

Guidance Document

on Commission Implementing Regulation (EU) No1112/2014

of 13 October 2014

determining a common format for the sharing of information on major hazard indicators by operators and owners of offshore oil and gas installations

&

a common format for the publication of information on major hazard indicators by the Member States

Part 1 - Introduction

Following the Deepwater Horizon major accident in the Gulf of Mexico in April 2010, the European Commission (EC) published Directive 2013/30/EU on Safety of Offshore Oil and Gas Operations (Offshore Safety Directive/OSD). This Directive defines minimum requirements for preventing major accidents related to offshore oil and gas operations and to limit their consequences.

The Directive requests the Commission by means of an Implementing Act to develop a common data reporting format for the sharing of information on major hazard indicators by operators and owners of offshore oil and gas installations. The Implementing Act shall also include a common data reporting format for Member States (expected to be their competent authority) to publish information on these major hazard indicators, to the public and the EC.

As the Implementing Act is in the form of a Regulation it is directly applicable to Member States. This means that the Member State is bound by the wording of the new reporting criteria and the reporting forms. Member States need to ensure that the competent authority is able to oversee compliance by operators and owners with their obligations under the Directive, including the reporting obligations, and shall ensure that infringements of the obligations under the Directive are subject to effective, proportionate and dissuasive penalties.

Member States are required to ensure that operators and owners of offshore oil and gas installations provide the competent authority, as a minimum, with the data on major hazard indicators as specified in Annex IX of the Directive, to the level of detail required by the Implementing Regulation. The EC aims for a common format for the reporting of data by operators and owners to the Member State that shall provide transparency of the safety and related environmental performance of operators and owners and shall provide EU-wide comparable information on safety of offshore oil and gas operations. This in turn will facilitate dissemination of lessons learned from major accidents and near misses.

For each calendar year Member States are required to prepare a document as specified in Annex II of the Implementing Regulation for publication to both, the Commission and the Public (e.g. via their competent authority or Member State websites).

The purpose of this Guidance is to provide competent authorities, operators and owners with supporting information and examples to promote consistent interpretation with the reporting requirements of the Implementing Regulation. At a later date guidance on how these reported events (see annex I of IR) will be assessed by the competent authorities to determine the potential for a major accident, which is to be reported at EU level, will be drafted.

This guidance document is of a non-binding character. Member States may suggest to the EUOAG further guidance to assist their owners and operators to fulfil their reporting obligations and in light of experience and frequently asked questions, a review of this guidance may be considered at a later stage.

Some Member States may provide further administrative guidance to assist operators/owners to align national and European reporting arrangements

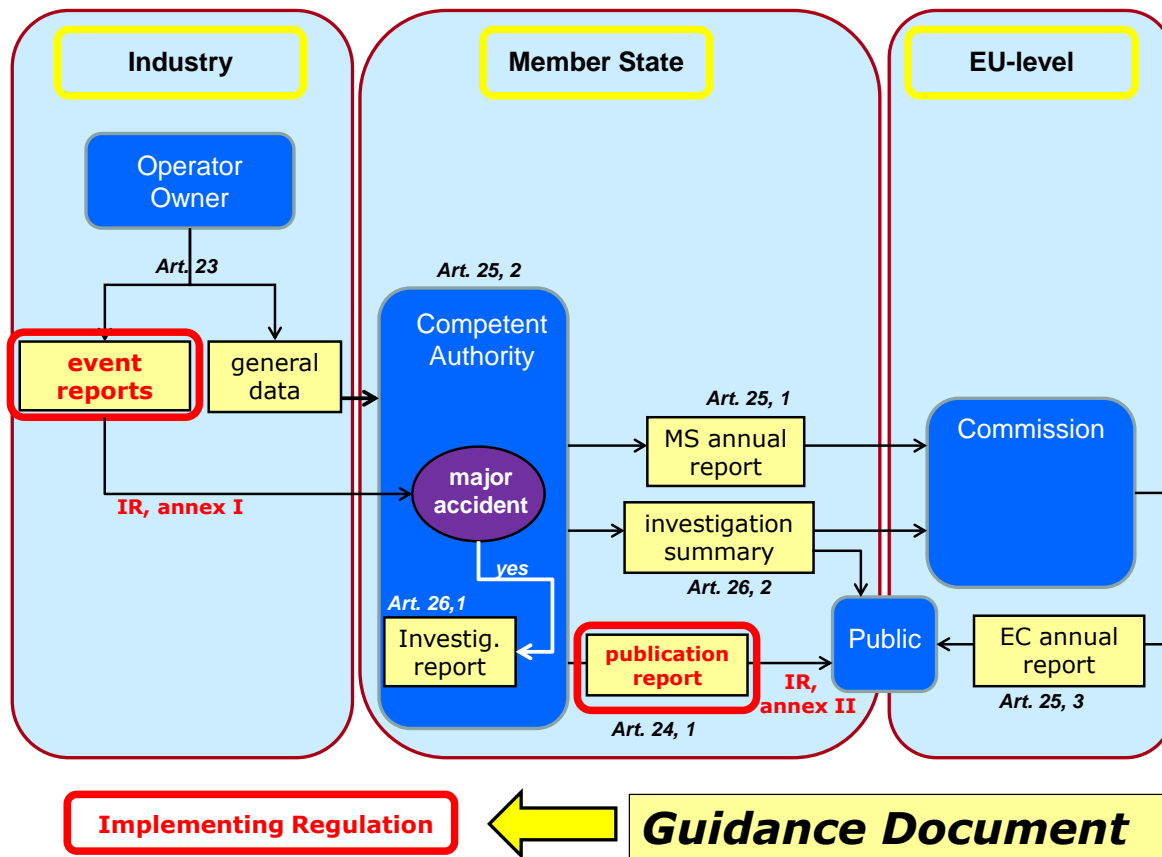
An important feature of the Implementing Regulation is the linkage with the Report on Major Hazards (RoMH) which has to be prepared by the owner/operator (as required in Article 12 & 13 of the OSD). For a specific installation, the major hazards are identified together with a description of the necessary Safety and Environmental Critical Elements (SECEs). The reporting requirements described in the Implementing Regulation focus on incidents (the term includes the potential to cause a major accident, e.g. the loss of containment of hazardous substances specified in the RoMH) and on the SECEs defined in the RoMH for the installation). Reports provided in accordance with the Implementing Regulation offer opportunities to improve the management of major hazards, by sharing knowledge, information and experience.

