

INDUSTRY STANDARD NR. 49

Independent SECE Verification Execution

19 October 2023

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Document Control Sheet

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3	27-06-2023	Review by Workgroup Asset Integrity	M. de Vos	Chairs of Committee Connect	

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Abbreviations

EXCOM	Executive Committee of NOGEPA
IV	Independent Verification
IV-er	Independent Verifier
IV-SECE-block	Independent Verifier SECE-block
MBW	Mijnbouwwet
MBB	Mijnbouwbesluit
MBR	Mijnbouwregeling
MEA	Ministry of Economic Affairs
NOGEPA	Currently trading under the name Element NL
ОРСОМ	Operations Committee of NOGEPA
OSD	Offshore Safety Directive
RIGG	Rapport Inzake Grote Gevaren
RoMH	Report on Major Hazards
SECE	Safety & Environmental Critical Element
SodM	State Supervision of Mines



Definitions

Good Operating Practice	The application of those methods and practices customarily used in good and prudent oil and gas field practice in the Netherlands and/or on the Dutch Continental Shelf with that degree of diligence and prudence reasonably and ordinarily exercised by experienced operators engaged in the Netherlands and/or on the Dutch Continental Shelf in a similar activity under similar circumstances and conditions.
Independent Verification	Independent Verification means an assessment and confirmation of the validity of particular Written Statements by an entity or an organisational part of the operator or the owner that is not under the control of or influenced by, the entity or the organisational part using those statements
Independent Competent Person	Independent Competent Person/ Body (ICP) is an internal or external person that assures that technical compliance of a SECE block meets legislation, international standards, industry standards and company standards.
Independent Verifier	The Independent Verifier (IV) is a person or entity performing the Independent Verification.
Independent Verifier SECE-block	IV-er SECE-block assesses and confirms Written statements of a group of SECE's and reports to the Independent Verifier about the validity of the SECE-block written statement.
Material Change	A change to the basis on which the current version of the RoMH was accepted including, inter alia, physical modifications, availability of new knowledge or technology and operational management changes.
Material Changes Wells	In the case of a notification of Well Operations, a change to the basis on which the original notification was submitted including, inter alia, physical modifications, replacement of one installation with another, availability of new knowledge or technology and operational management changes.
Non-Production Installation	An installation other than an installation used for production of oil and gas as defined in article 1.ac of the Dutch Mining Act.
Offshore Safety Directive	Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations.
Operations	Oil or gas exploration or production management.
Operator	The entity appointed by the licensee or licensing authority to conduct (offshore) oil and gas operations, including planning and executing a well operation or managing and controlling the functions of a production installation

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Production Installation	An installation used for production of oil and gas as meant in the article 1.ab of the Dutch Mining Act.	
Responsible Committee	The committee of NOGEPA that has been appointed by the EXCOM as the owner of a specific Standard.	
Performance Standard	A performance standard is a management-approved expression of the performance threshold(s), requirement(s), or expectation(s) that must be met to be appraised at a particular level of performance for a SECE or SECE-system.	
Responsible Committee	The committee of NOGEPA that has been appointed by the EXCOM as the owner of a specific Standard.	
SECE	A Safety & Environmental Critical Element as identified in the RoMH.	
SECE-block	A group of SECE's identified by an operational system.	
SIS	Safety Instrumented Systems are systems that contains control elements, sensors, and logic solvers to monitor parameters and values of processes within a plant and ensure that they remain within defined limits.	
Standard	A NOGEPA Industry Standard as approved in accordance with Standard 80.	
Suitable	Right or fully appropriate, including consideration of proportionate effort and cost, for a given requirement or situation, based on objective evidence and demonstrated by an analysis, comparison with appropriate standards or other solutions used in comparable situations by other authorities or industry;	
Verification Scheme	By Operator established scheme(s) regarding SECE verification and Well Examination.	
Well Examination	Well Examination is an independent assurance process on behalf of the Well Operator to give independent assurance that the pressure boundary of the well is controlled throughout its life and the pressure- containment equipment that forms part of the well is suitable for the anticipated well conditions at all times.	
Well Examiner	The Well Examiner is an Independent Verifier performing the Well Examination.	
Well Operations	Any operation concerning a well that could result in the accidental release of materials that has the potential to lead to a major accident, including the drilling of a well, the repair or modification of a well, the suspension of well operations and the permanent abandonment of a well.	

