Kingdom of the Netherlands

Permanent Delegation of the
Kingdom of the Netherlands
to UNESCO

7 rue Ebié

75007 Paris
France

Contact
Karin Kok
T 01 40 62 33 14
Reference
2022B-06

UNESCO World Heritage Centre
Mr L. Eloundou Assomo, Director
7, Place de Fontenoy
75352 Paris CEDEX 07
France

Date: 18 May 2022

Subject: Transboundary World Heritage Property 'Wadden Sea'

Dear Mr L. Eloundou Assomo,

On 30 March 2022 (CLT/WHC/EUR/22/13753), you provided me with the IUCN Technical Review of the information that the Dutch government shared with UNESCO in relation to the UNESCO Wadden Sea World Heritage Site in its letter of 20 January 2022 (Reference 2022B-03). In its review, IUCN focuses particularly on the proposed gas extraction operations at the Ternaard gas field. In your letter, you state that the potential impact of mining activities and the cumulative effects of all the various developments at the UNESCO Wadden Sea World Heritage Site are likely to be put on the agenda for the 45th session of the World Heritage Committee and you invite the Dutch government to provide additional information for the purposes of the State of Conservation report. Due to the fact that there is limited time to respond to the Technical Review – you requested that any documents be submitted on short notice – this letter is to provide an initial response on behalf of the Dutch government to the various points raised in your letter and to the attached Technical Review by IUCN.

First and foremost, I would like to state that, in accordance with the agreements under the World Heritage Convention, the Dutch government is making every effort to protect and preserve the Outstanding Universal Value (OUV) of the UNESCO Wadden Sea World Heritage Site. This means that activities in the Wadden Sea and below the seabed may only take place if there is sufficient certainty that no irreversible damage will occur to the unique and vulnerable natural environment. This will be the central question when reviewing the current permit request for the Ternaard gas extraction operation.

In addition, the Minister for Nature and Nitrogen Policy is developing a policy framework on nature in the Wadden Sea which, in translating and implementing the Single Integrated Management Plan, will strengthen the Outstanding Universal Value of the Wadden Sea by lowering the pressure on nature and ecology.

Based on Dutch regulations, the Netherlands is required to make the final decision on the requested permit for the Ternaard gas extraction within a reasonable timeframe. This will be after the summer. Where applicable, the Technical Review from IUCN will be involved. The Nederlandse Aardolie Maatschappij (NAM) studied the impact the proposed gas extraction would have on the local nature, which lead to the conclusion that there will be no ecological damage. In reviewing these statements, the Netherlands utilises instruments and procedures based on Dutch and European laws and regulations and takes into account recommendations from various advisory boards. Only when there is sufficient certainty there will be no irreversible damage to nature will a permit be issued. In addition, the effects of gas extraction and the state of nature and the geological system will be closely monitored. What's more, there is thorough understanding of the impact of both short and long-term developments in the Wadden Sea World Heritage Site. After the final decision by the Dutch government a statutory period follows during which interested parties can appeal the decision at the Dutch Council of State.
A major concern cited by IUCN is that the annex that was shared on 20 January 2022, i.e. '*Assessment – Impact of gas extraction at Ternaard on the Outstanding Universal Value of the Wadden Sea World*

Heritage Site', does not provide a sufficient degree of clarity regarding the contents of the underpinning Environmental Impact Assessment (EIA) for gas extraction at Ternaard. This memorandum from the NAM, which was drafted on the basis of the IUCN World Heritage Advice Note on Environmental Assessment & World Heritage, sets out the potential impact of gas extraction at Ternaard on the Outstanding Universal Value (OUV) by means of a summary of the relevant information of the EIA and Appropriate Assessment. The conclusions of this memorandum are substantiated in these documents in greater detail and are provided with scientific source citation. Without taking cognizance of the full EIA and Appropriate assessment, the summary may therefore provide an insufficient overview of all the available information. For that reason, I shall ensure that you receive a full translation of the EIA and Appropriate assessment, which up to now have only been available in Dutch by way of a digital link. I shall also be attaching the supplement to the EIA which was recently developed and drafted on the basis of the opinion of the Netherlands Commission for Environmental Assessment [1]. As mentioned, the documents will be translated for your understanding of these documents since a decision will be taken after the summer. These translations are currently underway and will be submitted shortly.

