



INTERNATIONAL UNION
OF RAILWAYS

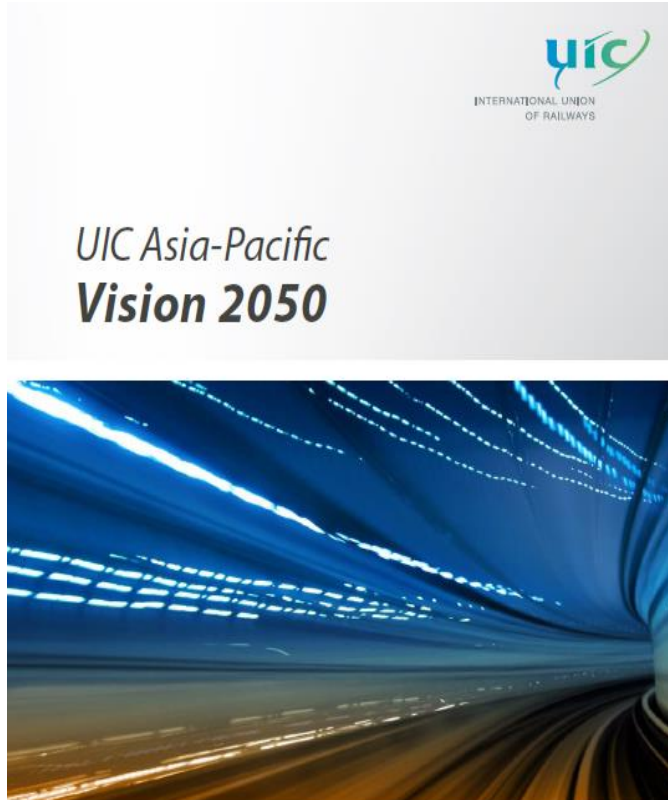
unity, solidarity, universality

APRA PROJECT INCUBATOR

Irina Petrunina

Adviser on CIS countries and international organisation in APRA

DOCUMENT STRUCTURE



Total pages: 210

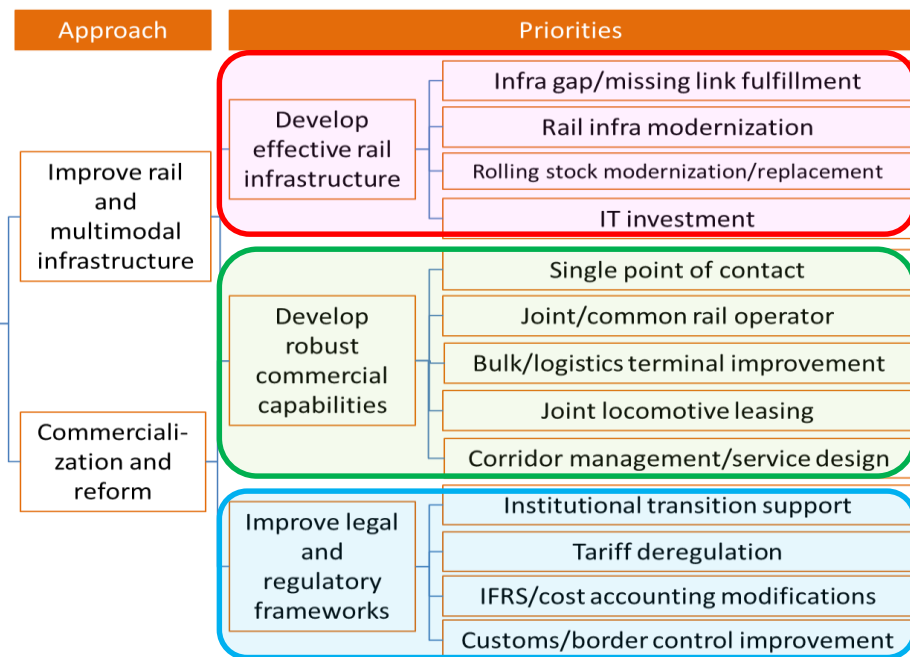
- 1. Economic and demographic overview of the region**
- 2. State of the art of the Railway Sector in the Region**
- 3. Transport Scenario**
- 4. Key elements of Asia-Pacific Railways at subregional level**
- 5. UIC Asia Pacific Vision for 2050**
 - Annex A: Focus on selected countries
 - Annex B: Country Profiles

Fig. 5-9: Framework Matrix for future UIC Asia-Pacific projects

	Passenger	Freight	Rail System
Cost reduction / Efficiency Improvement			
Harmonisation / Standardisation			
Regional Integration			
Research and Innovation			
Quality and Customers			
Environmental Sustainability			
Urban Development			
Safety			
Security			
Expertise development and training			

vs UIC Asia-Pacific VISION for 2050

CAREC Railway Strategy



Framework Matrix for UIC Asia-Pacific

	Passenger	Freight	Rail System
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Expertise development and training			

