



Safety Culture Ladder Manual

Working Safely Together

Version: 3.1
Date: 15 February 2017



SAFETY CULTURE LADDER

NEN

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Introduction

The Safety Culture Ladder Manual is the framework document for Safety Culture Ladder certification. It includes all the required formal information on the certification processes. The framework provides clarification and objectives, methods, requirements and definitions.

From Step 2, a definition is provided of what a company must comply with (the requirement), what the accompanying criteria are (the standard), how these criteria are valued (the scores) and what the independent auditors should pay attention to (the auditor guideline). Step 2 is also the minimum step for a ladder audit. If following an audit, a company does not achieve Step 2, it will 'automatically' receive Step 1.

A Safety Culture Ladder audit is always performed by 2 auditors in order to ensure a well-balanced and objective opinion. These 2 auditors need not necessarily be from the same certification authority.

The Safety Culture Ladder is owned and managed by NEN. The Manual and the Certification Scheme are published on the website www.safetycultureladder.org and can be downloaded free of charge.

List of Changes

All changes that are made between Safety Culture Ladder Manual version 3.0 and Safety Culture Ladder Manual version 3.1 are mentioned in the overview below.

Page	Change
27	The minimum man-days of the experience audit has decreased from 2 to 1,5 man-days per auditor.

Preface

Almost daily the media reports incidents in which workers are injured in the course of their duties. Sometimes it's about minor incidents, sometimes it's about accidents with serious injuries or even fatalities. The responsibility lies with all parties involved, both employers and employees. There are systems, structures, rules and regulations in place to avoid accidents, but that alone is not sufficient to prevent unsafe situations.

A key factor is awareness at all levels of the organization's own contribution to safety. This has everything to do with attitude, behaviour and culture. Has there been created a setting in which people dare to express themselves if there is an unsafe situation? Is safety often talked about and are employees being heard on safety issues?

In recent years, ProRail has developed the safety culture ladder and expanded it widely into the rail market. Since then the safety culture ladder is widely accepted and has made a major contribution to the safety consciousness within the entire rail industry. It's a huge success because this system is based especially on attitude, behaviour and culture, and furthermore, includes the entire chain of stakeholders, rather than only individual organizations. To roll out this system even further into other sectors in the Netherlands, ProRail asked NEN to become the scheme owner and to take over the scheme management of this safety culture system.

This transition has laid out the groundwork to bring the system under consideration in other sectors, therefore those sectors can also improve their safety awareness. The safety culture ladder provides sufficient basis for companies to improve safety in their own businesses as well as in the entire chain. This can be achieved through tendering and procurement processes or in other ways.

Working safely and healthy is a responsibility we share together!

Johan van den Elzen
Chairman Board of Stakeholders Safety Culture Ladder

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1 Introduction

Exceptional requirements made of building work in the 21st century. Work is carried out at a fast pace, often under very complex circumstances. Also, the labour market is subject to change. The traditional structure consisting of a long-term relationship with a single employer is being phased out. Also, building companies are becoming increasingly dependent on foreign employees to provide the necessary expertise. All these changes impact on current working processes. Rising work pressure may, however, never be at the expense of safety.

Together with rail contractors, engineering firms, consultancies and the scientific community, ProRail has developed a Safety Culture Ladder to stimulate safety awareness and safe working practices. Efforts made in this area will be objectively measured and positively valued. Ultimately, the objective is to reduce the number of unsafe situations and incidents (absenteeism, damage).

Use of the Safety Culture Ladder has a broader function, however. It offers a framework for safe working to all parties active in the various sectors, whereby no distinction is made between clients, contractors or suppliers. Safety is something we achieve together, throughout the chain.

The Safety Culture Ladder has been developed in such a manner that the core concept can be generically applied. Additionally, the Safety Culture Ladder offers plenty of room for 'customisation' per sector by interpreting requirements and criteria in a manner appropriate to the specific industry or type of company.

In 2016, ProRail has transferred the ownership and management of the Safety Culture Ladder to NEN (Netherlands Standardisation Institute).

2 Relationship with safety management systems

OHSAS 18001/ISO 45001

OHSAS stands for Occupational Health and Safety Assessment Series and is a standard for an Occupational Health & Safety management system. A company can use this system to ensure and prove that the working conditions are properly regulated. It is based on the inventoried and evaluated risks and the applicable rules and agreements. The continuous improvement of working conditions also forms part of the requirements, including the ability of the organisation to learn from experiences (incidents and established deviations). It serves as a standard for all organisations seeking to ensure that they comply with laws and regulations, and striving to systematically improve their working conditions based on proactive risk analyses. At the international level OHSAS 18001 is being converted into a widely accepted ISO standard (ISO 45001).

VCA

The VCA is a health, safety and environment checklist, with which contractors can be tested in terms of their policy and performance. The VCA is thus focused on the health and safety of employees and intended not only to show compliance with the Occupational Health and Safety Act (*Arbowet*), but is primarily a programme aimed at reducing the number of accidents and improving safety. Contractors have comparable standards with the VCU (Health and Safety Checklist Temp Organisations) and the VCO (Health, Safety and Environment Checklist for Contractors). The essence of the VCU is to control the health and safety of temp workers in cooperation with the host organisation(s). The VCO is intended for contractors that wish to create the necessary conditions so that parties who perform high-risk activities on their behalf or on their site can realise optimal HSE (Health, Safety & Environment) performance. The VCO sets requirements and defines the leadership that the client must provide under these circumstances. Point of departure is that the instructing party has an HSE management system that at least meets the VCA requirements.

