

# **ANNEXES DOCUMENT**

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## **Local Loop Unbundling: Review of GO's Reference Unbundling Offer**

**Consultation and Proposed Decision**

**November 2009**

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## ANNEX C1 :METALLIC PATH SHARED ACCESS SERVICE – SERVICE DESCRIPTION

### 1. SERVICE DESCRIPTION

The Shared Access Service will be provided on a dedicated point to point MPF providing physical connectivity between a GO Maltacom MDF and a GO Maltacom NTP at the User's premises. Physical connectivity to the Dedicated, Comingling, or Virtual UALL Collocation Facility will be provided by means of Internal Tie Cables. Physical connectivity to the Distant UALL Collocation Facility will be provided by means of External Tie Cables. The technical details of Tie Cables for use in the Shared Access Service are given in the Tie Cables Technical Description at Annex E9.

#### 1.1 GENERAL DESCRIPTION

The Shared Access Service allows the OAO 0L0 access to the frequency spectrum above that used to transmit voice services on a MPF which is used by Maltacom to transmit analogue telephony service over the GO network. The Shared Access Service allows the OAO 0L0 to connect appropriate xDSL technologies to the MPF thus enabling the OAO 0L0 to deliver xDSL services to the User.

The Shared Access Service will only be offered on MPFs that are currently working and supplying Maltacom analogue telephony service over the GO network to the User. The implementation of the Shared Access Service will allow the MPF, by means of the introduction of frequency splitters in the circuit, to support the simultaneous operations of two separate service providers. The Supply of the analogue telephony service Maltacom will continue by the current provider to supply analogue telephony service and the OAO 0L0 will deliver xDSL services.

#### 1.2 CONDITIONS

The Shared Access Service will be offered within all areas covered by the GO's General Authorisation Maltacom Telecommunications—Operator Licence. The implementation of the Shared Access Service will be subject to physical and/or technical limitations and unforeseen costs highlighted during the service planning. Implementation is also subject to the availability of approved supporting products. The Shared Access Service will be provided subject to the OAO 0L0 agreeing to observe the operational limitations of the Spectrum Management Specification at Annex E10.

The OAO 0L0 requesting the Shared Access Service must have physical access to the GO Maltacom MDF by means of a UALL Collocation Service under the terms and conditions of the UALL Agreement(s).

### 1.3 CHARGEABLE SERVICE ELEMENT DESCRIPTIONS

The applicable charges for the Service described in this Annex C1 are contained in the Price List at Annex F, unless bespoke charges apply.

#### 1.3.1 Provision of Shared Access Service

An existing metallic pair in the Copper Access Network, in use to provide analogue voice service to a ~~Maltacom~~ customer **over GO's network**, is tested for compliance with the MPF specification given in the Technical Description at Annex E1. The metallic pair is provisioned for the Shared Access Service once it meets or exceeds this MPF specification.

The MPF is temporarily disconnected from the **GO** ~~Maltacom~~ switch at the MDF and connected to an **OAO** ~~OLO~~ provided splitter unit via the appropriate Tie Cable. The high frequency output of the splitter unit is connected to an xDSL input port of the **OAO** ~~OLO~~ xDSL multiplexer installed at the UALL Collocation Facility while the low frequency output will be connected to the **GO** ~~Maltacom~~ analogue voice services switch. The process for the provisioning of a shared MPF is detailed in Annex G1.

The analogue voice service will therefore continue to be provided by **over GO's** ~~Maltacom~~ **network** whilst the xDSL service will be provided by the **OAO** ~~OLO~~ over the shared MPF. The **OAO** ~~OLO~~ will be responsible for the provision of the xDSL service to the User over the shared MPF and **the existing service provider** ~~Maltacom~~ shall not respond to queries from and/or handle customer care issues of any such Users.

The splitter unit is to be pre-provisioned and pre-wired to the HDF by the **OAO** ~~OLO~~ to minimise the duration of the interruption to the analogue voice service during provision of the Shared Access Service.

#### 1.3.2 Reversion of Shared Access Service

Reversion of Shared Access Service involves the disconnection of the MPF from the **OAO** ~~OLO~~ splitter unit and the reconnection of the said MPF to the **GO** ~~Maltacom~~ analogue voice services switch. Such reversion takes place when an **OAO** ~~OLO~~ providing a User with xDSL services by means of a Shared Access Service on an MPF requests **GO** ~~Maltacom~~ to cease the Shared Access Service to that User. The xDSL services are ceased and the MPF reverts solely to **the existing service provider** ~~Maltacom~~ for the continued provision of analogue voice service.

#### 1.3.3 MPF Testing Resulting in 'No Fault Found'

If a fault report is lodged by an **OAO** ~~OLO~~ about an MPF used for Shared Access Service, and such MPF, when subsequently tested by **GO** ~~Maltacom~~, is found to meet or exceed the MPF specification detailed in Annex E1, a 'No Fault Found' result would be deemed to subsist. In that case **GO** ~~Maltacom~~ will charge the **OAO** ~~OLO~~ for the MPF test as indicated under item 'Shared Access Service MPF Testing When No Fault Found' in the Price List at Annex F.

Where the fault conditions continue to exist, the OAO OLE may request additional testing to seek to establish whether the cause is interference and/or interaction within the cable between MPFs carrying xDSL services or external interference. Charges for additional testing shall be based on the additional work performed as a result of the request. The process for tackling fault reports attributed to interference is detailed in Annex G3.

#### **1.3.4 Cancellation of Application for Shared Access Service**

If, at any stage in the process to provide a Shared Access Service, an OAO OLE withdraws its application for such Service, the OAO OLE will be charged the full installation charge for the Service originally requested and/or additionally approved by the OAO OLE later during the provisioning process, as indicated in the Price List at Annex F.

#### **1.4 METALLIC PATH FACILITY**

An MPF shall be deemed suitable for implementation of the Shared Access Service when:

- The analogue voice service is provided to the prospective User by ~~Maltacom~~ **over GO's network** and the source of the received dial tone is the **GO Maltacom** equipment located in the MDF site where the Shared Access Service is requested; and
- The copper pair has been tested by **GO Maltacom** and the test results are within the specified line parameters detailed in the MPF Technical Description at Annex E1.

NB. The copper pair to be used for the MPF must be an existing ~~Maltacom~~ circuit carrying analogue voice service **over GO's network** to the prospective User. A new line must not be required to facilitate implementation of the Shared Access Service.

#### **1.5 INTERFERENCE**

The OAO OLE xDSL equipment transmissions must not interfere with the analogue voice band transmissions of the **GO Maltacom** analogue voice service **over GO's network**. It is the responsibility of the OAO OLE to comply with the specifications for associated telecommunications equipment, splitters and cables laid down in the Shared Access Service - Technical Description at Annex E2.

The Shared Access Service enables ~~Maltacom~~ **the current service provider to continue to provide** analogue voice service and an OAO OLE to provide xDSL services on the same MPF. Splitter components are required to enable the analogue voice and xDSL services to be transmitted simultaneously on the same MPF. It is the responsibility of the OAO OLE to provide splitter components, at the OAO OLE's cost, that comply with the requirements of the Spectrum Management Specification at Annex

E10.

## 1.6 OPERATIONAL REQUIREMENTS

It is the responsibility of the OAO ӨЛӨ to ensure that all equipment provided by the OAO ӨЛӨ and connected to MPFs is compliant with the Spectrum Management Specification at Annex E10.

It is the responsibility of the OAO ӨЛӨ to provide or facilitate the provision of appropriate Customer Premises Equipment required at the User's premises to deliver xDSL services.

The MPF boundary will be the line side termination of the GO ~~Maltacom~~ MDF and a GO ~~Maltacom~~ NTP at the User's premises. The User's splitter unit will be provided and installed on the User side of the NTP by the OAO ӨЛӨ.

GO ~~Maltacom~~ will remove active network components connected to the MPF subject to the conditions detailed in Section 2.1.3 of the Main Body of this RUO.

Line test facilities on the MPF used to provide the Shared Access Service will be the responsibility of GO ~~Maltacom~~ and are detailed in the MPF Technical Description at Annex E1.

Processes covering provision and maintenance of the interfaces between GO ~~Maltacom~~ and the OAO ӨЛӨ are contained in Annexes G1 and G3.

## 1.7 DISCONNECTION OF ANALOGUE VOICE SERVICE ON AN MPF SUPPORTING A SHARED ACCESS SERVICE

As stated in Section 2.3 of the Main Body of this RUO, any access to a shared MPF requires an analogue voice service being provided by ~~Maltacom~~ over GO's network. In the event of permanent disconnection of the ~~Maltacom~~ analogue voice service (over GO's network) for whatever reason at any time following the OAO ӨЛӨ's request for a UALL Service, the necessary conditions for the provision of the MPF for Shared Access Service would cease to exist. In any such event, any and all GO ~~Maltacom~~ obligations and any and all agreements with regard to the provisioning by GO ~~Maltacom~~ of Shared Access Service on the particular MPF on which the analogue voice service would have been so disconnected will cease forthwith upon the said disconnection. In these circumstances GO ~~Maltacom~~ will charge the OAO ӨЛӨ for the Shared Access Service up to the date of the said analogue voice service disconnection.

## 2. TECHNICAL DESCRIPTION

A technical description of the Shared Access Service is contained in Annex E2.

## ANNEX C2: METALLIC PATH FULL UNBUNDLING SERVICE – SERVICE DESCRIPTION

### 1. Service Description

The Full Unbundling Service will be provided on a dedicated point to point MPF providing physical connectivity between a ~~Maltacom~~ GO MDF and a ~~Maltacom~~ GO NTP at the User's premises. The Full Unbundling Service will consist of a MPF and a copper pair in a Tie Cable providing physical connectivity from the ~~Maltacom~~ GO MDF to the OAO OLO. The technical details of the MPF are given in the Metallic Path Facility Technical Description at Annex E1.

Physical connectivity to the Dedicated, Co-mingling, or Virtual UALL Collocation Facility will be provided by means of Internal Tie Cables. Physical connectivity to the Distant UALL Collocation Facility will be provided by means of External Tie Cables. The technical details of tie cables for use in the Full Unbundling Service are given in the Tie Cables Technical Description at Annex E9.

#### 1.1 Conditions

The Full Unbundling Service will be offered within all areas covered by the ~~GO's Maltacom~~ General Authorisation Telecommunications Operator Licence. The implementation of the Full Unbundling Service will be subject to physical and/or technical limitations and unforeseen costs highlighted during the service planning. Implementation is also subject to the availability of approved supporting products. The Full Unbundling Service will be provided subject to the OAO OLO agreeing to observe the operational limitations of the Spectrum Management Specification at Annex E10.

#### 1.2 Chargeable Service Element Descriptions

The applicable charges for the Services described in this Annex C2 are contained in the Price List at Annex F, unless bespoke charges apply.

##### 1.2.1 Provision of Full Unbundling Service

A request for Full Unbundling Service can refer to either:

- **Case A:** a metallic pair that is in service to provide switched analogue voice service to a ~~Maltacom~~ GO customer - the provisioning process in this case is termed an 'MPF Line Transfer';

- **Case B:** a metallic pair that is not in use (it can be a new line or a former active line which has been deactivated) and where the installation of a new NTP is required – the provisioning process in this case is termed a 'New MPF with spare capacity exists between the DP and the MDF';
- **Case C:** a metallic pair that is not in use (it can be a new line or a former active line which has been deactivated) and where no spare capacity exists between the DP and the MDF – the provisioning process in this case is termed a 'New MPF with no spare capacity between the DP and the MDF'.

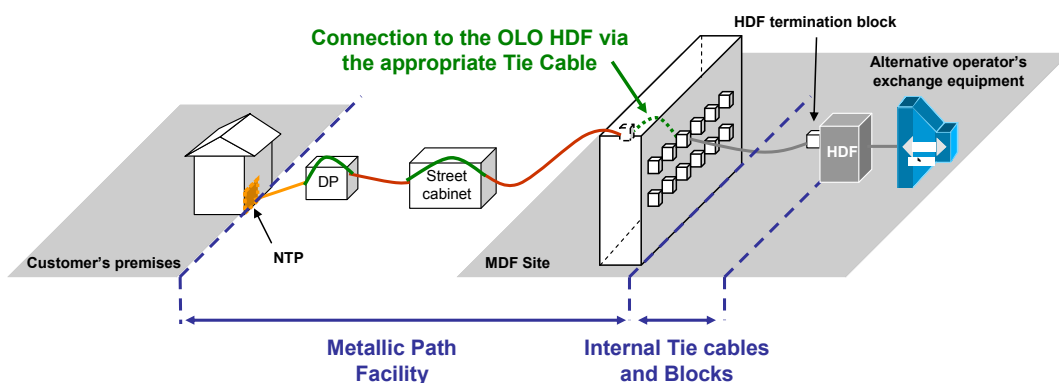
### 1.2.2 Case A: MPF Line Transfer

MPF Line Transfer refers to an existing metallic pair in the Copper Access Network in use to provide switched analogue voice service to a GO Maltacom customer. The line records are checked and if the metallic pair is found to be Equipped, it is rendered Unequipped as described in Section 1.2.10 below.

The Unequipped metallic pair is tested for compliance with the MPF specification given in the Technical Description at Annex E1. The metallic pair is provisioned for the Full Unbundling Service once it meets or exceeds this MPF specification.

The MPF is disconnected from the GO Maltacom switch at the MDF and connected to the OAO OLO HDF via the appropriate Tie Cable (see picture below). The OAO OLO will be solely responsible for the provision of any services to the User over that MPF and GO Maltacom shall not respond to queries from and/or handle customer care issues of any such Users in relation to the provision of such services.

