



Brussels, 24.9.2021
COM(2021) 585 final

REPORT FROM THE COMMISSION

Annual Report on the Safety of Offshore Oil and Gas Operations in the European Union for the Year 2019

REPORT FROM THE COMMISSION

**Annual Report from the European Commission on the Safety of Offshore Oil and Gas
Operations for the Year 2019**

Table of contents

1. INTRODUCTION	3
2. LEGAL BASIS.....	4
3. METHODOLOGY AND INFORMATION RECEIVED FROM MEMBER STATES.....	4
4. THE OFFSHORE SECTOR FOR OIL AND GAS IN THE EUROPEAN UNION.....	5
4.1 Installations and production	5
4.2 Offshore inspections, investigations, enforcement actions and regulatory framework.....	9
5. INCIDENT DATA AND SAFETY PERFORMANCE OF OFFSHORE OPERATIONS.....	10
6. CONCLUSIONS	13

1. INTRODUCTION

Following earlier publications for 2016, 2017 and 2018, this European Commission report provides data on the safety of offshore oil and gas operations in the European Union (EU) in 2019.

The legal basis for this report is Directive 2013/30/EU¹ of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations and amending Directive 2004/35/EC ('Offshore Safety Directive'). This legislation aims at achieving a high level of safety in offshore oil and gas operations, for the benefit of: (i) workers; (ii) the environment; (iii) offshore platforms and equipment; and (iv) economic activities such as fishing and tourism. The Directive, as implemented by Member States, will help to: (i) prevent major accidents; (ii) reduce the number of incidents; and (iii) ensure effective follow-up of accidents and incidents in order to mitigate their consequences.

As in the earlier reports, the purpose of this annual report is: (i) to provide data on the number and type of installations in the EU; (ii) to give information on safety incidents in these installations; and (iii) to make an assessment of the safety performance of offshore oil and gas operations. With every additional report, the analysis of trends will become more meaningful. Furthermore, the series of annual reports will serve as a record of safety performance in Member States' offshore oil and gas activities.

This report is based on annual reports and data notified by Member States as required by the Offshore Safety Directive. The Commission has received reports from Bulgaria, Croatia, Cyprus, Denmark, Germany, France, Greece, Ireland, Italy, Latvia, Malta, the Netherlands, Poland, Portugal, Romania, Spain and the United Kingdom (which was still an EU Member State in 2019). Most of the installations are located in the North Sea and Atlantic Ocean (366 installations), while there are 165 installations in the Mediterranean Sea, 9 in the Black Sea and 2 in the Baltic Sea.

In 2019, the competent authorities of the Member States inspected 337 offshore installations in their jurisdictions. Following certain incidents, three Member States (the United Kingdom, Italy and Romania) carried out investigations during the reporting period. The United Kingdom carried out 39 investigations for safety and environmental concerns, and 2 investigations for major accidents. Italy carried out 1 investigation of a major accident (no investigation on safety and environmental concerns) and Romania carried out 1 investigation on safety and environmental concerns.

¹ OJ L 178, 28 June 2013, p. 66.

2. LEGAL BASIS

In accordance with Article 25 of the Offshore Safety Directive, the Commission is required to publish an annual report on the safety and environmental impact of offshore oil and gas operations based on information reported by Member States. Member States must submit to the Commission an annual report containing information specified in Annex IX (point 3) of the Offshore Safety Directive.

The annual reports to be submitted by Member States under Article 25 must contain, as a minimum, the following information:

- (a) the number, age and location of installations;
- (b) the number and type of inspections and investigations carried out, in addition to any enforcement actions or convictions;
- (c) incident data under the common reporting system required in Article 23;
- (d) any major change in the offshore regulatory framework;
- (e) the performance of offshore oil and gas operations.

The deadline for Member States to publish the required information is 1 June of the year following the reporting period (e.g. 1 June 2020 for the year 2019).

The Member States must report using a common format provided by Commission Implementing Regulation (EU) No 1112/2014 of 13 October 2014². This Implementing Regulation sets a common format for: (i) sharing information on major hazard indicators by the operators and owners of offshore oil and gas installations; and (ii) publishing information on major hazard indicators by Member States. A Commission guidance document³ of 25 November 2015 provides further specific information on the Implementing Regulation, and explains how to use the reporting format.

