

Environmental Impact Assessment

Screening

(According to Schedule IB of LN 114/2007)

PA file no.: PA04687/10
Other reference: EA 00013/14
Project Title: To scuttle Patrol Boat P33 onto the sea-bed off the north coast of Gozo
Location: Area west of Reqqa Point and north of Billinghamurst's Cave
Screening date: November 2014

1. Description of Proposal

1.1 Outline of project/development

PA04687/10 is a development application for the scuttling of Patrol Boat P33 onto the sea-bed off the north coast of Gozo, in the area west of Reqqa Point and north of Billinghamurst's Cave (Figure 1). The proposal is being proposed by the Professional Diving Schools Association (PDSA).

The objective of the proposal is to:

- (i) seek the addition of an artificial wreck at the proposed site (coordinate N36° 0.4' 53.48" / E14° 14' 06.90") to enhance the attractiveness of the site for divers;
- (ii) support and enhance the diving industry in Gozo, specifically by providing a dive attraction on the north coast of the Island. The three existing dive wrecks on Gozo are all located at Ix-Xatt I-Aħmar, on the southern coast and, when the wind blows from the south or east, these sites are not available for use; and
- (iii) provide an additional new dive attraction in an area where there are already the land-side facilities and infrastructure in place to accommodate the development. There are parking facilities in the area, as well as a ladder and a railing (installed in 2011).

The proposal involves the scuttling of Patrol Boat P33 which dimensions are 23.33 m long, has a 4.7 m beam, and is 7 m high (including the mast). The vessel has a footprint of approximately 100 m². It is proposed to scuttle the Patrol Boat on a gently to moderately sloping sandy bottom at a depth of approximately 38 - 40 m. The vessel will be orientated with its stern pointing towards the north east and approximately 50 m from the shoreline in view that the seabed reaches great depths very close to the shore.

A number of alternative sites were considered as indicated in the PDS and the proposed site is the most appropriate location for the scuttling within this wider area.

1.2 Site description and related considerations

The site is located off the north coast of Gozo, in the area west of Reqqa Point and north of Billinghamurst's Cave. Billinghamurst's Cave (Ghar il-Kbir tar-Reqqa) is one of a number of popular dive sites on the north coast of Gozo. It is a large cavern within a small embayment close to Reqqa Point. This site lies within the Żebbug Local Council administrative area.

The water depth range within the area surveyed is between 40 and 49 m. The predominant benthic habitat type within the area is a biocoenosis of coarse sands and muddy heterogeneous sediment, with an impoverished epifauna but supported a facies with *Caulerpa cylindrica*.

Access to the coast is along an off-road track, which begins at a ramp approximately 300 m from Reqqa Point. This track is accessed off the access-only road linking Ix-Xwejni and Wied il-Għasri. The track terminates in an open area close to the salt pans, which is used for informal parking. There is a ladder giving access to the sea at Reqqa Point, located approximately 30 - 35 m from the site. It is surrounded by a number of coastal related activities including salt pans.

The site is located within the Xwejni – San Dimitri coastal water body (Government Notice 194 of 2004) and less than 30 meters from (i) a proposed Area of High Landscape Value (AHLV) for its coastal & rural landscape from Ta' Slima to Qbajjar, and (ii) a proposed Level 2 Area of Ecological Importance (AEI) - Ta' Slima to Qbajjar area.



Figure 1: Location of the Scheme Site and potential search area.

