

# Safety Culture Programme at ERA

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Kim Drews – [kim.drews@era.europa.eu](mailto:kim.drews@era.europa.eu)



*“It is widely recognised that safety management can be effective only if all staff share and live a common commitment to safety.*

*Leadership plays a paramount role here as a guide to cultural change.”*

Josef Doppelbauer

- Strong relationship between (safety) leadership and (safety) culture
- A positive safety culture ensures a living SMS

# The Safety Management System (SMS) as the cornerstone of railway safety regulation

EU secondary legislation on SMS requirements related to railway undertakings and infrastructure managers (2018/762)

*“Top management shall demonstrate leadership and commitment to the development, implementation, maintenance and continual improvement of the **safety** management system (...)”*

*“The organisation shall provide a **strategy** to continually improve its **safety culture** (...)”*



*The organisation shall demonstrate a **systematic approach** to integrating **human and organisational factors** within the safety management system*



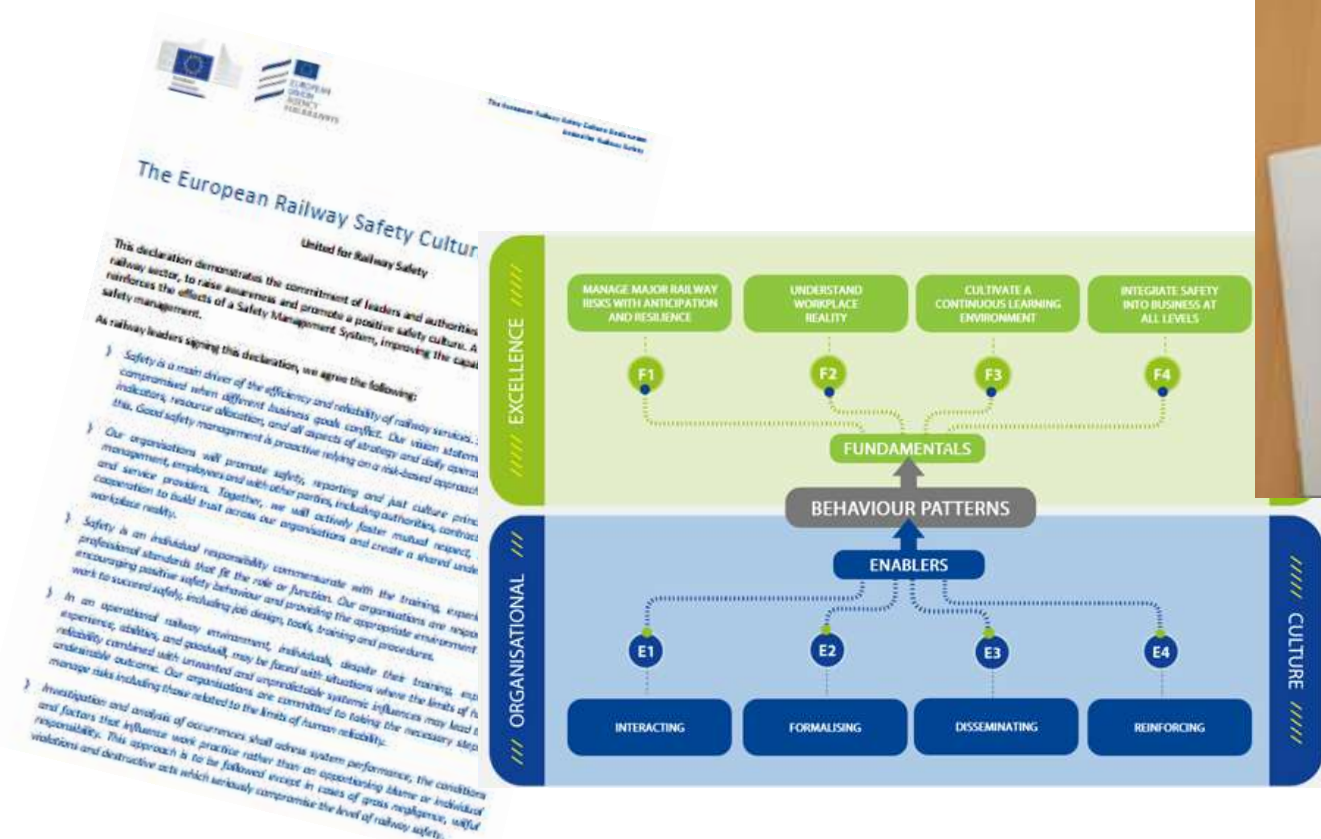
Aim: To devise *dissemination* and *evaluation* instruments to support the development of *a positive safety culture*

