

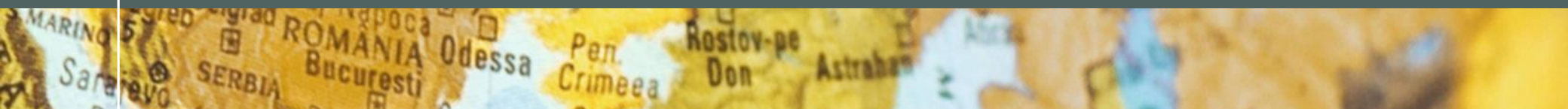


UIC'S ROLE IN CORRIDOR DEVELOPMENT

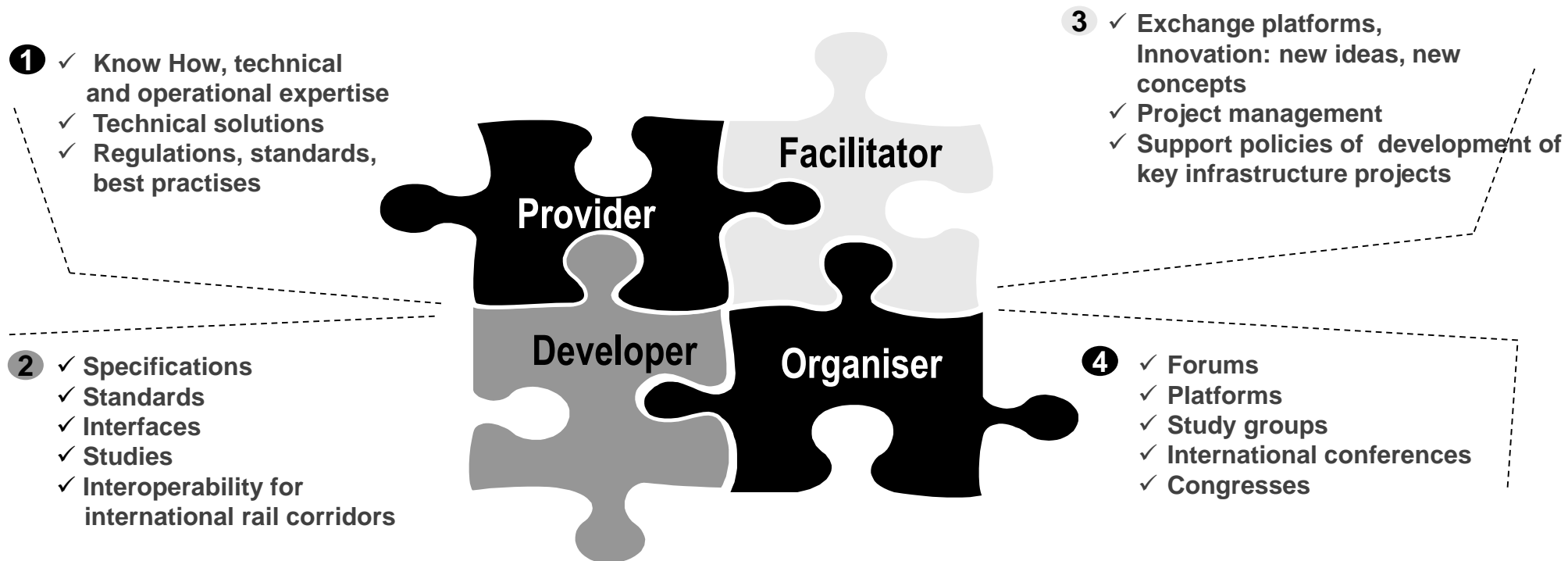
Geneva, 27 May 2014

REBETS Roman,

International Railway Advisor for Russian and CIS affairs,
UIC, Freight Department