**MPF Line Transfer: connection to the OAO HDF via the appropriate Tie Cable**



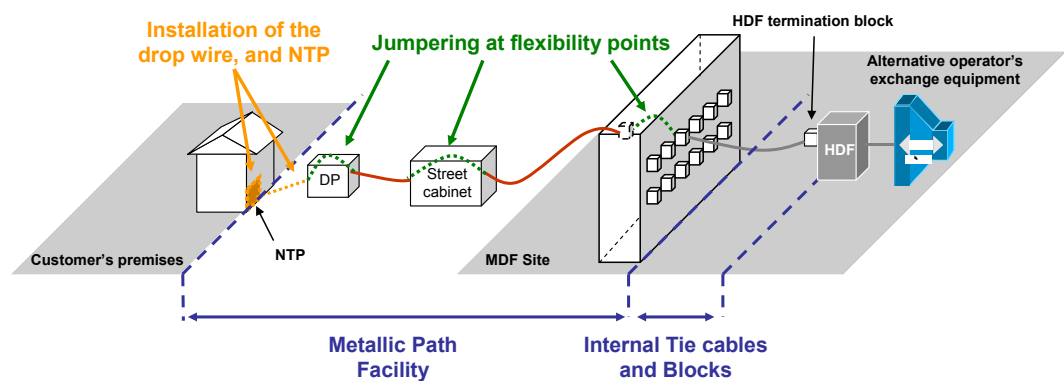


### 1.2.3 Case B: New MPF where with spare capacity between exists at the DP and the MDF

This refers to a request for an MPF to a User's premises which requires jumpering at the MDF and, possibly at the PCP/s, as well as a new connection to GO-Malta.com's Copper Access Network Distribution Point (DP), in cases where spare capacity from the MDF to the DP exists i.e. provisioning requires jumpering at flexibility points, the installation of the drop wire, and NTP.

GO-Malta.com will install, in accordance with current work practices, up to a maximum of 190 metres of lead-in cable, as well as the NTP, at the price detailed under item "Full Unbundling Service Provision where infrastructure currently exists Case B: New MPF with spare capacity between the DP and the MDF" in the Price List at Annex F. Moreover, the NTP will be installed not further than 5 metres from a reasonable point of entry into the User's premises. This price is indicated net of any charges for any infrastructure upgrades, such as the erection of poles, trenching and pipe-laying, that may be required to connect the MPF to the User's premises. Any such charges shall be charged separately to the OAO 040 on an ad hoc basis. Any required work over and above this specification will also incur additional bespoke charges and will also be charged to the OAO 040 on an ad hoc basis.

#### New MPF with spare capacity between the DP and the MDF



### 1.2.4 Case C: New MPF requiring Limited Network Rearrangements with no spare capacity between the DP and the MDF

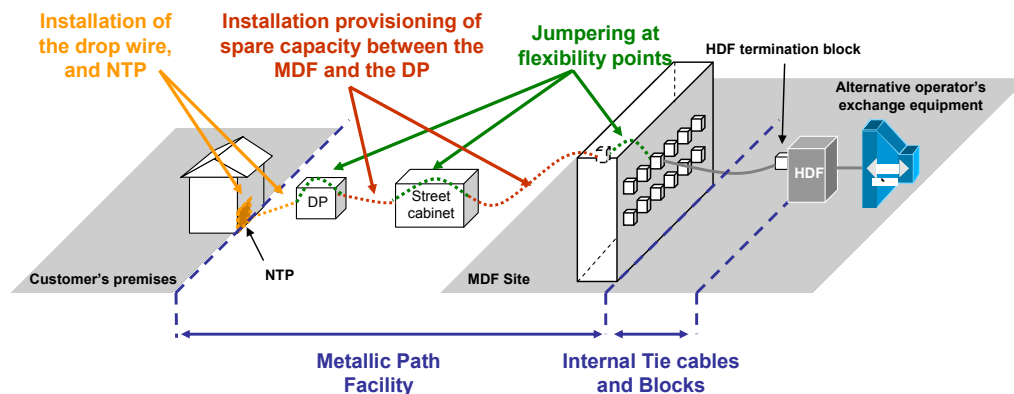
This refers to a request for an MPF to a User's premises which requires a new connection to the GO-Malta.com's Copper Access Network DP and where no spare capacity exists from the MDF to the DP i.e. provisioning requires jumpering at flexibility points, the installation of the drop wire and NTP, and the provisioning of spare capacity at the DP.

Where stubbed metallic pairs are available along the requested MPF route, GO-Malta.com will extend and terminate pairs at the appropriate point in the Network to provide the required capacity. Alternatively, GO-Malta.com

will provide the required capacity through a rearrangement of spare metallic pairs at a single joint. The relative charges are specified in item "~~Full Unbundling Service Provision involving limited rearrangement~~ **Case C: New MPF with no spare capacity between the DP and the MDF** (up to 20 man hours)" in the Price List at Annex F, and includes the installation of a new drop wire and NTP, as described in Section 2.1.4 of the Main Body of this RUO.

The total work involved in carrying out Limited Network Rearrangements cannot exceed the maximum threshold of twenty (20) man hours. Where the required work exceeds this threshold the **OAO** ~~OLO~~ will be given the option either to pay for the extra work or to withdraw the UALL Service request. **This option is exercised at the application form stage where the OAO shall indicate the amount he is prepared to incur in instances where the required works exceeds the 20 hours Limited Network Rearrangements.** ~~Where the OLO agrees to pay for the extra work, such work will be executed and the OAO will be charged for the additional expenditure on an ad hoc basis.~~

### New MPF with no spare capacity between the DP and the MDF



### 1.2.5 MPF Testing Resulting in No Fault Found

If a fault report is lodged by an **OAO** ~~OLO~~ about an MPF used for Full Unbundling Service, and such MPF, when subsequently tested by **GO** ~~Maltacom~~, is found to meet or exceed the MPF specification detailed in Annex E1, a 'No Fault Found' result would be deemed to subsist. In that case **GO** ~~Maltacom~~ will charge the **OAO** ~~OLO~~ for the MPF test as indicated under item 'Full Unbundling Service MPF Testing When No Fault Found' in the Price List at Annex F.

Where the fault conditions continue to exist, the **OAO** ~~OLO~~ may request additional testing to seek to establish whether the cause is interference and/or interaction within the cable between MPFs carrying xDSL services or external interference. Charges for additional testing shall be based on the additional work performed as a result of the request. The process for tackling fault reports attributed to interference is detailed in Annex G3.

### **1.2.6 Pair diversion option**

Where an unbundled MPF serving a User proves to be incapable of supporting the transmission of xDSL services, ~~GO Maltacom~~ will, where possible, carry out one [1] pair diversion to provide an MPF with suitable transmission characteristics. This process will involve the testing of up to five metallic pairs delivering analogue voice service to ~~GO Maltacom~~ customers. The most suitable pair tested will be diverted to the OAO ~~OLE~~, which will be charged at the prices indicated in Item 1.1.7 of the Price List at Annex F.

### **1.2.7 Reversion of an MPF to a GO Working Pair**

Such reversion takes place when an OAO ~~OLE~~ providing a User with services by means of a Full Unbundling Service on an MPF requests ~~GO Maltacom~~ to cease the Full Unbundling Service to that User and such User applies with GO for the delivery of telecommunications services over that MPF. The relative applicable charge due by the OAO ~~OLE~~ is shown under item "Full Unbundling Service Reversion" in the Price List at Annex F.

### **1.2.8 Return of an MPF to a GO Usable Spare Pair**

This occurs when an OAO ~~OLE~~ providing a User with services by means of a Full Unbundling Service on an MPF requests ~~GO Maltacom~~ to cease the Full Unbundling Service to that User and such User does not apply with ~~GO Maltacom~~ for the delivery of **electronic** telecommunications services over that MPF. The relative applicable charge due by the OAO is shown under item "Full Unbundling Service Disconnection" in the Price List at Annex F.

### **1.2.9 Cancellation of Application for Full Unbundling Service**

If, at any stage in the process to provide a Shared Access Service, an OAO ~~OLE~~ withdraws its application for such Service, the OAO ~~OLE~~ will be charged the full installation charge for the Service originally requested and/or additionally approved by the OAO ~~OLE~~ later during the provisioning process, as indicated in the Price List at Annex F.

### **1.2.10 Unequipping an Equipped Metallic Pair**

An Equipped metallic pair is rendered Unequipped by disconnecting the active network component or by diverting the User service to a spare Unequipped MPF. This service does not attract an additional charge. However, when diverting service is not possible, ~~GO Maltacom~~ will not remove active equipment from a metallic pair where this equipment is shared with other users and removal will require significant

network rearrangements and/or new network build. Where this situation arises, ~~GO Maltacom~~ will produce supporting evidence thereof to the ~~OA0 0L0~~.

### **1.2.11 Provision of test capability of Full Unbundling Service MPFs**

Test access to the MPF provided under a Full Unbundling Service requires the purchase, installation and operation by ~~GO Maltacom~~ of additional test software and hardware that will be charged to the ~~OA0 0L0~~. These charges will be bespoke according to the test methodology chosen by the ~~OA0 0L0~~.

### **1.3 Metallic Path Facility**

An MPF shall be deemed suitable for implementation of the Full Unbundling Service when the metallic pair has been tested by ~~Maltacom~~ ~~GO~~ and the test results are within the specified line parameters detailed in the Metallic Path Facility Technical Specification at Annex E1.

### **1.4 Interference**

The ~~OA0 0L0~~ xDSL equipment transmissions must not interfere with any transmissions carried by the Copper Access Network. It is the responsibility of the ~~OA0 0L0~~ to comply with the specifications for ~~electronic~~ telecommunications equipment connected to the ~~Maltacom~~ ~~GO~~ Network detailed in the Spectrum Management Specification at Annex E10.

### **1.5 Operational Requirements**

It is the responsibility of the ~~OA0 0L0~~ to ensure that all equipment provided by the ~~OA0 0L0~~ and connected to MPFs is compliant with the Spectrum Management Specification at Annex E10.

It is the responsibility of the ~~OA0 0L0~~ to provide or facilitate the provision of appropriate Customer Premises Equipment required at the User's premises to deliver xDSL services.

The MPF boundary will be the line side termination of the ~~GO Maltacom~~ MDF and a ~~GO Maltacom~~ NTP at the User's premises.

~~GO Maltacom~~ will remove active network components connected to the MPF subject to the conditions detailed in Section 2.1.3 of the Main Body of this RUO and in Section 1.2.10 of this Annex.

Line test facilities on the MPF used to provide the Full Unbundling Service will be the responsibility of ~~GO Maltacom~~ and are detailed in the MPF Technical Description at Annex E1.

Processes covering provision and maintenance of the interfaces between ~~GO~~

Maltacom and the **OA** ~~OL~~ are contained in Annexes G1 and G3.

## **2. Technical Description**

A technical description of the Full Unbundling Service is contained in Annex E3.

## ANNEX D1: DEDICATED COLLOCATION FACILITY SERVICE DESCRIPTION

### 1. SERVICE DEFINITION

#### 1.1 General Description

The Dedicated Collocation Facility Service is a Service provided by GO Maltacom offering Equipment space within a GO Maltacom MDF Site by means of construction of a Dedicated Collocation Facility room. The Dedicated Collocation Facility will provide equipment space which has been confirmed as being suitable for hosting Digital Subscriber Loop Access Multiplexor (DSLAM) equipment owned by the OAO OLO for the purpose of providing xDSL services on unbundled local loops.

The Dedicated Collocation Facility Service will be provided in a custom built room within a GO Maltacom MDF site where LLU Collocation Services have been requested which can be shared by a number of OAO OLOs, subject to space availability. The Dedicated Collocation Facility Service will provide secure accommodation suitable for the installation, operation and maintenance of the OLO's DSLAM equipment by the OAO OLO's own personnel or suitably authorised contractors.

Physical connectivity from the OAO OLO Dedicated Collocation Facility will be by the use of copper Internal Tie Cables, as described below at Section 1.2.1 and as further detailed in the Dedicated Collocation Service Technical Description.

#### 1.2 Chargeable Service Element Definitions

The Dedicated Collocation Facility Service will consist of the chargeable service elements defined below:

##### 1.2.1 Internal Tie Cable

An Internal Tie Cable consists of a number of metallic tie circuits provided in a telecommunications cable constructed for internal use. The Internal Tie Cable will provide connectivity between a GO Maltacom MDF and an OAO OLO HDF located in a Dedicated Collocation or Co-mingling Facility housed in a GO Maltacom MDF site.

The Internal Tie Cable will be provided as increments of 100 pair cables and in 100 metre lengths with an initial minimum provision of 100 metres.

All MDF and HDF metalwork and termination blocks will be supplied and

maintained by **GO Maltacom**.

The applicable charges indicated in the Price List include charges applicable in regard to the provisioning of cable trays, cable terminations and termination blocks.

### 1.2.2 Surveys

~~Dedicated Collocation Facility Service Initial Survey – An initial desktop survey carried out by Maltacom Facilities Management personnel which will involve the examination of paper and software records to determine whether floor space is available in the Maltacom MDF site that has the potential to house a Dedicated Collocation Facility.~~

~~Dedicated Collocation Service Detailed Survey –~~ **If the information on the types of collocation availability as disclosed to the OAO (upon the signing of the NDA) has indicated the initial survey indicates the existence of suitable floor space in a GO Maltacom MDF site, and the OAO confirms the request for a Dedicated Collocation Facility,** a detailed physical survey will subsequently be carried out. The detailed survey will consist of two sections. The first section will be carried out by a civil engineer to establish whether the identified floor space is capable of being converted into a Dedicated Collocation Facility ~~and to produce an estimate of the work and costs involved.~~ The second section will be carried out by **GO Maltacom** Facilities Management personnel to assess the capabilities of existing building facilities, such as power, climate control and fire alarms, to support the requirements of the **OAO OLO** for the Dedicated Collocation Facility. **GO shall produce a bill of quantities with associated costs and forecast timescales.**

### 1.2.3 Use of a Maltacom **GO** MDF

The charges applicable for use of a ~~GO Maltacom~~ MDF are laid down in the Price List.

### 1.2.4 Use of Floorspace at a **GO Maltacom** MDF site

The charges applicable for use of floorspace within a **GO Maltacom** MDF site are laid down in the Price List.

