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EDI-guideline
Electronic delivery note

DESADV - EANCOM´02 D01.B

Guideline for electronic data exchange in trade with Media-Saturn

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History

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2.3	16/07/2014	Correction of LIN-Numeration Chapter 7 – Packing Hierarchies / Package type B	Correction	G.Rogge-Przybylski

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1. Introduction

This document describes the requirements for electronic data exchange in trade with the Media-Saturn group. It serves as amendment and assistance for our suppliers regarding the technical interface description "MS_EDI_GUIDE_DESADV" for the implementation of this message type in EANCOM´2 Standard DESADV D01.B between supplier and Media-Saturn.

Provision of the interface in format EDI-DESADV was closely applied with the GS1-standard at Media-Saturn. You can refer to the implementation recommendation of the GS1 under the following link:

http://www.gs1-germany.de/internet/common/files/eEurope_english/desadv/

2. The EDI-message chain at Media-Saturn

Media-Saturn offers the following message standards for electronic data exchange:

PRICAT   Master data exchange (logistic data of the products)
ORDERS   Order
ORDERS VMI   Supplier sends an order proposal to Media-Saturn
ORDRSP VMI   Media-Saturn sends an order confirmation to the supplier
INVRPT VMI   (Future SLSRPT) Media-Saturn sends stock data to the supplier
DESADV   Delivery note
INVOIC   (Goods) invoice; invoice MSH to supplier (debit)

Current information can be found on the EDI Internet page:

http://www.media-saturn.com/edi/

Further MS_EDI_guidelines
Upon request, Media-Saturn, can provide the suppliers with further interface descriptions of the above described message types.

3. Basic conditions for the application of EDI-DESADV

- Basically, there is always a **1:1 relation** between the message types; i.e. an invoice follows a delivery note.

- Generally, the Media-Saturn order number must be stated. If it is not available (VMI/Replenishment), the supplier order number must be stated.

- **Backorder addition (EDI-DESADV):**
  In order to reduce transport costs, it is allowed to bundle products from several orders on one delivery note. With transfer of the delivery note, an order number (Media-Saturn or ORDRSP VMI) must be stated on position level of the products. A clear assignment of the product should be possible to one order.

- Delivery of electronic delivery notes to the stores of the Media-Saturn group is only possible after previous conclusion of a contract and provision of the "EDI-INVOICE" and "EDI-ORDERS" EDI-message type. Contract partners are supplier and Media-Saturn. Both parties can assign service providers with the development of the EDI-message formats on their own account.

- Delivery of electronic delivery notes is only allowed in connection with provision of NVE/SSCC. NVE/SSCC (**N**ummer der **V**ersand**E**inheit (=Number of Shipment Unit) /**S**erial **S**hipment **C**ontainer **C**ode) are mandatory fields in the technical interface description.

- Media-Saturn is able to process the Master-NVE hierarchy level when transferring data. This is, however, optional; statement of one or several NVE/SSCC of the shipment is required then.

- On shipment units (packages, pallets, etc.), NVEs/SSCCs must be fixed in the form of a barcode corresponding the EAN 128-standard. The words "NVE" or "SSCC" must be printed on the barcode as well as the 18-digit series of digits of the NVE/SSCC. The label must be fixed to the consignment according to the statements in chapter 12.

- Electronic transfer of the DESADV-message must be ensured before the physical goods receipt (chapter 9). Here, it is possible to make optional statements regarding information concerning backorders, such as e.g. delays with delivery date and substitutes.

- An accompanying document must be added to the consignment for receipt of goods in the store.

- This guideline is only applied with inventory managed products at Media-Saturn which are sold to end customers.

- A DESADV message only contains products of one supplier.

Media-Saturn does not support the usage of DESADV with NVE for Break Bulk Cross Docking processes (e.g. MGL-process:
http://www.metrogroup.de/internet/site/metrogroup/alias/METROGROUP_LOGISTICS/Len/index.html#anker12267) by means of its systems.

Regarding questions for the electronic data exchange in invoicing, this document refers to "EDI – guideline invoice".

