

Lithuania's Path to Digital Customs

A Case Study on Data Exchange and Future Perspectives

Jurgis Adomavičius
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giz Deutsche Gesellschaft
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Introduction

Why do digital customs matter?

- Rapid trade growth
- Importance of data: speed, accuracy, transparency
- EU regulations (UCC) as driver

Implemented Projects

- 2014–2016: **NCTS Phase 4 – Transit system digitalization**
- 2016–2018: **EMDAS – Launch of electronic customs**
- 2018–2020: **AIS/ECS automation**
- 2020–2022: **National link to e-Customs**
- 2023–2024: **UCC-specific systems – PoE, PoD, CDS**

Analysis of legal acts

EU Customs Legislation Timeline

◆ **October 9, 2013**

Adoption of Union Customs Code (UCC) – Regulation (EU) No 952/2013

◆ **December 29, 2015**

Adoption of the UCC secondary legislation:

- Delegated Regulation (EU) 2015/2446
- Implementing Regulation (EU) 2015/2447
- Transitional Delegated Regulation (EU) 2016/341

◆ **May 1, 2016**

UCC enters into force with transitional arrangements until end of 2025

◆ **May 17, 2023**

EC presents Customs Reform Package and EU Customs Data Hub vision (by 2030)

Analysis of legal acts

Lithuania's UCC Implementation Timeline

◆ 2016–2024

Gradual implementation of UCC through national IT systems (e.g., NCTS, AES, AIS, ICS2, GMS)

◆ September 1, 2024

Government Resolution enters into force:

- Defines institutional responsibilities
- Establishes national data exchange processes

◆ 2024–2025

Integration of Customs IT with business and public platforms

◆ By 2030

Full transition to Digital Customs in line with EU Customs Data Hub model

Data Exchange Structure

- National systems (EMDAS, AIS, ECS) ↔ EU systems (UUM&DS, CDCO)
- API / EDIFACT integration with business systems
- Single Window concept

Case Study – Export Declaration

Before: PDF forms, email submission

After: Fully digital via EMDAS → faster decisions,
release

Challenges & Lessons

- Business readiness
- Institutional coordination
- Legal-technical alignment

➤ Ongoing Challenges

- ⚠ Interoperability with neighboring countries
- ⚠ Data standardization
- ⚠ Cybersecurity & legal harmonization

Future Perspectives

- Integration of AI in customs
- Automated risk assessment
- Goods as data units (Data-Driven Trade)
- Goal: Fully automated declarations

Digital Customs Ecosystem

Includes:

- Customs authorities
- Brokers
- Logistics platforms
- Data exchange networks

Challenges & Lessons

- Business readiness
- Institutional coordination
- Legal-technical alignment

Conclusion

- Lithuania as one of the UCC leaders in the EU
- Data exchange is the core of digital customs
- Continue integration with business & EU

It's time to share thoughts