Metal Theft Taskforce
IDENTIFICATION BOOKLET

VERSION 2

openreach
a BT Group business
BT

THE THEFT OF METAL IS A GROWING PROBLEM IN THE UK, DIRECTLY AFFECTING MULTIPLE INDUSTRY SECTORS (POWER, TRANSPORTATION, WATER AND COMMUNICATIONS).

The current cost of metal theft to the UK economy has recently been estimated by ACPO[1] at £770m p.a. This financial impact is dwarfed by the impact on society (inconvenience and potential impact on public health and safety) and commerce.

[1]**ACPO – ASSOCIATION OF CHIEF POLICE OFFICERS**
Conductive Metal Theft Working Group – Metal Theft Problem Profile

Attacks on BT copper cable network have isolated entire communities and disrupted emergency service communications.

Openreach strictly controls the recovery and processing of its own waste cable and it should not be available on the open market. **All cable recovered by BT, or its contractors, is disposed of through Openreach's official channels and should not be offered directly to scrap metal dealers or recyclers.**
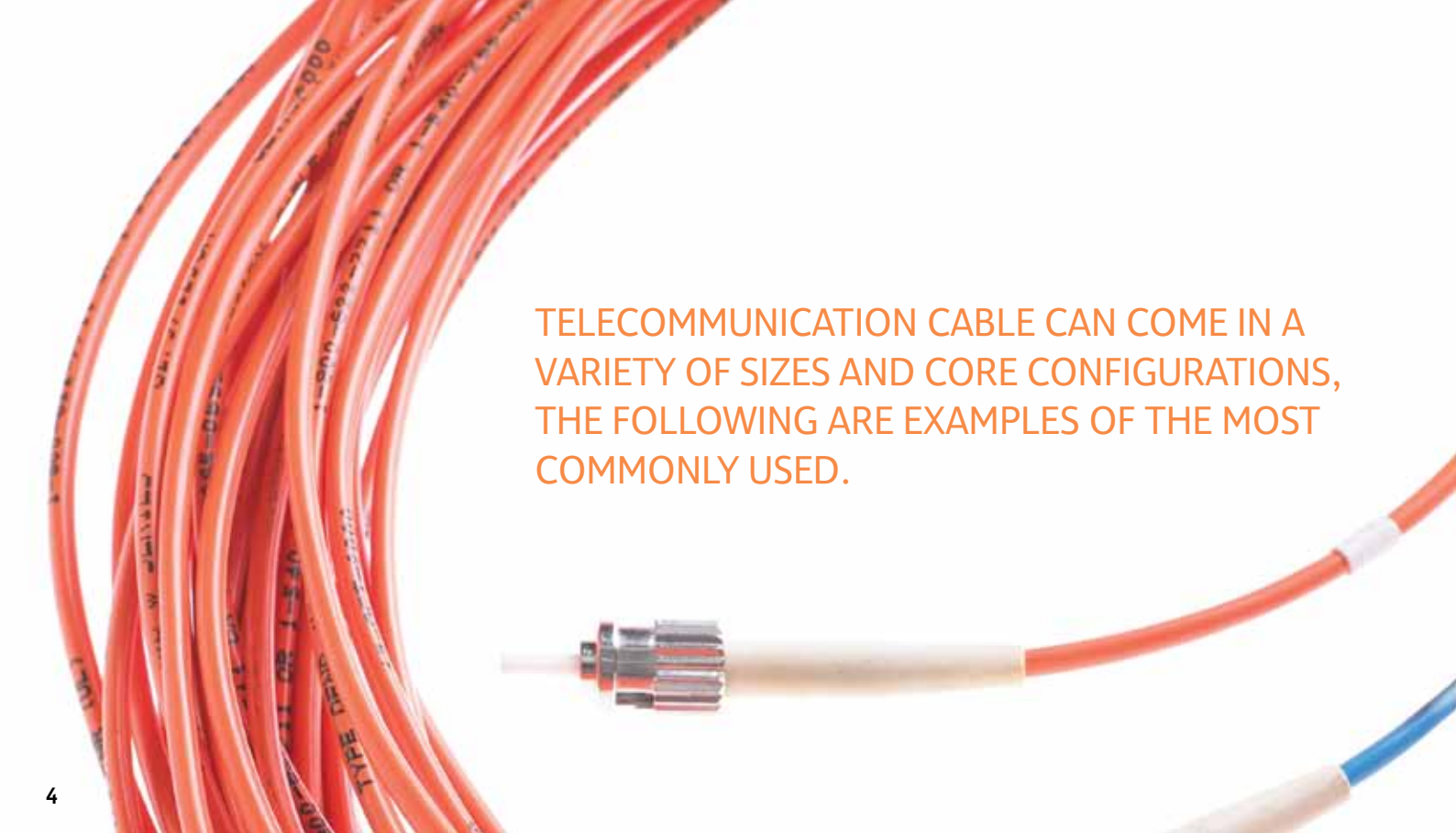

