FRMCS
Future Railway Mobile Communication System

From GSM-R to FRMCS Lessons learnt

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Based on Railways Needs

Railways telecommunication networks shall answer to both following needs :

Support Operational needs of Infrastructure Managers: Trains circulation, ETCS signaling, supervision of line energy, Track maintenance.

Support Services requirements of Railway Undertakings: Administrative Telephony, Supervision of railways installations, passengers information, ticketing etc.

GSM-R and FRMCS : International standards

Unified System, multiservice, performing and reliable

Technology allowing evolution

Supports on board signaling ETCS

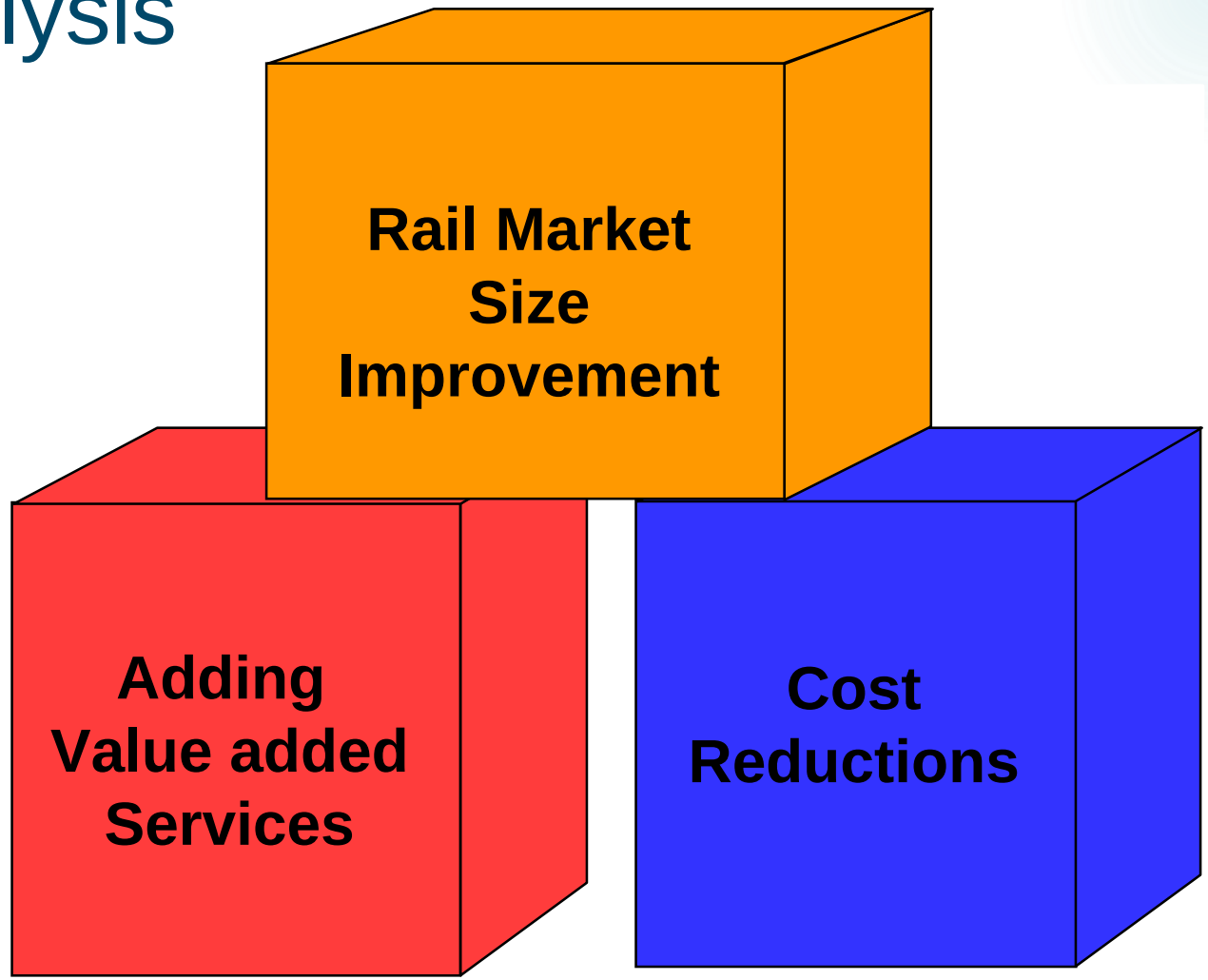
Ready for Rail digitalization

Allows for cross border interoperability

Ability to become a worldwide Rail standard

Based on 3GPP, with additional railways functionalities

Drivers analysis



FRMCS Scope as successor of GSM-R :
Provide improved technical conditions while answering expectations

