MALTA COMMUNICATIONS AUTHORITY

Study for the Provision of a New International Submarine Cable Link

Request for Information

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1. INTRODUCTION

The Government of Malta's National Digital Strategy 2014-2020[1] commits to evaluating opportunities for new submarine cable routes, connecting Malta to mainland Europe or North Africa. This commitment is reiterated in Malta's National Reform Programme[2] published by the Ministry for Finance in 2015.

On behalf of the Government, and in line with its Strategic Plan Update For 2014 – 2016[3], the Malta Communications Authority (MCA) is establishing the feasibility of an additional international link. This request for information document sets out the importance of international connectivity for Malta, the objectives of the feasibility study which is underway, and seeks feedback from stakeholders in response to a number of questions.

[1] Malta's National Digital Strategy: http://digitalmalta.gov.mt/en/Documents/Digital%20Malta%202014%20-%202020.pdf
[2] Malta's National Reform Programme: http://ec.europa.eu/europe2020/pdf/csr2015/nrp2015_malta_en.pdf
[3] MCA Strategic Plan Update: http://www.mca.org.mt/notices-and-announcements/strategic-plan-update-2014-2016

2. IMPORTANCE OF INTERNATIONAL CONNECTIVITY

Malta's broadband internet readiness is becoming increasingly pivotal in influencing the nation's global competitiveness. Over the past few years, new developments in broadband have not only helped reinforce Malta's position as the leading EU knowledge economy, but also enabled the financial and other service-based industries to make great strides.

Being an island, international connectivity is fundamental to the Maltese economy. The evolution of the tertiary sector into an intellectual services industry, inward investments in the secondary sector (targeting mainly the pharmaceutical, 'just-in-time' and high-value added advanced manufacturing industries) and emerging innovative business models in the quaternary sector, are all increasing the demand for low-latency, low-cost and high-resilient bandwidth.

The impact of a new international connection that meets Malta's growing bandwidth demand cannot be underestimated. Such an initiative would accelerate the evolution of the economy and make Malta a more attractive location in which to develop new business opportunities. As a small island state with the goal of keeping pace and advancing within an increasingly competitive and ICT-driven global environment, a most robust, efficient and effective international electronic connectivity is a critical success factor.

International connectivity for island nations can be provided through one of two means:

- satellite – using wireless technology with orbiting satellites and earth stations; or
- submarine – using undersea fibre optic cables and terrestrial landing stations.

The MCA is now investigating the feasibility of increasing international connectivity via submarine cable. The MCA has engaged Analysys Mason, a global telecommunications consultancy, to assist in the completion of the feasibility study.

3. OBJECTIVES OF THE FEASIBILITY STUDY

The MCA has commenced a study to investigate the feasibility of laying a new submarine cable connecting Malta to other alternative locations, with the objective of enhancing the resilience and quality of the current international telecommunications connectivity.

The purpose and aim of the feasibility study is to:

- analyse detailed submarine configurations and topologies;
- verify and determine the commercial and financial viability of a new submarine cable;
- study and compare various landing points and cable routes, other than the current routes and landing region;
- recommend financing options, including the possible use of public funds; and
- identify and propose the best strategies for deployment and by means of a full comparative analysis, compare the various models and recommendations for the optimal technical, commercial and financial solution.

