Table of Contents

Overview

This job aid documents how to execute the Business Intelligence (BI) report called **"Freight Orders - Events"**. It is intended to facilitate the exploration of statistics related to the Execution Events at Freight Order level (**FO**)

The aim of this report is to support the business by assessing the performance by Shipment leg providing lead times, and number and percentage of events occurred from a wide variety of perspectives.

Business users can run Analysis Workspace reports and use them as a starting point to instantaneously create complex, ad-hoc queries by using features like "slice and dice", "drill-down", breakdown and "filtering". In other words, the Analysis Workspace is a blank slate which provides users with the customised analysis and reports they need to build.

Users can run reports, export and save them in Excel, PDF or CSV format and even print them. When users run the report, the system generates it from the latest available data set loaded into SAP HANA from the Umoja transactional system. Data is refreshed in BI in real time mode from the Transportation Management transactional system.

* *

Objectives

This Job Aid provides the step-by-step procedure on how to generate a report on Freight Order Events using the Umoja BI Analysis Workspace application.
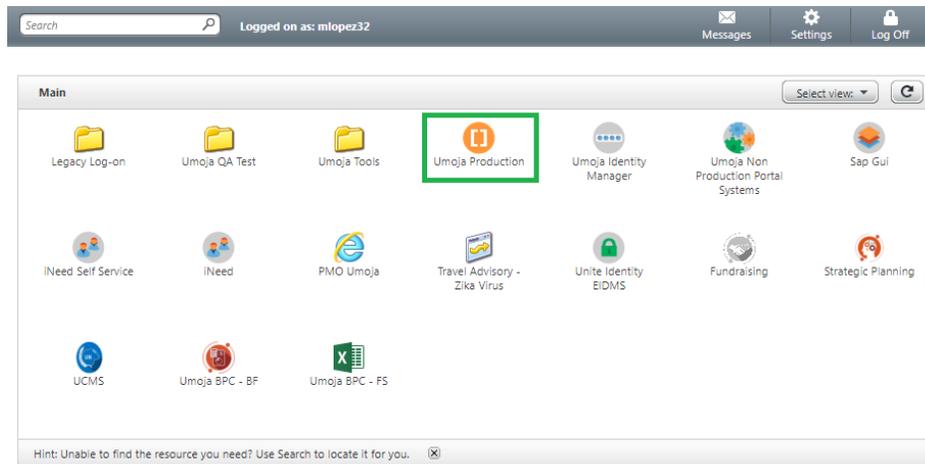
Enterprise Roles

BI.85 ROLE: ALL:BI:SC_TMEM_ANALYTIC_USER provides access to the TM Analysis Workspaces reports.

