Methodological notes accompanying the

Report on the state and safety
of the offshore activities in
the hydrocarbon upstream sector
Italy
Year 2021

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Section 1 - Profile.

No notes on this session.

Section 2 –Installations.

2.1. Fixed installations

[a] Note to the Table 2.1 Installations within jurisdiction of the State [in 2.1. Fixed installations/].

All fixed offshore installations, physically present on 1st January of the year 2021 are specified, in table 2.1, even if they are not productive.

[√b] Note to the field "Type of installation"

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of the Tab. 2.1 [in 2.1. Fixed installations/]; of the Tab. 2.2.a [in 2.2. Changes.../a. New Fixed installations/]; of the Tab. 2.2.b [in 2.2. Changes.../b. New Fixed installations out of operations/];
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Name and ID:

- 1. In addition to the requirements of EU Regulation no. 1112/2014¹, the table also shows the subsea wellheads, indicating the year of installation, the type of fluid produced and the coordinates; for uniformity with the classification system of the Regulation, they are assigned the NUI label (fixed plant normally without personnel) and, in detail on the type of plant, the acronym SPS (Subsea Production System) is shown; the subsea wellheads, as of January 1 of the year 2021, are 14: AQUILA 2, AQUILA 3, ARGO 1, ARGO 2, BONACCIA EST 2, BONACCIA EST 3, CAMILLA 2, CASSIOPEA 1, ELENA 1, EMILIO 3, LUNA 27, LUNA 40 SAF, PANDA 1, PANDA W1.
- 2. The FPI (floating units supporting the production of hydrocarbons) have been further labeled, with respect to the provisions of EU Regulation 1112/2014, with the acronyms FSO and FPSO to specify the type; the Floating Storage and Offloading units, as of January 1 of the year 2021, are 2 (ALBA MARINA and LEONIS); there is no Floating Production Storage and Offloading unit in the Italian seas after the FIRENZE FPSO was disconnected and temporarily removed in 2018.

¹ Implementing Regulation (EU) No. 1112/2014 of the Commission of 13 October 2014 which establishes a common format for the sharing of information relating to indicators of serious accidents by operators and owners of offshore oil and gas installations as well as a common format for the publication of related information the indicators of serious accidents by the Member States.

3. The production support platforms have been further labeled, with respect to the provisions of EU Regulation no. 1112/2014, with the acronym STCR [Support: Treatment / Compression / Connection]; as of January 1 of the year 2021, they are 10: AZALEA B PROD, BARBARA T, BARBARA T2, BRENDA PROD, CERVIA K, DARIA B, GARIBALDI K, GARIBALDI T, PORTO CORSINI W T, SAN GIORGIO MARE C).

$[\checkmark c]$ Year of installation:

It is assumed that the year of installation refers to the year of the offshore installation campaign. In fact, a platform installed in a certain year could be put into production in the following years: for example, the Clara NW platform was installed in 2015 but went into production in 2016 [see, for more information, the Methodological Notes in accompanying the Report on the state and safety of mining activities at sea in the hydrocarbon sector - Italy - Year 2016]²

[✓d] Note to the field "Coordinates":

of the **Tab. 2.1** [in 2.1. Fixed installations/];

of the **Tab. 2.2.a** [in 2.2. Changes.../a. New Fixed installations/];

of the **Tab. 2.2.b** [in 2.2. Changes.../b. New Fixed installations out of operations/];

The coordinates in the table refer to the World Geodetic System 1984 (WGS84).

[• e] Note to the **Table 2.2.a** *New fixed installations entered in operations during the reporting period.* [in 2.2. Changes.../a. New Fixed installations/];

The Table2.2.a refers to the installations which were subject to decommissioning, even if temporarily, during the reporting period [2021]

[√f] Note to the Table 2.2.b Decommissioned Installations during the reporting period

[in 2.2. Changes.../b. New Fixed installations out of operations/];

The table 2.2.b refers to the installations which were subject to decommissioning, even if temporarily, during the reporting period [2021]; .

