

International Revenue Share Fraud PRISM – An Introduction



International revenue share fraud – A threat you cannot afford to ignore.

CFCA GLOBAL FRAUD LOSS SURVEY 2015

Total Estimated Fraud Losses = **\$US38.1 Billion**

Down 17.8% on 2013 Survey figures

IRSF Estimated Fraud
losses 2013 Survey

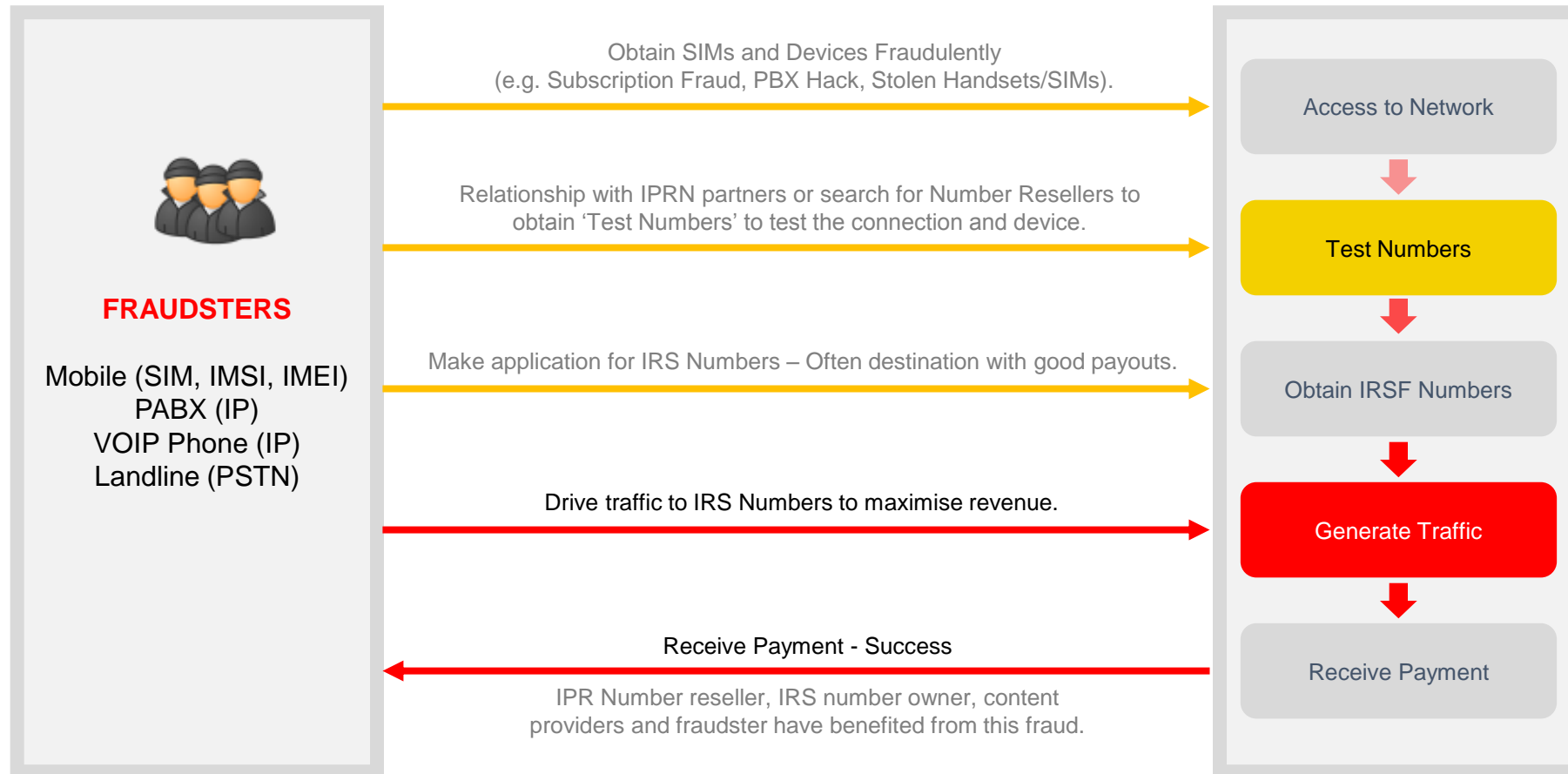
\$US1.8 Billion

IRSF Estimated Fraud
losses 2015 Survey

\$US10.7 Billion

Up by 497% from 2013

Typical modus operandi of fraudsters before an IRSF attack.