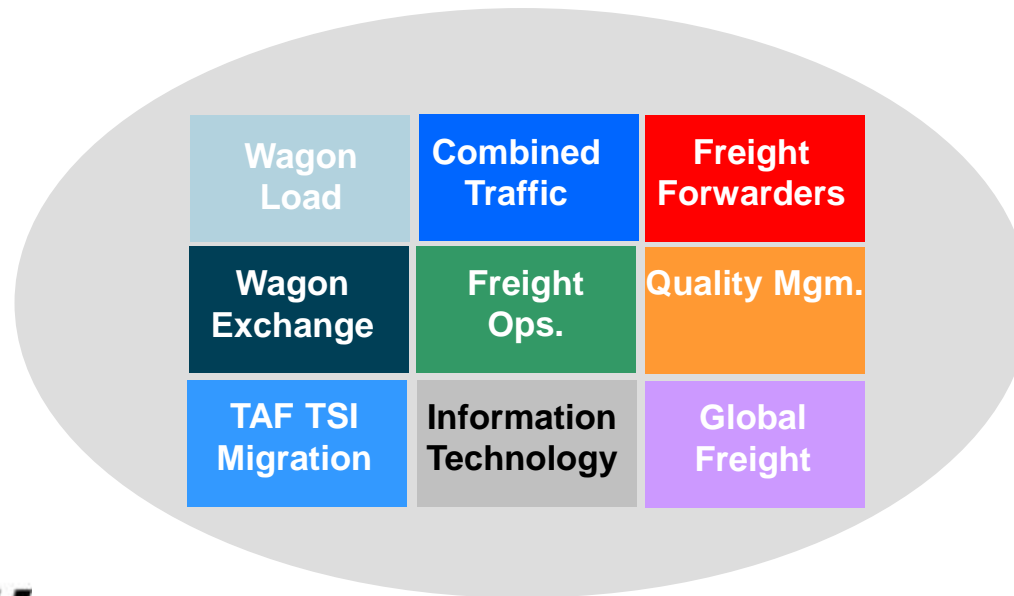
UIC role - Promoting the development of rail transport at world level, in order to meet the challenges of mobility and sustainable development



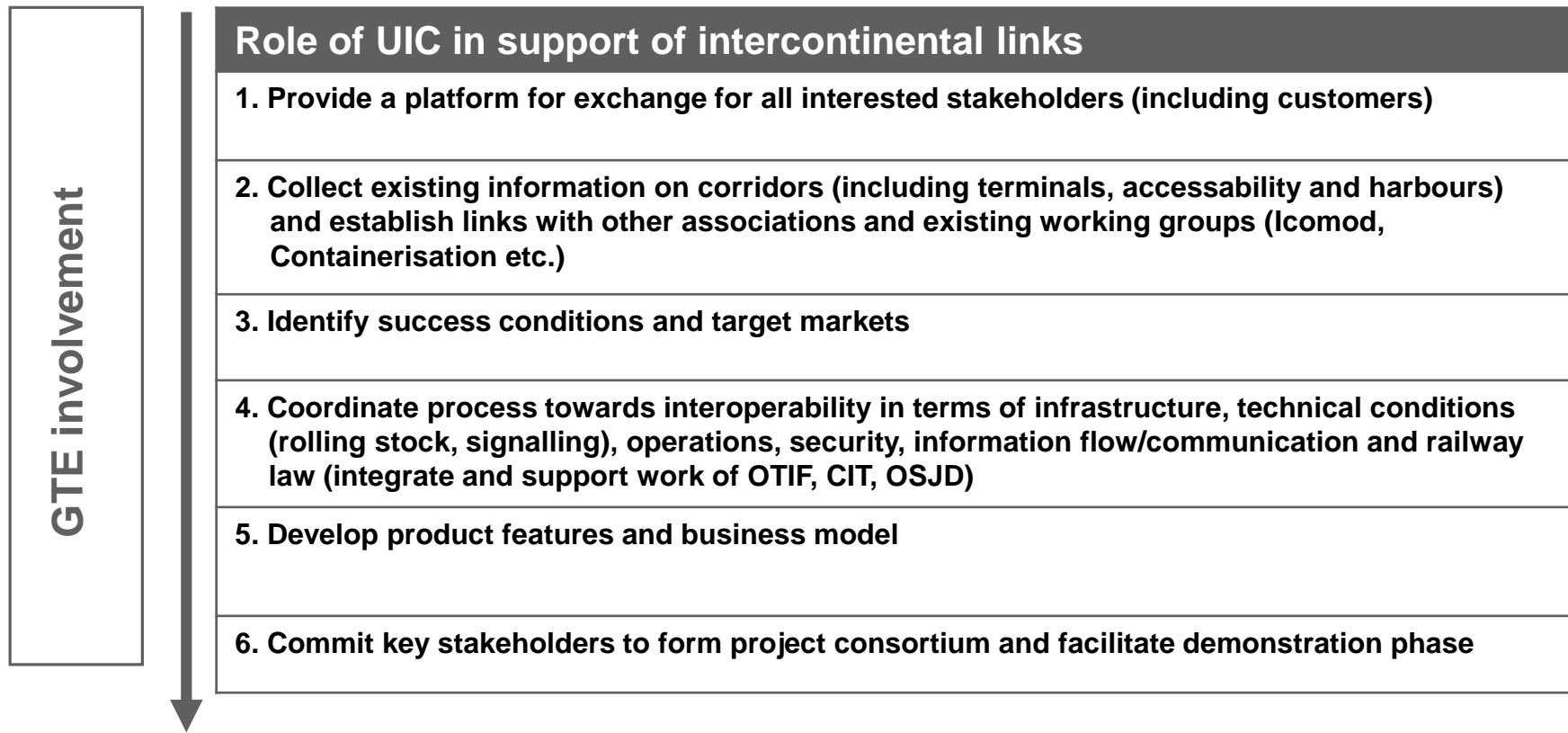
Active cooperation of members on freight projects