### 1.2.5 Handover Distribution Frame

The HDF will be constructed from multiple termination blocks approved for connection to the ~~GO Maltacom~~ Copper Access Network. For all Collocation Facility Services ~~GO Maltacom~~ will supply and install the HDF and the charges will be included in the charges for Internal and External Tie Cables.

### 1.2.6 Equipment Support

Support for power distribution boards, Handover Distribution Frames and ~~OAO-OLE~~ equipment racks and/ or cabinets will be provided by the Chargeable Ancillary Supply Service (CASS). The CASS service will provide physical support in the form of a metallic framework constructed to provide basic modular accommodation for the Operator equipment and support facilities. The CASS will also provide environmental control and alarm systems in compliance with ~~GO-Maltacom~~ standard equipment installation work practices. A full description of the CASS service is included in the Chargeable Ancillary Supply Service Description.

### 1.3 Conditions

The ~~GO-Maltacom~~ Dedicated Collocation Facility Service will be offered within areas covered by the ~~GO's-Maltacom~~ General Authorisation Telecommunications Operator Licence. The implementation of the Dedicated Collocation Facility Service will be subject to physical and/or technical limitations and unforeseen costs highlighted during the service planning. The Dedicated Collocation Facility Service will be provided subject to the ~~OAO-OLE~~ agreeing to enter into a Collocation Agreement with ~~Maltacom~~ GO.

### 1.4 Dedicated Collocation Facility

The Dedicated Collocation Facility consists of a custom built equipment room specifically designed for the installation of ~~telecommunications-racks~~ and DSLAM equipment and should comply with all requirements and regulations with regard to access, floor space, ceiling height, floor loading etc. Physical interconnection to unbundled local loops is facilitated by providing a copper Internal Tie Cable link from a HDF in the Collocation Facility to the ~~GO-Maltacom~~ MDF.

The Co-mingling Facility will be supplied with power from the ~~GO-Maltacom~~ Essential Supply Service (ESS) at the MDF site. Power supplied by the ESS service can be provided with or without a power back-up facility. A full definition of the ESS service is included in the Essential Supply Service Description.

The Collocation Facility will be supplied with Chargeable Ancillary Service Systems (CASS) such as:

- Secure access,
- Power,
- Lighting,
- Ventilation,



- Climate control,
- Smoke/fire detection etc.

The provision of CASS can be expanded to include enhanced ancillary services such as uninterruptible power supply (UPS), fire suppression, intruder alarms, environment alarms for ingress of gas, water and other liquids etc.

These enhanced ancillary services shall be additionally chargeable by ~~Maltacem~~ GO to the OAO-OLE.

### 1.5 Operational Requirements

- The Dedicated Collocation Facility Service will only be offered at ~~GO Maltacem~~ operational buildings housing MDFs.
- All dimensions and facilities of the Dedicated Collocation Facility will be specified by the OAO-OLE and will be supported by forecasts for customer demand supplied by the OAO-OLE to ~~GO-Maltacem~~.
- ~~GO-Maltacem~~ will reserve the right to refuse provision of the Dedicated Collocation Facility Service in buildings where there is no existing suitable space and the work required to create space can be demonstrated to be practically and/or economically non-viable.
- The Dedicated Collocation Facility Service will provide space for equipment racking with a standard height and footprint for the installation of lockable metal equipment cabinets.
- The OAO-OLE may only install equipment in the Dedicated Collocation Facility specifically required for the purpose of providing xDSL services over unbundled local loops. All installed equipment must comply with the relevant EU and Maltese legislation as well as with all relevant national and international standards in the communications industry including but not limited to those standards laid down by the International Telecommunications Union (ITU) and the European Telecommunications Standards Institute (ETSI). All OAO-OLE equipment will be supplied, installed and maintained by the OAO-OLE or by authorised and suitably accredited agents of the OAO-OLE for whom the OAO-OLE will assume responsibility.
- All personnel accessing the Dedicated Collocation Facility on behalf of the OAO-OLE shall require approval by ~~GO-Maltacem~~ prior to accessing the same and shall be escorted by ~~GO-Maltacem~~ personnel or ~~GO Maltacem~~ authorised agents at all times while on the premises. The OAO-OLE will be responsible for all such personnel accessing the said premises on the OAO-OLE's behalf.
- The charges relating to the Dedicated Collocation Facility Service, as

indicated in the Price List, shall apply.

## **2. TECHNICAL DESCRIPTION**

A technical description of the ~~GO-Malta.com~~ Dedicated Collocation Facility Service is contained in the Dedicated Collocation Facility Service Technical Description.

A technical description of all Tie Cables used in the provision of the ~~GO-Malta.com~~ Dedicated Collocation Facility Service is contained in the Tie Cables Technical Description.

## ANNEX D2: CO-MINGLING FACILITY SERVICE DESCRIPTION

### 1. SERVICE DESCRIPTION

#### 1.1 General Description

The Co-mingling Collocation Facility Service is a Service provided by ~~GO-Maltacom~~ offering Equipment space within a ~~GO-Maltacom~~ MDF Site occupying operational floor space which has been confirmed as being suitable for hosting DSLAM equipment owned by the ~~OAO-OLE~~ for the purpose of providing xDSL services on unbundled local loops.

The Co-mingling Facility Service will be provided in designated operational areas within a ~~GO-Maltacom~~ MDF site where LLU Collocation Services have been requested which can be shared by a number of ~~OAO OLEs~~, subject to space availability. The Co-mingling Collocation Facility Service will provide secure accommodation suitable for the installation, operation and maintenance of the ~~OAO-OLE's~~ DSLAM equipment by the ~~OAO OLE's~~ own personnel or suitably authorised contractors.

Physical connectivity from the ~~OLE-OAO~~ Co-mingling Facility will be by the use of copper Internal Tie Cables, as described below at Section 1.2.1 and as further detailed in the Co-mingling Collocation Service Technical Description.

#### 1.2 Chargeable Service Element Definitions

The Co-mingling Collocation Facility Service will consist of the chargeable service elements defined below:

##### 1.2.1 Internal Tie Cable

An Internal Tie Cable consists of a number of metallic tie circuits provided in a telecommunications cable constructed for internal use. The Internal Tie Cable will provide connectivity between a ~~GO-Maltacom~~ MDF and an ~~OAO-OLE~~ HDF located in a Dedicated Collocation or Co-mingling Facility housed in a ~~GO Maltacom~~ MDF site.

The Internal Tie Cable will be provided as increments of 100 pair cables and in 100 metre lengths with an initial minimum provision of 100 metres.

All MDF and HDF metalwork and termination blocks will be supplied and maintained by ~~GO-Maltacom~~.

The applicable charges indicated in the Price List include charges applicable in regard to the provisioning of cable trays, cable terminations and termination blocks.

### 1.2.2 Surveys

~~Co-mingling Facility Service Initial Survey – An initial desktop survey carried out by Maltacom Facilities Management personnel which will involve the examination of paper and software records to determine whether floor space is available in the Maltacom MDF site that has the potential to house a Co-mingling Collocation Facility.~~

~~Co-mingling Collocation Service Detailed Survey –~~ **If the information on the types of collocation availability as disclosed to the OAO (upon the signing of the NDA) has indicated the existence of suitable floor space in a GO MDF site, and the OAO confirms the request for a Co-mingling Collocation Facility, a detailed physical survey will subsequently be carried out subsequent to the initial survey to confirm whether suitable floor space exists in a Maltacom MDF site for a Co-mingling Collocation Facility.** The detailed survey will consist of two sections. The first section will be carried out by a civil engineer to establish whether the identified floor space is capable of being converted into a Co-mingling Collocation Facility and to produce an estimate of the work and costs involved. The second section will be carried out by **GO Maltacom** Facilities Management personnel to assess the capabilities of existing building facilities, such as power, climate control and fire alarms, to support the requirements of the **OAO OLO** for the Co-mingling Collocation Facility. **GO shall produce a bill of quantities with associated costs and forecast timescales.**

### 1.2.3 Use of a **GO Maltacom** MDF

The charges applicable for use of a **GO Maltacom** MDF are laid down in the Price List.

### 1.2.4 Use of Floorspace at a **GO Maltacom** Site

The charges applicable for use of floorspace within a **GO Maltacom** MDF site are laid down in the Price List.

### 1.2.5 Handover Distribution Frame

The HDF will be constructed from multiple termination blocks approved for connection to the **GO Maltacom** Copper Access Network. For all Collocation Facility Services **GO Maltacom** will supply and install the HDF and the charges will be included in the charges for Internal and External Tie Cables.

### 1.2.6 Equipment Support

Support for power distribution boards, Handover Distribution Frames and **OAO OLO** equipment racks and/ or cabinets will be provided by the Chargeable Ancillary Supply Service (CASS). The CASS service will provide

physical support in the form of a metallic framework constructed to provide basic modular accommodation for the Operator equipment and support facilities. The CASS will also provide environmental control and alarm systems in compliance with ~~GO-Maltacom~~ standard equipment installation work practices. A full description of the CASS service is included in the Chargeable Ancillary Supply Service Description.

### 1.3 Conditions

The ~~GO-Maltacom~~ Co-mingling Facility Service will be offered within areas covered by the ~~GO's-Maltacom~~ **General Authorisation** Telecommunications ~~Operator License~~. The implementation of the Co-mingling Facility Service will be subject to physical and/or technical limitations and unforeseen costs highlighted during the service planning. The Co-mingling Facility Service will be provided subject to the ~~OAO-OLQ~~ agreeing to enter into a Collocation Agreement with ~~Maltacom~~ **GO**.

### 1.4 Co-mingling Facility

The Co-mingling Facility consists of space in an operational area within a ~~GO-Maltacom~~ building designated by ~~GO-Maltacom~~ as being suitable for the installation of ~~OAO-OLQ~~ **electronic communications** ~~telecommunications~~ racks and DSLAM equipment and should comply with all requirements and regulations with regard to access, floor space, ceiling height, floor loading etc. Physical interconnection to unbundled local loops is facilitated by providing a copper Internal Tie Cable link from a HDF in the Collocation Facility to the ~~GO-Maltacom~~ MDF.

The Co-mingling Facility will be supplied with power from the ~~GO-Maltacom~~ Essential Supply Service (ESS) at the MDF site. Power supplied by the ESS service can be provided with or without a power back-up facility. A full definition of the ESS service is included in the Essential Supply Service Description.

The Co-mingling Facility will be supplied with other Chargeable Ancillary Service Systems (CASS) such as:

- Secure access,
- Power,
- Lighting,
- Ventilation,
- Climate control,
- Smoke/fire detection etc.

The provision of CASS can be expanded to include enhanced ancillary services such as uninterruptible power supply (UPS), fire suppression, intruder alarms, environment alarms for ingress of gas, water and other liquids etc.

These enhanced ancillary services shall be additionally chargeable by GO Maltacom to the OAO-OLE.

### 1.5 Operational Requirements

- The Co-mingling Facility Service will only be offered at GO Maltacom operational buildings housing MDFs.
- All dimensions and facilities of the Co-mingling Facility will be specified by the OAO OLE and will be supported by forecasts for customer demand supplied by the OLE to GO Maltacom.
- GO Maltacom will reserve the right to refuse provision of the co-mingling Facility Service in buildings where there is no existing suitable space and the work required to create space can be demonstrated to be practically and/or economically non-viable.
- The Co-mingling Facility Service will provide space for equipment racking with a standard height and footprint for the installation of lockable metal equipment cabinets.
- The OAO-OLE may only install equipment in the Co-mingling Facility specifically required for the purpose of providing xDSL services over unbundled local loops. All installed equipment must comply with the relevant EU and Maltese legislation as well as with all relevant national and international standards in the communications industry including but not limited to those standards laid down by the International Telecommunications Union (ITU) and the European Telecommunications Standards Institute (ETSI).
- All OAO OLE equipment will be supplied, installed and maintained by the OAO OLE or by authorised and suitably accredited agents of the OAO-OLE for whom the OAO-OLE will assume responsibility.
- All personnel accessing the Co-mingling Collocation Facility on behalf of the OAO-OLE shall require approval by GO Maltacom prior to accessing the same and shall be escorted by GO Maltacom personnel or GO Maltacom authorised agents at all times while on the premises. The OAO-OLE will be responsible for all such personnel accessing the said premises on the OAO OLE's behalf.
- The charges relating to the Co-Mingling Collocation Facility Service shall apply.

## 2. TECHNICAL DESCRIPTION

A technical description of the ~~GO-Maltacom~~ Co-mingling Facility Service is contained in the Co-mingling Facility Service Technical Description.

A technical description of all Tie Cables used in the provision of the ~~GO-Maltacom~~ Co-mingling Facility Service is contained in the Tie Cables Technical Description.

## ANNEX D3: VIRTUAL COLLOCATION FACILITY SERVICE DESCRIPTION

### 1. SERVICE DESCRIPTION

#### 1.1 General Description

The Virtual Collocation Facility Service is a Service provided by ~~GO-Maltacom~~ offering space within a ~~GO-Maltacom~~ MDF Site at a location external to the operational building but within the site under the ownership of ~~GO-Maltacom~~. An external enclosure will be provided by the ~~OAO-OLE~~ to a specification suitable for hosting Digital Subscriber Loop Access Multiplexor (DSLAM) equipment owned by the ~~OAO-OLE~~ for the purpose of providing xDSL services on unbundled local loops.

The ~~GO-Maltacom~~ Virtual Collocation Facility Service will be provided within a designated operational area in a ~~GO-Maltacom~~ MDF site but external to the ~~GO-Maltacom~~ building where LLU Collocation Services have been requested which can be shared by a number of ~~OAO-OLE~~s, subject to space availability and the permits required by law or regulation applicable at the time. The Virtual Collocation Facility Service will provide space for the installation by the ~~OAO-OLE~~ of secure accommodation suitable for the installation, operation and maintenance of ~~OAO-OLE~~-DSLAM equipment by the ~~OAO-OLE~~'s own personnel or suitably authorised contractors.

