

SECTION 1: INTRODUCTION AND BACKGROUND



CHAPTER 1: INTRODUCTION TO THE PROPOSED DEVELOPMENT

1. INTRODUCTION TO THE PROPOSED DEVELOPMENT

1.1 Introduction

This Environmental Statement (ES), and supporting documentation, has been prepared by Fugro EMU Ltd and Waterman Infrastructure and Environment Ltd. It describes the Environmental Impact Assessment (EIA) process and presents the findings, to accompany applications for regulatory consents for the construction and operation of the Aberdeen Harbour Expansion Project.

1.2 The Aim of the Document

The aim of the ES is to present, in a logical, comprehensive and transparent fashion, the findings and outcomes of the EIA process, highlighting any significant environmental effects arising from the construction and operation of the project, and where appropriate, proposing mitigation measures to mitigate adverse effects. The ES meets the requirements of the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended by The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2011, the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011), and Schedule 3 of the Harbours Act 1964. The ES provides the information to help regulatory consideration of the application. The focus and scope of the EIA and all supporting technical studies has been developed in full consultation with statutory and non-statutory stakeholders throughout the EIA process (as described in Section 1.8).

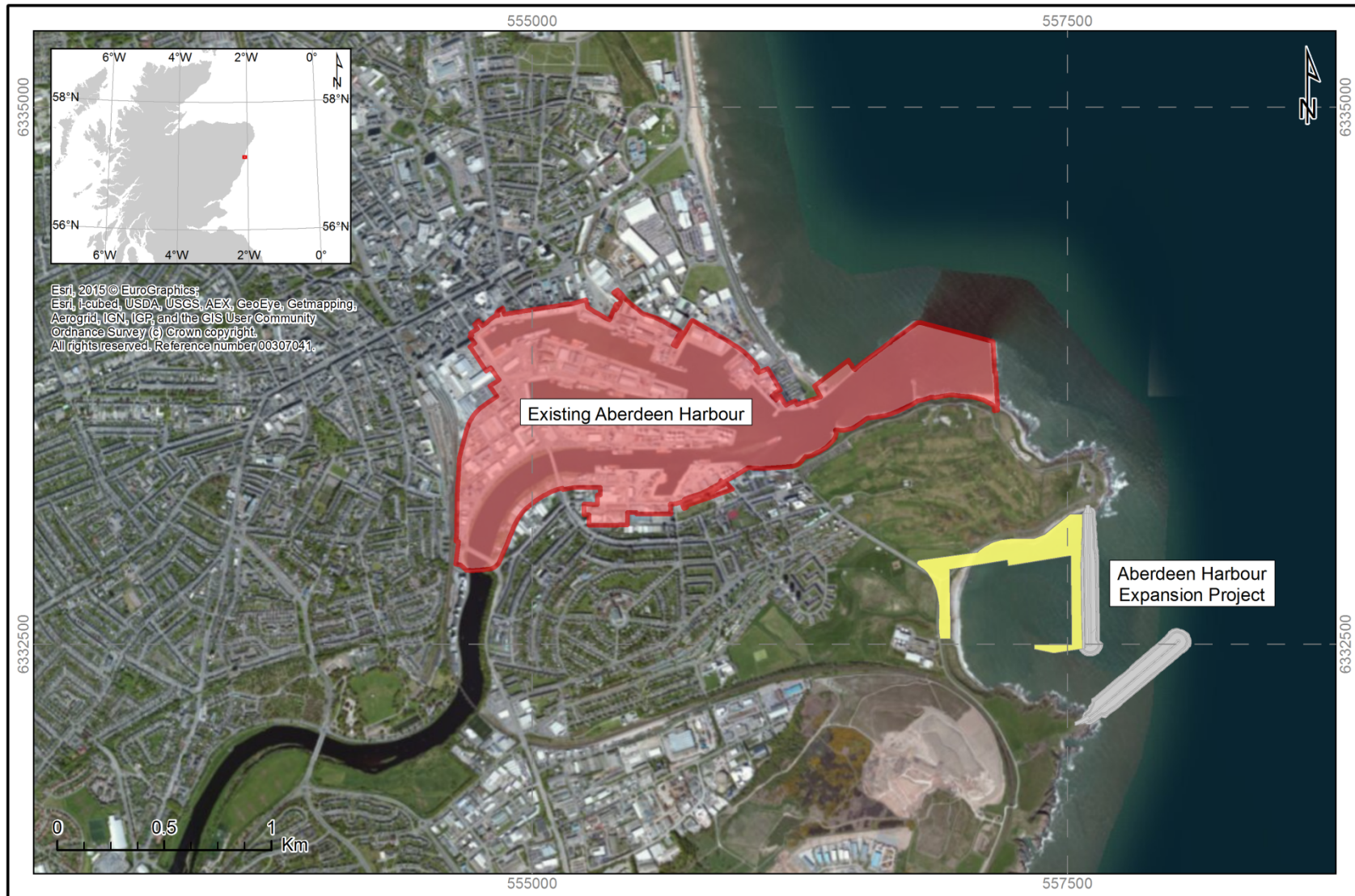
1.3 Background Context and Project Location

