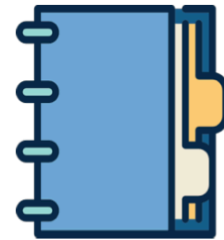




Project Lead: Zisis Palaskas

Part 1

Introduction to the
UN/CEFACT Cross-
Border Management
Reference Data Model
(CBM RDM) project



Agenda

CBM RDM and
related EU
Research projects

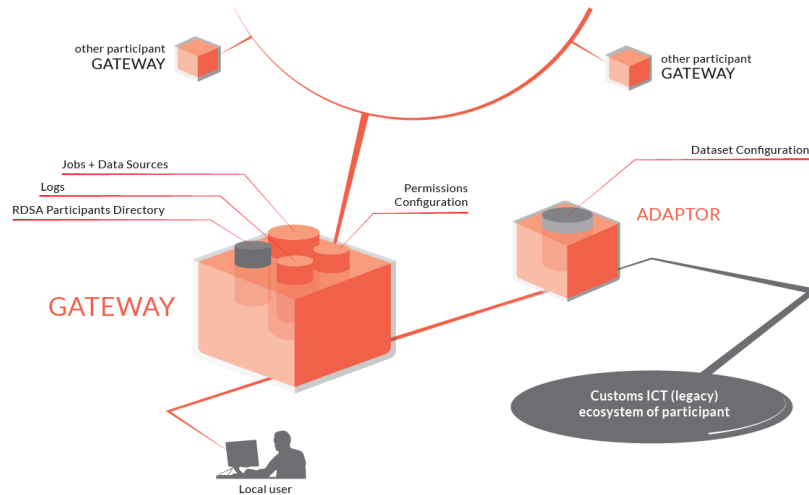
Part 2

EU Research (Horizon 2020) Project – PROFILE related to CBM RDM Project

- Data sharing for cross-border does not only links to Message Exchanges, very important is the sharing of data for Decision Support and Analytics.
- EU research in FP7 and Horizon 2020 involves a few projects related to Information and Data sharing. Naming just a few: eFreight, iCargo, eMAR, CASSANDRA, CORE, SELIS, AEOLIX.
 - Developments in these projects upon the concepts of information sharing PIPELINES and the Supply Chain and Transportation Data Models which have over the time interacted with UN/CEFACT.
- The DG-MOVE DTLF initiative, with CEF projects FENIX and FEDeRATED.
- For EU Customs:
 - PROFILE: Better access to data, **state-of-the-art data analytics** for **360° view on cross-border cargo flows**. Machine Learning, graph-based analytics, and natural language processing. PROFILE for customs-to-customs sharing of **Entry Summary Declarations** and other risk-relevant information through the PROFILE **Risk Data Sharing Architecture (RDSA)**. Involves logistics Big Data and provides customs an improved access to online data, especially valuation-relevant data of e-commerce sites. Covers co-operation and data exchange among customs and other authorities.
 - PEN-CP: Pan-European Network of Customs Practitioners (PEN-CP) a network between distinct customs administrations to create an ecosystem for interoperability, knowledge sharing and innovation to improve European security though more efficient control of the illicit trade flows.

EU Customs risks - PROFILE Project (Horizon 2020)

PROFILE Risk Data Sharing Architecture



RISK DATA SHARING ARCHITECTURE///

Secure customs-to-customs sharing of risk-relevant information

Developing an architecture for the agile sharing of risk-relevant data among the EU customs, extending the current capacities and facilitating the reception of data from external sources

Possible use cases include (details under work):

- ENS: (safety & security) - expanding the national data for pre-arrival risk analysis
- EORI: (antifraud+ safety & security) - sharing of <types of goods + origin> for each EORI as importer
- External data "BigDataMari": enriching ENS data (parties, goods description, weight, etc.), and supporting future implementation of ICS2

Explore sharing of pre-arrival data, statistics on importers, targeting decisions and control results

Flexible data sharing between willing authorities without the need of consensus

Re-usability of data analytics among customs authorities, including the capability to improve the configuration by learning from each other's data.