Physical connectivity from the ~~OAO-OLE~~ Virtual Collocation Facility will be by the use of copper Internal Tie Cables, as described below at Section 1.3 below and as further detailed in the Virtual Collocation Service Technical Description

#### 1.2 Conditions

The ~~GO-Maltacom~~ Virtual Collocation Facility Service will be offered within areas covered by the ~~GO's Maltacom~~ **General Authorisation Telecommunications Operator Licence**. The implementation of the Virtual Collocation Facility Service will be subject to physical and/or technical limitations and unforeseen costs highlighted during the service planning. The Virtual Collocation Facility Service will be provided subject to the ~~OAO-OLE~~ agreeing to enter into a Collocation Agreement with ~~GO-Maltacom~~.

#### 1.3 Chargeable Service Element Definitions

##### 1.3.1 Internal Tie Cable

An Internal Tie Cable consists of a number of metallic tie circuits provided in a telecommunications cable constructed for internal use. The Internal Tie Cable will provide connectivity between a ~~GO-Maltacom~~ MDF and an ~~OAO-OLE~~ HDF located in a Virtual Collocation Facility housed in a ~~GO-Maltacom~~ MDF site.



The Internal Tie Cable will be provided as increments of 100 pair cables and in 100 metre lengths with an initial minimum provision of 100 metres.

All MDF and HDF metalwork and termination blocks will be supplied and maintained by ~~GO Maltacom~~.

The applicable charges indicated in the Price List include charges applicable in regard to the provisioning of cable trays, cable terminations and termination blocks.

### **1.3.2 Surveys**

~~Virtual Collocation Facility Service Initial Survey~~ – **If the information on the types of collocation availability as disclosed to the OAO (upon the signing of the NDA) has indicated the existence of suitable floor space** ~~Maltacom will carry out an initial survey of an MDF site to assess the availability of space suitable for accommodating a Virtual Collocation Facility. Based upon the specifications of the OLO, the initial survey will only establish whether space exists within the MDF site that could be used for the provision of a Virtual Collocation Facility.~~

~~Virtual Collocation Facility Service Detailed Survey~~ – Where the Initial Survey indicates that space exists within an MDF site and the ~~OAO OLO~~ confirms the request for a Virtual Collocation Facility, ~~GO Maltacom~~ will carry out a detailed survey of the proposed area. The detailed survey will be carried out in two sections. The first section will be a civil engineering exercise to establish the existence of any underground services that would need to be protected or diverted and to assess the suitability of the area to support the construction of the Virtual Collocation Facility. The second section will be carried out by the ~~GO Maltacom~~ Buildings Facilities Group to assess the impact of the proposed Virtual Collocation Facility on ~~GO Maltacom~~ operations and, where requested, the ability of existing ESS facilities to supply power to the ~~OAO OLO~~ equipment. **GO shall produce a bill of quantities with associated costs and forecast timescales.**

### **1.3.3 Use of a ~~GO Maltacom~~ MDF**

The charges applicable for use of a ~~GO Maltacom~~ MDF are laid down in the Price List.

### **1.3.4 Use of Floorspace at a ~~GO Maltacom~~ MDF Site**

The charges applicable for use of floorspace within a ~~GO Maltacom~~ MDF site are laid down in the Price List.

### **1.3.5 Handover Distribution Frame**

The HDF will be constructed from multiple termination blocks approved for connection to the ~~GO Maltacom~~ Copper Access Network. For all Collocation Facility Services ~~GO Maltacom~~ will supply and install the HDF and the charges will be included in the charges for Internal and External Tie Cables.

#### 1.4 Virtual Collocation Facility

The Virtual Collocation Facility consists of space on a ~~GO Maltacom~~ MDF site but external to the ~~GO Maltacom~~ building. The space will be designated by ~~GO Maltacom~~ as being suitable for the installation by the ~~OAQ OLO~~ **electronic communications** telecommunications racks and DSLAM equipment and should comply with all requirements and regulations with regard to access, floor space, ceiling height, floor loading etc. Physical interconnection to unbundled local loops is facilitated by providing a copper Internal Tie Cable link from a HDF in the Collocation Facility to the ~~GO Maltacom~~ MDF.

At the request of the ~~OAQ OLO~~, the Virtual Collocation Facility will be supplied with power from the ~~GO Maltacom~~ Essential Supply Service (ESS) at the MDF site. Power supplied by the ESS service can be provided with or without a power back-up facility. A full description of the ESS service is included in Essential Supply Service Description.

The Virtual Collocation Facility will be supplied with Chargeable Ancillary Service Systems (CASS) such as:

- Secure access,
- Power,
- Lighting,
- Ventilation,
- Climate control,
- Smoke/fire detection etc.

The provision of CASS can be expanded to include enhanced ancillary services such as uninterruptible power supply (UPS), fire suppression, intruder alarms, environment alarms for ingress of gas, water and other liquids etc.

These enhanced ancillary services shall be additionally chargeable by ~~GO Maltacom~~ to the ~~OAQ OLO~~.

#### 1.5 Operational Requirements

- The Virtual Collocation Facility Service will only be offered at ~~GO Maltacom~~ operational buildings housing MDFs.
- The Virtual Collocation Facility will take the form of access to a specific area of land on the ~~GO Maltacom~~ MDF site but external to the ~~GO Maltacom~~ building. All activities relating to the preparation, construction and operation of the

Virtual Collocation Facility will be the sole responsibility of the ~~OA OLO~~.

- All dimensions and facilities of the Virtual Collocation Facility will be specified by the ~~OA OLO~~ and will be supported by forecasts for customer demand supplied by the ~~OA OLO~~ to ~~GO Maltacom~~.
- ~~GO Maltacom~~ will reserve the right to refuse provision of the Virtual Collocation Facility Service on MDF sites where there is no existing suitable space and the work required to create space can be demonstrated to be practically and/or economically non-viable.
- The Virtual Collocation Facility Service will provide space for the installation by the ~~OA OLO~~ of an enclosure suitable for housing equipment racking with a standard height and footprint for the installation of lockable metal equipment cabinets.
- The ~~OA OLO~~ may only install equipment in the Virtual Collocation Facility specifically required for the purpose of providing xDSL services over unbundled local loops. All installed equipment must comply with the relevant EU and Maltese legislation as well as with all relevant national and international standards in the communications industry including but not limited to those standards laid down by the International Telecommunications Union (ITU) and the European Telecommunications Standards Institute (ETSI).
- The ~~OA OLO~~ Virtual Collocation Facility housing and all associated equipment will be supplied, installed and maintained by the OLO or by authorised and suitably accredited agents of the ~~OA OLO~~ for whom the ~~OA OLO~~ will assume responsibility.
- All personnel accessing the Virtual Collocation Facility on behalf of the ~~OA OLO~~ shall require approval by ~~GO Maltacom~~ prior to accessing the same and shall be escorted by ~~GO Maltacom~~ personnel or ~~GO Maltacom~~ authorised agents at all times while on the premises. The ~~OA OLO~~ will be responsible for all such personnel accessing the said premises on the ~~OA OLO~~'s behalf.
- The charges relating to the Virtual Collocation Facility Service shall apply.

## 2. TECHNICAL DESCRIPTION

A technical description of the ~~GO Maltacom~~ Virtual Collocation Facility Service is contained in the Virtual Collocation Facility Service Technical Description.

A technical description of all Tie Cables used in the provision of the ~~GO Maltacom~~ Virtual Collocation Facility Service is contained in the Tie Cables Technical Description.

## **ANNEX G1: GENERIC METALLIC PATH FACILITY SERVICE ORDER PROCESS**

### **1. SCOPE**

This document describes the GO Unbundled Access to the Local Loop (UALL) Service Order Process for Metallic Path Facility (MPF) provisioning in the case of the MPF Full Unbundling Service and the MPF Shared Access Service.

## 2. MPF FULL UNBUNDLING SERVICE ORDER PROCESS

This service order process describes the procedures to be followed when an OLO files a request for a Full Unbundling Service. The description covers the three categories of Full Unbundling Service provision:

- Case A: a metallic pair that is in service to provide switched analogue voice service to a GO customer - the provisioning process in this case is termed an MPF Line Transfer;
- Case B: a metallic pair that is not in use (it can be a new line or a former active line which has been deactivated) and where spare capacity exists between the DP and the MDF but one needs to install an NTP;
- Case C: a metallic pair that is not in use (it can be a new line or a former active line which has been deactivated) and where no spare capacity exists between the DP and the MDF.

The procedures described herein may be subject to change from time to time as a consequence of improved internal operating processes at GO p.l.c.

All communications related to the MPF Full Unbundling Service order process shall be carried out between GO and the OAO through the Web Portal unless otherwise stated<sup>1</sup>.

As soon as the OAO makes a request for Full Unbundling Service (be it for case A, case B or case C), an e-mail is automatically sent to the OAO informing it that there has been a status change to a specific request (identified by the unique application number). The status change is time stamped for eventual reference should this be required for the purpose of ensuring SLA compliance.

### 2.1 Sub-process for case A: MPF Line Transfer

Step 1A	Application Form
<p>The OAO initiates the request by submitting via the Web Portal a duly filled-in and signed Application Form (Form 1) to GO's RUO Department. The unique Application Form number shall be the reference number for the particular service request.</p> <p>The OAO specifies the threshold for the unbundling process. This threshold should be equal or higher than tariff for case C in annex F (1.1.3), and is used for the process related to case C (step 6C)<sup>2</sup>.</p>	

<sup>1</sup> As per Communication clause proposed to be included in the Main Body.

<sup>2</sup> At this stage, OAO does not know if the line is related to case A, case B or case C, so it has to fix the threshold. This threshold will not be used in case A and case B.

<b>Step 2A</b>		
<p>GO's RUO Department verifies that:</p> <ul style="list-style-type: none"> <li>a. The Application Form is complete;</li> <li>b. Any up-front charges due have been paid;</li> <li>c. The OAO has a valid UALL Collocation Facility Agreement for the MDF site specified in the Application Form;</li> <li>d. The OAO has sufficient Tie Cable / HDF capacity necessary to provision the requested service.</li> </ul>		
<b>Step 3A</b>	NIL (unless any processing fees need to be charged on an ad hoc basis)	
<p>If any of the above prerequisites is not satisfied, the process continues at the 'Process Aborted' stage (Step 25A).</p>		
<b>Step 4A</b>		
<p>If all the prerequisites in Step 2A are satisfied, the Front Office within GO's RUO Department accepts the OAO's request and the Customer Creation process begins</p>		
<b>Step 5A</b>	Data filtering and credit control sub-process	
<p>The GO Data Filtering Unit checks the application data set against data in the system:</p> <ul style="list-style-type: none"> <li>○ If the check detects inconsistency in data input submitted by OAO, the OAO is informed accordingly through the Web Portal within 1 working day from Step 1A. Once the OAO submits the correct data, GO's Data Filtering Unit amends the application data. The response time agreed to in the relevant SLA shall be suspended during this period.</li> <li>○ If the check does not detect any payment issues<sup>3</sup>, the Web Portal sends the OAO an automated acknowledgment of the OAO's request, within 1 working day from step1A.</li> </ul>		

<sup>3</sup> A payment issue arises when the user for whom the OAO made a request for unbundling has been issued with a bill which is still outstanding after the due date stipulated on the bill. If a bill has been issued and the due date has not yet elapsed, then this does not constitute a payment issue.

- If the check detects payment issues, the GO Data Filtering Unit refers the request to GO's Credit Control Department. The GO Credit Control Department performs the standard process to try to resolve the payment issue. In this particular instance, the OAO is informed accordingly within 2 working days from Step 1A.
- If the payment issue is resolved, the Web Portal sends the OAO an automated acknowledgment of the OAO's request.
- If the payment issues are not resolved within the standard time limit, the request is cancelled and the process continues from the 'Process Aborted' stage (Step 24A).

**Step 6A**

If GO's Routing Office establishes that the MPF is unequipped, GO's Routing Office requests GO's LTS Section to test the MPF, and the procedure continues at Step 8A.

If GO's Routing Office establishes that the MPF is equipped, GO's Routing Office determines an alternative route to render the MPF unequipped.

**Step 7A**

GO updates the status of the OAO's request to the effect that the MPF requires unequipping.

A Work Order to unequip the MPF is issued and carried out by a GO field technician.

Status of the OAO's request is updated again to reflect that unequipping was done.

**Step 8A**

GO's LTS Section tests the unequipped MPF and checks whether it satisfies the MPF Specification agreed to by the Parties. If it satisfies the MPF Specification, the procedure continues at Step 10A.

**Step 9A**

If the unequipped MPF does not satisfy the MPF Specification,

GO's LTS Section updates the status of the OAO's request and refers the fault for rectification: "requiring lead in replacement" and/or "requiring Cable Fault rectification". If the fault rectification requires an appointment with the end-user, OAO is informed: OAO has the responsibility to conclude the appointment with the end-user and the lead time is postponed till the appointment. At the date of the appointment, the lead time continues.

Once the fault is rectified, OAO's request is updated accordingly and the process continues from step 10A.

**Step 10A**

GO's LTS Section updates the status of the OAO's request when test results conform to the MPF Specification.

The GO Test Room technician provisionally removes the provision of the GO analogue voice service by disconnecting the LIC circuit on the Exchange side of the MDF. He connects a jumper between the MPF termination on the Cable side of the MDF and the allocated Equipment side Tie Cable termination to the HDF of the OAO and confirms that the work has been done as planned.

**Step 11A**

The Web Portal informs the OAO that jumpering is complete and advises that the MPF is ready for acceptance testing within an agreed time limit.

**Step 12A**

If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the removal of the GO analogue voice service (Step 21A).

**Step 13A**

If no feedback from the OAO is received within the agreed time limit, or the OLO rejects the MPF outright, the process continues from 'Process Aborted' (Step 24A).