[√g] Note to the *Table 2.3 Mobile installations*

² https://www.mise.gov.it/index.php/it/ministero/organismi/comitato-offshore

The table 2.3. lists mobile installations involved in well operations.

[\(\shape h \)] Note to the Par. 2.4 Information for data normalization purposes.

- For the purpose of this Implementing Regulation, normalization means a transformation applied uniformly to each element in a set of data so that the set has some specific statistical property.
- 2. The sources for hydrocarbon production data are:
 - the UNMIG³ database of the Directorate General for Safety of mining and energy activities – UNMIG - National Mining Office for Hydrocarbons and Georesources of the the Ministry of the Economic Development (currently, Ministry of Ecological Transition);
 - the UNMIG databook 2021 (activity 2020) published by the DGISSEG of the Ministry of the Economic Development (currently, Ministry of Ecological Transition).
- 3. The figure of hydrocarbon production figure in kilo tonnes of oil equivalent (ktoe) is calculated only for the purpose of normalizing the data in this Report on the basis of the following assumptions:
 - a. The definition of toe of the *International Energy Agency*, according to which the tonne of oil equivalent is equal to 10⁷ kilocalories or 41.868 GJ (gigajoule);
 - b. The value of 8190 kcal/m³ is conventionally assigned to the lower calorific value of the natural gas, in continuity with what was done in previous edition;
- 4. The symbol *Scm* means "standard cubic meter", that is the unit of measurement of gaseous substance quantity contained in a cubic meter at standard conditions of temperature (15°C) and pressure (atmospheric pressure equal to 1 atm or 101325 Pa).
- 5. Information related to the offshore working hours are provided by the operators to the Directorate General for Safety of mining and energy activities National Mining Office for Hydrocarbons and Georesources of the Ministry of the Economic Development.

³ UNMIG: National Mining Office for Hydrocarbons and Georesources

<u>Section 3 – Regulatory functions and framework.</u>

3.1.Inspections.

[√i] Note to the **Tab. 3.1 - Data on the offshore inspections** [in 3.1. Inspections]

The figures show the information on the inspection activities carried out in 2021

Column 1. *Number of offshore inspections* means the number of site inspections carried out <u>on board</u> of offshore installations during the reporting period (2021).

Column 2. *Man-days spent on installations* means the total sum of days spent, during the year 2021, to carry out inspections on the installations by each inspector involved, not considering travel time. Site inspections might be carried out on different installations in the same day if they are nearby.

Column 3. *Number of inspected installations* means the number of different installations inspected during the year 2021.

Section 4 – Incidents data and performance of offshore operations.

Note to the Par.4.1. Incident data



- 1. As indicated in the Guidance Document on Implementing Regulation No. 1112/2014⁴, the term "event" refers to an incident but, more generally, even to a potentially critical episode for safety which requires to be reported to the Competent Authority, if it can be included in one or more categories, described in the *Directive 2013/30/UE*⁵ and operationally specified in Annex I of *Implementing Regulation (EU) n.1112/2014*⁶ (the mentioned categories are also shown in the first column of the table in the following par. 4.2. [4.2 Annex IX Incident Categories].
- 2. In the paragraph 4.1, the indication on the "number of reportable events" refers to the number of occurred events during the reporting year (2021);
- 3. In 2021, no event occurred to be reported pursuant to Annex IX of Directive 2013/30/EU, consequently the number of event, identified as major accidents, is also equal to zero (0).

