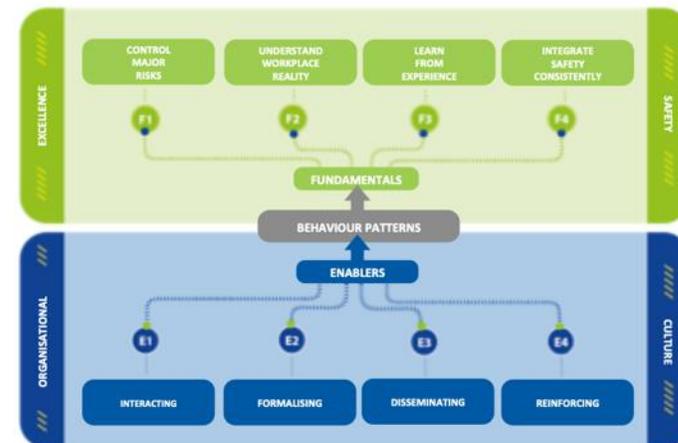


The European Railway Safety Culture Model: Theory and Practice

ERA Safety Culture Programme

Bart Accou, Head of Safety and Operations

4th German Workshop on Rail Human Factors, December 2nd 2020



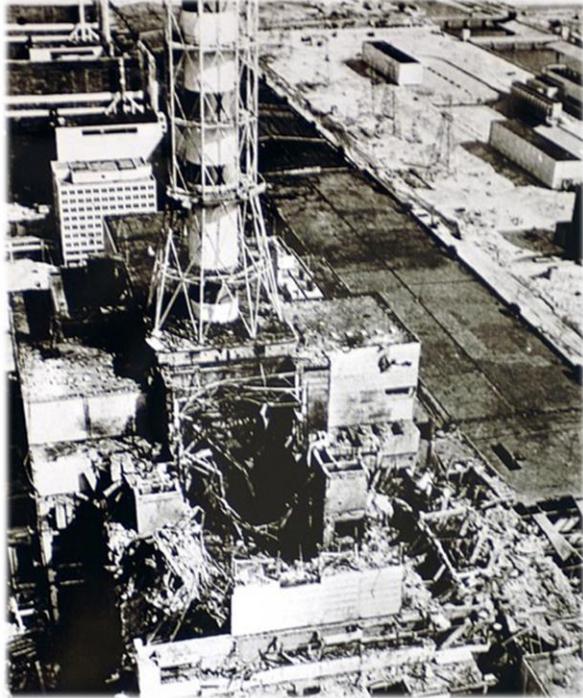
Safety culture model

- **Background**
- **Model Specifications**
- **Design Process**
- **Model Building Blocks**

Current and Future Developments

- **Safety Climate Survey**

Conclusive remarks / Q&A



**Chernobyl
1986**



**Challenger
1986**



**Clapham Junction
1988**

To an observer B, A^ is a model of an object A to the extent that B can use A^* to answer questions that interest him about A*

Minsky 1965



- Apply to any type of railway organisation or authority
- Distinguish and articulate two concepts
 - Organisational culture
 - Safety
- Balance between pragmatism and oversimplification