www.railfreightportal.com



How does UIC support the development of intercontinental rail links?



Commercial traffic on corridor (no GTE involvement)

The ICOMOD project assessed the viability of a rail link between Asia and Europe

PROJECT OBJECTIVES



- Establish **viability of a rail link** between Asia and Europe

- Assess **market potential** and quantify future rail scenario

- Assess **routes and terminals** between Asia and Europe

- Define **required steps** to attract more Asian-European traffic to rail

Rail transport from Asia to Europe has a significant market potential

Executive summary (1/2)

- Long-term (2030), **rail transport between Asia and Europe is forecasted to reach a level of around 950,000 TEU p.a.** This includes traffic from East Asia, Mongolia and Kazakhstan to the EU in both directions. Traffic from South Asia could add another 150,000 TEU in the long-term
- Already **today**, rail could hypothetically achieve a potential of **480,000 TEU p.a.** if requirements were already fulfilled
- The rail potential is derived from a **volume-based forecast** with subsequent translation into TEU. It analyzes existing transport volumes and applies a growth scenario for the future
- **Shift factors** were applied to estimate the amount of TEU that could be attracted by rail from maritime transport. Shift factors were **differentiated by commodities** and, within China, **by regions** based on their proximity to the coast
- Currently, **four viable route** options exist: via port of Vostochny, via Manzhouli/Zabaikalsk, trans Mongolia – all of which continue on the TSR – , and trans Kazakhstan via Alashankou/Dostyk. TSR routes benefit from efficient and modern infrastructure, trans Kazakh routes are shorter
- In the long-term, route and terminal infrastructure as well as rolling stock and container equipment will **need to be modernized and adapted to future growth**

To make Eurasian rail transport successful, rail services need to be improved significantly along five key levers

Executive summary (2/2)

- **Time** is the key differentiation for rail transport. Only **fast and reliable transport times** enable benefits compared to sea and trigger time-based monetary benefits for shippers
- **Predictability** is key to shippers/customers. **Reliability allows for price premiums** if time-sensitive or production-critical materials/goods bear high opportunity costs
- Rail generates **highest benefits in hinterland areas for high-value goods**. Continental consolidation terminals should be optimized. High-value goods also qualify for rail from other origins
- Rail can compete with a **comprehensive price view**, i.e. needs to **include time-based benefits like working capital savings and lead time benefits** in its pricing strategies. Fast and reliable transport times are crucial to justify a rail price premium
- Rail needs to **complement its westbound services with eastbound solutions** to optimize rolling stock and container movements and availability at key origins. Infrastructure needs to be improved to accommodate the rail volumes and timing/reliability requirements
- **Frequency** of services needs to be increased and adapted to specific customer needs. Customs procedures need to be facilitated and, long-term, transferred into a **transit customs logic** with customs being handled in origin and destination terminals only

There are four key railway corridors from China to Europe all of which pass through Russia

Main rail routes Asia to Europe (schematic)



To exploit the huge market potential, Eurasian rail services need to be improved significantly along key levers

Transport time



- Time is the **key differentiation** between rail and maritime transport.¹⁾ Only fast transport times enable benefits compared to sea and trigger monetary benefits for shippers
- **Priority** should be given to **reliability**/predictability rather than winning 1 or 2 days more

Reliability



- **Predictability is key** to shippers and customers
- Reliability allows for price premiums if time-sensitive or production-critical materials/goods bear high opportunity costs; reliability might differentiate rail if being further improved

Target markets



- Rail generates highest benefits in **hinterland areas for high-value goods**. It should optimize its product offer for these interfaces (continental consolidation points)
- Look for **balanced traffic** or **combine shorter eastbound traffics** along way back to Asia

Pricing



- Rail can compete with a **comprehensive price view**: D2D, working capital, lead time
- Working capital savings, time-to-market and built-to-order benefits allow for a price premium, but are highly dependent on fast and reliable transport times

