Luxembourg, 19th July 2017

Environmental and Social Data Sheet

Overview

Project Name:	NETHERLANDS FLOOD DEFENSE PPP
Project Number:	2017-0057
Country:	THE NETHERLANDS
Project Description:	The project concerns the upgrade of the 32km long Afsluitdijk, one of the main flood defense infrastructure works in the Netherlands. The top layer of the Afsluitdijk dam is to be re-enforced and an extra water barrier in front of current locks of Kornwerderzand / Den Oever is to be installed to combat high water from the sea. Also the current scouring sluices will be rehabilitated and special works are to be constructed to re-establish the fish migration between the sea and the inside lake. Moreover the project aims at increasing the discharge capacity to remove water from the lake (Ijsselmeer) into the sea by installing new pump systems. Finally the project includes a small component of road improvement and maintenance.
EIA required:	yes The project falls under Annex I of EIA Directive and thus a full EIA is required in compliance with the EIA Directive 2014/52/EC. The Promoter shall provide the link to the website where the NTS is published or send a copy of the full EIA to the Bank to be published on the Bank's website.

Project included in Carbon Footprint Exercise[1]: no

Environmental and Social Assessment

Environmental Assessment

The Project is being procured as a Design, Build, Finance and Maintain (DBFM)-Public Private Partnership (PPP) project under a 25-year concession after construction, by the Dutch Ministry of Infrastructure and the Environment represented by Rijkswaterstaat (RWS). EIB has been continuously involved in the Dutch PPP investment program of RWS and the Promoter is considered as a well experienced one, acting in line with the requirements of European and national environmental law.

The Dutch legislation complies with the relevant EU environmental Directives (Strategic Environmental Assessment (SEA) Directive 2001/42/EC, Environmental Impact Assessment (EIA) Directive 2014/52/EU, Birds Directive 2009/147/EC, Habitats Directive 92/43/EC, Water Framework Directive 2000/60/EC and Floods Directive 2007/60/EC).

After an extensive public consultation and participation process started from 2011, RWS and the regional stakeholders concluded on the project concept and solution space which is substantiated in a number of documents: A draft Government enforcement plan (the National

[1] Only Projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

Integration Plan), an Environmental Impact Assessment (EIA) report and an Appropriate Assessment (AA) (pursuant to the Nature Conservation Act 1998). In addition, RWS has entered into various cooperation agreements, translated into implementation agreements, with the regional authorities in order to incorporate additional regional aspirations related to sustainability, ecology, recreation and tourism in the project.
The Project falls under the requirements of Annex I of the EIA Directive 2014/52/EU and thus it has been subject to a full EIA. The draft EIA was approved in May 2015, and then went through a 6-week period of public consultation for comments and recommendations during which no appeals were received. Compliance with the Art 6(3) of the EU Habitats Directive 92/43/EEC, has been met and an appropriate assessment has been carried out for Natura 2000 areas as well as the Special (bird) Protection Areas. The conclusion of the Competent Authority, the State Secretary for Economic Affairs, was that the Project will not have significant negative effects on the identified Nature 2000 area of Wadden sea.

The National Water Plan 2009-2015 (or else called National Delta Programme) is in line with the approach recommended by the Floods Directive (2007/60/EC) and with the Water Framework Directive (2000/60/EC). The current standards for flood protection are used for the reinforcement works of the Afsluitdijk. A new approach on flood protection introduced by Delta Decision in 2015, is to be embedded in legislation in 2017, and will lead to a new national assessment in 2023. Thus, for the on-going projects which are already well advanced in terms of planning, such as the Afsluitdijk project, it is not yet possible to use the future standards, although the design is such to allow for adjustments if required. However, based on research by the Netherlands Bureau for Economic Policy Analysis (CPB), among others, it is evidenced that strengthening the Afsluitdijk with a requirement of 1/10,000 per year is also a cost-effective choice.

Regarding the water regime in the inner lake of Ijsselmeer, the Afsluitdijk project decision taken was to install pumps in order to maintain the present water levels in the IJseelmeer in spite of the rising sea level and the higher peak discharges from the hinterland. Also, the facilitation of fish migration through an opening at the dyke for the creation of a fish migration “river” is in full compliance with the requirements of the Water Framework Directive.