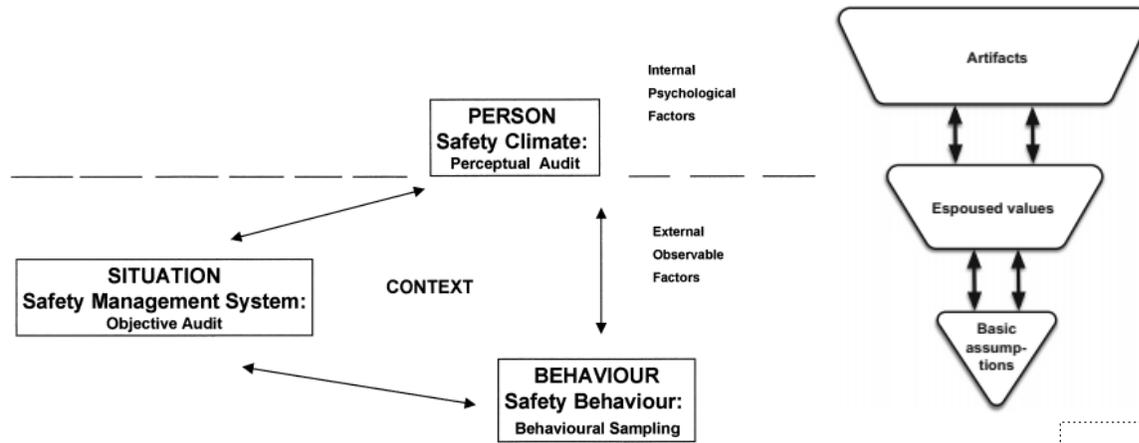
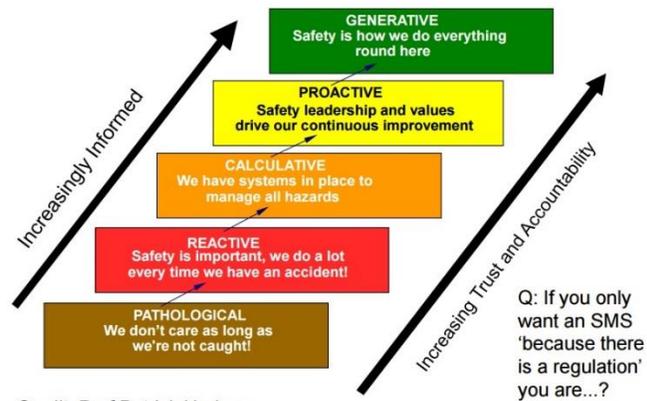
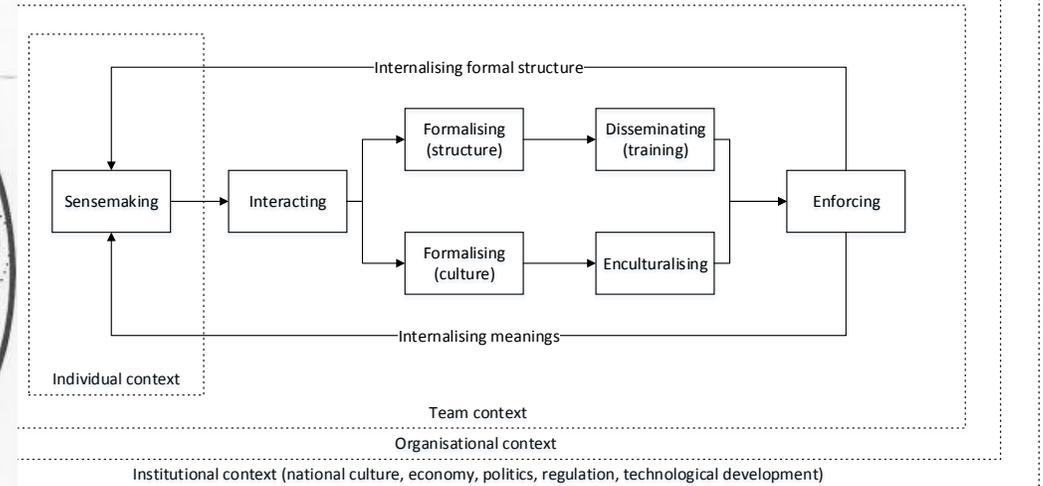
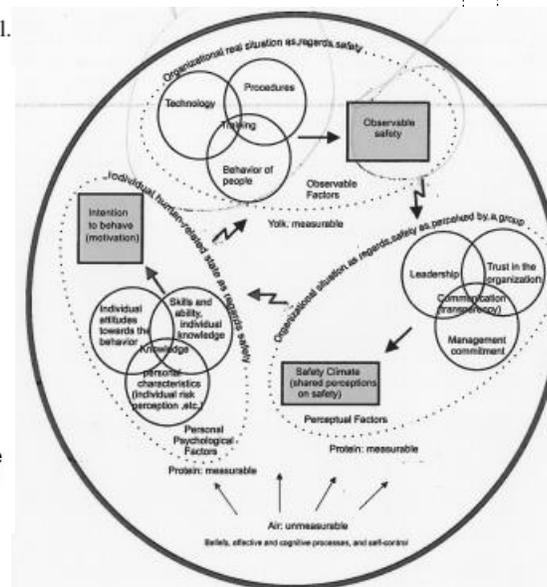


Fig. 2. Reciprocal safety culture model.