In addition, I can well imagine that you might appreciate receiving additional information in English, for example, with regard to the practice of sand replenishment in the North Sea Coastal Zone[2] and the scenarios for the sea level rise. On behalf of the Dutch government, I would like to propose to organise a technical briefing for the benefit of IUCN, if required, to review what additional information is required and how that information can be provided in the near future. This can be organised from our side within a couple of weeks.

Specifically in respect of the proposed gas extraction at Ternaard, work is currently ongoing on the finalisation of the assessment of the responses and opinions on the draft decisions that were made available for inspection for a period of six weeks from 27 August 2021[3], including a number of aspects which you highlight in your letter. To this end, a Memorandum of Reply will be drafted which will also include a response to the Netherlands Commission for Environmental Assessment advisory report regarding the EIA. The recommendations and areas of focus highlighted by UNESCO and IUCN, as set out in your letter, will be taken into account in the final decisions.

This does not alter the fact that the Dutch Government wishes to provide IUCN and the UNESCO World Heritage Committee with accurate and comprehensive information. This is why in this letter I shall be responding to a number of specific points raised in the IUCN Technical Review. Some specific concerns are still being reviewed. This, for example, relates to the key areas of focus of the opinion of the Netherlands Commission for Environmental Assessment in relation to the EIA for gas extraction at Ternaard. I previously made the draft documents available to you, which were submitted as a result of this opinion.

<u>Impact of Ternaard gas extraction on the OUV of the Wadden Sea</u>
IUCN rightly recalls the 2003 No-Go Commitment, and the 2013 World Heritage Committee Decision 37 COM 7 (Part III), in which it was agreed that projects taking place outside the World Heritage Site with potential impact on the site should be assessed for potential impact on the OUV. This assessment is guaranteed under the Nature Conservation Act, which implements the EU Birds and Habitats Directives. This Act is guided by the precautionary principle, meaning that all activities that could potentially have a negative impact on the UNESCO Wadden Sea World Heritage Site, such as gas extraction, are evaluated on the basis of an Appropriate assessment. As such, the Nature Conservation Act guarantees the integrity and protection of the OUV of the UNESCO Wadden Sea World Heritage Site under the World Heritage Convention.
In the case of gas extraction at Ternaard, the former Minister of Agriculture, Nature and Food Quality and the former Minister of Economic Affairs and Climate Policy came to the provisional conclusion, based on the substantiation provided by NAM, that the proposed activities will not harm the natural characteristics of the site as a result of gas extraction.

Criteria VIII, IX and X
The IUCN requests further details with regard to the conclusion reached in the NAM memorandum that the proposed gas extraction operations would not have an impact on criteria IX ('Ecological and biological processes') and criteria X ('Biodiversity'). This is fleshed out in greater detail in chapters 10 and 11 of the EIA and in the Appropriate assessment. For both criteria, NAM must substantiate that there would be no damage to flora and fauna of ecological value. If that is the case, it can be concluded that there would likewise be no damage to the OUV. The EIA shows that the deep subsidence as a result of gas production at Ternaard is limited to the Pinkegat and Borndiep tidal basins[4]. This means that, with respect to the deep subsidence, there is no reason to expand the assessment of the ecological

[1] An independent advisory body for environmental assessments
[2] This refers to the northern coast of the Wadden Islands – an area outside the UNESCO Wadden Sea World Heritage Site
[3] Please go to Gaswinning Ternaard - fase 1 - gaswinningslocatie | RVO.nl | Rijksdienst to consult the draft decisions in Dutch
[4] Please also see figure 3.4 in section 3.3 of the EIA on the Ternaard gas extraction

impact of gas production at Ternaard to the entire Wadden Sea.

As previously stated in the letter of 20 January 2022, in 2021, an independent scientific advisory board determined that, in line with the recommendations of the Netherlands Commission for Environmental Assessment – as Audit Committee for gas extraction in the Wadden Sea [5] – the advisory body determined that the 'hand on the tap' monitoring and response system as described in the nomination documents has proved satisfactory thus far and, on the basis of current practices, the Wadden Sea environment is adequately protected when it comes to existing, authorised gas and salt production beneath the Wadden Sea. The effectiveness of the 'hand on the tap' monitoring and response system has therefore been evaluated scientifically.

