EIA Quality Mark Case Study

Swansea Inner West Pier Works

Key Issues:
Associated British Ports (ABP) commissioned ABPmer to undertake the environmental assessment for a marine licence to construct a new retaining wall at Swansea Inner West Pier. In preparing a combined Screening and Scoping Report for this project, comparatively detailed consideration was given to the baseline environment, key issues and mitigation measures. These details were collected in line with the new EIA Regulations which require that there is a ‘front loading’ of information early in any EIA process (see here). This is to ensure that the EIA retires any potential effects that are not significant at an early stage in the process, allowing subsequent assessments to be proportionate.

Key environmental issues were largely a product of the narrow, constrained nature of the channel adjacent to the pier (see image and figure). These included:
- Elevated levels of noise and vibration during construction and potential adverse effects on marine fauna and residents; and
- Displacement of vessels and risk of an accident or incident involving marine craft during construction.

Purpose of the project:
Swansea West Pier, owned by ABP, is located to the south of Tawe Barrage in Swansea Bay. It comprises a timber retaining wall constructed in the 1800s, but the inner section has since suffered structural failure. Emergency repair works were carried out in December 2017 and July 2018; however, a long-term solution is required to prevent further failure. ABP proposed to construct a new retaining wall aligned in front (seaward) of the Inner West Pier.

Description of the project:
In March 2019, the project obtained a marine licence from Natural Resources Wales (NRW) for a driven combination pile wall. The upper surface layer of the seabed also needs to be dredged on a local basis and to a shallow depth in advance of constructing the new retaining wall to mitigate the risk of striking obstructions during piling. This material is to be disposed of at the Swansea (Outer) licenced disposal ground (LU130).

The installation of piles is likely to be carried out from a jack-up barge or similar marine plant with a crane and piling equipment (both vibro and percussive piling). Two piling rigs may be used to allow piling operations to take place concurrently in order to accelerate the construction programme.
EIA Learning Outcomes

Lessons learnt:

NRW’s guidance note on Scoping an EIA for Marine Developments suggests early and fit-for purpose scoping is the key to an efficient assessment process and reduces consenting timescales and risk. Scoping is also promoted as an opportunity for developers to consider the potential environmental impacts early, and highlight any appropriate adjustments to the proposal and mitigation/enhancement incorporated as a result. It also offers a chance to describe the project’s aims and benefits. ABPmer’s Screening and Scoping Report therefore aimed to achieve these goals.

A key issue (among others) was the potential for percussive (impact) piling to produce underwater noise above background conditions and at a level that may cause a risk of injury and behavioural changes to fish and marine mammals. To address this, substantial further assessment work was committed to at the screening and scoping stage (regardless of the outcome of an EIA Screening Opinion) involving underwater noise modelling of percussive piling. Mitigation measures were also suggested such as soft start piling procedures.

NRW, in their EIA Screening Opinion, considered that the “proposed noise modelling and associated piling mitigation should reduce impacts” and that other impacts are likely to be short term and recoverable. Thus, it was concluded the project did not require a statutory EIA. An environmental appraisal was submitted for the marine licence.

Lessons learnt continued:

Presenting detailed screening and scoping information to the regulator, and committing to further assessment, allowed for proportionate environmental assessment and indeed avoided the need for statutory EIA.

Stakeholder engagement throughout the project also facilitated a smooth and timely consenting process. A website provided information on the development to the public, and also advertised a stakeholder workshop. A Hazard Identification (HAZID) workshop with port stakeholders was also held to identify and raise known and potential hazards to marine navigation. Any issues were then addressed in the environmental assessment to support marine licence decision-making.

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