

## **Offshore Information Sheet 4/2006**

# **Offshore Installations (Safety Case) Regulations 2005 Regulation 13**

## **Thorough Review of a Safety Case** (Revised and reissued July 2008)

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## Introduction

The purpose of this guidance is to;

- 1) summarise the requirements of regulation 13 of the Offshore Installations (Safety Case) Regulations 2005;
- 2) explain HSE's views on the extent of a thorough review; and
- 3) explain how HSE will consider the review and how HSE will use it.

It should be read in conjunction with paragraphs 187-195 of the guidance booklet <sup>1</sup>.

## Legal requirements

Regulation 13 requires a dutyholder to undertake a thorough review of a current safety case within 5 years of:

- 1) the date on which the current safety case was accepted by HSE, and
- 2) the date of the previous thorough review.

Submission to HSE of a revised case involving a material change does not affect the date for carrying out a thorough review.

A summary of the review must be sent to HSE within 28 days of its conclusion.

Regulation 13 also gives HSE power to direct a thorough review of a current safety case. HSE is most likely to direct such a review if it is concerned that:

- 1) the safety case may not reflect the true safety situation on the installation (for example that the assumptions made are not fundamentally sound), or
- 2) the management system being operated may not be as described in the safety case.

This power may be used at any time. It is a fallback power which is unlikely to be used unless other avenues have been exhausted. It is not intended to deal with unsafe working conditions. HSE will give the dutyholder a reasonable time in which to undertake a directed thorough review. A directed review summary has to be sent to HSE within a reasonable time, but not less than 28 days of the direction.

In directing a thorough review, HSE may focus the dutyholder's attention on a particular aspect of the case. However even with a directed review, regulation 13 still requires review of the safety case as a whole.

## Purpose of a thorough review

The purpose of the thorough review is to confirm that the case as a whole continues to be fundamentally sound. It should be a systematic examination of all the basic assumptions made in the case, as well as of all its content. Its objectives are:

- 1) to confirm that the safety case, with any necessary updates, is still adequate, and is likely to remain so until the next thorough review,
- 2) to compare the case against current standards, HSE guidance (such as [APOSC](#)<sup>2</sup> and [GASCET](#)<sup>3</sup>) and industry practice for new installations, to evaluate any deficiencies, and to identify and implement any reasonably practicable improvements to enhance safety,
- 3) to identify design parameters, ageing processes and changes in operating conditions that may limit the life of the installation, or of its safety critical elements, and
- 4) to check that the management of safety is adequate.

A thorough review should not be confused with the requirement in regulation 14(1) to revise the case when appropriate, to reflect the current state of the installation and its operations.

### **Dutyholder arrangements for thorough review**

The arrangements for thorough review of the safety case should be a part of the safety management system. HSE may inspect to ensure that this is the case, and that the arrangements are up to date and are being implemented effectively.

The arrangements should ensure that;

- 1) those carrying out the review are suitably qualified and experienced,
- 2) a degree of objectivity is achieved, for example by including in the review team staff not involved in operating the installation or maintaining the case for safety,
- 3) the installation safety representatives are consulted,
- 4) full account is taken of any conclusions and recommendations from the review,
- 5) any necessary changes to the safety case identified during the review are implemented. This may involve a revision of the case,
- 6) an accurate summary of the review is sent to HSE, within 28 days of its conclusion, and
- 7) where there is a shortfall in achievement of current standards, the safety case continues to demonstrate compliance with the relevant statutory provisions in respect of major accident risks.

The review should consider the following in relation to the basic assumptions made in the case and to its content, since the case was accepted or the last thorough review. These examples should not limit the scope of the review.

Topic	Examples
Design and operational parameters of the structure and plant, including operational	Fatigue and corrosion life of the topsides and structure

experience and projected operational status and lifetime	Measured corrosion rates, vibration cycles and structural loading parameters
Maintenance, inspection and testing experience of safety critical elements (SCEs)	Review of records for emergency shut down valve closure tests (and other SCE tests). Adequacy of test regimes
Modifications to the installation or plant (including SCEs)	Changes to the types of fire and gas detectors. The effects of changes on detectable leak sizes
Changes to, and behaviour of, SCEs	Review of escape, evacuation and rescue arrangements after access/egress routes are modified or decommissioned
History of incidents and abnormal events	Updating of task and operational risk assessments to include hazards identified from past incidents
New knowledge and understanding	Awareness of risks highlighted by industry or HSE safety alerts, for example on temporary repairs. Findings from relevant research (engineering and human sciences)
Changes in safety standards or safety methodology/assumptions	The publication of new or revised codes Review of HAZOPs, risk assessments and other techniques used to construct the original arguments for safety
Changes in management of safety and human factor aspects affecting the installation	Arrangements for ensuring competence, adequate manning levels and that adequate attention has been given to human factors.

### **Content of a thorough review summary**

The summary provides evidence that a review has been done and information to help HSE decide whether to inspect the conduct of the review, or to update its inspection plans. It should include:

- 1) confirmation that the review has been carried out, when it started and when it finished,
- 2) who led the review and who carried it out,
- 3) how the review was carried out, or a reference to an existing review procedure,
- 4) a demonstration that the review process has been both fundamental and thorough, for example by including the matters described in the table above,
- 5) how the review was independent of the present owner of the safety case,
- 6) details of consultation with safety representatives,

7) summaries of all revisions made, or intended to be made, to the safety case as a consequence of the review, and

8) action plans, with estimated completion dates, for any work shown to be necessary by the review.

### **HSE's handling of a thorough review summary**

Submission of a thorough review summary provides an opportunity for HSE to check that the dutyholder is effectively implementing their arrangements. HSE does not formally accept thorough reviews nor does it assess them. HSE will acknowledge the receipt of a summary and will then consider it<sup>4</sup>. It is likely that HSE will need an up to date copy or copies of the safety case, and the acknowledgement may request such copies.

HSE will pay attention to the safety performance of the installation, in particular to any perceived deficiencies in standards or equipment compared to current good practice. HSE may ask for more information or seek meetings with the dutyholder to discuss the review. HSE may write to the dutyholder to provide feedback on the consideration of the review, which is normally complete within three months of submission.

HSE will use the summary to review its intervention plans, aimed at establishing the dutyholder's conformity with the safety case and other relevant statutory provisions.

If the summary contains a conclusion that a revision is necessary, HSE will need an indication of the timescale in which the revision will be made. If the revision is for a material change to the current safety case, HSE will need to know the case submission date. If no revision is proposed, but HSE forms the opinion that a revision is needed, HSE may direct a revision under regulation 15 - see paragraphs 205-207 of reference 1.

### **References**

1 A guide to the Offshore Installations (Safety Case) Regulations 2005 L30 Third edition  
HSE Books 2006 ISBN 0 7176 6184 9

2 Assessment principles for offshore safety cases (APOSC)  
<http://www.hse.gov.uk/offshore/aposc190306.pdf>

3 Guidance for the topic assessment of the major accident hazard aspects of safety cases  
<http://www.hse.gov.uk/offshore/gascet/gascet.pdf>

4 Procedure for dealing with thorough review summaries  
<http://www.hse.gov.uk/offshore/scham/reviewsummaries.htm>

### **Further information**

Any queries relating to this sheet should be addressed to:

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This information sheet contains notes on good practice which are not compulsory but which you may find helpful in considering what to do.