



Training course, slides version 2.4

EDI for supply chain collaboration in the automotive industry

October 27, 2016
Scandic Europa
Göteborg

Agenda walkthrough

Agenda

13.00	Introduction
	Deeper info format and syntax <ul style="list-style-type: none">■ EDI structure■ EDIFACT format and syntax, terminology■ Practical tasks
15.00	Coffee Break
15.20- 16.00	Deeper info and syntax <ul style="list-style-type: none">■ Practical tasks and summary

What is EDI lägga till årtal- i bilden

EDI – Electronic Data Interchange

- *The transfer of structured data, by agreed message standards, from one computer system to another*
- *EDIFACT – **E**lectronic **D**ata **I**nterchange for **A**dministration, **C**ommerce and **T**ransport – main European standard.*

Other standard formats:

Odette – Older EDIFACT subset

VDA – German Industry standard

ANSI X.12 – US standard

Some XML applications (UBL, cXML, SAP IDOCS and so on)

EDI structure

- EDIFACT is developed and maintained by UNECE – United Nations Economic Commission for Europe.
- The standard D.13A contains 194 different business documents

<http://www.unece.org/trade/untdid/d13a/trmd/trmdi2.htm>

The most common in the Automotive Industry are:

DELFOR – **DEL**ivery **FOR**ecast

DELJIT – **DEL**ivery **J**ust **I**n **T**ime

DESADV – **DES**patch **ADV**ice

INVOIC - **INVOIC**e

EDI structure

- Envelope One for each partner and location
 - Message: One per message (sets standard)
 - Header: Partner and message information
 - Line Detail/Item/Package data
 - Sub line Multiple details on line
-
- EDI standards like EDIFACT describe the structure of messages, gives information on how to interpret data and and what segments and tags are mandatory, conditional and optional.

EDI structure – Messages

Message Code	Message Description	Count 1	Count 2
message			
CUSRES	Customs response message	2	2
IFTIAG	Dangerous cargo list message	1	1
* IFTDGN	Dangerous goods notification message	1	2
DEBADV	Debit advice message	2	2
DELJIT	Delivery just in time message	2	2
DELFOR	Delivery schedule message	2	2
* DESADV	Despatch advice message	2	5
BOPDIR	Direct balance of payment declaration message	1	2
DIRDEB	Direct debit message	2	3
CONDEV	Direct payment valuation message	2	2
DIRDEF	Directory definition message	1	1
DOCADV	Documentary credit advice message	2	2
DOCAMI	Documentary credit amendment information message	2	1
DOCAPP	Documentary credit application message	2	2
DOCINF	Documentary credit issuance information message	2	2
CONDR	Drawing administration message	1	1
CONDRG	Drawing organisation message	1	1
CONEST	Establishment of contract message	2	3
CREEXT	Extended credit advice message	2	2
PAYEXT	Extended payment order message	2	2
FINCAN	Financial cancellation message	2	1
FINSTA	Financial statement of an account message	2	1
* IFTMBE	Firm booking message	2	5
* IFCSUM	Forwarding and consolidation summary message	2	4
* IFTRIN	Forwarding and transport rate information message	1	2
* IFTSAI	Forwarding and transport schedule and availability information message	1	2
* IFTCCA	Forwarding and transport shipment charge calculation message	1	2
+ GENRAL	General purpose message	1	1
GESMES	Generic statistical message	1	1
* IFTMCS	Instruction contract status message	2	5
* IFTMIN	Instruction message	2	5
INSPRE	Insurance premium message	1	1
PRPAID	Insurance premium payment message	1	1
* IFTSTA	International multimodal status report message	1	5
* IFTSTQ	International multimodal status request message	1	2
+ IFTFCC	International transport freight costs and other charges message	1	1
* INVRPT	Inventory report message	2	3
CONITT	Invitation to tender message	2	3
* INVOIC	Invoice message	2	4
JOBAPP	Job application proposal message	1	1
JAPRES	Job application result message	1	1
JINFDE	Job information demand message	1	1
JOBCON	Job order confirmation message	1	1
JBOFF	Job order message	1	1

DELFOR
DESADV

INVOIC

EDI structure – Segment Groups and segments

4.3 Message structure

4.3.1 Segment table

Pos	Tag Name	S	R
HEADER SECTION			
0010	UNH Message header	M	1
0020	BGM Beginning of message	M	1
0030	DTM Date/time/period	M	10
0040	AAAA Segment group 1	C	10AAAAAAA;3
0050	RFF Reference	M	1;3
0060	DTM Date/time/period	C	1AAAAAAA;3
0070	AAAA Segment group 2	C	20AAAAAAA;3
0080	NAD Name and address	M	1;3
0090	LOC Place/location identification	C	10;3
0100	AAAA Segment group 3	C	5AAAAAAA;3
0110	CTA Contact information	M	1;3
0120	COM Communication contact	C	5AAAAAAA;3
DETAIL SECTION			
0130	UNS Section control	M	1
0140	AAAA Segment group 4	C	500AAAAAAA;3
0150	NAD Name and address	M	1;3
0160	LOC Place/location identification	C	10;3
0170	FTX Free text	C	5;3
0180	AAAA Segment group 5	C	10AAAAAAA;3
0190	DOC Document/message details	M	1;3
0200	DTM Date/time/period	C	10AAAAAAA;3
0210	AAAA Segment group 6	C	5AAAAAAA;3
0220	CTA Contact information	M	1;3
0230	COM Communication contact	C	5AAAAAAA;3
0240	AAAA Segment group 7	C	10AAAAAAA;3
0250	TDT Details of transport	M	1;3
0260	DTM Date/time/period	C	5AAAAAAA;3
0270	AAAA Segment group 8	C	9999AAAAAAA;3
0280	LIN Line item	M	1;3
0290	PTA Additional product id	C	10;3
0300	IMD Item description	C	10;3
0310	MEA Measurements	C	5;3
0320	ALI Additional information	C	5;3

} Segment group

} Segment

EDI structure – Segment structure

Change indicators

NAD NAME AND ADDRESS ←

Function: To specify the name/address and their related function, either by C082 only and/or unstructured by C058 or structured by C080 thru 3207.

