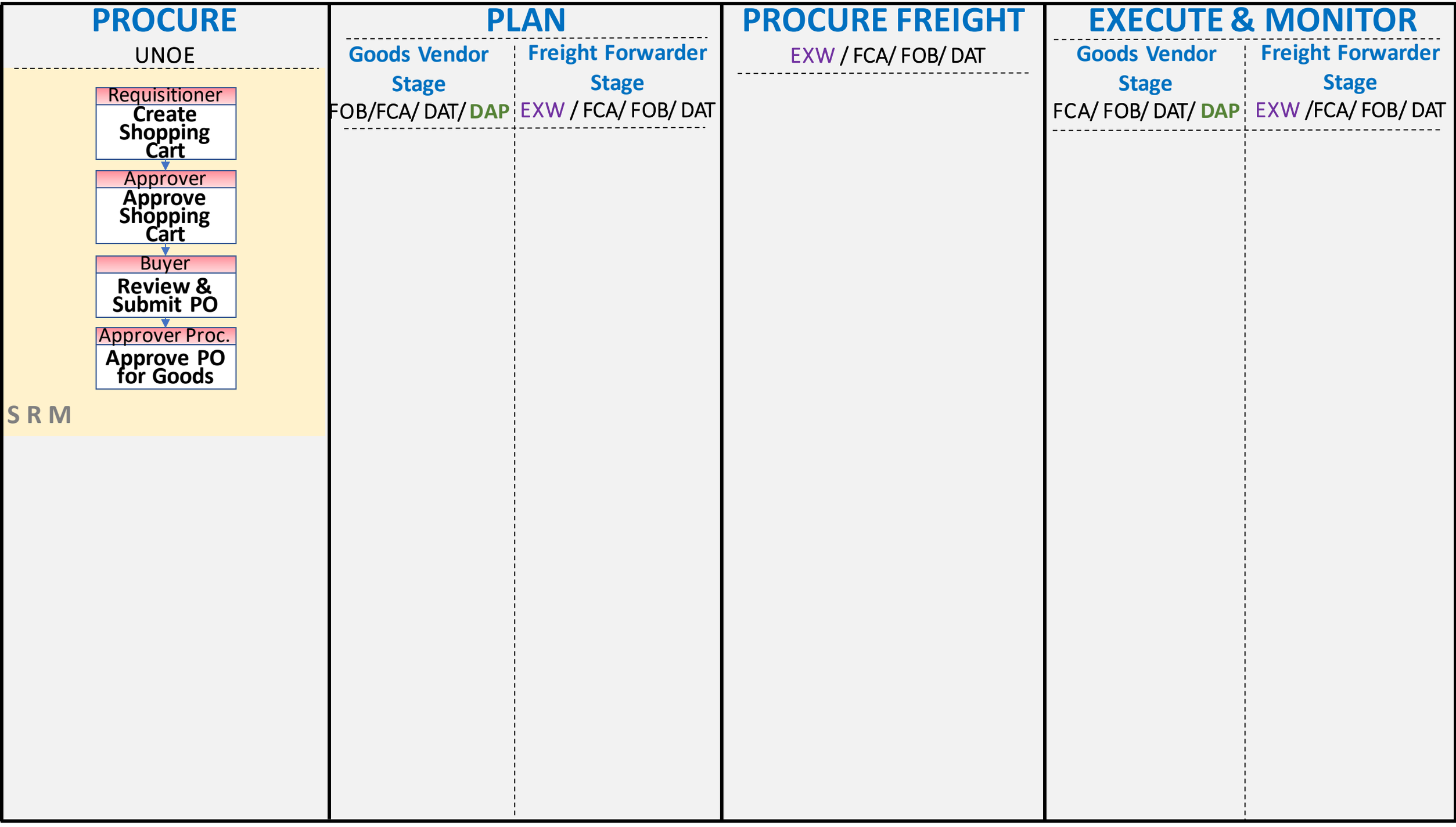
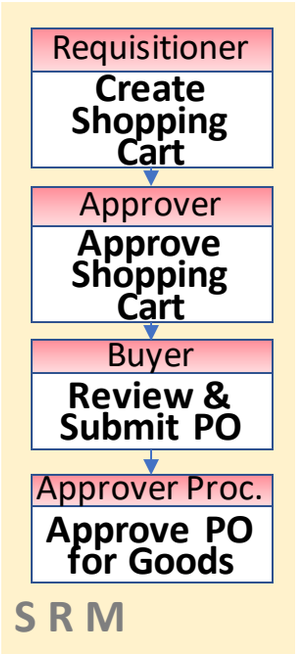
UNOE TRANSPORTATION MANAGEMENT END TO END PROCESS