Embedded support for data protection (GDPR) compliance

PROFILE

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Innovative Data Analytics, Data Sources, and Architecture for European CUSTOMS RISK MANAGEMENT

LIVING LABS

Project duration: 3 years (started 1.8.2018)
EC budget contribution: 5 million EUR

www.profile-project.eu

Connecting customs risk management systems to data owned by industry's "Big Data" providers

Applying machine learning, graph-based analytics and natural language processing technologies in customs processes

Risk Data Sharing Architecture enables secure customs-to-customs sharing of risk-relevant information, like threat priorities and control results

Dutch Living Lab collects product price information from web stores and compares average prices to the declared product values

Sweden-Norway Living Lab seeks to upgrade customs import/export risk assessment at the Swedish-Norwegian border

Customs Partners

- Belgium
- Norway
- Estonia
- Netherlands
- Sweden

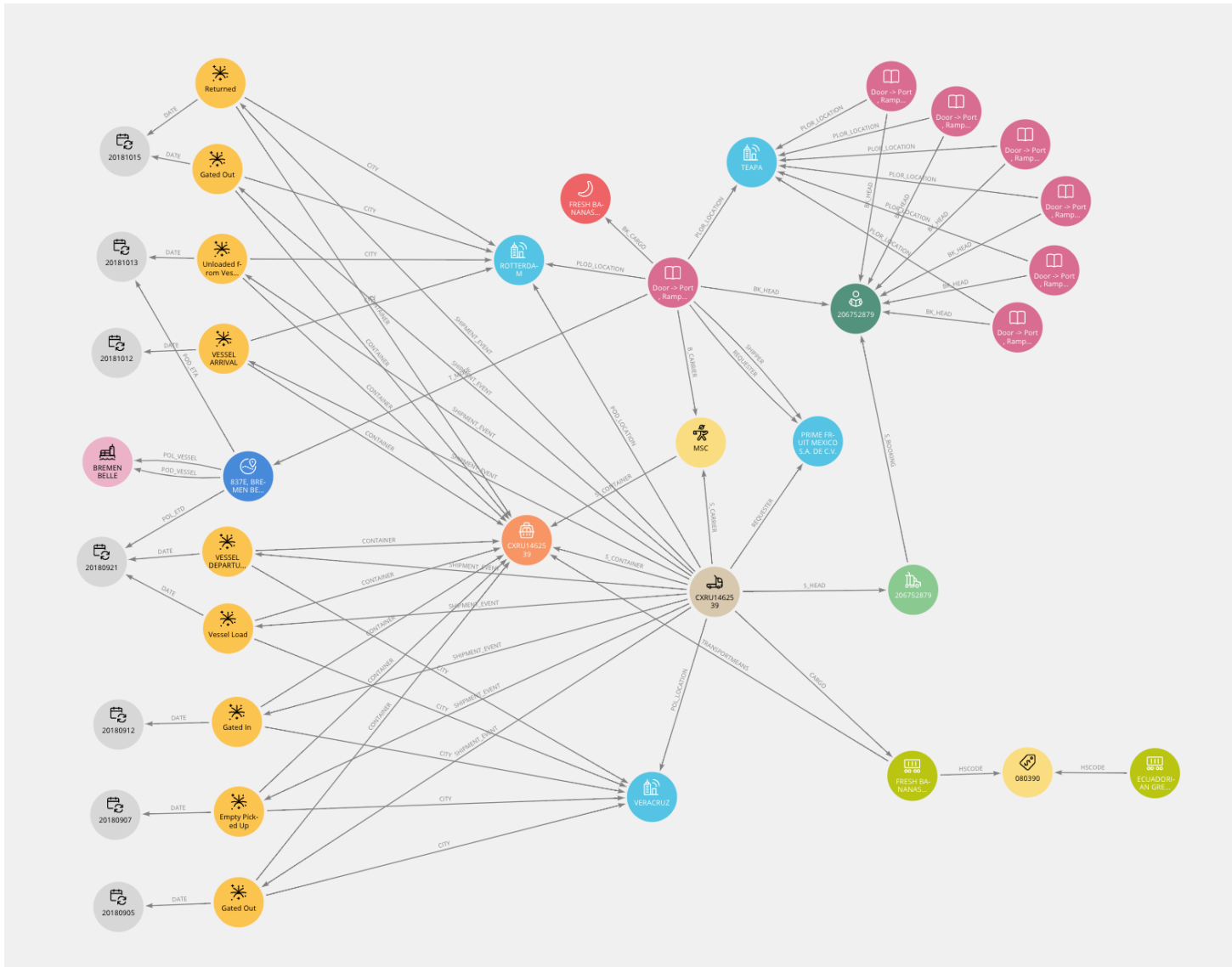
Other Partners

- Cross-border Research Association (Coordinator)
- IBM
- INILECOM
- Joint Research Centre (JRC)
- Netherlands Organisation for Applied Scientific Research (TNO)
- The Norwegian Defence Research Establishment (FFI)
- The Swedish Defence Research Agency (FOI)
- TU DELFT
- University of Lausanne

Belgian Living Lab develops new risk indicators for profiling economic operators and improving current targeting models

The PROFILE project receives funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No 786796.