010	3035	PARTY QUALIFIER	M	an..3
020	C082	PARTY IDENTIFICATION DETAILS	C	
	3039	Party id. identification	M	an..35
	1131	Code list qualifier	C	an..3
	3055	Code list responsible agency, coded	C	an..3
030	C058	NAME AND ADDRESS	C	
	3124	Name and address line	M	an..35
	3124	Name and address line	C	an..35
	3124	Name and address line	C	an..35
	3124	Name and address line	C	an..35
	3124	Name and address line	C	an..35
040	C080	PARTY NAME	C	
	3036	Party name	M	an..35
	3036	Party name	C	an..35
	3036	Party name	C	an..35
	3036	Party name	C	an..35
	3036	Party name	C	an..35
	3045	Party name format, coded	C	an..3
050	C059	STREET	C	
	3042	Street and number/p.o. box	M	an..35
	3042	Street and number/p.o. box	C	an..35
	3042	Street and number/p.o. box	C	an..35
	3042	Street and number/p.o. box	C	an..35
060	3164	CITY NAME	C	an..35
070	3229	COUNTRY SUB-ENTITY IDENTIFICATION	C	an..9
080	3251	POSTCODE IDENTIFICATION	C	an..9
090	3207	COUNTRY, CODED	C	an..3

Composite

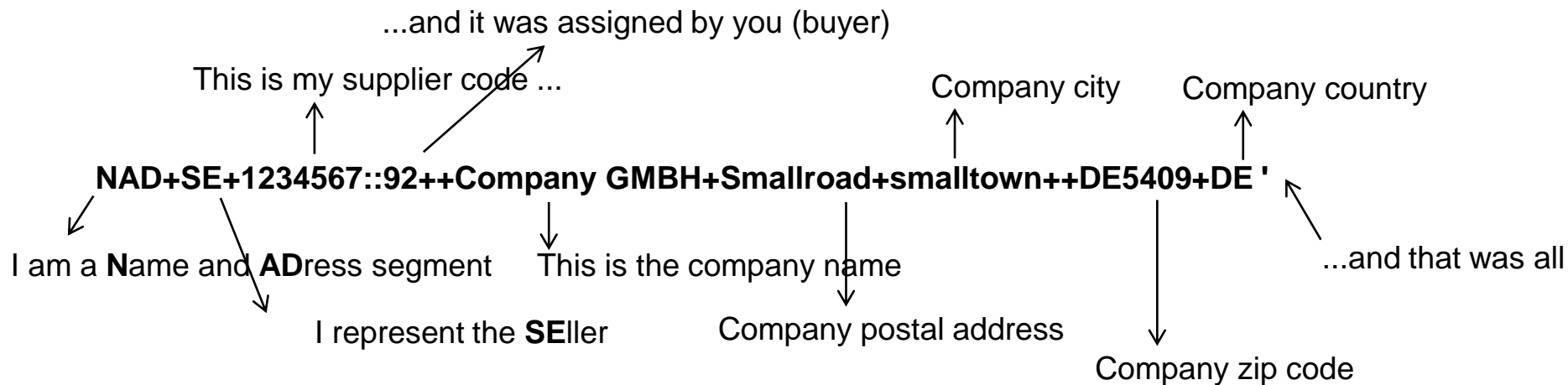
Data tag

???

NAD+BY+1234567::91++Company GMBH+Smallroad+smalltown++DE5409+DE '

What is EDI?