Transportation Planning and Management and Track & Trace (TPTM-T&T project)

Elena Carrasco Comes / UCS Training Team, Valencia / Tuesday, October 15th

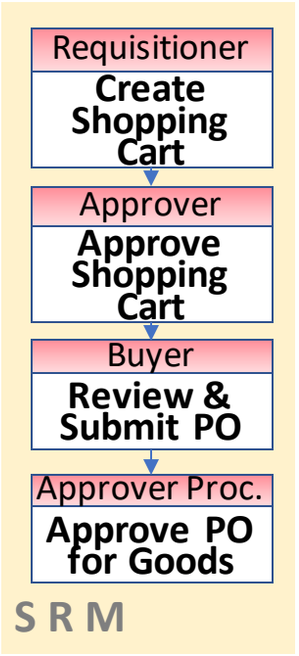

PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
PLAN
Goods Vendor Stage
FOB/FCA/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

UNOE – PROCURE PHASE – SHOPPING CART & PURCHASE ORDER

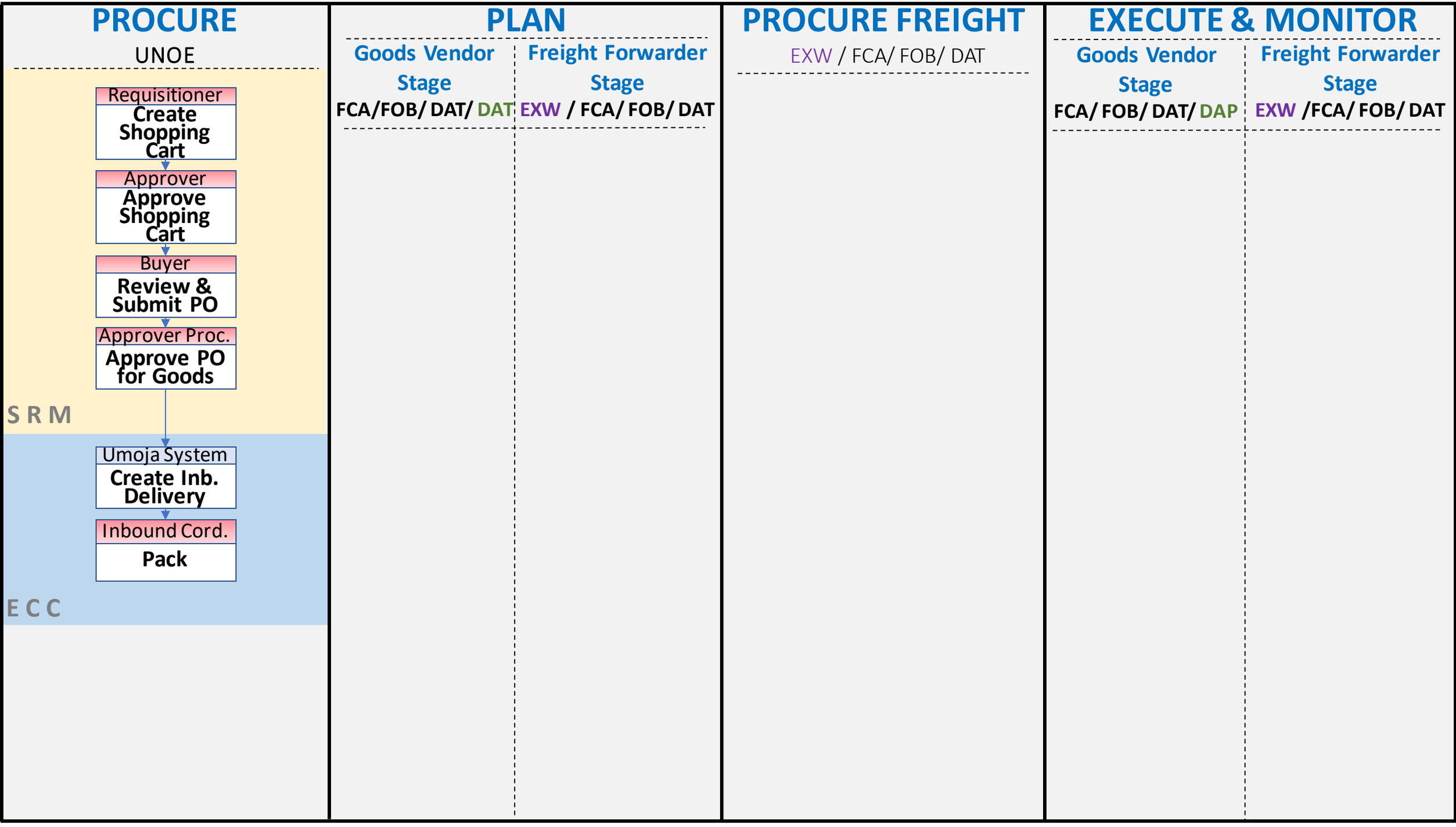


- [Shopping Cart]: Contract Catalog will be used as preferred option. If so, same PID will be offered with different Incoterms (hence, different prices).
- [Shopping Cart]: Incoterm terms from contract catalog are not picked up in the Shopping Cart line. If populated, it needs to be inserted manually. Incoterm key shall be selected by using Matchbox. Location is free text
- [Shopping Cart]: Purchasing Group (SRM) will default the Planner Group (TM) that will have visibility on the DTR to be planned. Purchasing group and planner group are plant based.
- [Shopping Cart}: For goods, no freight line should be created. Freight Shopping Cart and Purchase Order will be created separately.
- [Shopping Cart]: PO Delivery Address/ Performance Location (SRM) becomes Destination Location in the Freight Unit (TM). Umoja TM will calculate the last leg according to the destination set as PO Delivery Address/ Performance Location
- Selecting the Supplier in SRM will allow the Supplier to submit the related transportation events in the Carrier Collaboration Portal (CCP)

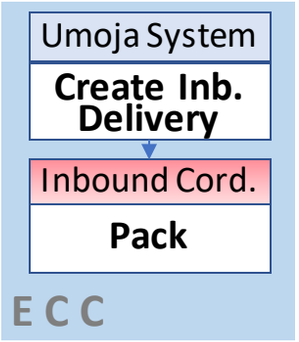
UNOE – PROCURE PHASE – SHOPPING CART & PURCHASE ORDER



- [Purchase Order}: Buyers shall ensure the correctness of the following fields: Location, Ship- To- Address-, Purchasing Group, delivery date
- [Purchase Order}: Incoterm/ Key Location at header and item level may not be picked correctly; both incoterm key and location shall be selected by using the matchbox.
- [Purchase Order}: Selecting the Supplier in SRM will allow the Supplier to submit the related transportation events in the Carrier Collaboration Portal (CCP)