Infrastructure



- Infrastructure requires **continuous updates** and extensions for long-term rail success
- In addition, rail needs to complement its westbound services with eastbound solutions to **optimize rolling stock and container availability** at key origins

Frequency, flexibility



- Unpredictable frequency reduces attractiveness of rail. A **regular service** is entry condition for many customers
- Target frequency of at least 1-2 departures per week, ideally more than 3

Customs












- Improvements **urgently** required, but also related to mistakes by operators/shippers
- **CIM/SMGS consignment note** and paperless transport keys to accelerate border crossing
- **Transit customs logic**: customs only at O/D terminals

¹⁾ Of course also to air transport, but the bulk of the volumes which rail could attract comes from maritime transport

Rail should focus on specific commodities – Anything else only opportunistically

Volumes – Analysis of interview

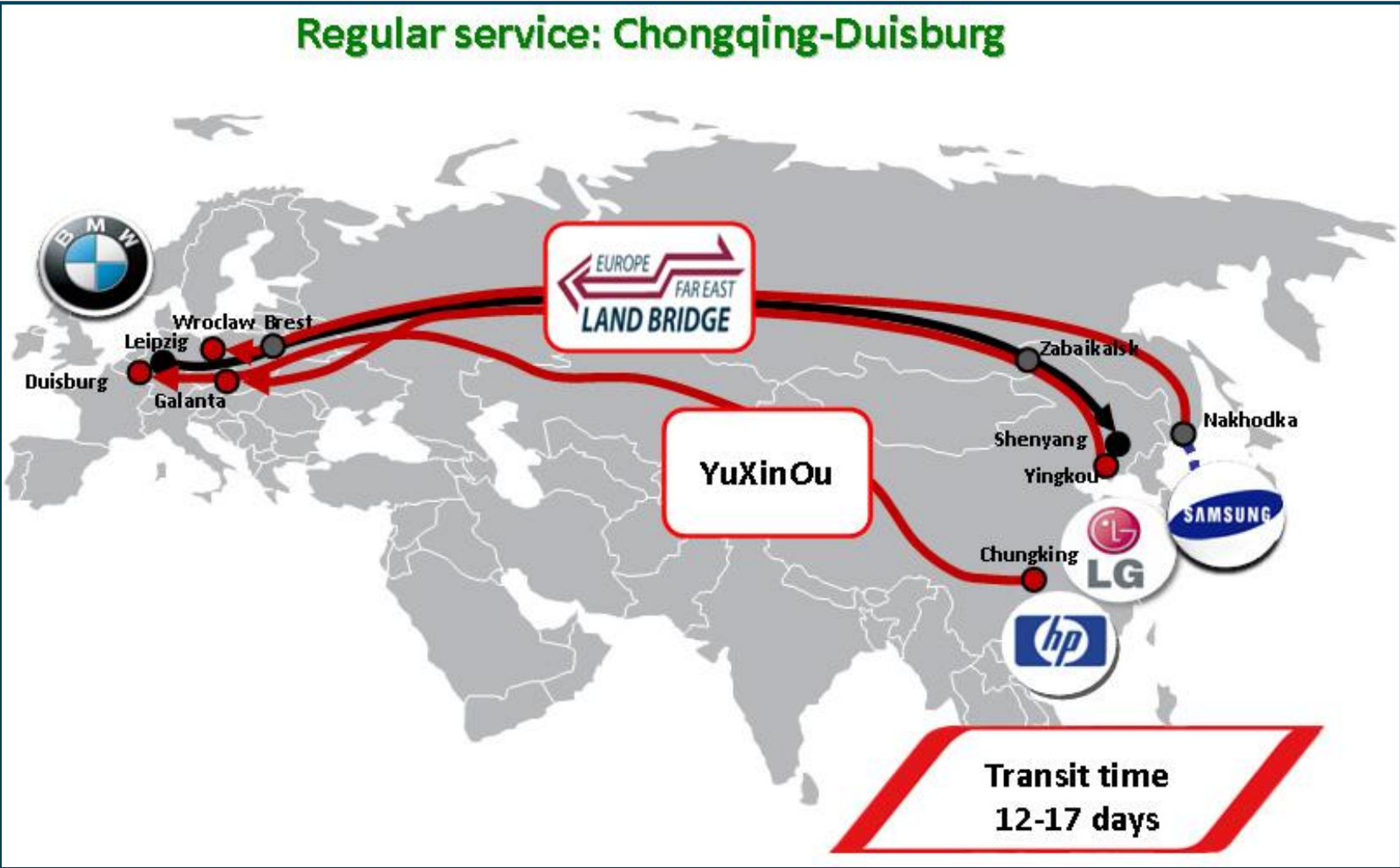
COMMODITIES ¹⁾	TARGET FOR RAIL	COMMENTS
High-value		<ul style="list-style-type: none"> • Highest working capital savings, also potential from non-inland locations
Automotive, parts		<ul style="list-style-type: none"> • Time sensitive, just-in-time production, high value, often heavy
High-tech, electronics, computers		<ul style="list-style-type: none"> • Mostly confirmed as target commodity, but also contradicting assessments (temperature sensitive) • Mostly high-value, sometimes high volume at low weights
Chemicals		<ul style="list-style-type: none"> • Contradictory assessments, low containerization for high-value chemicals • Dangerous goods mostly seen critical due to complex permissions, but also critical on sea. Potential for niche positioning of rail
Spare parts		<ul style="list-style-type: none"> • Time sensitive, but singularly mentioned in interviews only
White cargo		<ul style="list-style-type: none"> • Only singularly mentioned in interviews; high volumes and high weight
Health care		<ul style="list-style-type: none"> • Only singularly mentioned in interviews
Fashion		<ul style="list-style-type: none"> • Time-sensitive character before start of seasons, otherwise price sensitive
Food		<ul style="list-style-type: none"> • Only singularly mentioned in interviews; temperature/cooling issues