The operator/owner shall make a report to the competent authority within 10 working days. The competent authority will make a judgment whether or not this is regarded as a major incident and gives the justification.

ABBREVIATIONS:

OSD:	Offshore Safety Directive 2013/30/EU
RoMH:	Report on Major Hazards
SECE:	Safety & Environmental Critical Element
IR:	Implementing Regulation (EU) 1112/2014
EU:	European Union
LEL:	Lower Explosion Limit
PS:	Performance Standard
MODU:	Mobile Offshore Drilling Unit
POB:	Personnel on Board
IV:	Independent Verifier

Reporting diagram



There are three stakeholders: operator/owner, the MS competent authority and the European Commission. The Articles in the diagram above refer to the OSD.

Article 23 states that Member States shall ensure that operators and owners provide the competent authority, as a minimum, with the information described in Annex IX of the OSD, and that a common data reporting format shall be determined.

Article 24 states that the Member States shall make this information publically available and that a common publication format shall be determined.

The Implementing Regulation 1112/2014 contains both formats for the reports encircled above in red, the event report and the publication report, respectively in annex I and II.

Article 25 states that two annual reports shall be submitted: a report from the competent authority to the Commission and a report published by the Commission. As stated in the introduction one report could serve both obligations.

Article 26 states that if the competent authority considers the reported event as a major accident, the Member State shall initiate a thorough investigation. Furthermore a summary of the findings shall be made available to the Commission and a non-confidential version to the public.

This document is a guidance for the Implementing Regulation.

Part 2 – Definitions

Acceptable in relation to risk: As defined in Article 2 sub 8 of the OSD.

Blowout: An uncontrolled flow of well fluids and/or formation fluids from the wellbore to surface or into lower pressured subsurface zones (underground blowout).

Connected infrastructure: As defined in Article 2 sub 21 of the OSD

Event: an incident that requires to be reported under Annex I of the IR.

Fugitive emission: fugitive emissions arise from loss of tightness from hydrocarbon containment equipment such as valves, flanges and other connections, pressure relief devices, process drains, open-ended valves, pump and compressor seal systems, agitator seals, and access door seals.

Note: Fugitive emissions do not include releases due to degradation such as corrosion pinholes or cracks in process containment systems.

Immediate remedial action: means that the operator/owner will put in place immediate risk reduction measures to reduce the risks to an acceptable level as defined in OSD Article 2 sub 8. Immediate remedial action refers to those immediate risk reduction measures taken by operators/owners such as fully or partially suspending production, drilling, simultaneous operations or other work activities (e.g. not allowing or not finalising start-up).

Note: Planning for corrective action to be taken at a later date does not constitute “immediate remedial action”

Note: not allowing or not finalising start-up refers to the production phase, hence not to the initial commissioning of new equipment. e.g. the failure of an ESD valve during commissioning is not reportable.

Note: The repair of the failure of a cement job during construction of a well is considered to be a corrective action and hence not reportable.

Major accident: As defined in Article 2 sub 1 of the OSD.

Major incident: has the same meaning as a major accident as defined in Article 2 sub 1 in the OSD.

Major environmental incident: means an incident which results, or is likely to result, in significant adverse effects on the environment in accordance with Directive 2004/35/EC. However, in the context of this Implementing Regulation it is only such incidents resulting from a major accident as defined in Article 2 sub 1 under (1), (2) or (3) of the OSD.

Number of fatalities: the number of work related fatalities excluding natural deaths.

Performance standard for a SECE: a measurable statement, expressed in qualitative or quantitative terms, of the performance required of a SECE, and that is relied upon as the basis for managing a hazard, by preventing or limiting the effect of a major accident.

Notes:

1. Performance Standards form part of the owner/operators SECE management system and need to be detailed and kept up to date as part of compliance with that SECE management system.
2. If a SECE is “lost or unavailable” this by definition means that it fails to meet the required Performance Standard.

Serious personal injury: as defined in each Member State in accordance with Directive 92/91/EEC. Examples of guidance for the classification could be obtained from IRF or IOGP definitions:

Links: <http://www.irfshoresafety.com/country/performance/scope.aspx>
<http://www.ogp.org.uk/pubs/2013s.pdf> (Appendix E)

Total working hours: the number of offshore hours worked per annum..

- the exceptions are that the activities associated with aviation and supply boats/standby vessels are excluded from the total number of hours worked;
- for countries that have available the number of workers on board an installation instead of hours worked, use an average of 2000 hours per year as a multiplier to calculate the number of hours worked.

Working days in connection with reporting purposes exclude weekends and public holidays.

Part 3 - Guidance on the reporting requirements of the Implementing Regulation.

The basis for the reporting is in the OSD and is further specified in the IR.

This section of the guidance provides operators and owners with further clarification on how to comply with the IR reporting requirements for the different types of events to be reported. Each category starts with relevant text from the OSD and the IR.