Procedure
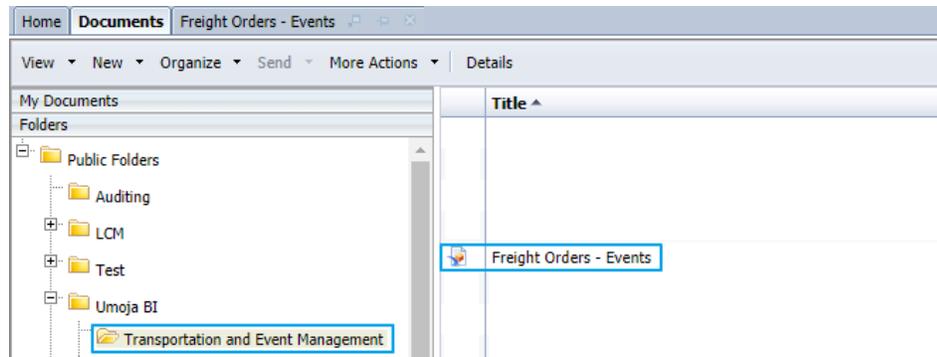
A. Navigation

1. Log on to Citrix: https://login.umoja.un.org
2. Go to the icon called "Umoja Production".

3. Open the downloaded file (normally called "launch.ica").

4. Click on "BI Portal".

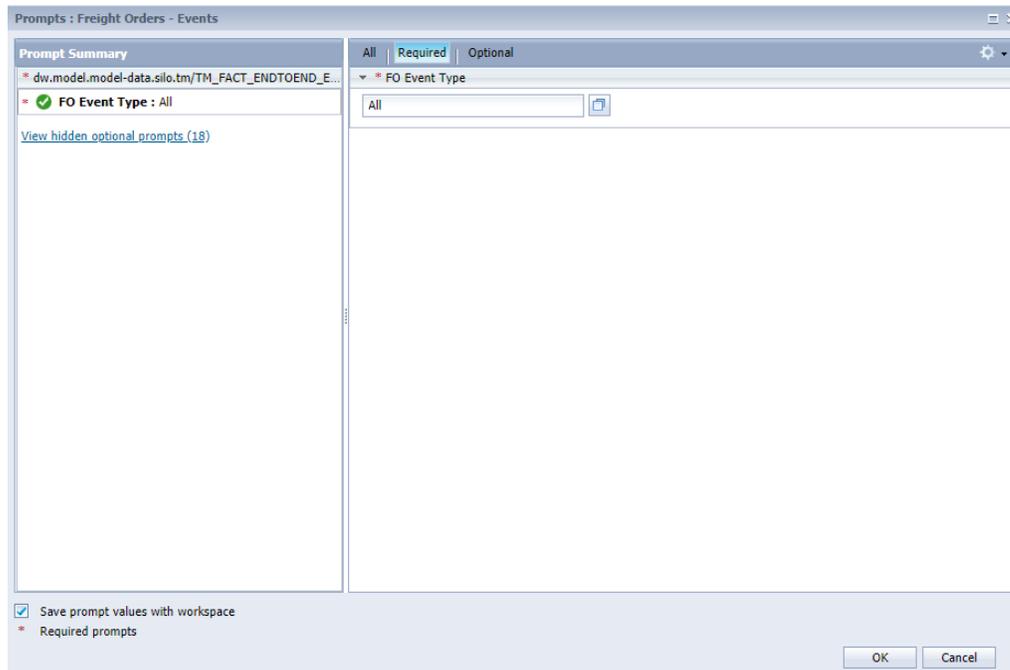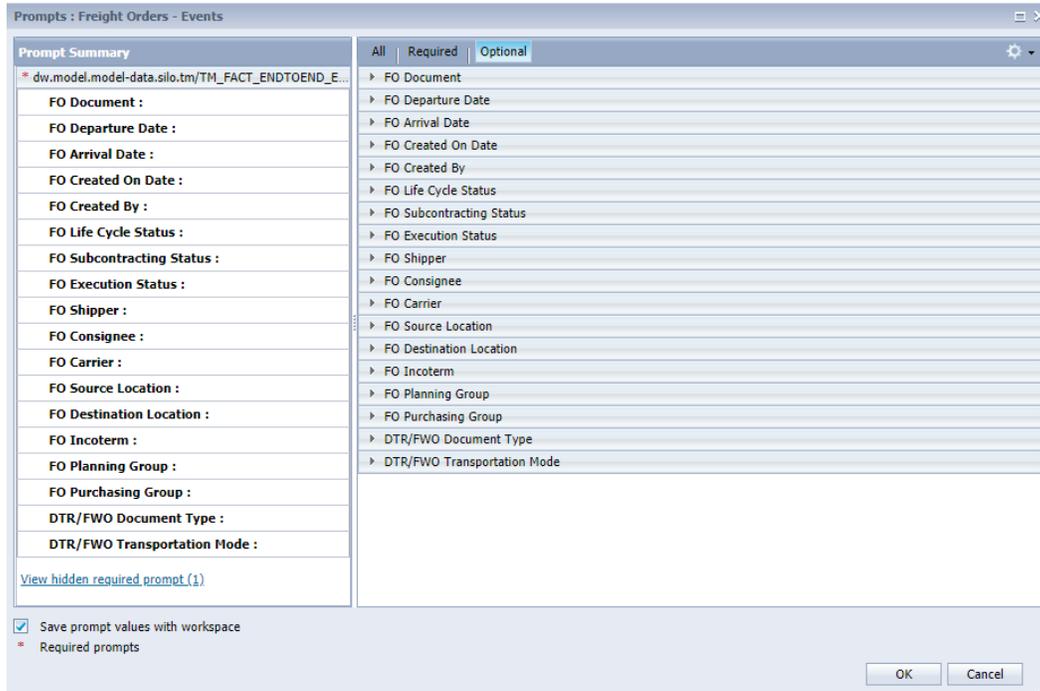5. Open the public folder **Umoja BI → Transportation and Event Management**. Double-click on the name to open it.
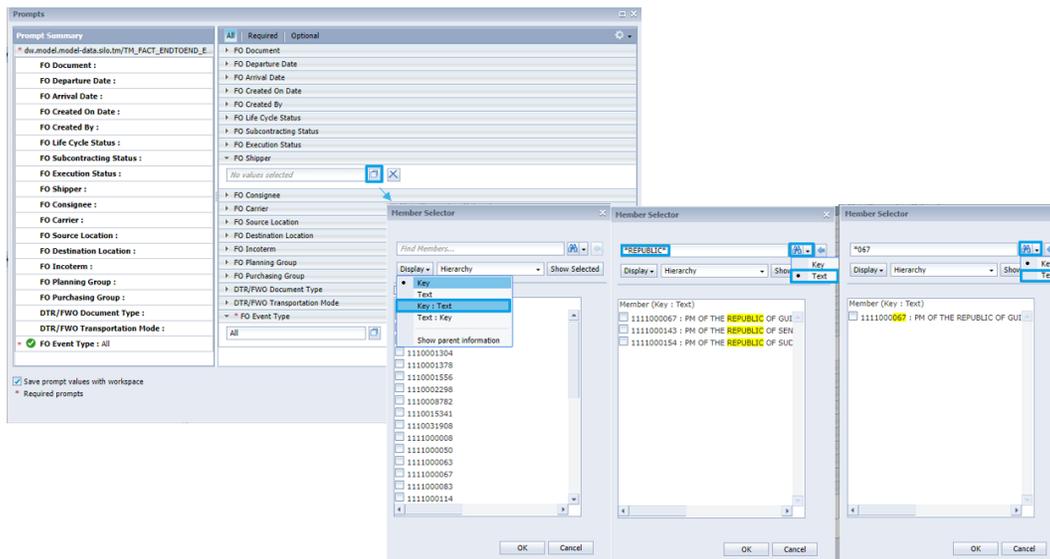