1) Partly overlapping

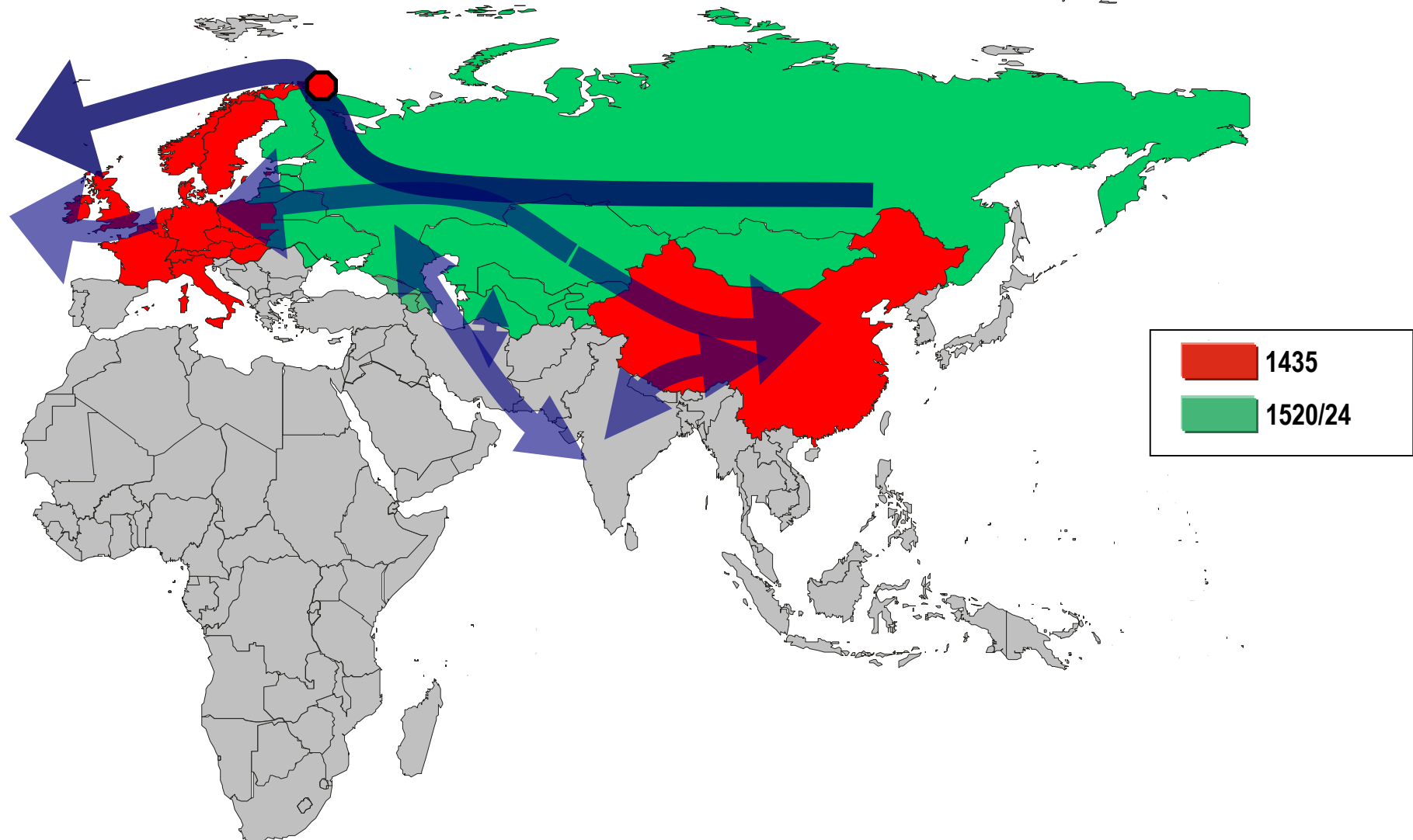
The Trans-Siberian Mainline: a link between Europe and Asia