Types of Safety Cultures



Credit: Prof Patrick Hudson



Human and
Organisational
Factors
Task Force



Three meetings in 2018 to issue a first version of the model





Full scale pilot on the EU model

- Workshop for Traficom inspectors

3 pilot organisations

- Volunteered to participate
- Different field
- Different size
- Steering groups
- Workshop: all organisations participating

F1. Ennakoiva turvallisuuden ja riskien hallinta	F2. Työpaikan todellisuuden ymmärtäminen	F3. Jatkuvan oppimisen edistäminen	F4. Turvallisuuden yhdistämisen liiketoimintaan
			

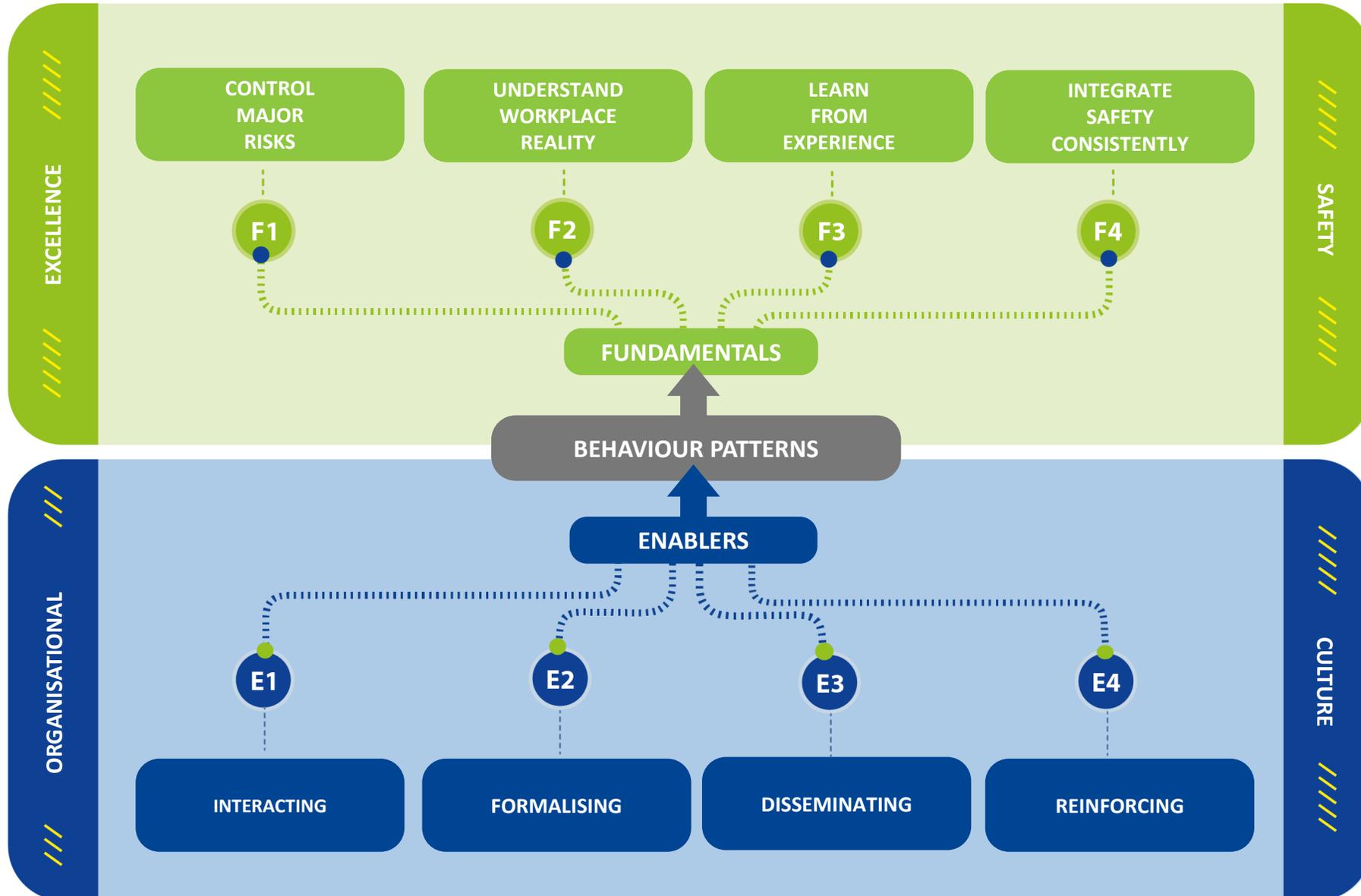


Workshops
(IT, EL, ES, NL)

