



Committee for safety of offshore operations

(Pursuant to the Article 8 of the Legislative Decree 18th August 2015, n. 145)

The President

**Report on the state and safety
of the offshore activities in
the hydrocarbon upstream sector**

according to

*the article 24 (paragraphs 1 and 2) and the article 25 (paragraphs 1 and 2)
of the Legislative Decree 18th August 2015, n. 145*

and

the Commission Implementing Regulation (EU) n. 1112/2014

Italy

Year 2017

SECTION 1

PROFILE

Information on Member State and Reporting Authority

- a. Member State: **Italy**

- b. Reporting period: (Calendar Year) **2017**

- c. Competent Authority:
Committee for the safety of offshore operations
(pursuant to art. 8, Legislative Decree 18th August 2015, n. 145)

- d. Designated Reporting Authority:
President of Committee for the safety of offshore operations
(pursuant to art 11, Decree of President of the Council of Ministers 27th September 2016)

- e. Contact details: **Secretary of the Committee for the safety of offshore operations**
Telephone number: **+39 06 4705 3794**
Certified e-mail: **segreteria.comitatooffshore@pec.mise.gov.it**
E-mail address: **segreteria.comitatooffshore@mise.gov.it**

[This report has been drafted by DGS-UNMIG (Ministry of Economic Development) for the *Secretary of the Committee for the safety of offshore operations.*]

SECTION 2

INSTALLATIONS

2.1. Fixed installations: detailed list of installations for offshore oil and gas operations in Italy (on first of January of the reported year), including their type (i.e. fixed manned, fixed normally unmanned, floating production, fixed non-production), year of installation and location:

Table 2.1

Installations within jurisdiction on 1st January of the reporting period

N.	Name or ID	Type of installation ¹	Year of installation	Type of fluid ²	Number of beds	Coordinates	
						(longitude)	(latitude)
1	Ada 2	NUI	1982	gas	0	12,591285	45,183634
2	Ada 3	NUI	1982	gas	0	12,591176	45,183361
3	Ada 4	NUI	1982	gas	0	12,59091	45,183561
4	Agostino A	NUI	1970	gas	27	12,495518	44,54018
5	Agostino A Cluster	NUI	1991	gas	0	12,496197	44,540685
6	Agostino B	NUI	1971	gas	27	12,471569	44,554372
7	Agostino C	NUI	1992	gas	0	12,494523	44,547174
8	Alba Marina	FPI	2012	oil	50	14,939078	42,201212
9	Amelia A	NUI	1971	gas	27	12,660836	44,405716
10	Amelia B	NUI	1991	gas	29	12,662218	44,407503
11	Amelia C	NUI	1991	gas	0	12,662895	44,406935
12	Amelia D	NUI	1992	gas	0	12,661276	44,407901

¹**Type of installation:** FMI [Fixed manned installation]; NUI [(Fixed) normally unmanned]; FPI [Floating production installation]; FNP [Fixed non production installation].

²**Type of fluid:** Oil; Gas; Condensate; Oil/Gas; Oil/Condensate.

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
13	Anemone B	NUI	1999	gas	0	12,704814	44,229289
14	Anemone Cluster	NUI	1979	gas	0	12,70531	44,212786
15	Angela Angelina	FMI	1997	gas	24	12,343127	44,391172
16	Angela Cluster	NUI	1975	gas	0	12,344848	44,392973
17	Annabella	NUI	1991	gas	24	13,078865	44,228781
18	Annalisa	NUI	1999	gas	0	13,113554	44,171042
19	Annamaria B	FMI	2009	gas	19	13,407327	44,322576
20	Antares 1	NUI	1982	gas	0	12,444429	44,393988
21	Antares A	NUI	1985	gas	19	12,453493	44,390057
22	Antonella	NUI	1976	gas	19	12,776663	44,214442
23	Aquila 2	NUI	1993	oil	0	18,327114	40,930188
24	Aquila 3	NUI	1995	oil	0	18,32532	40,918159
25	Argo 1	NUI	2006	gas	0	13,821989	36,916622
26	Argo 2	NUI	2008	gas	0	13,805449	36,926058
27	Arianna A	FMI	1984	gas	19	12,628146	44,306251
28	Arianna Cluster	NUI	1992	gas	0	12,62743	44,305788
29	Armida 1	NUI	1973	gas	0	12,44954	44,475932
30	Armida A	NUI	1985	gas	19	12,453192	44,480303
31	Azalea A	NUI	1984	gas	0	12,714258	44,171769
32	Azalea B DR	NUI	1987	gas	0	12,720562	44,166817
33	Azalea B - PROD	NUI	1987	gas	19	12,720768	44,166169