The aforementioned standards apply to all types of organisations, whether profit, non-profit, or in the service or industrial sector. Both large and smaller companies. All the standards are aimed at controlling and continuous improvement of Occupational Health, Safety and Environmental (OHS&E) management systems.

It has in recent years become ever clearer that besides the availability of appropriate resources and systems, it is the human factor that plays a prominent role, especially when it comes to working safely in practice. Attention has therefore shifted to the 'soft' side of the OHS&E management system, such as implicit safe and healthy working practices.

The Safety Culture Ladder is not a (new) standard for assessing an H&S management system, but instead a standard for objectively measuring the health & safety attitude and behaviour in a company. The purpose of the Safety Culture Ladder is to contribute to H&S awareness in companies and thereby stimulate safe and healthy working practices and realise improvements in this area. As a

result, the Safety Culture Ladder operates supplementary to 'system standards' such as ISO, OHSAS and VCA/VCU/VCO, as well as current rules, regulations and sector guidelines.

3 Terms and abbreviations

Ladder Certification Authority

A Ladder Certification Authority or LCA is a Certification Authority that has been recognised by NEN to perform, as an independent third party, a ladder audit and consequently issue a Safety Awareness Certificate. In order to perform a ladder audit, an LCA and its auditors must comply with a number of conditions (see Chapter 5.1).

Company

The company under certification. The highest legal entity under certification is regarded as the establishment; the accompanying or underlying legal entities are regarded as branches.

Board/Director

Highest level of management within the company.

Management/Manager

All managers in the operational line (study, preparation and performance). From Board (members) to first-line manager(s).

First-line management/First-line manager

Direct superiors of employees.

Employees

All persons with a position in the company. Both persons in salaried employment of the company as well as hired self-employed persons, temp workers and other loan personnel of the company.

Project

A number of related activities that (on the instructions of the client) are performed by the client on-site or in the own work environment. This includes, for example: the performance of a task, the making of a design, the supervision of a work, etc.

Client

The party for whom work is carried out, i.e., the party granting the instruction to the company.

Contractor

The party performing work on the instructions of the company (subcontractor, supplier, service provider).

Subsidiary contractor

The party who on the instructions of the client performs activities in the proximity of the work by the company, which activities impact on the work by the company.

Stakeholders

Parties with an interest such as employees, parent company, clients, commissioning authorities, contractors, subsidiary contractors, surrounding residents, political/administrative community.

Emergency services

Emergency services such as the fire brigade, police, ambulance, ANWB emergency doctor (helicopter), Environmental Service (Environmental disaster response firm/organisation), Labour Inspectorate, Emergency Response Team (ERT), etc.

Sector

The entire complex comprising the company, commissioning authorities, clients, secondary contractors, workforce hiring companies and sector organisations.

H&S¹

The health and safety of all persons at or in the proximity of the work environment.

Work environment

Location where employees perform work.

Safety culture

The complex of common values, standards, competences and accompanying behaviour in the area of health and safety.

H&S behaviour

Intentional and unintentional behaviour and actions aimed at the healthy and safe performance of work, with attention to people, materials, resources, methods, workplace and environment.

Campaign

A complex of systematic communication actions aimed at achieving the desired H&S behaviour. A campaign involves the deployment of multiple actions and resources in order to reinforce the message. The action resources include: management presentation, video, poster, booklet, an article in the company magazine, a detailed presentation for an H&S consultation, a training. It is important that the resources and message are aligned to the target group.

H&S meeting

An organised and structured periodic gathering of managers and employees, for a longer or shorter period, in order to inform one another about and confront one another with safe working practices and to motivate one another to observe these. Examples are H&S personnel meetings, H&S consultations, client-supplier days, training days, etc.).

¹ Abbreviation for Health & Safety.

H&S consultation

A safety discussion to raise H&S awareness (e.g., toolbox presentations, work consultations, lunch lectures or brief H&S reviews).

H&S observation rounds

A tour of the work environment, primarily aimed at observing the actions and behaviour of the employees in the area of health and safety. An important element of observation rounds is confronting employees with, and entering into a discussion on, desired H&S behaviour.

H&S work environment inspection

Inspection round both at the office (own and seconded) and on-site, primarily focusing on the health and safety of the physical work environment (barriers/access security, equipment/service vehicles, tools, technical facilities and suchlike).

H&S behavioural audit

Systematic assessment of the level of safety awareness and safe working practices in the company.

Incident

A collective term comprising all types of undesirable occurrences, situations, actions and/or behaviour in the area of health and safety. Safety concerns integral safety and thus comprises more than physical safety alone. It also includes social safety, external safety, etc.

Risk analysis

Written inventory and evaluation of H&S risks for employees and other persons in the work environment. The risk analysis comprises a description of the hazards, risks, seriousness and the applicable risk-limiting measures (including those concerning attitude and behaviour).