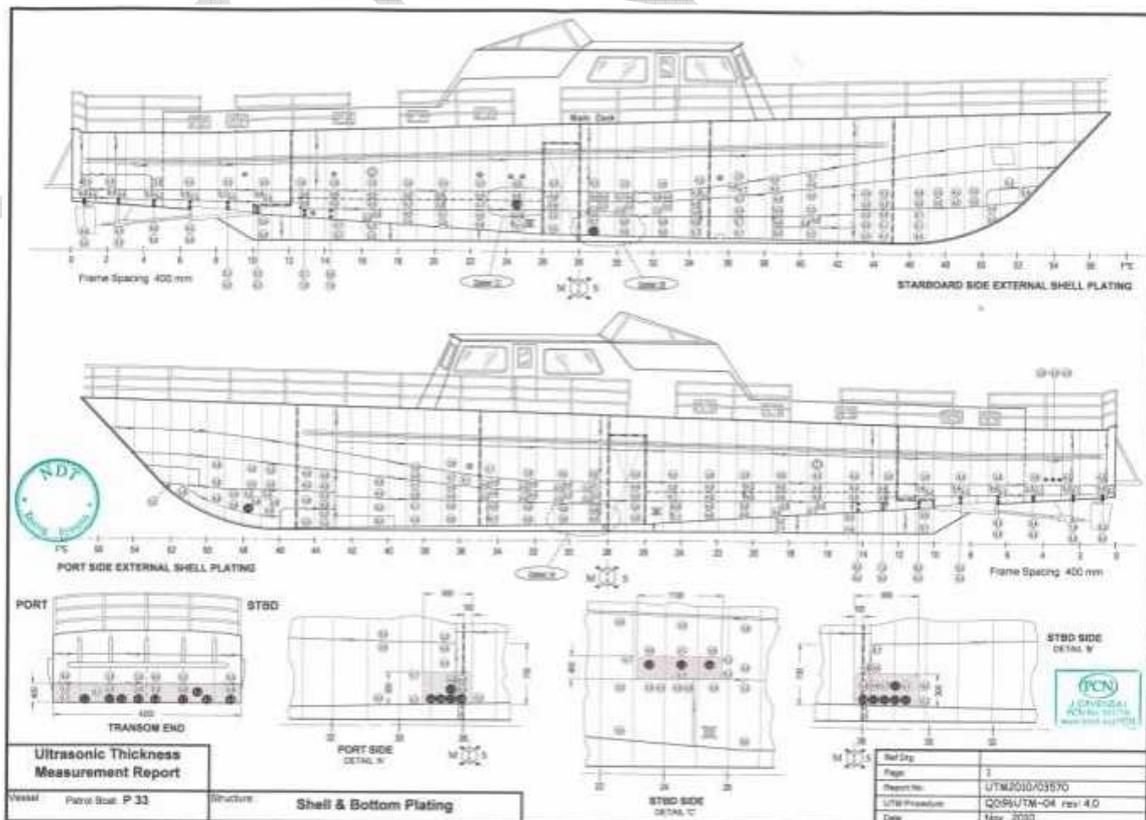


Figure 2: Plan of patrol boat P33.

2. EIA-relevant history

2.1 Relevant EIA/screening criteria (citations refer to L.N. 114 of 2007, as amended, except where otherwise specified):

Schedule 1A Category II Section 4.2.2.4 – Sinking of vessels or structures on the sea bed to form artificial reefs or similar structures or uses.

2.2 Version of documents used for screening:

1. PDS dated 7th November 2014.

3. Screening Matrix

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
1	Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, landuse, changes in water bodies, etc)?	Yes. The proposed development shall involve the scuttling of Patrol Boat P33 onto the sea-bed off the north coast of Gozo as an underwater attraction to divers. Naturally, this will modify the seabed topography and landuse of the site.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> It is not clear as to whether the scuttling of the wreck per se, shall have a significant impact on (i) the benthic environment and marine ecology of the site, (ii) the hydrodynamics, and (iii) the water quality. Therefore, further studies are required to be undertaken in order to identify the significance of such potential impacts.	PDS Pg. 1-2, 20, 24
2	Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?	No. Given the nature of the proposal (scuttling of a sea craft), the use of such raw materials will not be required in significant amounts.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts on resources are envisaged.	PDS Pg. – 28 - 29
3	Will the Project involve use, storage, transport, handling or production of substances or materials or energy, especially any resources which could be harmful to human health or the environment or raise concerns about actual or	Yes. Prior to the scuttling of the sea craft, the vessel is to be thoroughly cleaned to remove oil and fuel residues, loose paint, antifouling residues, etc. Such wastes are considered hazardous and harmful to human health or the environment (through contamination of the surrounding substrate).	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> It is not clear as to what impacts the proposed scuttling shall have on the marine environment in terms of water quality during both cleaning and scuttling, thus impact is being considered as unclear.	PDS Pg. – 26, 28 - 29