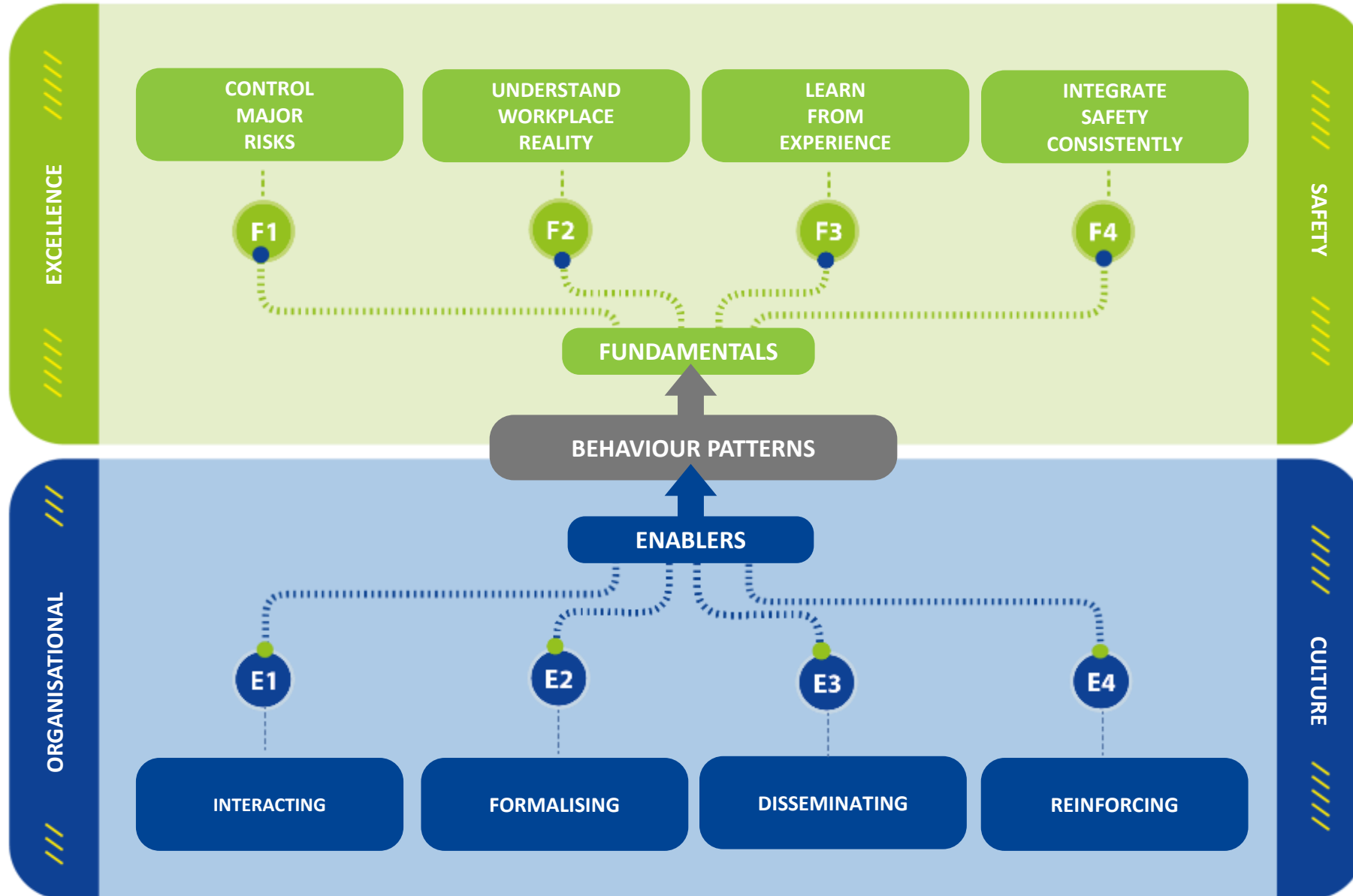
Project Management, Knowledge and Strategy



# ERA European Railway Safety Culture developments

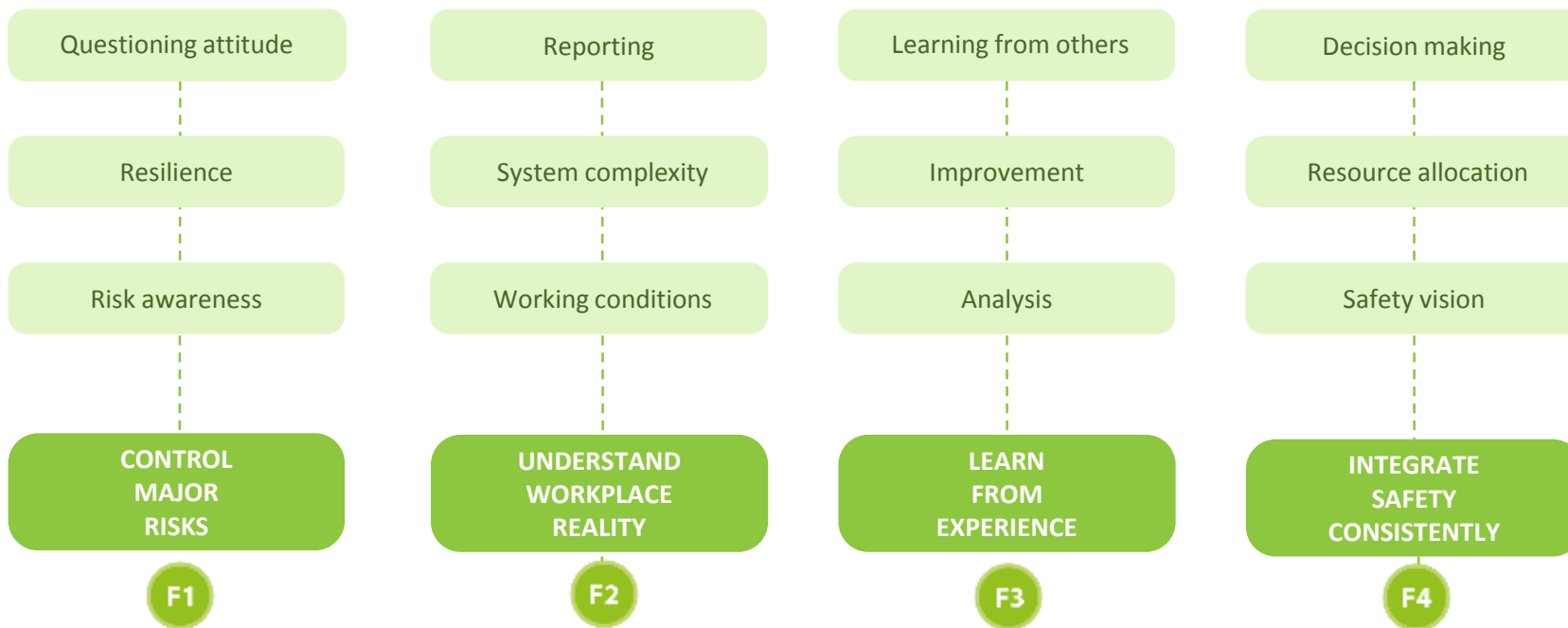
- Declaration to raise awareness and inspire safety policy and safety vision
- Model – to create a common language and understanding. Backbone for developments!
- Leadership training – to provide tools of good practice in safety leadership
- SC assessment



