



IPO Call for Views: Illicit IPTV Streaming Devices

BT Submission

6 April 2017

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Introduction and executive summary

Introduction to BT

BT is one of the world's leading providers of communications services and solutions, serving customers in 180 countries. Its principal activities include the provision of networked IT services globally; local, national and international telecommunications services to its customers for use at home, at work and on the move; broadband, TV and internet products and services; and converged fixed-mobile products and services. BT consists of six customer-facing lines of business: Consumer, EE, Business and Public Sector, Global Services, Wholesale and Ventures, and Openreach.

We established our TV business over ten years ago and continue to add customers as we build our content and technical offer. We deliver our own TV services over a range of platforms, including via BT TV, our managed IPTV service, which enables us to bring technical innovations to our customers: for example, we were the first TV service in the UK to broadcast live sport in Ultra HD via the *BT Sport 4k UHD* channel and, in a world-first, we have now added Dolby Atmos surround sound to this channel, to further enhance the TV viewing experience.

We launched BT Sport in 2013 and are now in over five million households. To build this business we have made multi-billion pound investments in exclusive sports content which we seek to offer at accessible prices and in a range of formats to domestic and commercial (e.g. pubs and clubs) subscribers.

Executive Summary

BT believes in the importance of copyright protection as an essential element in maintaining the ongoing success of the UK creative industries, a sector which is worth £84.9 billion and is growing at twice the rate of the rest of the UK economy providing 2.8 million jobs¹. Continuing to support and underpin the success of this sector will be even more important as we approach (and, ultimately, implement) Brexit.

Illicit IPTV Devices² form one component of a complex 'value chain' or ecosystem which enables IPTV Piracy³ and represent a fast-growing, global threat to the audiovisual industries. IPTV Piracy is driving a fundamental shift, from web-based viewing of illegal content on PCs and laptops, towards access via apps and devices which can be readily connected to TVs for viewing in the consumer's living-room. This threatens to turn digital access to illegal content into a mainstream and 'normalised' activity which undermines the value of investment in content [see Q1]. There is a clear and pressing need to review and make appropriate amendments to the law to address the challenges that IPTV Piracy presents to legitimate businesses [see Q4].

Legislative change to combat IPTV Piracy will not, in itself, be a "one-stop shop" solution, and must be part of a multi-faceted approach that also includes consumer education, awareness and engagement from Law Enforcement Agencies (LEAs), industry collaboration, "follow the money" approaches engaging all players along the value chain and, where appropriate, litigation [see Q13]. However efforts in all these areas are undermined without timely and appropriate evolution in the law to enable effective enforcement action to be undertaken against IPTV Piracy.

¹ www.gov.uk/government/news/creative-industries-worth-almost-10-million-an-hour-to-economy

² See the table of definitions below.

³ Ibid.

In this regard, any review of the legal framework and subsequent amendment(s) to address IPTV Piracy must:

- be based on a comprehensive, holistic understanding of all aspects of the ecosystem that results in IPTV Piracy;
- be technologically neutral, and be sufficiently flexible to account for a continually evolving IPTV Piracy landscape and avoid introducing legislation that is rendered obsolete due to technological change;
- create effective enforcement options against *all* players within the IPTV Piracy value chain, and not just against those involved in the retail and/or distribution of Illicit IPTV Devices. Therefore, careful consideration should be given to the legal framework as it applies to developers of Illicit Apps and Illicit Add-ons and providers of Illicit Streams.⁴ [see Q4]

In this context, BT considers that the Copyright Designs and Patents Act (CDPA) is the most appropriate statute for amendment with s.297A (unauthorised decoders) being one potential provision suitable for amendment [see Q4].

In conclusion, we acknowledge and welcome this Call for Views which reflects the UK IPO's commitment to ensuring IP rights are respected and appropriately enforced.⁵ We call upon the UK IPO to work in partnership with law enforcement and industry to provide leadership in a concerted effort to tackle the significant threat posed by IPTV Piracy to legitimate businesses and consumers. We envisage that such leadership from the UK IPO would involve the following actions:

1. Consulting with industry to understand all aspects of the IPTV Piracy ecosystem to enable a forward-facing and holistic review of the legal framework prior to any amendment. Although s.297A CDPA is one potential provision appropriate for amendment, all forms of legislative amendment that may facilitate effective enforcement actions against all parts of the IPTV Piracy value chain should be considered in consultation with industry [see Q4];
2. Working with industry to better educate consumers about the risks associated with IPTV Piracy and its adverse impact on the creative industries [see Q1];
3. Facilitating more effective engagement from, and consistency of approach by, LEAs in their enforcement actions against IPTV Piracy [see Q10 and Q12];
4. Supporting initiatives to enhance engagement from legitimate businesses whose services are used to facilitate IPTV Piracy e.g. e-commerce platforms, social media sites, and payment providers [see Q13]; and
5. Building on the UK's relationship with international law enforcement bodies, given the cross-border nature of IPTV Piracy [see Q7-8].

BT, like many other industry stakeholders, has significant resources assigned to proactively tackle various aspects of the challenges raised by IPTV Piracy, including Illicit IPTV Devices, and we welcome this opportunity to further engage with the UK IPO on this issue.

Definitions used in BT's response

IPTV Piracy is a complex issue and we have therefore chosen to adopt certain defined terms below to provide as much clarity as possible about the aspects of the IPTV Piracy ecosystem to which our various responses relate.

⁴ See the table of definitions below.

