

# Environmental Management System

## Annual Public Statement

### 2017



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**0. DOCUMENT CONTROL**

**0.1. Distribution list of controlled copies**

Copy	Name	Function
0	Original	HSE archive
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	HMI F16-A	HMI
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**0.2. Authorisation**

	Name / function	Signature / date
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Authorised by	R.K.K. Frimpong Managing Director	 01.06.18

**0.3. Revisions**

Rev.	Description of changes	Date
0	First issue	28-05-2018

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## 1. INTRODUCTION

Under the OSPAR Recommendation 2003/5, the Department of Business, Energy and Industrial Strategy (BEIS) requires that all existing UKCS oil and gas operators undertaking offshore operations during 2017 must prepare an annual statement of their environmental performance, covering that calendar year, and make that statement available to the public. This document represents Wintershall's annual public environmental statement for 2017 in relation to UKCS OSPAR reporting.

## 2. WINTERSHALL'S BACKGROUND

Wintershall Noordzee BV (Wintershall) is part of Gazprom International and Wintershall Holding GmbH (WIHO). WIHO is a German originated company, which in turn is a subsidiary of the BASF group.

Wintershall has been active in the North Sea since 1965 and, prior to the commissioning of Wingate, was currently operating 21 platforms and 6 subsea completions in the Dutch, Danish and German sectors of the North Sea. Five of these platforms are manned and the others are remotely controlled satellites.

Wintershall also operates land based gas production facilities and reception and control facilities at Den Helder and Heemskerk. The headquarters of Wintershall are located in Rijswijk, a suburb of Den Haag, with further offices in Den Helder.

Wintershall has developed the means to control and monitor offshore platforms. This provided the possibility for remote controlled operation (RCO) by operators on-shore and consequently a decrease in personnel on the platforms.

The platforms are operated from a Central Control Room (CCR) which is part of the Production Coordination Centre (PCC) in Den Helder. The implementation of RCO provides remotely controlled operation of offshore platforms and management of the RCO systems and communication networks.

Wingate, currently Wintershall's only operated installation on the United Kingdom Continental Shelf, is operated as a satellite installation as part of the RCO operations managed by the organisation that already operates and maintains the existing installations.

## 3. THE ENVIRONMENTAL MANAGEMENT SYSTEM

The general purpose of the Health, Safety & Environmental (HSE) Management System is to prevent business activities from putting people, the environment, property or the reputation of the company at risk.

The HSE Management System has been designed to comply with to OHSAS 18001 "Occupational health and safety management systems" and the ISO 14001 "Environmental management systems - Requirements with Guidance for Use, International Organization for Standardization, 1996". The Environmental part of the HSE Management system is ISO 14001 certified since 2005 by DNV-GL. As of May 2018 the certification is based on the new ISO 14001:2015 standard.

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The HSE Management System has been developed to achieve the following:

- Ensure compliance with legal requirements and with obligations of the environmental and energy covenants and agreements;
- Ensure compliance with standards of the parent company;
- Enable a level of HSE performance that conforms with ISO 14001:2015 and OHSAS 18001 requirements;
- Ensure continual improvement of HSE performance;
- Provide transparency for all stakeholders as to what must be done, by whom, when, in what way and how often with respect to HSE issues;

The HSE Management System applies to all activities undertaken by Wintershall and includes:

- The Business processes: Drilling, Construction, Production, Maintenance and Abandonment.
- The production installations and other assets such as pipelines and offices, and transport of goods and travel for business purposes.

### 3.1. Structure of the HSE Management System

Like most modern HSE management systems, Wintershall’s system is based on the so called “Deming Circle”. This is also the basis of the ISO 9001 and ISO 14001 standards and the OHSAS 18001 specification. The Deming Circle consists of the following four steps as indicated in figure 1:

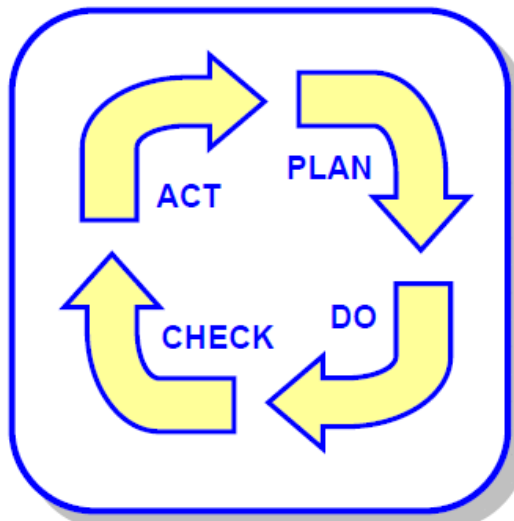


Figure 1 Deming Circle

- Plan:** Identification of risks and regulations; ensuring the necessary planning is carried out and measures (technical / organisational) are in place to control risks and impacts.
- Do:** Implementing the planned activities.
- Check:** Monitoring whether the activities are performed according to plan and measures as taken are adequate.
- Act:** Take corrective and preventive actions if necessary.