The current Aberdeen Harbour is located within the city of Aberdeen along the eastern coast of Scotland. The proposed new harbour facility is located at Nigg Bay to the south of the existing harbour (as shown on Figure 1.1).

Aberdeen Harbour has experienced rapid growth as a result of the development of the offshore oil and gas industry, and in recent years the harbour has seen growing demand for increased capacity. The operations at Aberdeen Harbour are currently restricted by the size and shape of the existing port facilities, its city centre location, and neighbouring uses which now surround the port and leave little space for any potential future expansion. In 2012, Aberdeen Harbour Board (AHB) commissioned two reports:

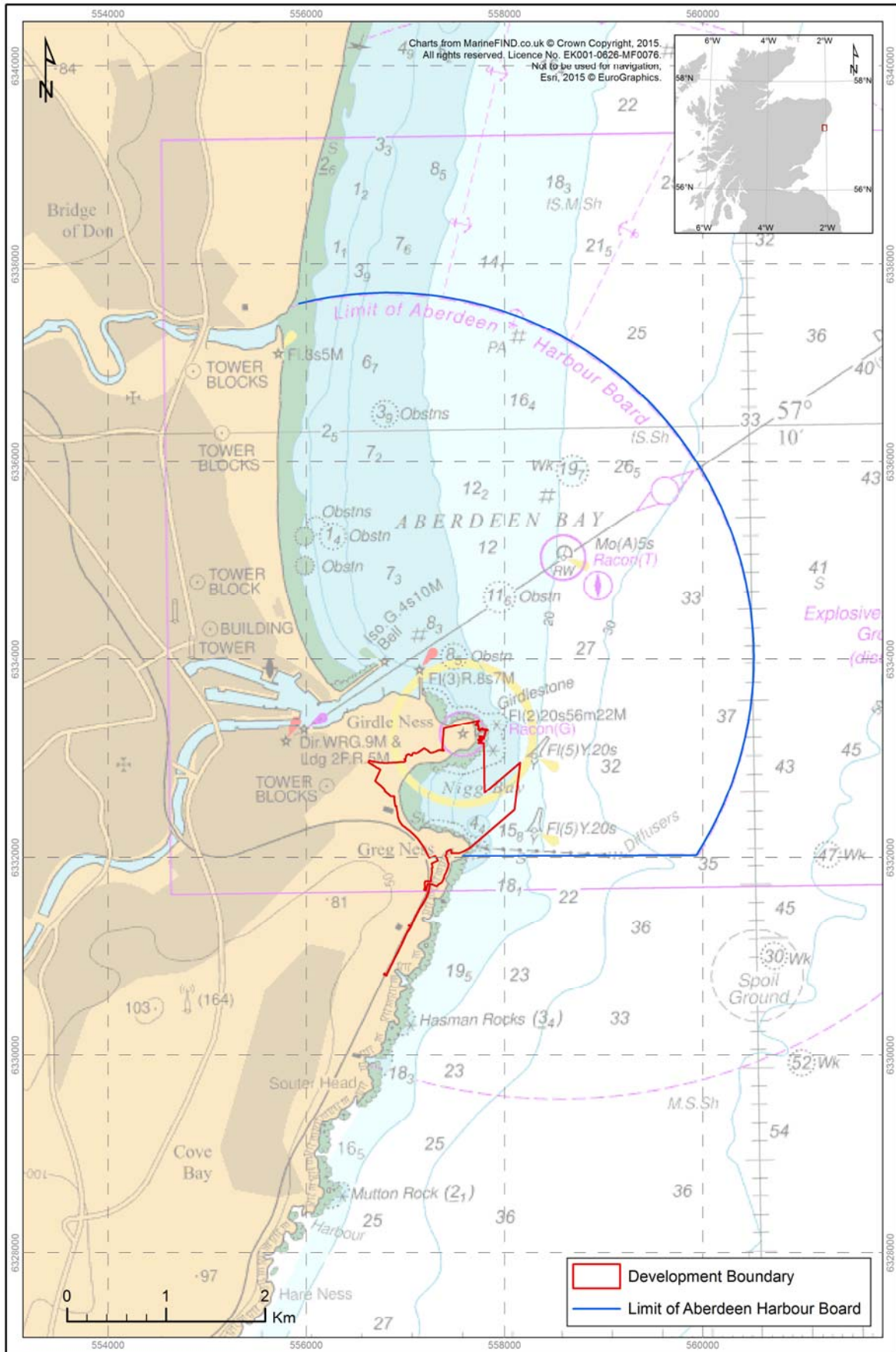
- 'Case for Growth' (ES Appendix 1-A), a feasibility study on the need for the expansion of the port facilities in order to test the broad options available in meeting this need; and
- 'Directions for Growth' (ES Appendix 1-B), assessed the viability of potential expansion options for a new or improved harbour facility with three potential locations considered.