PRISM – a cloud based pioneering database to tackle IRSF fraud.



No technology overheads. **A simple and secure cloud database.**
Subscriber set up in few seconds.



Over 412,000 Test Numbers in PRISM (as at 06/02/2017). 160+
number resellers assessed. **Numbers updated every 2 weeks.**



Simple to use. **No training required.** Subscription comes with **complete support and expert advice.**



The lowest cost IRSF Detection/Prevention tool available. ROI of
several folds by stopping just one IRSF attacks.

How can PRISM help fight against IRSF attacks?

1

Use the *'PRISM Test Numbers'* or *'PRISM Wildcard Test Numbers'* as B-NO hotlist in your FMS.

2

Monitor all calls (A-NO) to this B-NO hotlist and destinations. Identify devices used (SIMs, IMEIs, PSTN, PBX etc.) by the callers.

3

Alert all calls originating from the same number (A-NO) or devices used for making calls the B-NO hotlist (e.g. SIMs, IMEIs, PBX etc.)

4

If a call alerts against a PRISM number, then it is because that number has been advertised by an IPRN Reseller. This 1 minute call becomes important

5

Search for other SIMs and devices that may also be under the control of these fraudsters and implement your approved procedures for IRSF incidents.

How can PRISM help fight against IRSF attacks?

6

In most IRSF incidents, fraudsters will first call an IPR Test Number to confirm that the destination country and number range can be reached from their calling location and from the device they are using to originate the calls

7

In many cases, these test calls occur 10 to 45 minutes before IRSF call pumping commences (or longer), to allow fraudster to establish final arrangements

8

Look at recent IRSF call records, and in most cases you will see <1 to 2 minute calls to the IRSF destinations before the IRSF calls escalate. (This may not occur if Fraudster has an existing relationship with IPRN reseller)

9

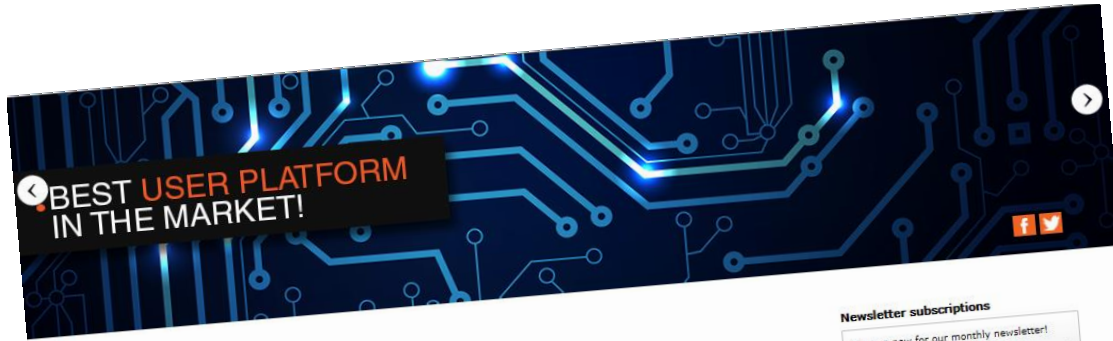
A hotlist alert from a PRISM number called will initiate an investigation and identify a pending IRSF attack, or provide confirmation that one has started

10

PRISM does not contain all IPR Test Numbers, but our customers advise that it will provide early warning in between 75 and 85% of IRSF attacks

Introduction to PRISM Database

Every 2 weeks we search 160 of these websites to create the PRISM database.



New International VAS Offer

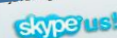
* Domestic calls for each destination are not allowed. No payments will be made according to this restriction

Destination	Test Number
Afghanistan B1	93704860403
Albania A1	35551181228
Albania A2	355669160030
Albania B1	35545750812
Albania B2	35552450433
Albania C1	35542490448
Albania C2	35542490448
Albania C3	35542490448
Albania C4	35542490448
Albania C5	35542490448

Newsletter subscriptions

Sign up now for our monthly newsletter!