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The system is broken down in a number of parts, called elements. Elements can be compared with chapters in a book: each chapter tells part of the story while the book tells the whole story. Following the example of the corporate HSE management system, a total of 12 elements cover all HSE aspects in Wintershall’s system. The titles of the 12 elements are shown in figure 2.



Figure 2: The 12 elements of the HSE Management System

### 3.2. System Documents

The requirements of what to do and how, are laid down in the system documents. Three levels of system documents can be distinguished as shown in pyramid of figure 3:

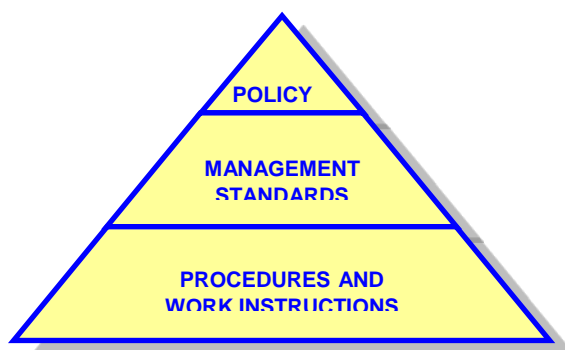


Figure 3: System document level of HSE Management System

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The highest level is the company's HSE policy as set by the Managing Director. At the next level the HSE requirements which should be met by the system are laid down in general terms in Management Standards. Requirements are defined for each of the 12 elements of the system. The bottom of the pyramid is formed by procedures and instructions. These define in detail not only what should be done but also how and, where relevant, by whom, how often and when.

The requirements of the HSE system also result in various documents such as plans, programs, analyses and records. Apart from the current document and the HSE Management Standards, each HSE-related document belongs to one of the 12 elements and has a number derived from the element number.

### 3.3. HSE Policy statement

The commitment of Wintershall with respect to HSE issues, as laid down in the HSE policy, is presented in figure 4.

To achieve this commitment, the availability of a pro-active HSE Management System is deemed to be indispensable. For that reason, Wintershall uses a system which is certified to the ISO 14001:2015 standard.

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**WINTERSHALL NOORDZEE B.V.**

**HEALTH, SAFETY AND ENVIRONMENTAL (HSE) POLICY**

1. Commitment

It is the policy of Wintershall Noordzee B.V. to conduct our operations in a manner that protects the health, safety and well-being of employees, contractors and the public.

We will make every effort to avoid impact to the environment, loss of integrity of assets and damage to the property of the company and third parties.

A responsible and pro-active HSE management is considered a key factor in ensuring business success.

2. Policies

- We will comply with the intent and specific requirements of all applicable laws, regulations and agreements with the Government and business partners.
- It is the responsibility of every individual who works for Wintershall to comply with the law as well as Wintershall's policies and practices. This is a condition of employment.

3. Objectives and Planning

- For the effective implementation of our policy we will maintain an HSE Management System, including energy care.
- We will set measurable targets as part of our annual HSE program.

4. Implementation

- We will maintain HSE management standards, sound procedures, and clear programs.
- We will conduct risk assessments so that the business will be conducted in a safe, healthy and environmentally sound manner.
- Wintershall will ensure that all employees and contractors are aware that the HSE aspects of their tasks and responsibilities are an integral part of the business.
- If the safe or environmentally responsible completion of a task is not clearly foreseen, the task shall not be started.
- Employees and contractors are expected to take action on any substandard condition and to report any incident that resulted in or could have resulted in injury or damage.
- Incidents will be investigated, the root causes determined and the results shared within the organization in order to prevent recurrence.
- We will maintain effective emergency response procedures, train employees in their use and conduct emergency exercises.

5. Monitoring and Audits

- We regularly conduct inspections and audits to monitor the compliance with and effectiveness of our HSE Management System.
- We will share those results with employees, contractors and stakeholders involved in order to identify strengths as well as opportunities for improvement.

6. Management Review

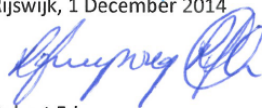
- Management will annually review the HSE policy and the effectiveness of the HSE Management System.
- The policy and management system will be adjusted as required.

7. Continuous Improvement

We seek to continuously improve our health, safety, environmental and energy performance by yearly setting new (individual and company) targets.