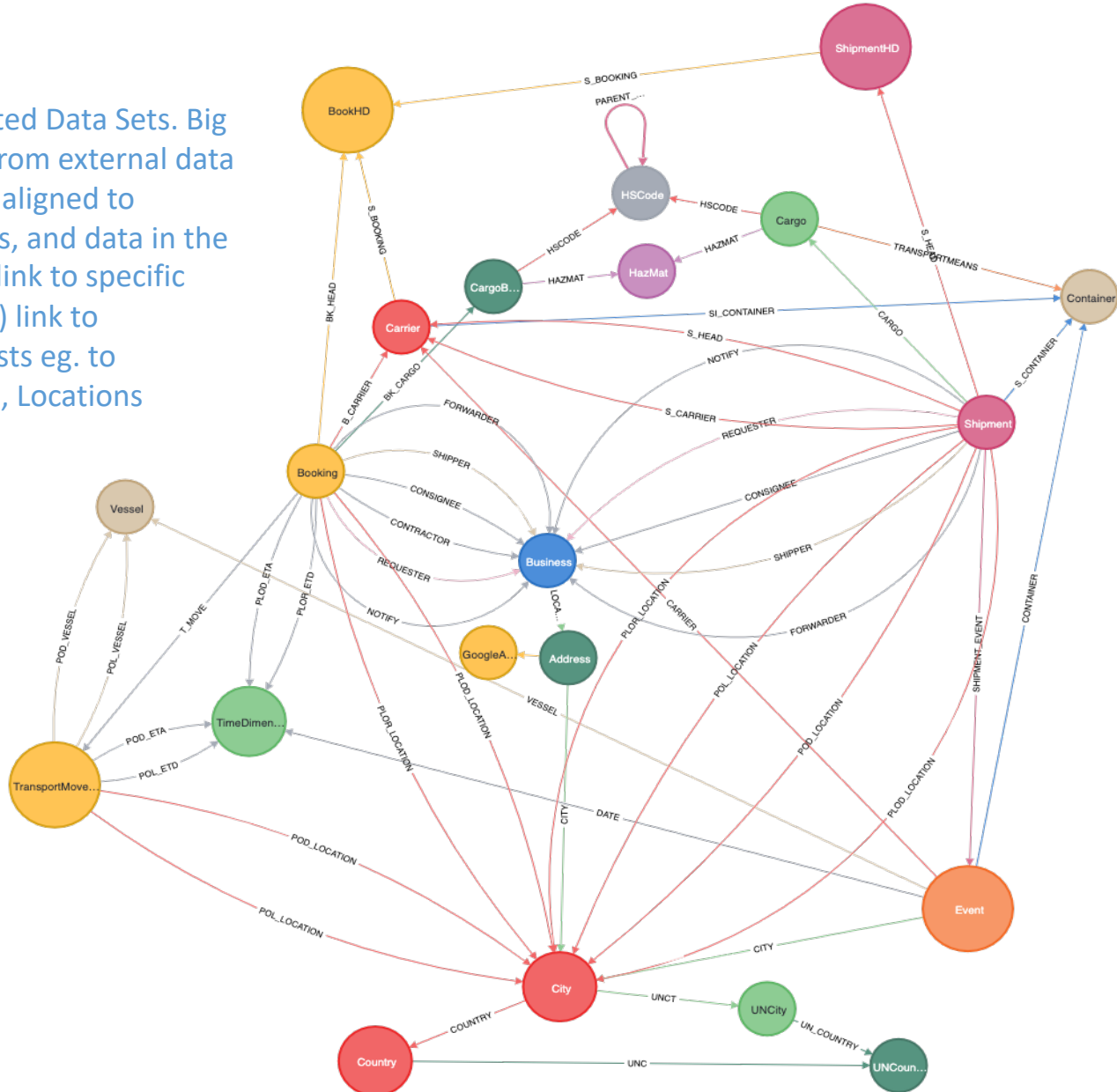
EU Customs risks - PROFILE Project (Horizon 2020)



