Agenda

1. TMC and TMS
2. Definition of Terms & Implementation steps
3. How to announce your transport order demand?
4. Communication with TMC
Supplier training document
What is Bosch TMC and TMS?

„BOSCH TMC”
= Transport Management Center

• TMC is a cross-divisional unit that is pre-planning, optimizing and coordinating transports as well as handling transport exceptions.

„TMS”
= Transport Management System

• TMS is an IT system with a web-based user interface
• Transports are ordered and managed in the TMS
• BOSCH plants, suppliers, carriers work with the TMS

All TMC pick-ups to be ordered via the TMS system!
New process for transport operations only

No change in:
- ordering process
- alignment of delivery quantity
- alignment of part numbers
- required income date at Bosch plants

Supplier training document
Overview of future setup

PLACE YOUR TRANSPORT ORDER DIRECTLY IN TMS (NOT TO THE CARRIER!)
Supplier training document
TMC Sea and Air Project - Introduction

Different transport modes in TMC Scope

- TMC Land
  - Road freight

- TMC Sea & Air
  - Sea freight
  - Planned Air freight
  - Unplanned Air freight
DEFINITION OF TERMS & IMPLEMENTATION STEPS
Supplier training document
Load and Transport order (TO) /D2D

**Transport**: is defined between pick-up and delivery (e.g. Supplier → Airport, operated with a truck)

**Route**: contains all transports between supplier and destination. It defines the conditions for the delivery to the plant (e.g. lead time, costs, etc.)

**Scope**: only consignments over 15 kgs are in TMC scope!
Below 15 kg use the parcel account of your customer¹
s_ranjith.kumar@dhl.com ajeesh.Manoharan@dhl.com

¹ eg. parcel account -> DHL
### Supplier training document

#### Routing Instruction

| 1 | Service level, Go-live date, Incoterm, Frequency, transport time |
| 2 | Consignor address and contact person Pick-up address and contact person |
| 3 | Recipient address and contact person Delivery address and contact person |
| 4 | Hub information |
| 5 | Carrier information |
| 6 | Agreed pick-up days and time windows Process instructions – further important information for operation of this route |
| 7 | Known Consignor details Comments |
| 8 | Customs responsible Export customs office Transport order process TMC operational contact – for exception management & operational questions |

#### Process instructions

- Suppliers need to confirm until 11:00 CEST last working days prior to the pick-up.
- All documents that are mandatory for the customs process have to be uploaded in TMS and attached to FAK or T0, e.g., empty declaration (EDC), etc., by 15:00 CEST on the day of the pick-up.
- A handling unit must be labeled with T0/T1 carrier.
- If suppliers do not issue the export customs documents, it is obligatory to highlight in the comment field of the T0.
- Transports are assigned to be loaded no later than 15:00 CEST one day before pickup in the TMS.
- Pickup and delivery time windows reflect local time. The carrier and supplier are responsible to immediately report any exceptions before and during the transportation in the TMS.
- Please note that without a valid back assignment, no transport will take place.
## Implementation steps

### Timeline

<table>
<thead>
<tr>
<th>Request for master data</th>
<th>Route alignment</th>
<th>Supplier Training</th>
<th>Routing Instruction sheet</th>
<th>Go-Live</th>
<th>Hypercare</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 4 weeks prior</td>
<td>~ 2 weeks prior</td>
<td>~ 1 week prior</td>
<td>week prior Go-live</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Description

**Initial contact & request for master data**
- Information email by plant
- Gathering of master data from supplier (Contact person, Pick-up address, Possible pick-up days, part & packaging information, Incoterm)

**Route alignment**
- Agreement of relevant Route details (Pick-up and delivery days → transit time, Transportation mode, Carrier, Equipment, Effective date)

**Supplier training**

**Routing Instruction sheet**
- Official confirmation of agreed route details send by TMC
- Go-Live
  - Based on agreed route details

**Hypercare**
- Availability of special staff for assistance during first transport
Supplier training material
Use TMS to request transport

PLACE YOUR TRANSPORT ORDER (TO) DIRECTLY IN TMS
( NOT TO THE CARRIER ! )*

*Valid for all consignments over 15 kg
Supplier training material
Release your TO before the cut-off

ORDER TRANSPORT
UNTIL 11:00 (CET)
IN TMS

PICK UP DAY

TWO DAYS BEFORE
THE PICK-UP

IF NO ORDER IS RELEASED UNTIL THE CUT OFF TIME IN TMS
- NO TRANSPORT CAN BE ORGANIZED!
Supplier training material
Use your AnS (Air and Sea) account