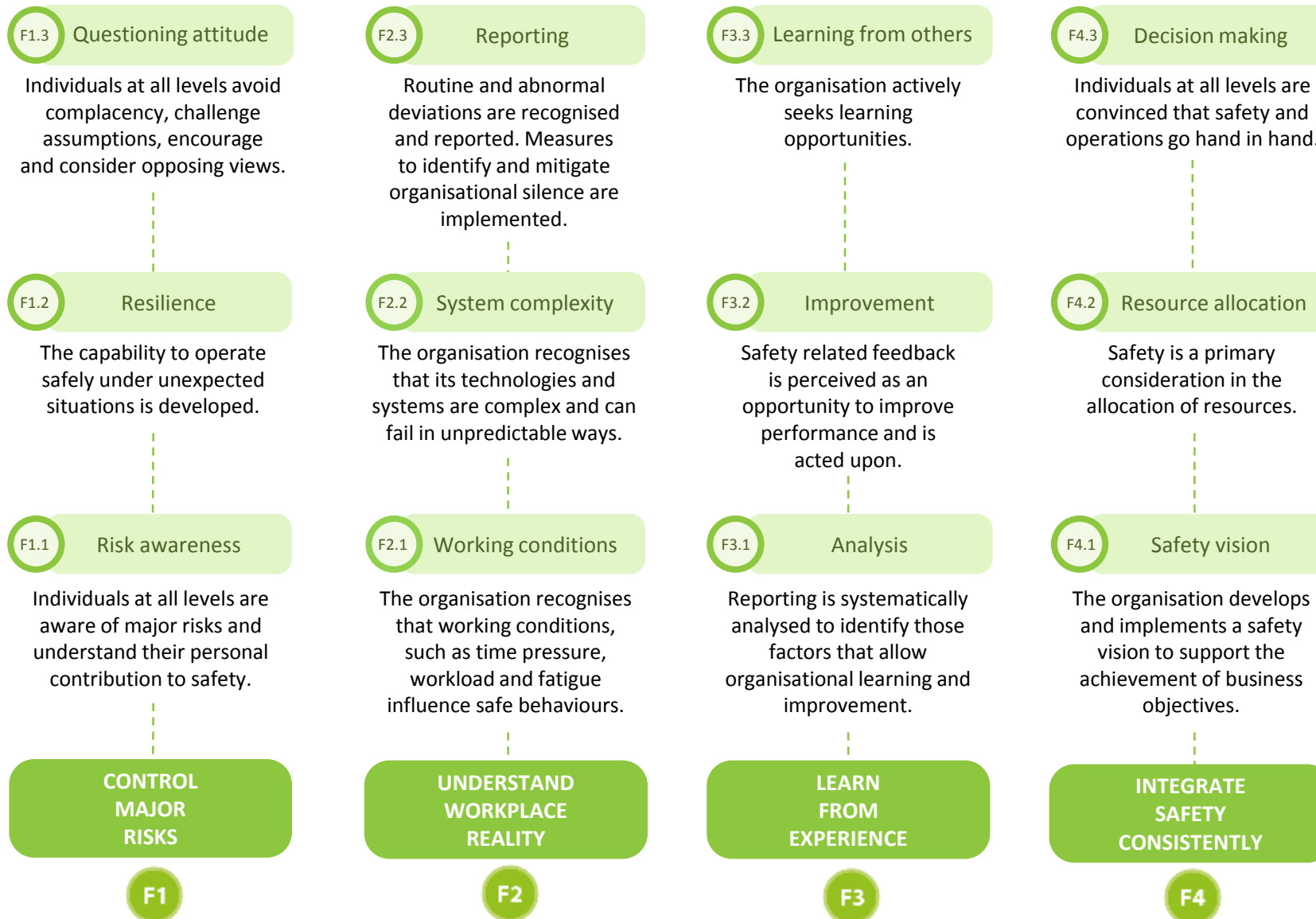


Adapted from  
Guldenmund  
(2015, 2018)

