

Internet Telephony Services Providers' Association
The Voice of Advanced Communications

Cyber Crime: Telephony Fraud

- The global cost of all forms of telecommunications fraud is estimated at \$46 billion, adding an estimated 2% to users' bills.
- Evidence shows that telephony fraud is originating in states where there is significant amount of dubious activity and high suspicion that it is in fact funding crime and, in some cases, terrorist activities.
- Successful law enforcement in the area is very low, which has led to underreporting of this crime by the industry.
- Ofcom already possess statutory powers in this area to request Communications Providers to block telephone numbers and withhold the revenue payments that occur through the termination of telephone calls – known as “out payments”. However, there is little evidence to show these powers being used.
- There is a clear need to: determine why Ofcom is not using their power in this area; improve international cooperation between governments and regulators; and ultimately block out payments to end the crime completely.

Background

ITSPA has long had concerns over the level of telecommunications fraud in the UK. Global estimates of the level of fraud are \$46 billion, which we equate to adding 2% on average to consumers' bills¹. Other estimates put the UK cost at £953 million, equivalent to 2.4% of total operator revenue².

One of the most prevalent forms of telephony fraud is known as International Revenue Share Fraud. In IRSF, a fraudster partners with a local carrier that charges high rates for call termination (the principle whereby one telecommunications provider pays another for a call terminating on its network) with an agreement formed to share revenue for any traffic generated by the fraudster. In most instances the fraudster hacks a specific phone network, for example a user in the UK, and then makes multiple calls to the local carrier it had formed an agreement with. This type of fraud is particularly prevalent in countries with significant populations with dubious intent towards the western world, including Yemen and Somalia, and in many cases the proceeds of the fraud are used to finance terrorist activities.

Impact of IRSF

As mentioned, IRSF results in a significant financial cost to communications providers and consumers in the UK. A recent survey of 1000 businesses performed by a tier one operator and ITSPA member in the UK revealed that 27% of those surveyed had been victim of a telephone hack over the past five years, resulting in the company being billed for calls that their employees did not make. The average cost to each business was some £12,126.

¹ The Communications Fraud Control Association, [World Telecom Fraud Survey](#), 2013

² National Fraud Authority, [Annual Fraud Indicator](#), 2013

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In addition to the financial cost that IRSF places on communications providers and consumers, this form of telephony fraud also causes harm to British Overseas Territories and British citizens when overseas. In order to guard against increased incidents of fraud appearing to be ending in certain states, it is common practice for UK operators to block all calls to an entire state with obvious consequences for British citizens in those states. A notable recent example of this occurred in the Ascension Islands when, following a notable increase in fraud incidents, many UK operators had to block all calls to the entire territory.

Failure to act and recommended action

Telephony fraud has long been overlooked by Government, the communications regulator Ofcom and law enforcement agencies. This has resulted in underreporting from the industry due to the widespread belief that the relevant authorities will not act despite, in the case of the regulator, a legal power existing which would prevent the crime.

In May 2011, Article 28 (2) of the Universal Service Directive was transposed into Ofcom General Condition of Entitlement 20 (3):

'20.3 The Communications Provider shall, where requested by or on behalf of Ofcom on the basis of fraud or misuse, block access to Telephone Numbers and/or Public Electronic Communications Services and in such cases withhold revenue associated with such Telephone Numbers and/or Public Electronic Communications Services.'

Ofcom has therefore had the power to intervene in telephony fraud originating in Europe for five and a half years. However, as far as ITSPA is aware, this power has only been used twice.

ITSPA highlights that Parliament should encourage Ofcom to use its existing power intervene in cases of telephony fraud originating in Europe. This crime is harming both consumers and businesses in the UK.

Additionally, it is essential that Ofcom and the Government improve their collaboration with international governments and regulators to address this crime. Cross-border collaboration is required to provide a long-term international solution to this problem. Whilst ITSPA was pleased to see the recently published National Cyber Security Strategy commit the Government to building international partnerships to help in 'bringing criminals in overseas jurisdictions to justice', we were concerned to see no explicit reference to telecoms or telephony fraud.

ITSPA would urge Parliament to encourage Government to include telephony fraud as part of its Cyber Security Strategy, including measures around the training and education of law enforcement and the public, as well as working more closely with international governments and regulators.

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Business Fixed Line Switching

- The current system in the UK for fixed line business switching is not fit for purpose, with communications providers (CPs) having to negotiate bilateral agreements with other providers in a laborious and problem-plagued process.
- Difficulties in the switching process often result in consumers losing their telephony service or being prevented from switching altogether, harming consumers and the competitiveness of the sector.
- CPs are currently forced to devote an inappropriate amount of resource attempting to resolve problems that have originated at some point during the switching process.
- Industry-led attempts to resolve the current situation have failed and there is now a lack of willingness from the regulator to tackle the problem, despite the opportunities provided by the Digital Communications Review and the General Condition review.
- It is now the time for the Parliament to urge the regulator to act, given the widespread difficulties which are harming consumers and the telecommunications sector.

Background

The current UK system for fixed line business switching (the system which enables consumers to switch telephony provider whilst keeping the same phone number) is in urgent need of reform.

The ability to switch service provider relies on a system known as number portability, which enables subscribers to change provider whilst keeping their existing telephone number.

Whilst the system generally works for residential switching of a single line between major operators, the situation for businesses and particularly those who are customers of non-major operators is not fit for purpose, with the complexities and inadequacies often causing significant delays and users going without services when consumers attempt to switch.

The current UK system relies on communications providers (CPs) setting up multiple bilateral agreements between each other. Unsurprisingly, the process of setting these up is highly onerous, with there being opportunities for CPs to play games if they feel so inclined.

A further inadequacy with the current system in the UK is that call routing is indirect. This means that an originating CP is forced to route a call to a ported number to the original range holder network. That range holder network then has to onward route the call to the recipient network.

It has been suggested in the past that the establishment of a centralised service in this area would resolve the problems facing CPs and their users. However, this has been attempted multiple times over the years and has repeatedly failed.

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Impact

Not only do the problems with the current system cause significant consumer harm, they also create a range of difficulties for the providers themselves. Many operators are forced to waste a significant amount of resource in attempting to resolve switching problems and the service disruption that often results. Indeed, a large member of ITSPA has over 50 members of staff allotted to working on the problems in this area.

Additionally, the inadequacies of the fixed line business switching system also harm the competitiveness of the UK's telecoms industry. When the process of switching provider is as plagued by problems as it currently is, it is inevitable that businesses will choose to stick with their current provider rather than risk losing their telephony service during their attempted switch.

There are over 5.4 million SMEs in the UK, constituting a vital part of the economy's future growth. It is essential that these businesses are provided with unhindered access to affordable and flexible communications systems to ensure that they continue to grow and thrive.

Lack of progress & proposed action

Despite suggestions in March 2015 that switching (including fixed line switching) would be reviewed as part of the Digital Communications Review, little progress has been made in this area.

As part of the Digital Communications Review, Ofcom announced that their General Conditions of Entitlement would be reviewed. ITSPA initially hoped that the GC review exercise would allow GC18 (the Condition related to fixed line switching) to be amended in a manner which would address the problems the industry is facing – potentially through defining reasonable timescales around switching services. However, it has become apparent in ITSPA's more recent meetings with Ofcom that the GC review is in fact a tidy-up exercise and the General Conditions, including GC18, will not undergo significant changes.

Following a number of failed attempted industry-led solutions and now an apparent lack of willing from the regulator to address the issue, ITSPA would urge Parliament to impress upon Ofcom the urgent need for reform in this area given the significant harm it is causing both to business consumers and the industry.