4. Supplier audit: Outgoing goods control

In order to implement the electronic delivery note, the supplier grants a right for audits to MSH related to the delivery process.

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5. Target process in the overview:

Supplier

MSH Shop

Pick list

DESADV incl. NVE/SSCC

Storage

Scan NVE/SSCC at good´s entry
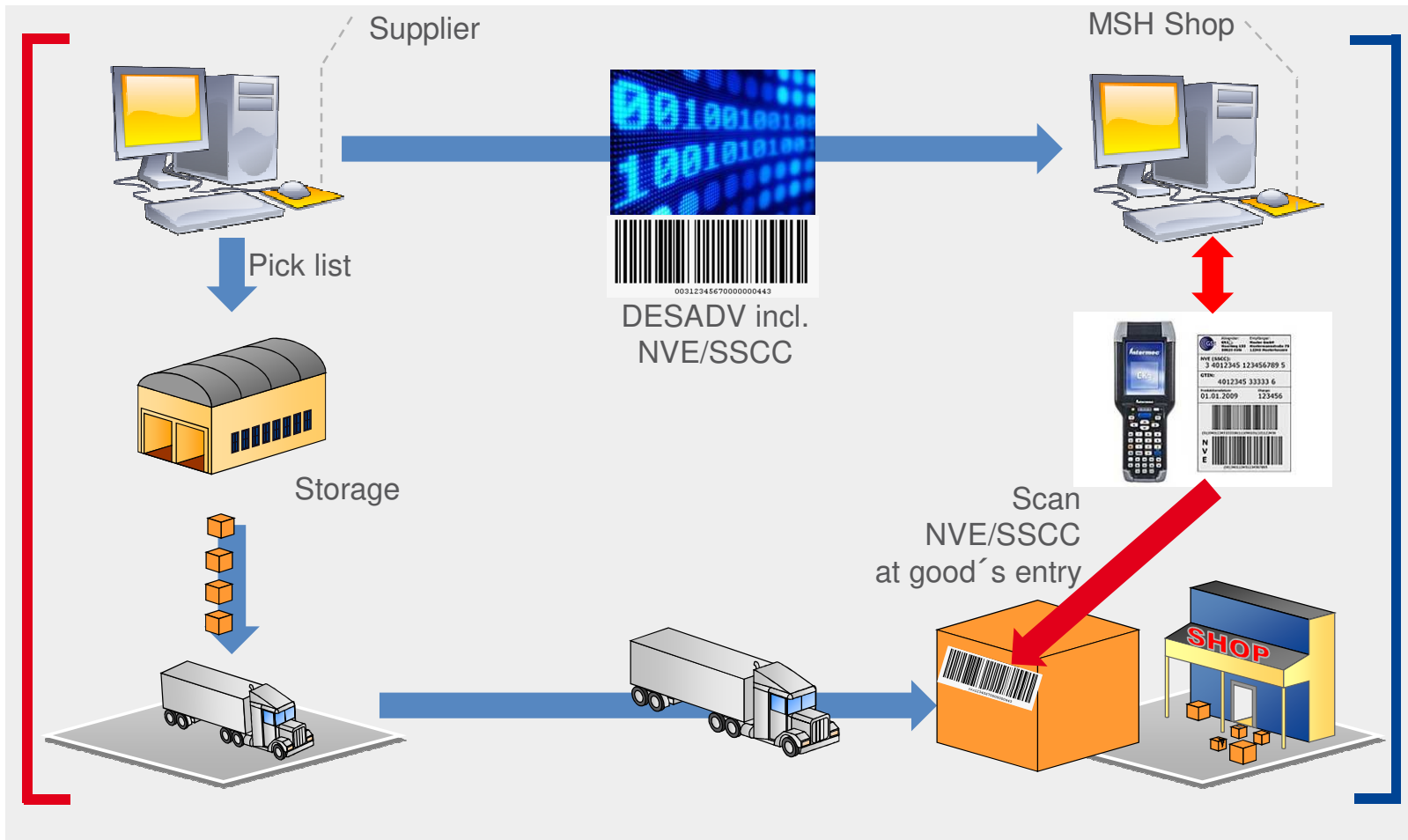
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Description of the target process:

- Due to an order or agreement of Media-Saturn regarding VMI / Replenishment, the supplier prepares the consignment for the store.