Following consultation with key stakeholders, AHB proposed that the Nigg Bay option was taken forward for investigation, assessment and development. An EIA Scoping Report was produced in 2013 which set out the proposed scope of the EIA (ES Appendix 1-C: Scoping Report 2013), and responses were received from consultees later that year (ES Appendix: 1-D: Scoping Opinion 2014); the Scoping Report was subsequently updated to include the Scoping Opinion (ES Appendix 1-E: Updated Scoping Report 2014).



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Figure 1.1: Location of the existing Aberdeen Harbour and the proposed Aberdeen Harbour Expansion Project



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Figure 1.2: Extent of the current Aberdeen Harbour Board jurisdiction and proposed Aberdeen Harbour Expansion Project Development Boundary

1.3.1 The Applicant

In 1961 Aberdeen Harbour became a Trust Port, and is therefore an independent statutory body run by an independent board. It is not controlled by a local authority and therefore is not a public body and nor is it a private business. Under the Aberdeen Harbour Order Confirmation Act 1960, as amended, AHB are responsible for the administration, maintenance and improvement of the port and for ensuring its continued prosperity. Within the designated port limits, the 1960 Act affords permitted development rights for certain onshore works. The port limits extend two nautical miles north of the mouth of the River Dee and one quarter of a mile south and are shown on Figure 1.2.

AHB's vision is "to be a major, commercially successful and sustainable Trust Port, integral to the north-east of Scotland's transport infrastructure and providing an increasingly significant contribution to its economic growth". Over the years AHB have kept pace with client demand through the maximisation of available space; however, the port is now operating at its capacity with vessels frequently queuing outside the harbour for available berths.

1.4 Overview of the Project Description

The Aberdeen Harbour Expansion Project at Nigg Bay will be constructed under a design and build (D&B) contract. The procurement process and appointment of contractors for the D&B contract had not concluded at the time of writing this ES and therefore construction techniques and infrastructure design are based upon the specification as per the D&B tender. It is anticipated that award of the D&B contract will take place late in 2016, with construction works starting in early 2017, and completion of the harbour construction works by 2020.

The main elements of the harbour will include:

- Dredging the existing bay to accommodate vessels up to 9 m draft with additional dredge depth of 10.5 m to the east quay and entrance channel;
- Construction of new north and south breakwaters to form the harbour;
- Provision of approximately 1500 m of new quays and associated support infrastructure. The quays will be of solid wall construction and suspended decks over open revetment;
- Land reclamation principally through using materials recovered from dredging operations and local sources, where possible;
- Construction of areas (for development by others) to facilitate the provision of fuel, bulk commodities and potable water;
- Provision of ancillary accommodation for the facility;
- Off-site road works to the extent necessary to access the facility and to satisfy statutory obligations; and
- Road diversions and enabling works necessary to permit the development.