⁵ *Promoting Innovation and Growth: The Intellectual Property Office at Work 2015/16*
www.gov.uk/government/uploads/system/uploads/attachment_data/file/552791/innovation-and-growth-report-sept-15-16.pdf

'Illicit Streams'	<p>Collective term referring to the various elements involved in the streaming of illegal content, namely:</p> <ul style="list-style-type: none"> • the original source feed of the content (e.g. a satellite decoder box with an activated access card) to obtain the original footage being streamed (e.g. a live football match); • the streaming platform which provides an interface to allow a supplied source feed to be distributed online; and • the streaming server which receives a copy of the original footage which is then transmitted to individual users upon request e.g. via an Illicit App, Illicit IPTV Device and/or Illicit Website.
'Illicit Add-on'	A specific plug-in (e.g. 'TVAddons' ⁶) which enhances and customises another software application (e.g. the Kodi media player ⁷) so that it can access Illicit Streams.
'Illicit Apps'	An app which provides a user-interface through which an end user can access Illicit Streams.
'Illicit IPTV Device'	Hardware (e.g. a set-top box or stick) which has Illicit Apps and/or Illicit Add-ons installed that enable access to Illicit Streams. Well known examples of Illicit IPTV Devices include the MAG250 set-top box or Amazon Firestick (which are in themselves legitimate devices) pre-installed with the legitimate open source media player, Kodi, with the addition of an Illicit Add-On (e.g. TVAddons) that enable access to Illicit Streams. Where such software is pre-installed, such devices are also commonly referred to as a 'fully-loaded' or 'pre-configured' Kodi devices.
'Illicit Websites'	A website which provides a user-interface through which an end user can watch pirated audiovisual content made available by Illicit Streams, whether through an embedded video player or by linking to another website.
'IPTV'	An abbreviation of "Internet Protocol Television". ⁸
'IPTV Piracy'	A collective term referring to the entire ecosystem which results in the making available and consumption by end users of pirated content using IPTV technology and therefore includes suppliers and distributors of Illicit IPTV Devices, developers of Illicit Apps and Illicit Add-ons, operators of Illicit Websites, and providers of Illicit Streams.
'Vanilla IPTV Device'	Legal hardware devices (e.g. a set-top box or stick) that are capable of being configured to access Illicit Streams through the installation of Illicit Apps and/or legitimate software with Illicit Add-ons.

⁶ www.tvaddons.ag/

⁷ 'Kodi' (formerly known as XBMC) is a free, open source software media player and entertainment hub that can be installed on multiple platforms (Linux, OSX, Windows, iOS and Android) <https://kodi.tv/about>

⁸ Within the TV industry, "IPTV" has traditionally been used to describe the managed delivery of content over a proprietary IP network to a proprietary receiving device (an example being BT's own BT TV platform, which delivers TV content over the BT consumer broadband network to BT YouView set top boxes). However, within a piracy context "IPTV" is increasingly used to describe the unmanaged over-the-top (OTT) streaming of Illicit Streams via IP and, unless otherwise stated, in our response "IPTV" is generally used to describe the OTT streaming of Illicit Streams.

Scale of the problem (Q1)

Q 1: Please provide evidence of the scale of the problem of illicit IPTV streaming devices and the economic harm it is causing to broadcasters and content owners

This Call for Views has focussed on Illicit IPTV Devices and our response is necessarily focused on this issue. However, Illicit IPTV Devices are only one aspect of a complex and evolving ecosystem that results in IPTV Piracy. As further explained in our response to Q4, there is a growing trend of consumers accessing illegal content without dedicated hardware such as an Illicit IPTV Device, and in their place, using Infringing Apps on their own general purpose devices (e.g. smartphone, tablet). Therefore it is important that the IPO considers the scale of the problem caused not just by Illicit IPTV Devices, but by *all the elements* within the ecosystem that result in IPTV Piracy. To assist the IPO in this regard, we have provided a brief summary of this IPTV Piracy ecosystem below.

The 'IPTV Piracy' ecosystem

The end user can readily access pirated content via IPTV Piracy through multiple channels, for instance, by using:

- an Illicit IPTV Device with an internet connection and connected to a television;
- a Vanilla IPTV Device⁹ onto which the end user installs Illicit Apps and/or Illicit Add-ons to another enabling software¹⁰;
- their own computer, smartphone or tablet onto which they install Illicit Apps¹¹ and/or using the internet browser to access Illicit Websites.

The ultimate source of pirated content which is accessed by such end users is made available by providers of Illicit Streams. However, such access to pirated content is enabled by other elements within the IPTV Piracy ecosystem, e.g.

- developers of Illicit Apps and Illicit Add-ons;
- operators of Illicit Websites;
- organisations that 'create' Illicit IPTV Devices through the installation of Illicit Apps and/or Illicit Add-ons prior to delivery to end users;
- suppliers and/or distributors of Illicit IPTV Devices.

It is important to note that in some instances, a single entity may be operating *multiple layers* of this ecosystem, involved in end-to-end activities – i.e. from making available the pirated content at source (i.e. as the provider of Illicit Streams), developing Illicit Apps and Illicit Add-ons, through to supplying Illicit IPTV Devices to users – and typically operate a subscription model to IPTV Piracy.

A well-known example of this type of entity involved in multiple layers of the IPTV Piracy ecosystem is "TV Addons", which according to its website is "*owned and operated by a company based in the Caribbean, with infrastructure hosted on offshore servers located around the world*"¹². As shown from

⁹ There are a large range of Vanilla IPTV Devices, with popular models including Amazon Fire Sticks, Mag254 Boxes or an NVidia shield. The factory version will contain no content, but these devices can be modified in the settings to enable the usage of 3rd party applications, including Illicit Apps and the enabling software onto which Illicit Add-ons are installed.

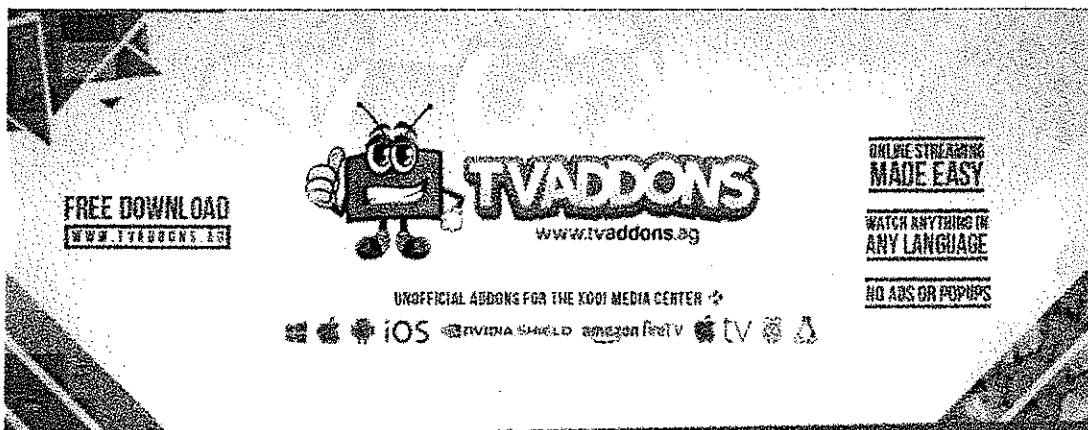
¹⁰ 'Kodi' is the most popular media player, although there are many other alternatives e.g. Plex and Roku. To be clear, these media players are, in themselves, legitimate software applications.