- For the shipping units, forwarding labels are created with NVE/SSCC at the supplier and fixed visibly to the shipping units. Ideally, the supplier can use the GS1-universal label (see chapter fixing NVE/SSCC) for shipping and NVE/SSCC information; alternatively, NVE must be fixed near the forwarding label.

- A so-called accompanying document must be added to every consignment.

- Consignment information (product/quantity of consignment and NVE/SSCC of the shipping unit) is transferred to Media-Saturn in the form of an electronic delivery note before sending / when sending the goods.

- Statements regarding products, handling instructions and further information such as e.g. subsequent delivery date are regulated in the "MS_EDI_GUIDE_DESADV" description. The expected information is classified into must and can statements.

- The DESADV-message sent by the supplier is checked regarding plausibility at the technical service provider (EDI Service Provider) of Media-Saturn (=all mandatory statements are available and correspond to the expected content). In case of an error, the involved parties are informed by the MSH - EDI service provider via email. In dependence of definition, error clarification is carried out between supplier and MSH - EDI service provider (e.g. missing mandatory statement such as GLN sender)or supplier and the EDI appointee of the respective country company of the MSH (e.g. error in target GLN). Violation of the validation regulation results in the fact that data records are not transferred into the target systems (store-WWS/SAP) of Media-Saturn.

- At goods receipt, the employee of Media-Saturn scans the NVE/SSCC with the handheld scanner. This process refers to the DESADV of the supplier. Now, the employee receives defaults to be checked regarding handling of goods receipt.

- Goods receipt is posted with support of the system.

- Media-Saturn archives the DESADV-data records according to fiscal requirements.

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6. Development of DESADV / logic assignment

Media-Saturn uses EDI-DESADV according to EANCOM ´02 D.01B standard.

The following illustration is exemplary regarding development with regards to content of DESADV:

Palette 1 SSCC: *343002342500011039* GTIN: 4300234003393 Anzahl der gelieferten Einheiten: 10	... **CPS+1'** PAC+2' **CPS+2+1'** PAC+1++201' PCI+33E' GIN+BJ+*343002342500011039*' LIN+1++4300234003393:EN' QTY+12:10':PCE	*1. Hierarchie (Sendung)* 2 Packstücke werden geliefert 2. Hierarchie (Palette1 / Bezug Sendung) Anzahl Packstücke (1 Europalette) Packstückkennzeichnung mit NVE *SSCC (NVE) der Palette 1* GTIN der gelieferten Einheit Anzahl der gelieferten Einheiten
Palette 2 SSCC: *343002342500020129* GTIN: 4300234004253 Anzahl der gelieferten Einheiten: 80	**CPS+3+1'** PAC+1++201' PCI+33E' GIN+BJ+*343002342500020129*' LIN+2++4300234004253:EN' QTY+12:80:PCE'	2. Hierarchie (Palette2 / Bezug Sendung) Anzahl Packstücke (1 Europalette) Packstückkennzeichnung mit NVE *SSCC (NVE) der Palette 2* GTIN der gelieferten Einheit Anzahl der gelieferten Einheiten ...

Source: EDI AK Handel

Assignment logic NVE/SSCC for DESADV is as follows:

- A DESADV can contain statements regarding several NVEs.
- Every NVE is clearly assigned to one DESADV.

Technically speaking, hierarchy levels are allowed with transfer via so-called master NVE (e.g. pallet contains separate layers of products which are marked with separate NVE). However, practically speaking, mandatory fixing of NVEs is required on every shipping unit for goods receipt in the store (see chapter 7 Packing hierarchies).

Because of dependencies between the used schema and the correspondent EANCOM format it is mandatory to send a (Master-) NVE if someone delivers specification about package type, package count and / or package measurements.