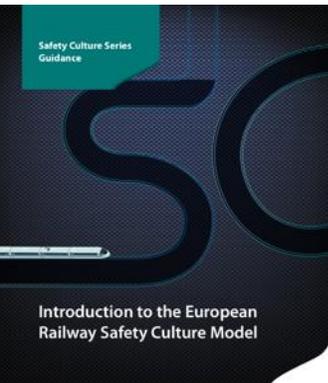
Safety Culture Assessment
(Nordjyske Jernbaner – DK, ADIF – ES)

Regulatory Oversight
(FI, IE, CH)

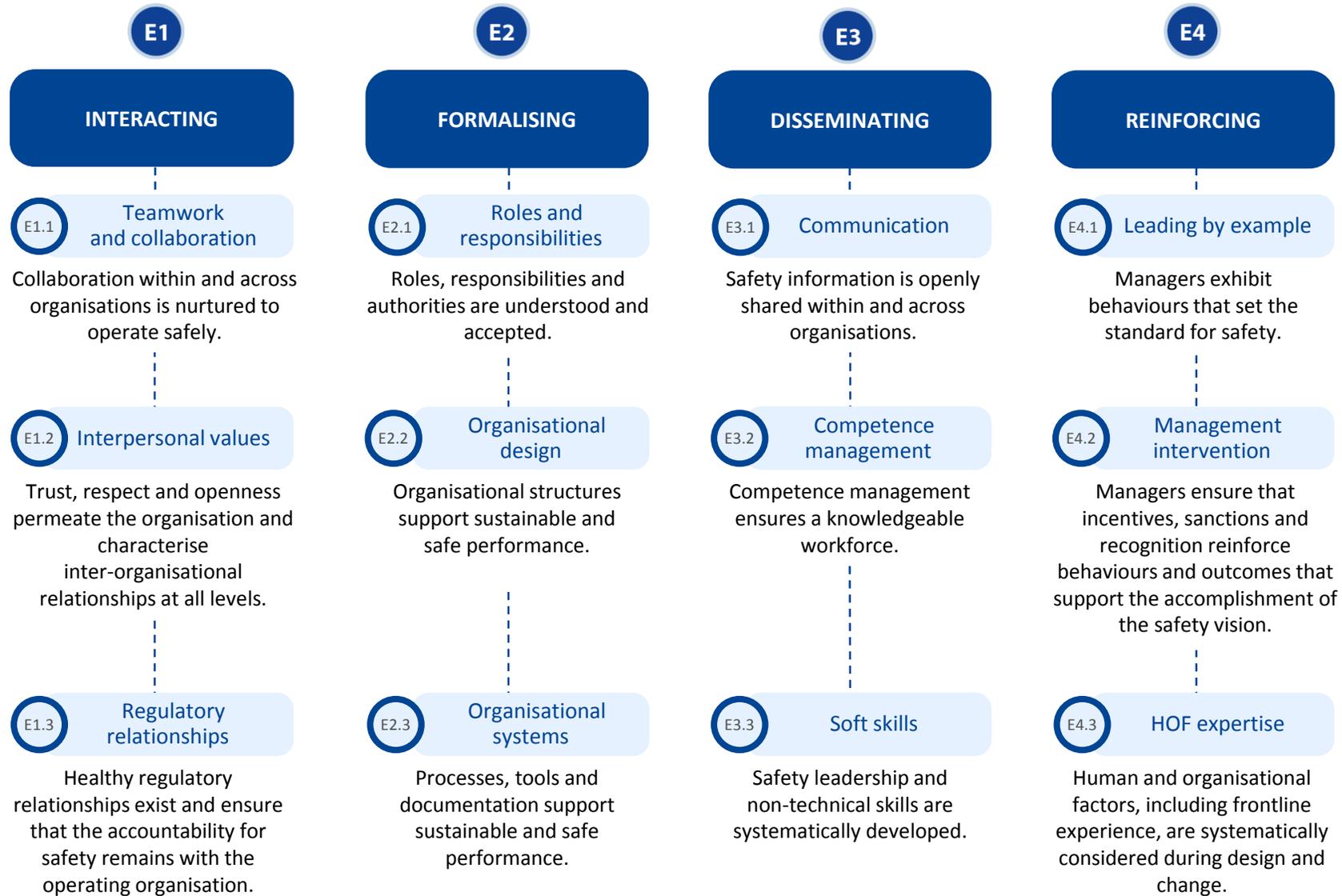
European Railway Safety Culture Model



Attributes of a Positive Safety Culture (1)



Attributes of a Positive Safety Culture (2)



Current and Future Developments



- Safety leadership
- Safety culture assessment
- Regulatory oversight of safety culture
- Peer review service
- European rail safety climate survey
- Just culture
- Cultural change strategy
- Human and organisational factors
- ...

European Rail Safety Climate Survey (1)

Railway Undertaking
Infrastructure Manager
Manufacturer
Service Provider...

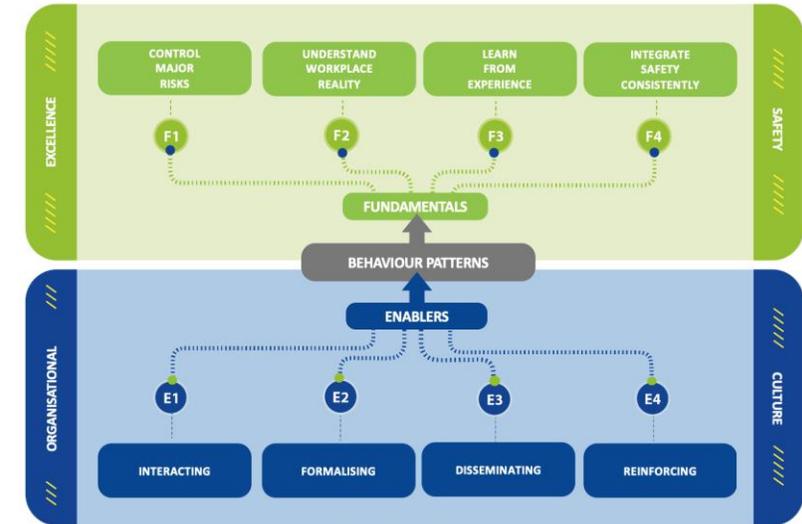
National Safety Authority
National Investigating Body
Ministry
Administration...



Open to ALL European rail professionals as individuals

Open to ALL European rail companies and authorities as **partners**

Aligned with the European Railway Safety Culture Model



Launched during the European Year of Rail



EUROPEAN RAIL SAFETY DAYS 2021
PORTO 14 - 16 June
Committed to Safety!



EU Survey

BG CS DA DE EL EN ES ET FI FR HR
HU IT LT LV NL PL PT RO SK SL SV

We are supporting our stakeholders
to make the
European Rail Safety Climate Survey
a **collective success**

Check out ERA [safety culture webpages](#) for regular updates
Any question or suggestion:
safetyclimatesurvey@era.europa.eu

European Rail Safety Climate Survey (2)

- It takes about **15 minutes** to complete the survey on **any electronic device**
- The information is collected **anonymously**: it will NOT be possible to identify individuals responding to the survey
- Results of the partner version of the survey will be **shared ONLY with the partner**
- Overall survey results will be used to improve European rail safety and will be made available to the public
- The initiative is to be repeated on a regular basis (2- to 4-year cycle) or upon request
- It is **the start of a sustainable European database on rail safety perceptions**

The European railway safety culture model

- Elaborated and tested with safety experts and rail professionals
- Articulates organisational culture with safety
- Addresses pragmatic company needs – still respects the complexity of culture
- Supports learning, cultural change and improvement strategy

Conclusive Remarks



Visit our webpages

www.era.europa.eu/activities/safety-culture_en

Contact us

safetyculture@era.europa.eu

safetyclimatesurvey@era.europa.eu



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