<b>Step 14A</b>	Annex F Price Schedule Item 1.1.7	
<p>If rejection of the MPF is received from the OAO within the agreed time limit, with the OAO's authorisation to find an alternative route (at additional cost), the Work Order is referred back to the GO Routing Office to provide an alternative route for the MPF.</p>		
<b>Step 15A</b>		
<p>The GO Routing Office requests the GO LTS Section to test up to five alternative metallic pairs delivering analogue voice service to GO clients on the same DP (if possible) and selects the most suitable one for diversion to the OAO.</p>		
<b>Step 16A</b>		
<p>A field technician executes the Work Order to divert the pair. While still on site, the field technician contacts the GO Area Test Room to temporarily re-jumper / manually test the MPF to the user's LIC circuit and disconnect the jumper to the HDF Tie Cable.</p>		
<b>Step 17A</b>		
<p>The GO LTS Section tests the MPF to confirm that it satisfies the MPF specification and requests the GO Area Test Room to re-normalise the jumpering so as to connect the MPF to the OAO's HDF.</p>		
<b>Step 18A</b>		
<p>The GO Test Room technician normalises the jumpering so as to connect the MPF to the OAO's HDF and informs the OAO that the work is complete and the Web Portal advises that the MPF is ready for acceptance testing within the agreed time limit.</p>		
<b>Step 19A</b>		

If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the removal of the GO analogue voice service (Step 21A).

**Step 20A**

If no written feedback from the OAO is received within the agreed time limit, or the OAO rejects the MPF, the process continues from 'Process Aborted (Step 24A).

**Step 21A**

The GO Test Room technician reconnects the User's analogue telephone voice service and disconnects the MPF from the OAO's HDF. The GO Test Room technician notes this on Cerillion / the Web Portal, which instructs the OAO to advise the User to settle any and all outstanding bills the User may have with GO.

**Step 22A**

The removal of the analogue voice service becomes effective once the User settles any and all outstanding bills that the User may have with GO. The process continues at the 'Post-Provisioning Process' stage (Step 23A).

**Step 23A** Post-provisioning processes

The GO RUO Department verifies whether any additional billable costs were incurred during the process (but not captured on the system) and issues a manual bill for any such additional billable costs.

Rental billing for the Full Unbundling Service commences.

**Step 24A** Process aborted sub-process

1. The GO RUO Department reviews the process to collect information about the costs incurred up to the stage when it

was aborted.

2. If the MPF is still connected to the OAO's HDF, the GO RUO Department issues instructions to the GO Area Test Room to reconnect the User's analogue voice service.

3. The GO RUO Department informs the OAO that the request has been rejected, giving reasons, and billing the OAO for costs incurred.

**2.2 Sub-process for case B: New MPF with spare capacity between the DP and the MDF**

<b>Step 1B</b>	Application Form	
<p>The OAO initiates the request by submitting via the Web Portal a duly filled-in and signed Application Form (Form 1) to GO's RUO Department. The unique Application Form number shall be the reference number for the particular service request.</p> <p>The OAO specifies the threshold for the unbundling process. This threshold should be equal or higher than tariff for case C in annex F (1.1.3), and is used for the process related to case C (step 6C)<sup>4</sup>.</p>		
<b>Step 2B</b>		
<p>GO's RUO Department verifies that:</p> <ul style="list-style-type: none"> <li>a. The Application Form is complete;</li> <li>b. Any up-front charges due have been paid;</li> <li>c. The OAO has a valid UALL Collocation Facility Agreement for the MDF site specified in the Application Form;</li> <li>d. The OAO has sufficient Tie Cable / HDF capacity necessary to provision the requested service.</li> </ul>		
<b>Step 3B</b>	NIL (unless any processing fees need to be charged on an ad hoc basis)	

<sup>4</sup> At this stage, OAO does not know if the line is related to case A, case B or case C, so it has to fix the threshold. This threshold will not be used in case A and case B.

If any of the above prerequisites is not satisfied, the process continues at the 'Process Aborted' stage (Step 20B).

**Step 4B**

If all the prerequisites in Step 2B are satisfied, the Front Office within GO's RUO Department accepts the OAO's request and the Customer Creation process begins

**Step 5B**

Data filtering and credit control sub-process

The GO Data Filtering Unit checks the application data set against data in the system:

- If the check detects inconsistency in data input submitted by OAO, the OAO is informed accordingly through the Web Portal within 1 working day to Step1B. Once the OAO submits the correct data, GO's Data Filtering Unit amends the application data. The response time agreed to in the relevant SLA shall be suspended during this period.
- If the check does not detect any payment issues<sup>5</sup>, the Web Portal sends the OAO an automated acknowledgment of the OAO's request, within 1 working day from step1B.
- If the check detects payment issues, the GO Data Filtering Unit refers the request to GO's Credit Control Department. The GO Credit Control Department performs the standard process to try to resolve the payment issue. In this particular instance, the OAO is informed accordingly within 2 working days from Step 1B.
- If the payment issue is resolved, the Web Portal sends the OAO an automated acknowledgment of the OAO's request.
- If the payment issues are not resolved within a reasonable time limit, the request is cancelled and the process continues from the 'Process Aborted' stage (Step 20B).

**Step 6B**

<sup>5</sup> A payment issue arises when the user for whom the OAO made a request for unbundling has been issued with a bill which is still outstanding after the due date stipulated on the bill. If a bill has been issued and the due date has not yet elapsed, then this does not constitute a payment issue.

GO establishes whether a relief project needs to be performed and informs the OAO accordingly. In this case, Case C will apply.

The GO Routing Office allocates a spare connection on the Cable side of the MDF, routing on the cabinet, DP and pair number OR diverts an existing analogue voice customer on to a pair gain unit to obtain a spare copper pair.

**Step 7B**

The GO Test Room technician connects a jumper between the MPF termination on the Cable side of the MDF and the allocated Equipment side Tie Cable termination to the HDF of the OAO and forwards the Work Order to the GO Area Installation Foreman, which passes the Work Order to the GO Lineman to:

- a. connect the jumpers on the cabinet OR divert an existing analogue voice customer on to a pair gain unit, as directed by the GO Routing Office;
- b. install lead-in cable and fix NTP at the User premises, up to 5 metres from a reasonable point of entry.

**Step 8B**

The GO Area Test Room tests the MPF and checks whether it satisfies the MPF Specification. If it satisfies the MPF Specification, the procedure continues at Step 10B.

**Step 9B**

If the MPF does not satisfy the MPF Specification, the GO Area Test Room updates the request status and refers the fault for rectification. If the fault rectification requires an appointment with the end-user, OAO is informed: OAO has the responsibility to conclude the appointment with the end-user and the lead time is postponed till the appointment. At the date of the appointment, the lead time continues.

Once the fault is rectified the process continues from step

10B.
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Step 10B	
<p>The GO Area Test Room updates the Web Portal to advise the OLO that the MPF is ready for acceptance testing within established time limit.</p>	

Step 11B	
<p>If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the Post-Provisioning Processes (Step 19B).</p>	

Step 12B	
<p>If no feedback from the OAO is received within the agreed time limit, or if an outright rejection of the MPF is received from the OAO within the agreed time limit the process goes to 'Process Aborted' (Step 20B).</p>	

Step 13B	Annex F Price Schedule
<p>If a rejection (on the basis of poor broadband capability) of the MPF is received from the OAO within the agreed time limit, but the OAO authorises GO to find an alternative route (at additional cost), the Work Order is referred back to the GO Routing Office to provide an alternative route for the MPF.</p>	

Step 14B	
<p>The GO Routing Office requests the LTS Section to test up to five alternative metallic pairs delivering analogue voice service to GO clients on the same DP (if possible) and selects the most suitable one for diversion to the OAO.</p>	

Step 15B	
<p>A GO field technician executes the Work Order to divert the pair.</p>	

While still on site, the field technician contacts the GO Area Test Room to manually test the MPF.

**Step 16B**

The GO Routing Office requests the LTS Section to test up to five alternative metallic pairs delivering analogue voice service to GO clients on the same DP (if possible) and selects the most suitable one for diversion to the OAO.

The GO Test Room manually tests the MPF to confirm that it satisfies the MPF specification and on a positive test updates the Web Portal to inform the OAO that the MPF is ready for acceptance testing within time limit.

**Step 17B**

If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the Post-Provisioning Processes (Step 19B)

**Step 18B**

If no feedback from the OAO is received within the agreed time limit, or if rejection of the MPF is received from the OAO within the agreed time limit, the process goes to 'Process Aborted' (Step 20B).

**Step 19B** Post-provisioning processes

The GO RUO Department verifies whether any additional billable costs were incurred during the process (but not captured on the system) and issues a manual bill for any such additional billable costs.

Rental billing for the Full Unbundling Service commences.

**Step 20B** Process aborted sub-process

1. The GO RUO Department reviews the process to collect information about the costs incurred up to the stage when it

was aborted.

2. The GO RUO Department informs the OAO that the request has been rejected, giving reasons, and billing the OAO for costs incurred.



## 2.4 Sub-process for case C: New MPF with no spare capacity between the DP and the MDF

<b>Step 1C</b>	Application Form	
<p>The OAO initiates the request by submitting via the Web Portal a duly filled-in and signed Application Form (Form 1) to GO's RUO Department. The unique Application Form number shall be the reference number for the particular service request.</p> <p>The OAO specifies the threshold for the unbundling process. This threshold should be equal or higher than tariff for case C in annex F (1.1.3), and is used for the process related to case C (step 6C).</p>		
<b>Step 2C</b>		
<p>GO's RUO Department verifies that:</p> <ol style="list-style-type: none"> <li>a. The Application Form is complete;</li> <li>b. Any up-front charges due have been paid;</li> <li>c. The OAO has a valid UALL Collocation Facility Agreement for the MDF site specified in the Application Form;</li> <li>d. The OAO has sufficient Tie Cable / HDF capacity necessary to provision the requested service.</li> </ol>		
<b>Step 3C</b>	NIL (unless any processing fees need to be charged on an ad hoc basis)	
<p>If any of the above prerequisites is not satisfied, the process continues at the 'Process Aborted' stage (Step 20C).</p>		
<b>Step 4C</b>		
<p>If all the prerequisites in Step 2C are satisfied, the Front Office within GO's RUO Department accepts the OAO's request and the Customer Creation process begins</p>		
<b>Step 5C</b>	Data filtering and credit control sub-process	
<p>The GO Data Filtering Unit checks the application data set against data in the system:</p>		

- If the check detects inconsistency in data input submitted by OAO, the OAO is informed accordingly through the Web Portal within 1 working day from Step 1C. Once the OLO submits the correct data, GO's Data Filtering Unit amends the application data. The response time agreed to in the relevant SLA shall be suspended during this period.
- If the check does not detect any payment issues, the Web Portal sends the OAO an automated acknowledgment of the OLO's request, within 1 working day from step1C.
- If the check detects payment issues<sup>6</sup>, the GO Data Filtering Unit refers the request to GO's Credit Control Department. The GO Credit Control Department performs the standard process to try to resolve the payment issue. In this particular instance, the OAO is informed accordingly within 2 working days from Step 1C.
- If the payment issue is resolved, the Web Portal sends the OAO an automated acknowledgment of the OAO's request.
- If the payment issues are not resolved within the standard time limit, the request is cancelled and the process continues from the 'Process Aborted' stage (Step 20C).

<b>Step 6C</b>	<p>The GO planning officer carries out a survey and issues the cost estimate for the additional work involved and the number of man-hours required to complete the work. If the work involved does not exceed 20 man-hours, the charge at item 1.1.3 of Annex F (case C) shall apply. If the work involved exceeds 20 man-hours, the cost estimate shall apply:</p> <p>a. If the total cost does not exceed OAO's threshold, the project is planned and is referred for execution. When the relief project is completed, the process then continues from Step 7C.</p> <p>b. If the total cost exceeds OAO's threshold, GO informs the</p>
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<sup>6</sup> A payment issue arises when the user for whom the OAO made a request for unbundling has been issued with a bill which is still outstanding after the due date stipulated on the bill. If a bill has been issued and the due date has not yet elapsed, then this does not constitute a payment issue.

OAO, via the Web Portal, and provides justifications of the costs. Then the process continues at the 'Process Aborted' stage (Step 20C).

**Step 7C**

The GO Test Room technician connects a jumper between the MPF termination on the Cable side of the MDF and the allocated Equipment side Tie Cable termination to the HDF of the OAO and forwards the Work Order to the GO Area Installation Foreman, which passes the Work Order to the GO Lineman to:

- a. connect the jumpers on the cabinet OR divert an existing analogue voice customer on to a pair gain unit, as directed by the GO Routing Office;
- b. install lead-in cable and fix NTP at the User premises, up to 5 metres from a reasonable point of entry.

**Step 8C**

The GO Area Test Room tests the MPF and checks whether it satisfies the MPF Specification. If it satisfies the MPF Specification, the procedure continues at Step 10C.

**Step 9C**

If the MPF does not satisfy the MPF Specification, the GO Area Test Room updates the request status and refers the fault for rectification. If the fault rectification requires an appointment with the end-user, OAO is informed: OAO has the responsibility to conclude the appointment with the end-user and the lead time is postponed till the appointment. At the date of the appointment, the lead time continues.

Once the fault is rectified the process continues from step 10C.

**Step 10C**

The GO Area Test Room updates the Web Portal to advise the

OAO that the MPF is ready for acceptance testing within established time limit.

**Step 11C**

If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the Post-Provisioning Processes (Step 19C).

**Step 12C**

If no feedback from the OAO is received within the agreed time limit, or if an outright rejection of the MPF is received from the OAO within the agreed time limit the process goes to 'Process Aborted' (Step 20C).

**Step 13C** Annex F Price Schedule

If a rejection (on the basis of poor broadband capability) of the MPF is received from the OAO within the agreed time limit, but the OAO authorises GO to find an alternative route (at additional cost), the Work Order is referred back to the GO Routing Office to provide an alternative route for the MPF.

**Step 14C**

The GO Routing Office requests the LTS Section to test up to five alternative metallic pairs delivering analogue voice service to GO clients on the same DP (if possible) and selects the most suitable one for diversion to the OAO.

**Step 15C**

A GO field technician executes the Work Order to divert the pair. While still on site, the field technician contacts the GO Area Test Room to manually test the MPF.

**Step 16C**

The GO Test Room manually tests the MPF to confirm that it

satisfies the MPF specification and on a positive test updates the Web Portal to inform the OAO that the MPF is ready for acceptance testing within time limit.

