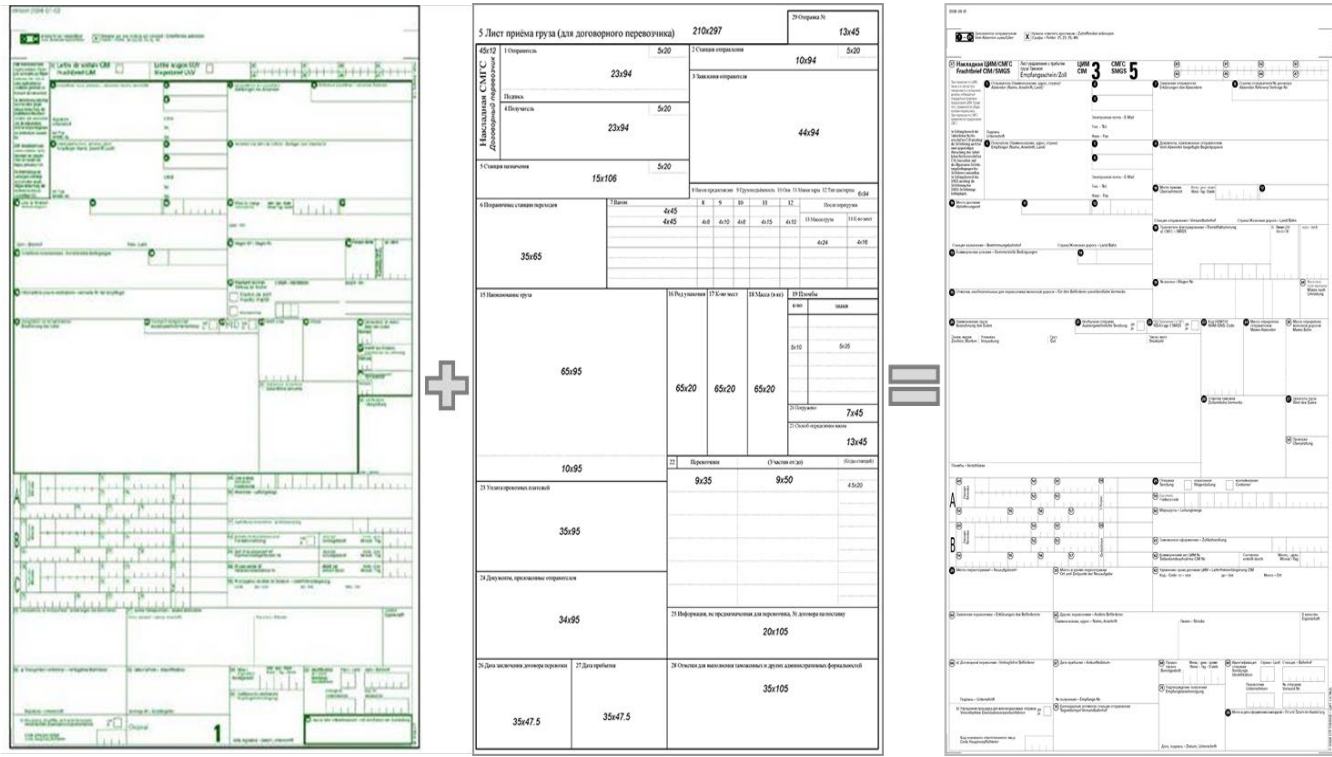# PILOT PROJECT FOR USE OF e-CIM/SMGS CONSIGNMENT NOTE ALONG SELECTED TRACECA ROUTES

15th International Capacity-Building Seminar on Trade and Transport Facilitation

11-12 June 2024, Aktau Kazakhstan and online

Introduction to the e-CIM/SMGS Pilot Project

CIM

SMGS

CIM/SMGS

Joint OSJD, CIT, UIC, UN ECE & TRACECA activity

(2025)

Adoption of an International Agreement

- Preparing legal basis for e-CIM/SMGS
- Preparing at national and international level
- Deciding on tools used for information exchange
- Possible piloting for electronic supporting documents
- Conducting internal approval procedures

(2024 - 2025)

Piloting e-CIM/SMGS (digital twin project)