## Railway Safety Fundamentals: Keywords

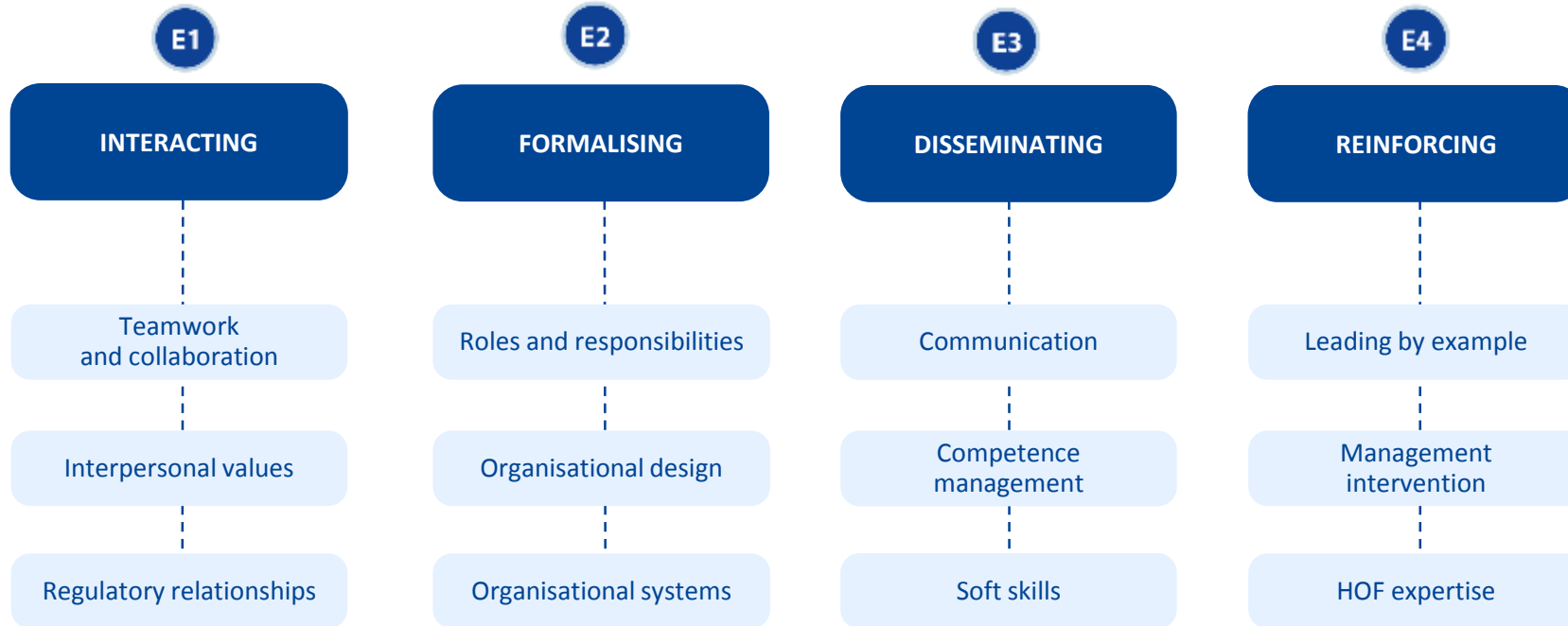


# Railway Safety Fundamentals: Attributes

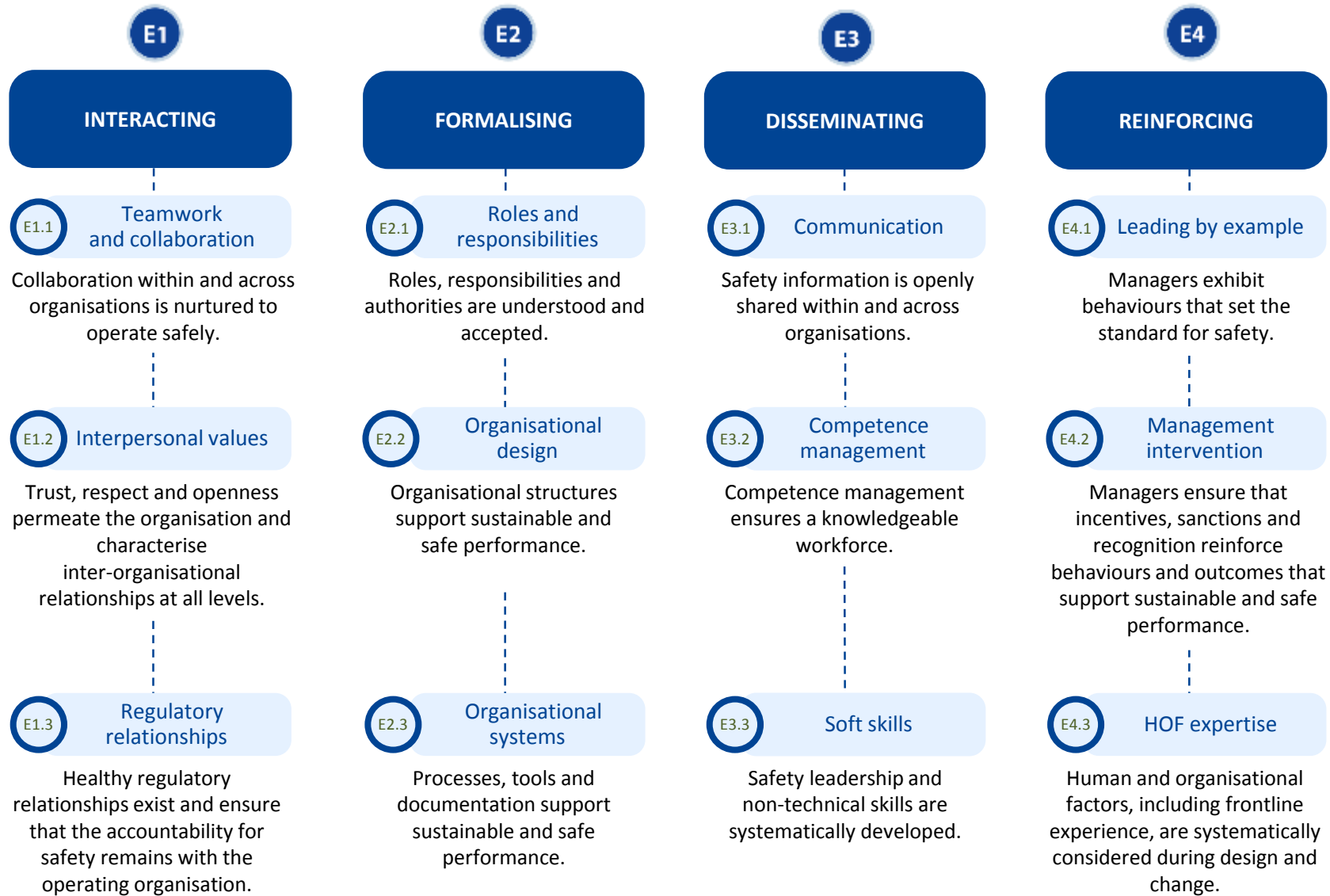




## Cultural Enablers: Key Words



## Cultural Enablers: Attributes



# Development of the Safety Leadership training course



- How to discuss safety in an operational context – displaying the many layers of safety, not at least the influence from management
- Good practices identified in the nuclear, oil & gas, construction,...
- ...leading to the following specifications:
  - The training will target managers at all levels
  - The training will be disseminated within any rail organisation via a top-down approach
  - Duration: one day
  - 12-15 participants per training course
  - Emotional means to strengthen main messages
  - **A film which relates an accident as a red line**



- Based on existing or plausible situations, e.g. incidents and accidents that occurred in European railways, as well as realistic dialogue and scenes that describe the complexity of railway operations