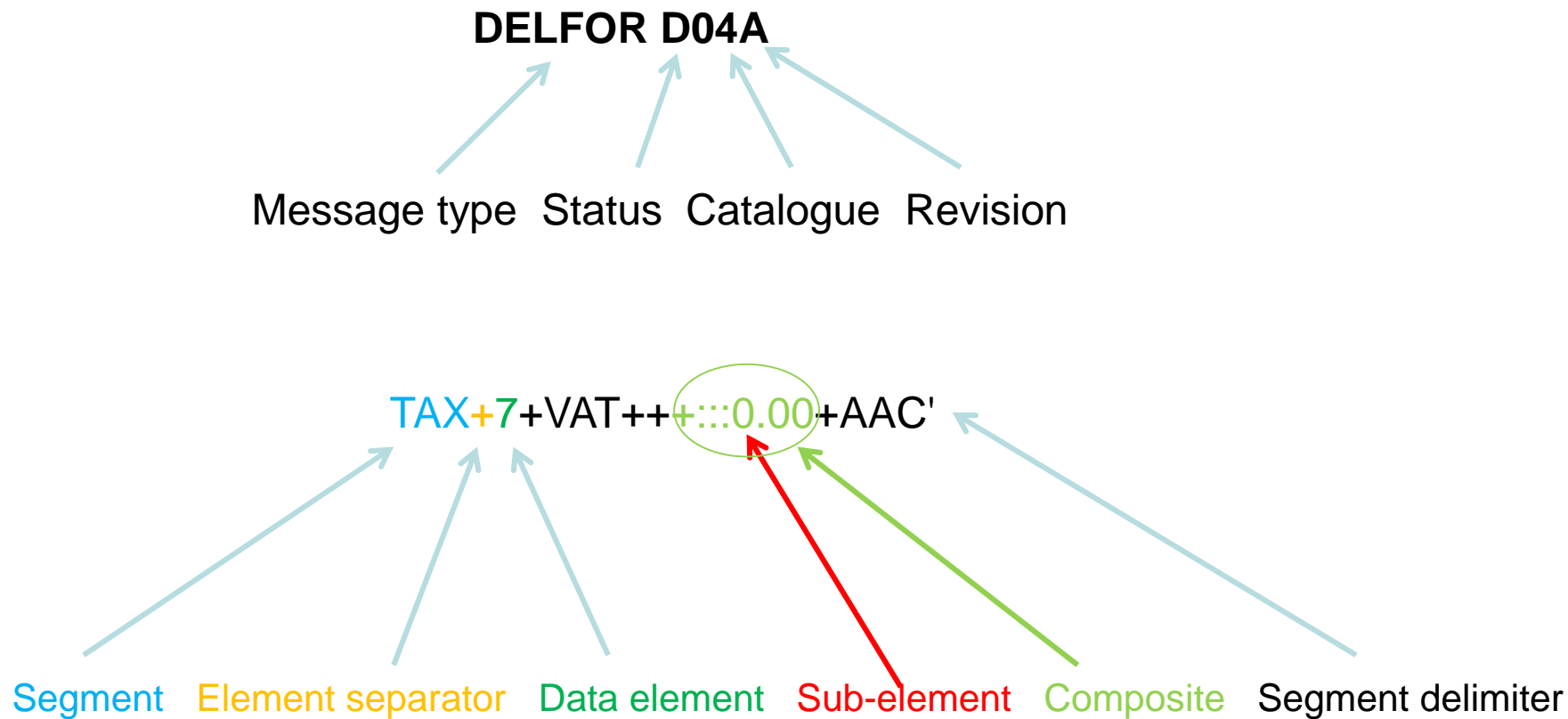
- *EDI is a way to pack and label data in business information in a standardized manner, so that the information can be interpreted and imported to/exported from ERP or other superior systems.*
- *Let's dissect one single EDIFACT segment:*