¹¹ If the end user is using the open source Android operating system, it is easy to install Illicit Apps, whereas other closed operating systems (e.g. Apple iOS) may require the end user to "jailbreak" the device first before being able to install Illicit Apps.

¹² www.tvaddons.ag/about-unofficial-addons/

the screenshots below, its profile includes advertising such as "WATCH ANYTHING IN ANY LANGUAGE", "NO ADDS OR POPUPS" and instructions on how to configure Illicit Add-ons.

Screenshot from TV Addons Facebook page:



Google search result for 'TV Addons':

Unofficial Kodi Addons for the Kodi Media Center | TV ADDONS

<https://www.tvaddons.ag/> ▼

There's no having fun with Kodi without TV ADDONS. We're the original source for unofficial Kodi Addons. Now you can watch anything you want!

Adding the Fusion Installer ...

Fusion for Kodi is your gateway ...
our Fusion Installer source in ...

Configure

Once you've installed Kodi, you'll
need to configure Kodi addons ...

Upgrading to the Latest ...

Upgrading to the Latest Version of
Kodi is Now Necessary (17.1 ...

[More results from tvaddons.ag »](#)

Download Kodi

Download the widely popular open
source Kodi media center for ...

Forums

Welcome to the largest unofficial
Kodi forums, home of the best ...

Help

If you're having trouble with your
Kodi media center or Kodi ...

Evidence of the scale of the problem

Access to pirated content facilitated via IPTV Piracy, including Illicit IPTV Devices, is a global issue affecting all types of creative content, including live sports, that requires urgent action. Typically, Illicit IPTV Devices are:

- readily available to consumers through legitimate e-commerce channels, at reasonable cost;
- easy to set up, requiring minimal technical ability;
- offer high quality viewing of live sports, film and TV content, via a "traditional" television;
- professionally marketed; and
- enable easy access to content via familiar electronic programme guide (EPG) interfaces.

Illicit IPTV Devices are driving a fundamental shift, from web-based viewing of illegal content on PCs and laptops (where websites often carried inappropriate content such as pornography or a lower quality viewing experience with pop-up advertising) towards a higher-quality 'living room' experience via app and device-based viewing connected to TVs. This threatens to turn digital access to illegal content into a mainstream and 'normalised' activity which undermines the value of investment in content.

The following statistics from the Industry Trust¹³ indicate the growing scale of the problem posed by IPTV Piracy:

- *Availability*: nearly 14,000 listings for IPTV devices across 51 online marketplaces, equating to more than 4 million items in stock globally, with Amazon and eBay being the largest marketplace suppliers for IPTV boxes (both Vanilla IPTV Devices and Illicit IPTV Devices).
- *Consumer interest*: there was a 143% increase in UK searches for 'kodi box' between November 2015 and November 2016.
- *Intergenerational interest*: "more than half (54%) of surveyed parents reported watching infringing content through their set-top box or stick with children aged under 18 in their household, whilst one in five of 11-15 years engaged in IPTV piracy".

BT's own consumer research, with focus on unauthorised streaming of live sports content, suggests that between one in five and one in three sports fans stream live sports unofficially online, although the real figures could be higher: awareness around the questionable legality of the activity may make respondents reluctant to admit to its use.

The Industry Trust has also considered the scale of the issue for live sports, finding that:

"The potential impact of IPTV Piracy on sports subscription services is significant, with the opportunity to watch live sports fixtures for free cited as a particular draw for younger men. Of the 19% of infringers using IPTV Piracy, nearly two thirds (62%) reported to using IPTV devices to watch live sports at least once, with 11% admitting to doing so more than once a week."

It is worth highlighting here that, in respect of live football matches, there is a designated 'closed period' in England between 2.45-5.15pm on Saturdays, during which live football matches may not be broadcast on a live basis. The primary aims of the closed period are to ensure that spectators are not deterred from watching matches in person (whether at a professional, amateur or at a local level) and to support grassroots participation. IPTV Piracy enables end-users in the UK to access, during the closed period, international Illicit Streams to live English football matches (including via Illicit IPTV Devices).

Evidence of economic harm to broadcasters and content owners

Substantial economic harm is already being caused by Illicit IPTV Devices and other components within the IPTV Piracy ecosystem which make available a wide range of illegal content, spanning TV, film and sports, presenting a critical threat to the creative content sector.

¹³ In our response, references to Industry Trust statistics are to a study undertaken on IPTV piracy covering set-top box and stick infringement completed in February 2017 on research carried out between 2015 to 2017. Questions relating to this study should be directed to Liz Bales, Chief Executive of the Industry Trust.

BT has invested heavily in securing exclusive live broadcasting rights in the UK, particularly in respect of Premier League¹⁴ and Champions League¹⁵ matches, which form a central part of its BT Sport offering. These investments have a positive effect beyond BT's TV and Sport business, with the launch of BT Sport coinciding with a significant slowdown in the decline of subscribers to fixed line telephony and an increase in broadband subscriptions.

Broadcasters Audience Research Board (BARB) viewing figures show that legitimate audiences for live football are falling with a decline in Premier League viewing this season (16/17) of around 12% on average¹⁶.

