



IRSC 2022

INTERNATIONAL RAILWAY
SAFETY COUNCIL

SEVILLA, OCTOBER 16-21, 2022



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SAFETY CULTURE AND SAFETY MANAGEMENT SYSTEMS – AN AUTHORITY PERSPECTIVE



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MODELS AND ASSESSMENT

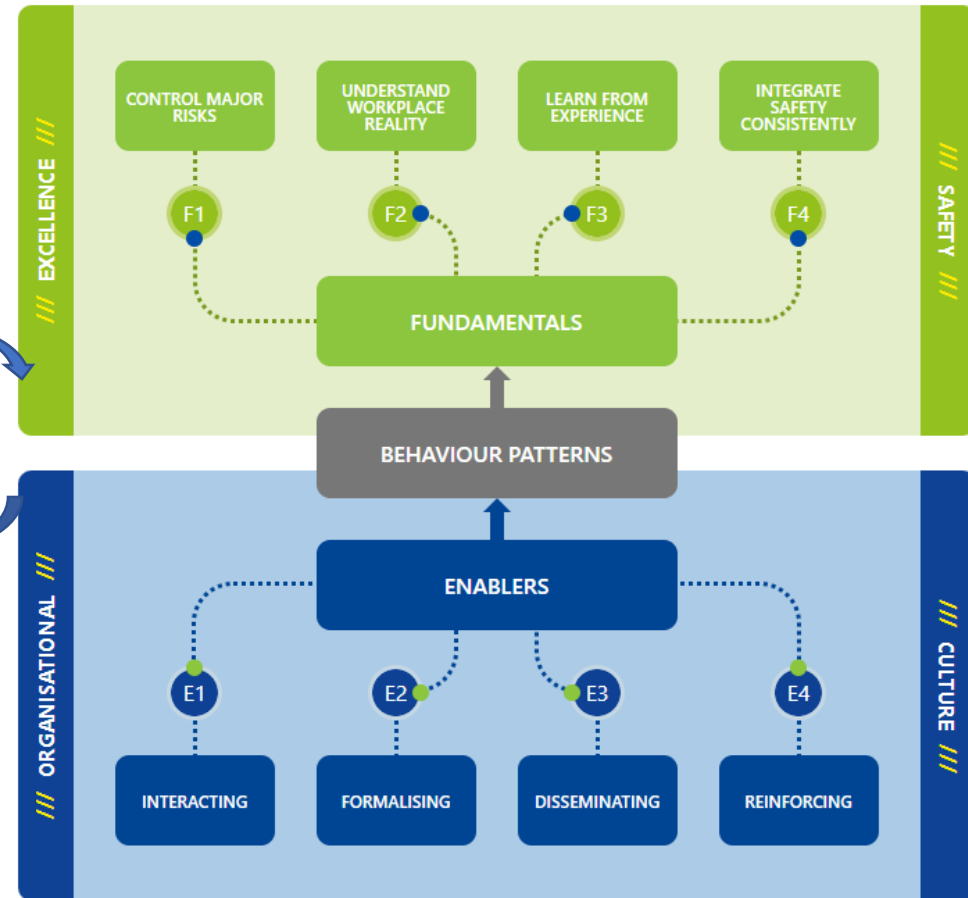
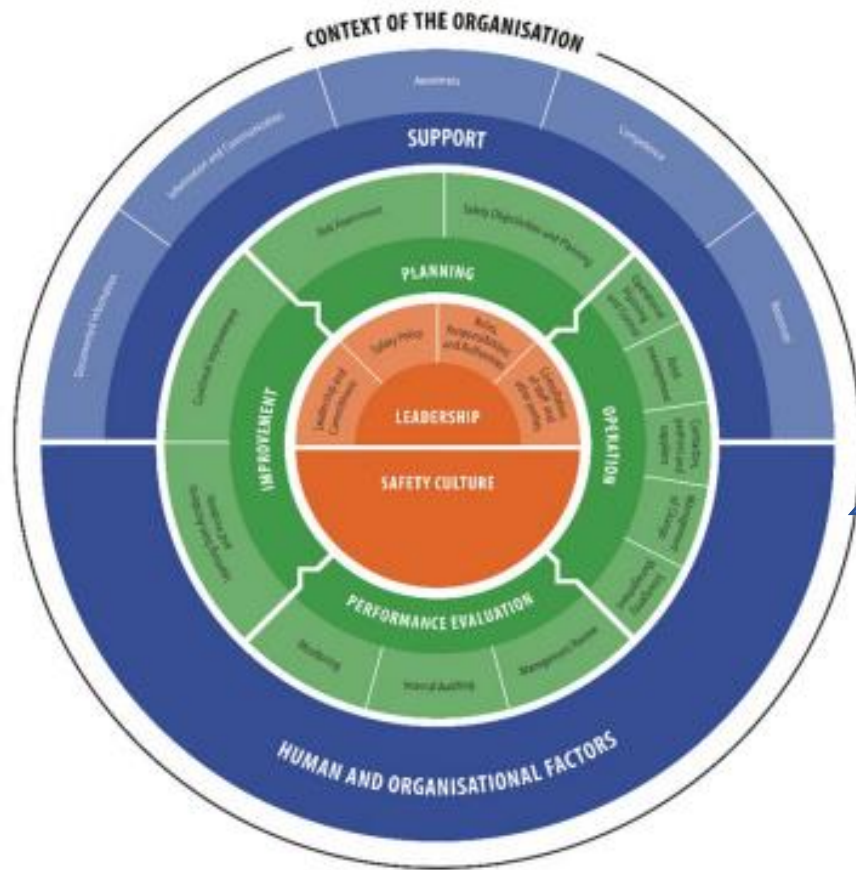