Send



Group Name	Number	Default payment terms
Afghanistan 11	0093777463904	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 12	0093780872998	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 13	0093752289134	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 14	0093795903362	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 16	0093770029876	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 17	0093797993904	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 18	0093780009987	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 20	0093780009985	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 24	0093546681160	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 26	0093763029036	EVERY 30 DAYS 45 DAYS DELAY
Afghanistan 31	0093729039110	EVERY 30 DAYS 30 DAYS DELAY
Afghanistan 9	0093779721503	EVERY 30 DAYS 30 DAYS DELAY
Albania 10	00355669170601	EVERY 30 DAYS 45 DAYS DELAY
Albania 11	0035552450295	EVERY 30 DAYS 45 DAYS DELAY
Albania 12	00355669141693	EVERY 30 DAYS 45 DAYS DELAY
Albania 4	0035542500450	EVERY 30 DAYS 45 DAYS DELAY
Albania 5	00355689326606	EVERY 30 DAYS 45 DAYS DELAY
Albania 7	00355681903655	EVERY 30 DAYS 30 DAYS DELAY
Albania 8	00355663946108	EVERY 30 DAYS 45 DAYS DELAY
Albania 9	0035545750871	EVERY 30 DAYS 45 DAYS DELAY
Algeria 3	0021372795033	EVERY 30 DAYS 30 DAYS DELAY
Algeria 5	00213695000163	EVERY 30 DAYS 45 DAYS DELAY
Algeria 6	00213559000011	EVERY 15 DAYS 30 DAYS DELAY

Navigation: Payouts, On-Line report, Numbers, Order, My account, Price lists, My news, Download, Customization, Invoice, News

Report view: Sum per number

Filter: Prefix (ANY, 1 246 256, 1 246 859a, 1 246 859b), Number from, Date from (2014-11-12), Date to (2014-11-12), Billing (Weekly, Monthly, Two monthly)

Buttons: Confirm, Today, Yesterday, Current Month, Last Month, Export

TEST NUMBERS and PRICE LIST
Download here

This week **HOT** terminations:
960 915 | 960 900 8 | 53 319 97
231 902 | 48 185 21 | 232 212 06

Be informed and check the section **NEWS!**

SILVER PAYOUTS for ONLY 250,000 minutes SPECIAL OFFER for NOVEMBER 2014

November 2014 NEW Terminations

+224 78 09	Guinea	+22478006980
+257 161 8	Burundi	+25716189130
+48 221 13	Poland	+48221138240
+232 212 06	Sierra Leone	+23221062200
+53 431 30	Cuba	+5343130080

User name	Prefix	PRN	Calls	Minutes	Currency	Revenue/min	Revenue	Date
test	1 246 859a	12468599140	6	0.78 min	USD	0.075	0.06	2014-11-12
test	1 473 507	14735077640	1	0.07 min	EUR	0.19	0.01	2014-11-12
test	1 473 901	14739018040	12	1.92 min	USD	0.087	0.17	2014-11-12
test	220 891	2208913040	3	0.15 min	USD	0.12	0.02	2014-11-12
test	220 99	2209974270	3	0.48 min	USD	0.115	0.06	2014-11-12
test	224 55 30	22455300860	1	0.17 min	USD	0.155	0.03	2014-11-12