- [Purchase Order} The Delivery Date serves as the baseline date for the new Umoja Transportation Module to estimate all the other related dates (departure date, handover date, arrival at destination date, etc.) based on the UN Transportation Network Master Data
- Certifying Officers and Procurement Officers must review the accuracy of data.


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAT
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

UNOE – PROCURE PHASE – INBOUND DELIVERY



- Inbound Delivery is created via batch job in **ECC** and can also be manually created.
- Product **weight** & **volume** is not maintained in the material master. Inbound coordinator shall update weight and volume in the inbound delivery document manually, based on supplier's packing list.
- Several **Packaging materials** *(material type "ZPAM")* are available in the system
- **Packaging materials** and packing shall be manually inserted in the inbound delivery document as per vendor packing list.
- Weight, volume and packaging information duly updated in the "Inbound Delivery" will reflect the correct dimensions of the materials being shipped by creating "**Handling Units**".
- **Batch managed** materials (e.g. vaccines and medical, rations, ammunition) are around 1100PIDs. They need to be assigned in batches by editing the Inbound Delivery document, prior to packing.
- At the moment vendors are onboarded on **EDI**, the packing details will come automatically with the Advanced Shipping Notice (**ASN**).

INBOUND DELIVERY – Packing & Multilevel Packing

Inbound Cord.
Pack

- The Transportation Planning in TM provides the planner with the SOW as a basis for solicitation. In some cases, it is important to reflect detailed packaging and shipment content on the SOW so that the Freight Forwarder can provide a better freight cost estimate. This can be the case for outbound deliveries belonging to STOs or inbound deliveries belonging to goods purchases.

- Reflecting in ECC how a shipment is packed is necessary for the FFW and/or other purposes.