Overall, and based on our consumer research, BT believes that viewing of Illicit Streams is one of the main drivers of this decline in viewing, materially undermining the exclusivity acquired by broadcasters in live sports rights, and causing economic harm to BT and other rightsholders, platforms and broadcasters. This is evident from the recent judgment of the English High Court in *FAPL v BT & Others* [2017] EWHC 480 (Ch)¹⁷ which found that:

- *"There is increasing evidence of football fans turning to streaming devices which access infringing streams as a substitute for paid subscriptions to services offered by Sky and BT".* This undermines the value of the live sports rights which *"if unchecked is likely to reduce the revenue returned by FAPL to football clubs, sports facilities and the wider sporting community"*.¹⁸
- FAPL and its licensees (such as BT) make substantial contributions to the UK economy¹⁹ and *"there is a public interest in combatting the infringement of [their] rights"*.

It is therefore important to recognise that Illicit IPTV Devices and IPTV Piracy more generally have a wider impact that goes beyond economic harm to the rights holders:

- There is a broader adverse impact on the economy, particularly in the context of football, where the rights fees paid to FAPL are used to fund all levels of football, which benefits the wider community and local economy;

¹⁴ Sky and BT paid a record £5.136bn for UK broadcasting rights for live Premier League football matches for three seasons from 2016-2017, of which BT paid £960m for 42 Premier League matches per season. BBC article, 'Premier League TV rights: Sky and BT pay £5.1bn for live games' (10 February 2015) www.bbc.co.uk/sport/football/31357409

¹⁵ In March 2017, BT extended its exclusive TV rights in the UK for the Champions League and Europa League until 2021 in a deal worth £1.2bn. www.bbc.co.uk/sport/football/39177581 (6 March 2017)

¹⁶ This article suggests somewhat higher numbers for individual games. Our internal tracking suggests an average of around 12% <https://www.theguardian.com/football/2016/oct/24/sky-sports-bt-sport-people-switching-football-off>

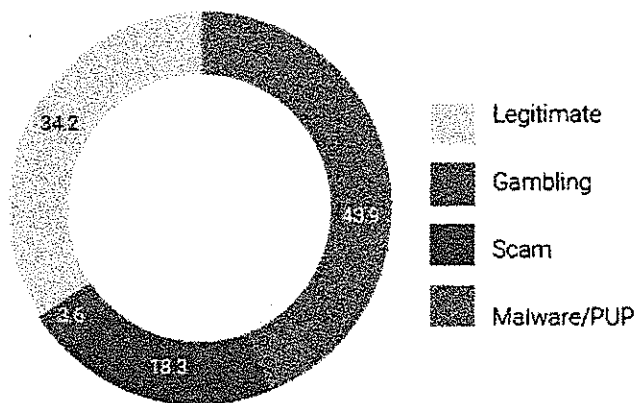
¹⁷ www.bailii.org/ew/cases/EWHC/Ch/2017/480.html. The issue of economic harm has also been recognised by the Federal Court of Appeal in Montreal, Canada, in *Bell Canada v Wesley dba MTLFRETV.COM* where the appeal court highlighted how the advertising by sellers that Illicit IPTV Devices were a *"way to access free tv content and avoid cable bills"* entitled the court to infer that the cable companies/content producers would suffer irreparable harm if injunctive relief was not granted. www.smart-bigger.ca/files/March%2020%202017.pdf and www.smart-bigger.ca/files/Order%20%28June%201%202016%29.pdf

¹⁸ See *FAPL v BT & Others* [2017] EWHC 480 (Ch) at paragraph 16.

¹⁹ See *FAPL v BT & Others* [2017] EWHC 480 (Ch) at paragraph 45. The economic impacts estimated for the Premier League and its underlying clubs (for the 2013/2014 season) was considered in detail by Ernst & Young (EY) in May 2015, who identified how the contributions made by the Premier League to non-Premier League clubs *"help to support the long term health of the game, with improved investment in youth development, training and facilities helping to ensure that football clubs continue to develop, irrespective of their place in English football"*. [www.ey.com/Publication/vwLUAssets/EY_-_The_economic_impact_of_the_Premier_League/\\$FILE/EY-The-economic-impact-of-the-Premier-League.pdf](http://www.ey.com/Publication/vwLUAssets/EY_-_The_economic_impact_of_the_Premier_League/$FILE/EY-The-economic-impact-of-the-Premier-League.pdf)

- The ability to stream 3pm matches is undermining the purpose of the closed period which is to encourage spectators to watch local matches and to play football at a local level, with a knock-on effect of reducing income for clubs from gate receipts;
- Revenue is being channelled into criminal enterprises which are increasingly involved in the (highly profitable) supply and distribution chain for IPTV Piracy, including through the provision of paid-for illicit IPTV "subscription" services which provide or enable access to unauthorised content;
- There may be product safety issues with imported Vanilla IPTV Devices and Illicit IPTV Devices according to initial investigations undertaken by FACT (Federation against Copyright Theft);
- Minors are at risk of being exposed to explicit and/or age-inappropriate content due to ineffective parental controls;²⁰
- Illicit IPTV Devices present a risk of malware and viruses, which leaves users exposed to cyber-theft, with malware and other potentially unwanted programmes (PUPs) "found to be the most prominent type of advertising served". The "most dangerous of these are present as necessary updates which must be installed to improve / repair or update a device in some way", while others are dating or other money earning schemes. This is further illustrated in the figure below provided by the Industry Trust:

Fig 6: Type of advertising present after pairing device



Source: INCOPRO

²⁰ The Industry Trust research indicates that "67% of parents say they are unaware that IPTV Piracy can expose children to inappropriate advertising, such as gambling or alcohol adverts, while 61% are unaware of the risk of exposure to age-inappropriate entertainment content. 55% of parents who engage in IPTV Piracy are unaware that the parental controls they set on their IPTV device will not extend to unauthorised apps and add-ons."

Case history (Q2-Q3)

Q2: Please provide examples of cases that you are aware of (with references where possible) where prosecution in the UK has been successful for the: a. Import; b. Offer; c. Sale; or d. Use of set-top boxes for illicit streaming. Please indicate the legal basis used for these prosecutions.

We note that in the Call for Views document, the UK IPO is already aware of the following two cases in which a prosecution was successfully brought in the UK relating to IPTV Piracy:

R v Rosero (legal basis: s.11 Fraud Act through s.44(1) Serious Crime Act 2007)

- Rosero (an eBay seller of illicit IPTV devices) pleaded guilty to an offence of assisting or encouraging others to obtain services dishonestly and was sentenced to pay a fine of £516.