B. Prompts

1. As soon as you open the report, the Prompts window will display. Only the FO Event Type field is required. It allows you to select **All**, **Expected** or **Reported** events. In addition, a wide variety of Optional Freight Order fields is also available.

Tip: You may click on the button to choose the values you are interested in any of the prompts. The wildcard * may be useful to search broadly by Keys (e.g. 111*67) or by Descriptions (e.g. *REPUBLIC*):

2. After entering the required filter, click **OK** and the report will run:

C. Refreshing the report

Once the report has been opened, you can decide to change the already selected filter values using the "Prompts" button:

D. Export Report

1. You can export the report to Excel, PDF or CSV (text format) by clicking on the Export icon as seen below:
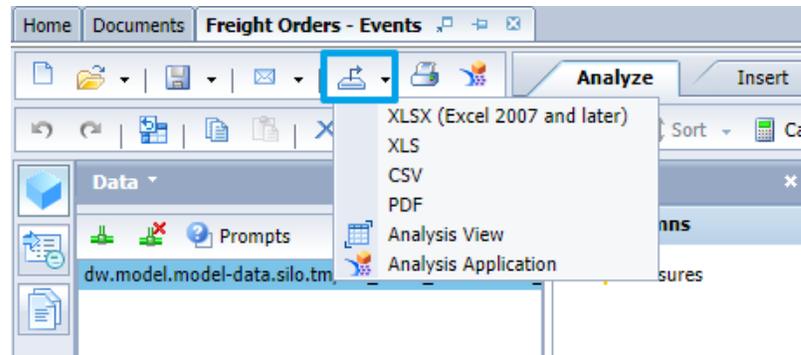
2. When the Export dialog box opens, make sure you select the required data to export using the available options, depending on the chosen export format.