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
34	Barbara A	NUI	1978	gas	0	13,803467	44,047208
35	Barbara B	NUI	1983	gas	17	13,741427	44,091609
36	Barbara C	FMI	1985	gas	42	13,781867	44,076859
37	Barbara D	NUI	1986	gas	43	13,809339	44,030369
38	Barbara E	FMI	1987	gas	27	13,757562	44,086474
39	Barbara F	NUI	1988	gas	43	13,817099	44,050183
40	Barbara G	NUI	1992	gas	12	13,79153	44,063905
41	Barbara H	NUI	1992	gas	12	13,762702	44,069387
42	Barbara NW	NUI	1999	gas	0	13,648827	44,108865
43	Barbara T	NUI	1985	gas	0	13,781345	44,077277
44	Barbara T2	NUI	2000	gas	0	13,78203	44,077718
45	Basil	NUI	1983	gas	19	13,001086	44,131649
46	Benedetta 1	NUI	2006	gas	0	12,581966	44,1794
47	Bonaccia	NUI	1999	gas	18	14,359527	43,592497
48	Bonaccia Est 2	NUI	2010	gas	0	14,437581	43,578672
49	Bonaccia Est 3	NUI	2010	gas	0	14,437583	43,578614
50	Bonaccia NW	NUI	2015	gas	0	14,335723	43,599803
51	Brenda PROD	FMI	1987	gas	19	13,045114	44,115802
52	Brenda PERF	NUI	1987	gas	0	13,044925	44,116443
53	Calipso	NUI	2002	gas	0	13,863461	43,827416
54	Calpurnia	NUI	2000	gas	16	14,153981	43,899535

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
55	Camilla 2	NUI	2001	gas	0	14,246376	42,897839
56	Cassiopea 1	NUI	2008	gas	0	13,732618	36,936642
57	Cervia A	FMI	1986	gas	21	12,639005	44,294608
58	Cervia A Cluster	NUI	1992	gas	0	12,639697	44,295105
59	Cervia B	NUI	1984	gas	19	12,645428	44,288823
60	Cervia C	NUI	1992	gas	12	12,640079	44,30165
61	Cervia K	NUI	2000	gas	0	12,639076	44,295474
62	Clara Est	NUI	2000	gas	0	14,071618	43,779617
63	Clara Nord	NUI	2000	gas	0	13,976674	43,939355
64	Clara NW	NUI	2015	gas	0	14,023295	43,802145
65	Clara Ovest	NUI	1987	gas	0	13,711516	43,828681
66	Daria A	NUI	1994	gas	0	13,249138	44,067586
67	Daria B	NUI	1995	gas	12	13,249706	44,066931
68	Davide	NUI	1980	gas	0	14,017133	43,095985
69	Davide 7	NUI	2002	gas	0	14,016886	43,095755
70	Diana	NUI	1971	gas	0	12,425718	44,441373
71	Elena 1	NUI	1989	gas	0	14,210255	43,040689
72	Eleonora	NUI	1987	gas	19	14,155689	42,840158
73	Elettra	NUI	2014	gas	0	14,215197	43,764413
74	Emilio	NUI	2001	gas	0	14,243294	42,934945
75	Emilio 3	NUI	1980	gas	0	14,23388	42,938165

