

Appropriate Assessment

Title of plan or project:	Proposed interconnector terminal station at Magħtab; Excavation and construction of tunnel from proposed tunnel leading St. Andrews DC to proposed Magħtab Terminal.
Reference no. (projects only):	PA 5396/09; PA 5584/09
Site location (projects only):	Naxxar
Potentially affected SACs / SPAs:	MT 000105: Żona fil-baħar fil-grigal ta' Malta:

Brief description of the project or plan

In accordance with EU Directive 2001/80/EC (also known as the Large Combustion Plant Directive – LCPD), Enemalta Corporation, the operator of the plant at Marsa Power Station will not be allowed to operate this existing plant for more than 20,000 hours starting 1st January 2008 until 31st December 2015, whichever comes first. This will result in a 210MW reduction of generating capacity in Malta. To compensate for this reduction, the generating capacity at Marsa would need to be replaced by either more local plants or by importing electricity through a submarine cable interconnection to the grid from Sicily which should be completed by not later than 2013 as indicated in the revised PDS submitted to MEPA by Enemalta in July 2010. Figure 1 below shows part of the cable route between Malta and Sicily.

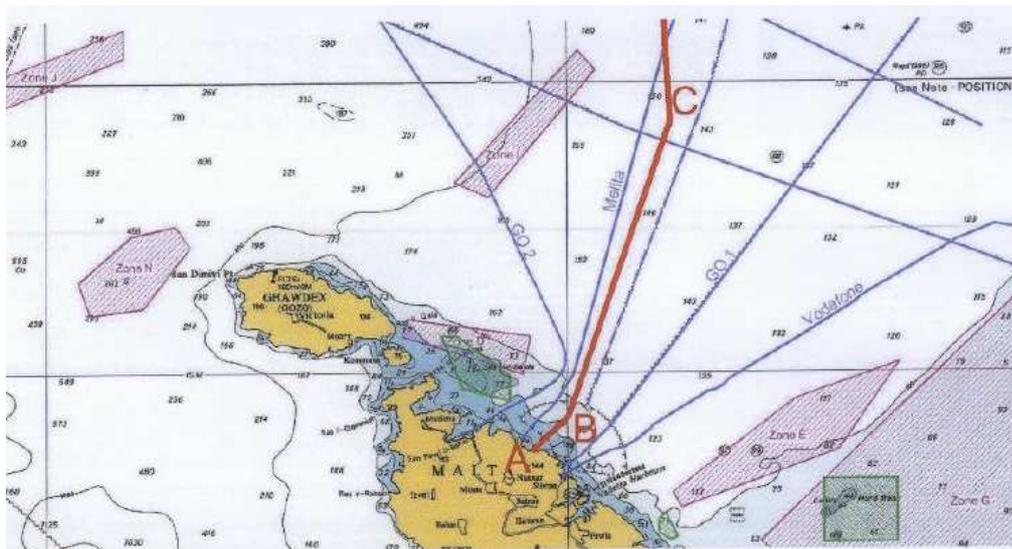


Figure 1: Part of cable route between Malta and Sicily.

The proposed submarine interconnection will require a terminal on either side of the islands i.e. Sicily and Malta. The terminal station is expected to be located within Żwejra, Magħtab and will occupy an area of approximately 80m x 80m – this area also includes unloading bays. An additional area will be required for the integration of a 100MW wind farm which will require a new 33kV switchgear room – the height of the tallest building will be approximately 9m. A cable landing area is also being proposed at Qalet Marku together with a small parking area. Two trenches 1m wide, 1.5m deep and 3m apart will be required between the terminal station and the cable landing area at Qalet Marku. Figure 2 below indicates the path through which these trenches will pass (further trenches may be required if the wind farm at Sikka l-Bajda is constructed, to connect the cable to the wind farm).

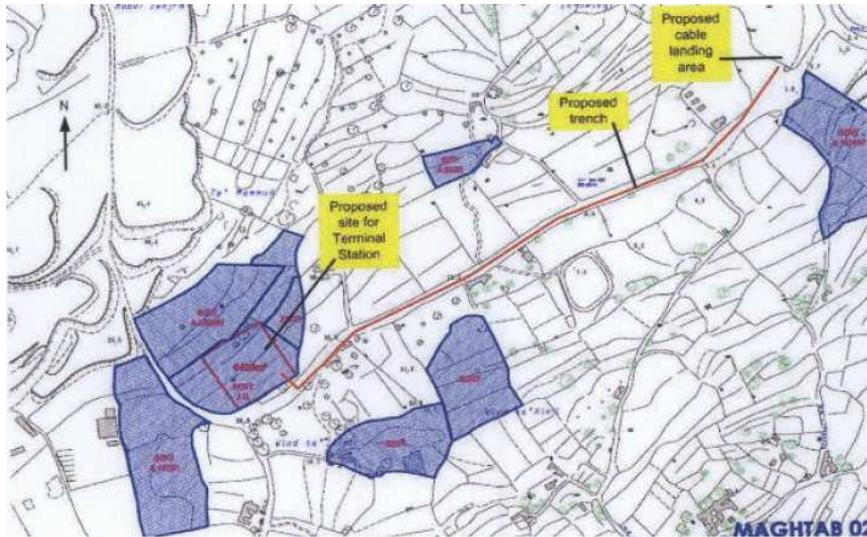


Figure 2: Proposed cable route on land.

