



# Sharing standardised data

RFID in Rail – WagonTrack  
Stockholm 2011-02-16



# Need for information in supply chains

- What do my customers need from me?
- How much inventory is in stock?
- When should I ship this product?
- What are the characteristics of this item?
- Where are the shipments related to this purchase order?
- What parties have handled this item before I received it? And why?





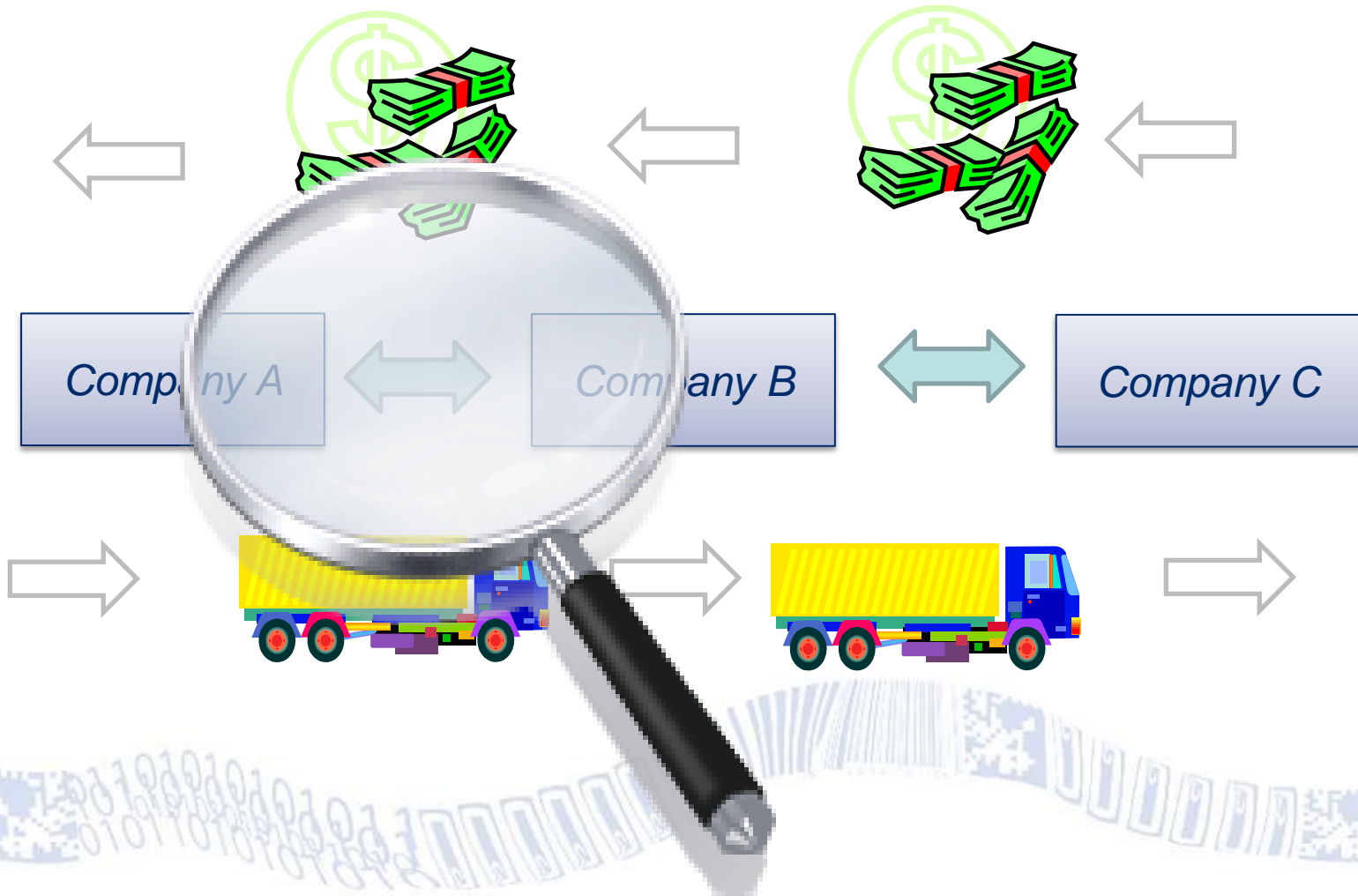
# Necessary characteristics

Information must be

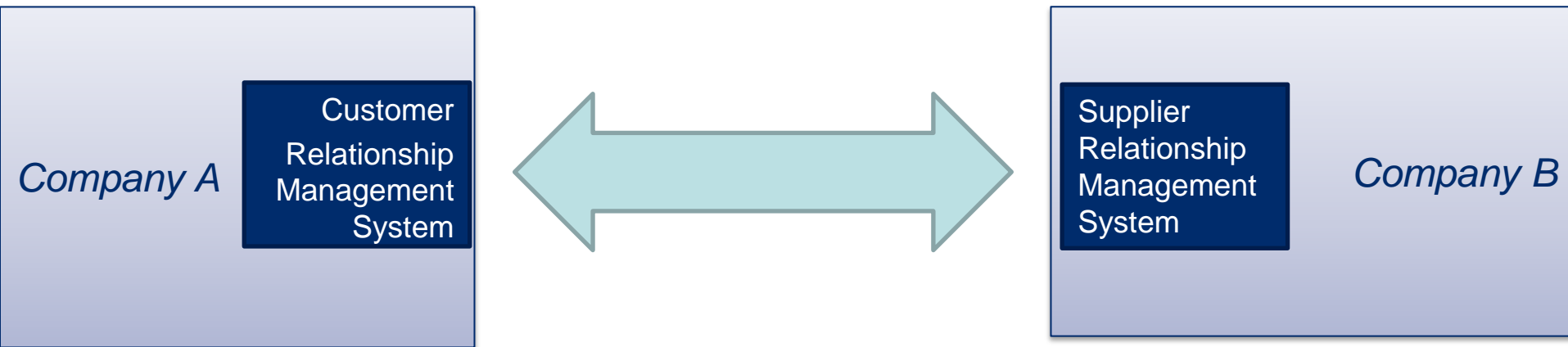
- Accurate
- Accessible
- Appropriate
- Timely
- Shared within the supply chain