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
76	Emma Ovest	FMI	1982	gas	19	14,379206	42,808505
77	Fabrizia 1	NUI	1998	gas	0	14,00114	43,041377
78	Fauzia	NUI	2014	gas	0	13,554058	44,056355
79	Firenze FPSO	FPI	2011	oil	56	18,326208	40,924163
80	Fratello - Cluster	NUI	1979	gas	0	14,168514	42,610534
81	Fratello Est 2	NUI	1980	gas	0	14,172827	42,576845
82	Fratello Nord	NUI	1980	gas	0	14,170126	42,648861
83	Garibaldi A	NUI	1969	gas	27	12,510457	44,523023
84	Garibaldi A - Cluster	NUI	1991	gas	0	12,51205	44,523727
85	Garibaldi B	NUI	1969	gas	27	12,531292	44,487009
86	Garibaldi C	FMI	1992	gas	24	12,51528	44,531601
87	Garibaldi D	NUI	1993	gas	16	12,546062	44,478183
88	Garibaldi K	NUI	1998	gas	0	12,516137	44,532077
89	Garibaldi T	NUI	1998	gas	0	12,511376	44,523311
90	Gela 1	NUI	1960	oil	19	14,26955	37,032157
91	Gela - Cluster	NUI	1986	oil	0	14,269454	37,032449
92	Giovanna	NUI	1992	gas	19	14,463941	42,768002
93	Giulia 1	NUI	1980	gas	0	12,753326	44,13104
94	Guendalina	NUI	2011	gas	0	12,881491	44,566435
95	Hera Lacinia 14	NUI	1992	gas	0	17,165078	39,058611
96	Hera Lacinia BEAF	NUI	1998	gas	0	17,172791	39,061388

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
97	Jole 1	NUI	1999	gas	0	13,926435	43,040959
98	Leonis	FPI	2009	oil	49	14,637158	36,559805
99	Luna 27	NUI	1987	gas	0	17,214444	39,088056
100	Luna 40 SAF	NUI	1995	gas	0	17,204166	39,091944
101	Luna A	FMI	1976	gas	18	17,181692	39,114236
102	Luna B	FMI	1992	gas	14	17,200158	39,084925
103	Morena 1	NUI	1996	gas	0	12,482887	44,231073
104	Naide	NUI	2005	gas	0	12,745412	44,343275
105	Naomi Pandora	NUI	2000	gas	0	12,847416	44,689089
106	Ombrina Mare 2	NUI	2008	oil	0	14,533455	42,323409
107	Panda 1	NUI	2002	gas	0	13,623818	37,00661
108	Panda W1	NUI	2003	gas	0	13,594536	37,000607
109	Pennina	NUI	1988	gas	19	14,163626	43,021356
110	Perla	NUI	1981	oil	17	14,216245	36,954193
111	Porto Corsini 73	NUI	1996	gas	0	12,579101	44,385037
112	Porto Corsini 80	NUI	1981	gas	0	12,546216	44,40564
113	Porto Corsini 80 bis	NUI	1983	gas	0	12,520281	44,423353
114	Porto Corsini MEC	NUI	1987	gas	19	12,560198	44,391356
115	Porto Corsini MS1	NUI	2000	gas	0	12,588897	44,348638
116	Porto Corsini MS2	NUI	2001	gas	0	12,576923	44,368807
117	Porto Corsini MWA	NUI	1968	gas	0	12,359541	44,511783
118	Porto Corsini MWB	NUI	1968	gas	0	12,373809	44,509278

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
119	Porto Corsini MWC	NUI	1987	gas	19	12,372787	44,508964
120	Porto Corsini MWT	NUI	1987	gas	19	12,359295	44,51238
121	Prezioso	NUI	1986	oil	19	14,045081	37,009175
122	Regina	NUI	1997	gas	0	12,840342	44,10492
123	Regina 1	NUI	1997	gas	0	12,834209	44,102781
124	Rospo Mare A	NUI	1981	oil	2	14,970746	42,203712
125	Rospo Mare B	NUI	1986	oil	4	14,946579	42,213157
126	Rospo Mare C	NUI	1991	oil	2	14,931856	42,235657
127	San Giorgio Mare 3	NUI	1972	gas	0	13,923748	43,197901
128	San Giorgio Mare 6	NUI	1981	gas	0	13,920136	43,206235
129	San Giorgio Mare C	NUI	1972	gas	0	13,901802	43,202624
130	Santo Stefano Mare 101	NUI	1987	gas	0	14,607395	42,22899
131	Santo Stefano Mare 1-9	NUI	1968	gas	0	14,59295	42,231768
132	Santo Stefano Mare 3-7	NUI	1968	gas	0	14,610729	42,219268
133	Santo Stefano Mare 4	NUI	1975	gas	0	14,675454	42,207323
134	Santo Stefano Mare 8 bis	NUI	1991	gas	0	14,636563	42,21649
135	Sarago Mare 1	NUI	1981	oil	0	13,785407	43,32096
136	Sarago Mare A	NUI	1981	oil	0	13,788738	43,288851
137	Simonetta 1	NUI	1997	gas	0	14,183769	42,559691
138	Squalo	NUI	1980	gas	0	14,244378	42,715657
139	Tea	NUI	2007	gas	0	13,018813	44,501557