The cables connecting the new terminal station to the rest of the 132kV network will be placed inside a new cable tunnel leading towards a new distribution centre at Kappara.

In the sea close to the shore, the proposed cable will pass as indicated in Figure 3 below:

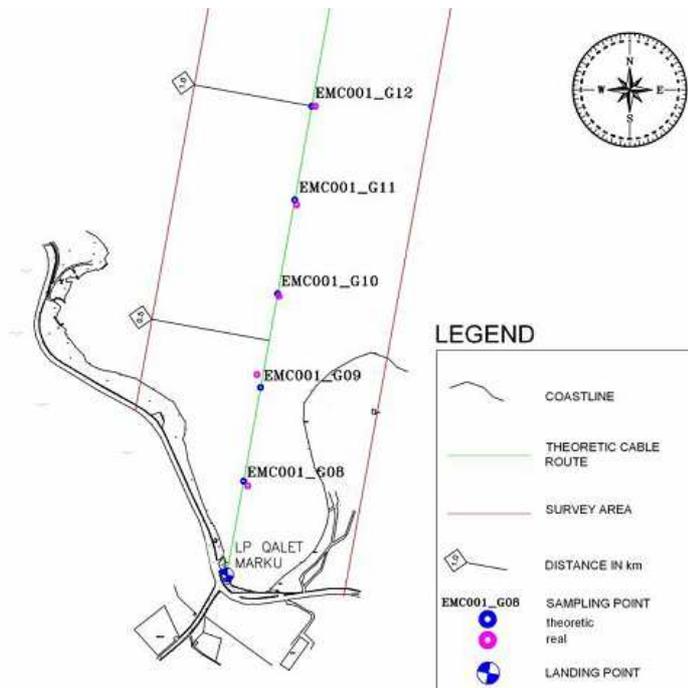


Figure 3: Proposed theoretical cable route as indicated in PDS submitted to MEPA in July 2010.

As indicated above, a cable will be laid down starting from Qalet Marku moving outwards. The underwater cable passes through the marine protected area: MT 0000105: Żona fil-baħar fil-grigal ta' Malta.

Brief description of the Natura 2000 site

MT 0000105: Żona fil-baħar fil-grigal ta' Malta:

This area hosts the largest variety of *Posidonia* sub-types when considering the marine sites selected to form part of the Natura 2000 Network, with the representation of each being considered superior to that of other areas. The subtypes present in this site are the following:

- *Posidonia* settled on matte, whose meadows are normally continuous and having a high density;
- *Posidonia* settled on rock, showing a reticulate distribution of dense strands;
- *Posidonia* settled on sand, with continuous beds generally showing low densities and variable percentage cover;
- Mosaic morphology, intermixed between *Posidonia oceanica*, *Cymodocea nodosa* and coarse sand, showing a reticulate structure;
- Ecomorphosis of 'barrier reef' *Posidonia* meadows.

The *Posidonia* meadows within this site are also known for a high degree of connectivity, as well as percentage coverage. From the data available through a *Posidonia* Baseline Survey carried out in 2002, it is evident that the *Posidonia* meadows in various parts of this site are very abundant and healthy. Amongst the important species within this site is *Lithothamnion minervae*, a species which has been included in national legislation as a plant species of national interest whose conservation requires the designation of Special Areas of Conservation.

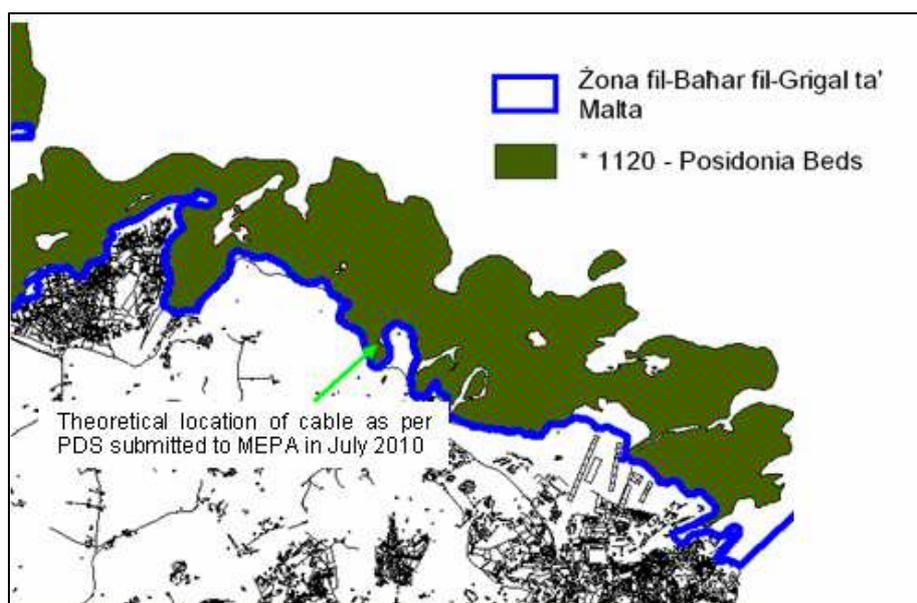


Figure 4: Habitats within local area of SAC.