# Supply chain flows



# Companies' IT systems need to be able to talk to each other



and they need a language



# What will IT systems talk about?

## ***Master data***

Foundational data that is fairly stable

Contracts

Prices

Trade items

Parties and locations

## ***Transactional data***

Instructions for what we want to happen

Inventory reports

Invoices

Recalls

Purchase orders

Sales forecasts

Delivery notes

## ***Event data***

Tracking of what actually happened

Movements of goods

Traceability

Sales

Returns



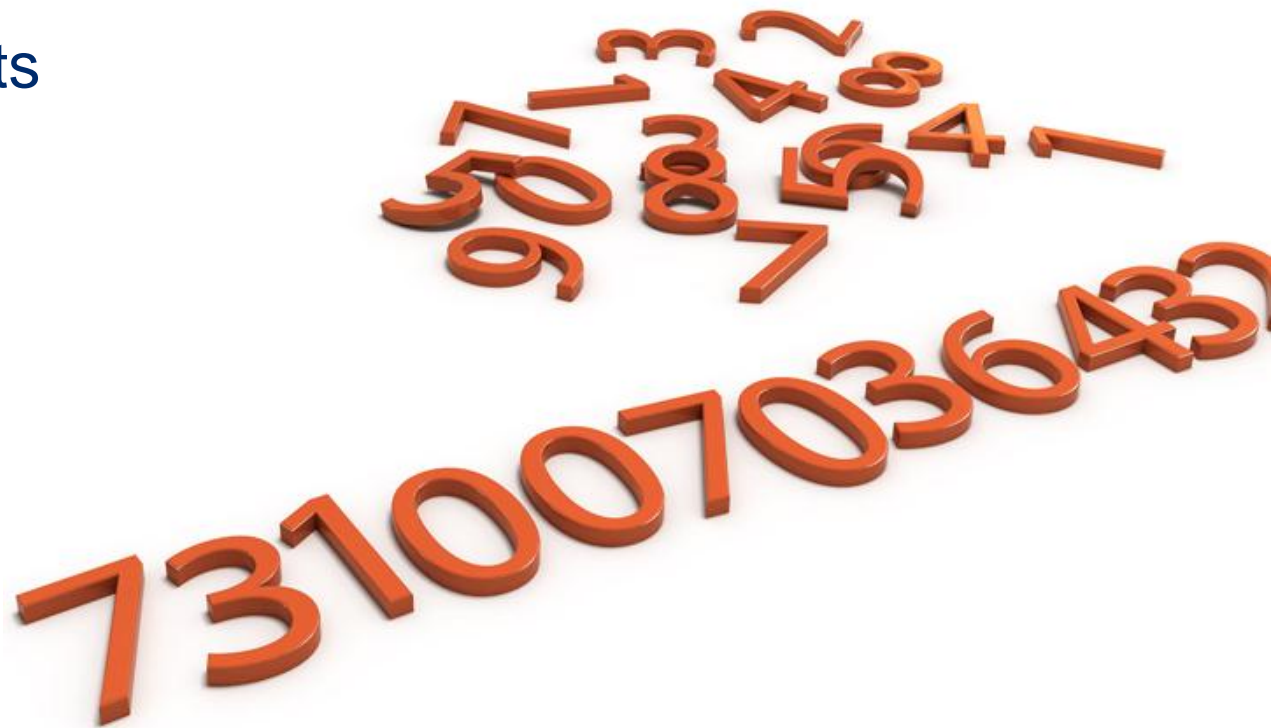
# GS1 standards that enable sharing of standardised supply chain data



