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

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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

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, and to 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
  – Recommendations 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