**Step 17C**

If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the Post-Provisioning Processes (Step 19C)

**Step 18C**

If no feedback from the OAO is received within the agreed time limit, or if rejection of the MPF is received from the OAO within the agreed time limit, the process goes to 'Process Aborted' (Step 20C).

**Step 19C** Post-provisioning processes

The GO RUO Department verifies whether any additional billable costs were incurred during the process (but not captured on the system) and issues a manual bill for any such additional billable costs.

Rental billing for the Full Unbundling Service commences.

**Step 20C** Process aborted sub-process

1. The GO RUO Department reviews the process to collect information about the costs incurred up to the stage when it was aborted.
2. The GO RUO Department informs the OAO that the request has been rejected, giving reasons, and billing the OAO for costs incurred.

### 3. MPF SHARED ACCESS SERVICE ORDER PROCESS

This service order process describes the procedures to be followed when an OAO files a request for Shared Access Service.

The procedures described herein may be subject to change from time to time as a consequence of improved internal operating processes at GO p.l.c.

All communications related to the MPF service order process shall be through the Web Portal unless otherwise stated<sup>7</sup>.

As soon as the OAO makes a request for Full Unbundling Service (be it for case A, case B or case C), an e-mail is automatically sent to the OAO informing it that there has been a status change to a specific request (identified by the unique application number). The status change is time stamped for eventual reference should this be required for the purpose of ensuring SLA compliance.

Step 1	Application Form	
<p>The OAO initiates the request by submitting via the Web Portal a duly filled-in and signed Application Form (Form 2) to GO’s RUO Department. The unique Application Form number shall be used as the request reference number for the particular service request.</p>		

Step 2		
<p>The RUO Department verifies that:</p> <ul style="list-style-type: none"> <li>a. The Application Form is complete;</li> <li>b. Any up-front charges due have been paid;</li> <li>c. The OAO has a valid UALL Collocation Facility Agreement for the MDF site specified in the Application Form;</li> <li>d. The OAO has sufficient Tie Cable / HDF capacity necessary to provision the requested service.</li> </ul>		

<sup>7</sup> As per Communication clause proposed to be included in the Main Body.

Step 3	NIL (unless any processing fees need to be charged on an ad hoc basis)	
<p>If any of the above prerequisites is not satisfied, the process continues at the 'Process Aborted' stage (Step 22).</p>		

Step 4		
<p>If all the prerequisites in Step 2 are satisfied, the Front Office within GO's RUO Department accepts the OAO's request and the Customer Creation process begins.</p>		

Step 5	Data filtering and credit control sub-process	
<p>The GO Data Filtering Unit checks the application data set against data in the system:</p> <ul style="list-style-type: none"> <li>○ If the check detects inconsistency in data input submitted by OLO, the OAO is informed accordingly through the Web Portal. Once the OAO submits the correct data, GO's Data Filtering Unit amends the application data. The response time agreed to in the relevant SLA shall be suspended during this period.</li> <li>○ If the check does not detect any payment issues, the Web Portal sends the OAO an automated acknowledgment of the OAO's request, within 1 working day from step 1.</li> <li>○ If the check detects payment issues, the GO Data Filtering Unit refers the request to GO's Credit Control Department. The GO Credit Control Department performs the standard process to try to resolve the payment issue.</li> <li>○ If the payment issue is resolved, the Web Portal sends the OAO an automated acknowledgment of the OAO's request.</li> <li>○ If the payment issues are not resolved within the standard time limit, the request is cancelled and the process continues from the 'Process Aborted' stage (Step 23).</li> </ul>		

Step 6		
<p>If the GO Routing Office establishes that the MPF is unequipped, the procedure continues at Step 8.</p> <p>If the GO Routing Office establishes that the MPF is equipped, the GO Routing Office determines an alternative route to render the MPF unequipped.</p>		

Step 7		
<p>A Work Order to unequip the MPF is issued and carried out by a GO field technician.</p>		

Step 8		
<p>The GO LTS Section tests the unequipped MPF and checks whether it satisfies the MPF Specification agreed to by the Parties. If it satisfies the MPF Specification, the procedure continues at Step 10.</p>		

Step 9		
<p>If the unequipped MPF does not satisfy the MPF Specification, the GO LTS Section records this and refers the fault for rectification: "requiring lead in replacement" and/or "requiring Cable Fault rectification".</p> <p>If the fault rectification requires an appointment with the end-user, OAO is informed: OAO has the responsibility to conclude the appointment with the end-user and the lead time is postponed till the appointment. At the date of the appointment, the lead time continues.</p> <p>Once the fault is rectified the process continues from step 10.</p>		

Step 10		
<p>The GO Test Room technician provisionally disconnects the GO analogue voice service by removing the LIC circuit on the Exchange side of the MDF.</p>		



Step 11		
<p>The GO Test Room technician connects a jumper between the MPF termination on the Cable side of the MDF and the allocated Tie Cable termination to the HDF of the OAO which had been prejumped by the OLO to the analogue voice and xDSL service Splitter Unit input at the OAO Collocation. The GO Test Room technician then connects the jumper between the Tie Cable termination to the HDF (which had been prewired to the analogue voice output of the Splitter Unit) and the LIC circuit on the Exchange side of the MDF. The GO Test Room technician confirms to the OAO via the Web Portal that the work has been done as planned.</p>		
Step 12		
<p>The Web Portal informs the OAO that jumpering is complete and that the MPF is ready for acceptance testing within agreed time limit.</p>		
Step 13		
<p>If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the Post-Provisioning Processes (Step 22).</p>		
Step 14		
<p>If no feedback from the OAO is received within the agreed time limit, or the OLO rejects the MPF outright, the process continues from `Process Aborted (Step 23).</p>		
Step 15	Annex F Price Schedule Item 2.1.4	
<p>If a rejection of the MPF is received from the OAO within the agreed time limit, but the OAO authorises GO to find an alternative route (at additional cost), the Work Order is referred back to the GO Routing Office to provide an alternative route for the MPF.</p>		

Step 16		
<p>The GO Routing Office requests the LTS Section to test up to five alternative metallic pairs delivering analogue voice service to GO clients on the same DP (if possible) and selects the most suitable one for diversion to the OAO. The GO Routing Office updates the Work Order and refers the Work Order for execution.</p>		
Step 17		
<p>A GO field technician executes the Work Order to divert the pair. When this work is complete, the GO field technician will contact the GO LTS Section while still on site to request a line test of the newly diverted MPF.</p>		
Step 18		
<p>The GO LTS Section tests the MPF to confirm that it satisfies the MPF Specification and updates the status on the Web Portal.</p>		
Step 19		
<p>The Web Portal informs the OAO that jumpering is complete and advises that the MPF is ready for acceptance testing within the agreed time limit.</p>		
Step 20		
<p>If acceptance of the MPF is received from the OAO within the agreed time-limit, the process continues with the Post-Provisioning Processes (Step 22).</p>		
Step 21		
<p>If no feedback from the OAO is received within the agreed time limit, or the OAO rejects the MPF, the process continues from 'Process Aborted' (Step 23).</p>		

Step 22	Post-provisioning processes	
<p>The GO RUO Department verifies whether any additional billable costs were incurred during the process (but not captured on the system) and issues a manual bill for any such additional billable costs.</p> <p>Rental billing for the Shared Access Service commences.</p>		

Step 23	Process aborted sub-process	
<ol style="list-style-type: none"> <li>1. The GO RUO Department reviews the process to collect information about the costs incurred up to the stage when it was aborted.</li> <li>2. If the MPF is still connected to the OAO's HDF, the GO RUO Department issues instructions to the GO Area Test Room to remove the two jumpers to the HDF and reconnect the User's analogue voice service.</li> <li>3. The GO RUO Department informs the OAO that the request has been rejected, giving reasons, and billing the OAO for costs incurred.</li> </ol>		

#### **4. PROCEDURES FOR LINE REVERSION FOR FULLY UNBUNDLED MPFs**

Step 1	Annex F Price Schedule Item 1.1.5	
<p>A User requests GO to revert the User to the GO analogue voice service and disconnect the OAO's services delivered over the fully unbundled loop.</p>		

Step 2		
<p>The GO RUO Department obtains a confirmation from the OAO that the OAO accepts the User's request for disconnection of the fully unbundled loop.</p>		

Step 3		
<p>The GO RUO Department initiates the Work Order for disconnection of the fully unbundled loop and requests the GO Sales Department to contact the User and explain to him the procedure the User needs to follow in order to revert to GO's analogue voice service.</p>		

Step 4		
<p>Once the analogue voice service is restored, GO informs the OAO that the service reversion has been completed.</p>		

Step 5		
<p>Cerillion issues the final rental bill to the OAO for the fully unbundled loop taking the date of confirmation by OAO of the reversion as the last date for which the OAO will be billed. Disconnection charges, if any, will be included with the final rental bill.</p>		

## 5. PROCEDURES FOR CESSATION OF THE UALL SERVICE

Procedures for cessation of the UALL Service is common to fully Unbundled and Shared MPFs

Step 1		
<p>The OAO initiates the request by submitting on the Web Portal a duly filled-in and authenticated Application Form (Form 3) to GO's RUO Department. The unique Application Form number shall be used as the request reference number.</p>		

Step 2		
<p>The GO RUO Department verifies that:</p> <ul style="list-style-type: none"> <li>a. The Application Form is complete; and</li> <li>b. Any up-front charges due have been paid</li> </ul>		

Step 3	Annex F Price Schedule Item 1.1.6 for Fully Unbundled MPF or Annex F Price Schedule Item 2.1.5 for Shared MPF	
<p>If any of the above prerequisites is not satisfied, the process continues at the 'Process Aborted' stage (Step 9).</p>		
Step 4		
<p>If all the prerequisites in Step 2 are satisfied, the Front Office within GO's RUO Department accepts the OAO's request and the Customer Creation process begins.</p>		
Step 5		
<p>If the request is for the cessation of a fully unbundled MPF the GO Test Room technician removes the jumper on the MDF cable side to OAO HDF. The process continues with records update at Step 7.</p>		
Step 6		
<p>If the request is for the cessation of a shared MPF the GO Test Room technician removes the both jumpers on the OAO HDF (to the MDF cable side and to LIC) and connects the LIC to the Cable side of the MDF.</p>		
Step 7		
<p>The GO Test Room technician updates records and informs the GO Routing Office of actual routing to update records.</p>		
Step 8		
<p>The UALL Service is disconnected and billing ceases on the date that Step 7 is completed. The final rental bill shall be issued up to such date.</p>		
Step 9	Process aborted sub-process	

1. The GO RUO Department reviews the process to collect information about the costs incurred up to the stage when it was aborted.
2. The GO RUO Department informs the OAO that the request has been rejected, giving reasons, and billing the OAO for costs incurred.

## ANNEX G2: GENERIC COLLOCATION SERVICE ORDER PROCESS

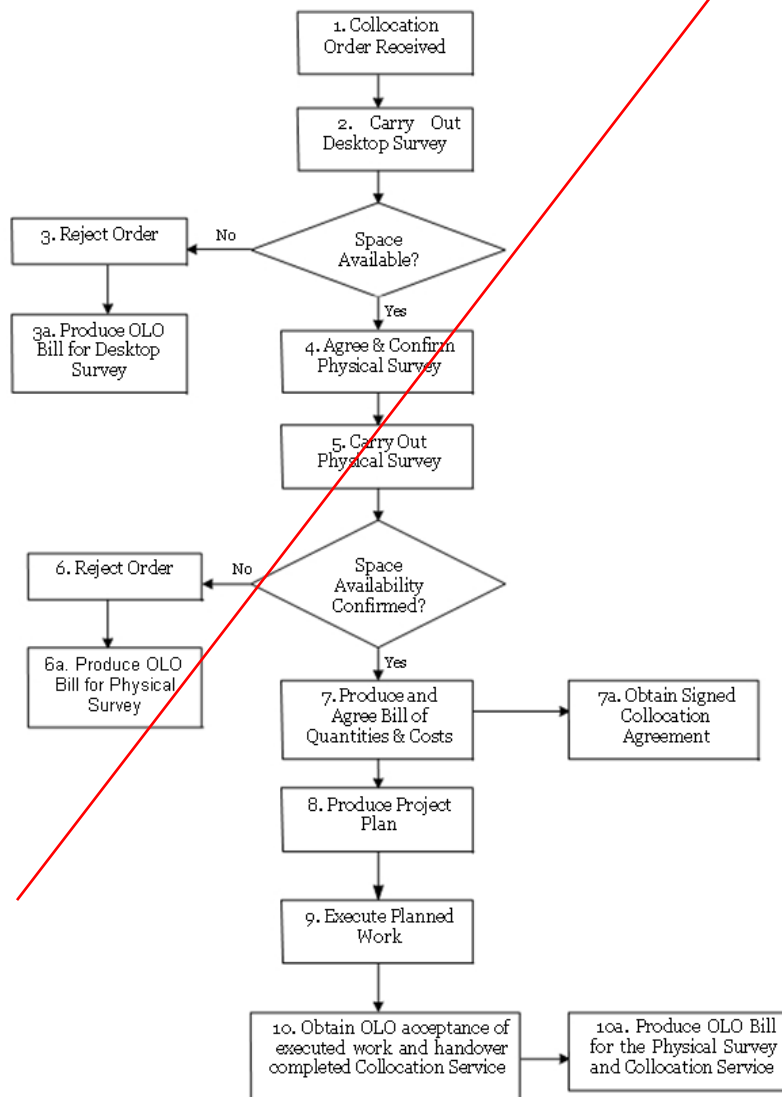
### 1.1 Process Description

This document describes the ~~GO Malta.com~~ Generic Collocation Facility Service Order Process required to support Local Loop Unbundling (LLU) operations. The process is generic in that it is high level and can apply to any of the following LLU Collocation Facility Services:

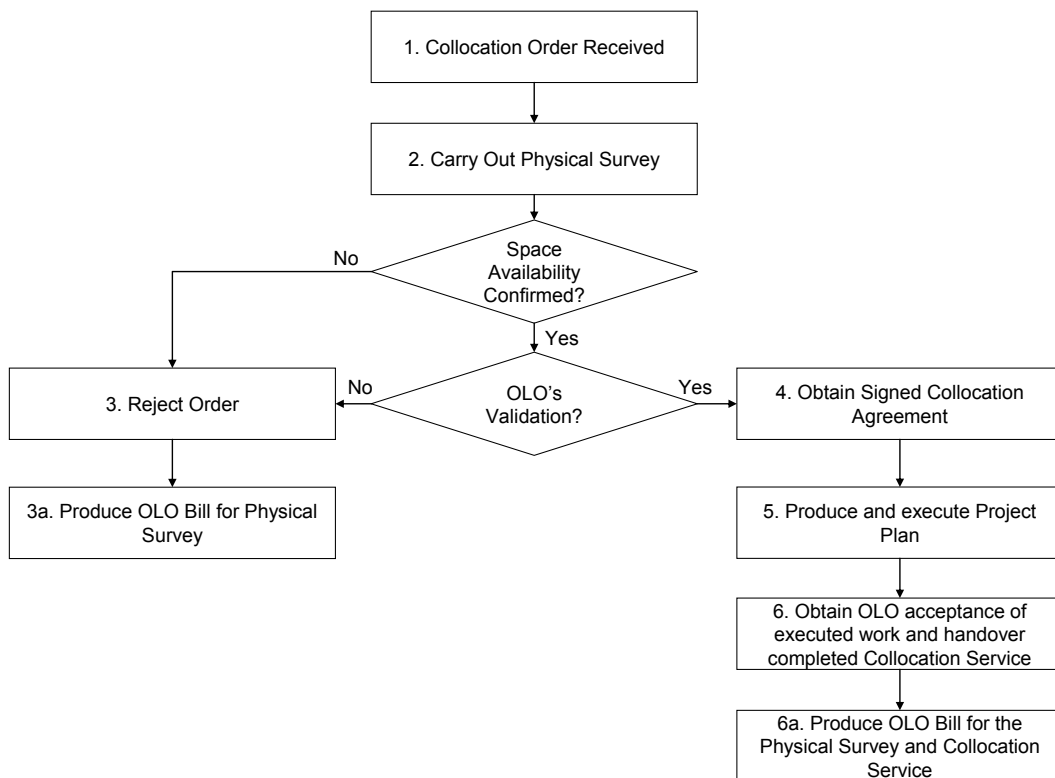
- Dedicated Collocation Facility Service
- Co-mingling Facility Service
- Virtual Collocation Facility Service

### 1.2 Process Flowchart

**Figure 1: Collocation process – Flowchart**







### 1.3 Summary of Operations

1. An **OA** OLO order is received for a **GO** Maltacom Collocation Service providing space on an MDF site. The service will be one of the following:

- Dedicated Collocation Facility Service
- Co-mingling Service
- **Virtual Collocation Service**

The order is recorded and the **OA** OLO is sent the appropriate LLU Request Forms.

~~2. Within 30 working days of receipt of the LLU Request Forms together with the applicable fee/s, Maltacom will carry out a desktop survey based upon the OLO requirements detailed in the LLU Request Forms and inform the OLO of the survey result. The desktop survey will be carried out using plans, records and strategic proposals from all relevant Maltacom departments and subsidiaries. Where necessary, a brief site visit may be required to verify details. This initial survey will establish whether space of suitable dimensions exists in the specified Maltacom MDF site. The fee for the desktop survey is~~

~~payable by the OLO regardless of the survey results.~~

~~NB. The desktop survey returning a positive result does not guaranteed that collocation space will ultimately be available at the specified MDF site.~~

~~3. If the desktop survey indicates that no suitable space is available the order will be rejected and the OLO informed.~~

~~4. If the desktop survey indicates that suitable space is potentially available the OLO will be contacted to agree to a physical survey being carried out~~

The OAO OLO will be required to pay the standard applicable fees for the time and materials used in the execution of the detailed physical survey in advance and regardless of the survey results.

~~2. 5. Within 90 working days~~ **40 working days** GO Maltacom will carry out a detailed physical survey based upon the OAO OLO requirements detailed in the LLU Request Forms and inform the OAO OLO of the results. If necessary the survey will be carried out by civil engineering consultants contracted by GO Maltacom for the purpose of meeting its LLU Collocation obligations. **In the case of virtual collocation service, GO will be required to engage the services of an architect in order to draw up the necessary plans for approval by MEPA. If physical survey confirms that suitable space is available, it will also include a bill of quantities with associated costs and forecast timescales. The timescale will be lower or equal to 60 working days, except in case where exceptional work is required in which case GO has to justify the reasons for any required extension to the timescales. In the case of Virtual Collocation Service, the time for the execution of the works will start running from when MEPA publishes approved permits for works.**

~~3. 6. If the physical survey confirms that suitable space is not available the order will be rejected and the OAO OLO informed.~~

~~3a. 6a~~ **GO Maltacom** will produce a bill for any bespoke costs incurred during the detailed physical survey that are not included in the standard fees paid by the OAO OLO ~~at the time the survey is agreed to.~~

~~4. 7. At this stage the OAO OLO must~~ **validate the survey and** enter into a formal Collocation Agreement with **GO Maltacom**. **The signing of this Formal Collocation Agreement would automatically trigger the timelines associated with tie-cable provisioning stipulated under Annex J<sup>1</sup>. In the case of virtual collocation, the OAO is required to pay the necessary costs directly associated with the MEPA permit application fees. GO is to submit the plans and any other necessary documents to MEPA within 2 working days from receipt of payment from the OAO of the associated MEPA permit application fees.**

~~7a. Upon receipt of a signed Collocation Agreement the results of the physical survey will be used by Maltacom to compile a bill of quantities with associated~~

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<sup>1</sup> **In any case, the deadline for the tie cable delivery cannot be prior to collocation delivery.**

~~costs and forecast timescales which will be passed on the OLO within 90 working days for agreement.~~

~~5. 8. From the signature of the collocation Agreement, GO~~ Within 30 working days of the bill of quantities and timescales being agreed Maltacom will produce a detailed Project Plan for the specified work and ~~9. Maltacom will execute the specified work to the timescales detailed in the Project Plan~~ physical survey. The OAO OLO will be kept informed of progress and any proposed deviation from the specified work, estimated costs or timescales will be agreed with the OAO OLO.

~~6. 10. GO Maltacom~~ will obtain formal acceptance of the executed works by the OAO OLO and hand over the completed Collocation Service.

~~6 10-a.~~ Within 60 working days ~~GO Maltacom~~ will produce a bill for the provision of the Collocation Service and for any bespoke costs incurred during the detailed physical survey that are not included in the standard fees paid by the OAO.

## **ANNEX G3: MPF - MAINTENANCE PROCESS**

### **1. SCOPE**

This document describes the GO Maintenance Process to the Local Loop Service Process for Metallic Path Facility (MPF) both for MPF Full Loop Full Unbundling Service and Full Loop MPF Shared Access Service.

### **2. OVERVIEW**

GO will make all reasonable efforts to ensure that the stated operational parameters in Annex E1 (GO RUO MPF Technical Description) are achieved.

#### **2.1 Application**

The MPF Maintenance Process is applicable to all Full Loop MPFs that can be automatically accessed by GO's Line Test System. In the case of Full Loop Full Unbundling MPFs, this MPF Maintenance Process is only applicable if the OAO has accepted the necessary investment required to carry out automated Line Testing. The maintenance process for Sub-Loop MPFs is outside the scope of this document, as GO does not currently provide such a service, and any required testing facilities would entail substantial investment to be borne by the OAO.

#### **2.2 Process Stages**

The MPF Maintenance Process is sub-divided into two main stages:

- Testing to verify compliance or otherwise with the electrical characteristics specified in Annex E1 (GO RUO MPF Technical Description) and, if applicable, fault rectification;
- Fault Report Escalation.

##### **2.2.1 Stage 1 - Initial MPF Specification Tests**

Defined parameters apply to technical performance of the MPF from a termination point on the GO Main Distribution Frame (MDF) to a GO Network Termination Point (NTP) at the User premises. The defined parameters apply to the MPF when it has been isolated from the User's internal wiring and equipment and from the OAO wiring and equipment.

GO's automated Line Test System is designed to provide pre-qualification of

copper loops for ADSL service. In the context of this RUO, the system will also be used for fault diagnosis on loops already equipped with ADSL. For the sake of efficiency and to reduce maintenance costs, GO will generally not disconnect the User's internal wiring and equipment and the OAO wiring and equipment prior to testing. However, at GO's reasonable discretion or at the OAO's request, tests will be carried out with one or both of the User's internal wiring and equipment and the OAO wiring and equipment disconnected. In such cases, the prices for the affected RUO service(s) would be revised to cater for the additional costs incurred by GO.

### **2.2.2 Stage 2 - Fault Report Escalation Process**

This stage refers to operational and performance parameters for carrying out additional tests in cases where the OAO is not fully satisfied with the outcome of the tests carried out at Stage 1.

## **3 MPF - MAINTENANCE PROCESS - STAGE 1**

The procedures described herein may be subject to change from time to time as a consequence of improved internal operating processes at GO.

The Maintenance process describes the procedures to be followed when an OAO files a request for Maintenance Service.

All communications related to the MPF Maintenance process shall be through the Web Portal. An e-mail is automatically sent to the OAO informing him that

there has been a status change to a specific request (identified by the unique application number) and if the case may be that GO requires feedback from the OAO before it can continue with the process. The lead-times start from the sending of this automatic e-mail. The status change is time stamped for eventual reference for the purpose of SLA compliance.

The OAO is responsible for investigating any end user fault report relating to the high bandwidth portion of the line and will report a fault to GO only where the OAO has reasonable grounds to believe that the fault lies within the GO network.

All requests for maintenance relating to Fully Unbundled MPFs and the high bandwidth portion of Shared Access MPFs will be submitted to GO by the OAO. GO will not accept any fault reports from a User for Fully Unbundled MPFs or the high bandwidth portion of a Shared Access Service MPF.

If during testing for any type of maintenance, GO deems it necessary to carry out intrusive tests to localise the fault, GO shall do this without informing the OAO or the User.

GO shall use reasonable endeavours to detect and rectify the fault condition on the Metallic Path Facility. The OAO shall co-operate with GO's reasonable requests in an effort to locate and if possible resolve any fault that may be present on MPF. This may include making arrangements for GO Field Technicians to visit the User premises.

### 3.1 Request by OAO for MPF Maintenance Process

Step 1	Request for MPF Fault Rectification	
<p>The OAO submits MPF Fault Report to GO RUO Department through the Web Portal. The OAO shall supply any additional information that may assist GO in classifying the nature of fault and identifying the cause.</p> <p>In the case of a Shared Access MPF, if a third party has already lodged a fault report for the analogue voice service on the same MPF, the OAO's report will be discarded and the OAO informed accordingly. If the fault has been rectified, the OAO is also informed accordingly.</p>		
Step 2		
<p>GO carries out the Line Test in order to establish whether the MPF is within the Technical Specification as per Annex E1 (GO RUO MPF Technical Description).</p>		
Step 3		
<p>If the test result is within the MPF Technical Specification, a copy of the test result is forwarded to the OAO. The process continues at Step 6.</p>		
Step 4		
<p>If the fault rectification requires an appointment with the end-user, OAO is informed: OAO has the responsibility to conclude the appointment with the end-user and the lead time is postponed till the appointment. At the date of the appointment, the lead time continues.</p> <p>The fault is rectified by GO and a copy of the final test result is forwarded to the OAO.</p>		
Step 5		
<p>If OAO accepts test result, process ends. Otherwise the OAO initiates Stage 2.</p>		

Step 6		
<p>If OAO accepts test result, the OAO is billed for "Testing When No Fault Found (no field technician intervention)" as per Annex F (GO RUO Price List) and process ends.</p>		

Step 7		
<p>GO carries out additional tests with the intervention of a field technician.</p> <p>If the fault rectification requires an appointment with the end-user, OAO is informed: OAO has the responsibility to conclude the appointment with the end-user and the lead time is postponed till the appointment. At the date of the appointment, the lead time continues.</p> <p>If the additional tests indicate that the MPF does not meet the electrical characteristics specified in Annex E1 (GO RUO MPF Technical Description) the process continues at Step 5.</p>		

Step 8		
<p>GO sends a copy of the test result to the OAO and the OAO is billed for "Testing When No Fault Found (with field technician intervention)" as per Annex F (GO RUO Price List) and process ends. If the OAO is not fully satisfied the OAO may opt for other RUO Services (such as Pair Swap) or initiate Stage 2.</p>		

### 3.2 Initiation of Stage 2 of MPF Fault Report by OAO

Step 1		
<p>OAO can initiate an Escalation Process to elevate Fault to Stage 2 of the MPF Maintenance Process. This initiation of the Escalation Process in no way guarantees that improved MPF electrical characteristics will be achieved or that the service to end user will be fully restored.</p>		

Step 2		
<p>OAO provides RUO Department with Operational and Supplementary Information in compliance with the requirements of the MPF Stage 2 Fault Management Process</p>		



as indicated hereunder.

- 1) Clearly specify the reasons for considering the MPF as being unsuitable for utilization as an MPF.
- 2) Clearly state if the MPF is considered to be within the stated performance limits.
- 3) Supply GO with supplementary information that the OAO believes will assist in clarifying the nature of any underlying fault conditions and identifying the cause.

Step 3		
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GO and the OAO decide on the appropriate activities that need to be undertaken and the relative time schedules. GO will use, at its discretion, the OAO provided additional information where it is of the opinion that it is relevant and useful. GO may also request that the OAO carries out some further tests on the OAO's own equipment and network and that of the User. This work will be the sole responsibility of the OAO and shall be carried out at his sole expense.

Step 4		
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GO carries out the agreed activities and forwards the final test results to the OAO. The OAO is billed for the agreed activities on the basis of the costs incurred. If OAO is still not satisfied with the outcome then the process continues at Step 5. If he is satisfied, process ends.