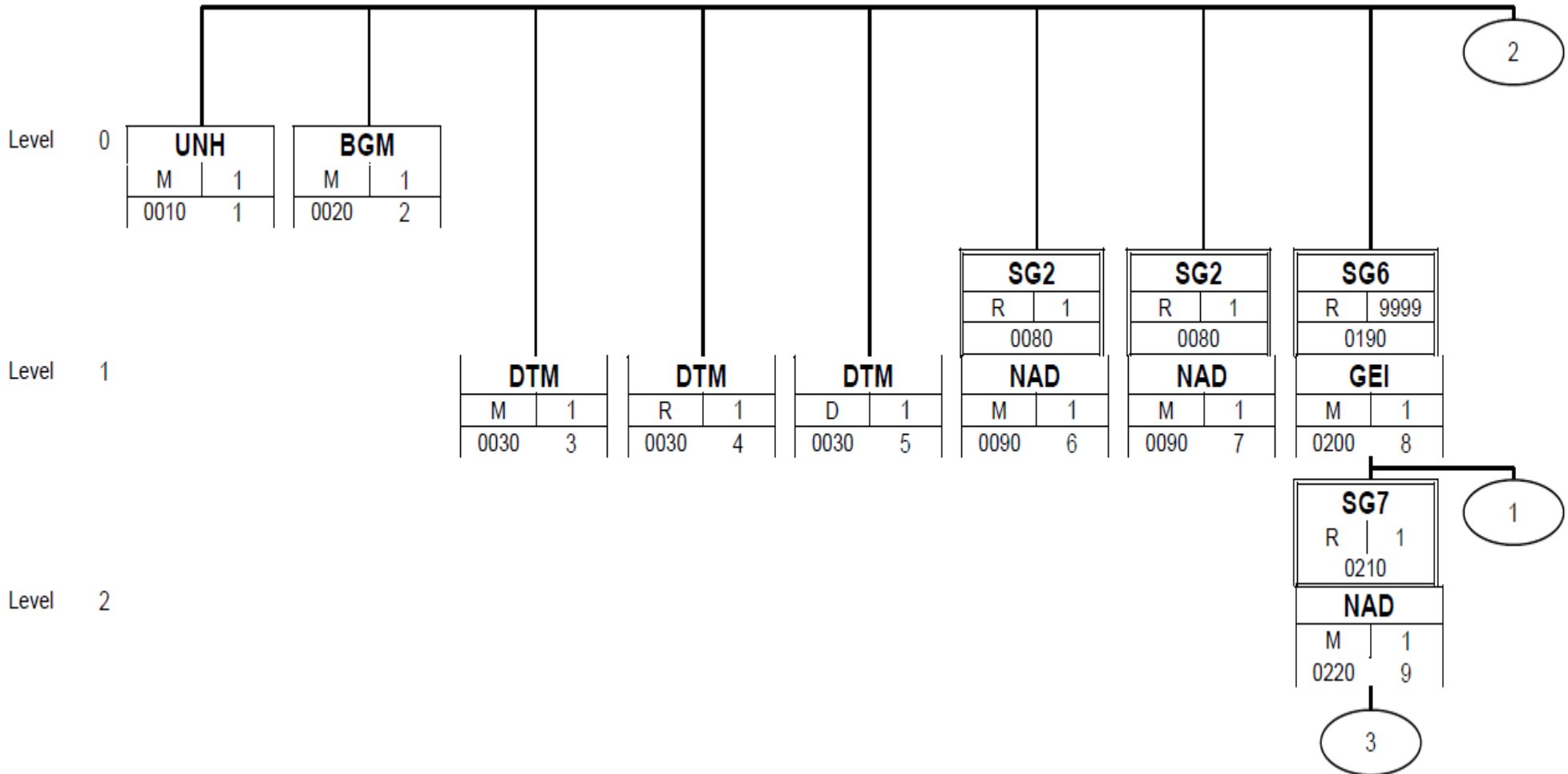


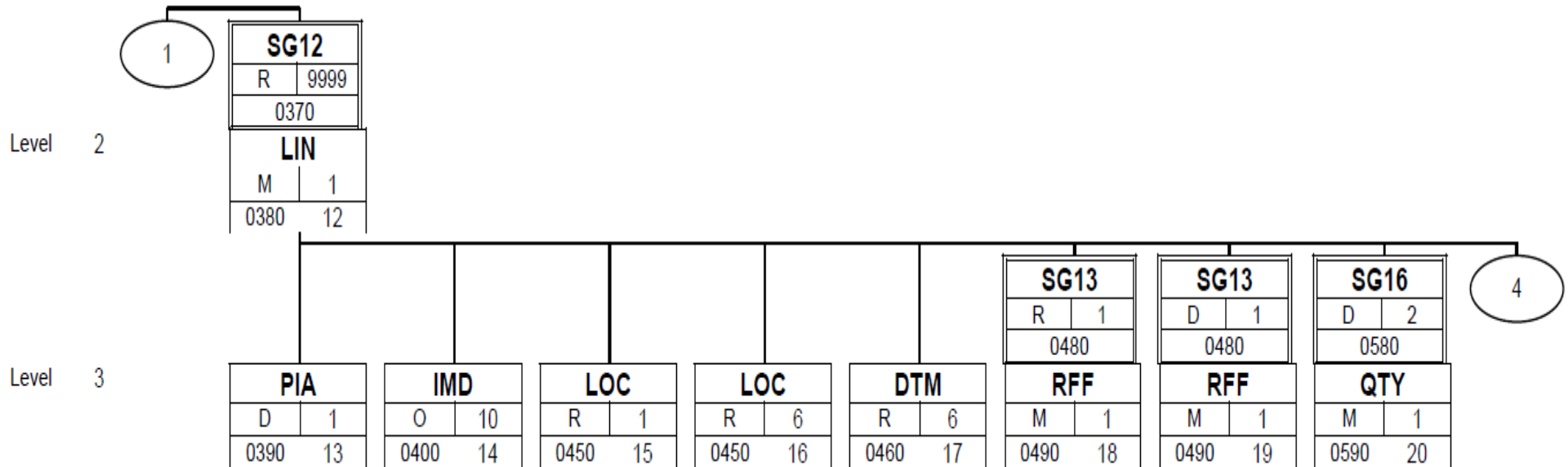
<http://www.unece.org/trade/untdid/d96a/trmd/trmdi2.htm>

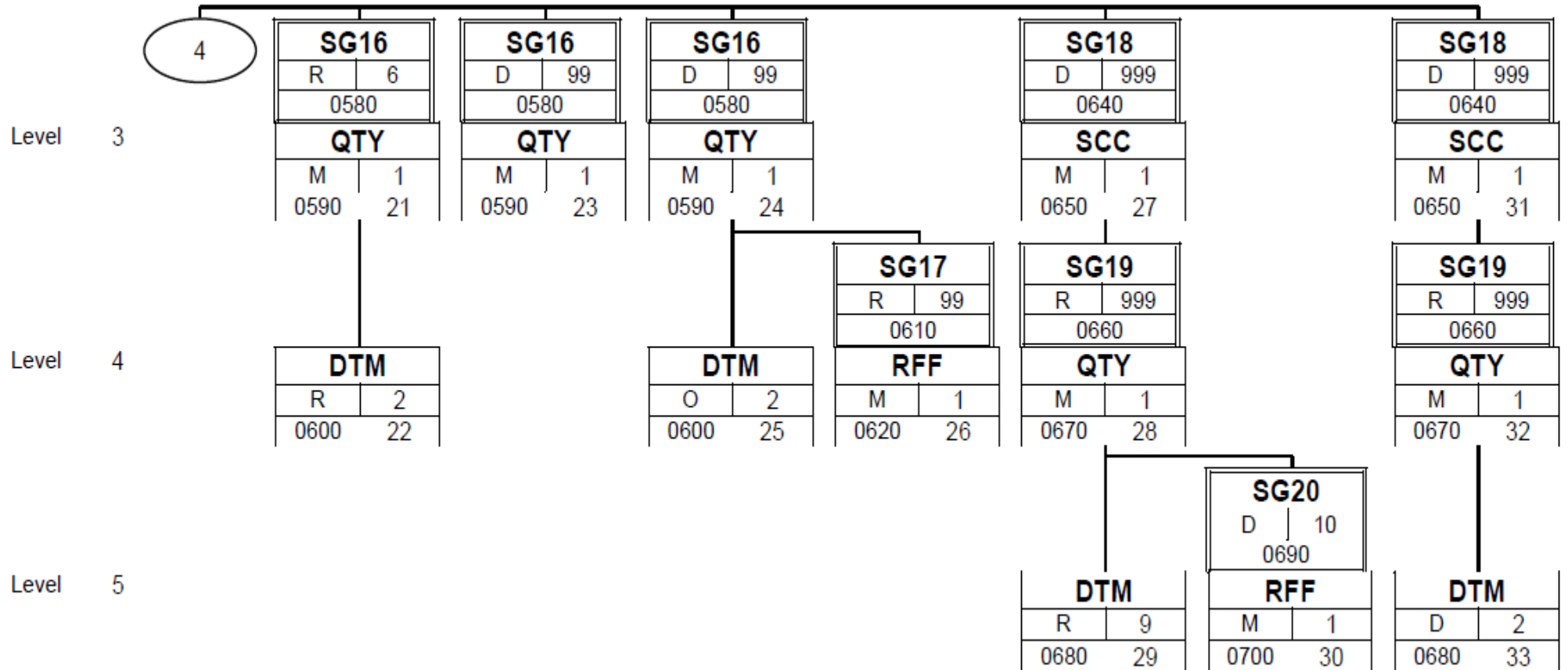
- EDIFACT Format and syntax, detailed walkthrough Segment architecture