Further information for technical implementation can be found in the "MS_EDI_GUIDE_DESADV" document.

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7. Packing hierarchies

This chapter describes the allowed packing hierarchies and the related CPS segment.

	Package type A: One package with one NVE. The package can contain equal or different products. Goods in kind can be in the package. The content of the package can consist of 1 to n-orders. There is one DESADV for the package.	**CPS+1'** 1.Hierarchy (consignment) **PAC+1'** (Number of packages 1, package) **CPS+2+1'** 2. Hierarchy (package) **PAC+1++CT'** (Number of packages 1, package) **PCI+33E'** (Package flag with NVE) **GIN+BJ+NVE1'** (NVE of package) **LIN+1++EAN1:EN'**(EAN of delivered unit) **QTY+12:7'** (Number of delivered units) **RFF+ON:4711'** (Reference to order 4711) **DTM+171:20130115:102'** (Order date) **LIN+2++EAN2:EN'**(EAN of delivered unit) **QTY+12:4'** (Number of delivered units) **RFF+ON:0815'** (Reference to order 0815) **DTM+171:20130113:102'** (Order date)
	Package type B: Several packages with own NVE. The packages can contain equal or different products. Goods in kind can be in one or several packages. The content of one package can consist of 1 to n-orders. One order can be delivered with n-packages. There is one DESADV for the packages.	**CPS+1'** 1.Hierarchy (consignment) **PAC+2'** (Number of packages, 2 package) **CPS+2+1'** 2. Hierarchy (package1) **PAC+1++CT'** (Number of packages 1, package) **PCI+33E'** (Package flag with NVE) **GIN+BJ+NVE1'** (NVE of package) **LIN+1++EAN1:EN'**(EAN of delivered unit) **QTY+12:7'** (Number of delivered units) **CPS+3+1'** 2. Hierarchy (package 2) **PAC+1++CT'** (Number of packages 1, package) **PCI+33E'** (Package flag with NVE) **GIN+BJ+NVE2'** (NVE of package) **LIN+2++EAN2:EN'**(EAN of delivered unit) **QTY+12:5'** (Number of delivered units)

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| | Pallet type A:
One pallet with one NVE. The pallet contains several packages without NVE.

The packages of the pallet can contain equal or different products. Goods in kind can be in one or several packages.

The content of one package can consist of 1 to n- orders. The orders are delivered with one pallet.

There is one DESADV for the pallet. | **CPS+1'** 1.Hierarchy (consignment)
PAC+1' (Number of packages 1, euro-pallet)
CPS+2+1' 2. Hierarchy (euro-pallet)
PAC+10++CT' (Number of packages 10, package)
PCI+33E' (Package flag with NVE)
GIN+BJ+NVE1' (NVE of pallet)
LIN+1++EAN1:EN'(EAN of delivered unit)
QTY+12:4' (Number of delivered units)
RFF+ON:4711' (Reference to order 4711)
DTM+171:20130115:102' (Order date)
LIN+2++EAN2:EN'(EAN of delivered unit)
QTY+12:6' (Number of delivered units)
RFF+ON:0815' (Reference to order 0815)
DTM+171:20130113:102' (Order date) |

	Pallet type B: Several pallets with own NVE. The pallets contain several packages without NVE. The packages of the pallet can contain equal or different products. Goods in kind can be in one or several packages. The content of one package can consist of 1 to n-orders. The orders are delivered with n-pallets. There is one DESADV for the pallets.	**CPS+1'** 1.Hierarchy (consignment) **PAC+2'** (Number of packages 2, euro-pallet) **CPS+2+1'** 2. Hierarchy (euro-pallet 1) **PAC+10++CT'** (Number of packages 10, package) **PCI+33E'** (Package flag with NVE) **GIN+BJ+NVE1'** (NVE of the pallet) **LIN+1++EAN1:EN'**(EAN of delivered unit) **QTY+12:4'** (Number of delivered units) **RFF+ON:4711'** (Reference to order 4711) **DTM+171:20130115:102'** (Order date) **LIN+2++EAN2:EN'**(EAN of delivered unit) **QTY+12:6'** (Number of delivered units) **RFF+ON:0815'** (Reference to order 0815) **DTM+171:20130113:102'** (Order date) **CPS+3+1'** 2. Hierarchy (euro-pallet 2) **PAC+8++CT'** (Number of packages 8, package) **PCI+33E'** (Package flag with NVE) **GIN+BJ+NVE2'** (NVE of pallet) **LIN+3++EAN3:EN'**(EAN of delivered unit) **QTY+12:4'** (Number of delivered units) **RFF+ON:4712'** (Reference to order 4711) **DTM+171:20130115:102'** (Order date) **LIN+4++EAN4:EN'**(EAN of delivered unit) **QTY+12:4'** (Number of delivered units) **RFF+ON:0816'** (Reference to order 0815) **DTM+171:20130113:102'** (Order date)