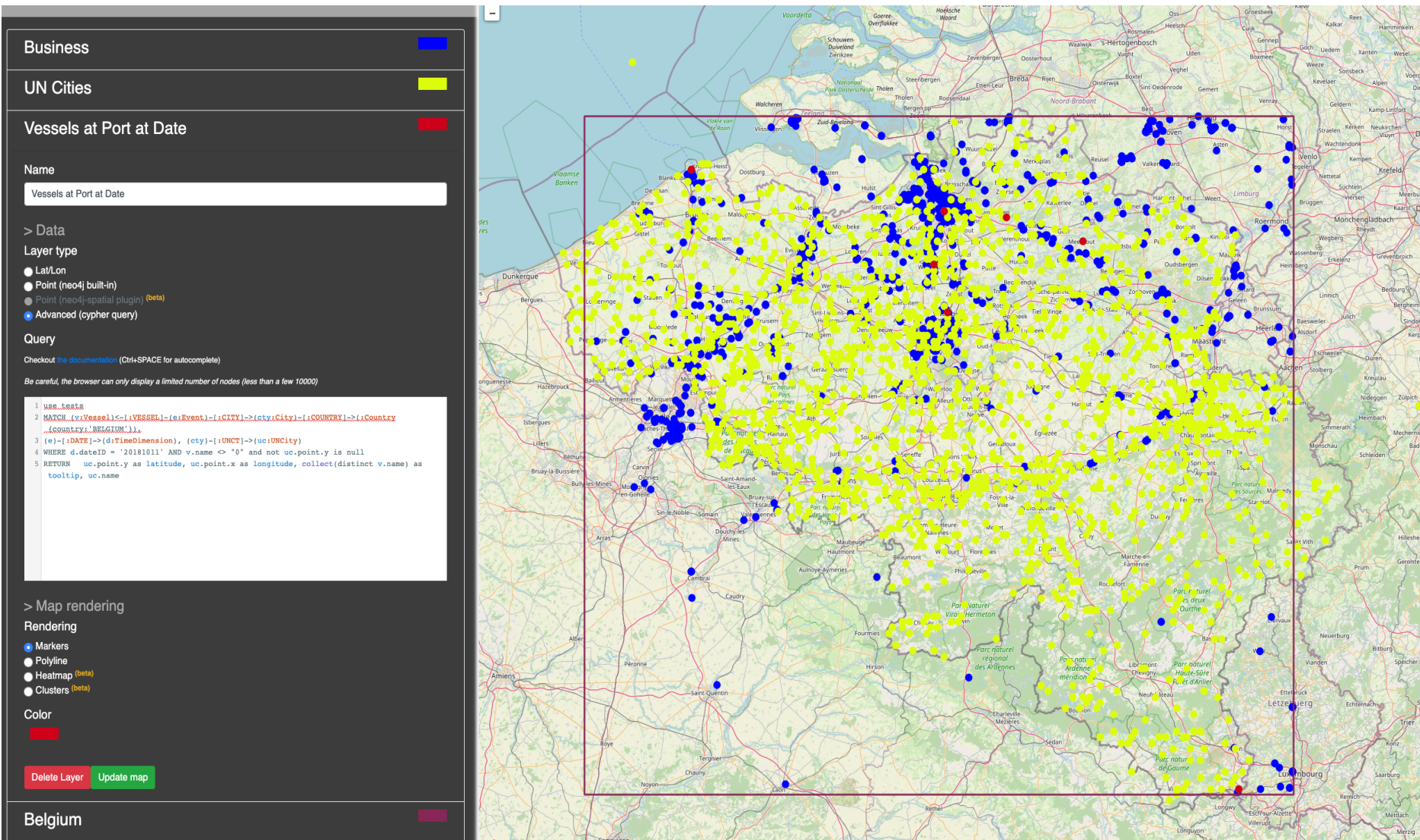
Standardising on data is important! Integration difficulties due to cleansing, and linking data

EU Customs risks - PROFILE Project (Horizon 2020)

Concepts in Connected Data Sets. Big Data sets available from external data sources, usually not aligned to standards definitions, and data in the data sets hard to a) link to specific BSP concepts, and b) link to standardized code lists eg. to Products (HSCODES), Locations (UNLOCODES) etc.



EU Customs risks - PROFILE Project (Horizon 2020)



Show vessels on a specific day in Belgian Ports, Belgian Businesses, UN/LOCODE Locations, for all businesses in Belgium

Discussion

