



**Comments on a development proposal to place a mooring buoy
for large vessels off Xlendi Bay in Gozo
(PA03218/16)
December 2016**

This document is prepared in order to address a recent development proposal by Transport Malta, bearing reference PA03218/16 (EA00022/16), to place a mooring buoy for large vessels offshore at Bajja Tax-Xlendi, Munxar in Gozo.

BirdLife Malta analysed the Project Description Statement and as a result, we want to highlight several sections of the document that we consider as being of major concern for the Marine Special Protection Area (Marine SPA or Marine Natura 2000 Site), its biodiversity and natural heritage which have not been considered thus far, including noise, light and air pollution.

The PDS points out two planning applications (PA 6212/07 and PA 2904/13), both with the similar purpose to be used for cruise ships to berth offshore in front of Xlendi bay. These planning applications were both made before the area had been declared as a Marine SPA and before this area had been identified as an area of major importance for breeding seabird species of Scopoli's Shearwater and Yelkouan Shearwater in 2016. In consideration of these designations, prior approvals of these applications do not serve as justification to approve the proposed development. It is to be noted that despite a mooring buoy having been placed in the area in the past, this has not been used. This application thus presents the opportunity for Transport Malta, ERA, and BirdLife Malta to look into this application process constructively to ensure that the development carries no impact on the natural environment.

Development in a marine Natura 2000 site with significant impacts on seabird populations

The proposed development is considered as requiring an Environmental Planning Statement (EPS) as it falls under development 2.3.2.1. listed in Category II of Schedule IA of the Environmental Impact Assessment Regulations (Legal Notice 114 of 2007). BirdLife Malta evaluates this as being highly necessary given the fact that following the deployment of the buoy, ship traffic may increase tremendously in this area and thereby impacting on the Marine Special Protection Area (marine Natura 2000 site) in which this proposed development is located. Furthermore, **an Appropriate Assessment is mandatory for this proposed development.** Regulation 19 of the Flora, Fauna and Natural Habitats Protection Regulations, 2006 (Legal Notice 311 of 2006), based on Article 6 of the EC Habitats Directive (Directive 92/43/EEC), necessitates the submission of an Appropriate Assessment where a proposed plan or project is not directly connected with

or necessary to the management of the protected site and may give rise to significant effects upon a Natura 2000 site or on a habitat or species for which such Natura 2000 site was designated.¹

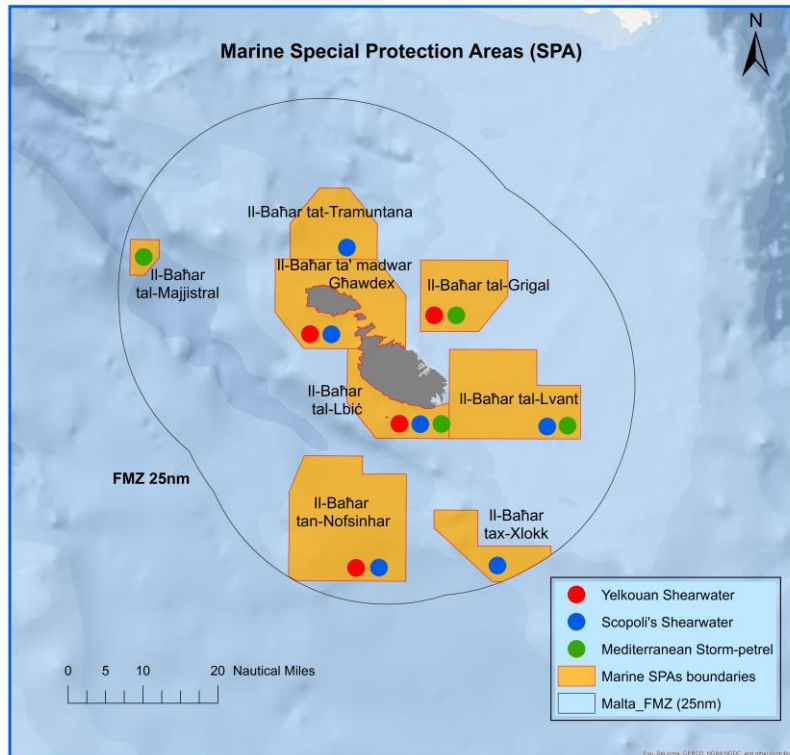


Figure 1: Malta's network of Marine Special Protection Areas designated by government in June 2016

The proposed development is located within the marine SPA **Il-Baħar ta' Madwar Ghawdex** - identified as an important area for Yelkouan Shearwater (*Puffinus yelkouan*) and Scopoli's Shearwater (*Calonectris diomedea*) (Refer to Figure 1). The Yelkouan Shearwater is currently IUCN-listed as 'Vulnerable' (BirdLife International Species Factsheet 2015). Therefore the mIBA category A1 applies.² All known Maltese Yelkouan Shearwater colonies are of a significant size and their survival is therefore relevant for the conservation of the species. Both, Yelkouan Shearwater as well as Scopoli's Shearwater are listed as particularly threatened under the Birds' Directive Annex 1.³