For more detailed information regarding the project description please refer to Chapter 3: Description of the Development.

1.5 TEN-T Funding

The Trans-European Transport Networks (TEN-T) is a European Union (EU) funded Programme with the aim of improving and developing transport infrastructure including road, rail, air and water transport networks across Europe, in order to maintain the EU's competitiveness and wealth.

The Aberdeen Harbour Expansion Project will increase port capacity, removing a bottleneck on the TEN-T network and create better links with other EU ports. It will enhance and expand Aberdeen Harbour's role as a key trade hub in northern Europe by delivering around 1500 m of new deep water quay that will be well connected to TEN-T road and rail links. TEN-T has contributed to the costs of this EIA and an assessment of wave climate and mooring conditions in the proposed new port, using a scaled physical model.

1.6 Environmental Impact Assessment Methodology

The harbour development will require consents under three main legislative regimes before the construction can commence:

- Planning permission under the Town and Country Planning (Scotland) Act 1997 (as amended by the Planning (Scotland) Act 2006);
- Marine licence under the Marine (Scotland) Act 2010; and
- Harbour Revision Order (HRO) under the Harbours Act 1964.

Each of these licensing regimes will require an EIA in accordance with the corresponding EIA regulations:

- Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011);
- Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended by The Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2011; and
- Schedule 3 of the Harbours Act 1964.

It is intended that both the marine and terrestrial works will be assessed under a single EIA with all three consenting bodies Aberdeen City Council (ACC), Marine Scotland and Transport Scotland, for further information see Table 4.1 within Chapter 4: Planning and Legislation) working together to ensure a streamlined approach. This ES supports both the onshore and offshore consents required.

The consenting process is presented in more detail in Chapter 4: Planning and Legislation.

1.7 Approach to the Environmental Impact Assessment

The ES outlines the principles of EIA, describes the baseline conditions of the environment, and evaluates the potential environmental impacts associated with construction and operation of the development. Further information on the approach to the EIA is provided in Chapter 5: Environmental Impact Assessment Process.

1.7.1 The Project Team

Fugro EMU, with support from Waterman Infrastructure & Environment Ltd has undertaken a full EIA and prepared this ES, on behalf of AHB, for the Aberdeen Harbour Expansion Project.

Table 1.1 shows those organisations that contributed directly to the production of the ES and/or technical studies.

Table 1.1: Contributors to the Environmental Statement











Contributors to the ES		
Fugro EMU Limited		Lead EIA co-ordinator. Technical studies undertaken: Metocean, marine mammals and seabirds surveys, fish ecology and commercial fisheries.
Waterman Infrastructure & Environment Limited		Responsibility for the onshore elements of the EIA.
Anatec Limited		Full baseline assessment for shipping and navigation including the facilitation of a hazard workshop.
CMACS Limited (Centre for Marine and Coastal Studies)		Benthic ecology technical surveys including intertidal, subtidal and baseline works.
BiGGAR Economics Limited		Socio-economics technical assessment.
Fairhurst		Technical transport assessment.
Envirocentre Limited		Terrestrial bird surveys including breeding and over wintering.
Kongsberg Maritime Limited		Underwater sound modelling technical study.
Wessex Archaeology Limited		Archaeology baseline technical assessment.

Table 1.1: Contributors to the Environmental Statement continued

Contributors to the ES		
<p>Intertek Energy & Water Consultancy Services. (Trading name of Metoc Ltd, a member of the Intertek group of companies).</p>		<p>Hydrodynamic modelling (HDM), flood risk assessment (FRA), drainage impact assessment (DIA) and the Water Framework Directive Assessment (WFDA) technical studies.</p>

In addition to those organisations directly involved with the drafting of the ES and associated technical studies, the wider project team includes:

- **Barton Willmore:**
Planning consultants with responsibility for co-ordinating and undertaking all public consultation, and providing input to the planning related components of the ES;
- **Doig and Smith:**
Overall project management of the proposed development (including engineering and environmental);
- **HR Wallingford Limited:**
Hydrodynamic expertise (including numerical and physical modelling) in support of engineering design;
- **Arch Henderson:**
Marine aspects of the new harbour design; and
- **Camtech Engineering:**
Mechanical and electrical design aspects of the development.