3. METHODOLOGY AND INFORMATION RECEIVED FROM MEMBER STATES

Under Annex IX (point 3) of the Offshore Safety Directive, Member States are obliged to submit clearly defined information on safety incidents in their offshore oil and gas sector, using the templates provided by Implementing Regulation (EU) No 1112/2014. The data submitted must include information on the offshore oil and gas installations in the EU, such as number, type, location and age. Reports from Member States must also provide information on the number of: (i) offshore inspections, investigations and enforcement actions taken; (ii) incidents by category; and (iii) injuries.

² OJ L 302, 22 October 2014, p. 2.

³https://euoag.jrc.ec.europa.eu/files/attachments/2015_11_25_implementing_regulation_guidance_document_final.pdf

In addition to data on individual Member States, the Commission has assessed the safety performance of offshore regions. For this purpose, the Commission considers: (i) Germany, Denmark, France, the United Kingdom, Ireland and the Netherlands as the North Sea and Atlantic region; (ii) Spain, Greece, Croatia, Cyprus, Italy and Malta as the Mediterranean region; (iii) Bulgaria and Romania as the Black Sea region; and (iv) Latvia and Poland as the Baltic Sea region.⁴

For its annual report for 2019, the Commission has used information provided by Bulgaria, Croatia, Cyprus, Greece, France, the Netherlands, Denmark, Germany, Ireland, Italy, Poland, Romania, Spain and the United Kingdom. Other Member States were not active in the offshore oil and gas sector or did not submit information relevant for this report.

All Member States with offshore oil and gas operations declared they had submitted complete data on all installations.

4. THE OFFSHORE SECTOR FOR OIL AND GAS IN THE EUROPEAN UNION

4.1 Installations and production

The vast majority of offshore installations⁵ in EU waters are located in the North Sea (see Table 1), specifically in the exclusive economic zones of the United Kingdom and the Netherlands (approximately 32% and 28% of offshore installations in EU waters, respectively). In the Mediterranean, Italy is the most active Member State (26% of all installations in EU waters) followed by Croatia. In the Black Sea region, Romania has an established offshore oil and gas industry, while Bulgaria has continued exploration activities for offshore hydrocarbons, but only has one installation and therefore produces very little. According to the reports received from Member States on the Baltic Sea, only Poland has offshore installations in this region. In total, there were 542 installations reported in EU waters in 2019⁶, which constitutes a decrease of 14 installations compared to 2018.

⁴ Other Baltic Member States do not carry out offshore oil and gas operations.

⁵ Mobile offshore drilling units (MODUs) are not part of the analysis of Section 4.1.

⁶ Taking into account the decommissioned installations, the reported numbers of installations are not fully consistent with numbers from preceding years.

Table 1. Fixed installations on 1 January 2019: Type of installation, by region and Member State

Region/Country		Type of installation(*)				
		FMI	NUI	FNP	FPI	Total
Baltic Sea		1	1	0	0	2
	Poland	1	1	0	0	2
Black Sea		6	3	0	0	9
	Bulgaria	0	1	0	0	1
	Romania	6	2	0	0	8
Mediterranean		16	147	0	2	165
	Croatia	2	18	0	0	20
	Greece	1	1	0	0	2
	Italy	12	126	0	2	140
	Spain	1	2	0	0	3
North Sea and Atlantic		139	204	0	23	366
	Denmark	10	20	0	0	30
	Germany	2	0	0	0	2
	Ireland	1	1	0	0	2
	The Netherlands	47	109	0	0	156
	United Kingdom	79	74	0	23	176
TOTAL		162	355	0	25	542

(*) FMI – Fixed, manned installation; FNP – Fixed, non-production installation; FPI – Floating production installation; NUI – (Normally) Un-attended installation.

In 2019, there were 11 installations reported as decommissioned in EU waters: 4 in the United Kingdom, 6 in the Netherlands and 1 in Romania. In the same year, 2 new fixed installations were reported as entering into operation, 1 in the Netherlands and 1 in Poland.

More than half of the offshore installations in EU waters entered into operation between 1980 and 2000. Since 2010, the development of new production installations has dropped noticeably in the North Sea and Atlantic region (Table 2).

Table 2: Number of installations present in EU waters, by decade of entry into operation and by region

Year of construction	Region				
	Baltic Sea	Black Sea	Mediterranean	North Sea & Atlantic	EU total
(not available ⁷)	0	0	0	4	4
1960-1969	0	0	7	16	23
1970-1979	0	1	14	45	60
1980-1989	0	2	53	78	133
1990-1999	1	3	42	112	158
2000-2009	1	3	40	71	115
2010-2019	0	0	9	41	50
2020-2029	0	0	0	0	0
Total	2	9	165	367	543

⁷ Year of construction; installation has not been reported by the Member State and the information could not be found from public sources.