[vm] Note to the Tab 4.2-Incident Categories [in 4.2. Annex IX incident Categories]

- 1. In table 4.2 (*Incident Categories*), the "number of events" column refers to the *number of events per category*.
- 2. As indicated in the Annex I of the *Implementing Regulation UE n.1112/2014*, "if the incident falls in one of the mentioned categories" [... the relevant sections are filled in, considering that ...] a single incident could result in completing multiple sections"; in other words, even more than one category can be used in order to better describe each single event (i.e., each single occurred incident that requires to be reported⁷, as explained in the previous note I.1).
- 3. In table 4.2 (*Incident Categories*), the "number of events" column refers to the *number of* events per category.
- 4. In the column named "number of events" (table 4.2), the value 1 has been assigned to each category related to a single event⁸; for this reason, if multi-category events were recorded

⁴«<u>event:</u> an incident that requires to be reported under Annex I of the Implementing Regulation» da EUOAG, Guidance Document on Commission Implementing Regulation (EU) N.1112/2014, Part 2-Definitions, pag.5 [https://euoag.jrc.ec.europa.eu/node/11];

⁵ Direttiva 2013/30/UE del Parlamento europeo e del Consiglio, del 12 giugno 2013, sulla sicurezza delle operazioni in mare nel settore degli idrocarburi e che modifica la direttiva 2004/35/CE, allegato IX (Condivisione di informazioni e trasparenza), punto 2; ⁶ «Event categorization

What type of event is being reported? (More than one option might be chosen)»(the list of the categories and the related sections follows).....«Remarks;a single incident could result in completing multiple sections», from Commission Implementing Regulation (UE) n. 1112/2014, Event categorizations and Remarks, pag.4-5.

⁷ «<u>event:</u> an incident that requires to be reported under Annex I of the Implementing Regulation» da EUOAG, Guidance Document on Commission Implementing Regulation (EU) N.1112/2014, Part 2-Definitions, pag.5 [https://euoag.jrc.ec.europa.eu/node/11];

⁸ Assuming that *m* events occur in a year, if *n* is the value of a cell in the "number of events" column of table/par.4.2, it means that, among *m* occurred events, n events can be described by the specific category Ci; we can note that each single event could be described by more than one category C₁, C₂...

during the reference year, we consider it is normal that the sum $N_{C\,(par\,4.2)}$ [the sum of the figures in the column number of events (per category) of the table 4.2] is greater than the figure $N_{A(par\,4.1)}$ [the number of (occurred) events, reported in par. 4.1.].

Using a summary formulation:

$$N_{C(par\ 4.2)} \geq N_{A(par\ 4.1)}$$

with > , in case of one or more multi-category events;

with = , in of no more multi-category event.

[n Note to the Tab 4.2-Incident Categories [in 4.2. Annex IX Incident Categories] to the Tab 4.4-SECE [in 4.4. Failures of Safety and Environmental Critical Elements (SECE's)]

The categorization of each event, mentioned in the report, in communicated on the basis of the first observations made after its occurrence, in accordance with the provisions of *Regulation UE n.1112/2014*, for the purposes of statistical reporting; the dynamics of the accident can be defined only at the conclusion of in-depth technical investigations and the related consequent actions.

[VO] Note to **Tab 4.2-Incident Categories** [in 4.2. Annex IX Incident Categories] to the **Tab 4.3-Injuries** [in 4.3. Total number of fatalities and injuries]

- 1. In the Tables 4.2 and 4.3, injuries refer to events occurred during offshore activities and recored for statistica purpose (they are fatalities or events causing absence from the workplace exceeding 3 days). Injury is classified as:
 - mild if the absence from the workplace is less than or equal to 30 days;
 - serious if the absence from the workplace is greather than or equal to 30 days;
 - fatal injury is mentioned as fatality.
- 2. The table 4.2 refers only to injuries and fatalities related to major accidents; the table 4.3 refers to events also not related to major accidents.
- 3. In table 4.3, the row "*Total number of injuries*" refers to the sum of fatalities, serious and mild injuries which occurred in 2021 during the offshore activities.
- 4. In 2021, 4 injuries were recorded (2 mild and 2 serious) and no fatality. During typical operations of the O&G sector, no injuries occurred; the injuries were not due to O&G activities, but, in any case, they involved personnel operating on the platform during their stay on them, even out of working hours.