The Xlendi cliffs, in close proximity of the development site are also designated land SPAs, these being the sites where both seabirds have substantial breeding populations, and for which the areas are recognised

¹ <https://www.mepa.org.mt/LpDocumentDetails?syskey=%20619>

² Category A1 - Globally Threatened Species: The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern. The site qualifies if it is known, estimated or thought to hold a population of a species categorized on the IUCN Red List as globally threatened (Critical, Endangered and Vulnerable), Metzger et. Al (2015): Creating an inventory of marine IBAs for *Puffinus yelkouan*, *Calonectris diomedea* & *Hydrobates pelagicus* in Malta. LIFE10 NAT/MT/090 Report

³ http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

as Natura 2000 sites. The ‘Rdumijiet ta' Ghawdex: Il-Ponta ta' Harrux sa Il-Bajja tax-Xlendi’ SPA is located along the cliffs to the north of the development site, whereas the Rdumijiet ta' Ghawdex: Id-Dawra tas-Sanap sa Tal-Hajt SPA is located to the east of the development site. These sites are known to host up to 150 Yelkouan Shearwater breeding pairs which reflects around 7% of its total population in Malta and up to 2,400 Scopoli’s Shearwater breeding pairs reflecting 25% of its Maltese population.⁴ Considering both species utilise the front area of the cliffs as rafting sites before they access their colonies at night, the proposed development is located within a prime rafting area for these two species.



Figure 2: Location of two land SPAs in proximity to proposed development designated for their value as internationally important seabird colonies (source: PA geoserver)

The proposed development is accordingly expected to impact the seabirds during their sensitive breeding periods between February and July for the Yelkouan Shearwater and between March and October for the Scopoli’s Shearwater. Especially during the summer months, the birds are congregating offshore forming rafts of various sizes a few kilometres from their breeding places. After sunset, they return to their nesting sites where they lay and breed their eggs. Once the chicks develop, they start venturing out of nests at night to exercise their wings and use the light of the horizon as an orientation for their first flights. Light distraction and disturbance – also referred to as light pollution - lead to disorientation of the birds and rank amongst the biggest threat for seabirds.

The problem of light pollution on seabirds is a known phenomenon in Malta⁵ with Xlendi being the second worse location for seabird strandings between 1978 and 2013 accounting to up to 10% of all strandings in Malta (see footnote 5). Light pollution originating from urbanised areas of the coast disturbs the seabirds

⁴ Metzger et. al (2015): Creating an inventory of marine IBAs for Puffinus yelkouan, Calonectris diomedea & Hydrobates pelagicus in Malta. LIFE10 NAT/MT/090 Report

⁵ <http://birdlifemalta.org/wp-content/uploads/2016/08/BLM-Light-Pollution-Report-2014.pdf>



to visit their colonies. Nest abandonment and the abandonment of whole breeding colonies are results of this disturbance. Furthermore, chicks and young birds, especially on their early flights have been reported to feel attracted and disoriented by artificial light sources, misleading them from going back to their colonies at night and often causing them to end up stranded on land or colliding against tall structures.⁶ This phenomenon, known as 'fallout' has been documented by BirdLife Malta over the past few decades and fallout or 'stranding' events appear to be pronounced at coastal development areas which bring about a significant increase of nocturnal light pollution.⁷

Noise pollution generated from the ships transiting and anchoring at the buoy is another negative impact on rafting birds at sea that may possibly displace birds from these rafting site due to increased human interference.

BirdLife Malta expects the previously-mentioned disturbances as a result of ships berthing at the proposed development of a buoy offshore in front of Xlendi. Therefore, we evaluate the proposed development as a threat to shearwater populations if ships are operating during the breeding seasons of both species from February to October. This also applies for the construction period of the buoy as well as maintenance work which should be undertaken outside this period to minimize concerns of light and noise pollution for the seabirds.

An Appropriate Assessment for this development should look into all these impacts and their residual effect on the shearwater populations for which three SPAs are designated in the area (two land SPAs and one Marine SPA).

Rationale behind the placement of a buoy to boost cruise ship tourism

The expected economic revenue to be gained by commercial and touristic outlets in Xlendi and Gozo (in general) as a result of the deployment of the buoy and following regular cruise tourism in Xlendi and Gozo as pointed out in the PDS, is highly questionable.

The revenue potential that cruise liner activity may bring along can be any of the following:

- (1) expenditure by cruise passengers and crew on land;
- (2) employment opportunities for cruise liner headquarters, marketing and tour operations;
- (3) expenditure resulting from the cruise liner's need for goods, supplies and services necessary for cruise operations;
- (4) expenditure by the cruise liner for port services and fees;
- (5) expenditure by cruise lines for the maintenance⁸.

⁶ Montevecchi, W.A. (2006). Influences of artificial light on marine birds. Chapter 5 in C. Rich and T. Longcore, eds. *Ecological consequences of artificial night lighting*. Washington, D.C.: Island Press.