Notes:

To clarify the remarks on Page 5 of the IR regarding the completion of multiple sections:

1. If the operator or owner considers that a release, reportable under section A, is likely to be judged by the competent authority to be a major accident (based on the operators and owner's analysis of whether an incident is reportable under OSD Article 19 sub 9 or Article 30 sub 1), then also complete section C if a SECE has failed;
2. Sections C and D need to be completed if there are failures of SECEs concerning Structural Integrity Systems (e.g Mooring systems) as per section C.2.1.a;
3. Incidents reportable under section B (Loss of Well Control), may also require the completion of section C (section C.2.1. b: Process Containment Systems and e: Process Containment Relief Systems);
4. Incidents reportable under sections E and F (marine vessel collisions and helicopter accidents) may also require the completion of section C (section C.2.1.h: Navigational Aids);
5. If a release might have significant adverse effects on the environment (defined in section J), the IR requires completion of all the relevant fields in section A, including in particular sections A2.3 and C2.2 as appropriate. This will be the same information included under section J;
6. When completing sections A3, B3, C3, D3, E3, F3, I3 & J3 operators and owners should use causes listed in Annex II section 4.5 of the IR (copied below) to assist in the preparation of the annual publication report (Annex II of IR)

Annex II Section 4.5 of the IR

4.5. Direct and Underlying causes of major incidents

Causes	Number of incidents	Causes	Number of incidents
(a) Equipment-related causes		(c) Procedural / organisational error	
<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>	1	<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		(d) Weather-related causes	
<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>			

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014**A: Unintended release of oil, gas or other hazardous substances, whether or not ignited;**

1. Any unintentional release of ignited gas or oil on or from an offshore installation;
 2. The unintentional release on or from an offshore installation of:
 - a. not ignited natural gas or evaporated associated gas if mass released \geq 1kg
 - b. not ignited liquid of petroleum hydrocarbon if mass released \geq 60 kg;
 3. The unintentional release or escape of any hazardous substance, for which the major accident risk has been assessed in the report on major hazards, on or from an offshore installation, including wells and returns of drilling additives.
-

Guidance**A: Unintended release of oil, gas or other hazardous substances, whether or not ignited;**

This includes reporting of process or non-process petroleum hydrocarbon fluids in 1 and 2 below.

In order of the reporting requirements of the Implementing Regulation above:

1. **Any unintentional release of ignited gas or oil on or from an offshore installation;**
Any release must be reported, irrespective of the potential to cause a major accident.
 - Exclusions: (no requirement to report under this Regulation) controlled ignited releases which are part of recognised safe operations such as flaring.
2. **The unintentional release on or from an offshore installation of:**
 - a) **not ignited natural gas or evaporated associated gas if mass released \geq 1kg**
 - 1 kg means 100% natural gas.

Exclusions: (no requirement to report under this Regulation)

- Gas releases which are recognized as safe operations (emergency-shutdown, venting gas manually to depressurize equipment in a controlled manner) or which is part of the designed process (automatic release via a blowdown system or venting system) should not be reported. However, where an intentional gas release, which is considered a safe operation, escalates to the extent where immediate actions in addition to the arrangements for safe operation result either automatically or are required by manual intervention to reduce risks then this release should be reportable.

Example:

“ During a routine manual blow-down of some gas lines routed to the atmospheric vent, vapour from the vent drifted toward a local equipment room ventilation intake. Gas was drawn into the room and local gas detection in the ventilation ducting shutdown the equipment automatically. The weather was abnormally calm and still.”

- Fugitive emissions (ref. part 2 definitions) shall not be reported under this Regulation as long as they are less than 3 kg/h or a 20% LEL at 50 cm is not reached. Emissions of this nature are unlikely to present a significant safety hazard, and consequent risk of fire/explosion.

b) not ignited liquid of petroleum hydrocarbon if mass released \geq 60 kg;

- 3. The unintentional release or escape of any hazardous substance, for which the major accident risk has been assessed in the report on major hazards, on or from an offshore installation, including wells and returns of drilling additives.**

This includes the release of any dangerous/hazardous substance identified in the assessment of major accidents in the RoMH as defined in OSD Article 2 sub (1) which would lead to a significant potential to cause fatalities or serious personal injury.

General note for section A:

The information requested in the reporting form in section A includes:

- A1.I type of substance leaked (non-process, crude oil, condensate, gas, 2-phase),
- A1.II estimated quantity released,
- A1.III estimated initial release rate,
- A1.IV estimated duration of leak.

The estimate of rate and quantity released must take into account the substance leaked and the physical and process conditions. The methodology can be based on the physical effects modelling used in the Report on Major Hazards for the installation or on recognised formulae and standard assumptions as referenced validated by competent person(s). Find below reference examples:

Ref:

<http://www.irfoffshoresafety.com/country/performance/scope.aspx>

<http://www.oilandgasuk.co.uk/cmsfiles/modules/publications/pdfs/HS021.pdf>

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014

B: Loss of well control requiring actuation of well control equipment, or failure of a well barrier requiring its replacement or repair:

1. Any blowout, regardless of the duration
 2. The coming into operation of a blowout prevention or diverter system to control flow of well-fluids;
 3. The mechanical failure of any part of a well, whose purpose is to prevent or limit the effect of the unintentional release of fluids from a well or a reservoir being drawn on by a well, or whose failure would cause or contribute to such a release.
 4. The taking of precautionary measures additional to any already contained in the original drilling programme where a planned minimum separation distance between adjacent wells was not maintained.
-

Guidance

B: Loss of well control requiring actuation of well control equipment, or failure of a well barrier requiring its replacement or repair.