   Furthermore, by clicking on "Repeat outer header members", each row of data will contain the header information for that data element. This is useful for exporting flat tables for further analysis in Excel.
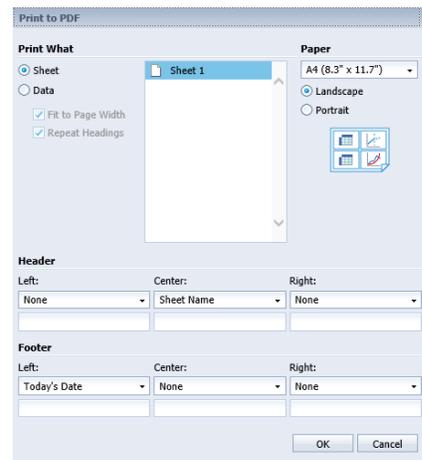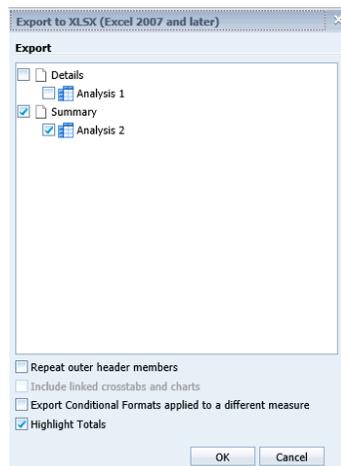
3. A pop-up dialog will appear, where the option to open or save the file needs to be chosen.

Overview of the Report

A. *Structure of Analysis Workspace*

The screenshot below highlights the main different navigational elements of an Analysis Workspace:

Transportation Management BI Report
Freight Order - Events

1. **Data Panel**

   The data panel displays the *Measures* and *Characteristics* available to use in the report. The data panel is used to select the required information to perform navigation functions, such as adding characteristics to rows or columns or including new background filters.

   Measures and Characteristics are the main components of an Analysis Workspace:

   - **Measure** 📊: Numerical values or metrics which are measured in the analysis (e.g. *DTR/FWO Quantity Item*).
   - **Characteristic** 📦: Fields in Umoja that are used to differentiate and analyse measures under different perspectives (e.g. *DTR/FWO Consignee)*.

2. **Layout Panel**

   The *Layout panel* is the panel adjacent to the *Data panel* and here you can:
   - Drag and drop different characteristics and measures into the Rows or Columns of your analysis, as with Pivot tables in Excel.
   - Drag and drop one or more measures or characteristics as Background Filters to your analysis.
   - Perform navigational operations on characteristics and measures including filtering, re-ordering and swapping objects.

3. **Analysis Panel**

   The Analysis window is the primary part of the screen displaying the rows and columns in a spreadsheet form for the selected data. It is located on the right of the *Layout panel*. This window displays the core components of the Analysis Workspace report.

Normally, the measures for a specific Analysis Workspace are set in the *Columns Section* of the analysis, while characteristics are placed in the *Rows section.*

The Analysis Panel can contain more than one Tab with different analysis or charts.

4. Calculations
The Calculations pane displays the Custom Calculations done in the Analysis Workspace. Here you can create a new measure based on the existing ones, edit or delete the custom calculations.

B. *Layout of the Report*

Analysis Workspaces have the following structure:

- **Data Panel**
  It contains all the Characteristics and Measures that users may add to their ad-hoc analyses.

  - **Measures**: provide the total number of events by type, the earliest and latest date of each event type, lead averages from Handover to Arrival event and delays for Arrival at Destination. Total number of Freight Orders documents, Consignees and Shippers are also provided.

    - **Number of Arrival to Destination Events:** counter of events of type Arrival to Destination (Event code 'ARRIV_DEST').

- **Earliest Date of Arrival to Destination Events:** Date of first occurrence of event 'Arrival to Destination' in a Freight Order document
- **Latest Date of Arrival to Destination Events:** Date of last occurrence of event 'Arrival to Destination' in a Freight Order document

Note: The above explanations apply to the following measures but for different event types

- **Number of Upload to BW Events**
- **Earliest Date of Upload to BW Events**
- **Latest Date of Upload to BW Events**

- **Number of Customs Clearance Events**
- **Earliest Date of Customs Clearance Events**
- **Latest Date of Customs Clearance Events**

- **Number of Damage Events**
- **Earliest Date of Damage Events**
- **Latest Date of Damage Events**

- **Number of Delay Events**
- **Earliest Date of Delay Events**
- **Latest Date of Delay Events**

