EXPERT MEETING ON TRANSPORT CONNECTIVITY AND LOGISTICS: EMERGING OPPORTUNITIES AND CHALLENGES FOR ENHANCING RAIL CONNECTIVITY ALONG THE TRANS-ASIAN RAILWAY NETWORK

29-30 APRIL 2024, BANGKOK

ELECTRONIC ROLLING STOCK DATABASE FOR FACILITATION OF INTERNATIONAL TRAFFIC ALONG TRANS-ASIAN RAILWAY NETWORK

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NECESSITY FOR A ROLLING STOCK DATABASE

FOR TRANS-ASIAN RAILWAY NETWORK AND CROSS-BORDER OPERATIONS

CMR ROUTE: CARGO FOLLOWING FROM RUSSIAN FEDERATION TO CHINA

1 TRANSIT DECLARATION

- Submitted electronically though ETRAN system AND in paper format
- Electronic transit declaration transmitted prior to cargo departure
- Customs stamps also available in electronic system

2 CONSIGNMENT AND SUPPORT DOCUMENTS

- Shipper hands over all documents (depend on the cargo) for the cargo to a responsible at railway station
- Station staff hands over the documents to locomotive crew
- Locomotive crew passes the documents to border control agents for stamps
- Documents are handed over to the next locomotive crew

IMPORTANT CONSTRAINTS

1. COMMERCIAL DOCUMENTS
2. **WAGON INSPECTION SHEET**

NECESSITY FOR A ROLLING STOCK DATABASE

FOR PLANNING AND DECISION-MAKING

SITUATION AS IS

- Rolling stock, mainly freight wagons of all types, cannot be used for international transportation without special arrangements.
- This is an impact for ALL non-container freight.
- The reasons: rolling stock needs to be verified prior to border crossing for certification for the exact country, technical maintenance, owner and leaser, etc.
- Countries participating in OSJD or OTIF agreements use them for rolling stock cross-border control – and pass all documents in paper form – the longest part of the border crossing procedures.
- Asian countries in the most dynamic regions are not members of OSJD or OTIF and have no legal basis at all for cross-border rolling stock move.
- This is especially important for leased rolling stock.

ELECTRONIC DATABASE AND PROCESSING FOR ROLLING STOCK OPERATIONS

OPPORTUNITIES

- Rolling stock compliance certification and check.
- Data for forecasts and accurate rolling stock sell / lease deals (incl. for MDBs).
- Multilateral compliance for national regulations, automated restrictions.
- Sharing of technical and exploitation data though uniform protocols or APIs to local resources.
- Built-in processing for all rolling stock related payments and insurance, incl. for lease payments.
- Data for preventive maintenance, planning and forecasts.
- Important decrease in border-crossing time.

EXISTING PROJECTS

INTERNATIONAL PUBLIC AND PRIVATE

GCU Bureau

Creator: OTIF
Public structure built around General Contract of Use for Wagons – a transport law document issued and monitored by OTIF.
A single model contract for the use of railcars and a repository of signatories. Does not have a calculation module, requires manual validation in the database.
More than 600 signatories across 20 countries, with around 600,000 wagons currently declared in the GCU wagon database
No processing.