This concerns loss of well control throughout the lifecycle of the well and is applicable for all offshore wells drilled for the exploration or exploitation of oil or gas, including wells drilled in connection with the exploitation of oil or gas, for example those used to support pressure through water or gas injection.

In the order of the reporting requirements of the Implementing Regulation above:

1. **Any blowout (ref. Part 2 Definitions), regardless of the duration.**

This covers all blowouts, including those of limited duration. If the blowout resulted in a major environmental incident section J should also be completed.

2. **The coming into operation of a blowout prevention or diverter system to control flow of well-fluids.**

This covers all incidents where a blowout preventer is closed or a diverter is operated to control an unplanned flow into the well-bore from the adjoining formations, but not where flow is planned as part of an operation (e.g. underbalanced drilling).

Reports are not required where flow is due solely to variations in the density of fluid across pipe installed in the well bore, an effect commonly known as 'U-Tubing'; nor where it is known that mud previously lost to the formation is subsequently returned, an effect commonly known as 'ballooning' or 'breathing'. There is also no need to report flows arising from thermal effects.(e.g. by starting up a well, the fluids are warming up and the casing is expanding).

3. The mechanical failure of any part of a well, whose purpose is to prevent or limit the effect of the unintentional release of fluids from a well or a reservoir being drawn on by a well, or whose failure would cause or contribute to such a release.

Failures of the primary pressure containment envelope of a well or of safety devices, namely blowout preventers or surface, subsea and subsurface safety valves shall be reported where there is a major loss of pressure integrity requiring immediate remedial action.

Significant leakages around a well of hydrocarbon gas from shallow formations should also be reported. It is not necessary to report minor leaks or failures found and rectified during routine maintenance, including replacement of worn components.

4. The taking of precautionary measures additional to any already contained in the original drilling programme where a planned minimum separation distance between adjacent wells was not maintained.

This means that operators/owners must report when unintentionally drilling into another well, or when additional corrective action has been necessary.

Examples of events to be reported:

1. Well failure during workover. A gas blowout occurring outside the well from the reservoir to the seabed. Gas formed under the entire platform.
2. Failure of primary well barrier during drilling. High influx volume of hydrocarbons into the well during drilling. Shear rams in BOP stack activated in ultimate stage.

Example of an event not to be reported:

3. Increasing gas trend during drilling. Circulate and increase the mud weight without activating secondary well barrier (BOP).

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014**C: Failure of a safety and environmental critical element:**

Any loss or non-availability of a SECE requiring immediate remedial action.

Guidance**General**

The requirement for a report to be submitted under this section arises from either:

- 1) a failure of a SECE causing a major accident or during a major accident.
- 2) a SECE reported by the Independent Verifier as failing to meet the required Performance Standard for that SECE
AND
the operator/owner had to take immediate remedial action to reduce risks to an acceptable level.

The Independent Verifier will notify the operator/owner where a SECE does not meet the requirements of the performance standards.

The operator/owner determines as a result of the notification received from the Independent Verifier whether immediate remedial action is necessary to protect people and the environment and to reduce risks to an acceptable level. If such action is necessary then a report under section C must be submitted to the competent authority.

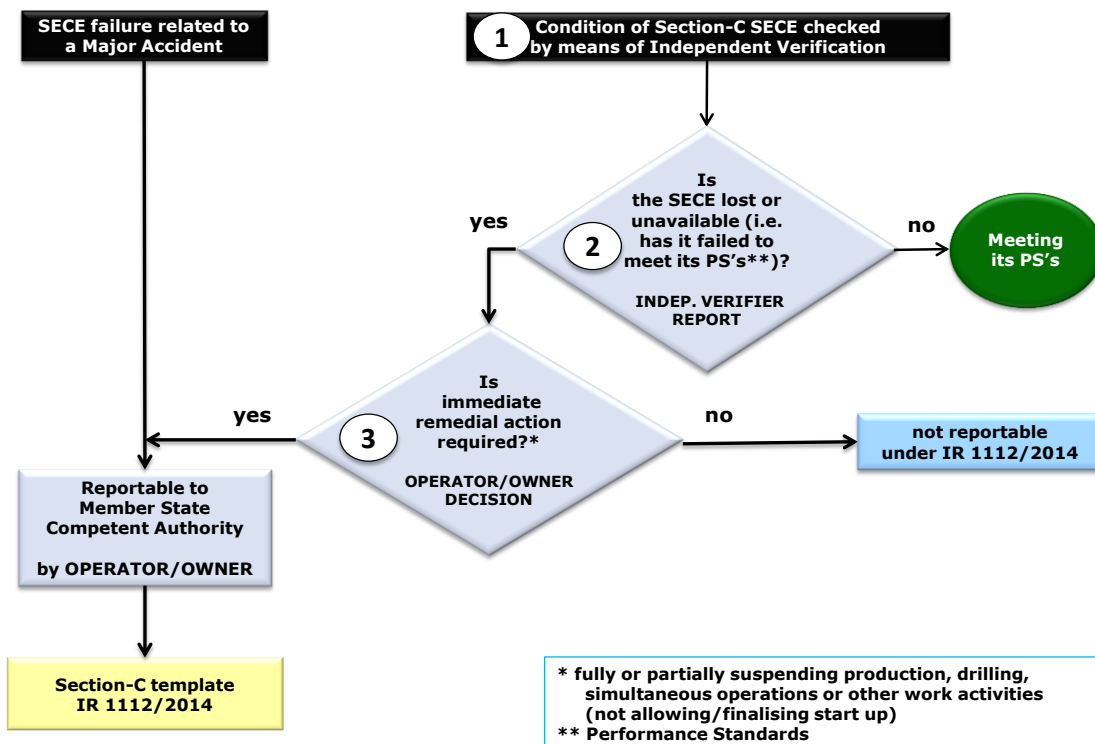
A SECE is generally to be understood at “system level” (e.g. emergency-shutdown system, fire extinguishing system or fire prevention system) and not at component level (e.g. smoke and gas detectors). However, there are instances where the failure of a single component of the system significantly reduces the integrity of the SECE or even the entire installation.

