

TELESHIELD™ CASE STUDY 2

International Premium Rate Number (IPRN) Database

Introduction

Between the 2nd and 24th February, a small Telecom Carrier in the Asia Pacific region who had suffered IRSF attacks for the previous 3 months, had another incident of IRSF. On this occasion, the fraud calls took place on the 2nd, 3rd, 9th, 23rd and 24th February.

The victim Carrier requested assistance to both confirm that these attacks were International Revenue Share Fraud, and to advise them if use of the IPRN database could have prevented this attack, and any further IRSF attacks they may suffer.

DETAILS OF THE FRAUD

This fraud incident occurred in February. Details of this fraud were:

- This attack occurred between the 2nd and 24th February over a 5 day period.
- There were 2721 calls made to 150 unique numbers in 16 countries.
- The total duration of these calls was 35,681 minutes (594 hours), an average of 119 hours per day.

INTERNATIONAL REVENUE SHARE FRAUD

- Analysing the numbers called during this IRSF attack identified 50 numbers with a 100% match to the IPRN database numbers and another 82 partial matches to the last digit. This represents an 88% success rate, with 132 of the 150 unique numbers being identified.
- Matching these identified numbers against the calls made found that 62 of the calls made were to numbers that were a 100% match with the IPRN database while another 2637 calls were a partial match to the last digit. This represents a 99.1% success rate, with 2699 of the 2721 calls made identified through use of the IPRN database.

Could the IPRN database have prevented this fraud?

Absolutely. The 1st call made during this fraud was to a 100% matching IPRN numbers in Iran. There were 139 calls made during the first 60 minutes of this IRSF attack, and 38 of these were exact matches to the IPRN database numbers and 85 to partial numbers (to the last digit). This is a total of 123 matches from 139 calls, an 88.5% hit rate.

The IRSF attack certainly would have been discovered and shut down during the first 30–60 minutes of this fraud, preventing it from continuing for another 5 days before being discovered.

CONCLUSION

This is a very good result with a 99% success rate in identifying IRSF calls, and 88% for the called numbers.