

Guideline reporting, investigation and review of SHE incidents

Public Information

Version 1.1

Index of changes and releases

Date	Changes	Version	Author	Authorised by
02-04-2015	Guideline CSS13-071 <i>Investigations of incidents regarding SHE</i> is fully integrated into this guideline and is therefore withdrawn.	1.0	F. Geijlvoet (SSC)	R. Marchal (SSC), after consultation with COO
16-11-2015	Scope set to segments instead of legal entities. In addition to FAT, LWC and HRI: MTC and RWC must also be investigated. LSR violations are no longer HRI but as a separate category. Fixed template for investigation report is abandoned. Basis for investigation report is iTask.	1.1	F. Geijlvoet (SSC)	R. Marchal (SSC)

Information protection classification

A1, I1, C1: Public Information

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1. Introduction

1.1 Goal

In this guideline you will find the TenneT requirements on incident reporting, incident investigation and review of incident investigations. With it, we offer a framework for you to develop and align your work processes on these matters. Our goal of this guideline is to set companywide standards, harmonization and quality assurance. We think that incident reporting, investigation and review of incident investigations are important factors to realize our safety goal of 'zero harm'. Learning from incidents is an important element in this development.

1.2 Scope

This guideline applies to the following segments:

- TTN TenneT Onshore NL
- TTG TenneT Onshore GE
- TOG TenneT Offshore & DCI

In this guideline the above entities are collectively referred to as "TenneT".

This guideline also applies to the joint ventures of TenneT whenever TenneT:

- is the operator; or
- has majority or controlling interest and has an officer assigned as the senior managing director of the joint venture operation.

The guideline applies to all contractors of TenneT. The guideline is to be implemented by way of contracts, general terms and conditions, supplier qualification terms etc.

1.3 Main changes compared to the previous version

- For alignment with present practice, this guideline refers to segments instead of legal entities in s.
- Two categories are added to the incident classifications that must be investigated: medical treatment case (MTC) and restricted work case (RWC).
- A violation of a life-saving rule (LSR) is no longer classified as a high risk incident. LSR are investigated but in a different manner.
- It is no longer mandatory to provide a separate investigation report other than the entry in iTask, as this leads to double work. When the option of a separate investigation report is preferred, the investigation report template (in Word) should be used in addition to the iTask entry.
- The abbreviation for the department of Corporate Safety and Security was changed from CSS to SSC to align with company standards.

- A copy of the investigation report will no longer have to be sent to SCC and AUD as both departments have access to the incident registration system.

1.4 Relation with other TenneT guidelines

- Guideline CSS13-014 *Definitions and classification of SHE incidents*. The present guidelines uses this guideline as a frame of reference, mostly for definitions relating to incidents.
- Process description CSS14-037 *Incident Investigation*. In this document, the process of incident investigation is described in detail.
- Factsheet CSS15-005 *Investigation Index*. The factsheet describes how the SHE performance indicator on incident investigation is calculated.
- Guideline CSS 15-010 *Information protection*. This guideline is relevant as it contains TenneT rules on confidentiality that apply to the investigation report (and other related documents).

1.5 Relation with legislation

Wherever this document in conflict with national, European or international maritime legislation, the latter prevail. In all other cases, the guideline is to be followed.

1.6 Responsibilities

This guideline has the following layering regarding responsibilities:

- Operational management is responsible for the implementation and execution of this guideline
- Corporate Safety and Security (SSC) is responsible for keeping the guideline up-to-date and for checking the measures of operational management on compliance, reviewing the effectiveness and reporting the findings to the board. SSC supports the business with the implementation and if needed the execution of this guideline
- Corporate Audit (AUD) checks whether the above processes have been implemented and are executed conformably.

2. Incident reporting

2.1 Which incidents to report, when and how.

With TenneT, all Safety, Health and Environment (SHE) incidents and potential SHE incidents must be reported. A SHE incident is 'an unplanned event or chains of events that has, or could have resulted in injury or damage to the environment' (see Annex A for further guidance). If SHE incidents are not reported, no further actions can be taken. A SHE incident has to be reported as soon as possible after its occurrence (≤ 24 hours after its occurrence at the very latest). All incidents, including incidents of contractors and third parties have to be reported accordingly.