The three requirements that determine whether the loss or non-availability of a SECE is to be reported to the competent authority in section C, are illustrated in the figure below.

The three requirements that all have to be met are:

- (1) the SECE condition is identified by the Independent Verifier.
- (2) The Independent Verifier reported that the SECE is lost or unavailable (i.e. fails to meet its performance standards)
- (3) the operator/owner determined that immediate remedial action is necessary to protect people and environment and to reduce the safety and environmental risks to an acceptable level.

Section C reporting diagram



Section C Reportable and non-reportable examples

The examples provided below are only indicative and offer assistance in determining when reports under this section may or may not be required.

Process containment systems

<i>Example 1.</i> Substantial corrosion of a flow-line detected, but with minimum allowable wall thickness in place;		
The IV has identified that the SECE is still meeting its performance standards. The operator has put in place mitigation measures of additional regular wall thickness monitoring until a repair/replacement is completed. The SECE is not lost or unavailable and does not necessitate an immediate remedial action such as down-manning or production shutdown.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	No
(3)	Immediate remedial action required	No
Not reportable		

<i>Example 2.</i> Substantial corrosion of a gas flow-line detected: wall thickness below minimum requirement;		
The IV has identified that the flow-line has failed meeting its performance standards. The operator's assessment showed that immediate remedial action is necessary. In response to the finding of the IV the gas flow-line was isolated and depressurized awaiting repair or replacement.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

<i>Example 3.</i> A flow-line is equipped with a HIPPS (High Integrity Pressure Protection System) to protect the downstream equipment against overpressure. The HIPPS valve is stuck in the open position due to scaling or sand deposits;		
The IV has identified that the HIPPS valve is unavailable. The operator has established that there are no acceptable additional mitigation measures available. The operator's assessment showed that this necessitates immediate remedial action to reduce risks to people and environment. Production through this flow-line is suspended until safeguarding will be restored.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

<i>Example 4.</i> A flow-line is equipped with a HIPPS to protect the flow-line and downstream equipment against overpressure. On one of the two sensing units, one of the three pressure sensors is defective. The HIPPS is designed for two out of three pressure sensors continuously operational. This allows alternately (preventative) maintenance on the pressure sensors during operation;		
The IV has found that one sensor is faulty. The performance standard allows for one out of three sensors to be faulty with an increased monitoring program until repaired. The operator has put mitigation measures in place to check the remaining sensors more frequently until the replacement is installed. Each of the two remaining sensors will cause the HIPPS valve to close when the trip setting is exceeded. The operator's assessment showed that immediate remedial action to reduce risks is not required. Repair of the third sensor shall be carried out as soon as practicable.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	No
(3)	Immediate remedial action required	No
Not Reportable		

Protection Systems

<i>Example 5. Loss or non-availability of one of two fire water pumps;</i>		
The IV has found that one fire water pump is unavailable. The design is based on 2x50% fire water pumps therefore with one out of service the fire water system cannot meet its performance standards. The operator made an assessment and decided (for instance based on contingency plans) to shutdown all hydrocarbon processing plant.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

<i>Example 6. A number of deluge heads in a particular module failed during a test while the installation was producing;</i>		
The IV found, due to a number of blocked deluge heads in a hydrocarbon processing module, that the required fire water coverage was notably depleted and the performance standard was not being met. The operator assessed the situation and took immediate remedial in shutting down and depressurizing the module.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

<i>Example 7. A small leak was detected in the ring main of a fire water system;</i>		
The IV noticed a small leak. The leak could be isolated from the ring main. The operator assessed the situation and concluded that the leak is small and that the ring main will not suddenly fail catastrophically. The operator will make plans to repair the ring main; no immediate remedial action is necessary		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	No
Not reportable		

Ignition Control System

<i>Example 8.</i> A fire damper on a temporary refuge not closing on test during a planned shutdown;		
The IV identified a failure on the fire damper of the temporary refuge. The operator cannot restore the fire damper to function as required before the planned start up. Consequently, the integrity of the temporary refuge is compromised. The operator took immediate remedial action by not allowing the start-up until the fire damper is repaired.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

Shutdown systems

<i>Example 9.</i> Blowdown test recalculation shows that required blowdown time (as per performance standard) of 15 minutes will be exceeded by 2 minutes;		
The IV found that the performance standard could not be met but the operator assessed the situation and decided that the failure was not a significant impairment of the integrity of the installation. The operator did not take any immediate remedial action.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	No
Not Reportable		

<i>Example 10.</i> Blowdown system hardware and logic does not function to ensure safe blowdown;		
The IV found that the blowdown system did not meet the requirements of the performance standard and this is a significant impairment of the integrity of the installation. The operator assessed the situation and took immediate remedial action in the form of a controlled shut-down.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

<i>Example 11.</i> LLSDV (Low Level Shutdown Valve) in rundown line of high pressure separator is passing more than the maximum allowable leak rate;		
The IV found that the LLSDV does not meet the performance standard requirements to the extent that its condition presents a risk to the integrity of the shutdown system and the entire installation. The operator assessed the situation and decided to take immediate remedial action by shutting down the production unit containing this HP separator. This condition will remain until the LLSDV valve has been replaced or satisfactorily repaired.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

