ENHANCING THE COOPERATION BETWEEN RAILWAY STAKEHOLDERS FOR IMPROVING SAFETY CULTURE

SAFETY CULTURE TWINNING II GUIDELINES

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ABOUT TWINNING II

Twinning II is the acronym for the programme support action: ENHANCING THE COOPERATION BETWEEN RAILWAY STAKEHOLDERS FOR IMPROVING SAFETY CULTURE.

TWINNING II aims at the improvement of the safety culture in the European rail sector.

This project provides a method for identifying strengths and areas for improvement of safety culture, so that each RU/IM in the sector is assisted in the enhancement of its safety culture;

The TWINNING II project delivers methods, recommendations and suggestions for improvement in areas where performance falls short of European and aligned international practice;

TWINNING II concentrates on practical experience with other specialists in safety culture, and between the members of the consortium.

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Executive summary

The TWINNING II project aims at developing the safety awareness, safety culture and safety commitment within organisations, with special focus on training activities, identification of safety hazards and issues, and management of blocking points for the development of a safety culture.

In this project, the partners in the consortium will first identify and then exchange on generalised technical failures, flawed instructions, and behavioural inconsistencies related to operational activities that may be critical for safety.

Partners will also share strategies and techniques for effective reporting of events, for analysis of incident and accident data, and for reporting events and identifying their benefits.

Positive results or third-party practices in different organisations and national frameworks approved during this project and adapted to the resources and management specific to safety needs, can be transposed in EU railway regulatory framework.

In general, participants in the consortium share knowledge about safety systems, processes, tools, and behaviour.

Potentially, particular focus will be performed on seamless cross-border safety and integration of safety processes used in the border Member States onto train running cross-border situations and linked safety-relevant operation.

Another important lever of this project is to encourage and support the exchange of expertise between the consortium members, and beyond, when possible, to increase the level of safety awareness and commitment within hosting and visiting organisations.

Based on the “peer review” exercises carried out, a methodology for safety “peer review” in the rail sector will be developed. This will include useful guidelines on “peer review” techniques, improvement strategies and tools, as well as documentation of and reference to useful knowledge for a better understanding of the rail sector and its safety challenges.

This deliverable 1 will present the detailed action plan of the project. The action is divided into four activities:
- Preparation and data gathering
- Data analysis and evaluation
- Identifying good culture practices and development of guidelines
- Dissemination and project management

This deliverable 2 gives an overview of how the different actions fit together and complement each other throughout the project. It is also an essential tool for project management.

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TWINNING II General Approach

The approach chosen in this project highlights the different types of partners present in the consortium: Railway Undertaking (RU), Infrastructure Manager (IM) and National Safety Authority (NSA). To facilitate exchanges and communication between these different types of actors within the railway eco-system, workshops are organised between participants from each type of organisation. To ensure that the exchanges take place in a secure environment, these workshops and any type of exchange are strictly confidential.

The approach of this project also emphasises cooperation and exchange of experience by implementing 2 or 3 peer reviews in different countries. For this project to run efficiently, training is given to provide a common base of knowledge, a common vocabulary, and a common method to all stakeholders.

This project, whose approach is to get as close as possible to the real practices to get a clear view of each organisation's safety culture, will conduct interviews with managers and staff in the form of open discussions to establish a relationship of trust and cooperation. In parallel, direct observations of operational and work activities will be carried out to capture behaviours in real-life situations that are often not identified by field actors nor managers.

For the data analysis and evaluation phase, this project will take inspiration from the SCART guidelines, adapted to the European Railway Safety Culture Model from ERA.

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Twinning II – Safety Culture Peer Review Handbook



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1. INTRODUCTION

1.1 Background

The TWINNING II European Project, funded by the European Commission, is an 18-month project that began in January 2022 and runs until June 2023. TWINNING II aimed at the improvement of the safety culture in the European rail sector. One of the objectives was to conduct Peer review exercises, including training activities for a homogeneous and high-level approach, actions to produce useful guidelines on peer review. 3 Peer Review exercises were organised in ÖBB, CFL and Infrabel between November 2022 until end of March 2023. This project was of great added value to the consortium members and to the UIC, as it gave us the opportunity to develop a common methodology for carrying out Peer Reviews. It was a major gain to develop our experience in terms of conducted the Peer Review for the Team Reviewers and for the host company to organise the Peer Review and gain an insight into the Safety Culture at all levels of their organisation. This project was so interesting and instructive that the UIC decided, following TWINNING II, to continue the Peer Review activity at the service of its members, in Europe and beyond at international level.

1.2 Objectives of the handbook

The objective of this publication is to provide guidance for companies on how to perform a Safety Culture Peer Review. The information provided will be of practical value to companies seeking to improve their own safety culture and will enhance the effectiveness of their safety culture oversight efforts.

The proposed methodology is based on the best practices used in similar approaches in various fields of activity. It also draws on feedback from interventions carried out as part of the TWINNINGS II project.

It examines the role to be played by the various stakeholders in preparing and conducting a Safety Culture Peer Review.

1.3 Scope

These guidelines are intended for railway actors (RU, IM, ECM) wishing to implement a Safety Culture Peer Review. More specifically, they are to be used by:

- The team of reviewers involved in the process, from planning the review to conducting it, drawing up and presenting the conclusions,
- The senior managers of the host company who sponsor the Peer Review and the resulting actions.

1.4 Structure of the handbook

A short overview of the concept of Safety Culture is given in Section 2 to make the reader familiar with the subject of Organisational and Safety Culture. An overview of the attributes that make up the various components of Safety Culture in an organisation is also given. The main purposes of a Safety Culture Peer Review are also discussed in this section.