Transport products on TSR: China – Russia – Europe



The 1520 mm rail system could become a strategic turntable for major traffic streams



E-rail Freight. Electronic Consignment Note (ECN)

Electronic data exchange of Consignment Note (ECN)

- between all involved parties;
- Simultaneously with data entry.

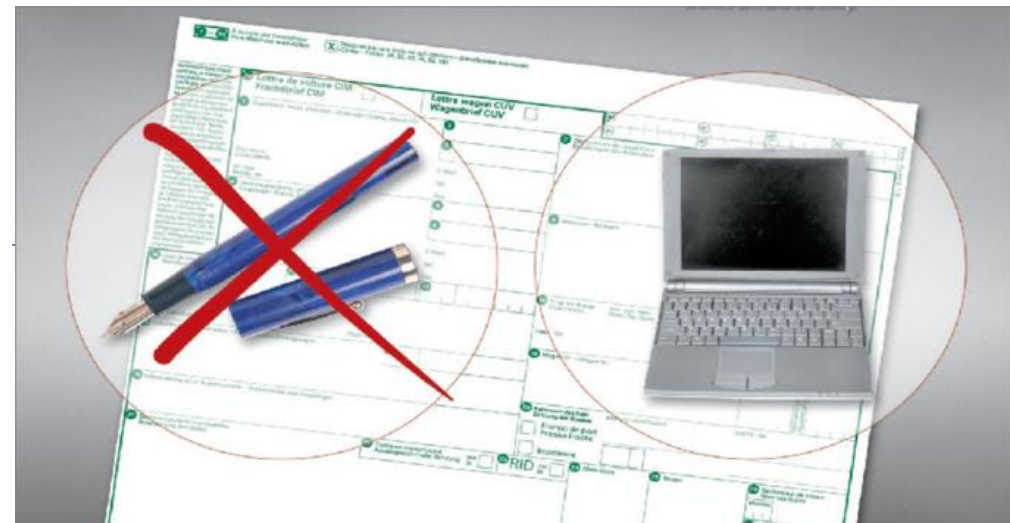
Paperless Transport

- Information flow will be independent from and ahead of the physical train movement