- **Number of Departure Events**
- **Earliest Date of Departure Events**
- **Latest Date of Departure Events**

- **Number of Loading Begin Events**
- **Earliest Date of Loading Begin Events**
- **Latest Date of Loading Begin Events**

- **Number of Loading End Events**
- **Earliest Date of Loading End Events**
- **Latest Date of Loading End Events**

- **Number of Proof of Delivery Events**
- **Earliest Date of Proof of Delivery Events**
- **Latest Date of Proof of Delivery Events**

- **Number of Proof of Pickup Events**
- **Earliest Date of Proof of Pickup Events**
- **Latest Date of Proof of Pickup Events**

- **Number of Unloading Begin Events**
- **Earliest Date of Unloading Begin Events**
- **Latest Date of Unloading Begin Events**

- **Number of Unloading End Events**
- **Earliest Date of Unloading End Events**
- **Latest Date of Unloading End Events**

- **Number of Cargo Information Events**
- **Earliest Date of Cargo Information Events**
- **Latest Date of Cargo Information Events**
- **Number of Chalk Arrival Events**
- **Earliest Date of Chalk Arrival Events**
- **Latest Date of Chalk Arrival Events**

- **Number of Chalk Departure Events**
- **Earliest Date of Chalk Departure Events**
- **Latest Date of Chalk Departure Events**

- **Number of Clear Customs On-Carriage Events**
- **Earliest Date of Clear Customs On-Carriage Events**
- **Latest Date of Clear Customs On-Carriage Events**

- **Number of Cost Change Events**
- **Earliest Date of Cost Change Events**
- **Latest Date of Cost Change Events**

- **Number of Cross Border COE Events**
- **Earliest Date of Cross Border COE Events**
- **Latest Date of Cross Border COE Events**

- **Number of Documentation Complete Events**
- **Earliest Date of Documentation Complete Events**
- **Latest Date of Documentation Complete Events**

- **Number of Documentation Sent Events**
- **Earliest Date of Documentation Sent Events**
- **Latest Date of Documentation Sent Events**

- **Number of Handover Document Events**
- **Earliest Date of Handover Document Events**
- **Latest Date of Handover Document Events**

- **Number of Loss Events**

- Earliest Date of Loss Events
- Latest Date of Loss Events

- Number of Other Events
- Earliest Date of Other Events
- Latest Date of Other Events

- Number of Partial Delivery Events
- Earliest Date of Partial Delivery Events
- Latest Date of Partial Delivery Events

- Number of Quality Issue Events
- Earliest Date of Quality Issue Events
- Latest Date of Quality Issue Events

- Number of Route Change Events
- Earliest Date of Route Change Events
- Latest Date of Route Change Events

- Number of Tax Exemption Events
- Earliest Date of Tax Exemption Events
- Latest Date of Tax Exemption Events

- Number of Military Security Escort Missing Events
- Earliest Date of Military Security Escort Missing Events
- Latest Date of Military Security Escort Missing Events

- **Number of Major Delay Events:** Total count of events classified as with 'Major Delay'. An event has a major delay when the difference between the Actual and Expected dates in the Arrival to Destination event exceeds four weeks.

- **Number of Slight Delay Events:** Total count of events classified as with 'Slight Delay'. An event has a slight delay when the difference between the Actual and Expected dates in the Arrival to Destination event ranges two and four weeks.

- **Number of Damages, Delays, Losses or Other Event:** Total count of events of type damage, delay, loss or other (event codes 'DAMAGE', 'ZDAMAGE','DELAY','DELAYED','DELAYED_FU','ZLOSS','LOSS', or 'ZOTHER')

- **Number of Freight Orders with Damages:** Total count of Freight Order documents with event codes 'DAMAGE' or 'ZDAMAGE'

- **Number of Freight Orders with Damages, Delays, Losses or Other Events:** Total count of Freight Order documents with event codes 'DAMAGE','ZDAMAGE','DELAY','DELAYED','DELAYED_FU','ZLOSS', 'LOSS', or 'ZOTHER')

- **Number of Freight Orders with Losses:** Total count of Freight Order documents with event code 'ZLOSS' or 'LOSS'.

- **Number of Freight Orders with Other Events:** Total count of Freight Order documents with event code 'ZOTHER'.