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Section 3 describes the Peer Review process. It describes in more detail the definition of the scope and extent of a Peer Review in railway undertakings, the prerequisites, the planning, the data collection process, its analysis, and the determination and communication of the results.

2. SAFETY CULTURE

2.1 What is Safety Culture?

Culture is a complex concept. However, it is very important in attempting to understand the attitudes and behaviors of groups of people. Different authors have described culture with various models. Edgar Schein (2016)[1], an organisational psychologist, describes organisational culture as follows:
Quote: "The culture of a group can now be defined as a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems".

If the experience of a behavioral pattern is positive for an individual member of the staff, an individual and his colleagues, or a group, for an organisational unit or even the whole organisation, there is a good chance that the same patterns of behavior will be used again. They become part of daily life. All group members accept this, and new members are taught to behave this way in this specific situation. Finally, this behavior is taken for granted. Nobody needs to talk about it anymore. It becomes part of the culture of the group. If, finally, one asks one of the group members why he/she behaves like this, they may not even be able to answer the question. At this stage, they form the culture of the organisation. They are 'the essence' of the culture. It takes a long time for certain behavioral patterns or ways of thinking to be adopted, used, and shared by the members of an organisation. The way such patterns develop cannot be controlled. Success or failure of a pattern determines how it will be recognised by most of the staff.

However, success and failure may be influenced by external and internal circumstances. For instance, if the response of members at higher levels in the hierarchy to success or failure of such patterns is recognised by individuals, they will react accordingly in the future. Therefore, the role model presented by senior and middle managers is of the utmost importance. Their behaviors, their way of thinking, and their way of recognising success and failures, will have a strong influence on the way in which behaviors are fostered or impeded. By these means, managers will be able to influence the development of the organisational culture.
These basic assumptions influence the way group members think and the way they act in the group. They determine what is important to the group and what is not. Thus, they also determine the style of collaboration and communication. They determine what people find acceptable or not acceptable; what is highly regarded and representative within the organisation and what is not.

[1] E. Schein, Organizational Culture and Leadership, Ed. 5th, 2016.

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The Safety Culture is that part of the organisational culture that influences the behaviour of individuals (staff and management), organisational units and the organisation in dealing with safety. It will include the attitudes and behaviours of the management, for example in promoting a questioning attitude, commitment, and motivation at all organisational levels. It can be described by characteristics that determine how safety is considered in the organisation.

Another influence factor which should be considered is the given Culture in the Country. And there are diverse cultural approaches in the Member States of the European Union. It means the accepted safety-level and the linked behavior in the whole society. And finally, the culture of the employees they are from other Countries, which will create a mix of the diverse cultures or different approaches to the same task.

2.2 Safety Culture Attributes

Experience shows that many senior managers generally recognise the importance of Safety Culture. However, because of a lack of in-depth understanding of the concept of Safety Culture, they feel uncomfortable and go back to technical matters with which they are more familiar and comfortable.
To better understand the relationship between practices, beliefs, and their impact on safety, it is necessary to use a framework comprising categories linked to a safety culture model. It will facilitate the analysis of the data collected during the peer review, its evaluation and the communication of the findings relating to the themes included in the model.
Numerous taxonomies relating to safety culture models exist in the railway sector, but also in other sectors such as civil aviation or the nuclear industry and can be used as a reading grid.
The ERA Safety Culture Model, presented below, has been used in previous TWINNING II Peer Reviews, and will be used in this publication as a reference.

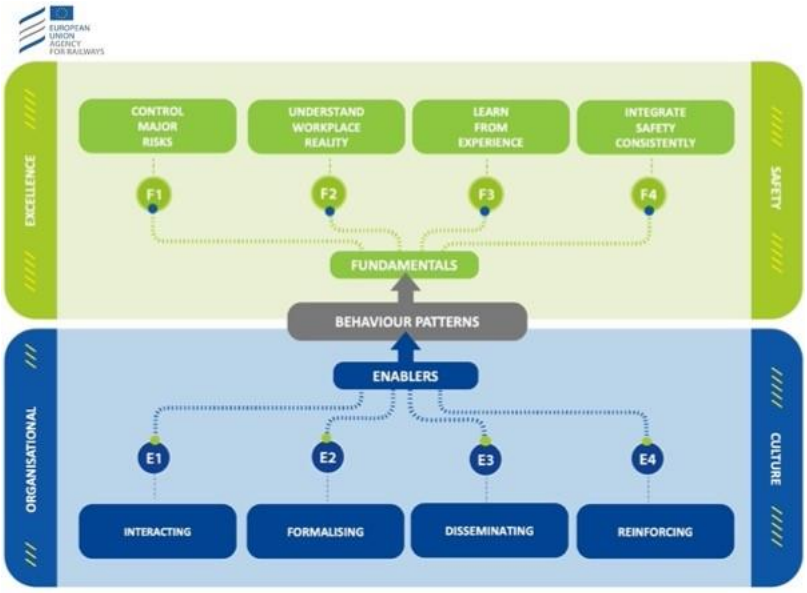


Figure 1 – European Railway Safety Culture Model 2.0 - Components

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Figure 2 – Railway Safety Culture Fundamentals - Attributes