R v O'Reilly & O'Leary [T20157857] (legal basis: Conspiracy to defraud)

- O'Reilly was convicted following a 4 week trial of two conspiracies to defraud and sentenced to 4 years' imprisonment.
- His co-defendant, O'Leary, pleaded guilty to a single count of conspiracy to defraud and received a 2 year sentence of imprisonment, suspended for 2 years.

In addition, we are aware of the following two prosecutions in the UK, in which the defendants pleaded guilty to offences contrary to section 296ZB CDPA (devices and services designed to circumvent technological measures):

R v Mayes

- According to the BBC²¹, Mayes was ordered to pay £170,000 costs and an £80,000 Proceeds of Crime Order with two 10-month prison sentences suspended for one year.

R v Montgomery

- Montgomery pleaded guilty and was sentenced to pay a £450 fine.

It should be noted that only one of the above 4 cases (*R v O'Reilly and O'Leary*) was contested – i.e. that the legal basis underlying the prosecutions for *R v Mayes / R v Montgomery* (under s.296ZB CDPA) has not yet been truly tested.

²¹ Set-top box seller Malcolm Mayes ordered to pay £250,000 (6 March 2017) www.bbc.co.uk/news/uk-england-tees-39184505

Q3: Please provide examples of cases you are aware of where prosecution of ostensibly valid cases was not pursued under the above provisions. Please indicate why these cases were not taken forward.

We are not aware of any cases not being taken under the legislation identified in the Call for Views.

In our view, the novelty and potential complexity of prosecuting IPTV Piracy has instead led both CPS and, to a lesser extent, Trading Standards, to be reticent in even initiating such cases, and for a great deal of delay being built into police led IPTV Piracy investigations. The driving force behind the majority of IPTV Piracy cases both concluded and currently in the pipeline are right-holders themselves e.g. FAPL who are bringing private prosecutions conducted by specialist legal teams, in order to combat the proliferation of IPTV Piracy, which are likely to have the effect of further developing case law.

Efficacy of existing legal framework (Q4-Q5)

Q4: Are there specific areas where you believe the current legal framework does not provide the necessary tools to investigate and prosecute this issue? If so, please provide as much detail as you can on how you think the current provisions could be amended and how these amendments would address the perceived gap.

For the same reasons explained in Q1 above, our response to this question has been focused on the issues raised by IPTV Piracy as a whole, and not just by Illicit IPTV Devices. We are concerned that a focus on legislative change solely to combat the retail and/or distribution of Illicit IPTV Devices would be too narrow and not sufficiently future-proofed, resulting in the risk of any legislative amendment becoming obsolete.

In this regard, it is critical to emphasise how the IPTV Piracy landscape is constantly evolving with those involved in the value chain making changes to evade legal and disruption techniques. For example:

- With increasing enforcement focus on the supply of Illicit IPTV Devices, there is already a trend towards suppliers offering Vanilla IPTV Devices, followed up with instructions on how to install Illicit Add-ons and/or Illicit Apps in order to gain access to Illicit Streams.
- We are seeing software being developed to automatically download everything (e.g. Illicit Add-ons) required to access Illicit Streams, therefore making the download and configuration process easy for a consumer with no technical knowledge or expertise.
- Consumers are already moving toward using Illicit Apps viewed on smartphones/tablets to watch infringing content, and there is growing consumer demand for SmartTVs onto which Illicit Apps can be installed. These do not rely on the consumer acquiring a separate hardware device (such as a set top box) to access the Illicit Streams. This content can still be consumed on a big screen through the use of technology such as Chromecast to 'sling' or 'cast' the content from a mobile device onto the TV for a high quality 'living room' viewing experience.

In the future, it is very likely that no hardware or physical set top box will be required to access content and thus the legislative framework must cater to address all aspects of IPTV Piracy, not just Illicit IPTV Devices. Therefore, our view is that any review of the legal framework and subsequent amendment(s) to address IPTV Piracy must:

1. be based on a comprehensive, holistic understanding of all aspects of the ecosystem that results in IPTV Piracy;

2. be technologically neutral and be sufficiently flexible to account for a continually evolving IPTV Piracy landscape to avoid introducing legislation that is rendered obsolete due to technological change; and
3. create effective enforcement options against all players within the IPTV Piracy value chain, and not just against the retail and distribution of Illicit IPTV Devices. For instance, careful consideration should be given to the legal framework as it applies to developers of Illicit Apps and Illicit Add-ons and providers of Illicit Streams.²²

The case of *R v O'Reilly and O'Leary* (referenced in Q2) highlights how the common law offence of conspiracy to defraud can be successfully deployed as an effective tool when prosecuting suppliers of Illicit IPTV Devices. However, conspiracy to defraud cannot be relied upon as the only suitable offence for this activity (for instance, it cannot be used against lone operators). There is a pressing need for a statutory offence(s) capable of effectively addressing all aspects of the IPTV Piracy value chain with in-built flexibility so that technological advancement does not render it. In our view, there is currently no existing statutory offence that can be effectively deployed in this manner.

In this context, BT considers that the CDPA is the most appropriate statute for amendment, adopting the approach listed at 1 to 3 above. In particular, BT considers that s.297A CDPA (unauthorised decoders) should be considered for amendment:

- Section 297A CDPA was designed for a form of television broadcast fraud which is centred on the actual decryption of an encrypted signal, usually by means of the sharing of legitimate codes known as 'control words' between devices, a process colloquially referred to as 'card sharing'.
- IPTV Piracy facilitated via Illicit IPTV Devices, Illicit Apps and/or Illicit Websites typically does not involve any decryption of an encrypted signal (a prerequisite for an offence under s.297A), because any such decryption happens further 'upstream' in the creation of the Illicit Streams.
- A possible approach is to refocus s.297A and remove the decryption requirement so as to capture set-top boxes, software, firmware and components which enable persons using the equipment to gain access to pay television without paying appropriately for it.