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Well Operator	The Well Operator is the Operator carrying the responsibility for the well, being the licencee who is appointed as operator by MEA (of the sole licencee).
Written Statement	A Written Statement is a performance report of (a group of) SECE's (SECE-block).

Legal Requirements

Offshore Safety Directive 2013/30/EU	Annex 1.5; Annex V
Dutch	MBW 45I Independent Verification
Mining Act – MBW	MBW45n.3 Notification Well Activity
(Mijnbouwwet)	
Dutch Mining Decree, Mining Regulation (Mijnbouwbesluit)	MBB 53(1a-b) technical integrity and inspection programme of production/storage installation (offshore - before first use, five yearly) MBB 54 strength and stability of installation after repair (offshore) MBB 55(7) 56(1d)(1e) technical integrity of exploration installation (mobile rig etc.) – offshore before placing it on location MBB 60 assessment of abandonment plan MBB 84e, 84f, 84g Independent Verification MBB 97, 101 quality and construction/installation of pipeline conform legal requirements – before fist use/ following repair
Dutch Mining	MBR 11a.5.1, 11a.5.2, 11a.5.3 Independent Verification
Regulation – MBR	
(Mijnbouwregeling)	

Related standards

NOGEPA Standard 04	Competency of personnel
NOGEPA Standard 42	Well Examination
NOGEPA Standard 45	Well Decommissioning
NOGEPA Standard 48	Independent Verification Management
NOGEPA Standard 83	RIGG Standard, Report on Major Hazards (RoMH)
NOGEPA Standard 86	Reporting
NOGEPA Standard 90	Asset Integrity Management

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Important Nomenclature used in this Standard

In the context of this Standard and when so used to describe a method or practice:	
'shall'	means that such method or practice reflects a mandatory provision of law (in Dutch: dwingend recht). Such method or practice is mandatory for those who are the addressees of such provision (mostly the operators). A Standard can describe or quote, but not amend, mandatory provisions. When an operator in exceptional cases cannot comply for technical, operational or HSE reasons, exceptions shall be documented and reported, and risks mitigated. Please note that this does not release the operator from the obligation to comply with the law.*
'should'	means that such method or practice reflects a Good Operating Practice. An operator is generally expected to apply such method or practice, but a specific situation may require a specific alternative. In other words: the operator complies or explains, and documents the explanation. *
'could'	means that such method or practice is of an advisory nature or mentioned by way of example. An operator is not obliged to comply and is not obliged to explain if he does not comply.
* Please refer to paragraph 2.3 of Standard 80 (Standards and Document Control), for further explanation on an exception of a 'shall' provision, or on a comply-or-explain of a 'should' provision.	



1 Executive Summary

NOGEPA Standard 49 provides further explanation to Standard 48 (Independent Verification Management) to implement a system of Independent Verification of SECE's.

This standard provides requirements and guidance to organize Independent SECE Verification and can be outlined as:

- SECE's are part of an installation with the purpose to prevent or limit consequences of Major accidents. Major (accident) Hazards are identified in the Report on Major Hazards, including corresponding SECE's.
- SECE's have to be assessed at design (material change) time and at a 5 yearly audit base for Independent Verification.
- Report and registrations of inspections and tests by Operator or service providers can be considered as verification content.
- One of the Independent Verifiers shall check if all SECE's according the RoMH are assessed for Independent Verification.
- Principle is to prevent 'double'-verification.
- Report of Independent Verification to be provided to State Supervision of Mines including remedial actions to findings.

At revision 1 the content has been adjusted to the revision of the Mining Act as per 1-1-2017, due to the implementation of the EU 2013/30/EU Offshore Safety Directive.

2 Purpose, Scope and Application

2.1 Purpose

This standard aims to provide explanation of the MBW regarding organizing and management of Independent SECE Verification.

The EU Offshore Safety Directive of January 1 2017, has been implemented in Dutch regulations.

2.2 Scope

This Standard lists the requirements and provides guidance for Independent SECE Verification of Design, Construction, Material changes, Operations, and Decommissioning in the Oil & Gasindustry for on- and offshore Production installations.

Standard 49 is part of NOGEPA Asset Integrity standards as outlined in Standard 48.