We will actively co-operate with industry and authorities to further enhance our HSE standards and performance.

Rijswijk, 1 December 2014



Robert Frimpong  
Managing Director

Figure 4: HSE Policy

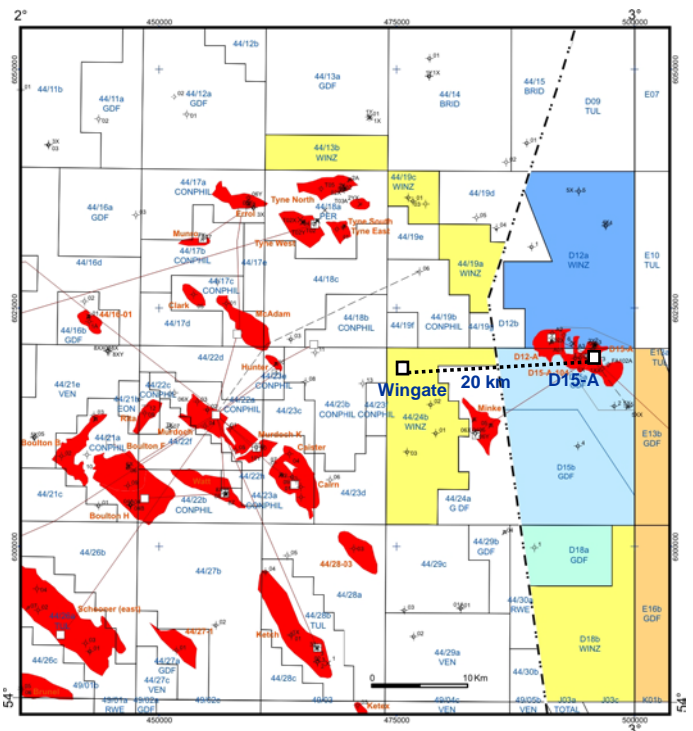
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## 4. ENVIRONMENTAL REPORTING

### 4.1. Location and Platform Description

Since 2011 Wintershall operates only one offshore production location on the UK continental shelf: “Wingate”. The Wingate field is located in the 44/24b UK license, which is some 20 km East of the Murdoch Platform, operated by Conoco-Phillips and is about 20 km West of the Wintershall co-owned D15-A platform in the Dutch sector (figures 5 & 6).



Figures 5 & 6: Location of Wingate

Wingate is a so called “Normally Unattended Installation” (NUI) located at 54 18 59.79 N and 02 37 10.37 E, standing in 29.2m (LAT) of water. The jacket is founded on four vertical skirt piles, one on each corner (see figure 7).

The platform is designed to support six production wells with the facility to allow future tie-ins if necessary. It has been designed to support well functions and has limited process facilities. The basis of the design is to remove free liquids from the gas in the production separator. The condensate liquid is spiked back into the gas stream leaving the separator.

The gas and condensate is exported from the Wingate platform, via a 20.5 km 12-inch gas export pipeline, to the Engie operated D15-A platform.

A two-inch methanol supply pipeline is piggy-backed to the export line to provide methanol for hydrate inhibition for the export pipeline and corrosion inhibitor is also injected into the 12” export pipeline at Wingate.

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The platform is provided with facilities to allow overnight stays during planned maintenance visits.

The platform topsides comprise the cellar deck, mezzanine deck, main deck and helideck. The platform is divided into a safe area at the South end and a hazardous/production area at the North end, separated by an H60/1bar rated blast wall which is also the North bulkhead of the crew quarters/TR (temporary refuge) module.

The crew quarters is located at the cellar deck level with the control room directly above at mezzanine deck level. Together with a utility room, also located at mezzanine deck level, these areas comprise the accommodation module. Within the crew quarters accommodation for up to eight persons, divided over 4 cabins, is provided. The TR is defined as the common mess area within the crew quarters.



Figure 7: The Wingate installation

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#### 4.2. UKCS Offshore activities 2017

During the year 2017, Wingate produced 445 million m<sup>3</sup> natural gas and 1903 m<sup>3</sup> condensate. Next to the production activities, in 2017 no drilling activities were carried out on Wingate.

Besides the production activities on the Wingate platform in 2017 also drilling activities were executed by Wintershall in another part of the UK sector. The Maersk Resolve rig drilled an exploration well in the Winchelsea II field, located at the 44/23g-15 UK licence block.

#### 4.3. Summary of reportable emissions 2017

Reportable emissions for Wingate are provided in the tables below. In August 2017 a minor environmental incident occurred during drilling at Winchelsea: 1 kg of pipe dope was unintendedly discharged to sea.