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
	perceived risks to human health?			
4	Will the Project produce solid wastes during construction, operation or decommissioning ?	Yes. Should the vessel not be properly stripped in full from exterior anti-fouling paint and other exfoliating paint material, oils, fuel, wiring, etc, there is the risk of contamination of the surrounding substrate. Additionally, parts of the vessel may be dislodged (i) should it not be secured properly; or (ii) due to degradation of the vessel through time; or (iii) due to storm events. Solid waste is also expected to be generated during decommissioning of the scuttling boat (if necessary).	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear. The stability and sturdiness of the vessel structure is to be studied and identified beforehand to avoid dislodging of parts of the wreck whilst underwater. On the other hand, negligible waste is expected to be generated during cleaning. Any solid waste which may be generated can be adequately managed and absorbed into local waste streams.	PDS Pg. – 26, 28 - 29
5	Will the project release pollutants or any hazardous, toxic or noxious substances to air?	No. No excessive emissions to air are expected given nature of the proposal (scuttling of wreck).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts on air quality are envisaged.	PDS Pg. – 28 - 29
6	Will the Project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	No. No excessive noise, vibration, light emissions are expected given nature of the proposal (scuttling of wreck).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts on air quality are envisaged.	PDS Pg. – 28 - 29
7	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	Yes. The site is located within the Xwejni – San Dimitri coastal water body (Government Notice 194 of 2004) where the objectives of no deterioration to the presently high ecological and good chemical status apply. The process of scuttling per se may lead to the release of hazardous/toxic substances if not carried out correctly. Such impacts are also envisaged during cleaning of the vessel which will generate old bulkheads, metals etc. Works are being envisaged to be carried out at a licensed shipyard.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> It is unclear as to what impacts the proposed scuttling shall have on the marine environment in terms of water quality, thus impact is being considered as unclear.	PDS Pg. 1-2, 20, 24, 28 – 29 Appendix 1

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
8	Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?	No. No risks of accidents are envisaged, save for any accidents that may occur during operation of the site e.g. entrapment or injury during diving operations around the proposed site.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged for EIA purposes.	/
9	Will the Project result in social changes for example, in demography, traditional lifestyles, employment?	No such changes in demography, traditional lifestyles and employment in the area are envisaged. The proposal is being considered as an additional attraction for divers along the northern coast of Gozo (west of Reqqa Point and north of Billingham's Cave) where such activities are already established.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged.	/
10	Are there any such factors which should be considered such as the consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?	No such factors are known of.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are being envisaged.	/
11	Are there any areas on or around the location which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project?	Yes. Reply in Question 7 refers.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> It is unclear as to what impacts the proposed scuttling shall have on the marine environment in terms of water quality, benthos, hydrodynamics, including waves and currents, and thus impact is being considered as unclear.	PDS Pg. – 26, 28 – 29 Appendix 1
12	Are there any areas on or around the location which are important or sensitive for reasons of their	Yes. Further to reply in Question 7, the site is located less than 30 meters from a proposed Level 2 Area of Ecological Importance (AEI) - Ta' Slima to Qbajjar area.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear impacts are envisaged. Reply to Question 11 refers. Appropriate Assessment screening for the	/

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	ecology e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?		said application is also currently being carried out.	
13	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project?	Reply to Question 11 and 12 refer. Furthermore, given the area is surrounded by the above mentioned proposed areas for protection, there may be species and habitats which are protected and that could potentially be affected as a result of the proposal ¹ .	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear impacts are envisaged. Reply to Question 11 refers.	/
14	Are there any inland, coastal, marine or underground waters on or around the location which could be affected by the project?	Yes. Replies to Question 7 and 11 refers.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> Replies to Question 7 and 11 refers.	/
15	Are there any areas or features of high landscape or scenic value on or around the location which could be effected by the project?	Yes. The proposal is located less than 30 meters from a proposed Ta' Slima to Qbajjar Area of High Landscape Value (AHLV) for its coastal & rural landscape.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged in terms of landscape and visual impacts given that the proposed development is scuttling of a wreck, thus will only be visible underwater at certain depths. Furthermore, the aim of the proposal is create a dive attraction.	/

¹ No feedback was received during internal consultation on the type of species present in the area.