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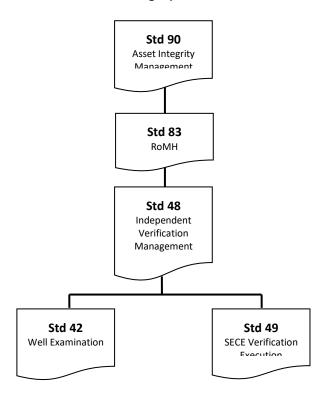
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Relation to NOGEPA Asset Integrity Standards

This Standard 48 is part of NOGEPA Asset Integrity standards as outlined below.



Standard 90 describes practical approaches to Asset Integrity Management (AIM). It provides general guidance on good practice and is geared to enable and maintain management systems that fully address these conditions.

Standard 83 is a goal setting document describing the regulatory requirements for a RoMH and provides a template to draw up a compliant RoMH document.

The RoMH provides a SECE listing for Independent verification and a demonstration of suitability including their scheme of maintenance.

Standard 48 contains principles and requirements for independency, impartiality of Independent Verification Management and provides the principles for Standard 42 and 49.

Standard 42 works out the requirements and provides guidance for Well Examination during Design, Construction, Intervention and Abandonment.

Standard 49 contains principles and requirements for independency, impartiality of Independent Verification of SECE's.

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2.3 Application

Dutch Territory including Dutch Continental Shelf.

3 SECE verification

3.1 SECE's for verification

SECE's as identified in the RoMH shall be subject to Independent Verification.

SECE identification takes place at Design, Construction, Installation, Material changes and Decommissioning phases. SECE Verification takes place at during operations.

If a Material Change results in a revision of the RoMH it shall be subject to Independent Verification.

SECE's are parts of an installation including Safety Instrumented Systems (SIS) related to Major Hazards.

SECE's can be identified at system and at tag-level.

3.2 SECE-blocks

SECE-blocks are identified by an installation section e.g.:Pressure equipment, Fire & Gas system, Helideck, Cranes etc.

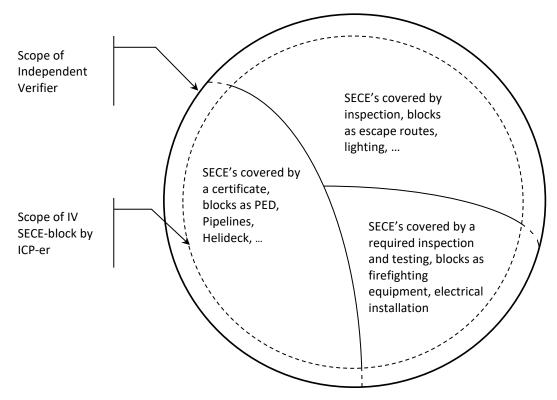
SECE-blocks shall be verified by an Independent Verifier.

A SECE-block may be verified by an ICP who's previously involvement in concerned SECE's is limited (see ST048 for details). The report of the ICP-er SECE-block has to be assured by an Independent Verifier.

Independent Verification of SECE-blocks should be registered and made transparent.



3.2.1 SECE-block principles



The dashed lines indicate the limited independency of the IV-er SECE-block.

A SECE-block is a group of SECE's distinguished in:

- 1. Covered by a certificate / verification report;
- 2. Covered by inspection and testing;
- 3. Covered by inspection.

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1. SECE's covered by a certificate / verification report

SECE's requiring legal certification / verification.

Examples are: Pressure equipment, Structures, Topsides, Pipelines, Helideck, etc.

2. SECE's covered by inspection and testing

SECE's requiring inspection and testing on a regular basis and can be conducted by competent service companies or by competent company personnel, providing Written Statements.

Examples are: Emergency Shut Down Valves, Fire & Gas systems, Solas, Electrical Installations, etc.

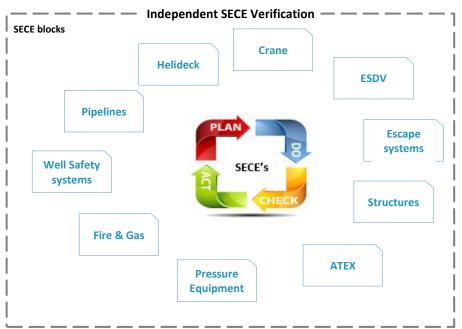
3. SECE's covered by inspection

SECE's requiring inspection on a regular basis by competent service companies or by competent company personnel, providing Written Statements.

Examples are: Firefighting equipment, Radio, Other SECE's blocks.