  - For details on how to pack in ECC please refer to the Logistics Execution Job aid 'Outbound Delivery processing for Stock Transfers Orders', especially the section -perform packing on an Outbound delivery, which can be found here: https://umoja.un.org/sites/umoja.un.org/files/umoja_job_aid_-_outbound_delivery_processing_for_stos_v1.1.pdf;

  - and for Inbound deliveries please refer to the TM job aid "Perform Packaging on Inbound Delivery", which can be found here: https://umoja.un.org/sites/umoja.un.org/files/umoja_job_aid_-_tm_planning_-_perform_packing_-_december_2019_-_v2.pdf

INBOUND DELIVERY – Packing & Multilevel Packing

Inbound Cord.
Pack

- After planning is done in TM, the SOW will reflect the packaging level in ECC. A new column “Pack. Seq.” now shows the packaging hierarchy. The column “Packaging” shows the packaging description as maintained in ECC. ***Please note** all packaging will show “Dimensions, Volume, and Weight” on the TM SOW if these fields are maintained in ECC. Many of the frequently used packaging materials in ECC have been maintained with dimension, volume, and tare weight in the material master.

Origin	DAP, UNGSC Brindisi, Italy
Destination	DOOR UNMISS, Aweil, South Sudan

Pack. Seq	Packaging	Item Description + material number info (if applicable)	DG and/or SH	Package ID	QTY	Dimensions L*W*H (Meters) (per unit)	Volume (M3) (per unit)	Weight (KG) (per unit)	Goods Value (USD)	Cargo Readiness Date
1	Container:Sea,20ft, Packing Reference			100000 1330	1	6.100 * 2.440 * 2.590	38.55	2398.00		24-JAN-20
1.1	Pallet			100000 1334	1			98.00		24-JAN-20
		MatDesc: Barrier: Defence,1.2 mWx0.6mH x0.6mD,Grn MatNo: 1100000203		100000 1334	44				1,447.16	24-JAN-20
1.1.1	Cooler: Box			100000 1333	1			53.00		24-JAN-20

INBOUND DELIVERY – Packing & Multilevel Packing

Inbound Cord.
Pack

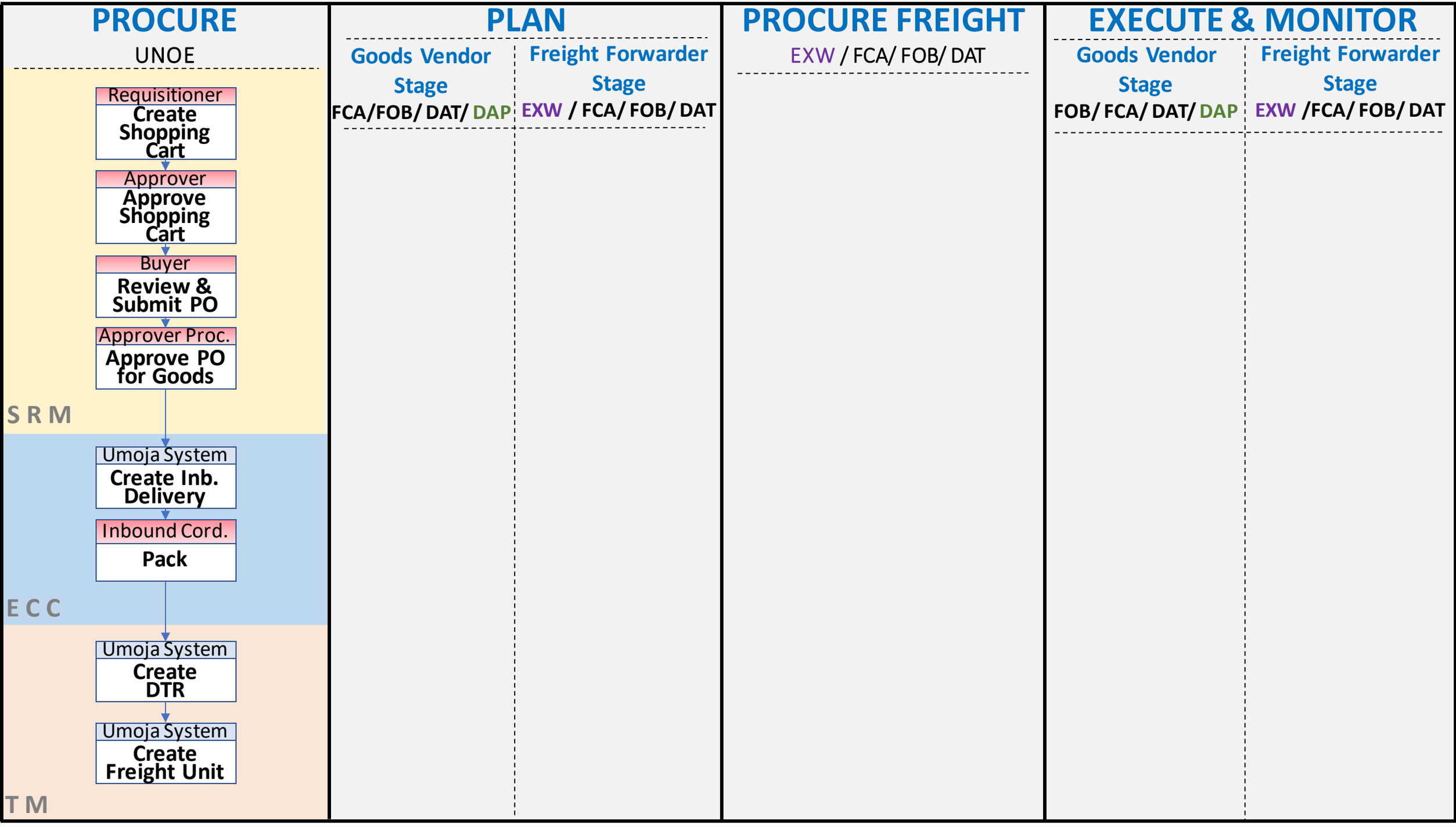
- The TM SOW shows dimensions in meters, volume in cubic meters, and weight in kg. If packaging information is received in different UoM, please note that most UoMs (please see Exceptions for further details) are automatically converted into meter, m3 and kg, but please verify to make sure that they are shown correctly on the SOW.