- **Number of Freight Orders with Major Delay:** Total count of Freight Order documents exceeding four weeks between expected and actual dates in the Arrival to Destination event.

- **Number of Freight Orders with Slight Delay:** Total count of Freight Order documents with a delay between expected and actual dates in the Arrival to Destination event of two and four weeks.

- **FO Lead Time in Days (Handover to Arrival):** Days between date of Handover Documentation event (code ZHANDOVER_DOC) and date of Arrival to Destination event (code ARRIV_DEST) in each Freight Order. In the case where several instances of same event could occur the calculation takes first handover documentation and last arrival to destination event.

- **DTR/FWO Lead Time in Days (Handover to Arrival):** Days between date of Handover Documentation event (code ZHANDOVER_DOC) in the first Freight Order linked to the DTR/FWO and the date of Arrival to Destination event (code ARRIV_DEST) of the last Freight Order in the shipment cycle. In the case where several instances of same event occur, the calculation is based on submission of first "Handover Documentation" event and last "Arrival to Destination" event.
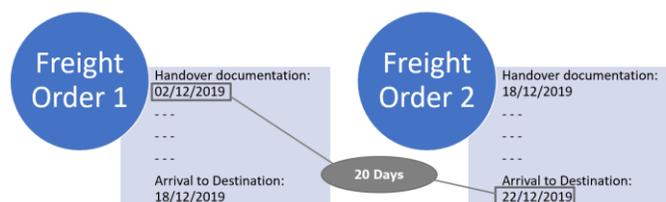
- **FO Number of Consignees:** Total count of distinct consignees.
- **FO Number of Documents:** Total count of Freight Order documents
- **FO Number of Shippers:** Total count of distinct Shippers.
- **Number of First DTR/FWO:** Total count of distinct Delivery Based Transportation Requirements or Forwarding Order documents linked to the Freight Order. If a Freight Order is linked to several DTRs or FWOs the calculation will only count the first one.

- **Characteristics**:

- **DTR/FWO Document Category:** It is the DTR/FWO document category identifier.
- **DTR/FWO Document Category Description**: The description of the document category

Document Category	Description
02	Delivery-Based Transportation Requirement
03	Forwarding Order

- **DTR/FWO Document Type:** The document type identifier
- **DTR/FWO Document Type Description:** The document type description.

Document Type	Description
ZD01	DTR for UNOE
ZD02	DTR for STO
ZFW1	Forwarding Order for COE
ZFW2	Forwarding Order for COE Troops
ZFW3	Forwarding Order for Troops Land and Sea
ZFW4	Forwarding Order for Wide Body (LTC)

- **DTR/FWO First Document**: First Delivery Transport Requirement or Forwarding Order linked to the Freight Order events
- **DTR/FWO Last Document:** Last Delivery Transport Requirement or Forwarding Order linked to the Freight Order events
- **DTR/FWO Transportation Mode:** The shipping transportation mode

Transportation Mode	Description
01	Road
02	Rail
03	Sea
04	Inland Waterway
05	Air
…	..

- **DTR/FWO Transportation Mode Description**
- **Difference between Planned and Actual Date in Days:** Number of days between the date when the event occurred (Reported Date and Time) and when it was planned (Expected Date and Time).
- **Difference between Planned and Actual Date in Hours:** Number of hours between the date when the event occurred (Reported Date and Time) and when it was planned (Expected Date and Time).
- **FO Arrival Date:** Arrival date of the Freight Order
- **FO Arrival Date Month**
- **FO Arrival Date Quarter**
- **FO Arrival Date Year**

- **FO Carrier:** Freight forwarder identifier
- **FO Carrier Description:** Freight forwarder name
- **FO Consignee:** Plant identifier
- **FO Consignee Description:** Plant description
- **FO Created By**
- **FO Created on**
- **FO Departure Date:** Departure of the Freight Order
- **FO Departure Date Month**
- **FO Departure Date Quarter**
- **FO Departure Date Year**
- **FO Destination Location Description**
- **FO Document**
- **FO Document (with leading zeros)**
- **FO Execution Status:** It is the Freight Order execution status identifier
- **FO Execution Status Description:** The execution status description