- Implementation of pilot project
- Testing electronic CIM/SMGS prototype
- Drafting international agreement
- Analyzing supporting documents for further digitalization

(2023-2024)

Adoption of Action Plan

- Implementation of Action Plan
- Digitalization of a prototype CIM/SMGS

(2023)

Signing MoU between interested railways

- Framework for piloting electronic CIM/SMGS consignment note

(May 2023)

3 UN ECE Seminar

- Use of electronic CIM/SMGS consignment note

(May 2023)

2 Joint Workshop

- Use of electronic CIM/SMGS consignment note

(Jan 2023)

Initial Survey

- Survey on use of CIM/SMGS consignment note

(Dec 2022)

1 Joint Workshop

- Use of CIM/SMGS consignment note

(Jun 2022)

Questionnaire on potential e-CIM/SMGS pilot project(s)

- Objective: to gather detailed information on organization of potential pilot project(s)

- Directed to Railway operators

- Joint letter signed by OSJD; CIT; UIC and TRACECA *(TRACECA No. 02\22\317 as of 27 Oct 22)*

- Structure of the Questionnaire:

  A. Purpose and scope of pilot project(s)

  B. Experience of electronic Railway CN Usage

  C. International Railway Transport and e-CIM/SMGS CN

  D1. Paper CIM/SMGS CN and electronically forwarded data

  D2. Electronic (paperless) CIM/SMGS CN

  E. Multimodal transport and e-CIM/SMGS CN

  F. Customs and electronic CIM/SMGS CN

9. Are there provisions in national railway regulation / national railway instructions that further detail implementation of electronic railway consignment note in international railway transport?

Yes — KAZ/TUR

No — AZE/GEO/KGZ/MDA/UKR

KAZ: 1) Rules for the carriage of goods by rail, Order of the Minister of Industry and Infrastructure Development of the R.Kazakhstan - August 2, 2019 No. 612;
2) Law of the Republic of Kazakhstan - December 8, 2001 N 266 "On Railway Transport";
3) Law of the Republic of Kazakhstan "On electronic document and electronic digital signature" - January 7, 2003 N370.

TUR: Regulation in customs legislation and implementation instruction for railways. (PS IGC TRACECA Note: Not clear if there is any railways regulation for railway transport purposes - not for Customs)

12. With which countries / railway operators you have electronic data interchange (EDI) agreements that include electronic exchange of railway consignment note : (please list the countries and the year when the agreement become operational)

AZE: 1. KTZ - Based on message type IFTMIN D.97.A (Contract: No. 72-AO, 05.10.18)
2. RZD - Based on message type IFTMIN D.97.A (Contract: No. 72-AO, 05.10.18)
3. GZD - Unilateral data transfer (Contract No. 6580, 28.05.20)

GEO: 1. AZE, 2020

KAZ: 1. RUS, 2016; 2. KGZ, 2018; 3. AZE, 2018; 4. UZB, 2022; 5. CHN, 2019

KGZ: 1. KTZ, Nov 2018; 2.RZD, Oct 2021

UKR: 1. Russia (OJSC Russian Railways) - presently not operational

15. How do you implement the requirements for authentication of the electronic railway consignment note:

a) Who carries out confirmation of the electronic signature in international transactions?

AZE: Not in use

GEO: Not in use

KAZ: Trusted Third Party (TTP)

UKR: Mutual confirmation is not required

Updates of the Overview of Responses

MoU for organization of e-CIM/SMGS CN pilot project(s)

1. PURPOSE AND PARTICIPANTS

1. This MoU sets the principles for organization of pilot project(s) between **participating railway operators** for use of electronic CIM/SMGS consignment note along selected TRACECA routes.

2. The participants will invite and identify **interested customers** (consignors and consignees) willing to participate in the pilot project(s).

3. The participants will invite and endeavor to actively include in the pilot project(s) the **carriers in other modes of transport and port terminal operators** in the case of multimodal transport operations.

4. The participants will invite and endeavor to actively include in the pilot project(s) the **Customs and other border crossing authorities** in their countries.

