



VIRTUAL UNBUNDLING LOCAL ACCESS

REFERENCE OFFER

Main Body

GO p.l.c.

This Reference offer for Virtual Unbundled Access to the FTTP network and collocation related facilities is published in accordance with the Malta Communications MCA Final Decision Market 4 – Wholesale Unbundled Infrastructure Access Market dated 6th March 2013 in line with Regulation 12(2) of the Electronic Communications Network and Services (General) Regulations (Chapter 399.28 of the Laws of Malta).

Undertakings are advised that the Malta Communications Authority may impose changes to this Reference Offer in accordance with its powers under Regulation 12(4) of the Electronic Communications Network and Services (General) Regulations (Chapter 399.28 of the Laws of Malta)

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1 Technical Implementation of Services

1.1 GPON Infrastructure

1.1.1 GPON General Description

GO will provide VULA-FTTP Connection through the GO GPON infrastructure in accordance with the terms and conditions of the Agreement and subject to the OAO following the applicable processes as specified in Annex E.

1.1.2 GPON Technical Description

Subject to GO and the OAO entering into an Agreement, GO will offer the OAO virtual access to the GO GPON network.

Virtual access is limited to function as a broadband access service. It provides the OAO with an S-VLAN from the HP at the site/s list at Annex G to an Ethernet port at the User premises. The traffic at the HP shall be Layer 2 P2P Metro Ethernet. The OAO may access the Service by connecting to a 10 G interface at the HP through a GO wholesale Ethernet connection or by collocating own Optical Distribution Frame “OD” at the Exchange Building/s listed at Annex G. The ONT shall be owned, provided and supported by GO and shall be GO’s demarcation point at the User end. The OAO shall take all reasonable steps to ensure that the ONT is not tampered with by third parties and shall take the full responsibility of any such actions by third parties.

When GO is required to install an ONT to satisfy a request from the OAO, the OAO shall ensure that the User installation site has a suitable place for the installation of the ONT and a nearby power outlet is available. The OAO shall obtain all the required permissions and/or consents required to carry out the installation enabling the delivery of the VULA FTTP Connectivity

Multicast traffic shall be attained through IGMP snooping at Layer 2.

QoS is based on S-VLAN prioritisation with four levels of priority.

The technical description of GO GPON and details of the chargeable Service elements are detailed in Annex C1.

1.1.3 Installation of Fibre Lead-in cable and Optical Network Termination Point

Where the OAO wishes to subscribe to the GO VULA-FTTP Connection to a User premises that has no existing connection to a GO GPON, GO will install a lead-in fibre cable terminated at one end on the optimum GO Optical Distribution Point “**ODP**” with spare capacity at one end and at ONT within the User premises at the other end. The length between the terminations of the fibre lead-in cable shall be limited to a maximum of hundred (100) metres and the ONT shall be installed not further than thirty (30) metres from a reasonable point of entry into the User premises.

In the case of availability of spare capacity on an existing ONT, GO will provision the VULA-FTTP Connection by allocating a port to the OAO on the existing ONT at the User's premises without the need to install the fibre lead-in cable.

1.2 Handover of Service Traffic

GO shall hand over all Service traffic to the OAO through a 10 G interface at the Exchange Building/s as listed at Annex G. The OAO may opt to subscribe to a GO wholesale Ethernet connection/s to transport this traffic to a site of its choice or opt to collocate its equipment at the Exchange Building/ s to transport the traffic from the HP to any other site. Details of the collocation offers are available at Annex H.

2 Requests for VULA-FTTP Connection

GO will deliver the VULA-FTTP Connection according to the OAO's request to GO as indicated in Annex E2 of this RO. Prior to making the request for a VULA FTTP Connection, the OAO will need to have a valid VULA Agreement with GO.

The OAO shall follow the order process for Installation, Termination and Fault Resolution as applicable and as described at Annex E2. GO will provide electronic access to the applicable forms. Annex E details the procedures to be followed by the OAO.

3 Service Levels

The Service Levels provided by GO under this Agreement are defined at Annex E3.

4 Pricing and Billing of VULA Services

The price list for the VULA Services is at Annex D.

Billing and payment shall be in accordance with the provisions in Annex A.

5 GO Infrastructure Development

When technically and commercially feasible, GO will endeavour to regularly upgrade and adapt its infrastructure in line with technological changes and developments, market demand and changes driven by regulatory authorities and contingencies. Such changes may have an impact on any Services offered by GO under this RO.

Unless otherwise prevented due to circumstances out of its control, GO undertakes to give the OAO prior written notification of thirty (30) days' notice of any scheduled changes that may impact the Services and to publish any amendments to the relevant technical documents and annexes that may be necessary.

GO may in future also consider changing the number of OLT sites operated in its network as GO may deem necessary in view of its technological and market needs. In such cases, and where these may impact the Services of the OAO, GO will endeavour to give the OAO advance notice of any such changes in all cases not less than 60 days' notice.

GO shall not be liable to compensate the OAO in any manner for any costs incurred by the OAO as a result of changes to GO's infrastructure delivering the Service to the OAO including but not limited to the number of OLTs.

6 Precedence of Main Body

In the event that there is any conflict with the provisions of an Annex and the Main Body of the Agreement, the said Main Body shall have precedence. Similarly, in case of a conflict with the provisions between two or more Annexes, the Annex order will be that of the alphabetical order of the Annex number.

APPENDIX 1

List of Annexes

Annex A General Terms and Conditions

Annex B Service Descriptions

Annex B1 VULA FTTP Connection

Annex B2 VULA FTTP Profiles

Annex C Technical Specifications

Annex C1 VULA Technical Characteristics

Annex D Price List

Annex E Processes and Procedures

Annex E1 High Level Operations and Planning Manual

Annex E2 Pre-Provisioning and Post-Provisioning Processes

Annex E3 Service Levels

Annex F Non-Disclosure Agreement

Annex G List of GO Optical Line Terminal Sites with access to the GO Gigabit-capable Passive Optical Network

Annex H Terms and Conditions for Collocation Service for Backhauling of VULA Traffic from the Handover Point.