The largest part (approximately 96%) of the EU’s domestic oil and gas is produced in the North Sea and Atlantic region (Table 3). The United Kingdom is by far the largest contributor, followed by the Netherlands and Denmark. Italy and Croatia are active producers in the Mediterranean Sea. In the Black Sea, only Romania currently has a noticeable output of oil and gas.

Table 3. Offshore oil and gas production in the EU in kilotonnes of oil equivalent (ktoe)

REGION	Country	ktoe	% of EU Total
Baltic Sea		215.18	0.18%
	Poland	215.18	0.18%
Black Sea		1 260.02	1.05%
	Bulgaria	11.99	0.01%
	Romania	1 248.03	1.04%
Mediterranean		3 423.02	2.84%
	Croatia	361.90	0.30%
	Greece	172.00	0.14%
	Italy	2 850.00	2.37%
	Spain	39.12	0.03%
North Sea and Atlantic		115 442.58	95.93%
	Denmark	7 814.74	6.49%
	Germany	837.00	0.70%
	Ireland	239.18	0.20%
	The Netherlands	10 295.00	8.55%
	United Kingdom	96 082.40	79.84%
Total		12 0340.79	100.00%

Compared to the preceding year, total production of oil and gas in the EU increased by 7%.

4.2 Offshore inspections, investigations, enforcement actions and regulatory framework

The competent authorities of the Member States have regularly inspected the offshore installations in their jurisdictions. Table 4 presents the number of offshore inspections carried out during the reporting year. The number of inspections usually increases with the number of installations in Member States.

Compared to 2018, the number of inspected installations increased markedly in 2019 in Poland, Romania, Croatia, Greece and the Netherlands (in the Netherlands, installations rose from 28 to 50). Several Member States reported more work days spent on the installations to carry out inspections. In contrast, Italy carried out fewer inspections compared to the preceding year.

Table 4: Number of offshore inspections by region and Member State in 2019

REGION	Country	Inspections	Work days spent on installation (travel time not included)	Number of inspected installations
Baltic Sea		4	8	4
	Poland	4	8	4
Black Sea		23	96	11
	Romania	23	96	11
Mediterranean		204	210	84
	Croatia	9	11	8
	Cyprus	1	4	1
	Greece	2	26	3
	Italy	191	168	71
	Spain	1	1	1
North Sea & Atlantic		366	2 553	238
	Denmark	23	72	19
	France	1	2	1
	Germany	5	5	2
	Ireland	3	28	2
	The Netherlands	59	34	50

	United Kingdom	275	2 412	164
TOTAL		597	2 866	337

Article 18 of the Offshore Safety Directive attributes rights and powers to the competent authorities of Member States on operations and installations in their jurisdiction. These rights and powers include: (i) the right to prohibit operations; and (ii) the right to request measures for both ensuring compliance with the general principles of risk management and ensuring safe operations.

Three Member States carried out investigations during the reporting period: the United Kingdom, Italy and Romania. In addition to 2 investigations of major accidents, the United Kingdom carried out 39 investigations for safety and environmental reasons⁸. Italy carried out 1 investigation for a major accident, and Romania carried out 1 investigation related to safety and environmental concerns. Fewer investigations were carried out in 2019 (43) than in 2018 (50). In previous years, there were 20 investigations in 2017 and 23 in 2016.

The total number of enforcement actions in 2019 was lower than in 2018. Although Member States took 33 enforcement actions in 2018 (all of these were taken by the United Kingdom), in 2019 only 24 such actions were carried out (23 by the United Kingdom and 1 by the Netherlands).

5. INCIDENT DATA AND SAFETY PERFORMANCE OF OFFSHORE OPERATIONS

Operators/owners of installations and Competent Authorities report single events. However, one or several categories of incidents may describe such event: For example two incident categories have to be notified for one event, if there was an (i) unintended release of gas, which required the (ii) evacuation of personnel.

For 2019, Member States submitted information on 156 reportable events⁹ (up from 120 in 2018). The bullet points below give more detail on these events.

- In the United Kingdom, there were 126 reportable events, including 2 major accidents. The causes of the major accidents have not been reported, since the cases were still under investigation at the time of reporting.
- In the Netherlands, there were 18 reportable events, including 1 major accident. The causes of the major accident are still under investigation.
- In Italy, there were 2 reportable events, including 1 major accident. The causes of the major accident have not been reported, since the case was still under investigation at the time it was notified.