Process disruption

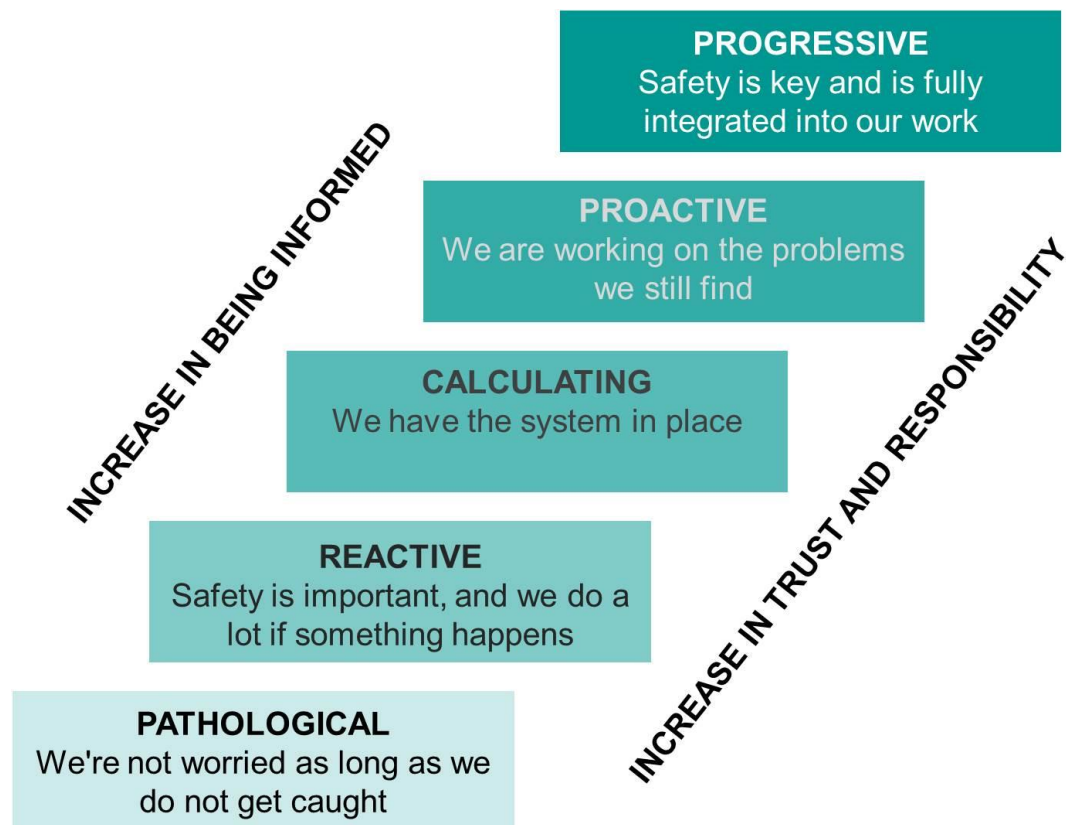
A disruption of the progress of the work and the related processes by stakeholders as a result of unsafe behaviour and/or actions, leading to significant loss (of image) for the company and its stakeholders.

4 The Safety Culture Ladder

4.1 What is the ladder

The Safety Culture Ladder is based on the safety culture ladder according to the model of Parker et al² (Figure 1), which is an evolutionary ladder consisting of five levels. The model assumes that the safety culture of a company has reached a certain level of maturity. The model distinguishes between five culture levels. Each culture level reflects the development phase of the company in terms of safety.

<Figure 1>



Like the model of Parker et al, the Safety Culture Ladder also consists of 5 levels, called steps, ranging from 1 to 5. A definition is provided per step of what a company must comply with (the requirement), what the accompanying criteria are (the standard), how these criteria are valued (the scores) and what the independent auditors should pay attention to (the auditor guideline). These originate from 6 perspectives or company aspects, subdivided into 18 company characteristics, each with an own weighting factor. The position of a company on the Safety Culture

² Parker, D., M. Lawrie, and P.T.W. Hudson. 2006. A framework for understanding the development of organisational safety culture.

Ladder is determined by the highest step at which the company still meets the requirements.

4.2 How does the ladder work

The Safety Culture Ladder provides a concrete elaboration of the ambition to creating clear and accessible instruments for the advancing of quality aspects in the purchasing of works, services and supplies. It can be, for example, take the form of a minimum requirement or award criterion in tendering procedures. Point of departure is that efforts made to raise safety awareness to a higher step are rewarded. How the Safety Culture Ladder is exactly applied in tendering procedures is stated in the client's tender documents.

4.3 For whom is the ladder intended

The Safety Culture Ladder has been developed for all types of organisations, whether profit, non-profit, or in the service or industrial sector. It is applicable to both large and smaller companies.

In order to raise safety awareness at the workplace, all chain parties (clients-contractors-suppliers) will have to take steps on the Safety Culture Ladder in order to achieve the maximum effect. This means that all parties will have to undergo testing against the Safety Culture Ladder as part of the chain.

4.4 How are company differences handled

The Safety Culture Ladder has been designed to make it applicable to all kinds of companies. Additionally, it offers plenty of room for 'customisation' per industry by interpreting requirements and criteria in a manner appropriate to the specific sector or type of company.

Thanks to generic nature of the Safety Culture Ladder, all types of companies can recognise themselves in the description of requirements, criteria and guidelines. It is emphatically not the intention to create various (company specific) versions of the Safety Culture Ladder, but instead to use the existing version.

4.5 How does assessment take place

When using the Safety Culture Ladder, how the company scores is assessed per step. Use is thereby made of 18 company characteristics resulting in 6 company aspects. Every company aspect (and thus also every company characteristic) has its own weighting. That weighting is translated into the maximum number of points that can be scored per criterion. The score per criterion is based on the certification scheme of the Safety Culture Ladder. This score per criterion then results in a score per company aspect (Table 2). Based on the total assessment, the company is certified for a specific step on the ladder.