During the construction phase, the main negative environmental and social impacts are:

- the negative impact on protected species is expected to be limited as additional measures will be taken such as the adjustment of works timeslots outside of migration and breeding periods and restriction on use of artificial light that would affect bats.
- the archaeological remnants below the ground, found mainly in and around the navigation and sluice complexes and at some points along the dyke are safeguarded through the Monuments Act. The archaeological process ensures search and ex situ conservation of valuable remnants.
- Merging of traffic flows on one lane on parts of the A7 between Den Oever and Kornwerderzand would be inevitable. On busy days and in case of an accident, this will result in inevitable delays.
- Ship traffic will be affected by the building of new tide locks in the protective complexes at Den Oever and Kornwerderzand complexes. However, in both complexes ship blocking will be kept as brief as possible.

Overall the Project will have minor negative residual environmental impact as the limitation of the physical space to a narrow strip in the Nature 2000 area of Wadden Sea for the works implementation, is expected to result in no significant adverse impact on protected species. Also, the residual impact on the cultural heritage, mainly on casemates from the Second World War, is expected to be low.

The Project is also expected to yield some long-term environmental benefits through maintenance of the current water levels in the inner lake (Ijsselmeer) including the creation of a fish (migration) "river" west of the Kornwederzand and designing the new pumping systems to accommodate a fish-friendly environment. The Project will also have net long term positive social outcomes as it will allow for sustainable growth since flood protection is crucial for the protection of lives, economic activity, the environment, and cultural heritage. The improvement and maintenance of the National Motorway A7 on the dyke will provide enhanced road safety. The rehabilitation of the outdoor areas at the Monument Area and the new recreational areas (fish migration "river" and new cycle paths) will also create new environmentally valuable areas that are also expected to enhance tourism. Finally, the project will generate significant temporary employment during the construction phase, whilst permanent employment for their maintenance will remain unchanged.

The National Water Plan 2009-2015 applies the climate scenarios (2006 version) of the Royal Dutch Meteorological Institute (KNMI), which are also adhered to in this project in terms of the objectives for flood protection and water discharge capacity for the Afsluitdijk. In the case of the flood protection measures for the Afsluitdijk, the dyke shall, after strengthening, meet the 1/10,000 requirement until half-way through this century. More flexibility is available regarding measures relating to water discharge. The preferred outcome in respect of water discharge emphasises the phased installation of pumps, among other reasons because such a phased approach allows a more adaptive management approach i.e. the flexibility to further expand pumping capacity on a staged basis, depending on actual climate developments. Therefore, the Project contributes significantly to the Bank's transversal objective of Climate Action Adaptation.

As far the Climate Change Mitigation is concerned, the Project does not contribute positively to the reduction of the greenhouse emissions (GHG) emissions, however, RWS stimulates an "energy neutral dike" under the DBFM contract i.e. the bidders are highly motivated to submit in their technical proposals considerations to keep the Afsluitdijk energy neutral for as long as possible by offering solar energy generation to offset the energy consumption of the pumps.

Public Consultation and Stakeholder Engagement

The national and regional governments have entered into cooperation agreements on how to achieve synergies between water engineering works and regional aspirations in the field of sustainability, ecology, recreation and tourism. These agreements were translated into implementation agreements (National Integration Plans) which have been available for public consultation for a period of six weeks, no appeals were received and they are irrevocable. Summaries and presentations related to the project are available on the RWS's website: https://www.theafsluitdijk.com/.

Other Environmental and Social Aspects

The Concessionaire will be responsible for environmental management of the project under the supervision of the Environmental Competent Authority (Netherlands Commission for Environmental Assessment), dependent on the Ministry of Infrastructure and Environment; and as set out in the project's environmental management plan. Specific E&S monitoring arrangements and the potential identification E&S performance indicators will take place once such environmental management plans are developed by the Concessionaire.

Conclusions and Recommendations

In line with the relevant EU Directives, Project implementation will upgrade the Afsluitdijk which, since 1932, has protected a large part of the Netherlands against flooding by the sea but no longer meets the required flood and water safety standards bearing in mind the more extreme events expected as a consequence of climate change.

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The promoter undertakes not to allocate Bank funds to project components that require a full EIA until the EIA and/or the necessary nature assessment have been finalised and approved by the relevant competent authority. Once any EIA is available, the promoter will provide the Bank with an electronic copy of its Non- Technical Summary (NTS) and full copy of the EIA, for publication on the EIB website.

The promoter shall not commit any EIB funds against any project component that impacts nature conservation sites, without receiving from the relevant competent authorities the declaration under Art. 6(3) of the Habitats Directive that there are no significant effects and informing the Bank of such declaration having been obtained.

Under these conditions, the Project is acceptable for EIB financing in Environmental and Social terms.