N.	Name or ID	Type of installation	Year of installation	Type of fluid	Number of beds	Coordinates	
						(longitude)	(latitude)
140	Vega A	FMI	1986	oil	75	14,625491	36,540638
141	Viviana 1	NUI	1998	gas	0	14,155051	42,656403
142	Vongola Mare 1	NUI	1985	gas	0	13,811731	43,253892

2.2. Changes since the previous reporting year

a. **New fixed installations:** list of new fixed installations, entered in operation during the reporting period:

Table 2.2.a

New fixed installations entered in operation during the reporting period

N.	Name or ID	Type of installation ³	Year of installation	Type of fluid ⁴	Number of beds	Coordinate	
						(longitude)	(latitude)
-	-	-	-	-	-	-	-

b. **Fixed Installations out of operation:** list of installations that went out of offshore oil and gas operations during the reporting period:

Table 2.2.b

Installations that were decommissioned during the reporting period

Name or ID	Type of installation ³	Year of installation	Coordinate		Temporary / Permanent
			(longitude)	(latitude)	
Ombrina Mare 2	NUI	2008	14,533455	42,323409	Permanent

³**Type of installation:** FMI [Fixed manned installation]; NUI [(Fixed) normally unmanned]; FPI [Floating production installation]; FNP [Fixed non production installation].

⁴**Type of fluid:** Oil; Gas; Condensate; Oil/Gas; Oil/Condensate.

2.3.Mobile installations: list of mobile installations carrying out operations during the reporting period (MODUs and other non-production installations):

Table 2.3

Mobile installations

Name or ID	Type of installation, i.e Mobile offshore drilling; Other mobile non-production	Year of construction	Number of beds	Geographical area of operations ⁵ and duration			
				Area 1	Duration (months)	Area 2	Duration (months)
Key Manhattan	MODU ⁶ (Jack-Up Drilling Unit)	1982	101	Adriatic sea	1		
Supersundowner XIII	MODU (Fast Move Workover Rig)	1992	67	Adriatic sea	5		
MAMTA	OSS ⁷ (Multipurpose vessel)	2010	85	Adriatic sea	<1		

2.4. Information for data normalization purposes. Total number of actual offshore working hours and total production in the reporting period:

- a. Total number of actual offshore working hours for all installations: **3,056,478 hours**
- b. Total production: **3731kTOE**

Oil production: **0.66*10⁶ t**

Gas production: **3.75*10⁹ Sm³**

⁵ Geographical area of operations: e.g. South North Sea, North Adriatic.

⁶ MODU : Mobile Offshore Drilling Unit

⁷ OSS: Offshore Supply Ship

SECTION 3

REGULATORY FUNCTIONS AND FRAMEWORK

3.1. Inspections

Number of offshore inspections performed during the reporting period.

Number of offshore inspections	Man-days spent on installation (travel time not included)	Number of inspected installations
289	366	88

3.2. Investigations

Number and type of investigations performed during the reporting period.

a. *following* major accidents: **0**

(pursuant to Article 26 of Directive 2013/30/EU)

b. *following* safety and environmental concerns: **0**

(pursuant to Article 22 of Directive 2013/30/EU)

3.3. Enforcement actions

Main enforcement actions or convictions performed in the reporting period pursuant to Article 18 of Directive 2013/30/EU.

Narrative:

.....//.....
.....//.....

3.4. Major changes in the offshore regulatory framework: major changes in the offshore regulatory framework during the reporting period. *(include e.g. rationale, description, expected outcome, references)*

- **The Legislative Decree No. 104 of 16 June 2017.** *Implementation of Directive 2014/52/UE of European Parliament and Council, of 16 April 2014, amending Directive 2011/92/UE, on the assessment of the effects of certain public and private project on the environment, as transposed in Articles 1 and 14 of Law No. 114 of 9 July 2015.*

The Legislative Decree, implementing European Directive, impacts on the environment assessment procedures related with *upstream* activities projects. In particular, amendments have been made in the Annexes to the second part of Legislative Decree No. 152 of 3 April 2006, specifying the works or the activities that should be subjected to an Environmental

Impact Assessment (EIA) procedure, including geophysical surveys carried out through *airgun* technique or using explosives.