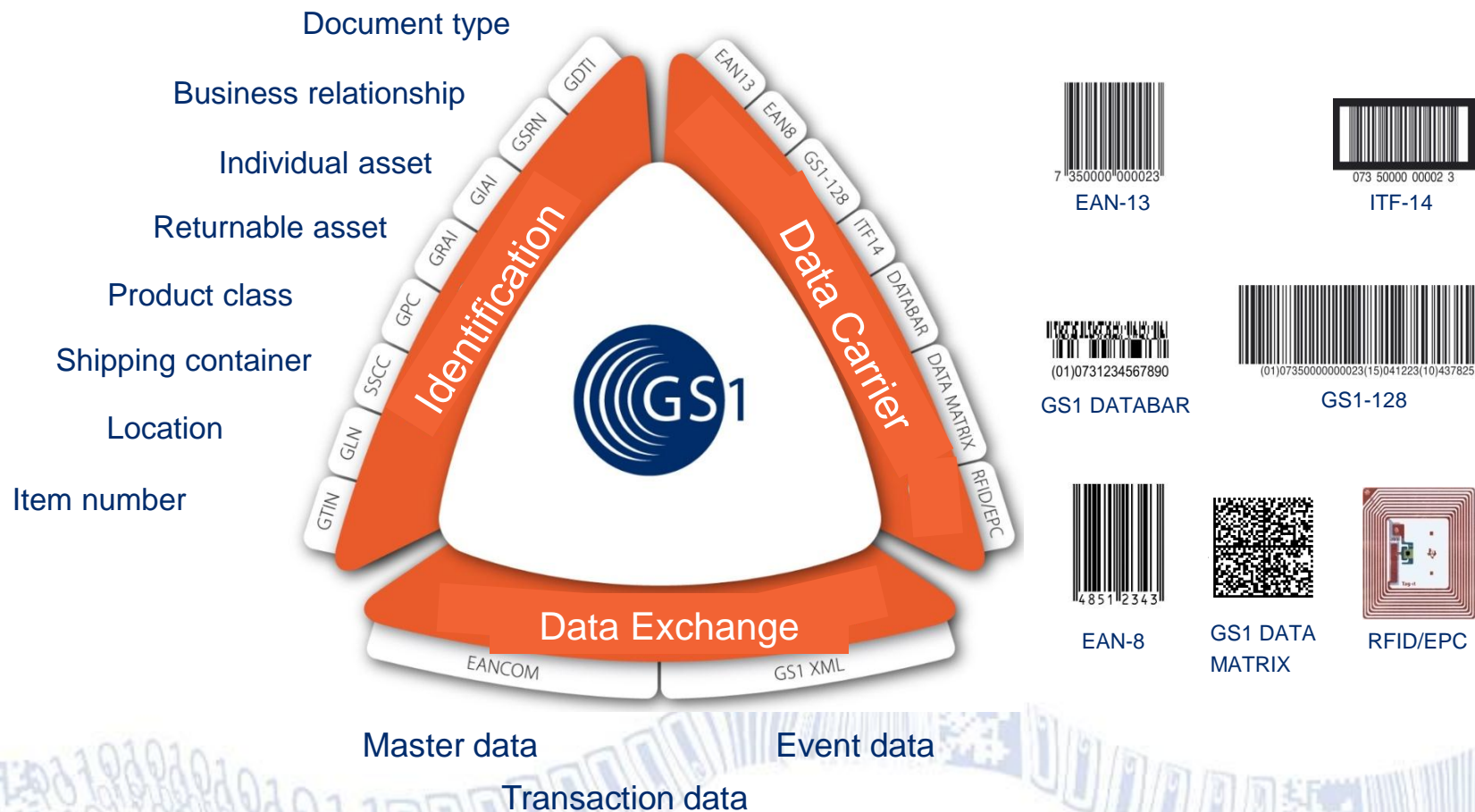


# Numbers – the language everyone understands

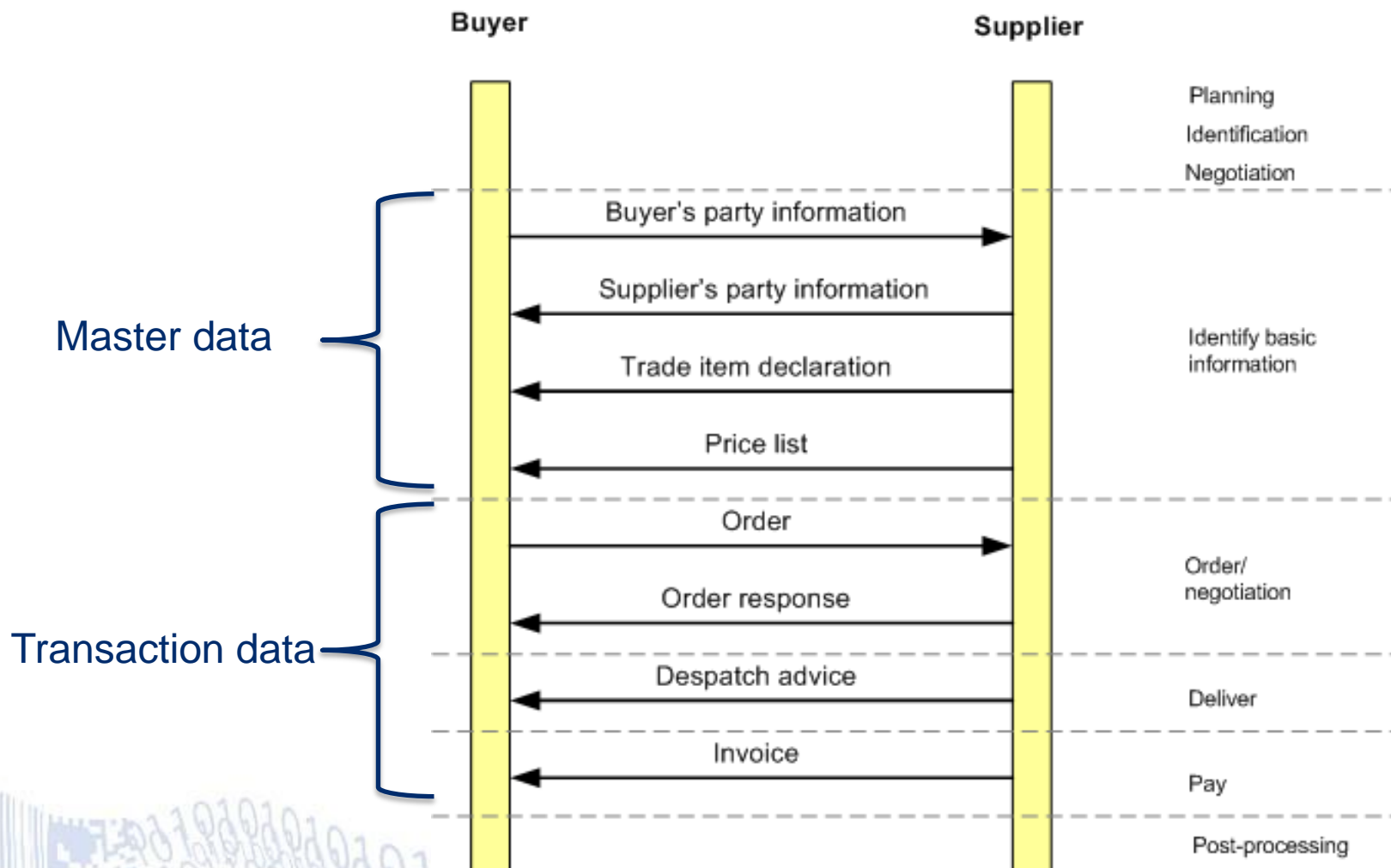
- Unique numbers identifying and labelling
  - Trade Items
  - Logistics units
  - Locations
  - Parties
  - Assets
  - Documents
  - Etc