< Table 2 >

Company aspect	Step 2		Step 3		Step 4		Step 5	
	Max	Min	Cumulatively	Min	Cumulatively	Min	Cumulatively	Min
1	800	70 %	2450	70 %	3800	75 %	4800	75 %
2	200	70 %	600	70 %	1200	75 %	1800	75 %
3	550	70 %	1500	70 %	2500	75 %	3450	75 %
4	400	70 %	1300	70 %	2500	75 %	3200	75 %
5	750	70 %	1650	70 %	3000	75 %	3950	75 %
6	150	70 %	350	70 %	550	75 %	800	75 %
Total	2850	75 %	7850	80 %	13550	80 %	18000	85 %

4.6 Who determines the height of the step

Independent certification bodies use audits to determine how companies score in terms of safety behaviour. In this process, they use the certification scheme of the Safety Culture Ladder consisting of the aforementioned requirements and accompanying criteria. Assessment takes place on a step-by-step basis. A company meets the requirements of a certain step if (1) it complies with the minimum requirements per company aspect of the relevant step and those of the lower steps and (2) the sum of the weighted scores of all company aspects of the steps satisfy the minimum requirement prescribed for that step. A progressive approach applies to both the minimum requirement per company aspect and the average per step (Table 3).

< Table 3 >

Subject	Explanation
Per criterion (100 points per criterion)	<ul style="list-style-type: none"> • Yes/No [0-100] • Completely [100], Largely [80], Partly [40], Not [0]
Amount of criteria/points	<ul style="list-style-type: none"> • Step 2: 29/2850 • Step 3: 46/5000 [75/7850] • Step 4: 55/5700 [130/13550] • Step 5: 44/4450 [174/18000]
Per step (of the ladder); according to the progressive approach	<ul style="list-style-type: none"> • Step 2: min. av. [75]; min. per company aspect [70] • Step 3: min. av. [80]; min. per company aspect [70]

	<ul style="list-style-type: none"> • Step 4: min. av. [80]; min. per company aspect [75] • Step 5: min. av. [85]; min. per company aspect [75]
Weighting per company aspect	Emphasis on leadership and commitment, deviations and communication

Assessments carried out within the context of the Safety Culture Ladder are not strictly audits of the management system of the relevant organisation. Not the having (the what), but the how and why is determinative in the Safety Culture Ladder. The ladder audit determines the degree in which the organisation has adopted safety awareness and to what level employees in all ranks of the organisation are involved in safe working practices.

4.7 How does the certification proceed

The company that wishes to undergo assessment will familiarise itself with all current and formal information regarding the application of the Safety Culture Ladder. This is available in the up-to-date manual and other documents that are available on the www.safetycultureladder.org. Based on current information, the company then performs a self-assessment using the certification scheme of the Safety Culture Ladder. A Ladder Certification Authority (LCA) tests and verifies the report submitted by the company by means of various interviews and observations in the company and during on-site work visits. The LCA establishes the achieved safety step and, if the minimum requirements are met, issues the corresponding Safety Awareness Certificate.

4.8 When did the ladder come into effect

A selective start was made with the Safety Culture Ladder on 1 July 2012. It was first applied to railway contractors recognised by NEN. The ladder has gradually also been extended to other parties. With the publication of the new certification scheme, version 3.0 on 15 July 2015, the Safety Culture Ladder is now available to companies from all sectors and clients other than NEN.

Companies can as of 1 July 2016 be certified according to the certification scheme, Version 4.0. There are no technical changes compared to version 3.0. This then relates to new initial audits; moving up a step is regarded as a new initial audit. Follow-up audits of existing certificates can until the end of the term of the certificate be carried out on the basis of the former certification scheme, Version 2.0 or Version 3.0 and accompanying documents.

4.9 Validity of Safety Culture Ladder

Application of the Safety Culture Ladder is subject to constant change. The most up-to-date information can be found in the latest version of the Safety Culture Ladder manual published on www.safetymcultureladder.org. A new updated version of the manual with revised criteria, scores and/or auditor guidelines may be published at any time. New versions of the manual will in case of changes provide for an appropriate transitional period, if necessary. NEN tries to limit the frequency of updates to no more than once per quarter of a year, unless earlier updating is urgently required. All parties assume own responsibility to be familiar with the latest version. NEN reserves the right to cease the publication and application of the Safety Culture Ladder.

4.10 Description of ladder steps

The Safety Culture Ladder distinguishes between 5 steps. The safety steps reflect the development phase in which a company finds itself in terms of safety awareness

Step 1.

The company's attitude is: 'we have no mishaps, we deliver good quality, so why should we waste time on preventive activities' and 'what you don't know won't harm you'. The company makes little to no investment in improving safety behaviour. This is not the desired attitude and will therefore not be rewarded.

Step 2.

The company tends to make changes after things have gone wrong. The response is based on deeply ingrained patterns. Employees are inclined to feel themselves the victim of a situation, rather than personally responsible. 'But that is not my fault?' Change behaviour is often ad hoc and short lasting. This behaviour is moderately valued.

Step 3.

The company has determined which safety rules are important. It adopts a vulnerable approach, assumes responsibility, but is often driven by self-interest. 'What's in it for me?' Involvement in safety and compliance with rules and laws is mainly the task of (senior) management. Attention is given to health and safety, which is valued.

Step 4.

Safety has a high priority, is deeply ingrained in the company's operations. Continuous investments are made in raising safety awareness and employees are encouraged to confront one another with unsafe behaviour. Improvements are structurally implemented and evaluated. The approach is characterised by proactivity and initiative. Safety awareness is regarded as an own responsibility: 'how can I contribute?'. This form of behaviour is highly valued.

Step 5.

Safety is fully integrated in the operational processes. It is a fixed item on the agenda during reflection and evaluation within the own organisation and with sector parties. Safety is ingrained in the thinking and behaviour of all employees; it is part and parcel of their work. This is very highly valued.

4.11 Description of company aspects

The requirements and criteria that a company must comply with originate from 6 perspectives or company aspects. Each company aspect is further subdivided into a number of company characteristics. A brief explanation of each company aspect and a summary of relevant characteristics are provided below.