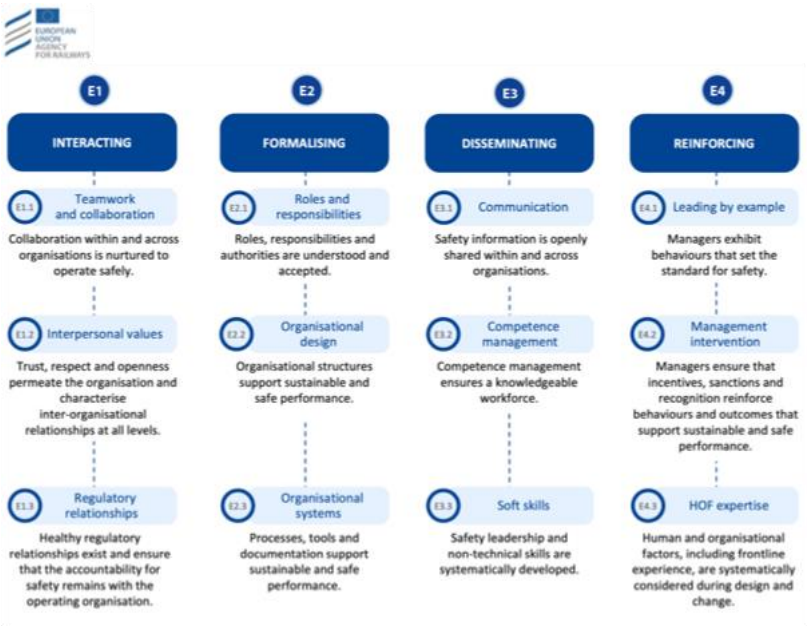


Figure 3 – Cultural Enablers - Attributes

We will see later in this publication that a good knowledge of the model and its characteristics by the reviewers is essential for analysing the data collected and communicating the results.

2.3 Objectives of a Safety Culture Peer Review

Senior management that engages in a Safety Culture improvement program need to be aware of the concepts important to Safety Culture, the process of cultural change and the factors which can influence culture. This will help the company to establish an effective program for oversight of the Safety Culture and thus have a positive impact on it. Being involved and

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obtaining a deeper understanding can improve both capability and confidence in addressing the issues related to safety.

The benefits to the capability of all people inside the company may include:

- An enhanced focus on safety in the context of daily work
- The development of a more systemic view of nuclear safety
- Improved communication between leaders and staff and among staff thus leading to improved internal collaboration
- Achievement of greater transparency, trust, and confidence, leading to a more positive working environment
- Improved effectiveness and efficiency of the safety functions resulting in more timely and cost-effective operations
- A shift from reactive to more proactive management of safety
- Increased vigilance in responding to weak signals and in establishing an enhanced reporting culture.

A Safety Culture Peer Review provides an opportunity for the host company's management to identify strengths and performance deficiencies and to initiate well thought through improvements that are understood and 'owned' by staff at all levels. The Safety Culture Peer Review aims to identify behaviours, attitudes, underlying beliefs, and basic assumptions in relation to Safety Culture and its influence on decision-making processes.

3. SAFETY CULTURE PEER REVIEW

3.1 Overview of the methodology

The Safety Culture Peer Review is a methodology to take a snapshot about the safety culture in a company. It considers previous results of surveys (like the ERA Safety Climate Survey) and different documents providing targets and descriptions of company's safety management. Interviews with staff and management, focus groups and observations are the basic for the assessment and the description within the peer review team. And finally, the management will get an overview about the level of safety culture, about good practices and improvement areas. This is the basic for measures to improve safety culture based on the European Safety Culture model. This will also foster a common approach to develop safety culture approaches in the European Railway Domaine.

Process

The process can be broken down into three main phases, which are described in detail in the following chapters:

- Preparation
- Execution

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- Feedback of results

In the diagram below, the underlined elements have hypertext links that allow to navigate through the document and go directly to the relevant chapter.

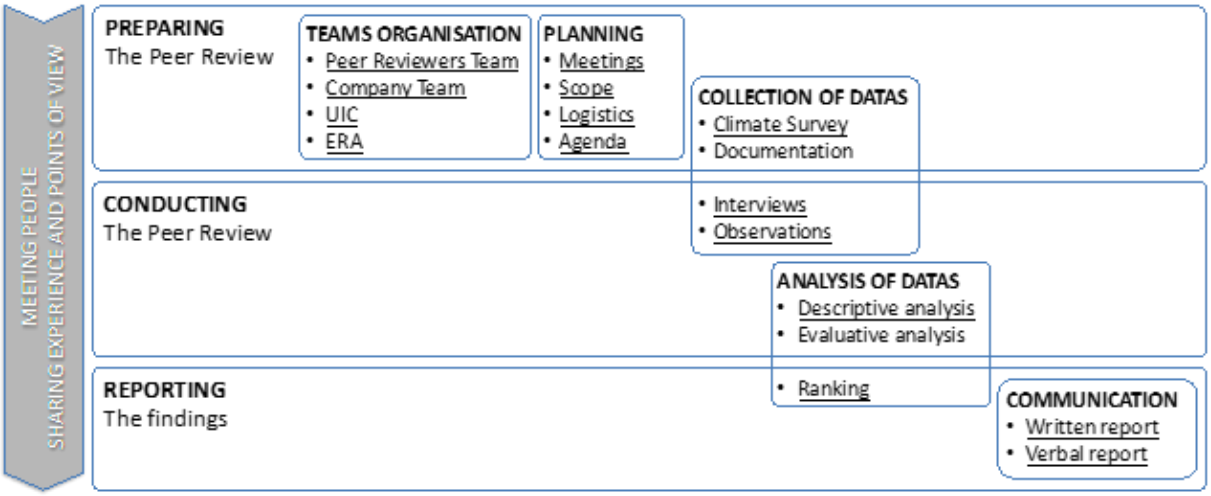


Figure 4 - Overview of the Peer Review process

Principles & Prerequisites

The principles of anonymity and confidentiality must be respected in order to guarantee the trust necessary for exchanges with the employees consulted within the organisation.

The general prerequisite is that the organisation being reviewed has to be open, transparent and actively supporting the review.