Terminology









Group: **SG6** Status: R Max. Occ.: 9999 Ship-to level (instruction line)

Segment: **GEI** Seq. No.: 8 Level: 1 Processing information
 Status: M Max. Occ.: 1
 Counter: 0200

Name: Processing information

Description of segment:

UN/EDIFACT			Implementation	
	Name	St Format	St Format	Use / Remarks
GEI				
9649	Processing information code qualifier	M an..3	M an..3	3 = Scheduling type information
C012	Processing indicator	C	N	not used
7365	Processing indicator description code	C an..3	N	not used
1131	Code list identification code	C an..17	N	not used
3055	Code list responsible agency code	C an..3	N	not used
7364	Processing indicator description	C an..35	N	not used
7187	Process type description code	C an..17	N	not used

Remark:

An instruction line gives the delivery instruction details (schedule dates, scheduled quantities etc.) for one individual ship-to party e.g. a plant in a delivery instruction or forecast.

Example:

GEI+3'

Group: **SG12** Status: R Max. Occ.: 9999 Scheduled Article Details

Segment: **LIN** Seq. No.: 12 Level: 2 Line item
 Status: M Max. Occ.: 1
 Counter: 0380

Name: Line item

Description of segment:

UN/EDIFACT		Implementation		
Name	St Format	St Format	Use / Remarks	
LIN				
1082	Line item identifier	C an..6	N	not used
1229	Action request/notification description code	C an..3	R an..3	Code indicating action required as a result of the new instruction. Code 9 - Amendments - means the schedule lines of a previous forecast/ instruction are replaced only for the specific horizon indicated. All figures before and after remain valid. This requires an effective from and an effective to date on header level. Code 38 - the complete previous forecast / instruction for this line item is replaced by new figures for the full horizon. It is business practice to use at least one time a zero quantity schedule line for articles that have been part of previous schedules but are now no longer part of the schedule in the case of the 'complete replacement' situation. 9 = Amendments 38 = Replaced
C212	Item number identification	C	R	Article ID(s) as assigned by one or more of the involved parties.
7140	Item identifier	C an..35	R an..35	Information directly relating to the identification of an article by the buyer's identification system. Note: The term article is synonym with the term item. Since in Odette and in the global joint automotive projects the term article has been used, this naming convention has been continued. Volvo's Article number.
7143	Item type identification code	C an..3	R an..3	IN = Buyer's item number
1131	Code list identification code	C an..17	N	not used
3055	Code list responsible agency code	C an..3	N	not used
C829	Sub-line information	C	N	not used
5495	Sub-line indicator code	C an..3	N	not used
1082	Line item identifier	C an..6	N	not used
1222	Configuration level number	C n..2	N	not used
7083	Configuration operation code	C an..3	N	not used

Remark:

A product required by the buyer, which is scheduled to be delivered
 All segments in the detail section following the LIN segment refer to the line item.
 The supplier is responsible for converting Volvo's article number into the supplier's own internal number.

Key information in the DELFOR message

BGM+241+20131001113000' ←
 DTM+137:20131001:102' ←
 DTM+157:20131001:102' ←
 NAD+BY+8442::92' ←
 NAD+SE+46243::92' ←
 GEI+3'
 NAD+ST+8442::92++VOLVO TRUCK CORP - KALUGA' ←
 LIN++38+1083377:IN' ←
 LOC+11+051::92' ←
 LOC+159+00 051::92' ←
 DTM+257:20131001:102' ←
 RFF+ON:00000000051' ←
 RFF+AIF:201309281131' ←
 QTY+70:1616' ←
 DTM+51:20130101:102' ←
 QTY+12:12' ←
 QTY+48:12' ←
 DTM+11:20130927:102' ←
 RFF+AAK:83050542' ←
 QTY+12:3'
 QTY+48:3'
 DTM+11:20130925:102'
 RFF+AAK:83044602'
 QTY+12:7'
 QTY+48:7'
 DTM+11:20130925:102'
 RFF+AAK:83044587'
 SCC+24' ←
 QTY+113:7' ←
 DTM+10:20121001:102' ←

Message Number.
 Message Date/time.
 Validity start date.
 Buyer number, allocated by Volvo.
 Seller number, allocated by the Volvo.

Ship to Volvo plant No.
 Item number.
 Place of discharge.
 Additional internal destination.
 Calculation Date/Time
 Volvo Order No.
 Previous delivery instruction number.
 Cumulative quantity received.
 Cumulative start date.
 Despatch quantity.
 Received quantity.
 Despatch date.
 Despatch Note No.

** Note the group QTY,QTY,DTM,RFF could be repeated 0 - 3 times depending on the number of received despatch notes.

Forecast indicator.
 Quantity to deliver.
 Delivery date.