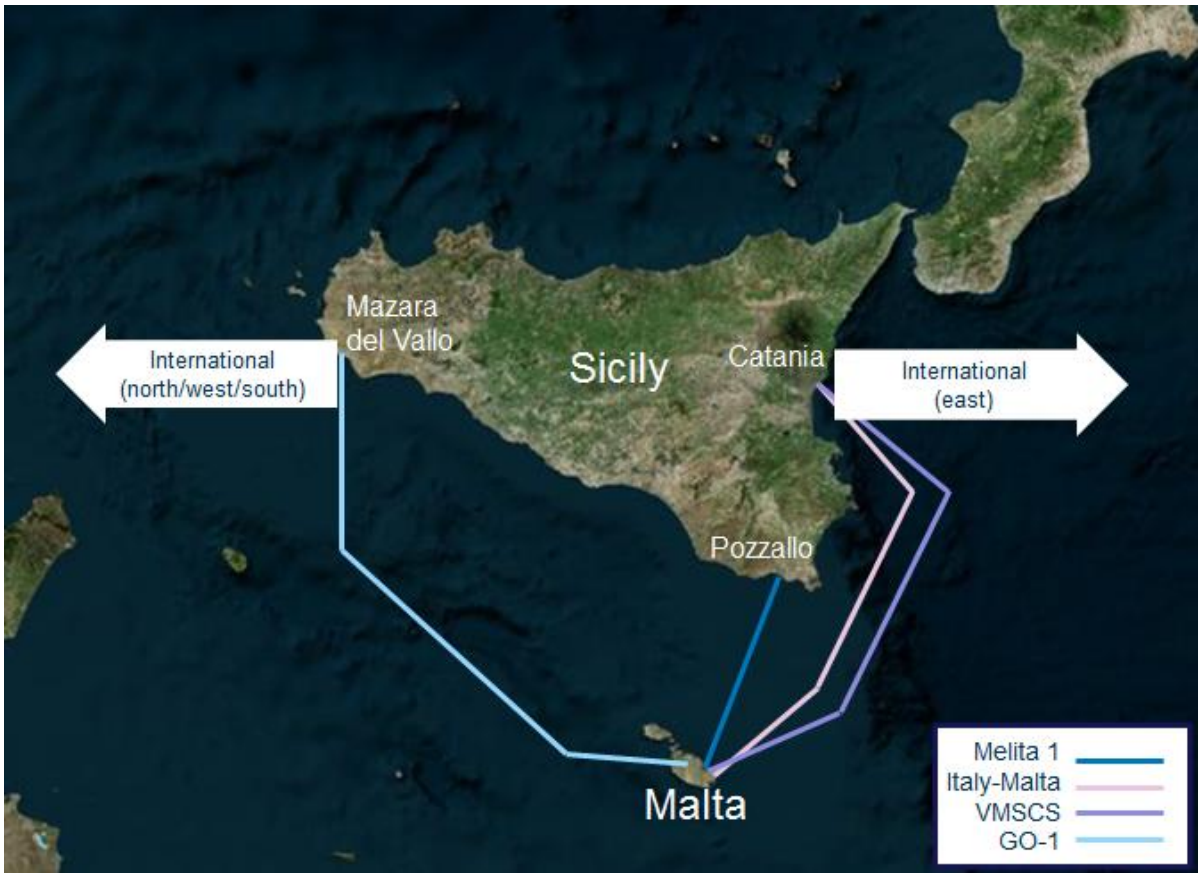
4. MALTESE INTERNATIONAL SUBMARINE CABLE CONNECTIVITY CONSULTATION

The subjects covered in this request for information are; existing arrangements, destination, demand, topology, financing model, operating model, risks and alternative solutions.

4.1 EXISTING ARRANGEMENTS

Despite the fact that a good number of other submarine cables are laid in close vicinity to Malta, Malta still relies exclusively on four existing submarine cables to provide its international connectivity via Sicily, Italy, as illustrated in Figure 1 below.

Figure 1: Malta's international connectivity is provided via connection to Sicily
[Source: Analysys Mason, Telegeography 2015, Bing Maps]



In addition, a new cable to Sicily has been installed by Enemalta and will be brought into service in the near future. Further details of the existing cables and the Enemalta cable are set out in Table 1 below.

Table 1: Description of the existing submarine cables serving Malta
[Source: Analysys Mason, Telegeography, 2015]

Cable name	Landing point A	Landing point B	Owner	Ready for service
Melita 1	Bahar ic-Caghaq, Malta	Pozzallo, Sicily, Italy	Melita	2009
Italy-Malta	Msida, Malta	Catania, Sicily, Italy	Telecom Italia Sparkle, GO plc	1995
Vodafone Malta-Sicily Cable System (VMSCS)	Balluta Bay, Malta	Catania, Sicily, Italy	Vodafone Malta	2004
GO-1 Mediterranean Cable System	St. Paul's Bay, Malta	Mazara del Vallo, Sicily, Italy	GO plc	2008
Enemalta Cable System	Malta	Sicily, Italy	Enemalta	2015

Questions:

- **Are existing arrangements for international submarine cable connectivity in Malta sufficient in terms of capacity, resilience, price and destination?**

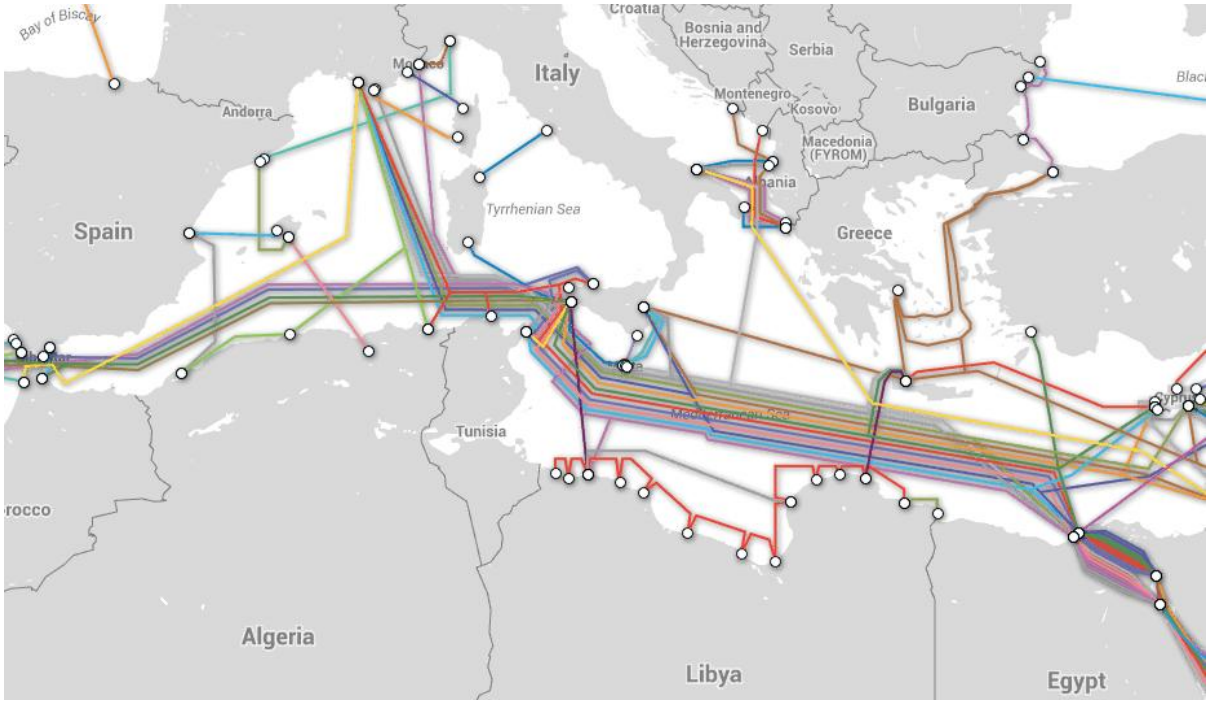
Please support your answers with as much detail as possible.