- Film language is English
- Cinematographic techniques and dramatic devices to increase public attention

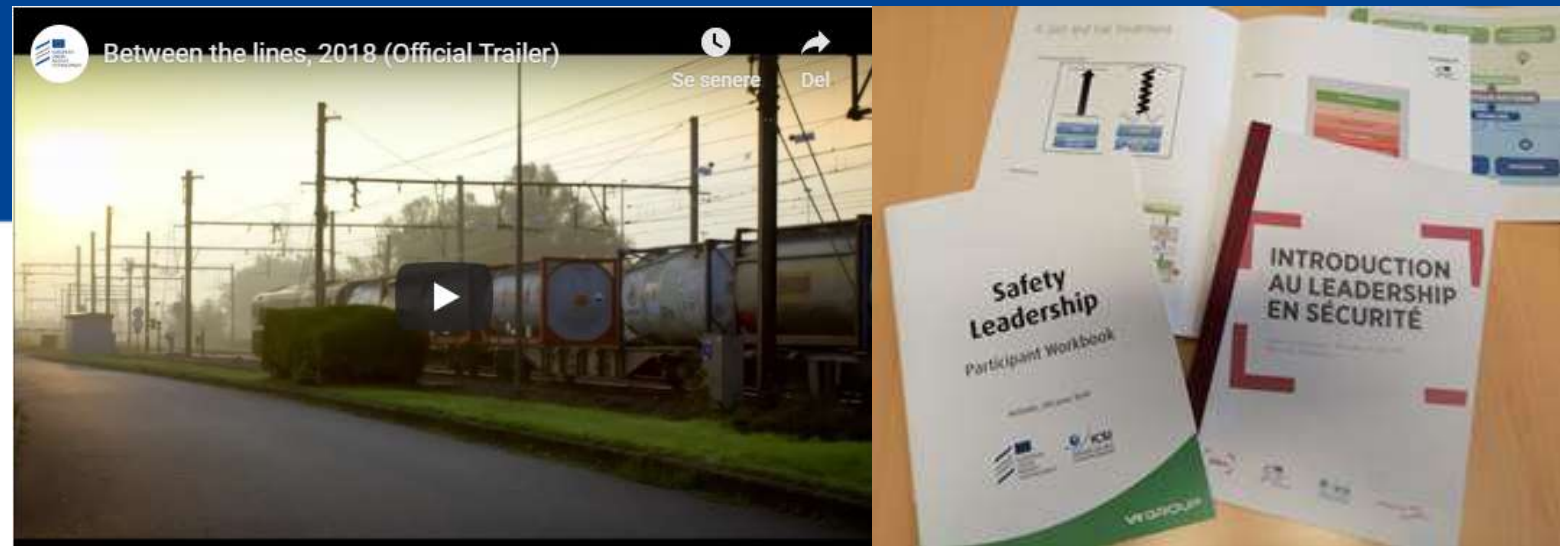


- The film should relate the story of a railway accident and describe the *systemic causal network* that leads up to the accident with a clear focus on ***poor safety leadership***
  - Good practices and appropriate behaviours to be highlighted
- poor commitment to safety at different levels of the railway socio-technical system,
  - production and economic pressures from the client and senior management,
  - inappropriate behaviours of team leaders,
  - unconvincing safety staff,
  - miscommunications between train drivers, shunters and signallers,
  - poor monitoring of contractors,
  - bad quality of procedures and documentation,
  - weak preparation and risk analysis,
  - inappropriate regulations,
  - poor regulatory supervision,
  - unhealthy work environment, lack of training,...