Furthermore, the IUCN states that criteria VIII ('Geological Processes') and criteria IX ('Ecological and biological processes') cannot be considered separately from criteria X ('Biodiversity'). Chapter 11 of the EIA, and section 11.5.2 in particular, examines the impact of subsidence on habitat types and species. On the advice of the Netherlands Commission for Environmental Assessment, the impact on salt marshes has been discussed in greater detail in the supplement to the EIA.

Sea level rise
The provisional estimates for the global sea level rise provided by the most recent studies of the Intergovernmental Panel on Climate Change (IPCC) show that the acceleration of sea level rise due to climate change is not expected until the second half of this century in most scenarios on sea level rise. Based on these estimates, which have been translated into scenarios for sea level rise for the Wadden Sea, the scientific evaluation of 'hand on the tap' monitoring and response system has confirmed that any subsidence of the seabed resulting from gas extraction in the eastern Wadden Sea will not contribute to the submergence of the tidal flats, even in the long term and in the event of extreme sea level rise. This means that subsidence due to gas extraction in the Wadden Sea, within the envisaged time frame for gas extraction operations, will be fully compensated by natural sediment accretion and will not pose an additional risk in combination with sea level rise. .

New insights into the development of sea level rise, based on measurements and models, are incorporated into the sea level scenario every five years as a basis for determining the effective subsidence capacity for gas and salt extraction in the Wadden Sea. In addition, a review takes place each year of whether new scientific information has become available that should lead to recalibration of the existing scenario for sea level rise. Furthermore, with the aim of making the Netherlands more water-resilient and climate-proof, the Sea Level Rise Knowledge Programme was launched in 2019, which focuses primarily on developing knowledge, exploring prospective action in relation to rising sea levels and the potential impact on flood risk management (coastal foundations, flood defences) and freshwater supply (salinisation problems) in the long term, as well as taking into account the impact on the economy, functional space and ecology. In relation to the Wadden Sea area, this principally involves examining the long-term impact of sea level rise on the morphology, design and management of coastal areas and nature. This puts into practice the advice of the scientific advisory board to conduct research into uncertainties in the long term with regard to sea level rise and the rate of natural sediment accretion and ensures that the latest scientific insights regarding sea level rise are always taken into account when determining the effective subsidence capacity for gas and salt extraction.

Subsidence as a result of gas extraction and sea level rise will be fully compensated by the natural deposition of sediment in the Wadden Sea during the anticipated timeframe. This sediment is extracted from the northern coastal zones of the Wadden Islands by way of the tidal currents. There would be no elevated levels of sand accumulation and/or deposits if no gas extraction were to take place. Gas production therefore would not disrupt the natural abiotic processes in the Wadden Sea, provided that the deep subsidence were to remain within the defined effective subsidence capacity. Studies have shown that despite climate change and subsidence due to gas extraction, the area of tidal flats in the eastern part of the Wadden Sea is even increasing. In this context, I should like to refer you to the independent, English-language publication by the Waddenacademie that deals with this issue[6].

Sand replenishments
Sand replenishments are carried out within the framework of the protection of the basic coastline in the North Sea Coastal Zone, outside the UNESCO Wadden Sea World Heritage Site. The deep subsidence caused by gas extraction in the Wadden Sea does lead to additional coastal erosion on the North Sea side of the Wadden Islands which are not part of the UNESCO Wadden Sea World Heritage Site. This erosion is compensated with additional sand replenishments. The effect of this additional volume of replenished sand compared to regular replenishments is marginal due to the fact that this extra amount only creates a larger volume at the same site in the North Sea Coastal Zone. The ecological impact of the additional sand replenishment has been reviewed in the EIA. The Natura 2000 Wadden Sea

[5] The Netherlands Commission for Environmental Assessment (NCEA), as independent Audit Committee, advises responsible ministers each year on the annual monitoring reports of the subsidence and the nature values related to the extraction of gas and salt under the Wadden Sea

[6] 2021-01_Climate_Change_and_Ecology.pdf (waddenacademie.nl), page 15

Management Plan[7] (page 210) and the nomination file (page 729) describe the practice of carrying out sand replenishments.