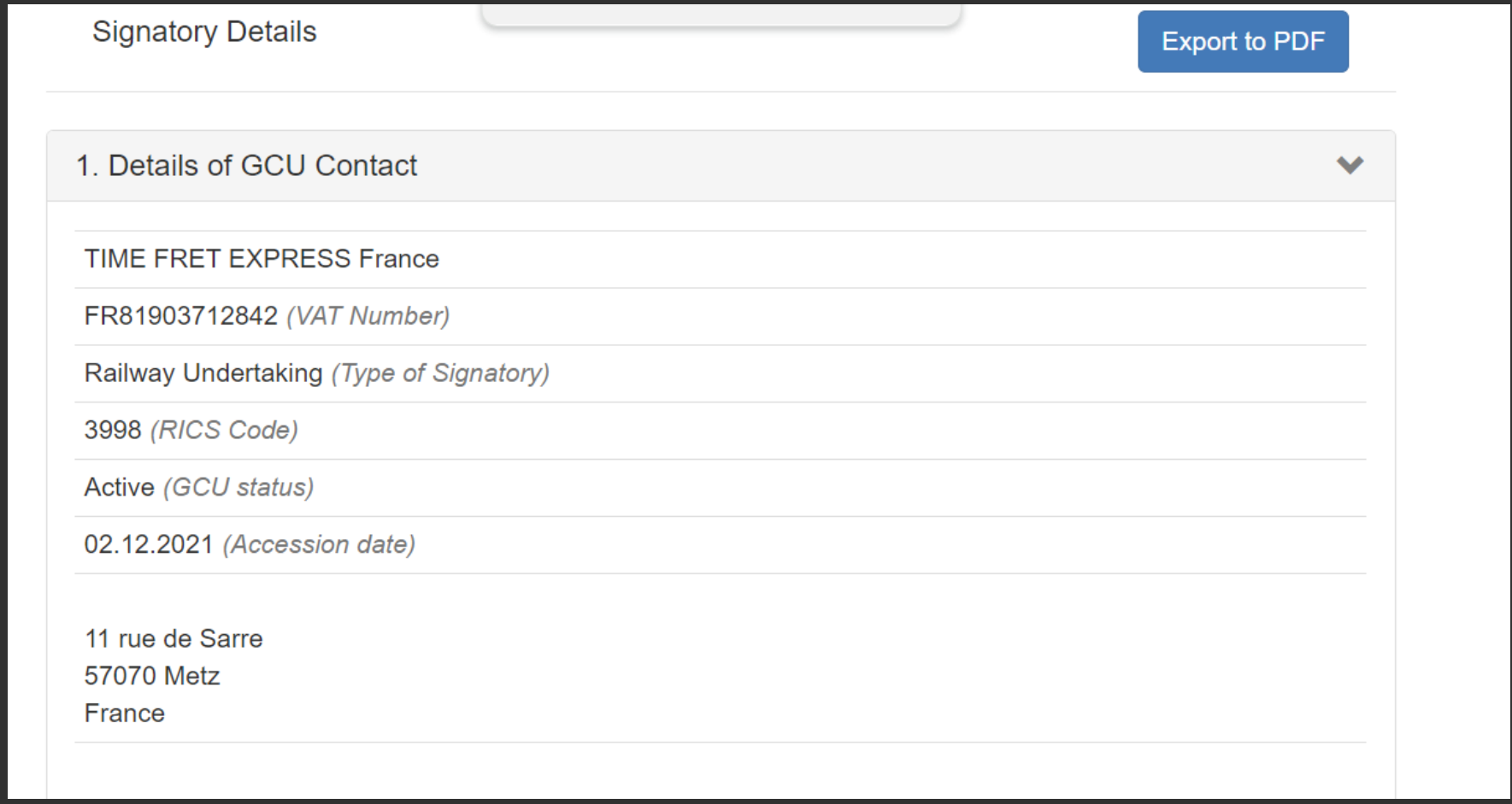
ERA Rolling Stock Reference Database RSRD2

Creator: ERA
Non-profit commercial structure.
Reference Database linked to TAF TSI standards. Has numerous functions and is free of charge (general part). Linked to EU regulations.
No processing.