Log in to all your inet modules

RBEU_AnS_supplier

*************

Log in

Reset password

MANUAL TO IS NOT ALLOWED TO BE CREATED FOR SEA & AIR SHIPMENTS
## Supplier training material
### Sea and Air TO types

<table>
<thead>
<tr>
<th>Conditions</th>
<th>TO type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard process</td>
<td><strong>Standard TO</strong></td>
<td>- TO automatically created according to the defined pick-up days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pre-filled with consignor &amp; recipient information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Packaging &amp; article information need to be filled (available as master data)</td>
</tr>
<tr>
<td>Exceptional process</td>
<td><strong>Manual TO</strong></td>
<td>- Exceptional process: Late delivery, Unplanned airfreight, Short-term order of BOSCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Consignor &amp; Recipient as well as packaging &amp; article information need to be filled by TMC</td>
</tr>
</tbody>
</table>
Supplier training material
New transport ordering process IN

- All TOs have to be released (saved) by 11 am two days before pick-up.
- After releasing (saving) the TO it can be edited one more time only.
- TOs that are not released until a certain time will be deleted in the system and have to be re-entered manually!
- No transports will be ordered without a released TO.
- The TO can be updated until two hours after the end of the pick-up window.
- In order to ensure that adjustments are performed, a reminder e-mail will be sent.

**CUT OFFs: supplier TO release - 11:00 am 2 days before pick up | all document upload on pick up day until 13:00**
Supplier training material
Extended TO update reminder

- With TMS release 17.4 the TO update reminder email has been enhanced
- The check for the availability of attributes has been enhanced and now includes:
  - article IDs
  - delivery note no.
  - commercial invoice no.
  - export declaration no.
  - purchase order no.
  - TO documents

With the reminder email, Suppliers will receive an overview of missing fields to be updated on the TO
Reminder e-mails will be sent separately for AIR and SEA shipments
HOW TO ANNOUNCE YOUR TRANSPORT ORDER DEMAND?
Supplier training material
TMS Login

1. Open your internet browser and go to: https://solutions.inet-logistics.com/ls/Login?Lang=EN&Branding=BOSCH&LoginSystemId=INETIDP

2. Type in your username and password

3. Press “Start” to log into the TMS.

You have to change your password the first time you log in!

USE YOUR ANS ACCOUNT YOU RECEIVED FROM OUR TEAM: „BOS-SUPPORT” (BOS.Support@hu.bosch.com)
In TMS the following masks are available:

1. **Order List**
   - Shows overview of all released transport orders in which shipper takes part as consignor or recipient.

2. **Transport List**
   - Shows overview of all transport orders that can be released by the shipper.

3. **Extras**
   - Configuration of default values and logout.
Supplier training material
Step 1: Go to transport list

Go to Transport List:

In the transport list, the transport orders with status „open” and the closest pick-up day will be listed first.

In case of any holiday at your pick-up place, please inform TMC and request a Transport order to be created!

If the transport is required, the transport order has to be released (saved) by the shipper.
Supplier training material
Step 2: Select relevant TO

Select transport order with status “open” for the relevant pick-up day and check the destination you are shipping to!

If the transport is not required, the transport order should be left in status “open” and will be automatically deleted by the system.

If you cannot find any open TO for your shipment, please contact TMC! Please make sure to request the TO before the agreed cut-off!
Supplier training material

Transport order details

By clicking on the transport order number in the order list or the transport list, the transport order details will be shown.

The mask for transport order details is divided into five main parts:

1. Order header with main transport order details (Step 2a)
2. Address information
3. Transport details and times (Step 2b)
4. Package information and quantity (Step 2c)
5. Article information and quantity (Step 2d)

Fields marked with an asterisk (*) are mandatory.
Supplier training material

Step 3: Check TO data

1. Check your TO’s transport mode, use the correct transport mode and if you cannot find the correct one, please immediately notify TMC.