2.2 Responsibilities regarding the reporting of incidents

All TenneT employees have the responsibility to:

- report all (potential) SHE incidents they have knowledge of as soon as possible after their occurrence (≤ 24 hours at the very latest) in the designated reporting system.
- to provide a complete and reliable report. This includes giving all required information and providing documents, pictures, sketches etc. where relevant. In the Netherlands, the incident reporting system (currently named iTask) guides the employee through all relevant questions. In Germany, the SHE expert will ask all relevant questions.

Senior managers are responsible for their subordinates and their contractors reporting incidents (including the quality of these reports). Next, they are responsible for the formal end classification of the incident following the guideline *Definitions and classification of SHE incidents*. The aim of the classification is to label the incidents as a Fatality, Lost Workday Case, Restricted Work Case, Medical Treatment Case, First Aid Case, Near Miss, Environmental Incident or High Risk Incident.

3. Investigation of SHE incidents

3.1 Which SHE incidents must be investigated

Incidents of the following categories must be investigated:

- Fatality (FAT)
- Lost workday case (LWC)
- Restricted work case (RWC)
- Medical treatment case (MTC)
- High risk incident (HRI)

Investigation of incidents belonging to any of the categories below is optional:

- First aid case (FAC)
- Near miss (NM)
- Environmental incident (EI)

3.2 Roles and responsibilities for incident investigation

Senior manager

The senior manager under whose span of control the victim resides is responsible for the incident investigation. In the case of incidents without a victim (e.g. an environmental incident or a near miss), the senior manager who bears ultimate responsibility for the work that was carried out is responsible for the investigation.

More specifically, the responsibility includes:

- to investigate every incident with mandatory investigation (see 3.1).
- to investigate SHE incidents without mandatory investigation whenever he (she) sees reason to do so. The SHE expert advises him (her) on this matter.
- to appoint an investigation leader¹.
- to provide necessary resources to the investigation team (manpower, time, and budget).
- to enable the investigation team access to information, persons and locations.
- to control the investigation process, including timely completion of the investigation (≤ 14 workdays after the incident occurred)².

¹ The investigation leader is not a SHE expert but someone of the line organization. In the Netherlands, SHE experts may be part of the team. In Germany, the team must include a SHE expert (legal obligation).

² Circumstances may require this period to be extended.

- to ensure that the investigation (report) meets the quality requirements as set in this guideline.
- to translate the investigation team's recommendations into specific measures, controlling the implementation of these measures and evaluating their effect
- to put the investigation report on the agenda of the MT for review (see chapter 4).

Incidents occurring during activities controlled by contractors should be investigated by the contractor, supported where necessary by TenneT's SHE and other specialist advisers. The incident investigation report submitted by the contractor should be reviewed and agreed upon by appropriate line management of TenneT. Despite the above, TenneT, based on the judgement of responsible management, can perform its own investigation into an incident as a result of the client responsibility that TenneT has.

Investigation leader

The investigation leader is responsible for:

- assembling the investigation team.
- carrying out the investigation according to the process description *Incident Investigation*.
- the timely completing the investigation (≤ 14 workdays after the incident occurred)³.

Investigation team members

Members of the investigation team are responsible for:

- cooperating with the other team members and carrying out instructions of the investigation leader
- carrying out the investigation according to the process description *Incident Investigation*.
- the timely completing the investigation (≤ 14 workdays).

3.3 When to investigate

Employees must report incidents in the designated reporting system as soon as possible after their occurrence (≤ 24 hours at the very latest). Also, the senior manager must appoint an investigation leader as soon as possible after the incident occurred (≤ 24 hours at the very latest).

3.4 How to investigate

The incident investigation must be started as soon as an investigation leader has been appointed. The investigation includes the following activities:

- Establishing the facts.
- Establishing the root causes (root cause analysis).

