# The collaboration between GS1 and UN/CEFACT in digitalising the private sector

Piergiorgio Licciardello, GS1 Global Office
09/10/2023

# GS1: who we are

- **GS1** is a neutral, not-for-profit standards organisation that helps companies do business across the world:
  - A federation of **116** GS1 Member Organisations
  - Developing standards to support over **2 million companies** worldwide
  - **25** industries served across **150** countries
  - Over **2 billion** products carry the **GS1 barcode**
  - Barcodes scanned more than **10 billion** times a day globally

*Source:* *https://www.gs1.org/docs/gs1-strategy-booklet-2023.pdf*

# Linking physical and digital worlds

Digitalisation of trade processes is a key evolution in order to support improvements in sustainability, circularity and efficiency.

The link between physical and digital worlds is a key factor for these goals and can be achieved by providing a standardised approach for:

– Identify

– Capture

– Share

# The data sharing domain

- In the data sharing domain, GS1 provides standards to the industries and communities that we serve for:
  - Master data alignment
  - Transactional and operational data sharing
  - Event data sharing

- In this domain, the collaboration with UN/CEFACT has been strategically important because it has allowed both organizations to further our common objectives of harmonization and interoperability

# EANCOM: the first chapter of a collaboration

- In June of 1989, the first release of EANCOM was published.

- The decision was to leverage an existing global standard, UN/EDIFACT, implement a subset applicable to the GS1 community

- The main messages implemented are:

  – Master data: PARTIN and PRICAT

  – Order to cash: ORDER, ORDRSP, DESADV, INVOIC…

  – Other processes

- In total, EANCOM includes 46 different messages and more than 130.000 identified users
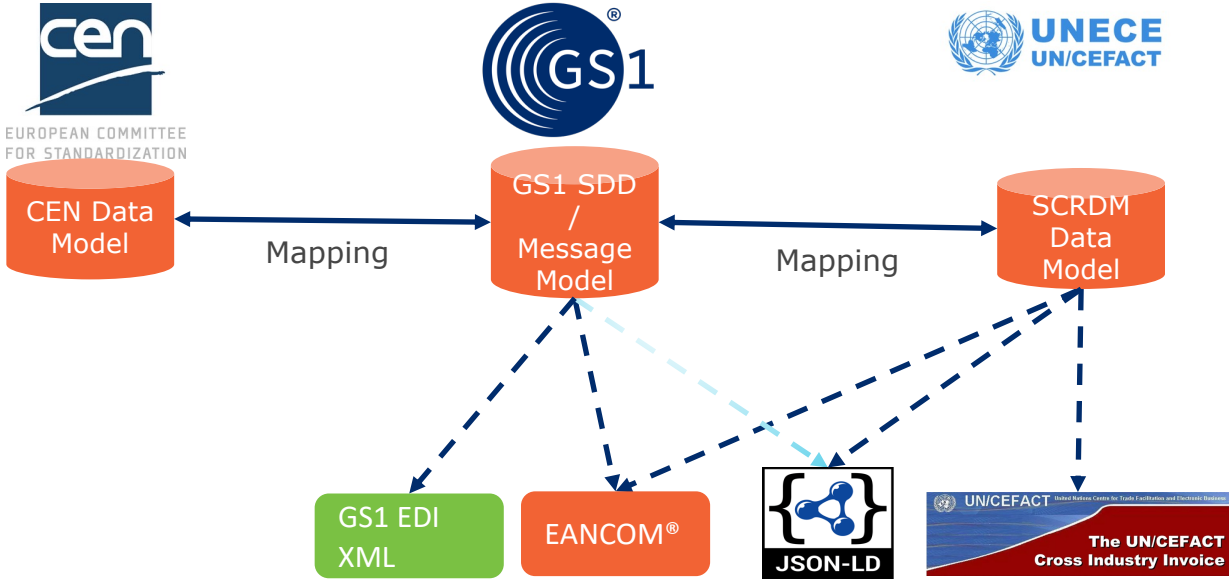
# UN/CEFACT CI profiles and Code Lists

- GS1 has released specific profiles based on UN/CEFACT Cross Industry messages
  - The profiles cover the Order-to-Cash process and were specifically intended to cover public sector exchanges

- UN/CEFACT and UNECE code lists play an important role
  - Reccomendations 20 and 21 are referenced in many GS1 standards, including GS1 XML, EPCIS, GDSN

# Scenario for future collaborations

- The focus is progressively shifting from syntaxes to semantic data models / ontologies
    - Business oriented definitions
    - Syntax neutral modelling
- The complexity of the market makes unlikely a scenario of a «single data model ruling them all»
    - Different industry business requirements
    - Regulators interventions at different levels, from local to global
    - Technology evolution
- The main goal is to be interoperable, being flexible in moving from one technology to another with limited effort

# Semantic interoperability

# Areas of collaboration development

- GS1 Semantic Data Model mapped to UN/CEFACT SCRDM

- Future potential area of collaboration:
  - subset of UN/CEFACT JSON schemas, based on SCRDM export
  - Interoperability with UN/CEFACT schema.org vocabulary for Linked Data support