EXISTING PROJECTS

GCU BUREAU

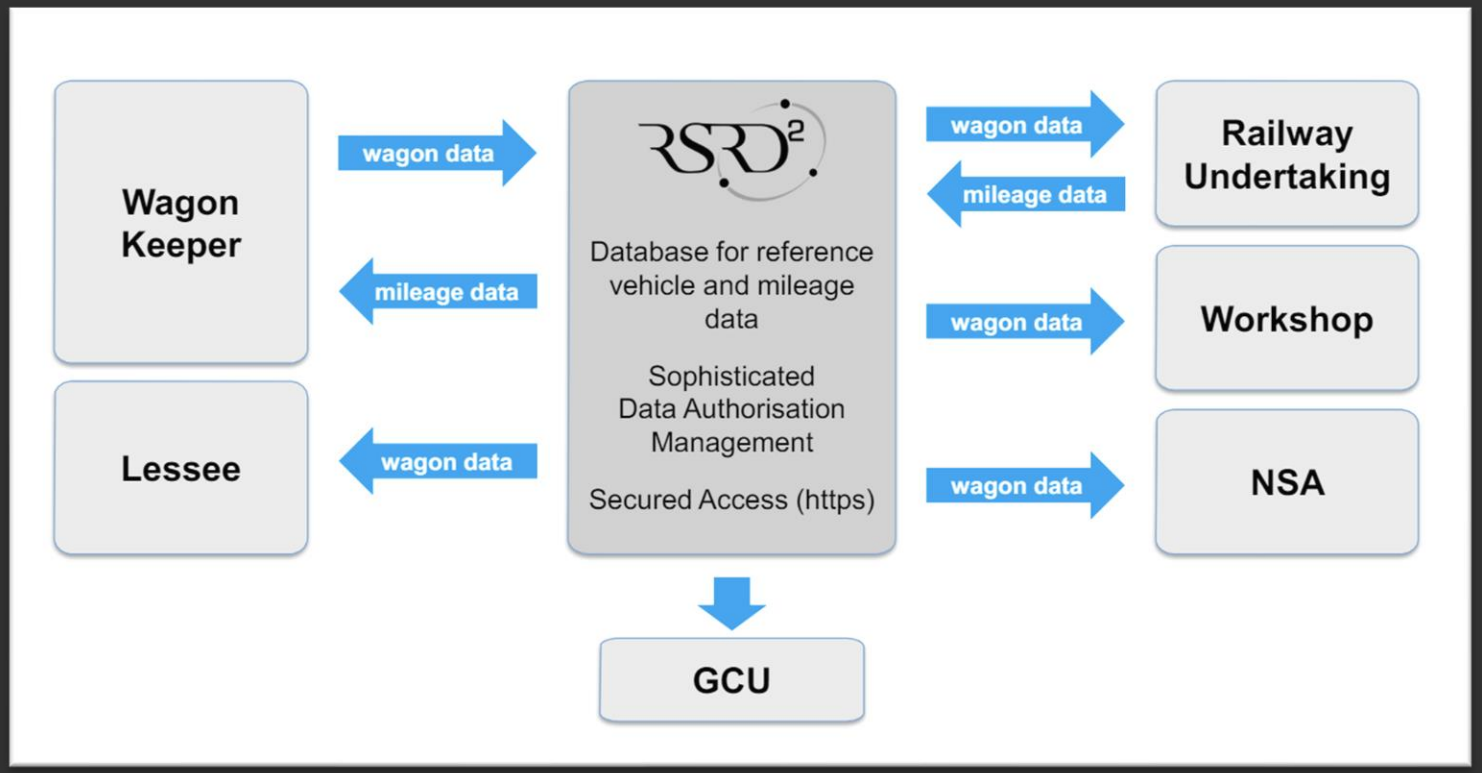
Signatory search interface



EXISTING PROJECTS

RSRD²

- Common cloud database Initiated by six wagon keepers and under the umbrella of UIP
- Query of wagon data is free of charge but a free of charge delivery of mileage data by railway undertakings using RSRD² is expected
- Benefits: share of costs, economies of scale, common standard, central data access, central collection of mileage data
- User Fee 2,00 Euro per wagon and year



EXISTING PROJECTS

INTERNATIONAL PUBLIC AND PRIVATE

Container Xchange

Creator: BCG
Privately owned
Container stock exchange – for forwarders and shippers to cope with logistics equilibrium, aimed at small to medium size enterprises – trading and leasing options + insurance available online.
Includes processing.

Hitrail

Creator: several European railways + International Union of Railways
Commercial entity.
Trusted railway IT service provider and integrator – used for all cross-rail passenger ticketing services

ROLE OF ESCAP AND INTERNATIONAL ORGANIZATIONS

OPPORTUNITIES FOR TRANS-ASIAN RAILWAY NETWORK

1. CURRENTLY JOINT SOLUTIONS ARE AVAILABLE EITHER FOR COUNTRIES WITH UNIFORM SUPRANATIONAL REGULATIONS, OR FOR MEMBERS OF INTERNATIONAL RAIL ORGANIZATIONS. WHILE MANY EMERGING MARKETS IN ASIA ARE NOT MEMBERS AND ARE JUST STARTING THEIR RAIL STRATEGIES.
2. REGULATORY DECISIONS TAKE DOZENS OF YEARS TO AGREE ON AND DO NOT RESULT IN PAPERWORK DECREASE.