1. Leadership and involvement

How important is safety? Who or which body is responsible for (un)safe working? Do clear rules exist and are these complied with? Does the management stimulate and reward good behaviour? Does the management set a good example? What form does the communication on incidents take? Do managers and employees confront one another in a positive manner with undesired behaviour?

(Company characteristics: management interest, employee involvement, performance rewards).

2. Policy and strategy

Is safety high on the strategic agenda? What is the vision? Is safety fully integrated in the management cycle. Are regular awareness actions planned? To what degree is investment in safety behaviour regarded as a profit-enhancing factor?

(Company characteristics: causes of accidents, profitability and continuity).

3. Organisation and contractors

Are contractors selected on the basis of their safety behaviour and performance? Is attention given to safety in the contracting of subcontractors? How are new employees selected and instructed? Is safety awareness included in the competence profiles. Are employees motivated to pursue further schooling/training? Do safety issues play a role here? Do safety officials have a high level of expertise and competency? Can a safety official directly approach the company director?

(Company characteristics: contractors, competency and training, H&S department).

4. **Workplace and procedures**

How high is the risk awareness and what is done to optimise safety awareness at the workplace? Are rules and protocols applied? Are these tailored to the specific users? Are the improvement agreements resulting from a study always implemented?

(Company characteristics: work planning, workplace safety, procedures).

5. **Deviations and communication**

How is the reporting culture and what is done with the reports? Is the workplace regularly inspected? Are lessons learned from incidents? Are changes prompted by incidents implemented and evaluated in practice? Does sufficient communication and evaluation take place?

(Company characteristics: report, study and follow-up of incidents, daily control, meetings).

6. **Audits and statistics**

Are specific audits held of safety behaviour? Does the company use statistics for improvement?

(Company characteristics: audits and reviews, trends and statistics).

5 Certification audit

A Safety Culture Ladder audit is carried out in accordance with the NEN-EN-ISO/IEC 17021, which is supplemented by the regulations below.

5.1 Authorised Ladder Certification Authorities

An LCA is authorised to perform a ladder certification if the LCA has been accredited by the Dutch Accreditation Council or by a member of the IAF in accordance with the NEN-EN-ISO/IEC 17021 standard.

What's more, the additional conditions below apply to all recognised LCAs.

- Accredited by the Dutch Accreditation Council for VCA and management systems such as ISO9001, ISO14001 or OHSAS.
- Every LCA communicates in advance which (new) auditors will be used for the ladder audit and includes a competence file, showing that the auditor is competent for assessment.
- The LCA devotes sufficient time to the training of auditors in the principles of the Safety Culture Ladder and accompanying certification scheme. The training is documented as part of the competence file.
- Personnel that in a period of two years prior to the certification activities have been involved in consultancy on management systems or have been employed by the company under certification may not perform audits in the context of the Safety Culture Ladder. Auditors may have performed ISO, OHSAS, VCA, or BTR audits at the company.

NEN has final responsibility for the issue of the statement of competency. NEN can at all times in case of non-fulfilment of the above conditions proceed to suspend or withdraw the statement of competency.

The LCAs registered as competent by NEN to perform the Safety Culture Ladder certification are listed on www.safetycultureladder.org. The listing includes address particulars and a statement of competency relevant and valid to the LCA in question.

The LCA has with respect to certification concluded an agreement with NEN on the use of the Safety Culture Ladder certification standard and participation in the Harmonisation Committee.

5.2 Auditor and assessor

The qualified personnel involved in certification can be distinguished according to:

- Auditors: charged with the performance of the certification audit, the assessment of the results, the audit report, the certification recommendation and performance of the annual reassessment.
- Assessor: charged with taking decisions on the issue and continuation of a certificate.

The qualified auditor and assessor are employed by an LCA that has been recognised by NEN. The auditor and assessor can be loan personnel, on condition that they are demonstrably qualified to perform Safety Culture Ladder audits.

The following minimum qualification requirements apply to auditors:

1. In terms of education and experience they have competences that are at least equal to higher vocational education.
2. Experience in management system certification under accreditation
3. Certified safety expert (HvK, MvK).
4. Qualified Lead Auditor for VCA** or OHSAS 18001.
5. Demonstrable familiarity with sector-specific techniques by means of training or extended experience (sector qualification).
6. Demonstrable competency with the certification scheme of the Safety Culture Ladder by means of training (Safety Culture Ladder qualification).
7. A positive audit assessment by the LCA of the auditor's attitude and behavioural competences.

The audit report assessor must at least meet the following supplementary requirements:

1. Qualified assessor for VCA** or OHSAS 18001.
2. 3 years demonstrable experience as Lead Auditor for management system certification.

5.3 LCA ladder audit requirements

- The LCA draws up an audit plan for every assignment. This plan details at least the following: ladder audit structure, organisational boundaries (department or company), composition and division of tasks audit team, ladder audit programme and report.
- A ladder audit is carried out by a minimum of two auditors, of which one is appointed in advance as lead auditor. Auditors need not necessarily be employed by one and the same LCA.
- Four methods are used in the performance of the ladder audit:

Method	Objective
Self-assessment by company	Self-assessment of quality requirements and criteria in terms of safety awareness and safe working practices.
Analysis of self-assessment by LCA	Analysing of factual data provided by company on safety awareness.
Interviews by LCA	Verification of factual data, the self-assessment and the factual implementation of quality criteria.
Observations & Work Visit by LCA	Observation of the application and enforcement of safety awareness and behaviour in the work environment and its significance within the organisation.