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SAFETY MANAGEMENT SYSTEM AND SAFETY CULTURE MODELS



RELATION BETWEEN ERA SMS REQUIREMENTS AND SAFETY CULTURE MODEL

Overlap between models, but no contradictions

Both models include leadership aspects, no explicit leadership model

HOF not described in detail, organizational factors considered

SC model includes good “additions” to safety management

SMS model can provide framework for SC development, requires understanding of models

TYPES OF ELEMENTS IN SAFETY CULTURE MODEL

Nearly identical with SMS elements

- Roles, responsibility, resource allocation...

Indications of SMS implementation

- Communication, leadership...

Indicative aspects of safety culture

- Questioning attitude, understanding system complexity...

Shared patterns of behavior, basic assumptions and values

- Only parts of interpersonal values

PROPOSAL FOR A REGULATORY APPROACH



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APPROACHES TO SAFETY CULTURE ASSESSMENT

Focused assessment

- Short interviews
- Document analysis / participation in SMS audits

Full assessment

- Short interviews
- Comprehensive document analysis/ dedicated SC audit

Wide assessment

- Long interviews
- Comprehensive document analysis
- Dedicated SC audit/participation in SMS audit

EXAMPLES OF SAFETY CULTURE ISSUES CONSIDERED IN INTERVIEWS

	Element	Interview question	Issues to pay attention to
F2.2		Are there some aspects in work conditions or in other work-related factors (work hours, amount of work etc.) that are bad for safety, but people have just learned to live with them? Why these have not been changed?	<p>Can the person describe the safety effects and risks connected to their work?</p> <p>Does the person feel that the current climate supports questioning and speaking up on issues?</p> <p>F1.3, depending on the answer can provide information also on E1.1 and E1.2 elements.</p> <p>Does the person recognize the safety effects of work conditions?</p>
F2.3	F2.2	Are there some aspects in work conditions or in other work-related factors (work hours, amount of work etc.) that are bad for safety, but people have just learned to live with them? Why these have not been changed?	<p>F2.1 (does the person recognize risk factors) and F2.3, F3.1 or F3.2. Also, why issues have not been changed can tell about F2.3, F3.1 or F3.2.</p>
		How does your organization deal with errors? Is it easy to talk about errors in your organization? Why?	<p>F2.2 & F1.3 (Tells about how complex view of safety the interviewee has and whether they see any improvement needs in it)</p> <p>F2.2 (Tells about the hazards but also about the employee perceptions of hazards – e.g. is there a consensus on dangerous situations, is something missed)</p> <p>F2.2 (Does one recognize that rail safety requires partly different activity than occupational safety)</p>
		as occupational safety vs rail safety?	
	F2.3	Have you reported safety observations or raised safety issues during the past few weeks? Why? Do the supervisors and management support raising and dealing with safety issues openly?	<p>F2.3 (if the person has raised an issue, it is interesting why they have considered it important to raise up [Tells also about F1.3], if not then it is interesting to consider whether this is due to lack of</p>

NEXT STEPS



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NEXT STEPS

Empirical testing

- Interviews in Traficom

SMS auditing method

- Developed with auditors
- Workshops

Publication of project results

Thank you for your attention!



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