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ELECTRONIC SYSTEMS

Railway Operational Communications on the Move

Thomas Karl,
Director Public Transport Division,
Frequentis – ROC IG

Paris, 17th May 2017

ROC IG - Housekeeping



- GSM-R IG became ROC IG:
Railway Operational Communications Industry Group
- We are the body of the European Industry for the continued success of GSM-R and for securing an evolutionary migration path towards FRMCS
- The new name reflects our mission: to support your business by making your voices heard
- New European ERTMS MoU signed by ROC IG - ROC IG is committed to ERTMS
- Membership update:
 - Sierra Wireless left the Group
 - Iskratel and Triorail joined

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Why are we here?: From GSM-R to FRMCS



Ensuring an interoperable transition:

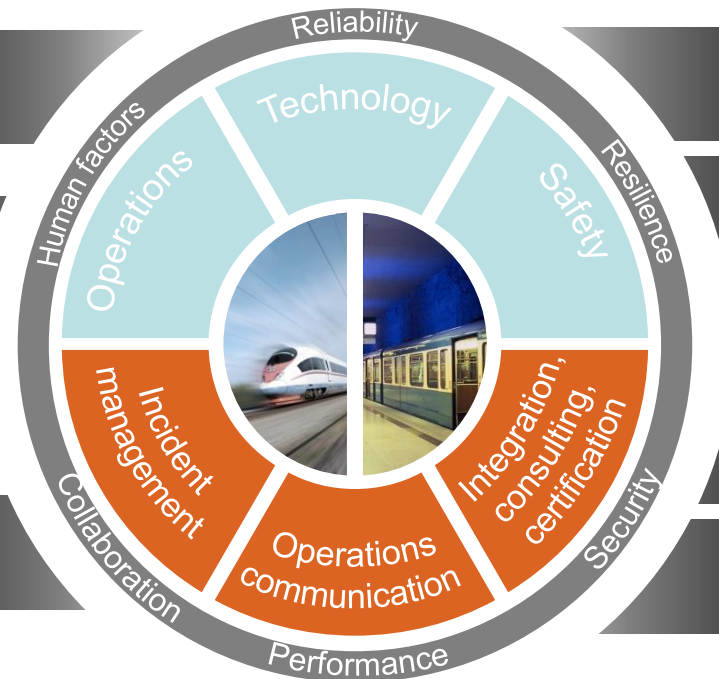
- ✓ Evolutionary migration instead of replacement
- ✓ Protecting railway investments in GSM-R
- ✓ FRMCS standardised and interoperable again

Strategic drivers and trends

A challenge for the supply industry

STRATEGIC DRIVERS

- Customer satisfaction
- High-density railway traffic
- Capability evolution
- Reduced TCO



TRENDS

- All-IP solutions
- Centralisation in integrated control centres
- Off-the-shelf products
- Bearer-agnostic solutions
- Convergence

Together, we tick all the boxes

End-to-end services, interoperability tested

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TRENDS

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Technology alone isn't enough

Without a smart approach, we'll move like this...





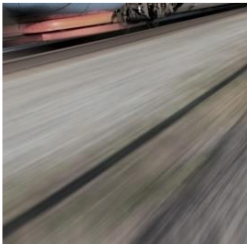


... while what we really want, is this....



GSM-R long term support & migration to FRMCS

ROC IG is committed to supporting GSM-R at least until 2030, including:

Maintenance and modernisation of the GSM-R systems HW / SW					Mitigation of interferences	
implementing packet data functionality GPRS / EGPRS	extending frequency band with add. 3 MHz (ER-GSM band)	Continuous life cycle management			Support of CCS TSI / EIRENE requirements	
		Migration towards IP - major stepping stone towards FRMCS				

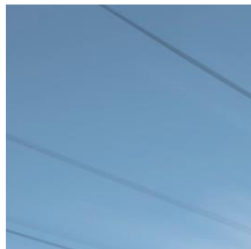


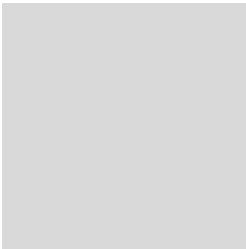


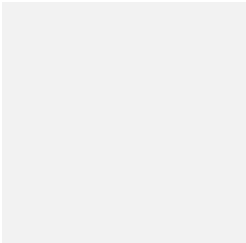




Collaborative long term evolution of GSM-R

requires also the commitment of **railways**:

	<p>Maintain a stable GSM-R market, following the ERTMS rollout plans</p>				
<p>Support first FRMCS trials & pilot projects soon</p>				<p>Proceed with introduction of FRMCS in line with timelines currently planned by ERA & European Commission</p>	
		<p>Implement new features standardised in EIRENE and in the TSI, developed and IOT tested by ROC IG members, e.g. eREC</p>			

ROC IG towards FRMCS on the European stage

ROC IG actively contributes to:

<p>ERA work packages, for adaptation of TSIs and the necessary amendments to the technological progress</p>			<p>CEF (former TEN) calls of the EC, also to the newest CEF 4th call</p>		
	<p>Participation in the activities of Shift2Rail</p>			<p>FRMCS standardisation work in ETSI RT and 3GPP</p>	
					<p>Individually tailored migration for our railway customers</p>

ROC IG will implement an interoperable transition towards FRMCS

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Thank you
&
Have a fantastic
conference !!!