- Interviews are chosen to ensure that all layers of the organisation (from high to low) are addressed, with an emphasis on (operational) employees. The interviews are additionally chosen in such a manner that the results together with the observations in the work environment are verifiable in other (held) interviews.
- The performance of a ladder audit entails at least an on-site work visit by the LCA. A ladder audit solely on the basis of a desk review is insufficient and thus not acceptable.
- As regards the number of interviews and worksites to be visited, refer to the man-day table below.
- Scores are awarded to criteria on the basis of interviews, observations and verifications.
- The ladder audit is concluded with an audit report. This report presents the conclusions of the ladder audit as well as the end score (ladder step). A copy of this audit report remains with the LCA and will be submitted at the request of NEN.
- A ladder audit for Step 'N' also entails a ladder audit of lower steps with the minimum requirements of Step 'N'.
- If a company fails to achieve the required minimum scores during a ladder audit for Step 'N', the company will not have Step 'N' on the Safety Culture Ladder and this does not automatically mean that the company has ladder step 'N-1'.
- The company has at least Step 1 of the ladder if it has a completed ladder audit and the ambition to further proceed up the Safety Culture Ladder.
- If an initiated audit cannot be (completely) performed due to circumstances and causes attributable to the company under audit, the audit must be completed within 3 months of the start of the audit.

5.4 Certification man-day table

As regards the time devoted to certification, the table below provides a guideline with a minimum number of man-days per establishment. The highest legal entity under certification is regarded as the establishment; the accompanying or underlying legal entities are regarded as branches.

The table shows the certification audit for Step 2 of the Safety Culture Ladder, consisting of:

- Phase 1: assessment of the scale and structure of the organisation, drawing up an audit plan and initiating the audit report.
- Phase 2: initial certification audit of working practices and assessment of all questions on the ladder step.

< Table 4>

Number of workers	Audit term in man days	Number of workers	Audit term in man days
1-10	3	1176-1550	13
11-25	4	1551-2025	14
26-65	5	2026-2675	15
66-125	6	2676-3450	16
126-175	7	3451-4350	17
176-275	8	4351-5450	18
276-425	9	5451-6800	19
426-625	10	6801-8500	20
626-875	11	8501-10700	21
876-1175	12	>10700	Continued according to the above progression

The provisions below apply to the table:

1. In order to ensure objectivity, a certification audit (Phases 1 and 2) is performed by a team of two auditors.
2. Besides personal interviews, on-site visits are also made of projects in progress. All work awarded by clients to companies under audit can be assessed as long as it is representative in terms of number and type (large, small, complex, simple, standard, unique, etc.).
3. The total number of workers concern those of the establishment and relevant branches (falling under the scope of the certification audit). For determining the number of workers, apply the sum of own personnel + loan personnel, whereby the auditors determine which persons will be interviewed. The minimum number of persons to be interviewed is $0.6\sqrt{M}$ voor for the board, management, staff, etc., and $1.2\sqrt{M}$ for operational employees. M is equal to the number of workers.

4. The number of workers in the table must be viewed as a continuum rather than a stepped progression.
5. If the company on average has N projects simultaneously ongoing per year, the audit will visit and test at least $0.6\sqrt{N}$ projects, whereby the auditors determine which projects will be visited. The total number of projects concern the projects that are managed from the establishment and/or the branches to be visited, if applicable.
6. Branches can be visited at random according to the schedule below. In this, (X) stands for the total number of branches and (\sqrt{x}) for the minimum number of branches to be visited. In the choice of branches, consideration should be given to:
 - does it offer a good reflection of the work performed under assignment;
 - safety risks and the related attitude and behaviour;
 - a representative image of the establishment as a whole.

(X)	(\sqrt{x})
2<6	2
6<12	3
12<20	4
20<30	5
30<42	6
37 ... etc.	

7. An audit is performed separately for certification under ISO/VCA/OHSAS, etc.
8. The audit term in man days applies to both the initial audit, the annual follow-up audit and audits for step progression.
9. A certification audit for Step 3 and higher also entails a certification audit of lower steps at the minimum requirements of the highest step under audit. The time devoted in man-days to the certification audit (see the table above) then increases according to the schedule below.
 - Step 3, factor 1.5;
 - Step 4, factor 2.0;
 - Step 5, factor 2.5.

5.5 Scores

The scores attainable for each criterion are stated in the certification scheme. A maximum score can only be awarded if the criterion is fully and demonstrably complied with.

If a criterion is only met in part, the auditors will award a score that, based on the expert judgement of the auditors, corresponds with the degree in which the criterion is demonstrably complied with. For this a spread is applied between largely (80%) and partially (40%).

5.6 Attendance

NEN is invited to attend ladder audits. By attending, NEN wishes to acquire insight into the competences of the deployed audit teams.

NEN can moreover determine whether the decision and assessment process of the auditors is adequately harmonised between the various LCAs. Notice of a pending ladder audit is sent at least 10 working days before commencement of the audits by the LCA to NEN. This notice will contain at least the following information:

- A clear description of the "organisational boundaries" indicated by the company.
- An audit plan drawn up by the LCA (only the main points; date and location of the audit, which actions, who, when, where).
- Information on the relevant auditors (specifying lead auditor, if applicable).

NEN will at least 3 working days before commencement inform the LCA whether or not it will attend the audit and if so, by whom. NEN can decide to replace the attendance by the company with a review of the LCA.

NEN will act as observer during the attendance and will thus not interfere with or be involved in the audit process by the LCA. This will, however, not prevent NEN at fixed times from exchanging information with the LCA auditors, requesting additional information, etc. Such interventions will, however, only take place outside the presence of the client (company). This may make it necessary to schedule extra time in the audit planning. The LCA ensures that the presence and objective of the attendance, as well as the task/function of the observer, is clearly explained to the company in advance. NEN will treat all information provided during the attendance as confidential. NEN will refrain during the audit from expressing any opinions on the scores to the LCA (or the client).