Furthermore according to the marine survey conducted by the applicant, and submitted to MEPA in May 2011, the following species of importance were noted in the surveyed area between Malta and Sicily:

1. Presence of Decapoda n.d. This group is part of Schedule II (containing two protected species, *Austropotamobius pallipes*, and the priority species **Austropotamobius torrentium*) and Schedule VII of Legal Notice 311 of 2006. The survey does not give details on what Decapoda species have been identified.
2. Presence of species belonging to the group Echinoidea. Under this group, one finds *Centrostephanus longispinus*, which is protected under Schedule V of Legal Notice 311 of 2006. The presence of habitat type 1170 (reefs) cannot be excluded.

Envisaged Impacts / Recommendations

The latest written submission submitted by applicant to MEPA (dated 31 May 2011) indicated the use of three methods for cable armouring as follows:

- Casing with cast iron shells;
- Water jetting (the use of high-pressure water jets to liquidize the sand beneath the cable thus burying the cable);
- Rock dumping (6 tonnes of rock will be dumped per meter of cable).

The document indicated that for the first two kilometers, the cable will be buried in sand or covered in rocks except for areas where *Posidonia* is present. In these areas, iron casing has been proposed in order to cause minimal disturbance to the protected habitat.

The main concerns arising from the above include potential degradation of habitats other than *Posidonia*. As discussed above the area is known to contain *Lithothamnion minervae*, a species which has been included in national legislation as a plant species of national interest whose conservation requires the designation of Special Areas of Conservation. Furthermore, the surveys submitted by the applicant make reference to the presence of Decapoda species, however it is not known whether the species protected in the Legal Notice 311 of 2006 as discussed above are the ones that were noted on site. Finally, the presence of habitat type 1170 (reefs) cannot be excluded.

In this regard, if such species are present along the route of the cable, these may be affected. In view of the applicant's concern vis-à-vis the durability of the cable at depths of around 140 m, the following was taken into consideration:

1. In proportion to the extent of the habitat and the extent of the designated Natura 2000 site, the affected area is relatively trivial. Thus, the integrity of the Natura 2000 site, as well as that of the relevant habitats/species is not expected to be significantly affected.
2. As indicated by applicant in email dated 29.06.11, the use of iron casing at such depths may increase the probability of damage to the cable, due to insufficient protection. This as indicated by the applicant in said email would result in the need of repairs that could extend over long periods. Apart from considering this as a legitimate justification, EPD is of the opinion that any such damages and repairs/maintenance would cause more damage (in view of the ensuing seabed disturbance) than the methods mentioned above and thus the proposed methodology is reasonably considered as a preferred option.

In view of the above, the use of water jetting / rock dumping in deep areas where *Posidonia* is not present is not considered to cause a major significant impact on any protected habitats and / or species and therefore the methodologies proposed by the applicant as detailed above are considered acceptable as long as a number of pre-emptive measures to offset impact are strictly adhered to. In particular it is however noted that the entire stretch from the coast up to 2km out should be encased in iron casings, as a precaution against overflows of material and other impacts arising from the cable-laying operations and thus preventing any possibility of impacts due to water jetting and/or rock dumping.

The following measures are to be included as permit conditions and followed during the course of works:

1. Prior to commencement of works an Environment Monitoring Plan (EMP) to MEPA's satisfaction shall be submitted and shall include details of ecological monitor responsible for

the monitoring, frequency and methodology of monitoring and submission of reports to MEPA;

2. Seabed surveys submitted by applicant in May 2011 should be included with the permit as approved drawings. In areas where *Posidonia* is present it must be ensured that cast iron shells are used. In areas where water jetting or rock dumping are used, it must be ensured that this action does not cause any damage to nearby *Posidonia* for example by allowing an adequate any
3. The entire stretch of the cable from the coast up to 2km out should be encased in iron casings, as a precaution against overspills of material and other impacts arising from the cable-laying operations and thus preventing any possibility of impacts due to water jetting and / or rock dumping. It must be ensured that, as indicated in the PDS submitted to MEPA, iron casing is used in all areas containing *Posidonia*.

If the above measures are implemented accordingly, then impacts from the laying of the cable on the Natura 2000 site and other protected species/habitats are not expected to be significant as discussed above. Further assessment in terms of Regulation 19 of L.N. 311 of 2006 (based on Article 6 of Directive 92/43/EEC [EU Habitats Directive]), is not considered necessary.

This screening is based on the PDS submitted to MEPA in July 2010, on the marine habitat survey submitted in May 2011, further submissions in May 2011, and a number of discussions which have been referred to in this screening.

The proposed pre-emptive / mitigation measures are aimed at eliminating or minimizing potential impacts on the SAC. Their exclusion, or any significant changes to the proposal, would in itself prejudice the effectiveness of the conclusions of this AA matrix and therefore, the merits of this assessment would need to be reopened.