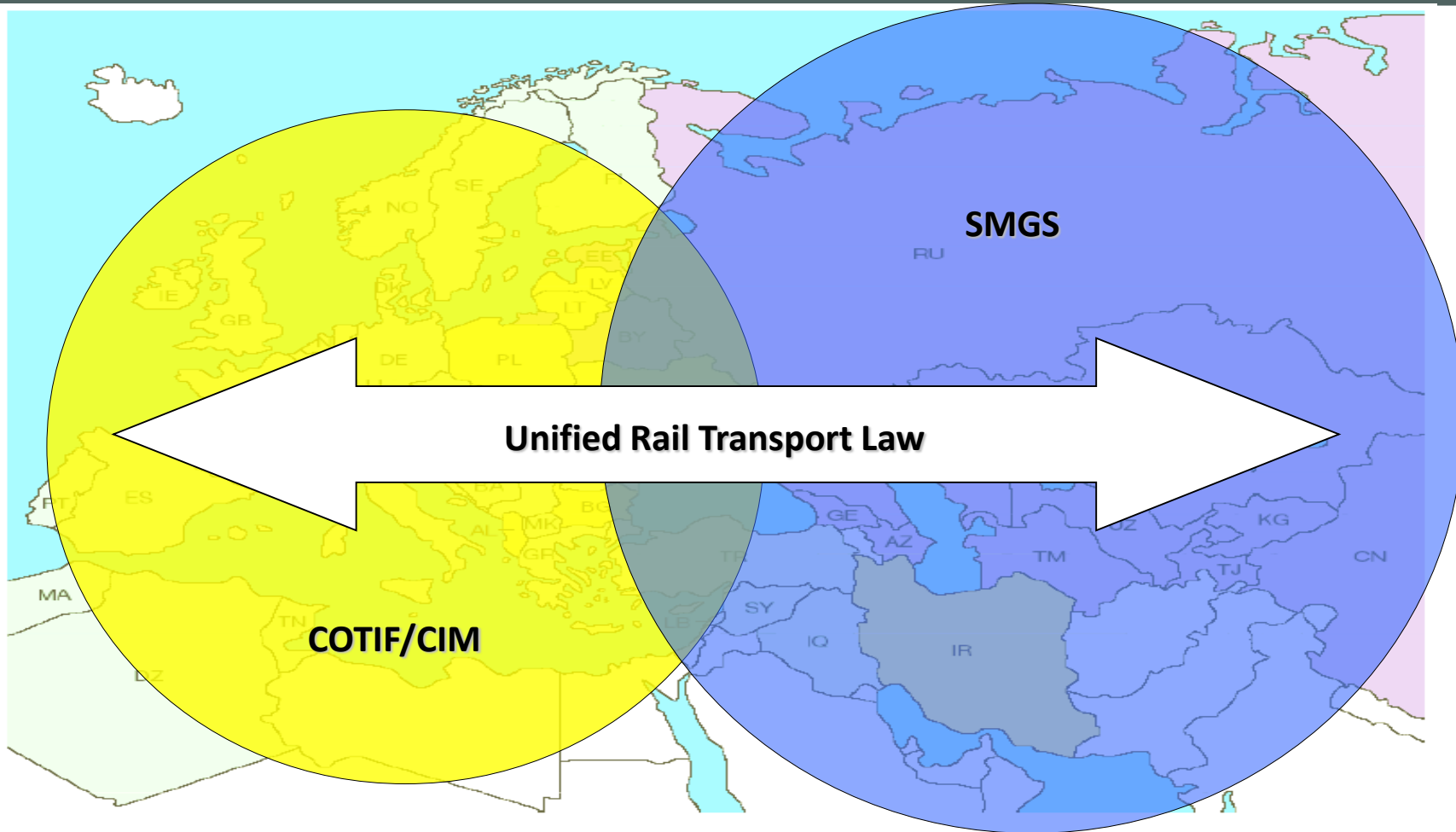
Data available at any time

- By all kind of technical devices as print out and where needed
- Rail production and commercial facilities
- Customs and other supervisory authorities

Interoperable in different legal areas (CIM/SMGS)