Such an amendment would no longer require proof that a transmission was decrypted, instead concentrating upon the *effect* of the relevant device and/or software – i.e. it is technologically neutral. The offence would turn on whether it enabled a pay television service to be viewed without the proper payment for that service being made. Adopting a technologically neutral approach reduces the risk of the provision becoming obsolete, since every development in IPTV Piracy always has the same objective; to steal pay television.

However, this is just one potential avenue for legislative amendment which we have identified in the limited timeframe available to us. We call upon the UK IPO to consider all forms of legislative amendment that may facilitate effective enforcement actions against all parts of the IPTV Piracy value chain and to consult with industry in this regard.

We should also highlight that the case law relating to IPTV Piracy is continually evolving. In particular, the Court of Justice of the European Union (CJEU) will deliver its judgment on 26 April 2017²³ in Case C-527/15 *FilmSpeleer*²⁴ on whether the sale of Illicit IPTV Devices infringes the communication to the public right and whether an end-user watching illegal content that is streamed via such devices infringes copyright. After judgment, further analysis will be required on how this affects enforcement

²² See the table of definitions below.

²³ See the Curia calendar at http://curia.europa.eu/jcms/jcms/Jo1_6581/en/

²⁴ <http://curia.europa.eu/juris/liste.jsf?language=en&num=C-527/15>

options. However, our view is that even if the CJEU follows the (non-binding) Advocate General's Opinion²⁵ of 8 December 2016 that the sale of an Illicit IPTV Device infringes copyright, and end-users watching pirated content through such devices infringe copyright, this is unlikely to create a clear statutory basis for enforcement against all elements of the IPTV Piracy ecosystem. This further emphasises the pressing need to review the current legal framework to address IPTV Piracy.

Q5: Is there any UK case law which you believe limits the applicability of the statutory offences listed above?

To date, there have only been four prosecutions relating to IPTV Piracy that have been successfully conducted within the UK, of which one (*R v O'Reilly and O'Leary*) was contested. In view of this, no case law exists which can properly be said to limit the applicability of the currently available statutory offences.

The key issue, in our view, is rather to look to the future and foresee as far as possible what problems might arise, taking into account the rapid pace of technological development, should a greater number of prosecutions be initiated.

In short, the lack of case law challenging and undermining IPTV Piracy prosecutions is no indicator that the current legislative regime is either robust or adequate.

Difficulties in evidence gathering (Q6)

Q6: Are there any issues around evidence gathering for these existing offences? This could arise conceivably from the need for digital forensic capability, or the often dispersed nature of the illicit streaming infrastructure.

By their nature, IPTV Piracy investigations will require digital forensic examinations to prove Illicit IPTV Devices are capable of accessing infringing content. There are challenges and issues around various parts of the evidence gathering process as follows:

- *Capacity* - to carry out the examinations. Often law enforcement have significant backlog of examination work, causing delays to these investigations.
- *Costs* – cost implications of setting up a lab environment to examine Illicit IPTV Devices, or outsourcing examination work.
- *Remote infrastructure* – inability to examine off-shore servers utilised as part of the provision of Illicit Streams.
- *Attribution* (i.e. attributing the test purchased Illicit IPTV Device to an individual or group) – this typically involves protracted enquiries with service providers, financial institutes and law enforcement. Where this occurs across international borders, the associated timeframes can provide a further barrier to a successful investigation. Information sharing agreements which simplify this process would assist investigations.

²⁵

<http://curia.europa.eu/juris/document/document.jsf?docid=186069&mode=lst&pageIndex=1&dir=&occ=first&part=1&text=&doclang=EN&cid=451567>

International considerations (Q7-Q9)

Q7: Please provide examples of where this issue has been raised with law enforcement agencies or government officials/ministers in other countries.

Through the Audiovisual Anti-Piracy alliance (AAPA), we are aware that many members are actively investigating IPTV Piracy across Europe. The main facilitators in these cross border efforts are EU IPO, Europol and Interpol. All members face the same challenges, around LEA engagement and ability to take such investigations on, knowledge and understanding and appropriate application of legislation.

As the selection of articles below show, it is evident that IPTV Piracy is a global issue, with industry seeking LEA engagement where possible, and that these criminal enterprises are not restricted by borders, often affecting members from various geographical locations.

Italy (web-based broadcasting of live and on-demand content, including sports)

- 5 people arrested, 50 pirate sites and 44 servers seized, with charges under the art.171-ter violation of Law 633/41 which provides for imprisonment up to 4 years and a fine of € 15,000.²⁶

Spain (pirated decoders enabling access to pay-TV channels)

- 30 suspects arrested in Spain, and 48 800 decoders seized (imported from China), alongside EUR 183 200 in cash, 10 luxury vehicles, 1 counterfeit luxury car, a private plane, several financial documents and IT equipment. Servers were located in various European countries, including Germany.²⁷

Spain (ISP hosting streaming service enabling illegal access to 100 international pay TV channels)

- Joint effort by Spanish National Police, Premier League and Irdeto to shut down IPTV subscription service run by two U.K. citizens.²⁸

China (manufacturer of illicit IPTV Devices)

- China police arrested owners and operators of a company that illegally programmed pirate IPTV boxes and marketed and sold them around the world under the "Filstream" brand.²⁹

Holland (sale of control word sharing equipment and pirate subscriptions enabling access to international pay TV channels)

- Dutch police arrest 7 defendants, of whom two received 200 hours of community service and three months of conditional sentencing. The third received 240 hours of community service and four months of conditional sentencing. Three defendants also forfeited amounts of €52,245, €53,245 and €110,406.85 respectively.³⁰

²⁶ www.aapa.eu/news-and-events/italian-blitz-against-piracy/

²⁷ www.europol.europa.eu/newsroom/news/spanish-network-behind-illegal-distribution-of-pay-tv-channels-dismantled

²⁸ <https://irdeto.com/news/spanish-national-police-premier-league-and-irdeto-join-forces-to-shut-down-isp-running-pirate-iptv-subscription-business.html>



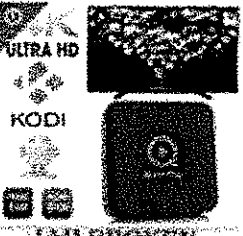

²⁹ <http://usa.inquirer.net/1982/police-china-arrest-content-pirates-stole-abs-cbn-others>

³⁰ <http://advanced-television.com/2016/11/25/3-dutch-content-pirates-sentenced/>

Q8: Please provide examples of where there is an international element to the supply and support of this activity in the UK, and give your views on how this dimension of the problem could be addressed in terms of: a. The supply of illegal boxes; b. Websites hosting illegal content.

a. The supply of illegal boxes

Listings on e-commerce platforms evidence the international element to the supply of Illicit IPTV Devices into the UK. China appears to be the country with the largest links to listings, whether that be selling direct to the customer or having a UK seller obtaining their stock from China and selling within the UK. As shown below, many listings, written in English, have the business seller's address as being located in China, where a large proportion of such sellers sell direct from China offering free postage and packaging to a large coverage of the globe.