Key information in the DELJIT message

BGM+30::10+20121023200745'	←	Message number.
DTM+137:201210232007:203'	←	Message Date/time.
NAD+CZ+46243::92'	←	The supplier number , allocated by Volvo. Use in DESADV and on Odette label.
NAD+BY+1020::92'	←	The buyer number , allocated by Volvo. Use in DESADV
NAD+CN+8442::92++VOLVO TRUCK CORP'	←	Volvo's plant number. Use in DESADV and on Odette label
LOC+11+051'	←	Place of discharge. Use in DESADV.
SEQ+3+482118'	←	Production sequence number.
DTM+194:201311272030:203'	←	Assembling Date/Time. Use on Odette label
GIR+4+109385:VV'	←	Vehicle identification number. Use in DESADV and on Odette label
LIN+++20755211:IN'	←	Item number. Use in DESADV and on Odette label
IMD+++::PROPELLER SHAFT C2060/235'	←	Detailed Description.
LOC+159+L41 14030 051'	←	Additional internal destination.Stated on Odette Label
QTY+131:1'	←	Quantity. Use in DESADV and on Odette label

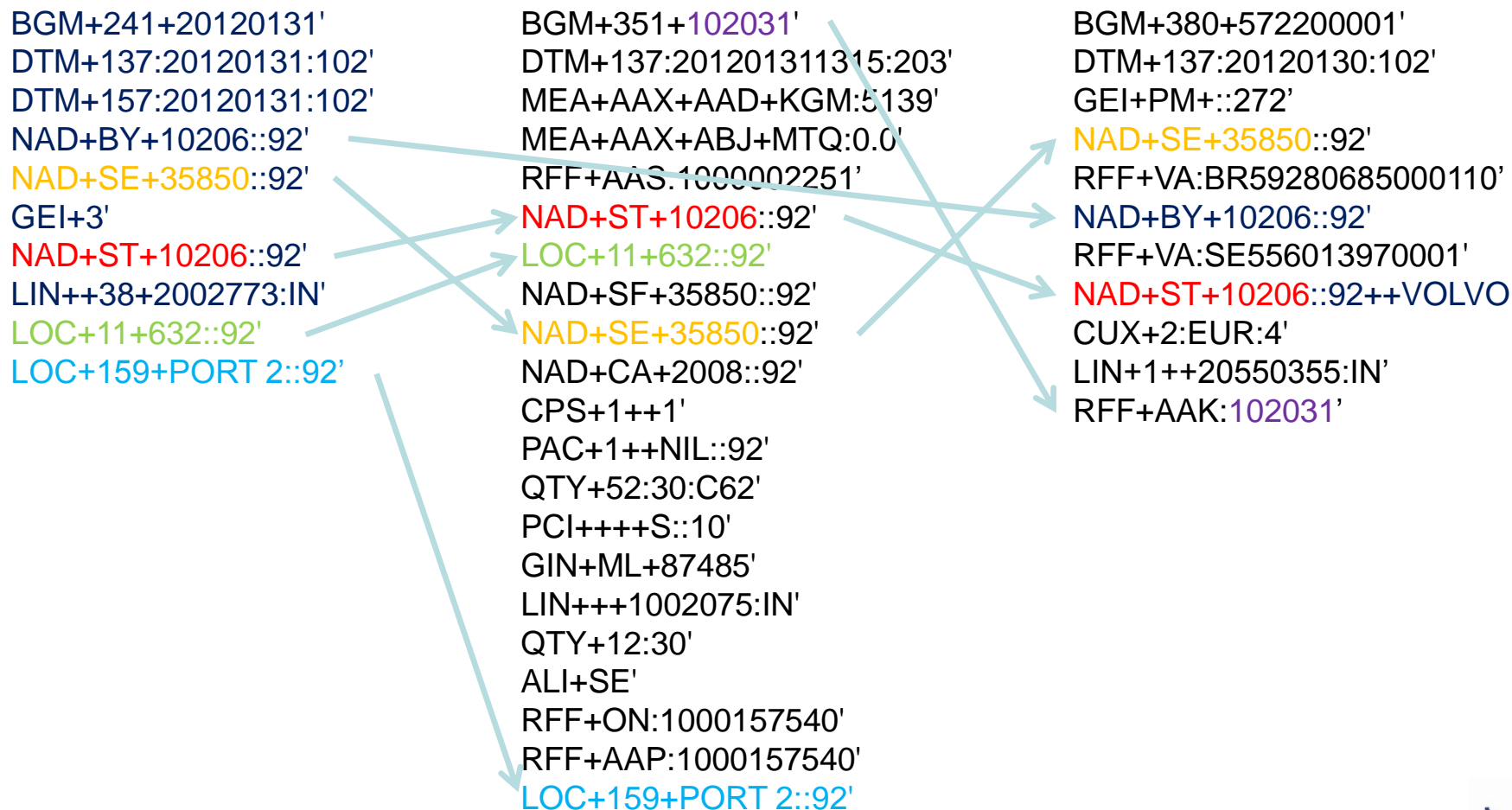
SEQ+40+482102'	}
DTM+194:201311270949:203'	
GIR+4+109369:VV'	
LIN+++1068154:IN'	
IMD+++::PROPELLER SHAFT C2060/170'	
LOC+159+L41 14040 051'	}
QTY+131:1'	
SEQ+40+482104'	
DTM+194:201311271051:203'	
GIR+4+109371:VV'	
LIN+++1067758:IN'	}
IMD+++::PROPELLER SHAFT C2055/180'	
LOC+159+L41 14040 051'	
QTY+131:1'	

For each new Chassi number there will be a repetition of SEQ,DTM,GIR,LIN,IMD, LOC and QTY.

