# **Specification CP16** – Technical Departure from Specification (TDFS).

Civil engineering items and tolerances applicable to a TDFS

# Scope

This document forms part of the Access Network specifications range of documents and is applicable to external PIA CP's. The following describes and details the requirements for PIA CP's working on the BT Underground Duct Network.

This document must be used by appropriately trained and competent personnel who have good experience of working in the civils environment.

### Introduction

This document details the technical elements and tolerances which may be varied as a Technical Departure from Specification (TDFS). TDFS only applies to civil engineering items where a degree of variance outside standard construction tolerances is required to overcome site conditions or the constraint of existing plant.

This process is not to be used in situations where poor quality workmanship or inadequate site set up/preparation has resulted in a non-conformance to the Engineering Principles.

# 1 Technical Departure from Specification (TDFS)

There may be situations where, due to site conditions, it is not possible to undertake the work within all relevant specifications of the Engineering Principles e.g. CP13. In these instances a Technical Departure from Specification (TDFS) 'Work Permit' will be required.

### 2 In Scope

Situations covered by the scope of this permit include, but are not limited to:

- New duct entries into an existing structure where other utilities services dictate entry position
- Depth of chamber due to other services where no alternative location exists
- Benching (modifying the chamber to fit into a tight space between existing services) of Footway chambers due to other services
- Bolts Foundation (for attachment of cable bearer channels) requiring repositioning due to existing duct/joint positions
- Provision of additional Bolts Foundation to suit existing joint arrangement.
- Re-position or omission of anchor irons due to existing duct entries
- Formation of multiway duct either entering or between chambers
- Numbers of ducts entering a chamber wall in excess of specification

### 3 Out of Scope

Situations which remain outside the scope of this permit include but are not limited to:

- Depths of chamber exceeding the design depth, as defined in the specification or CN drawing
- Duct entries provided in an unsafe location e.g. duct entry in manhole shaft or within 150mm of an access step
- Concrete strength

- Wall thickness
- Reinforcing bars number, type & location

#### **4 TDFS Limits**

TDFS limits are only applicable to items which would be affected by either site conditions or the constraints of existing plant. Items such as verticality, flatness of floor, concrete strength/voidage, finish etc. which are a result of quality working practices are excluded from TDFS. The standard tolerance/intervention would be applicable in all cases.

It is the responsibility of the PIA CP to ensure that any requests for TDFS will be based upon sound professional engineering judgement. Minimum Openreach specified standards cannot be varied by application of TDFS alone e.g. the proximity of a duct entry to an anchor iron cannot be varied unless the anchor iron is cut off to prevent use; this situation would be subject to a TDFS.

The requirements of the work originator must be considered when providing solutions, however, the issue of a TDFS request does not remove the responsibility from the PIA CP to ensure good engineering construction principles are adhered to.

Caution: Safety and repair durability remain paramount

## **5 Standard TDFS items and tolerances**

Item	Auto-TDFS
Anchor Iron Position	+/- 150mm from position shown on Drawing providing a minimum of 230mm from any new opening that is created during the construction
Benching floors and walls	Benching of the chamber can be carried out to a maximum one third the width of the chamber and a height of 200mm (footway chambers only)
Depth of Chamber	Depth of a standard chamber may be reduced by a maximum of 150mm (excluding pre cast and single ring JMF101/2 type chambers)
Bolts Foundation No.1 & No.2 (Bolts for wall channels)	Bolts can vary to suit existing / new ducts by a maximum of 150mm in the vertical plane and 250mm in the horizontal plane. Vertical and horizontal alignment will remain within the stated tolerance
Duct Entry position	+/- 150mm from position shown on drawing, assuming minimum specified floor/ roof clearances are achieved, (e.g. minimum 150mm from floor or roof & 75mm from the wall)
Step Position	+/- 50mm from specified. Step to remain horizontal +/- 5mm
Sump Position	+/- 150mm
Sump Depth	+/- 100mm

## **6 Non Standard Repair**

Where the PIA CP is still unable to meet the requirements of Engineering Principles CP13, e.g. due to other services such as Gas, then the PIA CP should complete the work so that:

- a) The duct section can be rodded easily
- b) Cables can be easily recovered (if required at a future date)
- c) Duct protection has been properly fitted

The PIA CP will need to confirm and fully evidence, in the information they submit with their SPO Network Adjustment Order, that they have been unable to meet the standards in Engineering Principles CP13 and that they have met the requirements set out in (a) – (c) above. Openreach will validate the SPO Network Adjustment Order completion evidence and based on the above criteria (a-c) will assess if a payment is appropriate. No cancellation charge would be applicable if Openreach do not approve payment.

If it is not possible to effect a repair in line with the above the PIA CP will be responsible for the cost of returning the network to no worse than the state it was prior to commencing the repair.

## 7 TDFS Requests and Authorisation

TDFS will be authorised by the PIA Desk team and all requests are to be sent to pia.spo@openreach.co.uk.

To ensure correct application of the TDFS process, photographic evidence must be provided clearly identifying the location and detail of each TDFS.

All requests are subject to approval.

#### 8 TDFS audit

Correct operation of the TDFS permit may be monitored via ad hoc audits and quality checks. Where a non-conforming repair is subject to a quality check, the resulting quality check can only be recorded as 'Checked OK' if a valid TDFS has been obtained and has been correctly recorded. If the TDFS is found not to be valid then the check must be recorded as 'Below Standard', and a CANDID case will be raised for the CP to rectify

### **9 Specification Authority**

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