

**Practical Approaches to Digitalization
and Standardization of Business
Processes in the National Segments
of the Middle Corridor in
CAREC countries**

CAREC Business Forum
**Session 2: Fostering Regional Connectivity:
Innovative Approaches and Solutions**

**18th November 2025, Bishkek,
Republic of Kyrgyzstan**



Our Business Profile and Partner Companies

TBA Global Experts Ltd. - strategic consultancy and innovation partner working at the intersection of logistics and digital transformation in Central Asia:

- Strategic support for government programs in the field of logistics and the coordinated development of transport and digital infrastructureы
- Consulting and R&D projects on multimodal and national transport systems
- Transformation of business model through digitalization and data analytics
- Public-private partnerships for national TLS platforms and regional transport corridors
- Integration of artificial intelligence and predictive maintenance solutions
- Intelligent nodes, terminals and operational optimization (e.g. depot management, digital platforms)



TBA Global Experts Profile in TLS Digitalization

The Working Group on Electronic Logistics and Digital Transport Corridors (DTC) was formed in 2017 in the framework of the program for the harmonization of digital markets in the EU and Eastern Partnership countries..

Since foundation our Working Group on e-Logistics and Digital Transport Corridors (DTC) has implemented a number of projects on digitalization of trade and transport corridors in the Eastern Partnership, EAEU, and CAREC countries:

2017/2018 – our experts participation in the EU and Eastern Partnership (EaP) research on the analysis of EaP countries' markets in the field of eTrade, eLogistics and Digital Transport Corridors

2018/2019 – participation of our Working Group in the EEC research project on "Development of the concept for the ecosystem of digital transport corridors (DTC) of the Eurasian Economic Union (EAEU)"

2019/2023 – conclusion of a long-term Cooperation Agreement with the operator of the Chinese national information and logistics platform LOGINK within the framework of the One Belt, One Road Forum

2021/2022 – development and piloting of prototypes of services for eSMGS, eCMR, and cross-border information exchange with third countries under the EAEU DTC ecosystem project

2023/2024 – feasibility study and the roadmap development for the creation of NELS platform in Georgia, as well as participation in UN ESCAP projects for the development of capacity building programs for TLS digitalization

2025 – implementation of the CAREC Institute and ADB project on National Platforms for Electronic Logistics and Digitalization of Transport Corridors in the particular countries of the region: Azerbaijan, Kazakhstan, Kyrgyzstan, Turkmenistan, and Uzbekistan

Basic Approaches to Digitalization and Standardization of Business Processes

Were developed in 2024-2025 in the course of Working Group activities for digitalization of TransCaspian International Transport Route (TITR) in accordance with the implementation plan endorsed by TITR Association

The following main tasks were included in the Work Plan for TITR digitalization

- I. Analysis and standardization of processes, development of technological schemes for information support of freight transportation in the Middle Corridor countries - China, Kazakhstan, Azerbaijan, Georgia, Turkey and the EU countries**
- II. Analysis of information flows, including the data structure and formats of electronic shipping documents, development of approaches and solutions for their standardization, taking into account the regulatory framework of the countries participating in the Middle Corridor and UN/CEFACT standards**
- III. Framework Development for standardized cross-border exchange of data and legally significative electronic documents in the Middle Corridor**
- IV. Analysis of stakeholder requirements, development of a functional architecture and a standardized organizational and technological solution for the development of national multimodal digital platforms with standardized processes in the national segments of the TITR countries**

Task 1. Analysis and Re-engineering of Business Processes

The following activities were planned and implemented:



- 1.1. Analysis of current freight transport information support processes in the TITR countries
- 1.2. Analysis of requirements and regulations for freight transport information support in different countries
- 1.3. Identification of problems and bottlenecks in existing information support processes
- 1.4. Development of process flow diagrams for freight transport information support
- 1.5. Development of recommendations for process standardization and implementation of technological solutions
- 1.6. Assessment of risks and problems associated with the implementation of proposed solutions
- 1.7. Development of process evaluation and control mechanisms