The first prerequisite for carrying out a Safety Culture Peer Review is that the members of the Peer Review Team must have mastered the required methodology and have sufficient knowledge in this area.

The second, and extremely important, prerequisite is a strong commitment from senior management to get involved in Safety Culture activities.

The third prerequisite is to develop knowledge and understanding of safety culture concepts among senior managers.

The fourth prerequisite is preparation for the process and coordination between the various stakeholders.

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3.2 Preparing the Peer Review

3.2.1 Teams' organisation

Conducting a Safety Culture Peer Review requires effective preparation and coordination of the various stakeholders involved: the Peer Review Team; the Host Company; the UIC; the ERA.
Within these different groups, anticipation is a central element of success, as is the mastery of a certain number of key skills and knowledge or the identification of key actors with specific profiles.

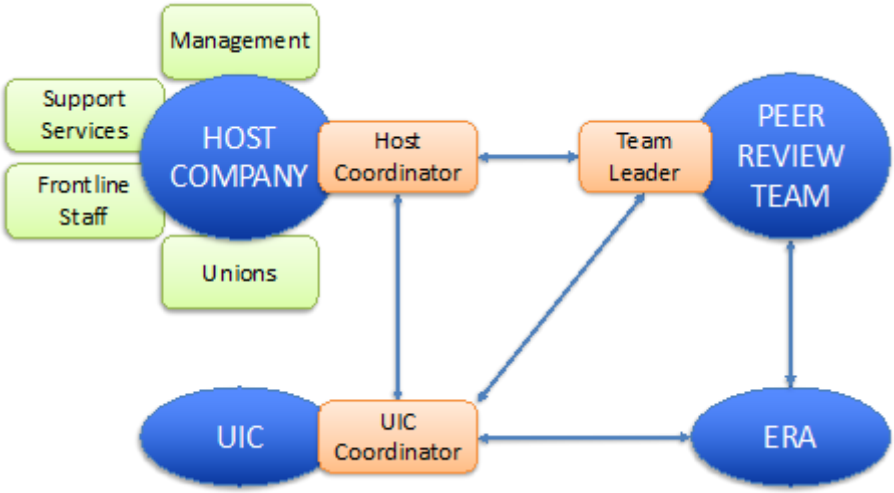


Figure 5: Synthetic representation of the different stakeholder groups involved, the key actors within each group and the necessary links between them.

The Peer Review Team

The Team is made up of between 6 and 10 Reviewers (including the Team Leader - see next paragraph The Team Leader), depending on the number of sectors to be reviewed and the number of interviews and observations to be carried out. It is not advisable to go beyond this number, for reasons of coordination efficiency.

The Peer Reviewers Team is divided into sub-teams of 2 or 3 people, who can share out the various interviews/focus groups/observations. Two people in each sub-team is a minimum, to limit the always possible interpretation bias with a single person. And three is a maximum, to avoid the always damaging "mass effect" when interviewing a single person, for example. What's more, the number 3 has the advantage of facilitating exchanges within the sub-group and arriving at a common vision in the event of differences of interpretation.

Each member of the team must possess a certain amount of knowledge and skills of their own to ensure the success of the mission, and must be able to complement, if necessary, the others. The composition of sub-teams should consider each member's own skills and knowledge, as well as their affinities, to ensure a balanced distribution of roles and optimised efficiency.
These skills and knowledge can be divided into two categories: technical and non-technical.
Technical:

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- Operational experience in the railway environment.
- Mastery of company processes, particularly regarding SMS.
- Mastery of OHF concepts and the Safety Culture model used.
- Experience in data collection and analysis, interviewing and observation techniques.
- Proficiency in the language(s) used by the stakeholders to be met.

To ensure they are fully conversant with the Safety Culture model, team members are required to have taken the training offered by the ERA on their model and the methodology to be applied, as well as the training offered by the UIC on practical cases for mastering the same model. This dual training will enable Team Members to be fully operational from their very first assignment.

Non-technical:

- Open-mindedness
- Ability to communicate
- Ability to learn
- Ability to work in a team
- Ability to synthesise
- Ability to argue and accept compromise
- Ability to ask "the right" questions
- Ability to link the conclusions to the ERA safety model

The Team Leader

The Team Leader has a central role within the Reviewers team. He/she is there to provide a clear vision of the objectives, and to reiterate them whenever necessary. He/she is responsible for coordinating the entire process, whether it involves the Reviewers Team, the Host Coordinator, the UIC or the ERA. He/she must also ensure a balance of skills within each Reviewers sub-team, as well as the coherence of the work of all the sub-teams, manage disagreements and find compromises, while being integrated into one of these sub-groups.
To ensure that the Team Leader has a sound knowledge and mastery of his role, he must have taken the specific Team Leaders training offered by ERA. The Team Leader should also have experience in conducting such a peer review and – if possible – he/she should have done a peer review before with the support of an experienced colleague.

The Host Coordinator

The Host Coordinator also plays a central role in the success of the Safety Culture Peer Review. He/she is responsible for overall coordination of the project within the company and with the Reviewer Team Leader. The Host Coordinator is also responsible for communicating the project to all relevant people in the organisation. It is important, that Host Coordinator explains the aim and the method of Peer Review to all concerned parties. It is necessary, that everybody involved in the Peer Review have a clear picture in mind to be prepared for all the tasks and results. In that matter he/she has a key role towards the Senior Management, who must be aware of what is at stakes.