2. If you do not prepare the customs documents, this box here will be automatically ticked. If you are responsible for the Export Customs Clearance of your goods, you have to add the MRN / T1 number, if possible already during TO release. If not possible, during the TO update process.
Supplier training material
Step 3/2: Loading reference, Incoterm & Known Consignor

Loading reference (if applicable), Incoterm has to match the aligned Incoterm

1. A special loading reference number (if necessary) can be inputted in the field “Loading reference”
2. It is necessary to check the Incoterm, since it is relevant for the customs declaration. Incoterm information will be requested during the implementation process.
3. “Known Consignor” information will also be asked during the implementation process (including RAKC ID). This master data information is necessary to ensure that no double work occurs.
   • If a change regarding your “known Consignor” status occurs, please contact us. Please inform us about your RAKC ID.
   • A “known Consignor” can change the goods to “unsecured” if necessary, this is not possible the reverse way. → If the TO volumes do not match the volumes in the documents or the TO volumes have been changes the goods will be “unsecured”.
   ➢ A loss of known consignor status has to be communicated immediately!
Supplier training material
Step 4: Complete / check handling unit information

**All fields are mandatory**

1. **Pos** is the package position as identifier for the package line in the TO (set by the system)
2. To select the handling unit use the search function and search by ID or Description → **ID**, **Description** and **Dimensions** are then (partially) filled by the system automatically
3. **Total Quantity** of handling units in this row
4. **Handling Unit Type** (filled by system)
5. **Total Gross** weight: weight of all packages (including the related articles) in kg
6. **L[mm]**, **W[mm]**, **H[mm]** are the **Dimensions** of the package (Length, Width, Height); for particular handling units the height has to be adjusted → Enter dimensions always in millimetres [mm]! The **volume** is calculated automatically based on the quantity and dimensions
7. **Stackability (Piling factor)**: is the number of handling units that may be stacked; if piling factor = 1 the handling unit is not stackable, if piling factor = 2 means two layers.

- Please note that due to identification reasons there need to be at least one position per article number (→ e.g. for two article numbers with 4 pallets, you need two lines)
Supplier training material
Explanation of container stackability

Stackability:
1 (not stackable)

Stackability: 2

Stackability: 3
Supplier training material

Step 5: Complete / check article information + document references

<table>
<thead>
<tr>
<th>Fields 1-3 &amp; 5-8 (5 if applicable) are mandatory, 4 is optional</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram of article data form" /></td>
</tr>
</tbody>
</table>

1. **Pos**: article position for the assignment to a package line (link to the Handling Unit, input the position of the handling unit in this field)
2. To select an article use the search function and search either by Part number or Goods description → **Part number, Goods description** and **Unit** are to be filled
3. **Quantity** of the article
4. **Net weight** is the weight of a single article unit
5. **Dangerous goods** information (including UN no.)
6. **Purchase order no.** per part
7. **Invoice no.** per part
8. **Delivery note no.** per part

≥ In case of dangerous goods, all relevant details (UN no, classification, net weight, packing group, applicable regulation) must be listed in the Comment field, as well!
Step 5a: Dangerous goods

MANDATORY:
1. UN number
2. Material Safety Data Sheet (MSDS)
3. Shipper’s declaration for dangerous goods (DGD)

TAKE CARE OF
1. Packing groups
2. Correct packaging &
3. Correct labeling

IF YOU SHIP DANGEROUS GOODS, PLEASE ALWAYS CONTACT TMC FIRST!
Export customs clearance
Supplier responsibility: MRN** creation

Please make sure to provide the proper required documents!

- **The Export Declaration (MRN**) is the responsibility of the supplier (excl. EXW Incoterm)**
- **If you cannot create the export declaration on your own,**
  - you have to find a broker or service provider who will create the relevant export declaration for you.
  - If needed, TMC can provide a contact from our LSP we are working with. Nevertheless you need to agree on cost and operational set-up directly with the LSP. TMC / Bosch will not pay for the MRN creation nor are we going to order the service for the supplier.
- **Please make sure** to contact the LSP directly and arrange the Power of Attorney form with them to enable the LSP to do the customs clearance on behalf of you (as supplier).
- **Irrespective who creates the MRN → Supplier has to ensure that the MRN is uploaded by latest 13:00h CET on day of pick-up!**
- **Example timing** (Service provider / Broker Set-Up):
  - if agreed pick up day on the transport order is Wednesday you need to send all relevant documents for MRN creation to your service provider on Monday (2 days before pick-up)
  - Your service provider creates the MRN in time before the pick-up and send it back to you in time so you can upload it to the iTMS
  - The MRN needs to be uploaded until 13:00h CET on the pick-up day so the LSP can pick-up the goods as agreed
  - Make sure to check all dates and time-lines for the MRN creation, as well as the needed documentation with your broker / service provider upfront. Your broker / service provider might have other timelines!
- **Important!** Agreed Pick-Up Time needs to be kept and can not be shifted because you or your service provider could not finalize the MRN in time!
- **How does the upload to iTMS work?**
  Please refer to the previous page!