⁸ Safety and environmental concerns are reported by the workforce.

Certain events, e.g. not related to operations, do not fall under the reporting obligation.¹⁰ OJ L 178, 28 June 2013, p. 73: Article 2(1): ‘major accident’ means, in relation to an installation or connected infrastructure:

- In Denmark, there were 6 reportable events. There was no major accident.
- In Romania, there were 4 reportable events. There was no major accident.

The number of major accidents includes incidents with a significant potential to cause fatalities or serious personal injuries even if they did not lead to such outcomes.

Most of the incidents (43%) belong to the category of **unintended releases of gas and/or oil**, while 3.75% concerned the **loss of well control** (blowout/diverter activation and well-barrier failures), and 2.5% concerned **failures of safety and environmental critical elements (SECE)**. A further 0.94% were **vessel-collision** incidents, while 0.63% concerned the **loss of structural integrity of the installation**, and 0.31% concerned helicopter accidents (1 event). Two incidents required the **evacuation of personnel** and, for the first time since reporting, 1 incident resulted in the **loss of life**.

Table 5: Incidents by categories (Annex IX of the Offshore Safety Directive, EU level)

Annex IX categories	Total	Share (of category total)	Share (of events total)
(a) Unintended releases – Total	138	100%	43.13%
Ignited oil/gas releases – Fires	4	2.90%	1.25%
Ignited oil/gas releases – Explosions	0	0.00%	0.00%
Not ignited gas releases	76	55.07%	23.75%
Not ignited oil releases	52	37.68%	16.25%
Hazardous-substance releases	6	4.35%	1.88%
(b) Loss of wells – Total	12	100%	3.75%
Blowouts	0	0.00%	0.00%
Blowout/diverter activation	7	58.33%	2.19%
Well-barrier failure	5	41.67%	1.56%
(c) Failures of SECE	8	100%	2.50%
(d) Loss of structural integrity – Total	2	100%	0.63%
Loss of structural integrity	2	100.00%	0.63%
Loss of stability/buoyancy	0	0.00%	0.00%

Loss of station keeping	0	0.00%	0.00%
(e) Vessel collisions	3	100%	0.94%
(f) Helicopter accidents	1	100%	0.31%
(g) Fatal accidents^(*)	1	100%	0.31%
(h) Serious injuries of 5 or more people in the same accident	0	0.00%	0.00%
(i) Evacuation of personnel	2	100%	0.63%
(j) Environmental accidents^(**)	1	100%	0.31%
Total	168		100%
<i>(*) Only if related to a major accident.</i>			
<i>(**) According to reports of Member States, the major accidents did not qualify as environmental accidents.</i>			

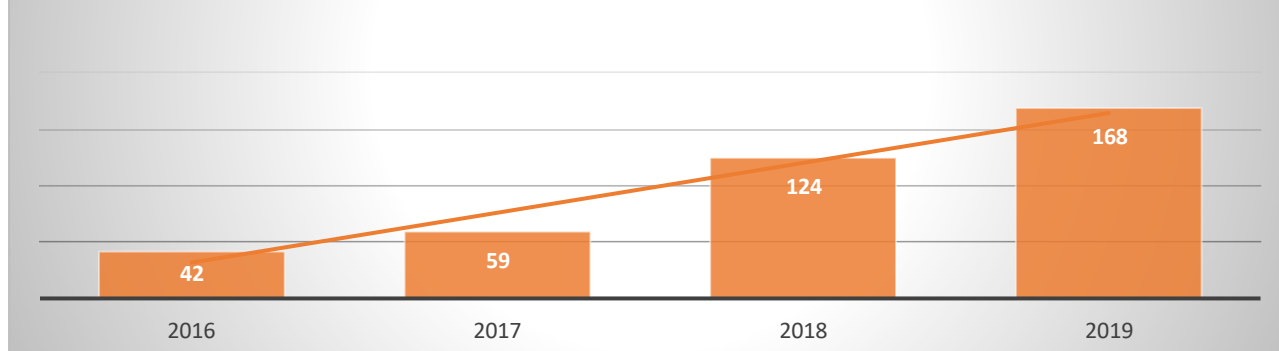
In the EU, the total number of incidents increased from 42 in 2016 to 59 in 2017, 124 in 2018, and 168 in 2019. This increase has largely been due to an increased number of ‘unintended releases’ of both oil and gas. In contrast, incidents in the categories ‘loss of well control’ and ‘releases of hazardous substances’ declined between 2016 and 2019. Remarkably, SECE failures increased from 2 to 8 incidents between 2016 and 2019. In 2019, Member States’ competent authorities reported 3 vessel collisions, 1 helicopter accident and 1 fatal accident; but in 2018 no such incidents occurred in Member States. As in 2018, personnel had to be evacuated from platforms twice in 2019. In 2019, 4 incidents (in 2018: 6 incidents) were classified as major accidents¹⁰, since they could have potentially caused fatalities or serious personal injury.