For this mission to be successful, he/she must have a very specific profile:

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- Mastery of company's internal processes.
- Mastery of company SMS processes.
- Mastery of HOF and Safety Culture concepts.
- He/she must be known and perceived and accepted as legitimate in terms of safety within the company (prior experience in this field is essential).
- He/she must be at a sufficiently high hierarchical level to have easy access to all the stakeholders concerned, whatever their position in the company, including the Management Committee.
- Leadership ability.
- He/she must have fluid relations with all stakeholders in the company, so as to be listened to.
- Ability to communicate and explain.

The Management

Safety culture studies show that the perception of management's sincere and proactive commitment about safety is what most influences the field operators safety behaviors. A lack of management involvement in the Safety Culture Peer Review would therefore be perceived as a lack of interest in safety. Consequently, for the process to be a success, the entire management team must be fully involved in its preparation and execution, in particular by allocating the necessary time and resources. Management should be convinced of the approach added value and of the benefits that the organisation can derive from it and must show exemplary commitment by actively participating in the entire process. They must take part in the information meetings and the information campaign organised by the Host Coordinator.

To be effective in this area, management must be aware that a Safety Culture Peer Review is not a compliance audit, nor the quest for certification but a quest for understanding how the organisation Safety Culture influences all stakeholders' behaviors when dealing with safety. Management should work with the Host Coordinator and the Team Leader to identify the issues and areas to be analysed. They should be willing to find out what is really happening in the field, including practices they may not be aware of, and must be prepared to accept the final result.

The Frontline Staff

Front Line Staff will play an important role in the interviews, focus groups and observations. As such, it is essential that they are properly informed of the principles, issues, and timetable of the Safety Culture Peer Review, prior to its implementation. Sufficient time for discussions and resources should be allocated so that staff are encouraged and enabled to be involved in the peer review.

This preparation is essential if the operational players are to feel confident and open during all process (questionnaires; interviews; focus groups; observations). It can be divided into two distinct elements:

- A comprehensive communication campaign aimed at all company personnel, explaining the process, and inviting volunteers to take part. The goal is to bring the staff to see the review as an opportunity to identify the organisation safety culture

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strengths and weaknesses and certainly not as an assessment of their performance, which it is not.

- A direct meeting between participants and the Host Coordinator to ensure that they understand the fundamental principles of the approach: improved safety, transparency, and confidentiality. The managers of frontline staff should be prepared to explain the targets to the employees.

The Support Services

One of the basic principles of an HOF and Safety Culture approach is to realise that we can't understand the performance of field operators without taking into account the whole system in which they operate. Consequently, it is essential to also assess the safety culture of support departments, to involve them in the preparation and execution of the Safety Culture Peer Review and they must also be the target of the communication campaigns and information meetings to encourage their participation.
But the role of support departments does not stop at active participation in the Safety Climate Survey, interviews or focus groups. They also play an essential role in the logistical management of the process (see paragraph Logistics).

The Unions

When it comes to safety, all actors are important, including representative professional organisations. Trade unions are in fact the owners and generators of part of a company's safety culture, and their contributions in this field, outside any political dimension, may be entirely relevant to consider in its evaluation. As such, they are fully entitled to be involved in the Safety Culture Peer Review.
Professional organisations can play an important role in the preliminary communication campaign, helping to build the necessary trust for this type of approach, and employee representatives can take part in focus groups or be interviewed.

UIC

The UIC plays a major coordinating role between the Host Company, the Team Leader, the Team of Reviewers, and the ERA. It guarantees the methodology applied throughout the process and is also responsible for the practical training of Team Members in the implementation of the ERA's analysis model.

ERA

ERA is the owner of the model used: the EUROPEAN RAILWAY SAFETY CULTURE MODEL 2.0
It is responsible for defining the associated methodology and for the theoretical training of the Team Members, respectively 2 days training on safety culture for the whole Team of Reviewers and 1 day for the Team Leader.

3.2.2 Planning

As seen earlier, preparation is an essential part of the process to ensure that the Peer Review runs smoothly. This requires activities to be planned with precision and anticipation, through preliminary meetings, whether to define the scope, the agenda or to ensure the logistics.

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Definition of the scope

The determination of the scope of the Peer Review is defined by the learning objectives pursued. The choice of subjects to be analysed in depth, the nature of the operational activities to be observed and the functions of the people to be interviewed depend on the reasons for launching the Peer Review, which can be varied.

Preparatory meetings

- Between the Team Leader and the Host Coordinator

Prior to the Peer Reviews, numerous meetings are organised between the Team Leader and the Host Coordinator, for example to plan the Peer Review: which staff profiles? How many are needed? They also discuss the most appropriate type of documentation to give to the Team of Reviewers to prepare them properly for the Peer Review. Essentially, these meetings are a way of exchanging ideas, communicating and, above all, moving forward together to organise the Peer Review in the best possible way.

- Between the Team Leader and the Reviewers

Preparatory meetings between the Team Leader and the Reviewers, generally done at distance, are essential to the success of the process. The purpose of these meetings is to create a group dynamic, to unite the team, to prepare each team member for his/her role, to define the sub-groups, to ensure that the model used is properly understood, that everybody knows the link between the analysed points and the Safety Culture Model, and to draw up the overall schedule for the week of work.

- Between the Host Coordinator and managers

It is necessary to inform the management about the Peer Review. It should be clear for the management what is the method, who are the review team members, what could be expected from the Peer Review and what is the concrete timetable. The Host Coordinator should inform the management by the written communication (which will be send to everybody in the given department) and by personal contacts with explanation and the possibility to answer questions.

- Between the Team Leader and the UIC Coordinator

Prior to the Peer Review, the UIC, who is coordinating the exercise, contacts the Team Leader to start organising the Peer Review. Depending on the peer review and the experience of the Team Leader, several meetings may be organised to discuss the logistics and planning of the Peer Review, the organisation of the Teams of Reviewers as well. Discussions also cover the choice of documentation to be made available to the Team of Reviewers and the presentation to be made at the kick-off meeting with the Host Country Team. As the guarantor of a systemic vision of peer review, the UIC may be called upon to help and advise the Team Leader.