- If the packaging in ECC has to be done in a detailed level but the TM SOW should not show such detail, the information on the SOW have to be deleted while opened in Word.

- For shipments that do not originate in ECC such as **COE** shipments the **multi-packaging option does not exist**.

Currently the following UoM are not converting automatically into meter, m3 and kg, hence please convert manually during packing process in ECC into meter, m3 and kg.

Dimension	Internal Measurement unit	Commercial Measurement unit	Measurement unit text
LENGTH	FT	FT	Foot
LENGTH	YD	YD	Yards
MASS	KT	KT	Kilotonne
MASS	LB	LB	US pound
MASS	OZ	OZ	Ounce
MASS	TON	TON	US ton
VOLUME	CL	CL	Centiliter
VOLUME	FT3	FT3	Cubic foot
VOLUME	GAL	GAL	US gallon
VOLUME	"3	"3	Cubic inch
VOLUME	FOZ	FOZ	Fluid Ounce US
VOLUME	PT	PT	Pint, US liquid
VOLUME	QT	QT	Quart, US liquid
VOLUME	YD3	YD3	Cubic yard


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
EXECUTE & MONITOR
Goods Vendor Stage
FOB/ FCA/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

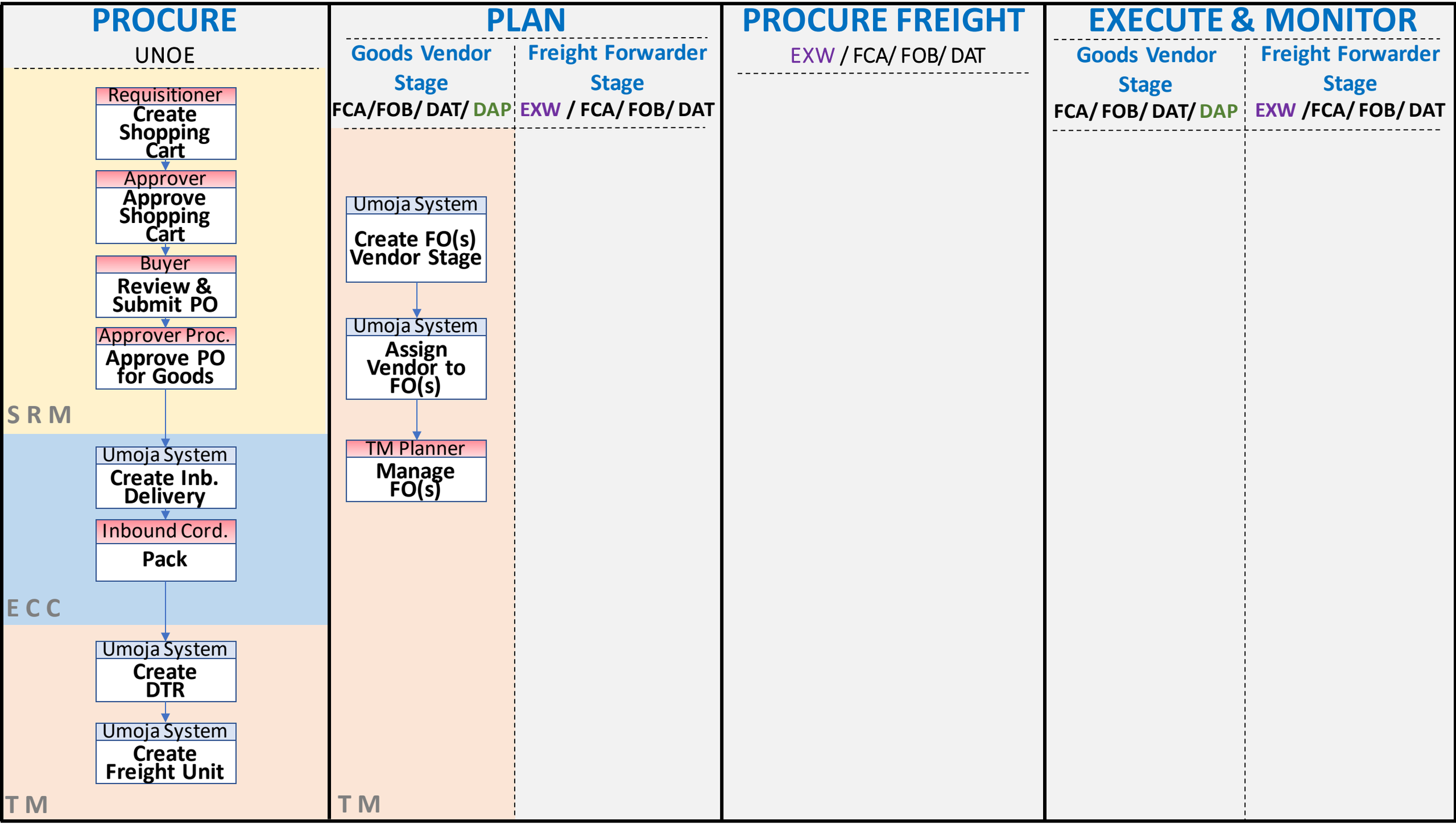
UNOE – PROCURE PHASE – DTR & FREIGHT UNIT

Umoja System
Create DTR
▼
Umoja System
Create Freight Unit
T M

- Once the **Inbound Delivery** (IBD) is created in ECC, the system automatically creates the following documents in TM: a **Delivery-based Transportation Requirement** (DTR) and a **Freight Unit** (FU).
- Both the DTR and the FU are visible in the Inbound Delivery (ECC) by using the "**TM Status**" tab.