Key information in DESADV

BGM+351+102698'	←	Despatch Note Number. Printed on Odette Label
DTM+137:201310010904:203'	←	Despatch Date/time. Printed on Odette Label
RFF+AAS:21627'	←	Transport document number.
NAD+ST+8442::92'	←	Volvo's plant number, allocated by Volvo.
NAD+SE+46243::92'	←	The Seller number, allocated by the Volvo.
NAD+SF+46243::92'	←	The supplier number. Printed on Odette Label.
LOC+11+051::92'	←	Place of discharge.
NAD+CA+NIL::92'	←	Carrier Coded
CPS+1++1'		
PAC+1++NIL::92'		
QTY+52:4:PCE'		
PCI++++S::92'		
GIR+3+428089:ML'	←	Package serial number. Printed on Odette Label
LIN+++21522366:IN++0'	←	Item number. Printed on Odette Label.
QTY+12:4:PCE'	←	Quantity in package. Printed on Odette Label.
ALI+RU'	←	Country of origin.
GIN+VV+638960'	←	Vehicle identification number connected to this package. Printed on Odette Label.
RFF+ON:340904758051'	←	Volvo Order No.
LOC+159+051::92'	←	Additional internal destination. Printed on Odette Label.

Information heritage between DELFOR , DESADV and INVOIC



- Implementation and usage of new processes by the various OEMs or tier 1 suppliers, examples

New requirements added into next version of "Swedish" message profiles

Parties

- **Buyer, NAD.BY**
Legal Buyer of the goods . Completing with Name and address due to EU Regulations.
- **Delivery Part (New) NAD.DP** information of Sub Contractor , 3rd party delivery center.
- **Seller, NAD.SE**
Legal Seller. . Completing with Name and address due to EU Regulations.
- **Ship From (New), NAD.SF**
Where the goods is shipped from . Completing with Name and address due to EU Regulations .
- **Ultimate Customer (New), NAD.UD**
Ultimate delivery place . The final goods receiver.
- **Ship To, NAD.ST**
Where the goods is Shipped to. Completing with Name and address due to EU Regulations and label demands.

New requirements added into next version of "Swedish" message profiles

Parts

- **Unit load**
Quantity per package described by the package instructions.
- **Incoterms**
Terms of delivery like Free on board etc
- **Package Type**
Code for type of package.
- **Package weight**
Tara weight of package. The Weight of empty packages.
- **Part weight**
Weight of a part calculated on the base value stated in Per quantity.
- **Per Quantity**
Calculation base.
- **Process Type**
Coding that describe type of delivery process e.g. JIT/JIS, KANBAN or Batch .
- **Object Code**
Type of ordered part e.g. if the part number describe a component or a ingoing part in a component

New requirements added into next version of "Swedish" message profiles

Dispatch

- **Dispatch note number**
- **Dispatch date**
Date of delivery.
- **Dispatched Quantity (Changed function)**
Quantity reported in ASN message
- **Received quantity (Changed function)**
Goods received and reported.
- **Reception date (New)**
Date of goods reception.

- **Backorder (Changed function)**
Confirmed not delivered.
- **In Transit (Changed function) (New)**
Goods supposed to be In Transit

New requirements added into next version of "Swedish" message profiles

- **Step 1**
- **When Supplier sending DESADV and the goods is in transit.**

- **Dispatch note number = contains Number**
- **Dispatch date = contains Date**
- **Dispatched Quantity = contains dispatched quantity**
- **Received quantity = no value**
- **Reception date = no value**
- **Backorder = depending on if there is any other delayed deliveries**
- **In Transit = total sum of goods in transit for this part number**

- **Step 2**
- **After goods reception.**

- **Dispatch note number = contains Number**
- **Dispatch date = contains Date**
- **Dispatched Quantity = contains dispatched quantity**
- **Received quantity = contains received quantity**
- **Reception date = contains reception date.**
- **Backorder = depending on if there is any other delayed deliveries**
- **In Transit = total sum of goods in transit for this part number**

PRODAT

Business requirement

- Due to legal requirements in connection with customs and taxation in certain (mainly emerging) countries it is not possible to undertake administrative procedures without having unique identification on all goods concerned. Today ordering and invoicing processes are only focusing on articles/ingoing parts like rims and tires but not components/modules like complete wheel.
- Another reason for changing is new sequencing concepts. In modern automotive manufacturing processes the variety of assembled parts and modules grow constantly. This has since long led to extensive usage of sequenced deliveries. A main advantage with this concept is synchronisation of pre assemblies with final vehicle assembly schemes.
- There is a growing need for automated solutions for the exchange of information on changes and/or new configurations from OEM to suppliers.

Main information content in the PRODAT message:

- Seller and buyer
- Valid from date
- Module ID
- Component IDs
- Parent-child connection between modules and components
- Reference information

PRODAT in the message modell



ENGDAT	Contains drawings, product models and technical specifications for the module
PRODAT	Connects ingoing parts to a module
DELFOR	Contains Call off information on module ID level only
DELJIT	Contains Call off and packing instruction information on module ID level only
DESADV	Contains delivery information on module ID level only
INVOIC	Contains invoicing information on module ID level only

Summary & discussion

Closing remarks and final Q & A session

Glossary

Term/ abbreviation	Meaning	Definition
AIAG	Automotive Industry Action Group	North American Automotive EDI Association
APS	Advanced Planning System	A business system with advanced MRP capability
AS2	Applicability Statement 2	Internet standard for file transfer communications, mainly used in retail and trading
ASN	Advanced Shipping Note	Electronic Despatch Note, equal to DESADV message
Bill of lading		A document which evidences a contract of carriage by sea
Call-off	Call-off/Call-in/Daily Shipping instruction	Short horizon order/requirement document
Carrier	Transporter	Party undertaking transport of goods from one point to another
CMR note	Convention relative au contrat de transport international de Marchandises par route	A document which evidences a contract of carriage by road
Consignee		Party to which goods is to be shipped to
Consignment		Load of one or more shipments to one consignee
Consignment note		A document which evidences a contract of carriage by any means
Consignor	Despatch party	Party sending goods
Consolidation Point	Consignment point/Grouping center	Location where consolidation of consignments takes place.
Data Element		Lowest level of data occurrence
Data Element Separator		The special character used to separate data elements in a data format.
DI	Data identifier	Character(s) to qualify a meaning of data for Auto ID
DM	Data model	Information model connecting data to business process
DELFOR	Delivery forecast/Delivery Instruction	Electronic order/requirement document