WE MARK – This document is designed to assist in the identification of Openreach owned cables and associated metal assets. It is only a guide and is by no means exhaustive. If in doubt, the Openreach Metal Theft Taskforce will be able to provide formal identification.

WE SEARCH – Openreach and BT Group are working closely with police forces across the UK, The British Metals Recycling Association and Crimestoppers to combat metal theft.

WE PROSECUTE – The BT Metal Theft Taskforce provides dedicated resource and investigates all incidents involving the theft or damage of cable from within our network and operational estate.
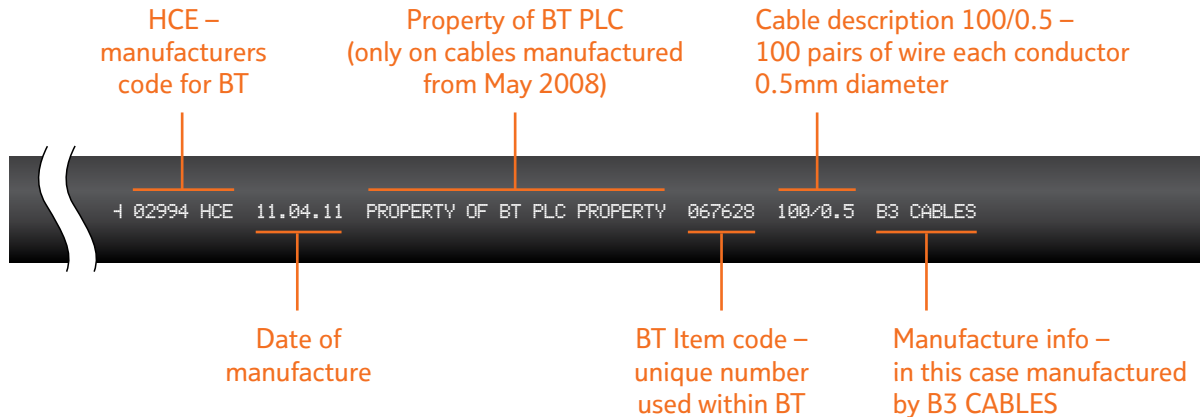

CONTACT DETAILS

You'll find contact details for BT Security Helpdesk, Operation EIGER, Openreach Network Resilience Unit and Crimestoppers on the inside back cover of this booklet (page 23).
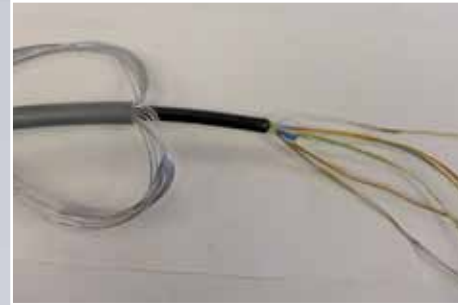
TELECOMMUNICATION CABLE CAN COME IN A VARIETY OF SIZES AND CORE CONFIGURATIONS, THE FOLLOWING ARE EXAMPLES OF THE MOST COMMONLY USED.