Cumulative effects

The Wadden Sea is a vulnerable area that is under pressure from various forms of use. Cumulative effects are identified and evaluated on an individual basis when assessing new activities on the basis of the Nature Conservation Act and the Mining Act.

The mining organisation must be able to demonstrate that any adverse development in respect of a certain species or habitat type is not the result of subsidence due to deep mineral extraction. It is vital to have an accurate overview of other influencing factors and the cumulative effects thereof in order to be able to rule out the contribution of mineral extraction as a possible cause in the event of any abnormal developments. Possible cumulation therefore plays a key role in the analyses of the monitoring results. Potential cumulation with other activities in relation to mineral extraction is likewise addressed by the Audit Committees for gas and salt extraction[8] in their monitoring advisory reports. If the monitoring activities confirm that the impact of mineral extraction can be excluded, then this also applies to cumulation with other activities. In the context of gas extraction at Ternaard, an assessment was carried out in the EIA and the Appropriate assessment regarding potential cumulative effects, which concluded that this was not the case.

In a general sense, the Dutch government believes it is vital that parties enter into a dialogue with one another at the earliest possible stage regarding the balance between ecology and the economy. In this context, it is crucial that the discussion should take place on the basis of an accurate picture of the cumulative effects of designated uses and that a sufficient level of knowledge is available of the limits to nature's ecological capacity and resilience. That is why the government proactively focuses on additional knowledge development in the area of cumulative effects.

As you identified previously, the joint management plan that is currently being drawn up with Germany and Denmark is a key instrument in this regard. The plan focuses on the management of threats such as fisheries, tourism, coastal defence, shipping & ports and energy (including mining). At present, the draft Single Integrated Management Plan (SIMP) has been submitted to the civic parties for consultation purposes.

Salt extraction

IUCN has also expressed its concerns regarding the potential adverse effects on the OUV of the Wadden Sea as a result of the salt extraction operations of Frisia Zout following the scientific evaluation on the effectiveness of the 'hand on the tap' monitoring and response system . In its letter of 20 January 2022, the Dutch government addressed this matter in greater detail and emphasised that the effectiveness of 'hand on the tap' monitoring and response system is likewise not at issue in relation to salt extraction and that there is no reason to restrict or halt salt extraction in the near future.

In response to the concerns expressed, the Netherlands Commission for Environmental Assessment – as Audit Committee for salt extraction in the Wadden Sea – was asked to provide a reaction. In its most recent advisory report from December 2021 in relation to the monitoring of subsidence and ecological effects, the Audit Committee indicated that the 'hand on the tap' monitoring and response system allows Ministers to intervene effectively and in good time if the developments identified deviate from what is envisaged and that the uncertainties in the long term are less important thanks to annual and actual measurement and monitoring.

In order to gain a more accurate picture of the prospects for salt extraction in the Wadden Sea in the long term, the Dutch government has commissioned the research institute Deltares to conduct additional research into the future effective subsidence capacity of the Vlie tidal basin, the results of which are expected by 2023 at the latest. Naturally, I will share those results with you in due course.

Finally, I would like to emphasise that the Dutch government will continue to work with all parties involved to protect the UNESCO Wadden Sea World Heritage Site based on the latest scientific knowledge regarding sea level rise, subsidence, sediment accretion and ecology.

I can inform you that the German and Danish authorities in the Trilateral Wadden Sea Cooperation have been informed about the potential developments and the subsequent actions. Please do not hesitate to contact me if you have any further questions.

[7] https://www.bij12.nl/assets/Waddenzee-beheerplan.pdf

[8] The Netherlands Commission for Environmental Assessment (NCEA), as independent Audit Committee, advises responsible ministers each year on the annual monitoring reports of the subsidence and the nature values related to the extraction of gas and salt under the Wadden Sea.

Yours sincerely,

Hans Wesseling

Ambassador,
Permanent Delegate of the Kingdom of the Netherlands to UNESCO