Escape, evacuation and rescue equipment

<i>Example 12.</i> An Independent Verifier witnessed the testing of a lifeboat. The engine started up but the propeller failed to turn. The remaining lifeboat capacity is not sufficient for the personnel on board the installation;		
The IV found that there is insufficient lifeboat capacity available for the POB (Personnel on Board). The operator/owner assessed the situation and decided to partially downman the installation until the lifeboat will be replaced or repaired.		
(1)	Identified by IV (Independent Verifier)	Yes
(2)	SECE lost or unavailable (i.e. failed to meet performance standards)	Yes
(3)	Immediate remedial action required	Yes
Reportable		

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014

D: Significant loss of structural integrity, or loss of protection against the effects of fire or explosion, or loss of station keeping in relation to a mobile installation:

Any detected condition that reduces the designed structural integrity of the installation, including stability, buoyancy and station keeping, to the extent that it requires immediate remedial action.

Guidance

Loss of protection against the effects of fire or explosion (passive and active fire protection e.g. deluge, fire/blast walls) to be reported under section C.

Section D covers structural integrity, including stability, buoyancy and station keeping of the installation. A report is required when such components are lost, unavailable or degraded, such that immediate remedial action is required.

Where there is, during a major accident, overlap between D and the reporting requirements in C, the operator or owner needs only to complete section C.

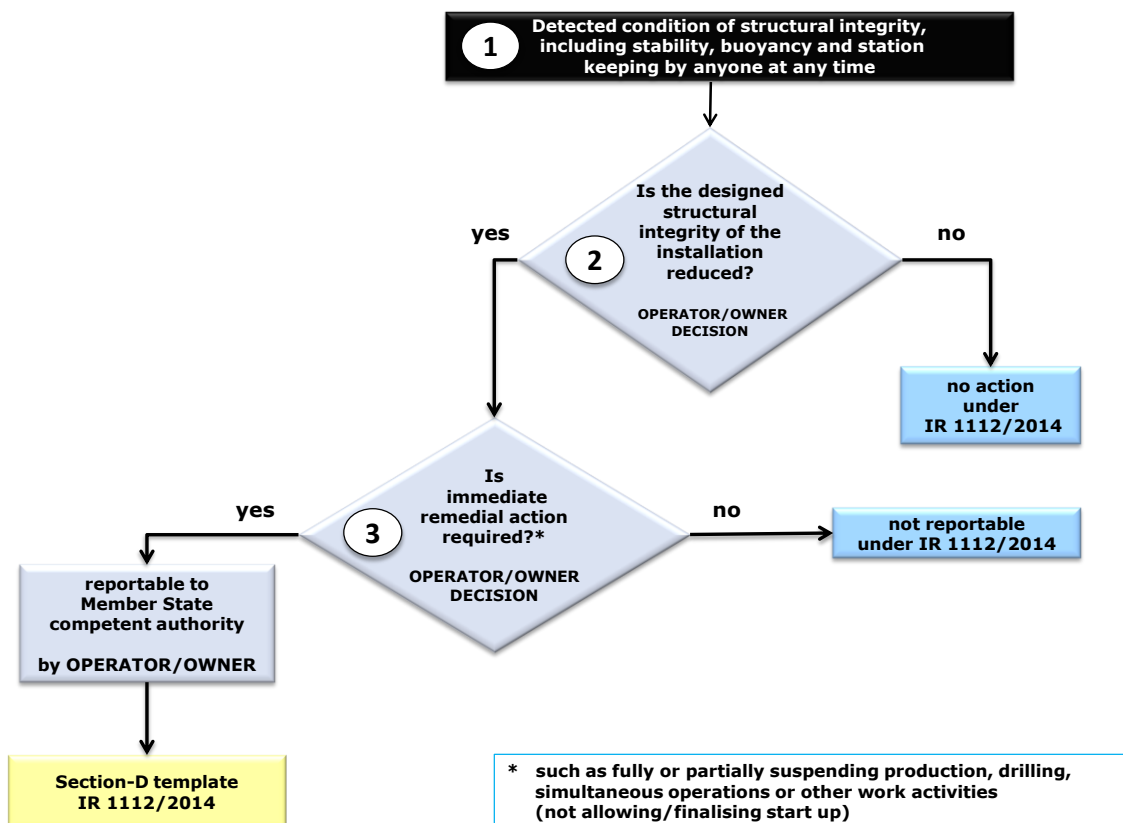
The detected condition can be reported to the operator/owner by anyone in any circumstance whether it is by simple observation, inspection or investigative techniques or analysis of the results of tests etc.

The operator/owner is responsible for determining whether immediate remedial action is required to protect the safety and environmental risks of the installation and to reduce immediate risks to people and environment to an acceptable level. If such immediate remedial action is necessary then a report under section D must be submitted to the competent authority.

The three requirements (that all have to be met) for determining when a detected condition regarding structural integrity must be reported to the competent authority in section D are illustrated in the figure below:

- (1) a condition regarding structural integrity is identified (by anyone);
- (2) the operator/owner assessed that the condition has resulted in significant loss of structural integrity;
- (3) the operator/owner determined that immediate remedial action is necessary to protect people and the environment and reduce the safety and environmental risks of the installation to an acceptable level.

Section D reporting diagram



Section D examples

Examples below of conditions identified which will be reported under this section if the operator/owner assesses that immediate remedial action is necessary:

Structural Integrity

Significantly reduced structural integrity (including load bearing parts) of an installation or its foundations, excessive movement, deflection, change in structural response, or settlement etc., caused by e.g.