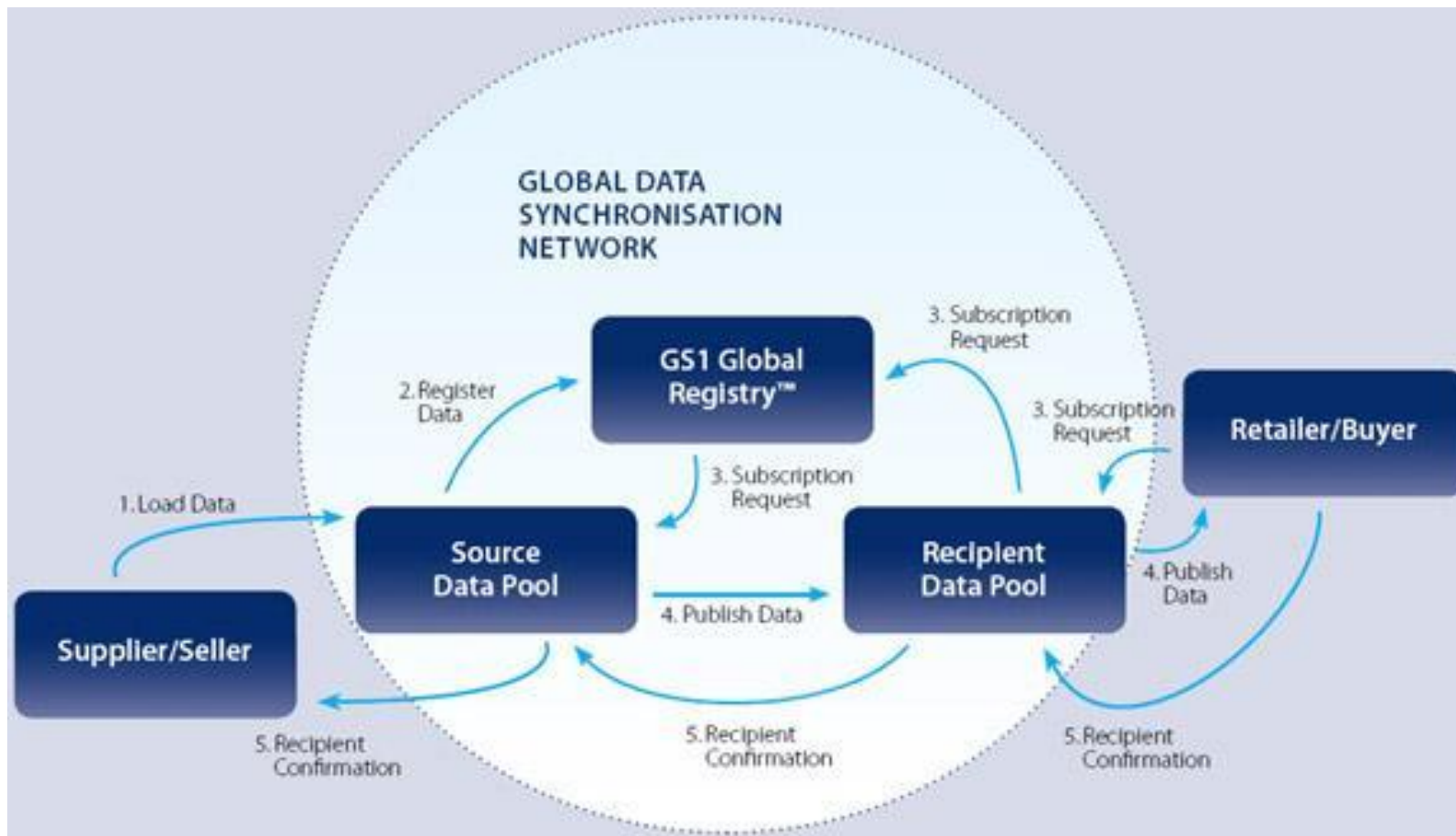
# The GS1 System



# Standards for data exchange

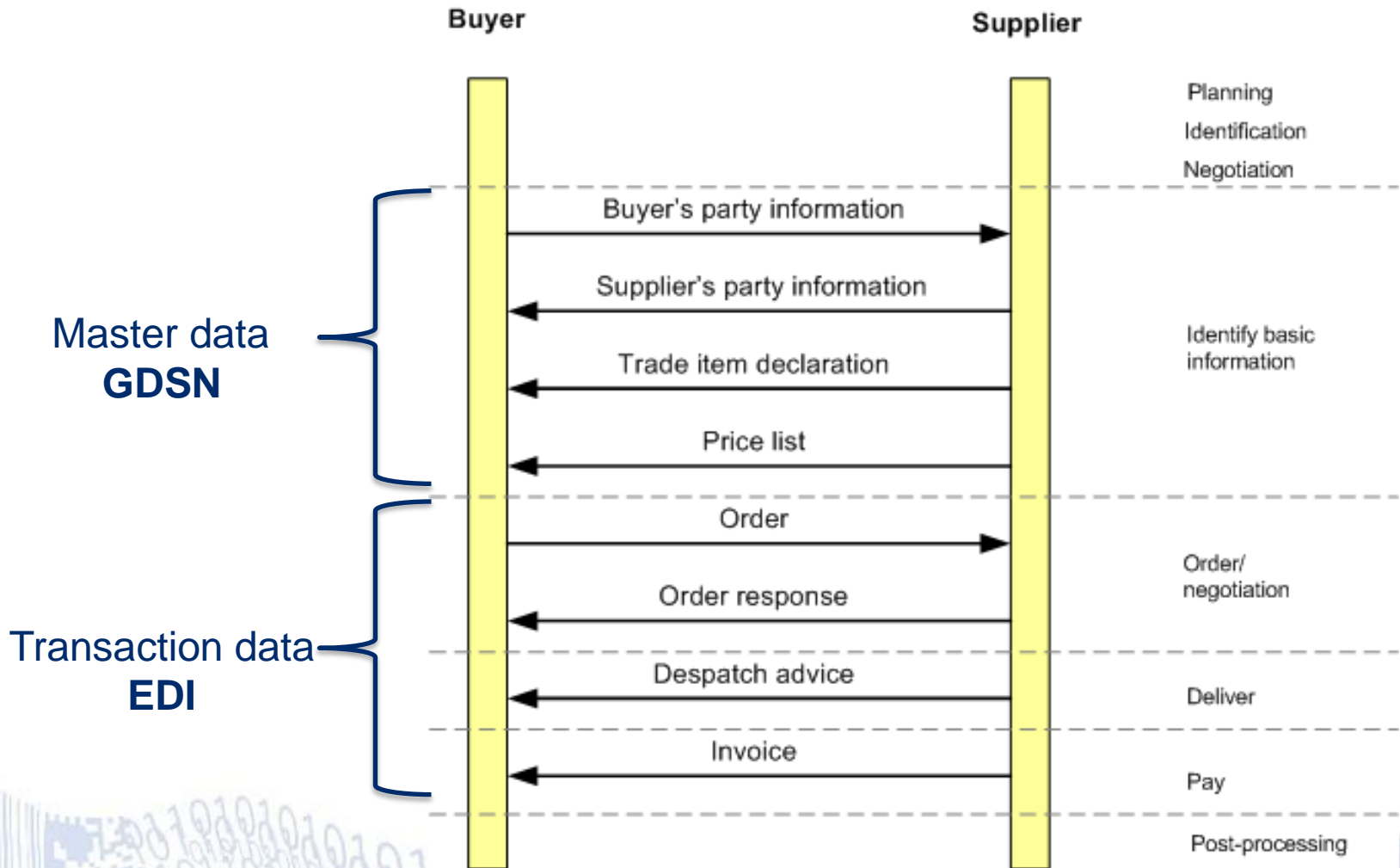


# Synchronizing Master Data



**GDSN** — A network of