- Under the umbrella of the Agency's Human and Organisational Factors Network
- Experts from ERA, ICSI, RSSB, SNCF, UIC
- Three meetings took place between July and October 2018 to accomplish the following objectives:
  - Enrich the training curriculum on safety leadership
  - Monitor the development of the workshop, including the specific movie
  - Reflect on test, deployment and dissemination of the training



# The result: Film “Between the lines” and training content





- How does leadership impact safety performance?
- What does a positive safety culture look like?
- Why do experienced and intelligent people get injured?
- How to respond in a just and fair manner?
- Which specific attitudes and behaviours make a safety leader?
- How to effectively consider safety in the daily trade-offs?
- What is my personal commitment to safety leadership after today?
- What is the link between safety leadership and safety culture?

## Five Safety Leadership Principles





### ACKNOWLEDGE GOOD PRACTICE AND EVALUATE DEVIATIONS FAIRLY

- Recognise and highlight good practice and initiatives in order to reinforce safe behaviour and raise awareness
- Collectively celebrate success
- Explain what is unacceptable conduct and the corresponding sanctions (if necessary using a graded scale)
- Carefully analyse the context before applying any sanction
- Exercise skilled, fair and honest judgment in safety matters
- Be able to transparently justify any sanction

- The training was announced during the **European rail human and organisational factors seminar** held in Valenciennes, France during 14-15 November
- During the event, professionals from Thalys THI Factory (France-Belgium) and VR Group (Finland) expressed their interest to deploy the training
- In the beginning of 2019, meetings took place to start preparing the delivery of the training to the senior managers of these two companies
- Next training to be conducted at Irish Rail next week



*The two training sessions that took place in May and June 2019 were successful*

Quelle partie avez-vous trouvée la plus intéressante?

Le film et la compréhension progressive de ce qui s'est passé  
- la partie sur le leadership réunifié

Le film permet une prise de recul le film lui-même pédagogique et les échanges  
vivants et didactiques

Which moment did you find the most interesting?

Video examples were the most inspiring and made me think of my role regarding safety

The video + analysis was effective

Any further comments or anything you should like to tell us:

Good course, Thanks

- The safety leadership training can be adapted to and implemented in any rail organisation
- A train-the-trainer course developed to allow faster dissemination and increase capability building
- Towards a community of rail safety leadership specialists: safety leadership summer school in 2020
- Next session open for external candidates: **17<sup>th</sup> January 2020 in Valenciennes (France)**
- Let us know if you are interested!
  - [kim.drews@era.europa.eu](mailto:kim.drews@era.europa.eu)
  - [gregory.rolina@era.europa.eu](mailto:gregory.rolina@era.europa.eu)

# Safety Culture assessment



- Tested questionnaire developed with industry experts
- Recognised assessment process
- Guidance to made in 2020

## Safety Culture Assessment Pilot @ Nordjyske Jernbaner

- Small IM, RU and ECM
  - 120 staff
  - Fast growth:
    - 19 to 70 drivers in few years
    - 2 to 4 lines
    - Old staff, DSB staff, BDK staff, new staff
    - Strong wish to work on safety culture





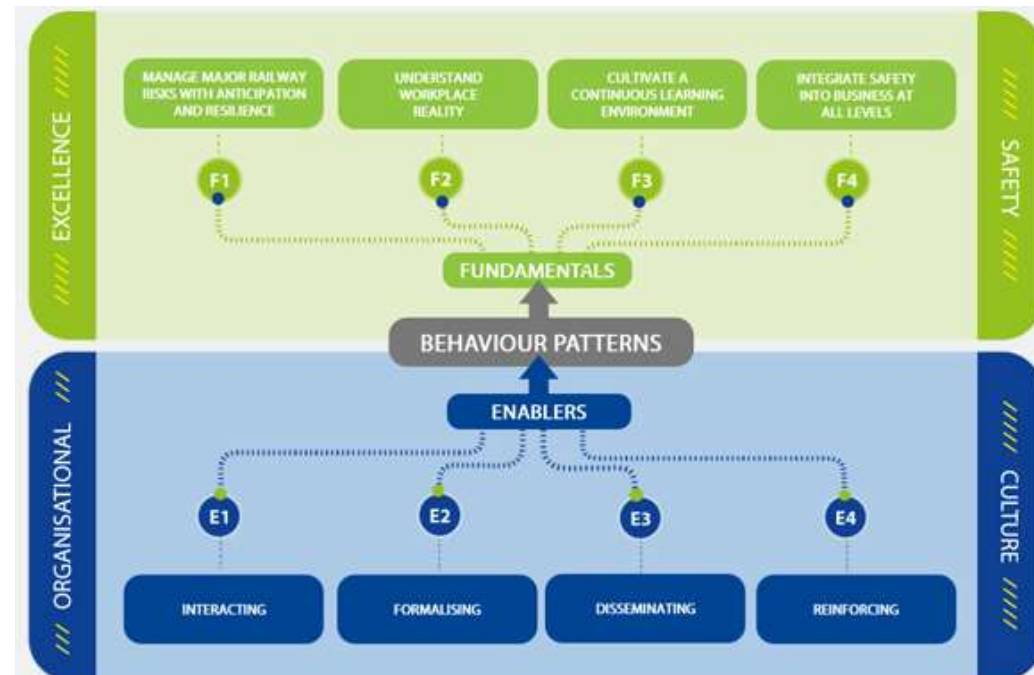
# A Method for Leading Safety Culture Change (ICSI)