⁷ Reed, J.R., Sincok, J.L., Hailman, J.P. (1985). Light attraction in endangered procellariiform birds: reduction by shielding upward radiation. *Auk* 102: 377–383.

⁸https://www.researchgate.net/publication/228268563_The_Impacts_of_the_Cruise_Industry_on_Tourism_Destinations



Should a cruise liner start berthing at Xlendi, the expected extra revenue would be that of (1) expenditure by cruise passengers and crew on land, for those cruise passengers and crew that would be ferried to land, and partly from (2) “tour operations”.

However, there are scientific studies that indicate that the cruise ship tourism sector and particularly cruise ship tourists rank amongst the least profitable tourist groups for destination areas. This is mainly due to the ‘All-Inclusive mentality’ of cruise liners which is based on full catering for passengers as well as provision of accommodation on board. **Cruise passengers' expenditures while visiting a harbour are very limited and results show that they spend less than tourists staying at hostels or backpackers in their destinations.** Cruise tourists generally stay significantly shorter in their holiday destinations due to strict cruise timetables⁹.

Another study which should be examined in the context of developing the cruise sector in Gozo is “Quantifying Cruising” by Giuseppe Tatarra¹⁰, taking into account external costs occurring as a result of increased cruise shipping, including health and damage to ecosystems, agriculture and buildings. In the case of Venice, it is estimated that each local resident of the city has to pay about 3,300EUR each year as a result of cruise ships berthing at the city. In this context it is worth mentioning that official authorities generally use accumulated profit revenues of the cruise industry and not national economic costs to estimate (expected) revenue results and those do not reflect the real economic costs.

Despite that, we would like to highlight that cruise ships contribute massively to air pollution that threatens our climate, our environment and our health. In 2012, the World Health Organization identified that 95% of Europeans living in urban environments are exposed to levels of air pollution considered dangerous to human health and about 420,000 premature deaths are known as a result in the European Union¹¹.

Running engines of ships contribute considerably to global and local emissions of sulphur oxides (SO_x), nitrogen oxides (NO_x) and particulate matter (PM). The latter includes soot emissions (black carbon) which are in particular harmful to health and climate. NO_x emissions diminish the function of the lungs and increase the risk of cardiovascular disease. NO_x is also a greenhouse gas causing climate warming due to its contribution in the formation of ozone (O₃). High concentrations of O₃ in cities are responsible for the death of elderly people and people with poor health conditions. Emissions of sulphur oxides such as sulphur dioxide (SO₂) are harmful for our environment, not least because it causes acid rain which leads to the eutrophication of soils and coastal areas and it damages buildings and structures, particularly those made of limestone which most of Malta’s historical heritage is made of. Air pollutant emissions are furthermore responsible for a significant loss of productivity in agriculture and have a negative impact on biodiversity.

In this context, it is highly recommended that an EPS also evaluates the socio-economic impact of this development and looks into the viability, even economically, of what such a development will bring along,

⁹ <http://www.sciencedirect.com/science/article/pii/S2211973613000068>

¹⁰ <http://www.jbna.org/IS%20-%20Quantifying%20Cruising.pdf>

¹¹ <http://ec.europa.eu/environment/pubs/pdf/factsheets/air/en.pdf>



in contrast with the environmental, social and health concerns a cruise ship berthing spot in this location will generate.

No alternative locations proposed or considered

In view of the above, BirdLife Malta cannot help but note that the developer and/or consultant have not listed any site evaluation exercise which would look into any alternative locations for this proposal. Should a socio-economic analysis indicate that such a project may be economically viable, alternative locations should be considered, which might be less sensitive.

In conclusion, while reserving the right to comment further on the proposed plans, BirdLife Malta:

- considers the proposed development as qualifying for an EPS , as well as an Appropriate Assessment as obligatory per Regulation 19 of the Flora, Fauna and Natural Habitats Protection Regulations, 2006 for this proposed development. This in consideration of the fact that the proposed development is located within a Marine SPA, as well as may negatively affect two land SPAs.
- Demands that a thorough evaluation is undertaken of the likely impacts of the proposed development and its associated increased shipping and anchoring movements, especially during its operational phase, on the nesting population of Scopoli's and Yelkouan Shearwaters, in particular during the sensitive nesting periods between February and October.
- Suggests that a socio-economic analysis is undertaken for the economic viability of this project, given the fact that the revenue expected of such operations are considered to be minimal, which might not outweigh the environmental impact associated with this operation.
- Sees the necessity to point out that cruise ships contribute massively to air pollution that threatens our climate, our environment and our health and expected economic revenues often stay an illusion for the destination regions, therefore further studies in this regard have to be undertaken.
- Suggests that alternative locations for this proposal are considered, with each location evaluated adequately on the possible environmental and social impacts each location will carry. It accordingly invites ERA and TM to consult on different proposals so as to tackle any possible environmental conflicts at an early stage of planning.

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