- The Host Company Kick-off meeting

For each peer review exercise, a kick-off meeting is organised on Monday morning between the Host Company Team and the Team of Reviewers, UIC and ERA. Generally, the Host Company makes an introductory speech and shows its commitment and support for the Peer Review exercise. The Team Leader then chairs the meeting and presents the aim and scope of

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the project; he/she then explains the methodology that will be used. Often, the Team Leader asks the Host Company to take part in a concrete exercise and invites them to identify the 3 fundamental principles on which they think they are the strongest and the weakest, and similarly for the facilitating elements of the ERA's Safety Culture Model. He then explains how the Peer Review would be conducted and finally invites them to meet on Friday for the final presentation and the results.

Logistics

The preparatory meetings are also an opportunity to discuss the logistical organisation required to conduct the Peer Review. This includes travel, accommodation and catering for members of the Peer Review Team. It also concerns the facilities provided by the Host Company:

- Booking of rooms used for meetings, interviews and focus groups
- Booking of rooms for the coordination meetings and all teams
- Booking a room for the whole week for the coordination meetings for the report
- Hotel pre-booking for 5 nights for all Teams of Reviewers, UIC and ERA staff. Payment is then made by each participant.
- Organisation of transport for travelling from one site to another

Agenda timeline

A retro-planning of the activities making up the Peer Review process is an aid to planning the various stages, in particular those taking place during the data collection and results communication phases, which are explained in the following chapters of this document.

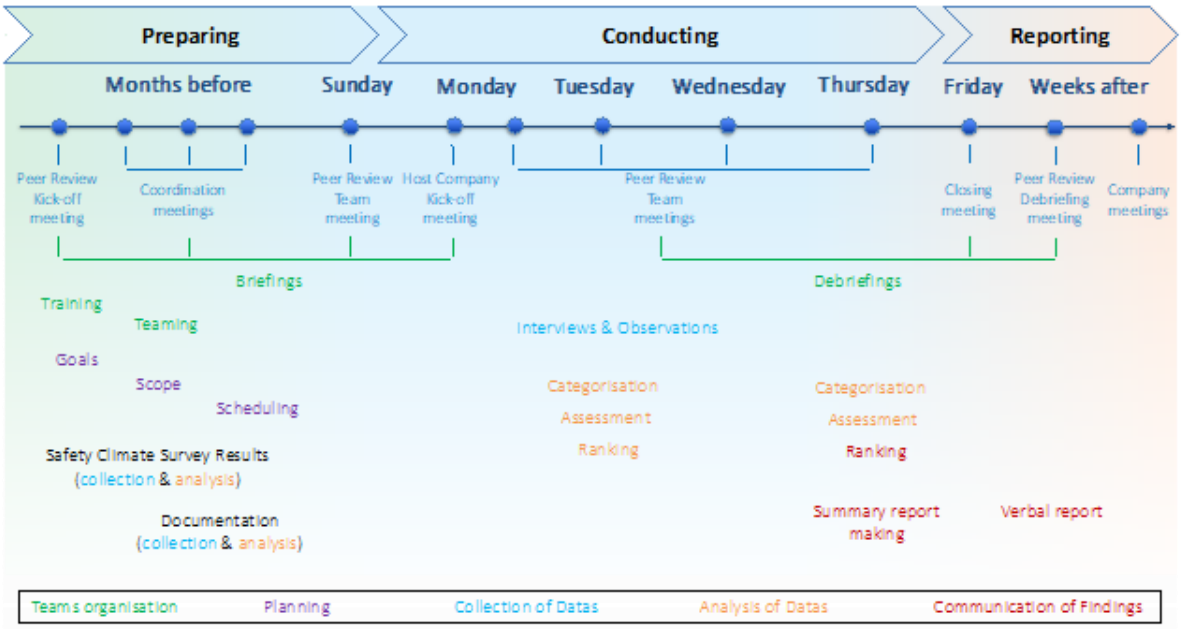


Figure 6 – Peer Review Timeline

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3.3 Conducting the Peer Review

Most of the data collection and analysis is carried out when the team is in the field, although it begins during the preparation phase. These two activities have been separated in this document for the sake of simplicity, but they are most often concurrent and recursive. In the course of a single day, there are several interviews or observations which correspond, strictly speaking, to data collection; they are systematically followed by a debriefing during which a succinct analysis of the data and a first level of prioritisation take place.

3.3.1 Collection of data

After the organisation and the team are prepared and the Peer Review plan is established, approved, and endorsed by senior management, the data collection phase may start. It is important to organise this process carefully since the activity requires substantial human resources and the availability of staff members and managers for interviews, focus groups and observations.

A very important issue is confidentiality for its participants. It should be stressed that the whole process is not to evaluate individuals, but to investigate what helps the organisation to perform better. There is no need to trace back findings to individuals; the aim is to collect commonalities in behaviour and thinking within the organization. The ways in which confidentiality might be breached should be carefully considered before data collection begins and explicit measures put in place for protection.
A secure data base for maintaining data should be established and used by all team members as a common resource.
Data collection takes place in two distinct stages:

- The first phase, which takes place prior to the face-to-face field phase: questionnaires and document review.
- The second takes place in the field: interviews, focus groups and observations.

Questionnaire

Questionnaires are an effective means of collecting information from a large population. The respondents have the same set of questions. It is important to allow staff sufficient and specific time during their work in order to consider and complete the questionnaire, and to respond without any interference. The data collected reflects perceptions on various topics including personal behaviour. It can be used to reveal the diversity of thinking of different sub-groups on certain topics.