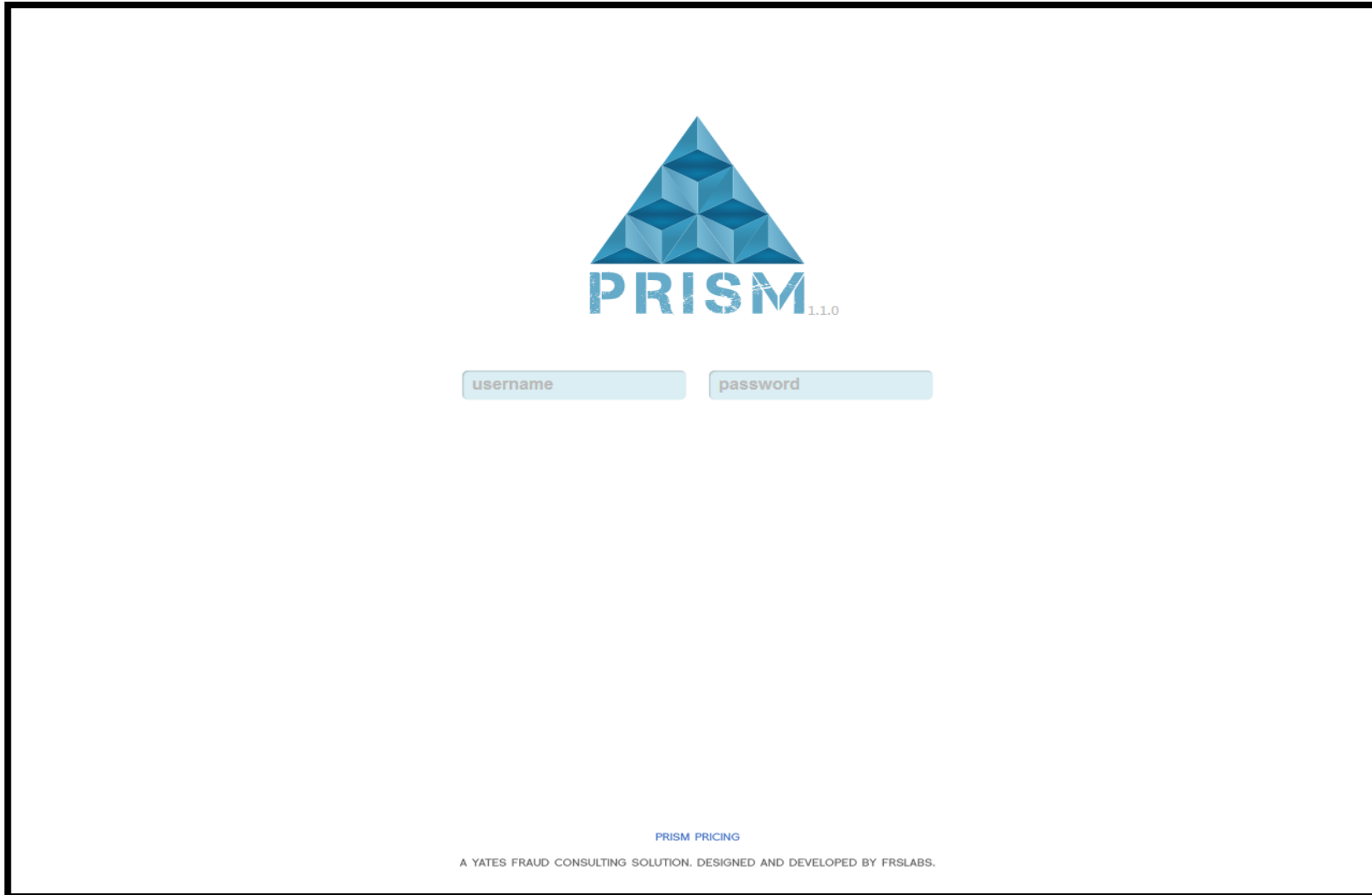
Feedback

Navigation: HOME, ABOUT US, SERVICES, PAYMENTS, PREMIUM NUMBERS, PRIVACY POLICY, CONTACT US

Premium Numbers !

SR	Country	Currency	Rate/Daily	Rate Card XLS	Test Numbers
1	AfghanistanB1	USD	0.0725		93704860403
2	AlbaniaA2	EUR	0.075		355669160030
3	AlbaniaB1	EUR	0.075		35545750812

Login Screen



The image shows a login screen for PRISM 1.1.0. At the top center is a blue geometric logo consisting of a triangle made of smaller triangles, with the word "PRISM" in a bold, blue, sans-serif font and "1.1.0" in a smaller font to its right. Below the logo are two light blue input fields: the first is labeled "username" and the second is labeled "password". At the bottom center, there is a small blue link that says "PRISM PRICING". At the very bottom, in a small grey font, it reads "A YATES FRAUD CONSULTING SOLUTION. DESIGNED AND DEVELOPED BY FRSLABS."