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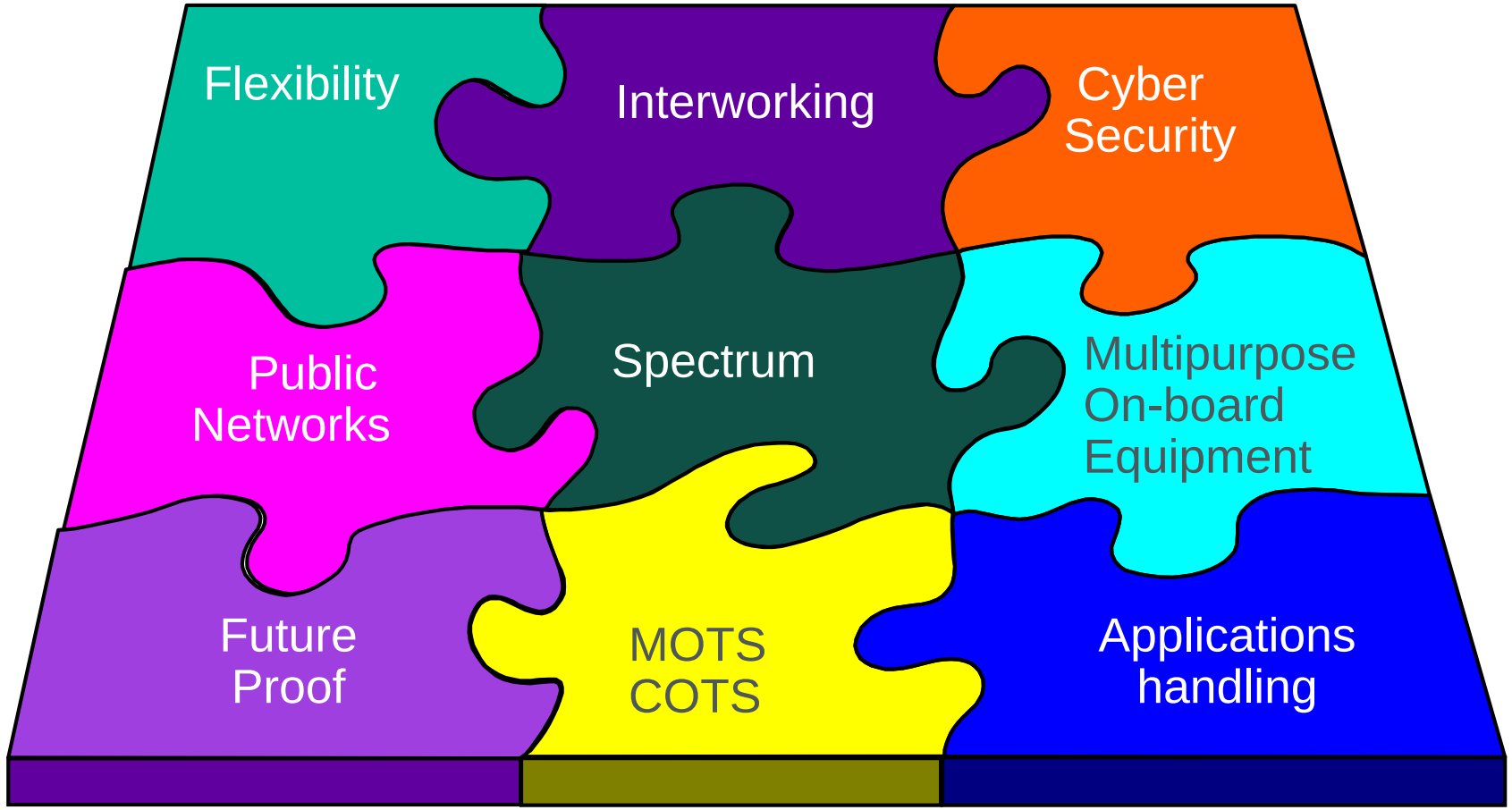
Interoperability challenges



What FRMCS should bring:

- **FRMCS will offer higher flexibility as based on applications handling.**
- **FRMCS is designed as a future proof system: It will be able to handle the evolution of radio access technologies.**
- **FRMCS is based on IP. Is there a successor to it?**
- **FRMCS will challenge a very stable GSM-R system with a lot of opportunities associated with the risks inherent to the open systems.**

Thanks You for Your Attention

Questions?

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