, global issue that requires collaboration
- Need an unprecedented level of cooperation between the international Carriers Industry and the NRAs
- **Need to jointly discuss, agree and implement a comprehensive framework, efficient and viable**

## Industry and NRAs share **same objectives**

A global,  
inclusive,  
agile,  
coordinated  
response

1. **Reduce** unwanted/illegal communications in general (spoofing, spamming, robocalling...)
2. **Restore** Trust in international communications
3. **Enable** trusted / branded communications

# Addressing NRAs concerns with Industry support

Proposed phased approach: initial focus on int'l Voice – Trust in Voice Services, CLI

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1

Tackle immediate issues : Legitimate International Traffic Using National CLI

- Roaming
  - International Call Center outsourcing
  - International DIDs
- 

2

Address more complex aspects requiring advanced NRAs – Industry cooperation

- CLI Validation (KYC / KYT) through the traffic chain
  - International interworking between national solutions
  - International Call Traceback (incl registration, single global database...)
  - ...
- 



# Some initial thoughts

## Basic CLI validation on international calls

- CLI valid on National and Global [Numbering Plan](#).
- CLI not listed on Do-Not-Originate List

## National CLI on international trunks

- Mobile [roaming](#) calls
- Outsourced [Call Centres](#)
- Enterprise [Global DIDs](#)

## International Traceback

- Global, international [database & process](#)

## International [trusted CLI](#) solutions

- Enable “trusted calls” with delivery of [trusted CLI indicator](#)
- Branded calls – brand name of Caller ID, call reason text

## [Interworking](#) between national solutions

- Trusted Calls from originating country [transited & delivered](#) to terminating country as Trusted Call with verified CLI.

# Our vision: Co-developing policy, governance

1

## Unified Guidance & Solutions

- Standardized global guidance
- Industry viable solutions
- Start with international calls with National CLI inbound to country

2

## Self/Joint Regulation Framework

- Joint/self-regulation framework to enforce unified guidance & solutions
- Opt-in framework for Carriers, NRAs
- Compliance at Carrier or trunk level
- Compliance monitoring, enforcement
- Compliance may bring “Trusted Carrier” benefits from participating NRAs & fellow Industry players
- Non-compliance results in Industry and NRAs inflicted penalties

3

## Joint Governance

- Joint overall management of the joint/self-regulation framework (NRAs, Industry)
- Jointly address NEW issues, adapt & improve framework

## i3forum not the only ones thinking this

- Great **traction** in the industry
- Confirmed **support** from other industry organizations
- Work has **already started**

## Industry best practices & initiatives

- i3forum/**GLF** joint Code of Conduct on Voice Fraud
- i3forum/**GSC** MoU on SMS Fraud
- Messaging Code of Conduct building on **MEF** work
- **KYT** expertise
- i3forum **Numbering Plan Community**
- **CLI Safe zone** concept developed by i3forum
- Working with National Telco Associations
- ...

## NRA best practices

- **KYC**: validation of CLI and right-to-use
- **IsRoaming**: is a consumer actually roaming? Improvements can be enabled through regulation
- **Traceback**: requires regulation
- ...

# Thank you for your attention

Your feedback is very much appreciated

i3forum is very interested in progressing this discussion with you