<p>Various Parts & Accessories</p> <p>Cables, Straps & Accessories</p> <p>Mobile Phones & Communication</p> <p>Footwear Goods</p> <p>Jewellery & Watches</p> <p>Books, Comics & Magazines</p> <p>Sticker Goods</p>		<p>Smart Movie BT 4.0</p> <p>£28.50</p> <p>Buy 4 items or less £30</p> <p>Free Postage</p> <p>492 sold</p>	
<p>Media Streaming</p> <p>Internet Network Media 4K</p> <p>Internet Network 4K</p> <p>Internet TV/Video 4K</p> <p>Not specified 4K</p>		<p>268 4K ULTRA HD</p> <p>£49.80</p> <p>2 day 8 day</p> <p>Free Postage</p> <p>276 sold</p>	<p>From China</p>
<p>Brand</p> <p>Amazon</p> <p>Unbranded</p> <p>Unbranded/Unbranded</p> <p>Kodak</p> <p>Not specified</p>		<p>KODI JAILBROKEN</p> <p>£30.99</p> <p>2 day 8 day</p> <p>Free Postage</p> <p>Only 1 left</p> <p>242 sold</p>	<p>From China</p>
<p>Features</p> <p>Keyboard Controller</p> <p>Picture Viewing</p> <p>Not specified</p>		<p>X92 9712 3G+15G</p> <p>£62.98</p> <p>2 day 8 day</p> <p>Free Postage</p> <p>Only 1 left</p> <p>12 watching</p>	<p>From China</p>

Postage and packaging

For example Shenzhen GuangJing China

Postage: Worldwide

Excludes: Saudi Arabia and Singapore, Algeria, Angola, Argentina, Azerbaijan, Bahrain, Bangladesh, Belgium, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Ethiopia, Finland, France, Germany, Greece, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iraq, Israel, Italy, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Monaco, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Serbia, Sierra Leone, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Thailand, Timor-Leste, Trinidad and Tobago, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uzbekistan, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

Some listings also have a valid GB VAT number (examples below). This suggests that the seller/manufacturer in China has either set up a company in the UK from within China, or has a seller/contact within the UK that is taking in deliveries and selling from within the UK (this will often result in quicker delivery times to the buyer, making the sale more attractive).

Business seller information	
Luxon Technology Limited Cherry Huang PLATINUM Q5 09/F WORKINGBERG COMMERCIAL BUILDING 41-47 MAHLE RD 518054 Shenzhen China	Company Country
VAT number: GB 201528364 I provide invoices with VAT separately displayed	

Business seller information	
Shenzhen Shangrun ECommerce Company Limited Ze Hao Li 401 bld 2, Guang Hui Technology Park, Min Qing Rd, LongHua Dist 518109 Shen Zhen city China	Company Country
VAT number: GB 248997348	

The scale of the international problem is hard to judge, some sellers will import their stock from China into the UK, but as they are a UK based seller they make no reference to China and their supply chain is hidden, unless an investigation is launched which will uncover this information. However, there are a large number of sellers that have links to China on their profile, whether it is the business information or country of sale.

We already work closely with many of the major e-commerce platforms to reduce the visibility of illicit IPTV Device listings. The sale of such devices on legitimate and mainstream e-commerce platforms which use trusted payment methods is likely to cause consumer confusion around the legitimacy of such devices and increases the risk of 'normalising' digital piracy that is facilitated through them. More effective displacement of illicit IPTV Devices from major e-commerce platforms may push the supply and sale of them onto smaller, less trusted, ecommerce platforms, and ultimately reduce the scale and profitability for those behind their distribution.

Focusing on the manufacture and importation of illicit IPTV Devices in China could also have a large impact by seriously disrupting the business model for many of the organised, large scale sellers.

This strategy focused on preventing entry into the UK of such devices is also effective to tackle the emerging trend of distributors/sellers supplying consumers with Vanilla IPTV Devices and associated instructions on how to install the illicit Add-ons which enable access to illicit Streams (see further, Q4). Recently, we have also seen police in China start to take action against this.³¹

³¹ Police in China arrest content pirates that stole from ABS-CBN, others | INQUIRER.net
<http://usa.inquirer.net/1982/police-china-arrest-content-pirates-stole-abs-cbn-others>

Clear guidance to e-commerce platforms and co-operation between global IPO representatives would support this action and work towards a consistent approach. This would also enable quicker and more robust evidence gathering by investigators.

b. Websites hosting illegal content

There is an international element within this context because almost all source sites host their website infrastructure on servers based outside of the UK, which is a jurisdiction in which it is generally possible to undertake effective action against the hosting of illegal content.

Currently the most problematic hosting provider encountered by BT is based in Russia. Other jurisdictions in which we encounter difficulties in taking effective action include: The Netherlands, France, Belize and the USA.

Q9: Are there examples of enforcement powers in other countries that have been introduced to deal with these issues? Please provide examples of approaches you are aware of in other countries and any evidence you have of their success.

This issue is still relatively new and we are not aware of any countries that have brought in legislation specifically to deal with IPTV Piracy. However, based on the examples provided at Q7 of the enforcement activity in other countries, it would seem that the relatively low fines and/or custodial sentences (if any) associated with engaging in this criminal activity is unlikely to act as a sufficient disincentive given the high profitability that results from this activity.

Other barriers to prosecution (resource, jurisdiction) (Q10-Q12)

Q10: Are there any other barriers to the successful investigation and prosecution of these issues?