MoU Signing Ceremony – Baku, 22 May 2023

2. OBJECTIVES

The objectives of the pilot project(s) are:

a) to review the legal environment to be able to fully implement electronic CIM/SMGS consignment note from legal perspective;

b) to analyze operational and organizational issues;

c) to test existing technical (IT) solutions and develop recommendations for potential adjustments / upgrading / development and implementation of other technical (IT) solutions

3. OUTCOMES

The expected outcomes from the pilot project(s) are:

a) Confirmation of the proof of concept;

b) Indication on reduced railway costs;

c) Indication on decreased railway time at reconsignment points;

d) Indication on improved coordination with transport operators in other modes of transport and simplification of multimodal transport operations;

e) Indication on reduced costs / decreased time for transshipment in multimodal transport operation;

f) Indication on reduced costs / decreased time for Customs and border crossing processing

GUIDANCE *(MoU para 8)*

1. **CIM/SMGS Consignment Note Manual** (RU) (EN) (Annex 6 to the SMGS Agreement / GLV-CIM/SMGS) developed jointly by International Rail Transport Committee (CIT) and Organisation for Co-operation between Railways (OSJD)

2. **Specifications for the electronic CIM/SMGS consignment note** (RU) (EN) developed jointly by International Rail Transport Committee (CIT) and Organisation for Co-operation between Railways (OSJD)

3. **UN/CEFACT standards and artefacts** for the CIM/SMGS consignment note, wagon list and additional documents aligned to the Multimodal Transport Reference Data Model

4. **Relevant Leaflets** of the OSJD Permanent Working Group on Coding and Information Technology (for OSJD domain)

Action Plan for the Pilot Project on use of e-CIM/SMGS consignment note along selected TRACECA routes *(June 2023)*

- Based on the MoU signed 22 May 2023

- Two-year project (June 2023 – June 2025)

- Five parts

  A. Legal aspects

  B. Technical (IT aspects)

  C. Operational & organizational aspects

  D. Multimodal transport

  E. Customs & border crossing

Responsibility: Pilot Project Working Group (members, national coordinators)

External Support: (coordination, experts) (OSJD, CIT, UIC, UN ECE, UN CEFACT, TRACECA)

Pilot project testing of e-CIM/SMGS CN *(Action Plan)*

o Initial analysis (legal & technical – IT aspects)

o Development of prototype of electronic CIM/SMGS electronic document aligned with UN/CEFACT MMT RDM (UN ECE consultant)

o Virtual and subsequent parallel pilot tests with e-CIM/SGMS digital prototype

- Virtual test

- Parallel test (in addition to existing procedure)(railways only)

- Parallel test (in addition to existing procedure)(railways plus, other operators, ports, Customs)

o Analysis and drafting suggestions / recommendations (legal & technical – IT aspects)

o Accepting recommendations on Working Group level and submission for further consideration for regular use of e-CIM/SMGS CN

Role of Railway Organizations / Role of International Organizations

e-CIM/SMGS - Pilot Project Working Group

July 2023 – ongoing

Working Group (WG) for organization of e-CIM/SMGS CN Pilot
- 03 Jul 2023 (online) - Preparatory Meeting of the WG
- 15 Sep 2023 (online) - 1st Meeting of the WG
- 14 Dec 2023 (online) - 2nd Meeting of the WG

November 2023 – ongoing

Sub-Working Group (S-WG) IT experts under Pilot Project
- 16 Nov 2023 - 1st Meeting of the S-WG of IT experts
- 26 Jan 2024 - Technical consultations of the S-WG
- 27 Feb 2024 - Technical consultations of the S-WG
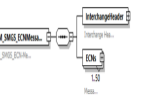- 13 May 2024 -Technical consultations (testing teams)

e-CIM/SMGS Shared Folder
- Pilot project documents (e.g. MoU, List of Working Group and Sub-Working Group Members, Pilot Project Action Plan, Testing Protocol, Action Plan for Testing)
- Documents from related events (e.g. Agendas, List of Participants, Aid Memoires, presentations from workshops and technical consultations)

WhatsApp Group of Railway IT Experts

Consultations, information exchange, sharing of sample documents in preparations for development and testing of e-CIM/SMGS CN digital prototype