Task 2. Analysis of information flows, including data structures and formats of electronic shipping documents

The following activities were planned and implemented:



- 2.1. Development of approaches and solutions for digital transformation of multimodal information exchange, taking into account the regulatory framework of the countries participating in the Middle Corridor and UN/CEFACT standards
- 2.2. Intensification of efforts to standardize multimodal data and document exchange in TITR countries in accordance with the SPECA roadmap, with a focus on harmonizing the regulatory framework.
- 2.3. Development and implementation of the concept for creating Data Pipelines for electronic shipping documents in TITR countries.
- 2.4. Development of technological solutions for seamless connectivity of the Middle Corridor national segments in the TITR countries

Task 3. Framework Development for standardized cross-border information exchange

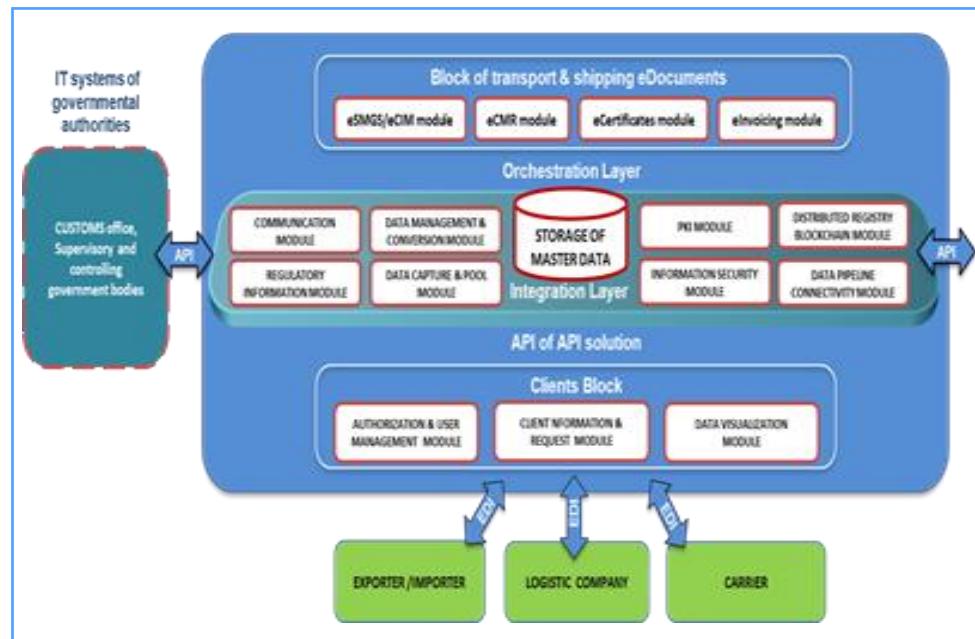
The following activities were planned and implemented:



- 3.1. Formation of digital passports for the Middle Corridor national segments in the TITR countries, assessment of their readiness for standardization of cross-border data and document exchange.
- 3.2. Development of recommendations for the standardization of cross-border legally significant information exchange using digital signatures and certification structures of TITR participating countries to ensure standardized document flow within the TITR, and their coordination with participating countries.
- 3.3. Development of the core technological solution for cross-border legally significant information exchange using digital signatures and certification structures of TITR participating countries to ensure interoperability of the Middle Corridor national segments in the TITR countries.