- Database is hosted on a Rackspace cloud server.
- Secure https access by subscribers to server via SSL Certificate.
- Database has an XLS upload and download feature.
- Browser access supports Chrome (Version 28+), Safari (Version 5+), Firefox 3.6 and IE 8+
- No technology overheads. A simple and secure cloud database. Subscriber set up in a few minutes.
- Simple to use. No training required. Subscription comes with complete support.
- Recently developed an API to allow the automated downloading of PRISM numbers to customers FMS

PRISM Database Fields

IRSF Test Numbers

Logged in as: Colin

PRISM

Home
 Admin
 Dashboard
 Feedback
 Help
 Logout

412,534 Total Records | Report Last Updated: 06/02/2017 00:00:00

↑ Upload
↓ Download

	Terminating Country	Test Number	First Advertised Date	Latest Update Date
1	Afghanistan	93067172167	19/01/2017	19/01/2017
2	Afghanistan	93067172410	06/02/2017	06/02/2017
3	Afghanistan	93085820403	21/12/2016	21/12/2016
4	Afghanistan	93086838201	19/01/2017	19/01/2017
5	Afghanistan	93086838817	06/02/2017	06/02/2017
6	Afghanistan	93096871248	21/12/2016	21/12/2016
7	Afghanistan	93202107376	06/07/2016	06/07/2016
8	Afghanistan	93202107402	05/08/2016	05/08/2016
9	Afghanistan	93202107516	06/09/2016	06/09/2016
10	Afghanistan	93202107595	11/11/2016	11/11/2016
11	Afghanistan	93202107755	04/01/2017	19/01/2017
12	Afghanistan	93202107807	05/05/2016	05/05/2016
13	Afghanistan	93202108261	19/01/2017	06/02/2017
14	Afghanistan	93202108262	06/10/2016	06/10/2016
15	Afghanistan	93202108297	04/01/2017	04/01/2017
16	Afghanistan	93202108435	06/10/2016	06/10/2016
17	Afghanistan	93202108453	06/09/2016	06/09/2016
18	Afghanistan	93202108598	05/08/2016	05/08/2016
19	Afghanistan	93202108633	21/12/2016	21/12/2016

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- Over 160 IPRN Websites monitored.
- Numbers updated every 2 weeks.
- Numbers have increased from 17,000 3 years ago to over 412,000 now.
- Numbers originate from 221 Countries.
- The 412,000 unique numbers have been advertised over 725,000 times over multiple websites.
- Also provide the PRISM ‘Wildcard’ database.
- Last 2 digits removed and replaced with Wildcards with over 7 million numbers in DB.
- Significant resource requirement to source, download and cleanse numbers.

Test Numbers - Value as an IRSF identifier

CASE STUDY – EUROPEAN MOBILE OPERATOR (1)

- Jan 2015, Fraudsters obtained 24 SIM cards and took these to a neighbouring country.
- 8th Jan, Fraudsters made 14 test calls. 4 were to PRISM IPR Test Numbers.
- 9th Jan, Fraudsters made 37 test calls. 25 were to PRISM Test Numbers. Last test call on 9 Jan at 2027 hrs
- 9th Jan, 2028 hrs through to 11 Jan 1638hrs. Made 8422 long duration IRSF calls
- 11 Jan, made 36 test calls between 1653 and 1753 hrs. All numbers in PRISM
- From that time through to 1638 hrs on 12 Jan, made another 3080 long duration IRSF calls
- Total IRSF call volumes 386,000 minutes with retail value of €520,000
- 65 of the calls were to IPR Test numbers in PRISM – all would have generated alerts if hot-listed
- The first PRISM alarm would have occurred 26 hours before AIT started, with 31 alarms possible before AIT commenced
- Had PRISM been in place at victim Operators premises, losses could have been less than €200.00
- Operator who was victim of this fraud is now a PRISM customer.

Test Numbers - Value as an IRSF identifier CASE STUDY – EUROPEAN MOBILE OPERATOR (2)

- Ongoing issue in another European Country where Fraudsters are using Social Media to make friends in operators home country and convince them to send local SIM cards to Fraudsters.
- Fraudsters then using these SIM cards to make IRSF calls.
- Roaming records (NRTRDE) arriving 3-4 hours after traffic inflation starts, so losses high.
- Victim operator checked call records from previous few incidents and found obvious test numbers being called, most 30-40 minutes before AIT started.
- They were provided with access to PRISM and all test calls appearing in IRSF call records were in PRISM Database.
- Checking further they found that because these test calls were 30-40 minutes earlier than the AIT traffic, Operator would have been notified in an earlier NRTRDE record had they been using PRISM.
- This would have considerably reduced their fraud losses.
- Operator victim is now using PRISM.