interconnected data pools for master data. Enables trading partners to synchronize master data

# Standards for data exchange





# Event Data

**When?** – timestamp of this event

**What?** – identities for the objects observed

**Where?** – the read point or business location of after the event

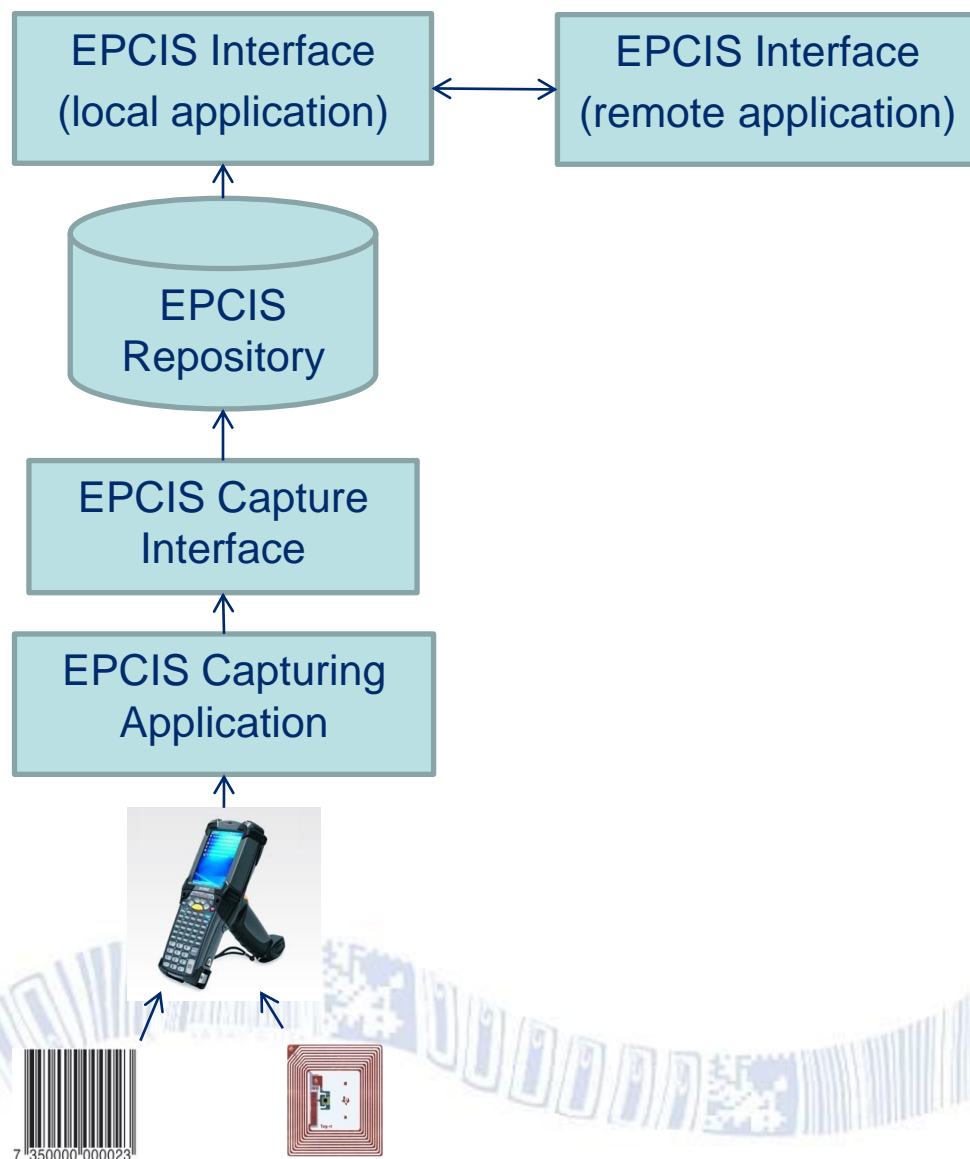
**Why?** – the business step that this event is part of