However, questionnaires normally identify symptoms rather than causes, so it is not possible to understand the basis of underlying cultural beliefs and assumptions from the responses given. Questionnaires are therefore a basis for further investigation but if used as the sole source of data or in the absence of findings from other methods, understanding of the organisational culture will almost certainly be partial and incomplete. Questionnaires are useful for establishing a baseline of information to prepare the face-to-face phase of the Peer Review. It is important to try to achieve a high response rate from across the entire organisation.

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ERA has developed a Safety Climate Survey (ERA-SCS). It is an online survey hosted on the EU Survey platform, accessible in 22 European languages on smartphones, tablets and computers and it is available under request to any railway organisation willing to obtain an overview of their staff safety perceptions.

Documentation

The main visible products of an organisation are documents such as Safety Management System Manual, Standard Operating Procedures, checklists, safety indicators, annual reports, inspection reports, safety investigation reports or analysis, actions plans and safety training programs.

These documents may reflect the Senior Management decision-making process and the way its opinions on safety issues are built up, indicating some of the underlying beliefs involved. The process of document review is not however an audit of document content or compliance with expectations and standards.

Documents and records in the company's management system provide information on formal approaches adopted by the organisation. They also reflect the organisation's thinking and intentions on a wide range of organisational dimensions and may be helpful in identifying gaps between stated intent and actual practices.

To capture cultural facts, it is important to draw upon a broad set of documents. Documents reviewed may include the above-mentioned elements, but also internal reports, notes, correspondence which is generated by various functional groups in their routine work, policy statements, consultancy reports, performance review reports.
Document review is rather time consuming. Where there are limited resources, a focus on a selection of the documents may be a good approach to reduce effort.

Interviews (individuals & focus groups)

Interviews bring out people's points of view, experiences, perceptions, and beliefs. This is why they are essential for understanding the psychological and sociological mechanisms, and therefore the Safety Culture, at work in the organisation. They also are very useful for bringing to the fore controversial or unspoken topics, or those that have been brought to light by the analysis of questionnaires.

An important point of attention concerns the Reviewers' mastery of the language spoken by the interviewees, as a large part of the information to be gathered is perceived in the nuances of the language used. If the Reviewers are not fluent in the language of the interviewees, it is essential to enlist the services of a translator who must be both fluent in the two concerned languages and familiar with the interviewees' operational environment, to avoid misinterpretations or mistranslations of professional specific vocabulary.

It's important to bear in mind that interviewees may be reluctant to talk about delicate or controversial subjects, out of loyalty to their company and/or corporation. They may therefore perceive certain questions or subjects as intrusive and develop defensive mechanisms that are detrimental to the transparency of exchanges. It is therefore essential to build a relationship of trust between Peer Reviewers and interviewees right from the start of the interview, by creating a positive atmosphere that protects the individuals and values their points of view.

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Building this relationship of trust will be all the easier if the company has done an effective communication campaign about the process before it begins (see paragraphs The Management & The Frontline Staff).

The themes of the interviews will have been defined during the preparation phase (see paragraph Definition of the scope).
Interviews should normally be carried out by two or three team members – one or two acting as interviewers, and the other taking notes. Some issues emerging may be complex and the presence of two or three Reviewers allows post interview discussion where necessary.
It is essential to take a break after an interview, so that the Reviewers can tackle the next one in the right frame of mind.

We can distinguish between two types of interviews: individual interviews and focus groups. Interviews must not exceed one hour, for the individual ones, and one hour and a half for the focus groups. Beyond that, the answers given could become less precise or too generic, and the fatigue of both Reviewers and interviewees could become too great. Once the interviewees have left, the Reviewers need to take the time (between 15 to 25 minutes) to synthesize and consolidate the information gathered (cf paragraph Planning).

- Individual interviews: there are several types of individual interviews. The most useful one for gathering culture facts is the one called "semi-structured interview". It is conducted on the basis of broad pre-defined thematic areas and allows for follow-up questions in response to the interviewee's story. The flexibility of this approach allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as pertinent during the Peer Review preparation. If handled by a skilled interviewer, they can raise additional or complementary issues that can be a valuable contribution to the assessment findings.

- Focus groups make it possible to observe human interactions, while at the same time obtaining useful information that would not be obtained using other methods. Indeed, group interactions and dynamics bring out other aspects of safety culture than those obtained during individual interviews or observations, including power dynamics, interaction patterns, dominant beliefs, and values, etc. The location of a focus group is selected to ensure that participants are not distracted by noise or other forms of interference. Focus groups should be made up of small groups of 4 or 5 people to allow everyone to express themselves freely, and they should not mix hierarchical levels so as not to engender such mechanisms as obedience to authority or organizational silence.

Observations

Observations are a structured approach to gathering factual information about what is going on in real-time. They capture information on such things as the attitudes and behaviors of participants, the shaping of resulting activities or actions, and visible reactions or consequences. They are conducted with as little interpretation as possible from the observer. Observations give insight into how people typically interact, prioritize, make decisions, and shape outcomes.

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Observations obviously concern field operators in their day-to-day working environment, but may also include managerial meetings, particularly if they concern arbitrations involving safety (e.g., safety reviews, event classification, endorsement of safety reports or inspection reports…). In that context observations give insights into group dynamics and how people interact with each other. This may include how conflict is dealt with in the presence of positional power and in what ways decisions are made.

During field observations, it is important to have a manager present to protect the activity being observed and to ensure the Reviewers' safety. There must be no interference between the Reviewers and the personnel observed carrying out their professional duties. Whenever necessary, a safety briefing should be held before going to the site. As a good practice we identified the support from one of the concerned employees to accompany the peer review team to answer questions without disturbing the staff in the field.