Installation	Date	Category	Unit
Wingate	2017	Gas-production	A1, A2, A3, A4, A5

Table 1: Gas Operations Notice No. 1

Installation	Date	Category	Incidents
Wingate	n.a.	Chemical release	0
Wingate	n.a.	Hydrocarbon release	0
Wingate	n.a.	Oil spills	0
Winchelsea II	16 August 2017	Chemical release	1 kg discharge to sea of cat. E chemical
Winchelsea II	n.a.	Hydrocarbon release	0
Winchelsea II	n.a.	Oil spills	0

Table 2: Environmental Incidents

Installation	Activity	Amount (kg)	Category chemicals
Wingate	Production A1 – A5 wells	3404 79	Plonor Gold
Maersk Resolve at Winchelsea II	Drilling well	75388 1241175 8760 342	Gold Plonor E D
Maersk Resolve at Winchelsea II	Cementing well	1216 12743	Gold Plonor

Table 3: Chemical discharges

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Installation	Category waste	Amount (Tonnes)
Wingate	Special (Group I)	2.8
Wingate	General (Group II)	4.3
Winchelsea	General (Group II)	6.4
Wingate/Winchelsea	Other (Group III)	0
Winchelsea II	Back loaded drill cuttings	812

Table 4: Waste

Installation	Category	Emissions from Production activity [Tonnes]	Emissions from Drilling activity [Tonnes]	Total Emissions [Tonnes]
Wingate	CO <sub>2</sub>	341	n.a.	341
Wingate	CO	0.6	n.a.	0.6
Wingate	NO <sub>x</sub>	2.9	n.a.	2.9
Wingate	SO <sub>2</sub>	0.1	n.a.	0.1
Wingate	CH <sub>4</sub>	7.2	n.a.	7.2
Wingate	VOC	0.6	n.a.	0.6
Installation	Category	Emissions from Drilling activity [Tonnes]	Emissions from Well test activity [Tonnes]	Total Emissions [Tonnes]
Winchelsea	CO <sub>2</sub>	5186	n.a.	5186
Winchelsea	CO	0.4	n.a.	0.4
Winchelsea	NO <sub>x</sub>	96	n.a.	96
Winchelsea	SO <sub>2</sub>	1.6	n.a.	1.6
Winchelsea	CH <sub>4</sub>	3.1	n.a.	3.1
Winchelsea	VOC	121	n.a.	121

Table 5: Atmospheric emissions

#### 4.4. Environmental Objectives 2017

In order to improve the HSE performance of Wintershall, and as part of the continuous improvement cycle ISO 14001, a yearly HSE Program is made. The basis of this plan is the outcome of the HSE Management review, the legal frame work, the mother companies' requirements and all other received opportunities for improvement. This program is not specifically set-up for a single platform, but incorporates all Wintershall actives in The Netherlands, Denmark, Germany and UK.

For 2017 the HSE Program consisted of the Environmental actions as stated in table 6:

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Action number	Action description	Percentage completed
E1	<b>CH4 emission reporting</b> E1-1: Prepare an inventory of CH4 emitting sources  E1-2: Develop method for measurement or calculation diffusive emissions  E1-3: Improve reporting of CH4 emissions	100%

Table 6: Environmental actions of HSE Program 2017

Regarding the ISO 14001 continuous improvement cycle, micro-gas turbines are used for power supply instead of conventional gas or diesel engines. Compared to conventional piston engines, micro-gas turbines generate less atmospheric emissions, leading to a considerable decrease in the emission of NO<sub>x</sub>. Other benefits are lower fuel gas consumption and less maintenance.

#### 4.5. Environmental Targets

For 2018 the HSE Program consists of the Environmental targets as stated in table 7:

Action number	Action description
3.1	<b>ISO 14001-2015 Certification</b> Organize 4 ISO Task Force meetings Compile a Environmental Compliance Overview Set KPI's for Energy, Air Emission and Emissions to Water Prepare for the pre-audit and certification audits (conducted by DNV)
3.2	<b>Environmental Database Enhancement</b> Brainstorming session and review of existing environmental data Adjust the system to the defined environmental KPI's Publish and track the KPI's and environmental figures in forms of graphs for general use.
3.3	<b>Methane emission reduction plan</b> Contribute to Noregpa Methane emission reduction guideline Activate the ETF - Emission to consider which measures can be implemented (economically and technically feasible) Propose achievable measures including monitoring of the outcomes

Table 7: Environmental actions of HSE Program 2018

Next to these specific actions for 2018, the commitment to the general environmental principles (as mentioned in chapter 3) will be maintained. To achieve this, in 2018 the HSE Management System procedures will be audited to the ISO 14001:2015 standard independently by Det Norske Veritas (DNV) on behalf of recertification up to 2019.

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