If you cannot create the export document, please make sure to organize MRN with LSP directly.
Upload MRN into TMS latest 13:00 on pick up day by supplier in all cases

© Robert Bosch GmbH 2019. All rights reserved, also regarding any disposal, exploitation, reproduction, editing, distribution, as well as in the event of applications for industrial property rights.

** MRN = ABD
Supplier training material

Step 6: Upload transport documents & attach them to the goods

Please make sure to provide the proper required documents!

1. Click the “Documents” button in a TO in order to open the dialogue for uploading documents
2. Select the type of document you want to upload (naming convention on next slide)
3. Search your computer for the file to be uploaded
4. Select “Add” in order to upload the document and attach it to the TO

Mandatory documents:
- Delivery note
- Commercial invoice (invoice for goods with commercial value)
- EX1, MRN (ABD, export declaration)
- Additional → all required, no change will take place. Upload all your current documents

- All documents that are mandatory for the customs process have to be uploaded in TMS AND attached to the shipment (see picture)

CUT OFFs: all document upload on pick up day until 13:00
Supplier training material
Upload of transport documents - naming

- Following document types are necessary for an international transportation process and have to be uploaded in the TMS per TO according to the following standards (opportunity A (every document in an own file) or B (all documents compiled in one file)*:

<table>
<thead>
<tr>
<th>Document name</th>
<th>Document type (EN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;TO-number_CI&quot;</td>
<td>Commercial Invoice</td>
</tr>
<tr>
<td>&quot;TO-number_DN&quot;</td>
<td>Delivery note</td>
</tr>
<tr>
<td>&quot;TO-number_EX&quot;</td>
<td>Export declaration</td>
</tr>
<tr>
<td>&quot;TO-number_documents&quot;</td>
<td>Various</td>
</tr>
</tbody>
</table>

*In case of more documents scanned in one file, please split documents over 1 MB size!

Upload: only PDF | max. 1MB per file | max. 2 files per document type
Supplier training material

Label print

How to print TMS label

- To ensure smooth identification of the TMC shipments, you need to print the TMS label in addition to your own label and attach them to the shipment.

1. Select „Label SSCC“ in the header of the TO

2. Press the “Print” button to print label

- Label should be directly printed on self-adhesive paper (4 labels per DIN-A4) and attached to the goods acc. to physical instructions of the BOSCH supplier manual

All handling units must be labeled | all labels must include the TO (transport order) number
Help us to identify your goods

Always mark each Handling Unit with the TO

Why is the transport order (TO) number on the pallet so important?

- The TO has to be linked to the physical shipment in order to ensure a clear identification of transport details within the network and for the goods receiving department at BOSCH.
- Please attach the label to the shortened side of the pallet (1200mmx800mm, 1140x790 mm) in order to make it still visible after loading.
- Any delay related to pallets not marked with TO reference, will remain the Shipper’s responsibility.

Did you know? We have a TMS Label

- Select „Label SSCC“ in the header of the TO
- Press the “Print” button to print label

All handling units must be labeled | all labels must include the TO (transport order) number
Supplier training material
Step 7: Release the TO

A transport will be ordered for all released TO’s

Confirmation of a TO

1. A TO is released by clicking on the ‘save’ button.
   - The status of the TO then changes from ‘open’ to ‘in process’.

2. After releasing (saving) the TO it can only be updated once.

If you want to save changes and edit the TO again later please use the button ,save with status open.

Please note: There are no transports ordered for ‘open’ TO.
Supplier training material
Step 8: TO update process

1. If you want to update a TO, you have to first open the corresponding TO via the transport list.

2. You now can see a tick inside the box: „update required“, which means that you can update the TO one single time.

3. You can now edit the handling unit information analogue to the process explained above, to save the changes, press the save button.

⚠️ It is not allowed to change the Service.
Supplier training material
TO adjustment / shipping of backlog

The TO adjustment allows to ship volume that differs to the delivery schedule

Adjustment means that I have to adjust the TO volume to the delivery volume. Possibly because you shipped only partial orders before or the plant ordered short-term.