There is no magical recipe model for action, only a model adapted to your own context



- Questionnaire
- Interviews
- Observations
- Focus groups
- Feedback (snapshot)



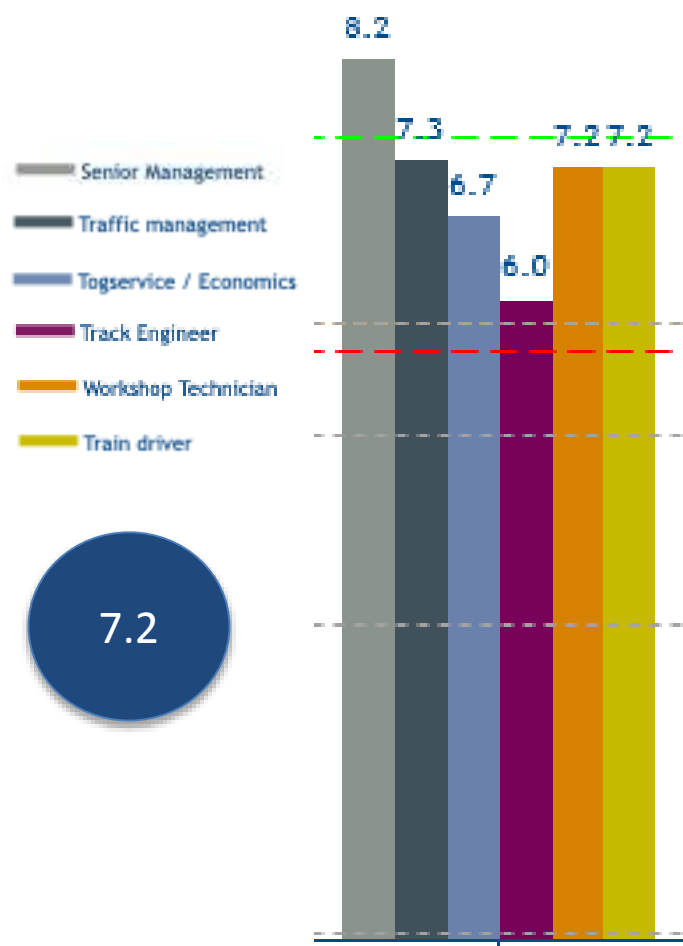
# Safety Culture Assessment Process



# Outcome from focus groups, observations and interviews

**Strength: F2.3** Measures to identify and mitigate organisational silence are implemented

**Area for improvement: F2.1** Human and organisational factors, including frontline experience, are systematically considered following safety events, deviations, and during design and change



*“People are feeling comfortable speaking up here. Most of them will tell”*

*“The door is always open to the CEO”*

*“Today, there were a little accident. A driver cut the shift. The driver came to safety ‘I have done something wrong’.*

*“The leaders do not know what is going on in the trackside.”*

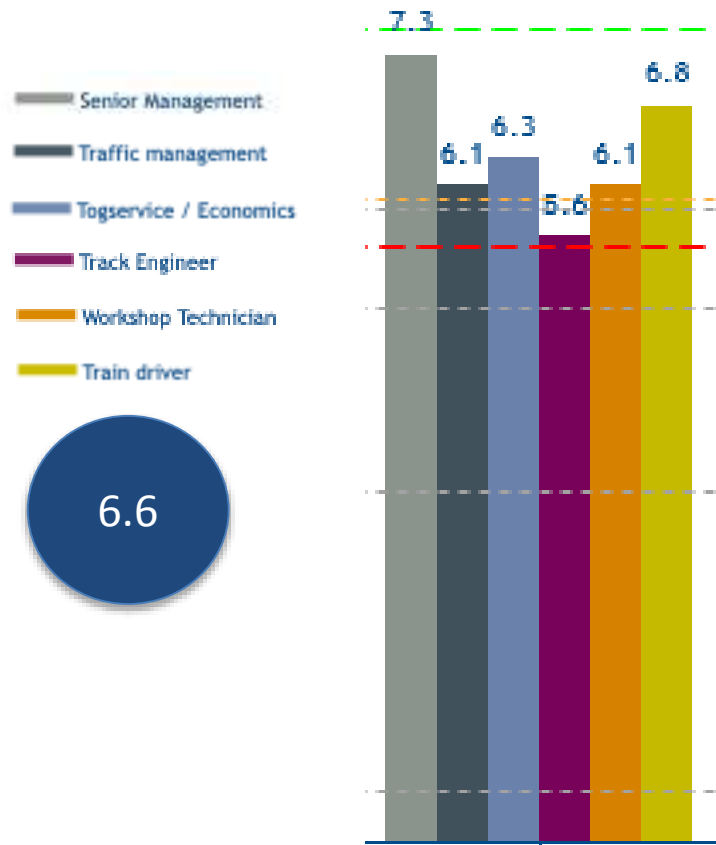
*“Our views should be more integrated in the planning and in the decision making at high level”*

*“It is too difficult to find something inside the tablet”*

*“How was the change of train service intervals risk assessed – ending up wearing down brake pads? We were never asked about our opinion”*

**Area for improvement: E3.1** Safety information is openly shared, up, down and across the organisation and with audit and regulatory organisations.