4.2 DESTINATION

Geographically, Malta is well positioned to interconnect to the major international fibre links located throughout the Mediterranean. The submarine fibre network in the region is competitive, with multiple routes connecting major peering points including Marseille, Sicily, Alexandria and Abu Talat.

Current and planned systems in the region are illustrated in Figure 2 below.

Figure 2: Current and planned fibre in the region
[Source: Telegeography, 2015]



Questions:

- **To what destination(s) should a new submarine cable connect?**

Please support your answers with as much detail as possible.

4.3 DEMAND

Demand for international connectivity typically comes from telecoms operators, digital content providers and multi-national companies.

Questions:

- **What factors will drive local demand for international connectivity in Malta?**
- **What factors will drive international demand for connectivity in Malta?**
- **Are there any specific characteristics of this demand that should be taken into account in the feasibility study?**

Please support your answers with as much detail as possible.

4.4 TOPOLOGY

There are broadly three options available when considering the topology of a new submarine cable.

- Cable direct to destination(s);
- Cable spur to existing/planned cable, which connects to destination(s); and
- Cable to existing/planned intermediate destination from which another cable connects to destination(s).

In this regard, the MCA and Analysys Mason are discussing topology with the owners of, and investors in, existing and planned Mediterranean cable networks and welcome approaches from any stakeholders in this regard.

Questions:

- **Which of the listed topology options is most suitable for Malta?**
- **Are other topology options available?**
- **What is the available capacity on existing and planned cables in terms of**
  a) **fibre pairs; and**
  b) **bandwidth?**

Please support your answers with as much detail as possible.

4.5 FINANCING MODEL

Submarine cables are typically financed through private or consortium models:

- a private cable is owned by a single company, which may either build the cable to meet its own capacity needs, or use it to sell available capacity on the cable, to carriers, thereby operating as carrier's carrier.

- a consortium cable is owned by multiple carriers, which can access capacity on that cable for their own use, or for resale, and whose ownership is proportional to their investment in the system.

Questions:

- **Which financing model is most suitable for a new submarine cable?**

Please support your answers with as much detail as possible.

4.6 OPERATING MODEL

Submarine cables are typically operated by private entities.

Questions:

- **What operating model should be considered?**
- **Who should be responsible for operating the new network?**
- **How should capacity be provided to telecoms operators and other end-users?**
- **Is a government-appointed managed services entity required?**

Please support your answers with as much detail as possible.

4.7 RISKS

The chief potential risk to submarine cable systems is a cable cut. Cable cuts can generally be categorised as accidental, malicious or natural. Technical, operational and financial risks must also be considered.

Question:

- **What risks are associated with submarine cable connections to and from Malta?**

Please support your answers with as much detail as possible.

4.8 ALTERNATE SOLUTIONS TO ADDRESS MALTA'S INTERNATIONAL CONNECTIVITY REQUIREMENTS

The MCA welcomes additional proposals regarding opportunities to connect Malta to mainland Europe or North Africa, in line with the Government's commitment under the National Digital Strategy.

Questions:

- **In addition to the options set out in this request for information, what other options are available to connect Malta to mainland Europe or North Africa? Please describe these options.**
- **Do you represent a stakeholder who has an interest in this opportunity?**
- **Would it be beneficial to discuss details in person with representatives from the MCA or Analysys Mason?**

5. SUBMISSION OF RESPONSES

The MCA welcomes responses from all stakeholders interested in the provision of international connectivity to Malta during the national request for information period, which shall run from the **22nd May 2015** to the **12th June 2015**. In particular, owners of existing submarine cables, organisations planning new submarine cables, telecommunications operators, submarine cable vendors and installation and maintenance providers and end-users are encouraged to provide their views in response to this request for information.

The Authority appreciates that respondents may provide confidential information in their feedback to this request for information document. This information is to be included in a separate Annex and should be clearly marked as confidential. Respondents are also requested to state the reasons why the information should be treated as confidential.

All responses should be submitted to the Authority, in writing by no later than 5:00PM CET on the 12th June 2015 and addressed to:

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