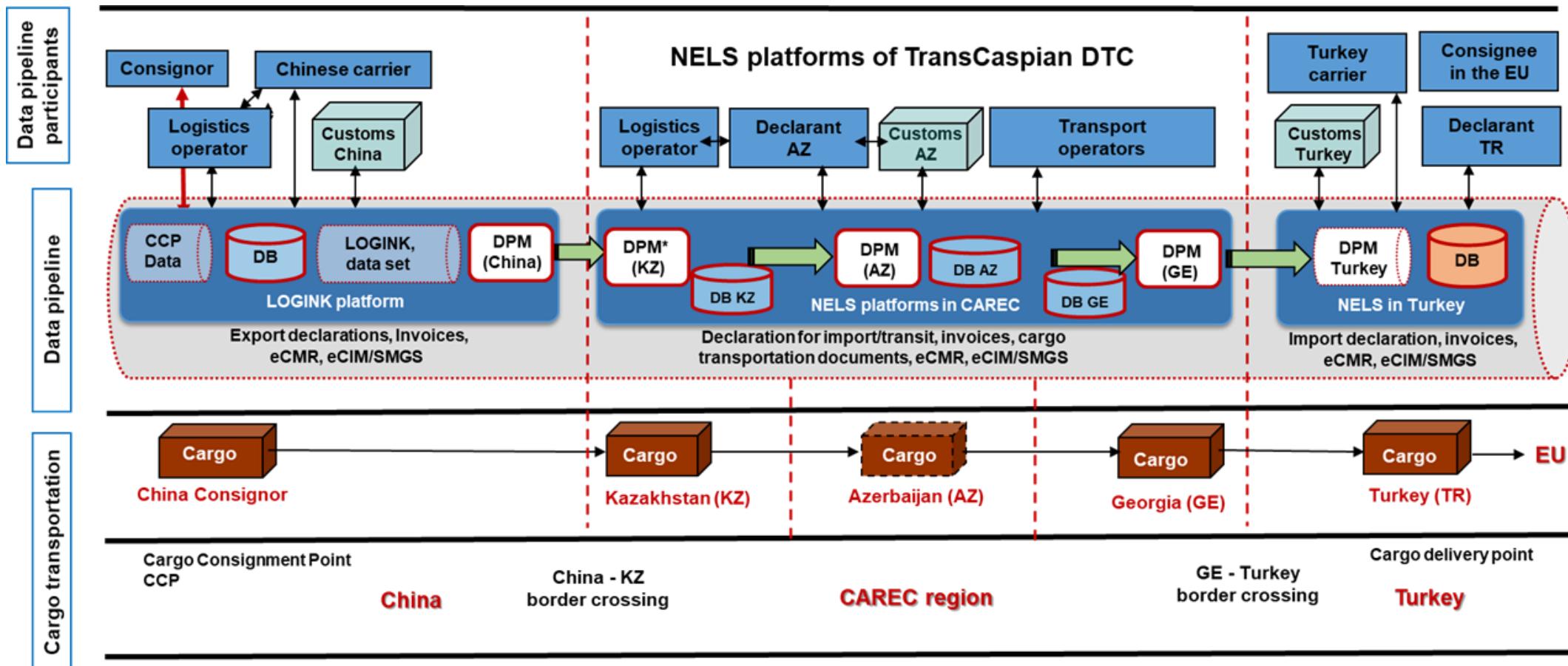
Task 4. Development of the core functional architecture and technological solution for the national multimodal digital platforms

The following activities were planned and implemented:



- 4.1. Development of standardized data exchange processes between TITR national segments
- 4.2. Development of the core functional architecture for the National Multimodal Digital Platform with the focus on integration functions and the orchestration layer
- 4.3. Development of governance and operational models for National Platforms including PPP options
- 4.4. Development of service models for TITR national segments and formation of the core services portfolio in the TITR national segments

Sample Digitalization Scheme for TITR National Segments



Thanks for your attention



Torsten Thieme

CEO
ThiemeBieg & Associates GmbH



+49 171 9318825



torsten.thieme@thiemebieg.com



Dr. Valery Virkovski

Principal Digitalization Expert, Chair of
eLogistics and Digital Transport Corridors
Working Group



+994 51 370 70 48



v.virkovski@gmail.com

Disclaimer:

All information shown in this presentation may not be disclosed to third parties or used contrary to its original purpose without the consent of ThiemeBieg & Associates.