³ Circumstances may require this period to be extended. The investigation leader will inform the senior manager in case an extension is required.

- Preparing recommendations.
- Completing the report in iTask.
- Finishing the investigation within 14 workdays from the day of the incident.

The investigation leader chooses the investigation method. It is important that the method focuses on root causes and action→consequence relations and is proportional to the complexity and (potential) effects of the incident. Methods like AcciMap, MTO-analysis, SOAT, TRIPOD, STAMP, etc. may be considered. The default method used in TenneT is the 5W method. A detailed description of the investigation process can be found in the Process description CSS14-037 *Incident Investigation*.

3.5 Final product of the investigation: the report

All incident investigations must result in a comprehensive investigation report in iTask. When it is foreseeable that information related to the incident is to be made available to third parties (e.g. Labour Inspectorate, Berufsgenossenschaft, National Safety Board, lawyers, etc.), the investigation leader must consult Legal Affairs (LA) before doing so. Request for copies of incident investigation reports – whether internal or external - should be considered individually in accordance to the guideline *Information protection*.

3.6 Confidentiality

Investigators will use all information confidentially. The guideline *Information protection* applies to all documentation that is written in course of the investigation process, including the final report.

4. Incident review

4.1 Introduction

Incident investigations are to be reviewed systematically. TenneT has implemented an incident review system (IRS) consisting of four different levels. The aim of the IRS is to check the quality of the investigations, the translation and implementation of the recommendations and to expand the learning curve from the level of individual incidents to the entire organization. An important aspect in the prevention of accidents is learning from previous incidents. The IRS identifies areas of poor and good practice, risks and lessons learnt with the aim to improve the safety management and culture.

4.2 Which incidents have to be reviewed

All incidents that have to be investigated are to be reviewed. The list includes: fatalities (FAT), lost workday cases (RWC), restricted work cases (RWC), medical treatment cases (MTC) and high risk incidents (HRI).

4.3 Structure of the IRS

The incident review system consists of four levels.

First level IRS

The first level of review is by the senior manager who is responsible for the incident investigation.

Participants of the 1st level IRS are:

- senior manager(s) responsible for the investigation;
- investigation leader.

Responsibilities of the 1st level IRS are to ensure that all relevant incidents are investigated and to review the quality of the investigation by assessing the corrective actions. Also, to adapt the relevant risk assessment in agreement with the relevant safety expert accordingly and to document the incident and results of the investigation in the iTask system.

Second level IRS

The second level of review is during the MT meetings (MTM) of TenneT TSO B.V., TenneT TSO GmbH or TenneT Offshore. Every MT reviews all investigated SHE incidents that occurred under its scope of control.

Participants of the 2nd level IRS are:

- MT members;

- the senior manager(s) responsible for the investigation(s).

The MTs make a selection of incident investigations to be discussed in the IRB (see next paragraph). Criteria for the selection may be: seriousness and complexity of the incident, impact on TenneT's company values, scope and complexity of the recommendations, lessons to be learnt on corporate level, etc. The selected incident investigations to be discussed in the IRB must be handed to the secretary of the IRB, viz. SSC.

Responsibilities of the 2nd level IRS are to review all investigations, examine the root causes, consider relevance of recommendations and to add recommendations if needed. Also, to make suggestions how lessons learned can be proactively shared within the organisation and to send proposals of relevant incident investigations and findings for IRB and IRB-C to SSC.

Third level IRS (Incident Review Board, IRB)

Incidents proposed by the MT (see previous paragraph) or proposed by SSC are reviewed in the IRB.

Participants of the IRB are:

- chairman of the executive board;
- 2nd executive board member;
- senior manager(s) responsible for the investigation(s);
- secretary (SSC).

Responsibilities of the IRB are to review incident investigations and give recommendations on corporate and strategic level to further improve the safety culture at TenneT.

Fourth level IRS (Incident Review Board with contractor, IRB-C)

Incidents proposed by the MT or proposed by SSC concerning a contractor are reviewed in the IRB-C.