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
16	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?	Yes. The land nearest to the wreck site is a rocky shore used for swimming, snorkelling and scuba diving. The location of the wreck may also be subject to sea craft traffic movement.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear. Impacts on the maritime traffic of the area, namely boat traffic are unknown.	/
17	Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	Reply to Question 16 refers.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Reply to Question 16 also refers.	/
18	Is the project in a location where it is likely to be highly visible to many people?	No. Proposed development is scuttling of a wreck, thus will only be visible underwater. Furthermore, the aim of the proposal is create a dive attraction.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged in terms of landscape and visual impacts.	PDS Pg. – 28 - 29
19	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?	Yes. The proposal is located 320 metres (west from the proposed site) from a proposed Class B 18 th century Salt Pans.	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> Unclear given that although there are no known/recorded remains, there have been two instances along the same stretch of coastline (a site close to Għar Qawqla and il-Bajja ta' San Blas) where anchors were discovered. Furthermore, the coastline is characterised by an important system of salt pans and it is unclear if any terrestrial interventions are being proposed (if any).	Internal Consultation
20	Is the project located in a previously undeveloped area where there will be loss of greenfield land?	Yes. The physical and biological characteristics of the area proposed for the scuttling of the wreck is typical of that found along the northeastern coast of Gozo between Wied il-Għasri and Xwejni. The area is characterised by a rocky / boulder bottom present immediately below the shore which is steeply sloping. Further offshore leads to a less steep sloping seabed	Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/> It is not clear as to whether the scuttling of the wreck per se, shall have a significant impact on: (i) the benthic environment and marine ecology of the site; (ii) the hydrodynamics; and (iii) the water quality. Therefore, further studies are required to be undertaken in order to identify the significance of such potential impacts.	/

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
		consisting mainly of coarse sediments. The water depth range within the area surveyed is 40 – 49 m. The predominant benthic habitat type within the area is a biocoenosis of coarse sands and muddy heterogeneous sediment, with an impoverished epifauna but supported a facies with <i>Caulerpa cylindrica</i> .		
21	Are there existing land uses on or around the location e.g. homes, gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	Yes. The land adjacent to the wreck site is a popular rocky shore used for swimming, snorkelling and scuba diving.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged, given that no impacts on any land-uses are envisaged.	/
22	Are there any plans for future land uses on or around the location which could be affected by the project?	No. None that are known of, given that the site is off-shore.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged.	/
23	Are there any areas on or around the location which are densely populated or built up, which could be affected by the project?	No impacts are envisaged given the nature of the proposal (scuttling of a vessel), and the closest residential building is the locality of Żebbuġ (approx. 700m away). Furthermore, it must be identified if any on-shore facilities are being proposed.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged in view of the distance from the said areas and since site lies off-shore. The activity generated by this type of intervention/attraction is not expected to be of such scale as to have a significant effect on the nearby urban areas.	/
24	Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community	No. No such areas are known of, given that the site is off-shore.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/> No significant impacts are envisaged.	/

Question Number:	Questions to be Considered	Identified potential impacts Briefly describe	Is this likely to result in a significant effect? Briefly justify	Document reference
	facilities which could be affected by the project?			
25	Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?	Yes. Refer to Questions 1 and 7 above.	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> Replies to Questions 1 and 7 refer.	/
26	Are there any areas on or around the location which have already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?	No. No such areas are known of.	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unclear <input type="checkbox"/></p> <hr/> No significant impacts are envisaged.	/
27	Is the project location susceptible to earthquakes, or subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	Yes. The area in question may be susceptible to adverse weather situations, such as extreme sea-storm conditions and sea currents. In the case of <i>some</i> other scuttled wrecks, such conditions (prevalent either during scuttling or on a long-term basis after scuttling) have actually resulted in significant alteration of the precise wreck position, capsizing of the wreck [thereby rendering it hazardous or defeating the purpose of scuttling], or breaking apart of the wreck. Some currents may also result in a degree of localised scouring of the seabed around the wreck.	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear <input checked="" type="checkbox"/></p> <hr/> Given the nature of the proposal, it is not clear as to whether any significant impacts may occur in relation to the said conditions.	PDS Pg. – 28 – 29

4. Conclusion

4.1 EIA screening conclusion

Proposal falls under the remit of Schedule IA, Category II Section 4.2.2.4 of the EIA Regulations 2007 (Legal Notice 114 of 2007, as amended), and would thus require the submission of an Environmental Planning Statement (EPS).

Furthermore, detailed screening was undertaken, as per matrix above, in accordance with Schedule IB of the EIA Regulations, whereby the following impacts were identified as unclear and requiring detailed assessment of the following issues, amongst others:

1. Marine ecology;
2. Quality of the marine environment;
3. Waves, currents and hydrodynamics; and
4. Potential Archeological remains in the area.

In this regard, scoping in order to compile the required Terms of Reference for the EPS is to be carried out.

4.2 Screening disclaimer

The above screening results, the ensuing conclusions and recommendations are without prejudice to any required changes or updates should the development proposal be eventually modified or should the information/assumptions provided turn out to be incorrect. Any deviations of the proposal from this submission would need to be re-assessed and the merits of this screening would need to be re-opened.