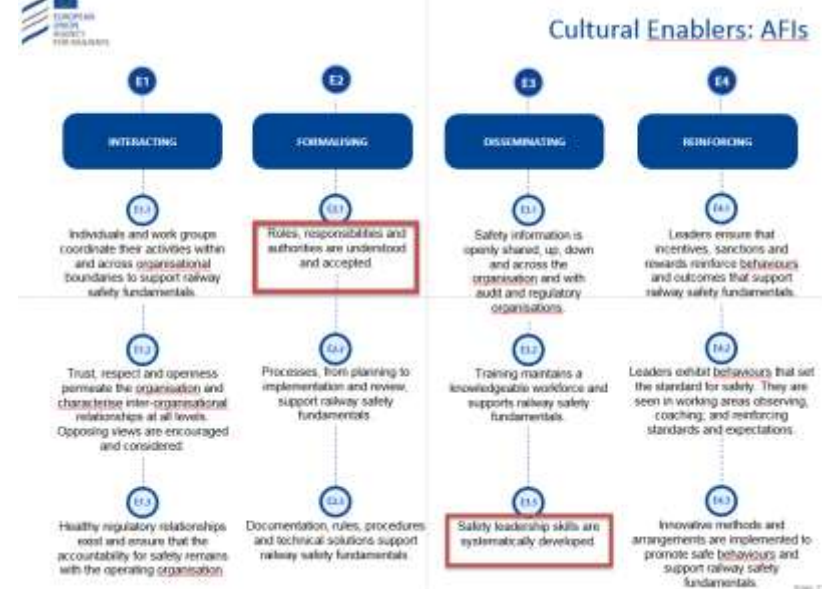
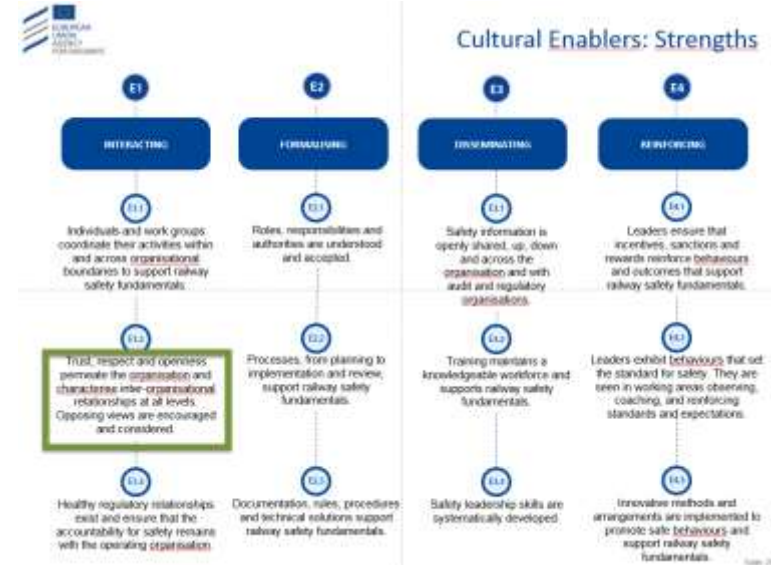
**Area for improvement: E3.3** Safety leadership skills are systematically developed.



*Mentoring practice in the workshop*  
*“The rules are the easiest part of teaching.*  
*Trainings here address values and behaviours.”*

*“Safety is not addressed during the morning brief”*  
*“I would like to have more sharing. The newsletter is just the headlines. Not the details. There is more to learn”*  
*Emergency/Evacuation: “We have procedure. A training would be necessary.”*  
*“I haven’t had a safety introduction since I came.”*

# Conclusions and learnings





- Over the three last years, Nordjyske Jernbaner has significantly grown:
  - 2 new lines opened
  - 48 train drivers hired
  - About 2,5 times more kilometres per year operated
  - First Danish company to implement ERTMS-2
- The company has accomplished these impressive achievements with good safety performance
- **Among the success factors are the following items:**
  - **The integration of new qualified staff coming from the national sector raising the safety level**
  - **A clear commitment to safety expressed and demonstrated by the management**
  - **A climate of openness and trust cultivated by the management**
  - **An overall great motivation of staff at all levels**
  - **A valuable contribution of the safety team**

- The company is living a critical moment: from a “wild wild west” family company to a more sustainable and formalised organisation
- To succeed, the following items require a specific attention:
  - Communication of safety issues and lessons learned from internal and external occurrences
  - Integration of Human and Organisational Factors expertise into new projects, changes and occurrence analysis
  - Development of safety leadership and soft skills
  - Clarification of roles and responsibilities, in particular for emergency situations
  - Appreciation of the contribution of the “yellow guys” and the train service staff
  - Continuous fight against complacency and awareness that a major accident is possible

- Successful evaluation
- Captured many opportunities for NJ improvements – known and unknown
- Provided basis for improvements on the SC model and the questions used in the questionnaire.

- Very positive feedback:
  - “we couldn’t have had a better understanding of our present state of safety anywhere”
  - “using the model and going through the process means that that we can speak about and structure our SC work better. The SC model has helped us a lot - before doing this, we wanted to do more on SC, but it was very “fluffy””
  - “We will share our learnings with the DA NSA and will try to convince them to use the model as a general standard”
  - “this assessment has given us more learnings than any “normal” supervision”
- Next steps at NJ (without ERA):
  - Setting up new information sharing system
  - Initiating staff focus groups to discuss and plan action



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