Participants of the IRB-C are:

- chairman of the executive board;
- CEO of the contractor;
- responsible senior manager of TenneT;
- responsible senior manager of the contractor (or equivalent, e.g. relevant overall project manager);
- secretary (SSC).

Responsibilities of the IRB-C are the same as for the IRB.

In the diagram below, all four levels of the IRS and the interrelations are shown.

Level of the IRS



4.4 Elements of the review

When reviewing an incident investigation (report), both the process and the findings and recommendations shall be reviewed. Annex B contains a sheet with topics for evaluation and a frame of reference for each of these topics.

Annex A Definition of incidents

Introduction

This annex gives basic definitions of the most relevant terms (SHE incident, potential SHE incident and high risk incident) as these form the basis of this guideline. A full overview of incident related definitions is given in the guideline *Definitions and classification of SHE incidents*.

SHE incident

In the guideline *Definitions and classification of SHE incidents*, a SHE incident is defined as "an unplanned or uncontrolled event or chain of events that has – or could have - resulted in at least one fatality, injury or illness, or physical or environmental damage". When the incident results in injury or damage to the environment, the incident may be classified as a (e.g.) fatality, lost workday case or first aid case (see guideline *Definitions and classification of SHE incidents* for further guidance). When the incident did not lead to injury or damage to the environment, it is commonly called a near miss.

Potential SHE incident

The guideline *Definitions and classification of SHE incidents* also distinguishes potential incidents, being "an unsafe practice or hazardous situation that may cause an incident". Mark that the 'unplanned or uncontrolled event or chain of events' did not occur and that no injury or damage to the environment was caused. Examples of potential incidents are: an icy office entrance (hazardous situation), working without a work permit when its use prescribed (violation of safety regulation), not wearing a safety helmet on a construction site (violation of safety regulation), drinking and driving (violation of life-saving rule).

High risk incident

In many cases, an incident could have resulted in a slightly different outcome; a twisted ankle instead of a bruise. A (potential) incident that could, in other circumstances, have realistically resulted in one or more fatalities is classified as a high risk incident. In addition, an environmental incident which, in other circumstances, could have realistically resulted in very serious environmental damage is also counted as a high risk incident.

Annex B Reference guide for SHE incident review

This annex offers guidance for those involved in the review of incident investigation. The topics mentioned in this reference sheet can be discussed during a review of an incident investigation. The document offers a frame of reference to evaluate the quality of the investigation. For easy use, the criteria are presented in the form of a table. This reference document is based on the present guideline reporting, investigation and review of SHE incidents and the Process description incident investigation (CSS14-037).

Nr	Topic	Description
	Report format	TenneT format agreed upon by SHE teams. Contractors may use their own format as long as contents are comparable with TenneT format.
	Contents of the report	Report must contain: <ul style="list-style-type: none"> - name of investigation leader; - overview of facts; - timeline (sequence of events); - results of the root cause analysis; - recommendations
	Timeliness of the investigation	Report must be delivered within 14 workdays after the incident. If longer: what caused the deviation of the standard process time?
	Analysis method	Method must identify root causes. Choice of method is free but must be proportional to the incident. Serious incident -> comprehensive method (e.g. Tripod); simple incident -> simple method (e.g. 5-Why)
	Investigation team	The team must consist of a minimum of two persons. A team leader must be appointed. The team members: line experts. SHE expert may be involved in NL and must be involved in GER.
	Direct causes	Could any of the direct causes have been foreseen? Why did any of the direct factors that caused the incident exist? Were any of these factors 'business as usual'?
	Root causes	Did the analysis establish root causes? Is the trail of deduction to each root cause logical? Is every step in the analysis based on factual information?
	Recommendations	Does the report contain specific recommendations? Are the recommendations based on the findings of the analysis? Do the recommendations address direct causes and root causes alike?
	Actions	Are the recommendations translated into SMART actions? Which actions will be taken and when? Who is responsible to take these actions? Who will monitor the progress and to whom will this person report?
	Communication	How are the lessons learnt communicated to a broader public?