Development of e-CIM/SMGS CN Digital Prototype

- October / December 2023 - initial activities for defining the assignment (development of e-CIM/SMGS CN Digital Prototype aligned with with UN/CEFACT MMT RDM)

- November / December 2023 – consultations on support to be provided from UN CEFACT experts and identified prospective consultant (with support of UN ECE)

- December 2023 / February 2024 – collection of e-CIM/SMGS samples from participating countries (to support development of e-CIM/SMGS digital prototype suitable for testing purposes)

- January – March 2024 – weekly consultative meetings between consultant and UN CEFACT experts

- 18 and 23 January 2024 – first versions of the CIM/SMGS digital prototype (XML file and XSD files) shared by consultant with the members of S-WG of IT experts for consideration

- 24 January 2024 (online) - Consultative Meeting on development of eCIM/SMGS digital prototype between the consultant and representatives of UN ECE, RailData, UN CEFACT experts, OSJD, PS IGC TRACECA.

- January/May 2024 – Presentation and discussion on development of CIM/SMGS digital prototype with members of the S-WG of IT experts (see technical consultations at S-WG meetings)

- 09 April 2024 – final version of e-CIM/SMGS digital prototype for initial testing developed by consultant and shared with participating railways / testing teams.

Testing Protocol & Action Plan for Testing

A. Preparatory Phase (before organizing test runs)

- Designate a testing team with team leader and team members (Commercial/Freight & IT Departments)
- Identify Consignors/Consignees/Forwarding agents interested to join the pilot project
- Finalize mapping of e-CIM/SMGS digital prototype and internal IT systems, consider use of exchange methods
- Define routes for testing: KAZ-AZE-GEO-TUR & KAZ-AZE-GEO-UKR in both directions East - West & West - East
- Decide on number of test runs (at least 4 movements) for each stage

B. Organize Test Runs

- Phase 1 testing (virtual pilot testing) (R2R) (testing environment only, share and understand e-CIM/SMGS messages) (**03-07Jun 2024**,…)
- Phase 2 testing (parallel pilot testing) (R2R) (in parallel with live railway transport operations) (Sep – Oct 2024, …)
- Phase 3 testing (virtual pilot testing) (R2R; R2MC/P; R2C) (testing environment only, e-CIM/SMGS data messages) (Feb – Mar 2025, …)
- Phase 3 testing (parallel pilot testing) (R2R; R2MC/P; R2A) (in parallel with live railway transport operations) (May – Jun 2025, …)

C. Evaluation, Analysis and Reporting (after organizing test runs)

- Findings from testing (feedback, analysis, initial reports)
- Evaluation of Digital Prototype and IT solutions / potential for integration (API) / requirements for fully paperless solutions ;
- Business Process Analysis / Time-Cost analysis / Cost-Benefit analysis
- Reports with suggestions - Roadmap for regular use of e-CIM/SMGS consignment note (legal and IT aspects)

Next steps and potential expansion of pilot project(s)

- Updating e-CIM/SMGS CN digital prototype based on feedbacks from testing (continue with parallel testing)

- Consider options for seamless R2R exchange of e-CIM/SMGS CN messages (e.g. API for connecting existing IT systems, updates of existing railway IT systems)

- Digitalization of e-CIM/SMGS CN related documents (e.g. e-CIM/SMGS wagon list, …) and digitalization of other accompanied documents

- Multimodal transport aspects (include operators in other modes of transport, ports in pilot project activities)

- Use of e-CIM/SMGS CN as a Customs document (include Customs in pilot project activities)

- Address issues on authentication and recognition of electronic signatures (preparations for use of paperless e-CIM/SMGS CN) (legal and IT aspects)(bilateral/multilateral agreements)

- Expanding pilot projects along other routes of TRACECA corridor

Goran Andreev

Border Crossing Expert

Permanent Secretariat of the Intergovernmental Commission TRACECA

🏠 **Azerbaijan, Baku, Aliyarbekov str. 8/2, AZ 1005**
📞 **+994 12 598 27 18**
✉ **office@ps.traceca-org.org**
🌐 **www.traceca-org.org**

USEFUL LINKS IN SOCIAL NETWORKS

f IntergovernmentalCommission.TRACECA/

✕ @TRACECA

in traceca-permanent-secretariat