

IRSC 2022

INTERNATIONAL RAILWAY SAFETY COUNCIL

SEVILLA, OCTOBER 16-21, 2022









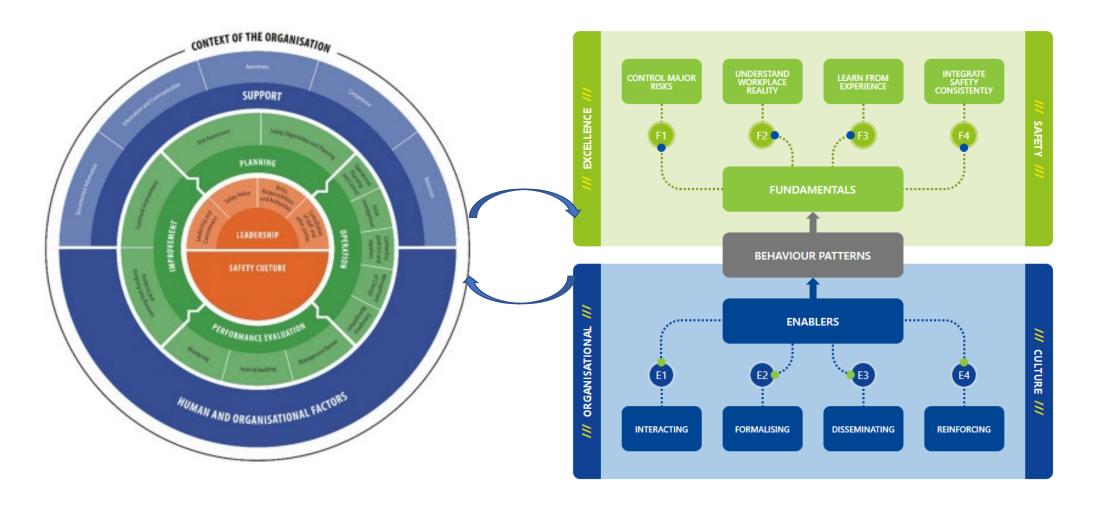




INDEX **MODELS AND ASSESSMENT** Relations between ERA Safety Management System and Safety Culture Model PROPOSAL FOR A REGULATORY **APPROACH NEXT STEPS** LILIKOI IRSC 2022 ASSI AGENCIA ETIATAL DE SEGUREACO FERROMANIA INTERNATIONAL RAILWAY SAFETY COUNCIL TRAFICOM SEVILLA, OCTOBER 16-21, 2022



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















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			Can the person describe the safety effects and risks connected to their work?
1 2.2	other work-related factors (work hours, amount of			Does the person feel that the current climate supports questioning and speaking up on issues?
	work etc.) that are bad for safety, but people have			F1.3, depending on the answer can provide information also on E1.1 and E1.2 elements.
	just learned to live with them? Why these have not			Does the person recognize the safety
	been changed?			effects of work conditions?
		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?	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.
F2.3	How does your organization deal with errors? Is it easy to talk about errors in your organization? Why?			F2.2 & F1.3 (Tells about how complex view
				of safety the interviewee has and whether they see any improvement needs in it)
				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)
				F2.2 (Does one recognize that rail safety requires partly different activity than
			as occupational safety vs rail safety?	occupational safety)
		F2.3	Have your 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?	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















NEXT STEPS

Empirical testing

• Interviews in Traficom

SMS auditing method

- Developed with auditors
- Workshops

Publication of project results













Thank you for your attention!