Principle outline

(Definition of SECE-block is indicative)



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3.3 Independent Verification

The IV shall assess the validity of Written Statements as provided by the Operator. Independent Verification may be performed by more than one Independent Verifier. Independent Verifiers shall provide a report to the Operator.

One of the Independent Verifiers shall check if SECE's according the RoMH, have been assessed and reported for Independent Verification.

The IV may decide to perform a spot-check on location in cooperation with the responsible for the Written Statement of the Operator and if applicable the IV-er SECE block. To perform the spot-check, it is important to have information about the performed verification assessment.

The Verification process consists of a 5 yearly audit based assessment performed by a representative 10% sample office records / field witness sample check for compliance to applicable Performance Standards.

3.4 SECE Verification process

- a. The Operator decides if the Independent Verification **shall** be performed by one or more Independent Verifiers and if IV-er SECE-blocks will be appointed.
- b. The Operator assesses the competence of the Independent Verifier and checks previously decision involvement of the IV in the design of a SECE.
- c. The Operator appoints one of the Independent Verifiers to check if SECE's according the RoMH have been assessed for validity of Written Statements.

3.4.1 Verification by IV

The Operator organizes according to the Verification scheme Independent Verification. The Operator provides the Written Statements and IV-SECE-blocks reports, to the IV.

The following elements are subject of verification:

- a. Familiarization of verifier to Operator organization and processes.
- b. Assessment of Verification Scheme.
- c. Assess, remedial action progress of previous SECE Verification, preparation current SECE Verification.
- d. Assessment of RoMH for Material Changes.
- e. Assessment of the validity of Written Statements and that their schedule of examination and testing are suitable and up-to-date (Compared to Performance Standard).
- f. Review assessment reports of IV-er SECE-block.
- g. Select SECE's for spot-check and performs required spot-checks.
- h. Close-out presentation findings and reporting of performances requiring improvement (instances and non-compliances).

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3.4.2 IV report

Required content of an IV report:

- a. Verification statistic information (Name Verifier, date, received information)
- b. Listing of verified SECE's / SECE-blocks.
- c. Statement if SECE's and their schedule of examination and testing as well their scheme of maintenance, are suitable and up-to-date.
- d. Performed spot-checks (including reason, and by whom) and finding details.
- e. Summary of Independent Verification and findings requiring improvement of performance (instances and non-compliances) including references to applicable Performance Standards and Written Statements.

Required content of Independent Verification reporting:

Ref. ST086 reporting findings and remedial actions. (Ref. EU 1112-2014 Section C: Failure of a Safety & Environmental Critical Element)

3.4.3 Providing IV report to SodM

Required content of Operators Independent Verification reporting to SodM:

- a. IV report, as stipulated in paragraph 3.4.2.
- b. Operators comments and explanations to Independent Verification findings (including remedial actions to instances and non-compliances).
- c. Statement that record of SECE's and their scheme of maintenance are suitable.

4 Document Management and Retention

The Operator shall maintain a file including the report of Independent Verification and the documentation regarding remedial actions for a period until at least 6 month after completion of the related Oil & Gas operations (Platform removal).



5 Competency of the Independent Verifier

The Operator should draw-up a Competence Management System (CMS) to help demonstrate competence for the scope of work. Operator shall assure the competency of the Independent Verifier as part of his CMS, recognizing that the Independent Verifier is "sufficiently knowledgeable" for the task.

A competency profile to cover the types of SECE's and operations should be drawn up in a job description or contract. Competence assessments should be carried out as part of the Independent Verification process. The competence of the Independent Verifier should be reviewed regarding:

- Experience
 - Proven minimum 7 years' professional experience in the applicable SECE block to be addressed by the IV;
 - Managerial experience.
 - Proven minimum 3 years' auditer / track record in audit skills.
- Education
 - Relevant knowledge and training for the subject to be verified
 - Knowledge of:
 - Dutch Mining legislation, including up to date knowledge, relevant to Oil & Gas operations.
 - o EU Offshore Safety Directive 2013/30/EU
 - NOGEPA standards.
- Skills
 - Auditing; Listening; Cooperation; Presentation.

The competence should cover the full life cycle of the installation from design to abandonment. Training for the Independent Verifier may be needed to ensure competence.

Different Independent Verifiers may be used for different SECE block's. Some SECE blocks may need specialist knowledge and skills. Technical competence does not need to reside with a single individual: additional Independent Verifiers or IV-er SECE block can be used to provide the full range of competencies required.

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