Execution Status	Description
01	Not Relevant
02	Not Started
03	In Execution
04	Executed
05	Interrupted
06	Canceled
07	Ready for Transportation Execution
08	Not Ready for Transportation Execution
09	Loading in Process
10	Capacity Planning Finished

- **FO Life Cycle Status:** It is the Freight Order life cycle status identifier.
- **FO Life Cycle Status Description:** The life cycle status description

Life Cycle Status	Description
00	Draft
01	New
02	In Process
05	Completed
10	Canceled

- **FO Planning Group:** It is the Freight Order Planning and Execution Group. For example:

Planning Group	Description
50000633	Planning & Execution Field Supp
50000662	Planning & Execution Vehicles
---	---

- **FO Planning Group Description**
- **FO Purchasing Group**
- **FO Purchasing Group Description**
- **FO Shipper:** Vendor identifier
- **FO Shipper Description:** Vendor name
- **FO Source Location Description**
- **FO Subcontracting Status:** It is the Subcontracting status identifier
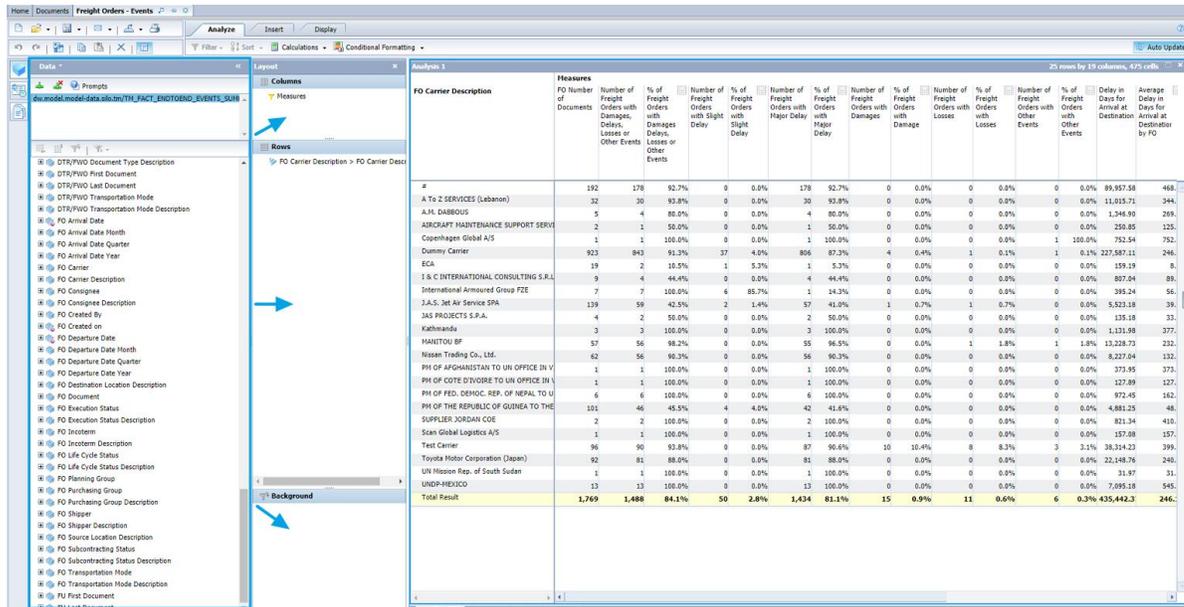- **FO Subcontracting Status Description:** The subcontracting status description

Subcontracting Status	Description
01	No Subcontracting Result
02	In Tendering
03	Carrier Assigned
04	Sent
05	Changed After Sending

- **FO Transportation Mode:** It is the transportation mode identifier
- **FO Transportation Mode Description**

Transportation Mode	Description
01	Road
02	Rail
03	Sea
04	Inland Waterway
05	Air
06	Parcel
UN	Multiple Mode

- **FU First Document:** Only first and last Freight Unit documents are provided. The measures provide accurate summaries pivoting at freight order level
- **FU Last Document**

Note that any Measure or Characteristic can be added dynamically to the Rows, Columns or Background sections:

The report contains one tab:

- **Columns Section**

  It provides the following **Measures**:

  - **FO Number of Documents:** Counter of Freight Order (FO) documents.
  - **Number of Freight Orders with Damages, Delays, Losses or Other Events:** Counter of Freight Order documents with event codes 'DAMAGE','ZDAMAGE','DELAY','DELAYED','DELAYED_FU','ZLOSS', 'LOSS', or 'ZOTHER')
  - **% of Freight Orders with Damages, Delays, Losses or Other Events:** The percentage of freight orders with at least one event of type 'Damage', 'Delay', 'Loss' or 'Other Events' over the total number of freight orders. Formula applied: 'Number of Freight Orders with Damages, Delays, Losses or Other Events' / 'Number of Freight Orders'*100. If a freight order has more than one of these types of events it will be counted once.
  - **Number of Freight Orders with Slight Delay:** Number of Freight Order documents with a delay between 2 and 4 weeks
  - **% of Freight Orders with Slight Delay:** The percentage of freight orders with a delay of two and four weeks between the Actual and Estimated date in the Arrival to Destination Event. If the actual date is yet to occur the difference is calculated between the Estimated date and the date when the report is refreshed.
  - **Number of Freight Orders with Major Delay:** Number of Freight Order documents with a delay greater than 4 weeks
  - **% of Freight Orders with Major Delay**: The percentage of freight orders exceeding 4 weeks between Actual and Estimated date in the Arrival

to Destination Event. If the actual date is yet to occur, the difference is calculated between the Estimated date and the date when the report is refreshed.

- **Number of Freight Orders with Damages:** Number of Freight Order documents with event codes 'DAMAGE' or 'ZDAMAGE'
- **% of Freight Orders with Damage:** The percentage of freight orders having an event of type damage over the total number of freight orders. Formula applied: 'Number of Freight Orders with Damages' / 'Number of Freight Orders'*100
- **Number of Freight Orders with Losses:** Number of Freight Order documents with event codes 'ZLOSS' or 'LOSS'
- **% of Freight Orders with Losses:** The percentage of freight orders having an event of type Loss over the total number of freight orders. Formula applied: 'Number of Freight Orders with Losses' / 'Number of Freight Orders'*100
- **Number of Freight Orders with Other Events:** Number of Freight Order documents with event code 'ZOTHERS'
- **% of Freight Orders with Other Events:** The percentage of freight orders with an event of type 'Other' (code ZOTHERS) over the total number of freight orders. Formula applied: 'Number of Freight Orders with Other Events' / 'Number of Freight Orders'*100
- **Delay in Days for Arrival at Destination:** Time delay in days when the event code is 'ARRIV_DEST'. It indicates the total summation of days calculated as the difference between Estimated and Actual dates of Arrival to Destination event for each Freight Order.
- **Average Delay in Days for Arrival at Destination by FO:** Average delay in days per Freight Order document. Formula applied: 'Delay in Days for Arrival at Destination' / FO Number of Documents'
- **FO Lead Time in Days (Handover to Arrival):** Difference between Earliest Date of Handover Document and Latest Date of Arrival at Destination Events

- **Average Lead Time by FO (Handover to Arrival):** Average number of days of Lead Time per Freight Order document. Formula applied: 'FO Lead Time in Days (Handover to Arrival) '/'FO Number of Documents'
- **DTR/FWO Lead Time in Days (Handover to Arrival):** Difference between Earliest Date of Handover Document and Latest Date of Arrival at Destination Events at Delivery Transport Requirement or Forwarding Order level
- **Average Lead Time by DTR/FWO (Handover to Arrival):** Average number of days of Lead Time per DTR or FWO document. Formula applied: 'DTR/FWO Lead Time in Days (Handover to Arrival) '/'Number of First DTR/FWO'.

- **Rows Section**

  The Rows Section contains the characteristics or dimension attributes. In this tab, it contains the *FO Carrier Description* as the default option to aggregate and visualize the measures.

- **Background Filters**

  Background filters apply restriction of data to the entire Analysis, in this case there are no background filters applied by default.

Please refer to the next section Scope Determination to understand important concepts used in the background for the calculations.

Scope determination

The below **conditions** apply in the logic selected to retrieve the data for the report:
- The report selects all the Freight Orders Execution Events with no restrictions.

Additional Resources

NV301 Umoja Advanced BI Navigation guide:
https://umoja.un.org/sites/umoja.un.org/files/nv301-umoja_advanced_bi_navigation_cbt_v9.pdf