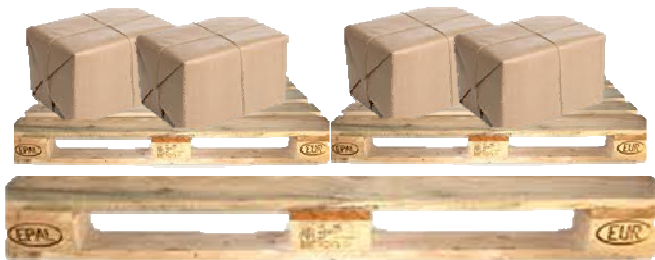|	Pallet type C:	
	One pallet with several packages. The pallet contains no NVE. The packages have their own NVEs. Proceeding as with package type B.	
	Pallet type D: Several pallets with several packages. The pallets contain no NVE. The packages have their own NVEs. Proceeding as with package type B.	
	Pallet type E: A mixed pallet is treated as pallet type A to D according to type.	

8. Allowed character strings for EDI-DESADV

For the transfer of reference numbers, the following regulations must be adhered to:

> length max. 15 characters   > no leading zeros
> letters in capitalization A to Z   > figures from 0 to 9
> space   > full stop .
> comma ,   > minus/hyphen -
> left parenthesis (> right parenthesis)
> diagonal slash /   > equal sign =

9. Times for transfer EDI-DESADV

The electronic delivery note serves, among others, for the notification of goods delivered to MSH by the supplier. Transfer of the electronic delivery note from the supplier to the EDI service provider of Media-Saturn should be carried out after consignment / at the time of consignment of goods and should be completed on the day of delivery until 5:00 o´clock in the morning at the latest. The aim is to be able to provide in time planning of the upcoming goods receipts for the store in order to exclude denial of acceptance.