CURRENT CABLE MARKINGS

Some telecommunication cables used by BT have their own unique marking printed onto the outer sheathing. This is an example of a typical cable marking:

HCE – manufacturers code for BT

Property of BT PLC (only on cables manufactured from May 2008)

Cable description 100/0.5 – 100 pairs of wire each conductor 0.5mm diameter

`02994 HCE   11.04.11   PROPERTY OF BT PLC PROPERTY   067628   100/0.5   B3 CABLES`

Date of manufacture

BT Item code – unique number used within BT

Manufacture info – in this case manufactured by B3 CABLES

5 PAIR 0.5mm SWA TELECOM CABLE

Grease filled steel wire armoured telephone cable
5 pairs 0.5mm conductor
Outer sheath colour – light grey
Layer of galvanised steel wires
Inner sheath colour – black
Diameter – 10mm

**This cable also comes in 10, 20, 50 and 100 pair sizes
with various core configurations.**

300 PAIR 0.4MM PEUT TELECOM CABLE

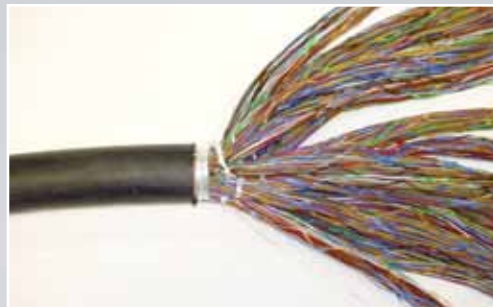Air core duct telephone cable
Aluminium moisture barrier adhering to the sheath
300 pair 0.4mm conductor
Sheath colour – black
Diameter – 23mm

This cable also comes in 50 – 4800 pair sizes with various
core configurations.

800PR 0.5MM PEUT TELECOM CABLE

Air core duct telephone cable
Aluminium moisture barrier adhering to the sheath
800 pairs 0.5mm conductor
Sheath colour – black
Diameter – 46mm

This cable also comes in 50 – 4800 pair sizes with various core configurations.

1600PR 0.4MM PEUT TELECOM CABLE

Air core duct telephone cable
Aluminium moisture barrier adhering to the sheath
1600 pairs 0.4mm conductor
Sheath colour – black
Diameter – 51.5mm

This cable also comes in 50 – 4800 pair sizes with various core configurations.
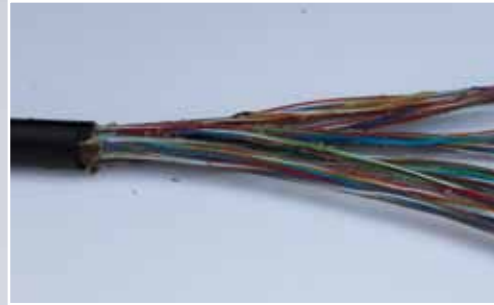
20 PAIR 0.5MM PET TELECOM CABLE

Grease filled duct multi-pair telephone cable
20 pairs 0.5mm conductor
Sheath colour – black
Diameter – 10mm

This cable also comes in 2 – 100 pair sizes with various core configurations.

100 PAIR 0.5MM PET TELECOM CABLE

Grease filled duct telephone cable
100 pairs 0.5mm conductor
Sheath colour – black
Diameter – 24mm

This cable also comes in 2 – 100 pair sizes with various core configurations.

50 PAIR 0.5MM AERIAL CABLE

Grease filled figure 8 aerial cable
50 pairs 0.5mm conductor
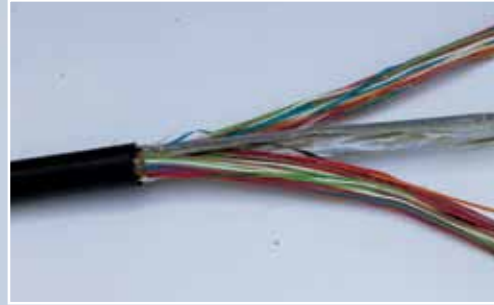Steel support strand
Sheath colour – black
Diameter – 16mm

This cable also comes in 10 – 100 pair sizes with various core configurations.