- subsidence, collapse of the seabed, settlement of foundations or excessive scouring;
- unintentional collapse or partial collapse of any part of it;
- environmental conditions exceeding design or site specific limits such as caused by significant wave contact or other environmental forces (e.g. storm);
- collision by a vessel or aircraft;
- defects (cracks, evidence of fatigue) in the structure or serious corrosion which are a threat to the integrity of the installation.

Stability, Buoyancy & Station Keeping

Loss of stability or buoyancy of a floating installation (indicated by excessive inclination, undue sensitivity to weight shifts, or excessive movements) caused by e.g.

- a collision by a vessel or aircraft
- unintended flooding of spaces expected to remain buoyant.

Loss of station keeping due to e.g.

- failure of a mooring system.
- failure of the installation's dynamic positioning system

The examples provided below are indicative only and offer assistance in determining when a condition which reduces the designed structural integrity of the installation, is NOT reportable under this section.

Structural Integrity

1. A cellar deck walkway has become detached under wave load and is being driven by wave action against the leg of the installation. Temporary restraints have been put in place to reduce the abrasion until sea conditions are such that repairs and a full assessment of the damage to the leg can be made. There is no reason for the operator/owner to conclude that any primary (load bearing) structural member has suffered damage that would jeopardize the overall structural integrity of the installation and there is no risk of it coming into contact with any hydrocarbon pipework. No immediate remedial action is necessary. There is no increased risk to people or the environment.
2. A seabed survey has detected that scouring has increased and that these do not exceed the limits provided by the structural department. The operator/owner's initial structural engineers assessment indicates that there is no immediate threat to the safety integrity of the facility. While regularly monitoring further scouring, measures must be taken to replace the scoured material and stabilise the seabed around the structure. No immediate remedial action is necessary (such as reducing production, depressurising pipelines or downmanning the facility).
3. A drill pipe has been dropped over the side, there is no subsea infrastructure in the vicinity. An underwater survey indicates that a diagonal primary member has been dented but there is no other damage. A structural assessment is initiated including monitoring for any leaks or flooding but no immediate remedial action is required. There is no increased risk to people or the environment.

Stability and Buoyancy

1. An underwater survey finds that anodes have broken off part of the hull and corrosion pitting has been measured nearby. A programme of structural assessment and anode replacement is initiated. Although corrective action must proceed without delay no immediate remedial action is necessary.
2. A flooded member is detected in a fixed offshore structure. Risk assessments available as part of a contingency plan and checked against the current structural model, show that loads are safely redistributed and that overall structural integrity is not at risk and that it is safe to continue production. An underwater repair project is scheduled but no immediate remedial action is necessary. There is no increased risk to people or the environment.

Station Keeping

1. Eight chain mooring system on rotating turret FPSO with one failed chain. Risk assessment and mooring plan shows that remaining chains will meet mooring load design loads due to redundancy in the original design. A replacement plan is put in place for urgent execution, The Operator decided that no immediate remedial action is considered necessary on this occasion.

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014**E Vessels on collision course and actual vessel collisions with an offshore installation:**

Any collision, or potential collision, between a vessel and an offshore installation which has, or would have, enough energy to cause sufficient damage to the installation and/or vessel, to jeopardise the overall structural or process integrity

Guidance

A report is required when an actual collision has occurred between a vessel and an offshore installation. Operators and owners should note that such events may involve a failure of a SECE, therefore it may be necessary to complete sections C or D of the IR.

When considering a potential collision between an installation and a vessel, it will not always be possible to estimate with any accuracy whether a collision could have occurred or what the consequences might have been. The operator/owner shall report incidents with a significant risk for the installation.

In both situations, it is likely that the operator/owner will take immediate emergency measures, either at the installation to evacuate or protect people from a foreseeable collision or that an action is taken towards the vessel (e.g. contacting it and requiring it to change course). It is the (expected) taking of these immediate measures that should require a section E report under this requirement.

For mobile drilling units, actual or potential collisions shall only be reported when the unit is engaged in offshore oil and gas operations or is in the safety zone of an offshore installation. If a mobile drilling unit collides with an offshore installation, it shall be necessary to complete also section D.

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014**F Helicopter accidents, on or near offshore installations:**

Any collision, or potential collision, between a helicopter and an offshore installation.

Guidance

A helicopter accident shall be reported according to Aviation Guidelines.

Where an actual collision has occurred between a helicopter and an offshore installation, this must be reported.

When considering a potential collision between a helicopter and an installation, although it could involve uncontrolled maneuvering of a helicopter near an installation, other factors may be involved (e.g. unauthorized crane use near a helideck) and so it will not always be possible to estimate with any accuracy whether a collision could have occurred or what the consequences might have been. During such events, it is likely that the operator/owner will take immediate emergency measures, either on the installation to protect people from the consequences of a collision or take action in regard to the helicopter. It is the taking of these measures that requires a report under this requirement.

By taking this approach, “heavy landings” covered by routine operational procedures are not reportable.

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014**G Any fatal accident to be reported under the requirements of Directive 92/91/EEC**

Guidance

Operators and owners of offshore oil and gas installations are already expected to report all fatalities to their national authorities under their domestic legislation that implements Directive 92/91/EEC. Therefore, operators and owners have under this IR no additional reporting requirement.

Under this requirement, the competent authority is expected to use this information to complete the Common Publication Format (Annex II of the Implementing Regulation No 1112/2014). The competent authority will need to determine the number of fatalities associated with major accidents, as well as the total number of fatalities associated with offshore oil and gas operations. Additional reporting by operators/owners, above that required under Directive 92/91/EEC is not required to meet this requirement.

Individual Member States should have their own regimes and definitions in place to implement Directive 92/91/EEC and will report in line with these. Alternatively, industry definitions may be used.