The Article 25, Paragraph 6, assigns to the Ministry of Economic Development, in agreement with the Ministry for the Environment and Territorial and Marine Protection along with the Ministry of Cultural Heritage and Activities and Tourism, the adoption of national guidelines for the decommissioning of the *offshore* hydrocarbon production platforms and related infrastructures. This provision is in order to ensure the quality and completeness of the assessment of the related environmental impacts.

- *The Annex I and the Article 1 of the **Legislative Decree No. 183 of 15 November 2017**. Implementation of Directive (UE) 2015/2193 of European Parliament and Council, of 25 November 2015, concerning the limitation of pollutants emissions into the air from medium combustion plants. The reform of the regulatory framework for atmospheric emissions produced by plants, pursuant to Article 17 of Law No. 170 of 12 August 2016.*

In accordance with Article 1, Paragraph 10, let. d) of Decree No. 183/2017, gas turbines and gas engines, normally used on offshore platforms, do not constitute medium combustion plants.

- *The **Inter-ministerial Decree of 23 January 2017**. Definition of equipment and stocks in the defence against marine pollution by hydrocarbons, that should be stored in appropriate on-shore deposits, on drilling rigs, production platforms and related vessels.*

The Decree, adopted by the Ministry for the Environment and Territorial and Marine Protection in agreement with the Ministry of Economic Development, preserves the environmental precautionary principle set out in Article 191 of the TFUE. Taking into account the potential and actual impact to the marine environment, the Decree comply the protection of the marine environment in the Mediterranean Sea through a clear discipline of the procedures in order to determine the suitability of the products used into the sea.

The Legislative Decree stresses the need that the first step to combat contaminations by mineral oil products in the sea is the mechanical removal of pollutants and the use of absorbent products. The use of solvents or dispersants (solubilizing agents) is exceptionally considered.

The technological development of the sector imposed to update the equipment and stocks available in each production platforms, related vessels and on-shore in order to counteract the harmful effects of accidental pollution.

- *The **Ministerial Decree of 5 July 2017** related to the Tripartite Agreement between the Committee, operators and workers representatives in accordance with Article 19, Paragraph 5 of the Legislative Decree No. 145/2015 on the safety of offshore oil and gas operations.*

The Decree of the Ministry of Economic Development, endorsed for the implementation of Legislative Decree 145/2015, transposing the European Directive 2013/30/EU, provides the mechanism of tripartite consultation between the Committee for safety of offshore operations, sector operators and workers for the following activities:

- a) involvement in the formulation of standards and strategies in matters pertaining to major accident prevention;

b) definition of guidelines and actions regarding an integrated management system relating to the environment and health and safety.

- ***The Ministerial Decree of 9 August 2017. Adapting of Decree of 7 December 2016, laying down Standards Specifications for the granting of mining rights for the prospection, exploration and production of liquid or gaseous hydrocarbons on shore, within the territorial sea and on the continental shelf, to the Constitutional Court Judgement No. 170 of 2017.***

The Decree of the Ministry of Economic Development modified the Ministerial Decree of 7 December 2016 regulating the procedures for the granting of mining rights. The amendment concerns both the traditional mining rights and those from the consolidated Act (s.c. “*Titolo Unico*”), pursuant to Article 38 of the Law Decree No. 133 of 12 September 2014, converted with amendments by Law No. 164 of 11 November 2014 (s.c. “*Save Italy Decree*”).

Various Italian regions (Abruzzo, Marches, Puglia, Lombardy, Veneto, Campania and Calabria) lodged an appeal of constitutional legitimacy against the Article 38, Paragraph 7, of the *Save Italy Decree*, to the Constitutional Court. The appeal resulted in the Judgement No. 170 of 2017, ruling the exception of unconstitutionally as the Article does not provided the Regional protocol of agreement aimed at adopting the Standard Specifications on a single concession title.

Therefore, the Ministerial Decree of 9 August 2017, upon the principle set out by the Court, has removed from the Ministerial Decree of 7 December 2016 any reference to the single concession title. It also granted a mandate to the DGS-UNMIG and the DGSAIE to adopt the Standard Specifications, pursuant to Article 38, Paragraph 7 of the *Save Italy Decree*, taking into account the decision of the Court promoting the full Regional participation to the drawing up of technical legislation.