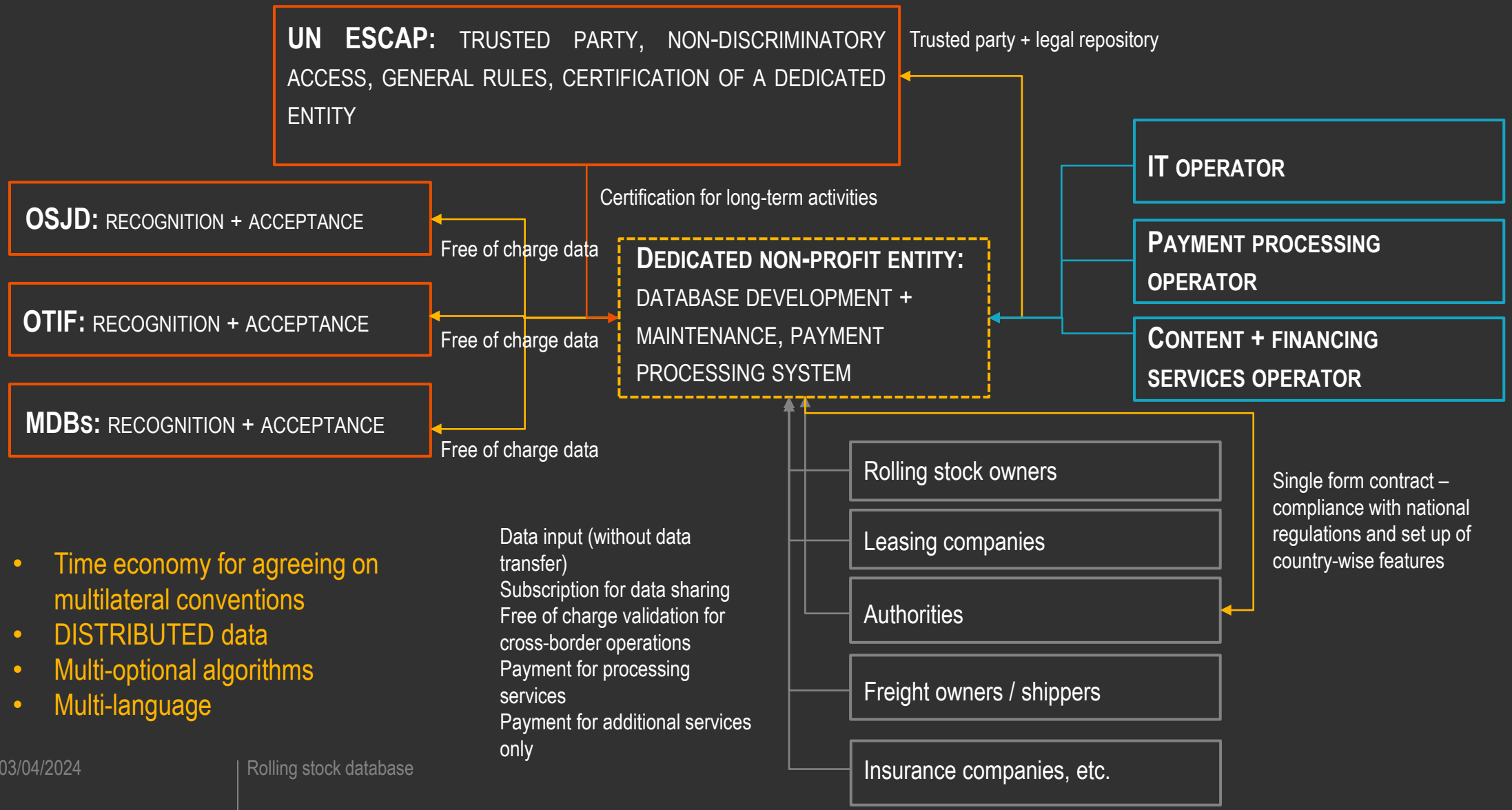
ESCAP can become an umbrella organization to establish a database for countries currently not necessarily participating in any rail organization, not having local railway agencies, but being active in rail developments.

Role of ESCAP:

- elaboration of legal and organizing framework and being a legal repository
- third trusted party for specified processes and transactions
- ensuring non-discriminatory access
- ensuring compatibility with other similar projects

DRAFT STRUCTURE

WHAT AN ECOSYSTEM COULD LOOK LIKE



- Time economy for agreeing on multilateral conventions
- DISTRIBUTED data
- Multi-optional algorithms
- Multi-language

FURTHER STEPS

PROPOSED ACTIONS

1. Comprehensive description of the database and its functions.

2. Proposal of detailed organizing framework and legal basis.

3. Elaboration of roadmap for project delivery.

Expert Meeting on Transport Connectivity and Logistics: Emerging opportunities and challenges for enhancing rail connectivity along the Trans-Asian Railway network

29-30 April 2024, Bangkok

Thank you for attention!