Business Case Considerations

- PRISM is quite different to the GSMA Hot Number Range list.
- GSMA numbers are those previously used for fraud and are typically blocked.
- PRISM numbers are Test Numbers advertised by IPRN Resellers to test that a number and destination can be called from a fraudsters location and device.
- Used as a Called Number Hotlist, these can provide an early warning prior to traffic inflation starting in an IRSF attack.
- An alert generated from a PRISM Test Number will allow an IRSF attack to be closed down immediately with a return of the investment made in the PRISM subscription being recovered following the first IRSF attack detected.
- The Wildcard database has proven to be an effective tool to identify Wangiri Fraud attacks.
- Alerting against inward and outward calls to Wildcard numbers allows for identified Wangiri Fraud numbers to be blocked. This provides significant protection to customers.
- Low risk. Access to PRISM by annual subscription. If it provides little value (unlikely) simply do not renew the subscription next year without penalty.

Important issues you should be aware of

- The 3rd and 4th columns in PRISM are headed 'First Advertised Date' and Latest Update Date'. If the Latest Update Date against any number is the current month, this signifies that the number is currently being advertised by an IPRN Reseller. There are normally between 90,000 and 120,000 of these, so as they are current, they are considered the highest risk of being used during the month. The date difference between column First Advertised Date and Latest Update Date indicates how long that test number has been advertised. To reduce the number of false positive alerts from PRISM, it is recommended that once the numbers are downloaded, they are sorted by the Latest Update Date column, and all numbers showing the current month in that column are entered in to a 'single called number hotlist' and classified as high risk. These are the test numbers most likely to be used during the current month.
- The remaining numbers should be entered in to a second hotlist with a more flexible rule, such as 3 or more calls originating in a 15 minute period. Although not advertised in the current month, these numbers are likely to be 'recycled' or even moved from the test number pool to the number allocation pool.
- If a number is in PRISM, then it is there because it has been advertised by an IPRN Reseller, either on their website or their rate card, as an International Revenue Share test number. PRISM does not contain numbers that have been used for IRSF (unless a test number has previously been used). Some of these numbers previously used for fraud can be obtained from the GSMA by downloading their 'Hot Number Range List'.

Final Words

- Those who are using PRISM now rely on this as a key tool in their IRSF defence strategy.
- Unfortunately most of the existing PRISM customers started using the product after one or more significant IRSF hits. All would agree that they should have done this earlier.
- We are now adding between 15,000 and 25,000 new numbers to PRISM every month and the number of IPRN Resellers continues to increase.
- The CFCA survey results speak for themselves – Overall fraud is dropping by 17.8% but IRSF is up by 497% over the past 2 years. The number of IPRN's advertised each month has increased by 83% between Jan 2016 and Jan 2017
- The industry has failed to find a way to manage this fraud over many years, and there is nothing happening currently that is likely to change that.
- The majority of fraud enablers are being used for IRSF or related frauds.
- A standard Rules based FMS will provide some protection, but PRISM can increase that detection rate by 70-80%.

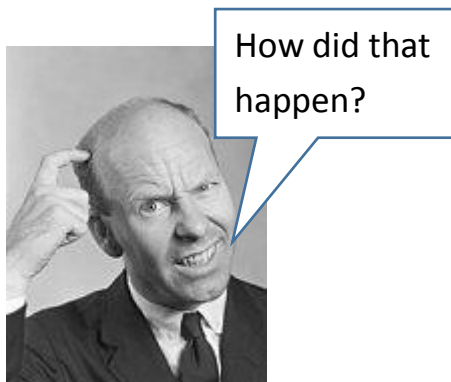
One low subscription fee – quick set up – real savings.

**“IRSF is one of the top
Emerging Threats”**

Source: CFCFA Global Fraud Loss Survey 2011 .

**~~“IRSF is one of the now the top
Emerging Industry Threats”~~**

*Source: CSP’s who have suffered significant
IRSF attacks in 2015.*



Thank You

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