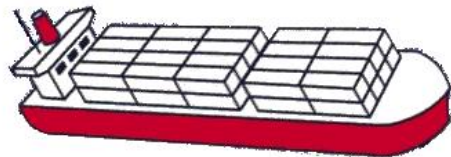
Unified Rail Transport Law



Transport Time



11 000 km



- 40-45 days



- 20-23 days



- 15-18 days

The Corridor challenge

ECCO – Efficient Cross Corridor Organisation

EU n°913/2010

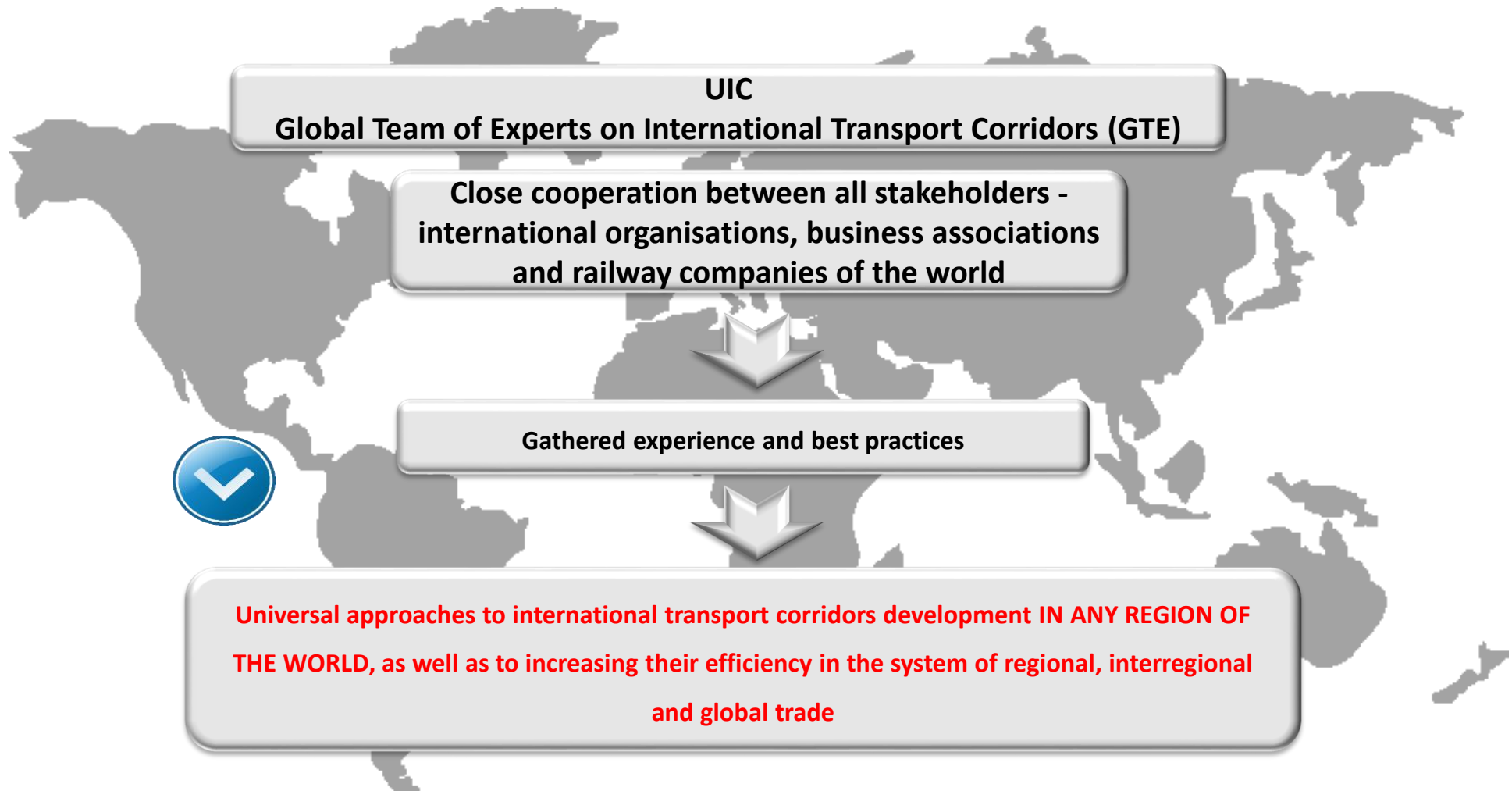
Defines, on 9 initial corridors, rules for the:

- Selection
- Organization
- Management
- Indicative investment planning
- etc.

**NO COORDINATION
BETWEEN CORRIDORS
REQUIRED BY LEGISLATION**



Geographic coverage of the concept – any region of the world



Railway freight corridors: definition criteria

- **Freight traffic density**
- **Freight transportation volume**
- **Daily traffic handling capacity, including transit train pairs**
- **Availability of dry ports, logistic and cargo distribution centres along the route**
- **Possibility of using common/unified documents (consignment notes)**
- **Possibility of electronic data exchange, including electronic consignment notes, digital signature etc.**
- **Availability of “one-stop” solutions at border crossings**
- **Time needed for border crossing**

Test container train launch technology

- **Providing cargo base, wagons and containers for the test train.**
- **Defining the technical and operational profile of the test train.**
- **Ensuring the usage of unified transportation documents (e.g. the common CIM/SMGS consignment note).**
- **Agreeing the route for the test train.**
- **Defining the test train schedule.**
- **Agreeing the through tariff rate for the test train.**
- **Defining the train operator and forwarders on each territory.**
- **Performing the test run, monitoring.**
- **Evaluating results and preparing recommendations.**

The 4th UIC Global Rail Freight Conference

"Seamless Transport Chains through Harmonisation – Success Stories and Global Perspectives for Rail Freight"



23 -26 June 2014

Vienna, Austria



The sessions of the 4th UIC Global Rail Freight Conference will focus on the latest developments and perspectives in the following areas:

"Harmonisation of Procedures and Standardisation"

"Spatial Planning and Rail Freight"

"Logistics and Integration on Rail Corridors"

"How to gain new Market Shares?"

"Innovation and New Technological Trends", etc.

In parallel to the conference and session programme, "GRFC 2014" will host a professional trade exhibition at the Hilton Stadtpark Vienna.

■ ■ ■ **Thank you for your kind attention**

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