¹⁰ OJ L 178, 28 June 2013, p. 73: Article 2(1): ‘major accident’ means, in relation to an installation or connected infrastructure:

- (a) an incident involving an explosion, fire, loss of well control, or release of oil, gas or dangerous substances involving, or with a significant potential to cause, fatalities or serious personal injury;
- (b) an incident leading to serious damage to the installation or connected infrastructure involving, or with a significant potential to cause, fatalities or serious personal injury;
- (c) any other incident leading to fatalities or serious injury to five or more persons who are on the offshore installation where the source of danger occurs or who are engaged in an offshore oil and gas operation in connection with the installation or connected infrastructure; or
- (d) any major environmental incident resulting from incidents referred to in points (a), (b) and (c).

For the purposes of determining whether an incident constitutes a major accident under points (a), (b) or (d), an installation that is normally unattended must be treated as if it were attended.

Number of incidents at offshore oil and gas installations in EU Member States from 2016 to 2019



Although the number of major accidents decreased between 2016 and 2019, as shown above, the number of incidents, specifically unintended releases, continued its upward trend over this period¹¹.

6. CONCLUSIONS

With 543 installations in the EU¹², the number of installations decreased in 2019 compared to the preceding year (556 in 2018). However, the level of overall oil and gas production slightly increased from 112 217 ktoe of oil equivalent in 2018 to 120 340 ktoe of oil equivalent in 2019.

The Commission assessed the safety of the EU's offshore oil and gas operations based on the data provided by Member States according to the rules of the Implementing Regulation on reporting. This means that the accuracy of the Commission's analysis depends on the information submitted by Member States.

In 2019, Member States' competent authorities have redoubled their efforts to ensure a high level of safety in offshore oil and gas operations. They increased the number of inspected installations from 318 in 2018 to 337 in 2019. However, the follow-up in the form of enforcement actions in 2019 was less than in 2018. Only the United Kingdom and the Netherlands (1 action) reported on follow-up actions taken in 2019. In the United Kingdom, the number of enforcement actions further decreased from 34 in 2018 to 23 in 2019.

¹¹ Year by year, the UK has increased the number of installations subject to the reporting of accidents. However, this increase only partially explains the upward trend in the figures.

¹² The report for the year 2019 still includes the United Kingdom.

While for all Member States, the number of major accidents in the EU decreased from 6 to 4 between 2018 and 2019, the total number of incidents in all Member States (assigned to categories of Table 5) increased from 124 (2018) to 168¹³. One fatality was reported for 2019, and 101 injuries and 45 serious injuries occurred.

On positive developments, the number of incidents in Denmark decreased from 9 in 2018 to 6 in 2019. This follows on from Denmark's successful reduction in accidents between 2017 and 2018.

With the objective of improving a high level of safety, in the coming year the Commission will work closely with the European Union Offshore Authorities Group (EUOAG) to bring back the number of incidents to a lower level in the EU, notably by further promoting the application of best practices in all Member States and assisting national authorities represented in the EUOAG.

While the United Kingdom has become a third country, incidents can also have important consequences for countries in the region. The Commission will therefore continue working with the United Kingdom with the aim to maintain high levels of safety and environmental protection for all offshore oil and gas operations. It will notably use the instruments available in the framework of the Trade and Cooperation Agreement between the EU and the United Kingdom, and of relevant International Conventions, to cooperate and exchange information and good practices.

¹³ Whereas the number of incidents increased from 25 to 34 in the EU (without the UK), the UK reported an increase from 99 to 134 incidents for the year 2019. More specifically, the figures in Italy increased from 0 to 6, in the Netherlands from 14 to 18, and in Romania from 0 to 4. Denmark reported 6 incidents, which was a decrease from the 9 it reported in 2018. In the year 2019, from the 542 fixed installations in the EU (UK included) 176 (32,5 %) belonged to the UK's jurisdiction