1.8 Consultation Stages

For projects requiring an EIA, consultation is an essential part of the application process. AHB have taken a proactive and committed approach to consultation throughout the course of this project from the feasibility stage, and throughout the EIA process. A summary of this consultation is presented in this section.

1.8.1 Feasibility

Following completion of a prefeasibility report (as discussed within Case for Growth, ES Appendix 1-A) AHB undertook a series of workshops to consider the potential locations and options for development, namely: the existing harbour, North Beach and Nigg Bay. Workshops were themed around transportation, planning and environmental considerations. Invitations were extended to:

- Aberdeen City Council;

- Aberdeen City and Shire Strategic Development Planning Authority;
- Scottish Natural Heritage;
- Scottish Environmental Protection Agency;
- Marine Scotland;
- Transport Scotland;
- First Bus;
- Stagecoach;
- Network Rail;
- NESTrans;
- ARR Craib;
- Scottish Water;
- Royal Society for the Protection of Birds; and
- Scottish Dolphin Centre.

The outputs from this phase of consultation are outlined within Directions for Growth (ES Appendix 1-B).

1.8.2 Scoping

In 2013 the EIA Scoping Report was submitted to ACC, Marine Scotland and Transport Scotland (ES Appendix 1-C). A combined Scoping Opinion was issued by Transport Scotland on behalf of the three consenting authorities (ES Appendix: 1-D). Following receipt of the Scoping Opinion, the scoping report was amended in 2014 (ES Appendix 1-E).

During the scoping stage, consultation was undertaken with a range of statutory and non-statutory organisations, as coordinated by Transport Scotland and detailed within the Scoping Report (ES Appendix 1-E):

- Scottish Environment Protection Agency;
- Scottish Natural Heritage;
- Maritime and Coastguard Agency;
- Northern Lighthouse Board;
- Dee District Salmon Fisheries Board;
- Aberdeen City Council;
- Royal Yachting Association;
- Royal Society for the Protection of Birds;
- The Whale and Dolphin Conservation Society (now Whale and Dolphin conservation);
- Marine Scotland, Science Departments, Licensing Operations Team (MS-LOT) and Marine Analytical Unit;

- Historic Scotland; and
- Transport Scotland, Ports and Harbours and Trunk Road and Bus Operations.

1.8.3 Environmental Impact Assessment

The outputs of the scoping stage have been taken into account in the preparation of this ES and associated technical studies, and consultation has been an ongoing process throughout. Topic specific responses have been captured within each individual chapter, with signposting to show where comments have been addressed.

In addition to the formal scoping stage of the EIA, informal discussions have been ongoing with statutory and non-statutory consultees to ensure all relevant and up to date data sources have been captured to inform the baseline characterisation, and to ensure that all survey methodologies are fit for purpose to inform the EIA process. Further consultation has been undertaken with the statutory regulators and their advisors on a draft of the ES, principally ACC, Marine Scotland, Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA) and Historic Scotland.

1.8.4 Proposal of Application Notice

AHB have undertaken an extensive range of consultation approaches with key stakeholders and members of the public during the detailed pre-application process. This consultation has included:

- Submission of Proposal of Application Notice (PAN) – July 2015;
- Pre-Application workshops with Aberdeen City Council and Other Regulators – Ongoing;
- Correspondence with Ward Councillors - September 2015;
- Public Consultation Events – September 2015;
- Presentations to Community Councils – Ongoing;
- Radio Adverts; and
- Consultation on Nigg Bay Development Framework – Ongoing.

1.8.4.1 Submission of Proposal of Application Notice

A Proposal of Application Notice (PAN) was submitted to ACC on 6 July 2015 informing them of AHB's intention to submit an application for Planning Permission in Principle (PPP) for the proposed development.

1.8.4.2 Pre-Application Meetings and Workshops with Aberdeen City Council and other regulators

During the pre-application process, a number of pre-application meetings took place with ACC's planning team in relation to the content and structure of the PPP application.