10. Functionality of NVE/SSCC

The NVE/SSCC is the connector between electronic dispatch of the delivery note message and the physical goods receipt.
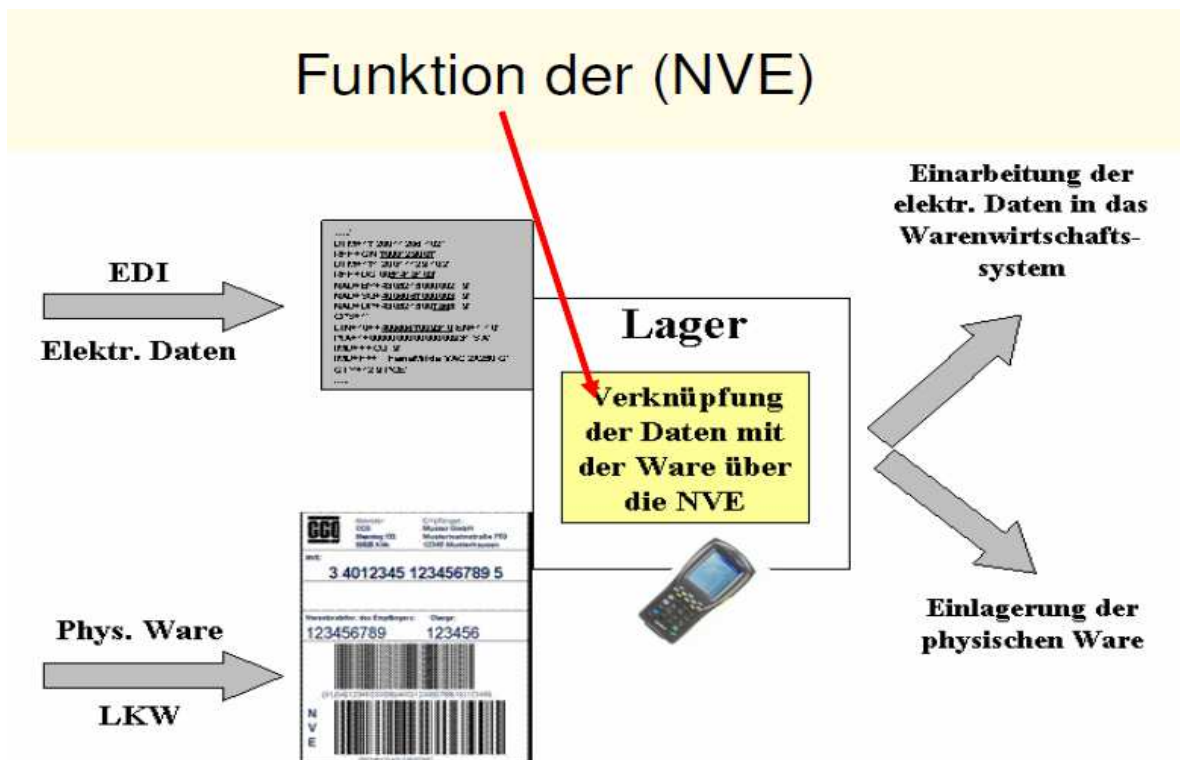
11. Structuring of NVE/SSCC

The NVE/SSCC is developed from the basis number of the individual global location number (GLN/ILN) of the supplier and a series of digits assigned by him as well as the check digit.

12. Fixing NVE/SSCC on shipping unit

The NVE/SSCC must be fixed in the form of an EAN 128 barcode in connection with the words "NVE" or "SSCC" and by printing the characters of the barcode in plain writing on the shipping unit:

If it is a matter of a weld euro-pallet, the NVE/SSCC must be stick **clearly visible from the outside** on the welding sequence.