100 PAIR 0.6MM AERIAL CABLE

Grease filled aerial cable
100 pairs 0.6mm conductor
Steel support strand
Sheath colour – black
Diameter – 30mm

**This cable also comes in 10 – 100 pair sizes
with various core configurations.**

40 PAIR 0.6 TVS (PCM) CABLE

Grease filled duct telecom cable
40 pairs 0.6mm conductor
Transverse screen – this is a second
foil barrier separating the inner core
Diameter – 20mm

**This cable also comes in 20, 40 and 80 pair sizes
all with 0.6mm conductors.**

CAT 5 TYPE MULTI-COLOURED STRANDED CABLE

Purple/lilac sheathing
17mm diameter with markings
"Tyco electronics EVOTAM"
25 or 32 pair cable

LEGACY CABLE

LEAD-SHEATHED

Lead-sheathed cable was installed in the ground up until the late 1960s, but is still very common. It comprises of an outer layer of lead – sometimes wrapped in hessian and bitumen for protection, with a paper-wrapped copper core.

Lead cables come in a variety of sizes, from 1cm to nearly 10cm diameter. The inner core can also differ in its appearance – many trunk cables will have a number of thick coaxial tubes at the centre.

POLYTHENE-SHEATHED CABLE

After lead-sheathed cable was discontinued, BT introduced a polythene-sheathed cable. The outer core is made up of a translucent or white coloured polythene sheath, with an aluminium barrier between it and the core. The core is still paper-wrapped copper and is identical to that used in the previous lead cables. Again it comes in a variety of sizes and core configuration.

The pairs are insulated with either plastic or paper sheathing.

Coaxial cable was used to carry high grade circuits prior to fibre optics. This type of cable consists of copper coaxial tubes wrapped in a steel ribbon. Again, it comes in a variety of sizes and core configurations.

These are examples of manufacturers' ID labels found on legacy cable. ID labels are located between the sheathing and copper conductors.

FIBRE OPTICAL CABLE

The examples here are of fibre optical cables and tubing. This type of cable consists of plastic tubing which protects the glass conductors. This cable does not contain any metal but is used extensively within the telecommunications network.

STOLEN CABLE

It is common practice for thieves to process the cable before selling it on by removing its outer sheathing.
This is generally achieved by stripping the outer sheathing and burning the conductors to remove the insulation.
The following photos are examples of the results of this practice.

Stolen cable can also be found cut into 1 to 2 metre length "sticks".

BT CABLE DRUM LABELS

The following are typical labels which would be affixed to a cable drum owned by BT.

CABLE TRAILERS

Larger cable drums are transported by cable trailers. The following are examples of the type of trailers used by BT.

CABLE WINCH

Cable winches are used by Openreach and its contractors to install and remove cable from within the underground network. The following photographs are examples of the different types used by BT and contractors.

CRIMESTOPPERS

Crimestoppers is an independent charity helping to fight crime. It is not part of the police or government.

The charity believes that people and their communities have the right to live without crime and without the fear of crime.

Their mission is to provide a means to detect, reduce and prevent crime through the provision of information about crimes to law enforcement from anonymous sources.

Crimestoppers operates 0800 555 111 and www.crimestoppers-uk.org for people to pass on information about crimes anonymously. They will not take users' names or any personal details and information cannot be traced or recorded. As users remain anonymous, it also means they will not go to court or give a statement to police.

FOUND AN ITEM THAT'S SHOWN IN THIS BOOKLET? THEN PLEASE CONTACT US

BT SECURITY HELPDESK (24HRS)
0800 321999

OPENREACH NETWORK RESILIENCE UNIT
network.resilience.unit@openreach.co.uk

OPERATION EIGER
intel@bt.com

CRIMESTOPPERS
0800 555 111   www.crimestoppers-uk.org

For more information please visit
www.openreach.co.uk/cableprotection