Workshops were held with key regulatory bodies including SNH, SEPA, Scottish Water, Transport Scotland and MS-LOT to discuss the proposed development in greater detail and to ensure that each of the statutory consultee's requirements had been identified and would be addressed within the ES.

1.8.4.3 Aberdeen City Council Pre-Application Forum

Following the submission of the PAN to ACC and discussions with their communications team, Barton Willmore (on behalf of AHB) attended the Council's Pre-Application Forum. This forum is a committee designed to provide members of the planning committee with an opportunity to view proposals for major and national planning applications that are due to be submitted to the Council.

This provided AHB with an opportunity to present the proposed scheme to this committee, and afforded opportunities for councillors to ask questions in relation to the proposed development.

1.8.4.4 Public Notices (Local Newspapers)

In parallel with the PAN submission to ACC, a public notice was placed in both the Evening Express and the Press and Journal newspapers, outlining AHB's intent to submit an application for PPP, a Harbour Revision Order and a Marine Licence, whilst also providing particulars on the consultation undertaken in September 2015 (see below).

1.8.4.5 Radio Adverts

In order to promote as large an attendance as possible at the public exhibitions (see below), and to inform as wide an audience as possible, radio adverts were broadcast on Northsound Radio in the weeks prior to the exhibitions.

1.8.4.6 Public Exhibitions

In September 2015 four public exhibition sessions were undertaken over the course of a two-week period between the hours of 10:00 and 19:00. The purpose of the exhibitions was to provide information to members of the public, and to give the opportunity for the public to ask questions about the development.

1.8.4.7 Presentations to Community Councils

Presentations to the local community councils have been ongoing over the last few years as part of the community consultation associated with the Nigg Bay Development Framework. In addition, further presentations were given to the Torry and, Cove and Altens Community Councils during the pre-application stage.

1.9 Structure of the Environmental Statement

The ES comprises 26 Chapters in four volumes, as outlined below, and a stand-alone Non-technical Summary (NTS). Each of the topic specific ES chapters describes the consultation relevant to that topic, a baseline characterisation, an impact assessment, mitigation measures and conclusions. The chapters cross-reference technical reports and ES appendices as appropriate.

The ES is structured as follows:

- Volume 1: Non-technical Summary;
- Volume 2: Environmental Statement;
- Volume 3: Technical Appendices;

- Volume 4: Habitats Regulations Appraisal and Information to Support the Appropriate Assessment.

Information to support the Appropriate Assessment (AA) as required by the Habitats Regulations has been produced as a separate standalone section of the ES. Volume 4 provides supplementary information and signposting to the ES where required.

The Environmental Statement (Volume 2) is further broken down into the following sections and chapters:

Section 1: Introduction and Background

Abbreviations, Acronyms and Glossary;

- Chapter 1: Introduction to the Proposed Development;
- Chapter 2: Site Selection and Alternatives;
- Chapter 3: Description of The Development;
- Chapter 4: Planning and Legislation;
- Chapter 5: Environmental Impact Assessment Process.

Section 2: Physical Environment

- Chapter 6: Marine Physical Environment;
- Chapter 7: Marine Water and Sediment Quality;
- Chapter 8: Flood Risk and Surface Water;
- Chapter 9: Ground Conditions and Contamination.

Section 3: Biological Environment

- Chapter 10: Nature Conservation;
- Chapter 11: Terrestrial Ecology;
- Chapter 12: Benthic Ecology;
- Chapter 13: Fish and Shellfish Ecology;
- Chapter 14: Marine Ornithology;
- Chapter 15: Marine Mammals.

Section 4: Human Environment

- Chapter 16: Socio-economics;
- Chapter 17: Seascape, Landscape and Visual Effects;
- Chapter 18: Traffic and Transport;
- Chapter 19: Air Quality;
- Chapter 20: Terrestrial Noise and Vibration;



- Chapter 21: Shipping and Navigation;
- Chapter 22: Commercial Fishing;
- Chapter 23: Other Users;
- Chapter 24: Archaeology and Cultural Heritage.

Section 5: Summary and Conclusions

- Chapter 25: Summary of the Environmental Impact Assessment;
- Chapter 26: Outline Environmental Management Plan.