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014

H Any serious injuries to five or more persons in the same accident to be reported under the requirements of Directive 92/91/EEC

Guidance

Operators and owners of offshore oil and gas installations are already expected to report all work related injuries on offshore installations to their national authorities under their domestic legislation that implements Directive 92/91/EEC. Therefore, operators and owners have under this IR no additional reporting requirement.

Under this requirement, the competent authority is expected to use this information to complete the Common Publication Format (Annex II of the Implementing Regulation No 1112/2014). The competent authority will need to determine the number of serious injuries associated with major accidents. Additional reporting by Operators/Owners, above that required under Directive 92/91/EEC is not required to meet this requirement.

Individual Member States should have their own regimes and definitions in place to implement Directive 92/91/EEC and will report in line with these. Alternatively, industry definitions may be used

Reporting requirements of Implementing Regulation No 112/2014 of 13-10-2014**I: Any evacuation of personnel:**

Any unplanned emergency evacuation of part of or all personnel as a result of, or where there is a significant risk of a major accident

Guidance

Full or partial evacuation may be a response in the event of major accident or as precautionary measure. This includes reporting medevacs associated with a major accident reported under another category. Any emergency and unplanned evacuation due to bad weather or a condition where there is a significant risk of a major accident is reportable.

Where an installation has undertaken an evacuation because it has suffered a total loss of power, it shall be reported under this section.

There is no requirement to report:

- Evacuation exercises or precautionary evacuation measures due to welfare issues (e.g. no water on the installation), which involve de-manning where there is no increased potential of a major accident;
- Transfer of personnel to avoid delays or disruptions in crew changes anticipated due to bad weather;
- Evacuations that are planned as part of an operators or owners safety management system due to forecasted bad weather.

Reporting requirements of Implementing Regulation No 1112/2014 of 13-10-2014**J: A major environmental incident:**

Any major environmental incident as defined in Article 2.1.d and Article 2.37 of Directive 2013/30/EU

Guidance

Reports shall be made in this section of:

- The significant adverse environmental effects arising as a consequence of events reported under other reporting sections and in particular sections A.2.3 and C.2.2.

These also include:

- events for unmanned installations;
- pipelines are included if they are part of the connected infrastructure or at discretion of the Member State.

The term “major environmental incident” means an incident which is the consequence of a major Accident and results, or is likely to result, in significant adverse effects on the environment in accordance with the Environmental Liability Directive (ELD) 2004/35/EC. Annex I lists criteria which have to be taken into account in the determination of the significance of a damage to protected species and natural habitats.

They cover:

- the number of individuals, density, area covered;
- the role of the particular individuals or of the damages area in relation to the species or to the habitat conservation, the rarity of the species or habitat;
- the species' capacity for propagation, its viability or the habitat's capacity for natural regeneration;
- the species' or habitat's capacity to recover within short time after the damage occurred without any intervention other than increased protection measures etc.

For damage to water such a list of criteria helping to assess the significance of a damage does not exist in the ELD. There are however guidance documents and tools available in many Member States at national level. Reference is also made to the REMEDE tool and the ELD training material, both available on the liability website of the Commission:

<http://ec.europa.eu/environment/legal/liability/index.htm>

“Significant adverse effects” may be assessed by operators and owners already in the RoMH and/or by using as a guide Annex II(2) of the Strategic Environmental Assessment (SEA) Directive 2001/42/EC. This requires assessment of the characteristics of the effects, and of the area likely to be affected, having regard, in particular, to:

- the probability, duration, frequency and reversibility of the effects,
- the cumulative nature of the effects,
- the trans boundary nature of the effects,
- the risks to human health or the environment (e.g. due to accidents),
- the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected),
- the value and vulnerability of the area likely to be affected due to:
 - special natural characteristics or cultural heritage,
 - exceeded environmental quality standards or limit values,
 - intensive land-use,
- the effects on areas or landscapes which have a recognised national, Community or international protection status.

Part 4 - Guidance for the competent authority on the Common Publication Format

The competent authority shall make the information referred to in Annex IX of the Directive 2013/30/EU publicly available. In order to ensure consistent reporting from the competent authority to the European Commission, a Common Publication Format is developed. This format is posted under Annex II of the Implementing Regulation No 1112/2014 of 13 October 2014.

Oil and gas production figures are also recorded for normalisation purposes.

The 'number of events' to be recorded under 4.2, (g) 'fatal accidents', shall only consist of fatalities related to a major accident.

The 'total number of fatalities' (92/91/ EEC) to be recorded under 4.3, shall consist of all fatalities on the installations.

Failed SECEs shall be reported In C.2.1 of Annex I if:

- a) the failures were reported as lost or unavailable by the Independent Verifier.
- b) the failures occurred during a major incident;

In table 4.4 of Annex II of the Publication Format the column 'number related to major accidents' comprises the number of failed SECEs against the relevant category(ies) for each major accident within the MS. Failed SECEs as meant under a) above could be ignored in table 4.4 if not considered as major incident by the Competent Authority (see section C/C.4)

Reporting parameters for Normalisation

1. Total working hours of all installations
2. Number of fixed installations
3. Number of beds on fixed installations
4. Number of mobile installations
5. Number of beds on mobile installations
6. Number of months mobile installations are in operation in the waters of the MS
7. Total production (kTOE)
8. Oil production
9. Gas production

section	normalisation parameters	
A	Total working hours of all installations	
B	Total working hours of all installations	
C	Total working hours of all installations	
D	Number of installations	
E	Number of installations	
F	Total working hours of all installations	
G	Total working hours of all installations	
H	Total working hours of all installations	
I	Total working hours of all installations	
J	Total working hours of all installations	