PROPOSALS FOR 2019 - 2021

Multiregional proposals

No / Acronym	Project title	Regi on	Leader	UIC support
ROLLHSL	Rolling Stock Maintenance Management for HSL	Multi	EU	PASS
ARV	Autonomous Road Vehicles	Multi	EU	PASS
SNOW	High Speed Operation in difficult natural conditions	Multi	EU	PASS
COMPHSR	Comparison High-Speed Rail between China and Europe	Multi	EU	PASS
MIXTRAF	Mixed Traffic high-speed lines operations handbook	Multi	EU	PASS
RESEARCH	Research projects for Alliance	Multi	EU	PASS
DRONE4Rail	Harmonized methodology for drone / UAV use for bridge inspections	Multi	EU	RSD
SAMP	Smart Asset Management Plan - Guideline	Multi	EU	RSD
AIR+RAIL	Air + Rail project Intermodal distribution system	Multi	EU	PASS
D2D	Door to Door project Intermodal distribution system	Multi	EU	PASS
FMS	FRMCS Migration Scenarios (4 years * 375 k€)	Multi	EU	RSD
RAI-2	The ways/methods/solutions to face/confront with the problems occurred in sandy/desert areas	Multi	RAI	RSD
RAI-1	Reconstruction and upgrading the under operation lines in the tunnels and other areas	Multi	RAI	RSD
	13			

PROPOSALS FOR 2019 - 2021
Projects selected

No / Acronym	Project title	Leader	UIC
EU-China	Technology for high-speed freight and passenger train traffic between China and the European Union	RZD	PASS
CARS-1	Track Economical Maintenance Decision based on Life Cycle Cost	CARS	RSD
DRIM	Drones for Railway Infrastructure Monitoring (DRIM)	NIIAS	RSD
UISDTC	Unified information space for Digital transport corridor	KTZ	RSD
INTERES-2	Integration of reservation systems	FPC VNIIZhT	PASS
INTERTRAN-2	Measures for the effective development of intermodal transport in the APR aimed at increasing the competitiveness of the railway transport	RZD	FREIGHT
NEWTRANSYS	Exploratory study of new rail-type transportation systems and their impact on sustainable development, railway technology and standards	RUT	RSD
Total	7		

Projects proposals for 2020

No / Acronym	Project title	Leader	UIC
IRaTCA	IRaTCA Training sessions for UIC AP members	KORAIL	
DTC	Development of the train control procedure based on HFACS-rtc analysis	KORAIL	
SUMAP	Asia Pacific Heavy Haul Summit 2019	MASKA	
BDTM	Big Data-Based Timetable Management	NIIAS	
WSDR	Workshop on Digital Railways	NIIAS	
CARCONTRACT	General rules of setting requirements for reliability and functional safety in contracts for the delivery of new cars and their parts	VNIIZhT	
CROSSAPP	Development of signaling control system of rail crossings in unified reporting system for the purpose of informing car drivers and locomotive drivers of crossing conditions and emergency situations	VNIIZhT	
UNICOUPLING	Capabilities assessment for design of universal coupling for interoperable railway rolling stock to service Korea-China-Russia	VNIIZhT	
TechNP	Technological Neutrality Principle	R.ZDstroy	
A3DC	Application of 3 D concrete and compositions for track elements construction	R.ZDstroy	
ADAPT	Adaptation of existing rail infrastructure for higher speeds	RUT	
	Taking market from trucks	ADY	
	Hybridization of diesel locomotives by solar panels	ADY	
	Ecodriving training for train drivers	ADY	
	Asset management solutions	ADY	
GEOHSR	Guidelines on operational efficiency for new and existing HSR	Multi	PASS
IHSRC	Internal High-Speed Rail Competition	Multi	PASS
	Customer Experience Management Platform	Multi	PASS
TopRail III A	Tourist Opportunities for Railways III	Multi	PASS
Total		19	

Overview and results of ongoing projects



STUDY

TECHNOLOGY OF FREIGHT TRAFFIC ORGANIZATION ACCORDING
TO THE ENERGY-OPTIMIZED SCHEDULE



Cost Evaluation of Railways Projects in Asia



Draft final report

Welding in Extreme Conditions



Draft final report

Comparison of Korean Technical Regulations with European TSI considering Interoperability in Asia Pacific region

- 1st year : comparison of technical regulation for rolling stock subsystem -

Commissioned by UIC Asia-Pacific region

Authors : Korea Railroad Research Institute(KRRI) - Kangyoun Choe,

Yeonsu Kim, J.S. Hong, M.S. Song, Jai Kyun Mok

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EVENTS

NEXT ASIA-PACIFIC REGIONAL ASSEMBLY

- 26th UIC Asia-Pacific Regional Assembly, 16 November 2018, Bangkok, Thailand
- 27th UIC Asia-Pacific Regional Assembly, 23 May 2019, Manila, Philippines
- 28th UIC Asia-Pacific Regional Assembly, 28 October 2019, Tokyo, Japan



2018



TRAININGS



2018





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**Thank you
for your attention!**