- ***The Decree of the President of the Council of Ministers of 1° December 2017. Approval of the guidelines containing policies and criteria concerning the maritime space management plants.***

In implementation of Directive 2014/89/UE, the DPCM disciplines on the maritime spatial planning in the framework of the European Integrated Maritime Policy (IMP), defining a path drawing up the Maritime Spatial Management Plants.

SECTION 4

INCIDENT DATA AND PERFORMANCE OF OFFSHORE OPERATIONS

4.1 Incident data

Number of reportable events pursuant to Annex IX: 0

of which identified to be major accidents: 0

4.2 Annex IX Incident Categories

Annex IX categories	Number of events	Normalized number of events
a) Unintended releases	0	0
<i>Ignited oil/gas releases - Fires</i>	-	-
<i>Ignited oil/gas releases - Explosions</i>	-	-
<i>Not ignited gas releases</i>	-	-
<i>Not ignited oil releases</i>	-	-
<i>Hazardous substances released</i>	-	-
b) Loss of well control	0	0
<i>Blowouts</i>	-	-
<i>Activation of BOP / diverter system</i>	-	-
<i>Failure of a well barrier</i>	-	-
c) Failure of SECE's	0	0
d) Loss of structural integrity	0	0
<i>Loss of structural integrity</i>	-	-
<i>Loss of stability/buoyancy</i>	-	-
<i>Loss of station keeping</i>	-	-
e) Vessel collisions	0	0
f) Helicopter accidents	0	0
g) Fatal accidents (*)	0	0
(h) Serious injuries to 5 or more persons in the same accident (*)	0	0
i) Evacuations of personnel	0	0
j) Environmental accidents	0	0

(*) only if related to a major accident

4.3 Total number of fatalities and injuries (**)

	Number	Normalized value
Total number of fatalities	0	0
Total number of serious injuries	1	$0.33 \cdot 10^{-6}$
Total number of injuries	2	$0.65 \cdot 10^{-6}$

(**) a total number as reported pursuant to 92/91/EEC

4.4 Failures of Safety and Environmental Critical Elements (SECEs)

SECE	Number related to major accidents
a) Structural integrity systems	0
b) Process containment systems	0
c) Ignition control systems	0
d) Detection systems	0
e) Process containment relief systems	0
f) Protection systems	0
g) Shutdown systems	0
h) Navigational aids	0
i) Rotating equipment – power supply	0
j) Escape, evacuation and rescue equipment	0
k) Communication systems	0
l) other	0

4.5. Direct and Underlying causes of major incidents

Causes	Number of incidents	Causes	Number of incidents
a) Equipment-related causes	0	c) Procedural / organisational error	0
<i>Design failure</i>	-	<i>Inadequate risk Assessment/perception</i>	-
<i>Internal corrosion</i>	-	<i>Inadequate instruction/procedure</i>	-
<i>External corrosion</i>	-	<i>Non-compliance with procedure</i>	-
<i>Mechanical failure due to fatigue</i>	-	<i>Non-compliance with permit-to-work</i>	-
<i>Mechanical failure due to wear-out</i>	-	<i>Inadequate communication</i>	-
<i>Mechanical failure due to defected material</i>	-	<i>Inadequate personnel competence</i>	-
<i>Mechanical failure (vessel/helicopter)</i>	-	<i>Inadequate supervision</i>	-
<i>Instrument failure</i>	-	<i>Inadequate safety leadership</i>	-
<i>Control system failure</i>	-	<i>Other</i>	-
<i>Other</i>	-		
b) Human error – operational failure	0	d) Weather-related causes	0
<i>Operation error</i>	-	<i>Wind in excess of limits of design</i>	-
<i>Maintenance error</i>	-	<i>Wave in excess of limits of design</i>	-
<i>Testing error</i>	-	<i>Extremely low visibility in excess of system design</i>	-
<i>Inspection error</i>	-	<i>Presence of ice/icebergs</i>	-
<i>Design error</i>	-	<i>Other</i>	-
<i>Other</i>	-		

4.6. Which are the most important lessons learned from the incidents that deserve to be shared?

Narrative:

.....//.....
//.....

END OF THE REPORT