Scanning of the NVE of a pallet consignment

If it is a matter of packages, the NVE/SSCC must be fixed **per package** either near the shipping note or in the form of the universal label developed by GS1 with the KEP (**K**urier-, **Express** und **P**aket) (courier, express and package) service providers.
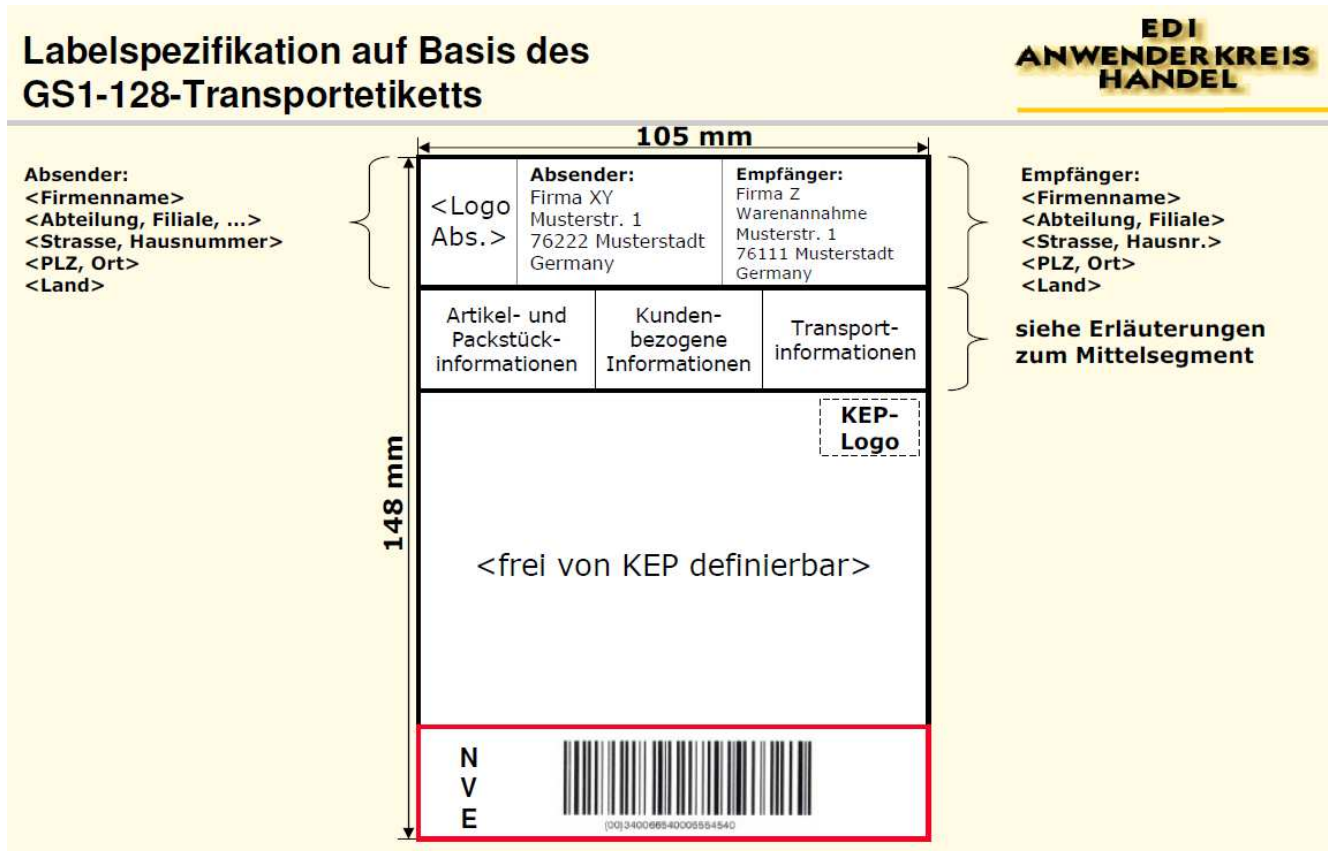

The exemplar shows a shipping label with SSCC (NVE) which was fixed to the top of the cardboard by the supplier.

FAQs for fixing of shipping label can be found under:
http://www.gs1.org/docs/transportlogistics/GS1_STILL.pdf

Exemplar of a combined shipping label containing the NVE/SSCC as well as the logistic information of the parcel service provider:

http://www.gs1.org/docs/transportlogistics/GS1_STILL.pdf

13. Proceeding of connection

- The usage of EDI-DESADV is regulated by means of an additional agreement for the contract via EDI-INVOICE between supplier and Media-Saturn.

- Media-Saturn exchanges EDI messages via the AS2-protocol. The connection of the supplier to the EDI service provider is not allowed for the EDI-DESADV message type without previous contract agreement for EDI-INVOICE and the related electronic invoicing.

- Media-Saturn has an own contact person per country company for the EDI connection of its suppliers. Thus, the agreement regarding usage of the EDI-DESADV is coordinated in the country with the suppliers. Validation of EDI sample messages is carried out via the technical service provider of Media-Saturn together with the supplier.

- After a test, Media-Saturn makes so-called pilot stores available to the supplier in order to test the reliability of the message transmission.

- Upon request, Media-Saturn provides the supplier with a list of the persons responsible for EDI in the countries.

14. Source of information EDI-DESADV with NVE/SSCC

Further information regarding significance of the electronic delivery note between trade and industry can be found under:

http://www.gs1-germany.de/internet/common/files/eEurope_english/desadv/

15. Contact persons of Media-Saturn concerning EDI

You can reach our technical contact persons under the following email address: EDI_INT@media-saturn.com.

Further information regarding EDI@media-saturn and the technical interface description (MIG) can be found on our homepage under:
http://www.media-saturn.com/edi/