## Examples of business steps:

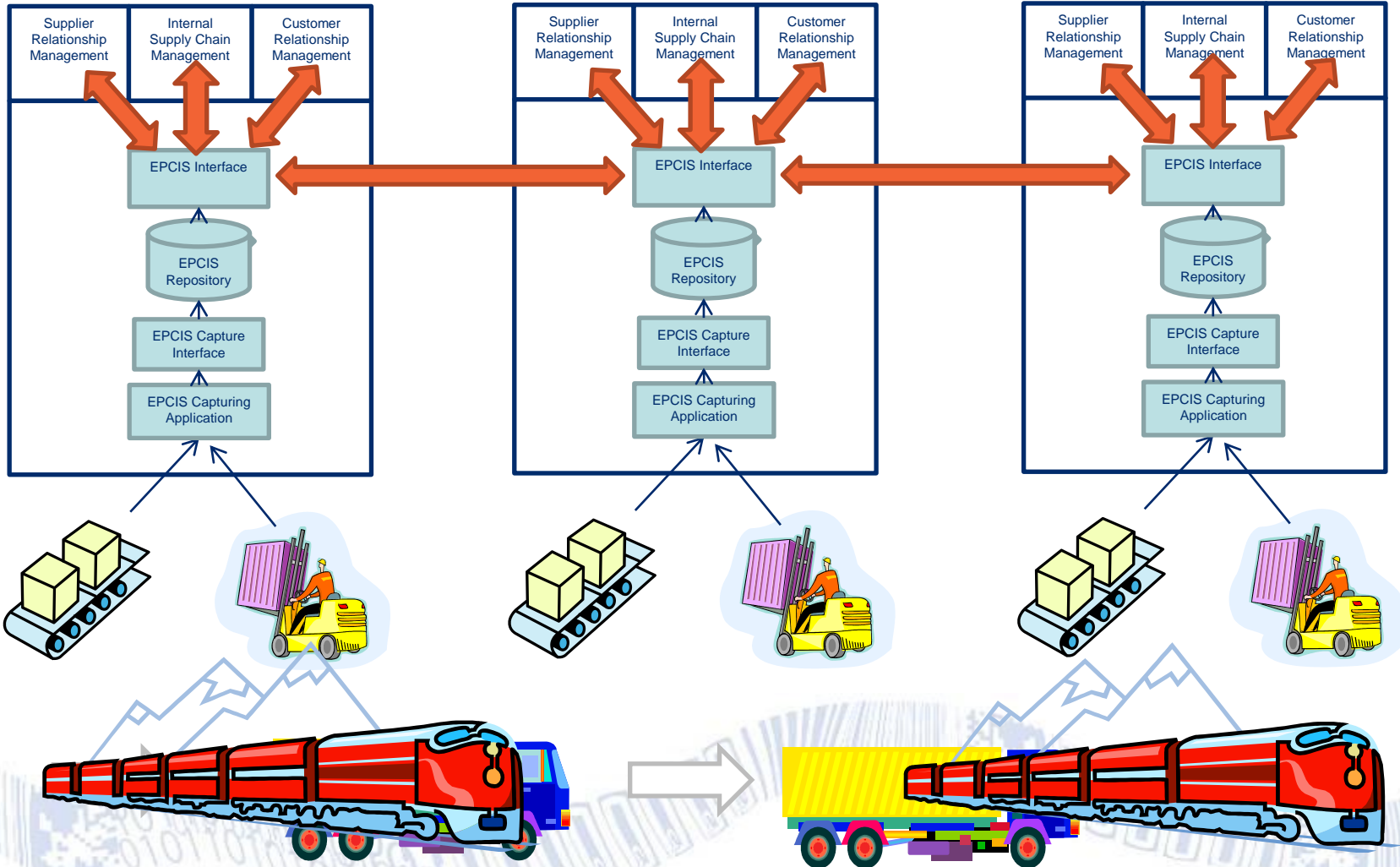
- Accepting
- Arriving
- Assembling
- Departing
- Destroying
- Installing
- Loading
- Packing
- Shipping

# EPC standards components

1. Acquires events from RFID or barcode readers
  - when?
  - what?
  - where?
  - why?
2. Applies business intelligence to create EPCIS events
3. Stores the result in a database
4. Sends the event data to an application using an EPCIS interface



# Event data sharing - EPCIS



# How it all fits together

... as illustrated in the Value Chain movie





# Staffan Olsson

GS1 Sweden  
Box 1178  
SE-111 91 Stockholm  
Tel +46 8 50 10 10 00  
[staffan.olsson@gs1.se](mailto:staffan.olsson@gs1.se)

[www.gs1.se](http://www.gs1.se)

The global language of business