The complexities around the supply and sale of illicit IPTV Devices have been highlighted above. Our experience from supporting LEA enforcement actions is that there is a significant level of inconsistency in how this issue is addressed, in particular, in respect of what legislation is used in charges relating to IPTV Piracy. Furthermore, the quality of investigation varies greatly and is often dependent on the individual who is assigned to the investigation, their knowledge, experience and willingness to drive the investigation forward.

Therefore, lack of knowledge by prosecutors is one barrier to prosecution which, if left unresolved, could result in negative judicial precedents with detrimental effects on enforcement efforts. Better education and training is required for these agencies to drive forward a consistent approach.

Time is another critical factor, and many cases are dropped because the *modus operandi* has changed and evidence packages are therefore irrelevant by the time the LEA is ready to take action. This is a significant problem when trying to submit cases to the likes of EUROPOL when cross border offences are identified. This is a very long and complex process.

Further we have directly or indirectly (via our membership of FACT) experienced cases being rejected by Trading Standards for a variety of reasons, for example:

- IPTV Piracy was not an "organisational priority";
- Lack of resources in terms of manpower and finances to prosecute;

- Lack of legal authority to investigate fraud.

There is a need for central government to provide leadership and spotlight the issue and ensure that these issues are on the strategic priorities of LEA and Trading Standards. There are significant revenues involved in these activities, with evidence of involvement by organised crime.

Q11: Do enforcement agencies have the powers required to investigate this activity? Given the split in offences between IP legislation and other provisions such as the Fraud Act, are warrants readily available to those investigating?

It is essential that enforcement agencies have the necessary powers under both the CDPA and the Fraud Act to investigate IPTV Piracy-related offences.

In relation to the Fraud Act, further scrutiny should be applied to implications of the lack of powers of entry, search and seizure for Trading Standards officers under the Fraud Act, and how this may be dissuading Trading Standards from involving themselves in IPTV Piracy allegations based upon Fraud Act offences.

We also consider that, when amending any provisions within the CDPA to address IPTV Piracy (such as to s.297A CDPA as per Q4 above), the IPO should consider whether the amended provision is included within the list of offences that Trading Standards are under a duty to investigate.³² In this regard, it should be noted that s.297A is not currently included in this list and we recommend should be considered for inclusion, alongside any other provisions which are identified as appropriate for amendment.

Q12: Are there specific areas where further guidance (from IPO and/or CPS) would be beneficial in the investigation and/or prosecution of this activity?

In light of the inconsistency of approach currently taken by LEAs (see Q10), we consider that there is a pressing need for better education and training for LEAs to facilitate an informed and consistent approach to enforcement against IPTV Piracy.

However, in view of the inherent complexities of IPTV piracy, it is important that those providing guidance in the investigation and/or prosecution of this activity have the necessary experience.³³ It would be counter-productive and extremely damaging if centralised guidance was given which was incorrect and thus it is important that this process is done with detailed consultation with appropriate industry stakeholders. Where guidance is deemed appropriate, we would recommend that this is provided by the IPO in consultation with appropriate stakeholders from within the industry who have specialist expertise in this area, e.g. FACT.

³² Under s.107A CDPA, local weights and measures authorities are placed under a positive duty to enforce the provisions of section 107 (making or dealing with infringing articles etc). This focus was relevant and appropriate ten years ago, when the majority of intellectual property prosecutions in the criminal courts concerned the sale/distribution of 'hard goods', namely optical discs containing infringing copies of films or albums.

³³ In this respect, we note that at this stage, the CPS have conducted only one successful IPTV prosecution (R v Rosero) against a small-scale individual eBay seller resulting in a £516 fine. We are not aware of any other cases prosecuted by the CPS.

Other suggestions comments (Q13-Q14)

Q13: Are there any non-legislative approaches that you think could help with the situation? Please provide examples.

There is no "one-stop shop" solution to address all parts of the IPTV Piracy value chain, and thus legislative amendment will form one (important) aspect of a broader enforcement strategy. Industry members, including BT, are already working collaboratively to share best industry practice and intelligence to combat IPTV Piracy. This involves various non-legislative approaches which have been already highlighted in this response, including:

- Monitoring and working with large e-commerce platforms and payment providers and other legitimate businesses in the value chain;
- Working with non-UK hosting providers;
- Participating in industry initiatives to raise awareness and provide better guidance and training on this issue to LEA.

Government leadership and support on all the issues raised in our response in parallel with legislative amendment would be most welcome. In particular, we call for the UK IPO's support in the following areas:

- Better education for consumers about the public interest in combatting IPTV Piracy (e.g. age-inappropriate content, malware, product safety).
- To build on the 'follow the money' (FTM) approach adopted in other Government led initiatives to engage and bring about responsive change from e-commerce platforms, social media platforms and payment providers all of which facilitate this trade currently.
- Building the UK's relationship with international law enforcement bodies, including building their understanding of the issues and how they are best addressed.
- Facilitating more effective engagement from, and consistency of approach by, LEAs in their enforcement actions against IPTV Piracy [see Q10 and Q12]. The UK Government has a key role to play here in terms of providing leadership and setting priorities in consultation with industry. One negative outcome which has already materialised from the absence of a consistent approach is unhelpful public coverage of public statements by local trading standards officers that streaming illegal content is "likely to be exempt from copyright laws" which further encourages IPTV Piracy and normalised digital piracy³⁴. Clear, accurate and publicly available statements from the IPO, championed by Government Ministers would be a very helpful first step in ensuring LEAs take an appropriate and consistent approach across the UK to combatting IPTV Piracy.

Q14: Do you have any other suggestions or experience relevant to this exercise?

BT welcomes this opportunity to further engage with the UK IPO in its endeavours to create a legal framework that adequately addresses all parts of the IPTV Piracy value chain.

We would be happy to discuss these issues further. Further enquiries can be directed to
[REDACTED] Head of Political Research, Policy and Briefing, BT Group plc
[REDACTED]

³⁴ www.derbytelegraph.co.uk/derbyshire-trading-standards-warns-kodi-users-warns-about-illegal-streaming/story-30171321-detail/story.html