Glossary

Term/ abbreviation	Meaning	Definition
Delivery party		Sub-contractor/hub/LSP/supplier
DESADV	Despatch advise	Electronic despatch/delivery note (ASN)
EDI	Electronic Data Interchange	Means to electronically transmit structured data
EDIFACT	Electronic data interchange for administration, commerce and transport	Framework for EDI Exchange, developed by UNECE
ERP	Enterprise resource planning (system)	
(S)FTP	(Secure) File transfer protocol	Commonly used file transfer protocol over Internet
Forwarder	Carrier, transporter	Party arranging the carriage of goods
Freight		Goods in transit
Freight invoice		Invoice issued by carrier for transport cost
FCL		Full container load
FTL		Full trailer load
Hub	Hub/cross docking	Central collection point of goods for further distribution
HRI	Human readable interpretation	Characters readable to the human eye
Incoterms coded		Code specifying terms of delivery and/or transport
Packaging item	Package/kolli	Package identified by unique label number
Intermodal transport		Load of goods forwarded by more than one mode of transport
INVOIC		Commercial invoice message
Invoicee		Party to which invoice is addressed
JAMA		Japan Automobile Manufacturers Association
Kanban		A pull replenishment system, with Kanban card indicating minimum stock.

Glossary

Term/ abbreviation	Meaning	Definition
Kanban number	Card number	Unique identifier for a pull signal from buyer
License Plate		Unique transport unit identifier
Linear symbol		One dimensional bar code symbol
LSP	Logistic service provider	Party taking consignment responsibility for other party
Master Load	Master load/transport carrier	Unit that hold inner packages with same items.
Material release	DELFOR/CALLOFF/ORDER	An order against a blanket order for a requirement
Message		A continuous stream of data elements
Message envelope		Message header and trailer surrounding message
Message Function Coded		A code specifying function (purpose) of message
Message Header		Group of characters defining start of message
Message trailer		Group of characters defining end of message
Message Type Code		Code specifying type of message
Message version		Code specifying version of message
Mixed load	Mixed load (G pallet)	A transport carrier with inner packages with different items
ODETTE	Organisation for Data Exchange by TeleTransmission in Europe	Organization for EDI and Auto-ID in the European Automotive Industry
OEM	Original equipment manufacturer	Commonly used to describe actors in top of value chain
OFTP/OFTP2	Odette file transfer protocol (2)	
Packaging instruction	Package instruction	Agreed packaging instruction for an item, equipment or module

Glossary

Term/ abbreviation	Meaning	Definition
Packaging type code		A code to specify a packaging type
Packing list		Document specifying individual packages and content
Payee		A party to which payments are made
Place of delivery	Place of delivery/discharge	Place of delivery according to terms of transport
Place of despatch		Place where goods is taken over for carriage
Proforma Invoice		Invoice document with same info as conventional invoice. Mostly used for customs declarations
Proof of delivery		Signed copy of delivery receipt (reception receipt)
Pull method		Order based on static stock and replenishment order is immediate upon consumption
Push method		Order based on specified due dates and est transport lead time.
Quiet zone		Blank space surrounding a bar code
Reader		Equipment to read and decode bar codes
RECADV	Reception advise	Reception advise from buyer to supplier on received goods (corresponding with DESADV)
RFID	Radio Frequency identity	Wireless electromagnetic method for data transfer
SBI	Self billing invoice	Invoice (monetary transfer) document from buyer to supplier
Shikyu process	Shikyu process	Shipment of components to a supplier for assembly to a larger component ready for final assembly
Ship-from	Ship-from (Consignor)	Shipping party

Glossary

Term/ abbreviation	Meaning	Definition
Ship-to	Ship-to (Consignee)	Receiving party
Shipment		Load of one or multiple transport carriers shipped from one consignee to one consignor
Shipper	Shipper (Consignor)	Party sending goods
Subset	Subset/application of framework	Framework (business rules) within larger framework
Symbology		Framework for bar codes standard
Syntax	Data grammar	Data grammar, data sequence framework
TOD	Terms of delivery	Conditions agreed between buyer and seller on delivery
TOF	Terms of freight	Conditions agreed between buyer of transport and carrier
TOT	Terms of transport	Conditions agreed as above for physical transport of goods
Tracing	Tracing (traceability)	Function to trace goods, items, consignments and so on
Tracking		Function to maintain trace of goods, items, consignments and so on
Transshipment		Transition from one means of transport to another
THU	Transport handling unit	One separately identifiable transport unit (eg pallet)
Transport instruction		Generic term document with details to arrange transport
Tier	Tier 1, Tier 2 ...	Level in supply/value chain
VAN	Value added network	Communication hub with features added
VDA	Verband Der Automobilindustrie	German Automobile Manufacturers Association
Web-EDI	Web-EDI	Web accessible EDI system (via Portal)

Glossary

Term/ abbreviation	Meaning	Definition
Ultimate consignee		Final place of discharge (consumption place)
UML	Unified modeling language	Set of diagrams communication requirements of a business process
UN/CEFACT		United Nations Centre for Trade Facilitation and Electronic Business
Waybill	Consignment note	A document which evidences a contract of carriage by any means
XML	Extensible markup language	Data format
X.12		American EDI framework for EDI
X.25	X.25	Datapak, older analog communication network
X.400	X.400	Older but still existing communication network

Wrap Up