NEN will draw up an attendance report for every attendance. The attendance report drawn up by NEN will focus only on the main points (professional and harmonisation aspects). This attendance report can serve as input for improvement measures by the LCA. General observations regarding harmonisation will be anonymised and discussed during the harmonisation consultation with the LCA auditors.

5.7 Audit report

The audit reports will express at least the results of the requirements of the Safety Culture Ladder and state which step of the ladder has been audited. The failure of the company to (demonstrably) comply with the requirements is set out separately in the audit report. Every audit report will contain the auditor's conclusion regarding the step on the Safety Culture Ladder. The audit results may only lead to a positive report if the minimum requirements of the step have been complied with. A positive audit report will specify the attained step and make a recommendation to the LCA to grant or revise the step on the certificate.

The decision by the LCA to issue a certificate is taken on the basis of:

1. A complete audit report with positive conclusion on the attained step and a certification recommendation.
2. Generally compulsory appendices such as a statement by the board on the activities and company entities, possibly accompanied by a copy of the (legal) organisational structure as included in the annual auditor's report.
3. Specific compulsory appendices such as the assessor's report on the audit report, notes and findings of auditors, substantiation of scoring by auditors.

The report will be made available by the LCA to the board of the company no later than 15 working days after the final audit day. The audit report forms an intrinsic part of the certificate to substantiate the step on the Safety Culture Ladder. The audit report is confidential and does, in itself, not provide proof to third parties that the company meets the requirements of the Safety Culture Ladder.

NEN has no influence on the audit report and the audit results. NEN is not provided with a report. NEN is permitted to inspect audit reports at random for the purpose of LCA/auditor assessment and in case of complaints by audited companies.

5.8 Issue of certificate

The certificate bears the title: "Safety Awareness Certificate Step *N*", whereby *N* can have the value 1, 2, 3, 4 or 5. A certificate reflects the highest obtained step and the date on which the certificate was issued. Every certificate is a unique document, with format A4 and a unique number. This number is generated by the LCA. The LCA issues the certificate to the company. The certificate has a fixed format. The certificate states at least:

1. The legal name, address with place of establishment and the registration number with the Chamber of Commerce of the business entity/entities falling under the certification of the Safety Culture Ladder.
2. The name of the LCA as stated in the certificate of competency.
3. The achieved step on the Safety Culture Ladder (Step 1, 2, 3, 4 or 5).
4. The name and signature of the assessor. This assessor must be known to NEN in accordance with the statement of competency (see Chapter 5.2).
5. A reference to the version number of the applied certification scheme of the Safety Culture Ladder.
6. The date of the first issue and the date of change.
7. The statement: This Safety Awareness Certificate is registered under number xx (number to be generated by LCA) on www.safetycultureladder.org.
8. The certificate issued by an LCA is registered by the LCA with NEN for publication on www.safetycultureladder.org.

5.9 Validity of certificate

A “Safety Awareness Certificate Step *N*” issued by an LCA has unrestricted validity from the date of issue, subject to the condition of an annual reassessment, showing that the company still complies with the requirements of Step *N* of the issued certificate. From 10 to no more than 12 months after certification, recertification is required in order to continue the validity of the original certificate.

In case of an assumed rise up the ladder, a company may request a new ladder audit from an LCA. Such a request may not be made sooner than six months after receiving the certificate.

If a company does not (any longer) meet the requirements, the company can within a period of 13 weeks perform an extra audit to show that the first audit contains a measurement error and that the requirements are indeed met. The review will then focus specifically on the company aspects that were supposedly 'wrongly' assessed. The LCA will draw up an audit plan for this.

If the 2nd measurement also shows that the company does not (any longer) comply with the requirements, the company will lose its certificate for Step *N* and will – on the basis of the recommendation of the LCA – be certified for a lower step. It is not permitted to change LCA or auditors during the term of 13 weeks. A change is permitted thereafter on condition that the company communicates such to NEN in advance.

5.10 Audit process

Certification audit

A certification audit is a complete audit. It is irrespective whether it concerns an additional certification audit for a (higher) ladder step or an annual recertification that shows whether or not the company still meets the requirements.

Every certification audit will be completed within 13 weeks (1 quarter). Phase 1 of the audit is regarded as start time. The certification audit is completed on issue of the certificate. No change of LCA is permitted during this period. If a certification audit is not completed within the period of 13 weeks, the audit is invalid and no legal certificate can be issued. If a company still requires a valid certification, a completely new certification audit will have to be carried out. The company is at that time free in its choice of LCA.

The certification audit will be aborted in case of significant changes during the certification audit (reorganisations, etc.) as a result of which the original scope of the audit is no longer representative. If the company wishes to receive a valid certificate on the basis of the new/changed scope, a completely new certification audit will be scheduled. The company is also at that time free in its choice of LCA.

Experience audit

An experience audit offers the company the possibility of ‘testing’ whether certain company aspects meet the requirements and to gain experience with a Safety Culture Ladder audit. The experience audit is limited in scale and does not produce a score or certificate. The scale is set at 40% of a complete certification

audit with a minimum of 1,5 man-days per auditor (total of 3 man-days). The audit covers at least the board, management and operational personnel, whereby 1 work visit will be carried out. The experience audit is performed as standard for Step 3. The LCA is not permitted to make any statements with respect to whether or not the requirements of the step have been complied with.