Step 5		
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If the OAO is not satisfied with the outcome of stages 1 and 2, the OAO may initiate a Dispute Resolution Process with MCA.

## ANNEX I: PROVISION OF INFORMATION

### List of Maltacom Main Distribution Frame Sites giving access to the Maltacom Copper Access Network

#### List of GO's Main Distribution Frame Sites

The following<sup>1</sup> is the list of GO Maltacom Main Distribution Frames Sites giving access to the GO Maltacom Copper Access Network:

1. Xewkija Telephone Exchange, Xewkija Industrial Estate, Xewkija.
2. Marsalforn Telephone Exchange, Qbajjar Road, Marsalforn.
3. Mosta Telephone Exchange, Technopark, Mosta Road, Mosta.
4. Mghatab Earth Station, Mghatab.
5. Zejtun Telephone Exchange, Tarxien Road, Bulebel Industrial Estate, Zejtun.
6. Marsascala Telephone Exchange, Government Primary School, Marsascala.
7. St. Paul's Telephone Exchange, St. George's Street, St. Paul's Bay.
8. Mellieha Telephone Exchange, St. Michael Street, Mellieha.
9. Birkirkara Telephone Exchange, Rabbits Lane, Birkirkara.
10. Birzebbuga Telephone Exchange, Zaren Dalli Street, Birzebbuga.
11. Zurrieq Telephone Exchange, Triq Dun Guzepp Zammit, Zurrieq.
12. Marsa Telephone Exchange, Spencer Hill, Marsa.
13. Sales Telephone Exchange, South Street Valletta.
14. Luqa Telephone Exchange, New Street, Luqa.
15. Castille Telephone Exchange, St. Paul's Street Valletta.
16. Rabat Telephone Exchange, Saqqaja Hill, Rabat.
17. Zebbug Telephone Exchange, Siggiewi Road, Zebbug.
18. Sliema Telephone Exchange, Viani Street, Sliema.
19. St. George's Telephone Exchange, St. George's Street, St. Julians.
20. Old University, St. Christopher Street, Valletta.
21. Roy Bar, Strait Street, Valletta.

~~Detailed information as to the availability of local loops will be available to OLO's at the appropriate price following the signature of a non-disclosure agreement.~~

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<sup>1</sup> GO is to update the list to reflect current list of exchanges.

## Provision of information on sites

The following information on sites will be available without payment to OAOs following the signature of a non-disclosure agreement:

- Size of the exchange: number of active lines, number of inactive lines;
- Size A1-Map which broadly partitions Malta's territory according to the coverage areas of the MDFs;
- Types of collocation which are theoretically<sup>1</sup> available on the site (co-mingling, dedicated collocation, virtual collocation, distant collocation);
- PSTN number ranges associated with each exchange.

The above information will be provided through secure access over GO's website. Secure access to this information shall be given to the OAO within 3 working days of the signing of the non-disclosure agreement.

## Provision of information on lines

After the signature of a UALL agreement, information on theoretical<sup>2</sup> eligibility and quality of broadband service over PSTN active line will be available free of charge to the OAO through a web portal<sup>3</sup>. Secure access to this information shall be given to the OAO within 3 working days of the signing of the UALL agreement.

GO shall submit to the OAO frequent updates – in any case at intervals not exceeding 8 months - to the information in line with its internal practice.

Provided that in respect of all the above information, GO shall ensure that such information is kept up-to-date and as accurate as reasonably possible, and shall provide the OAO with reasonable notice of any significant changes to the information.

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<sup>1</sup> A pre-survey has been performed at a high level and although conducted with the intention of vetting MDF Sites for Collocation suitability, GO makes no guarantees that each site in this category is suitable for Collocation.

<sup>2</sup> Information on theoretical eligibility to broadband service of PSTN active line is regularly obtained through tests performed from GO's switches. GO makes no guarantees that real eligibility is consistent with theoretical eligibility.

<sup>3</sup> in the first phase of unbundling, information may be provided through an alternative process if the demand does not justify the investment in development of the web portal.

## ANNEX J: LEAD TIMES AND PENALTIES

Note:

- 1 All penalty prices are exclusive of VAT.
- 2 The provision of External Tie Cables is subject to available GO duct capacity and the OAO having completed all the requested civil engineering works.

### 1 Metallic Path Facility - Full Loop Full Unbundling Service

#### 1.1 Provisioning

Service Code	Service	Steps (annexes G1)	Lead Time (Working days)	Penalty per working day (Euros)
1.1.1	Case A: MPF Line Transfer (1)	From Step 1 A to Step 11 A	8	€5.36 capped at €54
	If requiring Unequipping Pair Gain(1)	Step 7A	+3	SAME AS ABOVE
	If requiring Lead in replacement (1)(2)(4)	Step 9A	+3	SAME AS ABOVE
	If requiring Cable Fault rectification (1)(3)	Step 9A	+8	SAME AS ABOVE
1.1.2	Case B: New MPF with spare capacity between the DP and the MDF (4)	From Step 1B to Step 10B	20	€11.87 capped at €119
1.1.3	Case C: New MPF with NO spare capacity between the DP and the MDF(4)	From Step 1C to Step 10C	38	€22.25 capped at €445
1.1.4	Full Unbundling Service Reversion	From Step 1 to Step 4 <sup>1</sup>	5	€3.49 capped at €35
1.1.5	Full Unbundling Service Disconnection	From Step 1 to Step 8 <sup>2</sup>	2	€3.26 capped at €33
1.1.6	Full Unbundling Service Pair Diversion	(5)	4	€5.59 capped at €56

**(1) The total lead time, in any case will not exceed 20 working days, even if the line requires several additional lead time, such as (for example) Unequipping Pair Gain + Cable Fault Rectification;**

**(2) Between the DP and end-user;**

<sup>1</sup> Refer to steps under the Procedures for Line Reversion for Fully Unbundled MPFs.

<sup>2</sup> Refer to steps under the Procedures for Cessation of the UALL Service.

- (3) Between the MDF and the DP;
- (4) In case an appointment with the end-user is required during the process, OAO has the responsibility to conclude the appointment with the end-user. The lead time is postponed till the appointment.
- (5) Case A: from step 14A to step 18A; Case B: from step 13B to step 16 B; Case C: from step 13C to Step 16 C.

## 1.2 Full Unbundling Fault Rectification

Service Code	Service	Steps (annexes G3)	Lead Time (Working days)	Penalty per working day (Euros)
1.2.1	Line Fault (1)	From Step 1 to Step to "process ends"	3	€11.88 capped at €119
1.2.2	Cable Fault (1)	From Step 1 to Step to "process ends"	8	€11.88 capped at €119
1.2.3	Full Unbundling Service MPF Testing when no Fault Found (1)	From Step 1 to Step to "process ends"	3	€2.56 capped at €26

- (1) In case an appointment with the end-user is required during the process, the OAO has the responsibility to conclude the appointment with the end-user. The lead time is postponed till the appointment.

## 2 METALLIC PATH FACILITY: FULL LOOP SHARED ACCESS SERVICE

### 2.1 Provisioning

Service Code	Service	Steps (annex G1)	Lead Time (Working days)	Penalty per working day (Euros)
<b>2.1.1</b>	Shared Access Service Provision (1)	From Step 1 to Step 12	8	€3.96 capped at €40
	If requiring Unequipping Pair Gain(1)	Step 7	+3	SAME AS ABOVE
	If requiring Lead in replacement (1)(2)(4)	Step 9	+3	SAME AS ABOVE
	If requiring Cable Fault rectification (1)(3)	Step 9	+8	SAME AS ABOVE
<b>2.1.2</b>	Shared Access Service Reversion of Service		5	€4.66 capped at €47
<b>2.1.3</b>	Shared Access Service Pair Diversion	From Step 15 to Step 19	4	€5.59 capped at €56
<b>2.1.4</b>	Shared Access Service Pair Disconnection	From Step 1 to Step 8	2	€2.33 capped at €23

**(1) The total lead time, in any case, will not exceed 20 working days, even if the line requires several additional lead time, such as (for example) Unequipping Pair Gain + Fault Rectification;**

**(2) Between the DP and end-user;**

**(3) Between the MDF and the DP;**

**(4) In case an appointment with the end-user is required during the process, the OAO has the responsibility to conclude the appointment with the end-user. The lead time is postponed till the appointment.**

## 2.2 SHARED ACCESS FAULT RECTIFICATION

Service Code	Service	Steps (Annex G3)	Lead Time (Working days)	Penalty per day (Euros)
2.2.1	Line Fault (1)	From Step 1 to Step to “process ends”	3	€3.96 capped at €40
2.2.2	Cable Fault (1)	From Step 1 to Step to “process ends”	8	€3.96 capped at €40
2.2.3	Shared Access Service Testing When No Fault Found (1)	From Step 1 to Step to “process ends”	3	€2.56 capped at €26

**(1) In case an appointment with the end-user is required during the process, the OAO has the responsibility to conclude the appointment with the end-user. The lead time is postponed till the appointment.**

### 3. COLLOCATION SERVICES

#### 3.1/3.2 Survey, Building Works and Facilities Service Provision

Service Code	Service	Lead Time (Working days)	Penalty per day (Euros)
3.1	Full Survey: Co-mingling/dedicated/Virtual/Distant Collocation	40	Subject to agreement
3.2.1	Co-mingling/dedicated/Virtual/Distant Construction Work (1)	60	(2)
3.2.2	Co-mingling/dedicated/Virtual /Distant Construction work (1) in case of exceptional work	Bespoke	(2)

(1) Including AC Electricity Supply to OAO Racks, Essential Power Service supply to OAO racks, Fire Alarms (for Dedicated/Virtual, Co-mingling, if necessary), Racking Structure (for co-mingling).

(2) €88.14 per working day capped at €1675 for AC Electricity Supply to OAO racks, €68.53 per working day capped at €1302 for Essential Power Service supply to OAO racks; subject to agreement for other services.



### 3.3 INTERNAL TIE CABLES

#### 3.3.1 Provisioning of Internal Tie Cables

Service Code	Service	Lead Time (Working days)	Penalty per day (Euros)
3.3.2.1	Internal Tie Cable – First 100 pair cable terminated at both ends	40 <sup>1</sup>	€373 capped at €11,181
3.3.2.2	Internal Tie Cable Additional 100 pair cable terminated at both ends	40 <sup>2</sup>	€82 capped at €2,462

#### 3.3.2 Fault Rectification of Internal Tie Cables

Service Code	Service	Lead Time (Working days)	Penalty per day (Euros)
3.3.2.1	Internal Tie Cable – First 100 pair cable terminated at both ends	5	€373 capped at €11,181
3.3.2.2	Internal Tie Cable Additional 100 pair cable terminated at both ends	5	€82 capped at €2,462

<sup>1</sup> In the case of first time round requests, lead times start with the signing of the Formal Collocation Agreement (see Annex G2: *Generic Collocation Service Order Process*). In case of an order for additional tie cable in a MDF that is already unbundled, lead time for tie cable provisioning shall start with the order.

<sup>2</sup> *ibid*

### 3.4 EXTERNAL TIE CABLES

#### 3.4.1 Provisioning of External Tie Cables subject to OAO having completed all requested Civil Engineering Works

Service Code	Service	Lead Time (Working days)	Penalty per day (Euros)
3.4.1.1	External Tie Cable – 400 pair First 400m Connection terminated at both ends, inc MDF (excl HDF at OAO)	40	€601 capped at €19,697
3.4.2.2	External Tie Cable 600 pair First 400m Connection terminated at both ends, inc MDF (excl HDF at OAO)	40	€862 capped at €25,567
3.4.2.3	External Tie Cable First 800 pair First 400m Connection terminated at both ends, inc MDF (excl HDF at OAO)	40	€1,002 capped at €29,988
3.4.2.4	Additional 400 m of 400 pair	10	€373 capped at €11,046
3.4.2.5	Additional 400 m of 600 pair	10	€419 capped at €12,402
3.4.2.6	Additional 400 m of 800 pair	10	€431 capped at €12,476

#### 3.4.2 Fault Rectification of External Tie Cables subject to OAO having completed all requested Civil Engineering Works

Service Code	Service	Lead Time (Working days)	Penalty per day (Euros)
3.4.2.1	External Tie Cable – 400 pair First 400m Connection terminated at both ends, inc MDF (excl HDF at OAO)	15	€601 capped at €19,697
3.4.2.2	External Tie Cable 600 pair First 400m Connection terminated at both ends, inc MDF (excl HDF at OAO)	15	€862 capped at €25,567

	OAO)		
<b>3.4.2.3</b>	External Tie Cable First 800 pair First 400m Connection terminated at both ends, inc MDF (excl HDF at OAO)	15	€1,002 capped at €29,988
<b>3.4.2.4</b>	Additional 400 m of 400 pair	5	€373 capped at €11,046
<b>3.4.2.5</b>	Additional 400 m of 600 pair	5	€419 capped at €12,402
<b>3.4.2.6</b>	Additional 400 m of 800 pair	5	€431 capped at €12,476

### 3.5 Escorted Access

These prices assume that the OAO shall provide transport services for the technician escorting the OAO.

Service Code	Service	Lead Time (Hours)	Penalty per day (Euros)
<b>3.5.1</b>	Working Hours – Planned – per hour (min 4 hours)	72 hrs	€0.91 capped at €65
<b>3.5.2</b>	Working Hours – Unplanned – per hour (min 4 hours)	8 hrs	€10.48 capped at €84
<b>3.5.3</b>	Outside Working Hours – Planned – per hour (min 4 hours)	72 hrs	€0.91 capped at €65
<b>3.5.4</b>	Outside Working Hours – Unplanned – per hour (min 4 hours)	8 hrs	€10.48 capped at €84
<b>3.5.5</b>	Midnight to 0800 – per hour (min 4 hours)	72 hrs or 8 hrs*	€1.16 capped at €84 or €10.48 capped at 84

<b>3.5.6</b>	Sundays and Public Holidays – per hour (min 4 hours)	72 hrs or 8 hrs*	€1.16 capped at €84 or €10.48 capped at 84
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\* Depends on whether work is planned (72 hrs) or unplanned (8hrs).