There are two options for shipping additional volume:

1. If you have a TO that matches the delivery day you can add the volume to this existing TO
   
   (→ fill in additional goods to the existing TO according to the described process)

2. If you do not have a TO that matches the delivery day you have to call the TMC to create a manual TO
   
   (→ fill in additional goods to the new TO according to the described process)
Supplier training material
Weight and height limits AIR shipments

Oversized pallets can risk „on time” delivery

The maximum weight and volume on one TO should not exceed the following:

- Maximum weight per TO: \(2500\) kg
- Maximum volume per TO: \(9\) cbm
- Maximum dims per pallet: \(305 \times 240 \times 160\) cm

In case of any oversize shipment = that exceeds the above maximum values, please always pre-alert TMC (to ensure the capacity and avoid any transport delay).

If the planned shipment exceeds the limit, always request additional TO(s) an inform TMC!
Supplier training material
Shipments with high volume – split of pallets SEA shipments

Split of pallets

- The number of pallets on one TO should not exceed the capacity of a 40‘ container (Weight & pallet space)
  - Max. weight: 20 000 kg
  - Max. number of pallets:

<table>
<thead>
<tr>
<th>Pallet type</th>
<th>Not stackable</th>
<th>Stackable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 x 800 mm</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>1200 x 1000 mm</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Container pallet 1140 x 790 mm</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Others</td>
<td>To be calculated by supplier</td>
<td></td>
</tr>
</tbody>
</table>

Creation of transport documents

- Every TO must have separate shipping documents, therefore in case of huge volumes, all shipping documents need to be issued as per the separate TOs:
  - Delivery note
  - Commercial invoice (proforma invoice for goods without commercial value)
  - EX1 / MRN (ABD, export declaration)
  - Any other relevant document

If the planned shipment exceeds the limit, always request additional TO(s) an inform TMC!
COMMUNICATION WITH TMC
Supplier training material
Contact us!

You should call the TMC when:
- An exception occurs
- In case of any question/issue
- Pick-up is required

TMC will:
- Manage exception
- Help you with your question
- Arrange pick-up

In case an exception occurs please always contact the TMC via phone or e-mail!

Please include the following data in your mails to TMC:

- **Subject**: Transport mode_Supplier name_Supplier ID_Receiving Plant code_Receiving Country
- **Mail**:
  - Transport mode
  - Supplier ID
  - Shipper name
  - Planned pick-up day
  - Receiving Plant
  - TO number (if already available)
Supplier training material

TMC Contacts

**ROAD**

EU TMC ROAD
TMC_EU@bosch.com
+36(1)879-8500

Standard

TO release

Client info

Manual Order

**AIR**

US: TMC_NA@bosch.com
+49 (711) 81117832

US & MX: TMC_NA@bosch.com
+49 (711) 81117832

CN: TMC_CN_AIR@bosch.com
+49 (711) 81117758

CN: BOSCH_TMC_SEA@4flow.com
+49 (711) 81117831

BR: BOSCH_TMC_Sea_LA@4flow.com
+55 19 2514 4208

BR: BOSCH_TMC_SEA@4flow.com
+49 (711) 81117831

1 working day prior pick-up
11:00 CET

2 working days prior pick-up
11:00 CET for India
1 working day prior pick-up
11:00 CET for US, CN and BR

Road freight account to be used

SEA & AIR freight account to be used

Allowed

TO released based on routing instruction

Not Allowed

Only provided TO to be filled out

**SEA**

IN & VN: TMC_AP@bosch.com
+49 (711) 81117832

IN & VN: TMC_AP@bosch.com
+49 (711) 81117832

1 working day prior pick-up
11:00 CET for US, CN and BR

2 working days prior pick-up
11:00 CET for India
LCL: 1 working day prior pick-up 11:00 CET
FCL: 2 working days prior pick-up 11:00 CET
FLORENCE: 2 working days prior pick-up 16:00 CET

SEA & AIR freight account to be used

SEA & AIR freight account to be used

Not Allowed

Only provided TO to be filled out

TMC ASIA PACIFIC
E-mail address

© Robert Bosch GmbH 2019. All rights reserved, also regarding any disposal, exploitation, reproduction, editing, distribution, as well as in the event of applications for industrial property rights.
THANK YOU VERY MUCH FOR YOUR PARTICIPATION, YOUR SUPPORT AND COMMITMENT IN THE FUTURE!