6 Organisation

6.1 Who manages the ladder

ProRail was owner and manager of the Safety Culture Ladder since 2012. Due to the transfer of the management of the safety culture ladder from ProRail to NEN (Netherlands Standardization Institute) the ownership is also passed on to NEN.

As of July 1, 2016 NEN is responsible for it's use, continuous development, management of the certification scheme and the extension to other clients and new sectors.

NEN has established a Board of Stakeholders (BoS) as the main decision making body of the system. And for the operational implementation it has established a technical Committee of Experts (CoE). NEN provides the overall scheme and project management and secretariat.

<Figure 5>

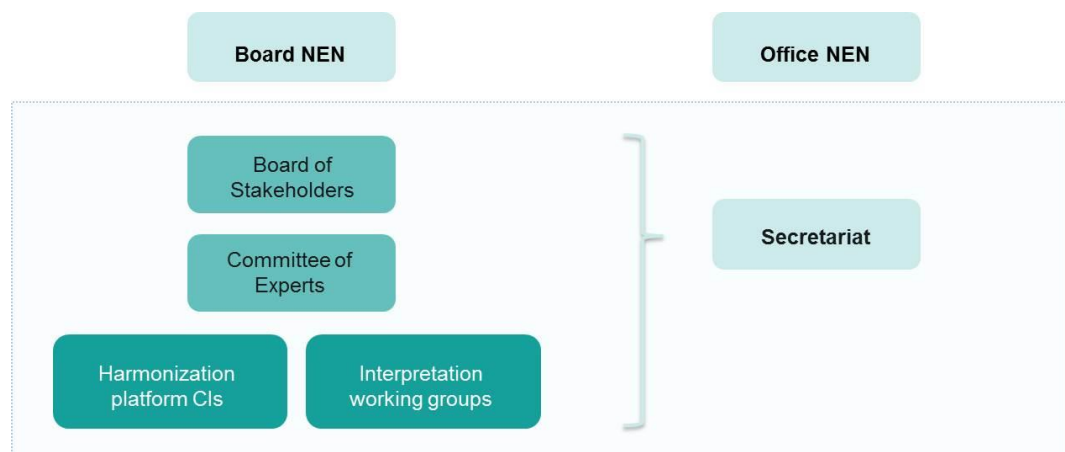


Figure 5 shows the organizational structure of the Safety Culture Ladder. The composition of the structure of the Safety Ladder is as follows :

- The *Board of Stakeholders* (BoS) acts as the main decision-making body of the system and governs the management and development of the Safety Culture Ladder system. The BoS is a broad assembly of procurers, businesses, science institutions and civil society organizations and is led by an independent chairman at board level. The Board consults (interested) clients, contractors and other relevant (professional) organizations on new developments. For the management and development of the Safety Culture Ladder the BoS is supported and advised by the Committee of Experts and NEN.
- The *Committee of Experts* (CoE) is the operational committee of the Safety Culture Ladder. The Committee of Experts is primarily responsible for keeping the certification scheme up to date and functions as the contact for

the Ladder Certification Authority (LCA) regarding interpretation issues and other issues. The Committee of Experts is represented by clients and contractors. Members of the Committee of Experts shall be appointed in a personal capacity. In case of organizational changes interested parties may nominate other representatives.

- The *Harmonization Platform CIs* is composed of delegates from LCAs that signed a license agreement with NEN. The delegates need to be involved in the certification process as (lead) auditor or a person who takes the certification decision (assessor). LCAs also assess companies on the basis of this harmonization. Interpretations problems or audit issues can be submitted to NEN by the LCAs together with the company (as a customer of the LCA). If necessary the Manual can be adjusted.
- When necessary an *Interpretation Working Group* can be established in which technical experts from clients, contractors and certifying institutions participate. The Board of Stakeholders must approve the composition of the Working Group. The Working Group members may be part of the Committee of Experts.

6.2 Financing

The Safety Culture Ladder is a market initiative. The ladder is thus not supported by subsidy or government involvement. The principle of the ladder is that all companies and organisations involved jointly finance the ladder and contribute proportionately to the costs of the ladder, which include the site, the helpdesk, the further development, the supporting of initiatives, the management of the certification scheme, the administration, etc.

Active use of the Safety Culture Ladder thus requires a modest contribution, which will be kept as low as possible.

Contributing parties are all companies and organisations that actively use the ladder as an instrument for:

- Tendering;
- certification of the own company/organisation;
- other commercial activities (such as consultancy, training, research, certification, etc.).

Use of the Safety Culture Ladder should consequently generate sufficient income to ensure that the ladder remains up-to-date and applicable in the future.

Income will thus consist of:

- Payments by all companies that undergo certification, per issued certificates and per annual audit.
- Payments by companies who offer paid services and products related to the Safety Culture Ladder.

An overview of the payments and tariffs can be found on www.safetycultureladder.org.

6.3 Document/version management

NEN is responsible for the development and management of the certification scheme and manual of the Safety Culture Ladder. The existing versions are developed and adopted by the Committee of Experts and endorsed by the Board of Stakeholders. Comments and suggestions regarding the documents of the Safety Culture Ladder can be submitted to NEN.

The current versions of the document are published on www.safetycultureladder.org. All previous versions lapse as a result.

6.4 Information and advice

All required formal information on the certification processes is contained in the manual. The latest version of the Safety Culture Ladder manual as published on www.safetycultureladder.org applies. You are therefore advised to regularly check www.safetycultureladder.org whether an updated version of the manual applies.

Contact also be sought with any of the recognised LCAs for further information on or support in preparing for certification, etc.

6.5 Complaints

Complaints, comments and suggestions regarding the scheme or the relevant LCA can be submitted in writing to NEN.

Colophon

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