As for the interviews, observations should normally be carried out by two or three team members.

3.3.2 Analysis of data

The analysis phase is expected to identify the strengths and weaknesses of the Host Company's Safety Culture, together with opportunities for improvement and the risks if action is not taken.

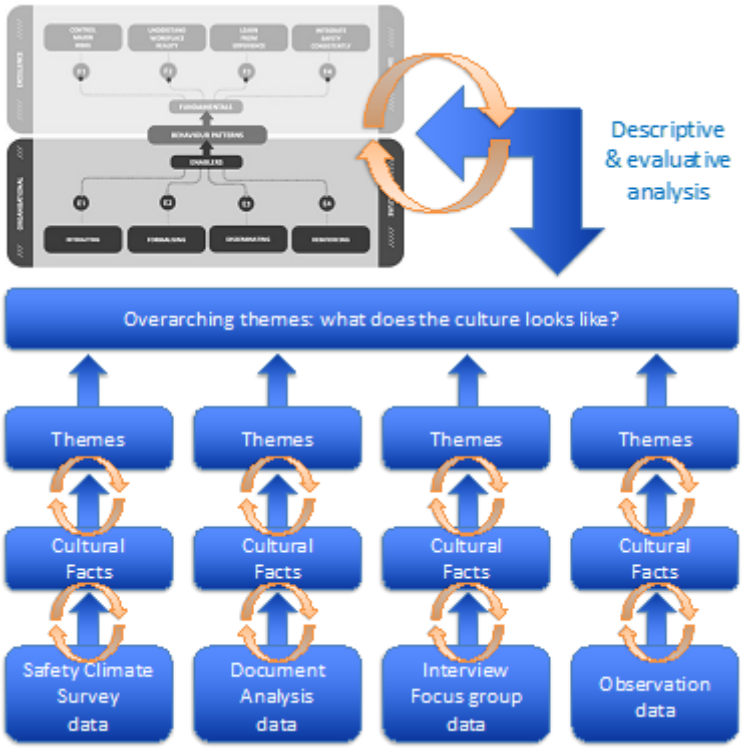


Figure 7 – Descriptive and evaluative analysis

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Descriptive analysis

Descriptive analysis involves extracting cultural facts from all the data sets independently, then classifying them into themes – attributes – linked to the Safety Culture model used. This is normally done by extracting discrete data points that reflect stories, events, explanations, and ways of thinking. These facts make it possible to give meaning to the practices reported or observed and to link them to the underlying assumptions and values. Aggregating these elements into different categories will allow a distinct and detailed analysis of the data, while documenting all or part of the themes and sub-themes that make up the model.

Evaluative analysis

Although the Safety Culture Peer Review is not a compliance audit, such as those that may be carried out elsewhere by a supervisory authority, it may be of interest in revealing practices that deviate from recognised standards or those mentioned in the company's guidelines. These gaps may reflect weaknesses that could compromise safety within the company, or good practices that should be preserved by the company in case of change management.

Ranking the findings

To make it easier to take ownership of the results when reporting back and to choose the action plans to be implemented, the findings should be ranked in order of priority. At the end of the day, every review-team should have the 5 most important messages to discuss in the group.

3.4 Reporting the findings

Once the team has finished analysing the data, it's time for the final report. This report takes three distinct forms: a written report; an oral presentation to be delivered to Senior Management; communication to the whole organisation.

Before sharing the results, one essential point should be stressed: Some concerns may be perceived to reflect on particular groups or functions and output may thus be sensitive. It is important, again, to stress that the findings are not intended to criticise but to be constructive and to improve the culture of the organization. In particular, communication to the whole organisation, which is under the responsibility of the company and not of the Team Leader, should be planned and performed carefully.
It is also important to underline that the final report should not include any recommendations. All the actions plan, following the review, are under the responsibility of the company.

3.4.1 Summary written report

When a Safety Culture Peer Review has been effective, the number of findings can be very large (see paragraph Analysis of data). The main objective to bear in mind when drawing up the final report is therefore to produce something that is digestible and usable by the company.

To achieve this objective, the following structure is proposed:

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- An executive summary
- An overall summary of the final result
- A highlighting of the company's 5 main strengths and 5 main areas for improvement, based on the associated findings.
- An exhaustive presentation of all findings for each attribute of the safety culture model used.

The clarity and simplicity with which the results are presented will make it all the easier to take ownership of them and implement effective action plans.
Once the report has been issued, it is essential that contact is maintained between the Team Leader and the Host Coordinator so that any questions can be answered.

3.4.2 Summary verbal report

The written report must, then, be shared with the Senior Management during a specific meeting leaded by the Team Leader. This oral report should focus on the main strengths and areas for improvement, with their findings, and should leave enough room for discussion between the Team Leader and his/her team, on the one hand, and Senior Management on the other.
It's important that the Team Leader and the Team Reviewers set aside extra time after the meeting and remain available to answer any extra questions the managers may have.

3.4.3 Communication to the whole organisation

Although this overall communication is not part of the Safety Culture Peer Review process itself and is not the responsibility of the Team Reviewers but of the company, it is important to underline a few key points that should not be missed.

As already emphasised, this communication needs to be carefully planned. This point is of the utmost importance, as the entire organisation will have invested heavily in the project, and the way in which the results are presented must live up to the generated expectations. Those involved should be given the opportunity to discuss the findings and sufficient time should be given to digest them and questions and/or feedback invited. This is important so that individuals and groups are able to develop ownership for the results and so that they are better able to understand and accept the importance of the follow-up actions which will be decided by the company.

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