ERP-TM Document Flow	ERP Doc	Quantity	Unit	Status	BTD ID	BTD Descr.	BTD Cat.	BTD Cat.
Inbound Delivery	180075157				180075157	Inbound Delivery 180075157		
Delivery-Based Transportation Requirement	180075157				1100000099	DTR for UNOE 1100000099 (Inbound Delivery 180075157)	02	Delivery-Based Tr
Inbound Delivery Item	180075157	2	EA		1100000099	DTR for UNOE 1100000099 (Inbound Delivery 180075157)	02	Product
Freight Unit	180075157				4100000395	UNOE Planned Frt Unit 4100000395	FU	Freight Unit

- With the current system configuration, there is a "**1 to 1 relationship**" between IBD, DTR & FU: 1 Inbound Delivery – 1 Delivery-based Transportation Requirement – 1 Freight Unit.
- The **Delivery-based Transportation Requirement** (DTR) document is the representation in TM of the ECC Inbound Delivery document.
- A **Freight Unit** (FU) represent a set of goods that are transported together across the entire transportation chain. The following data is available in the FU document:
  - Items
  - Transportation stages
  - Document flow
  - Status information


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
Umoja System
Create FO(s) Vendor Stage
Umoja System
Assign Vendor to FO(s)
TM Planner
Manage FO(s)
T M
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

UNOE – PLAN PHASE – Goods vendor vs Freight Forwarder

Umoja System
Create DTR

Umoja System
Create Freight Unit

T M

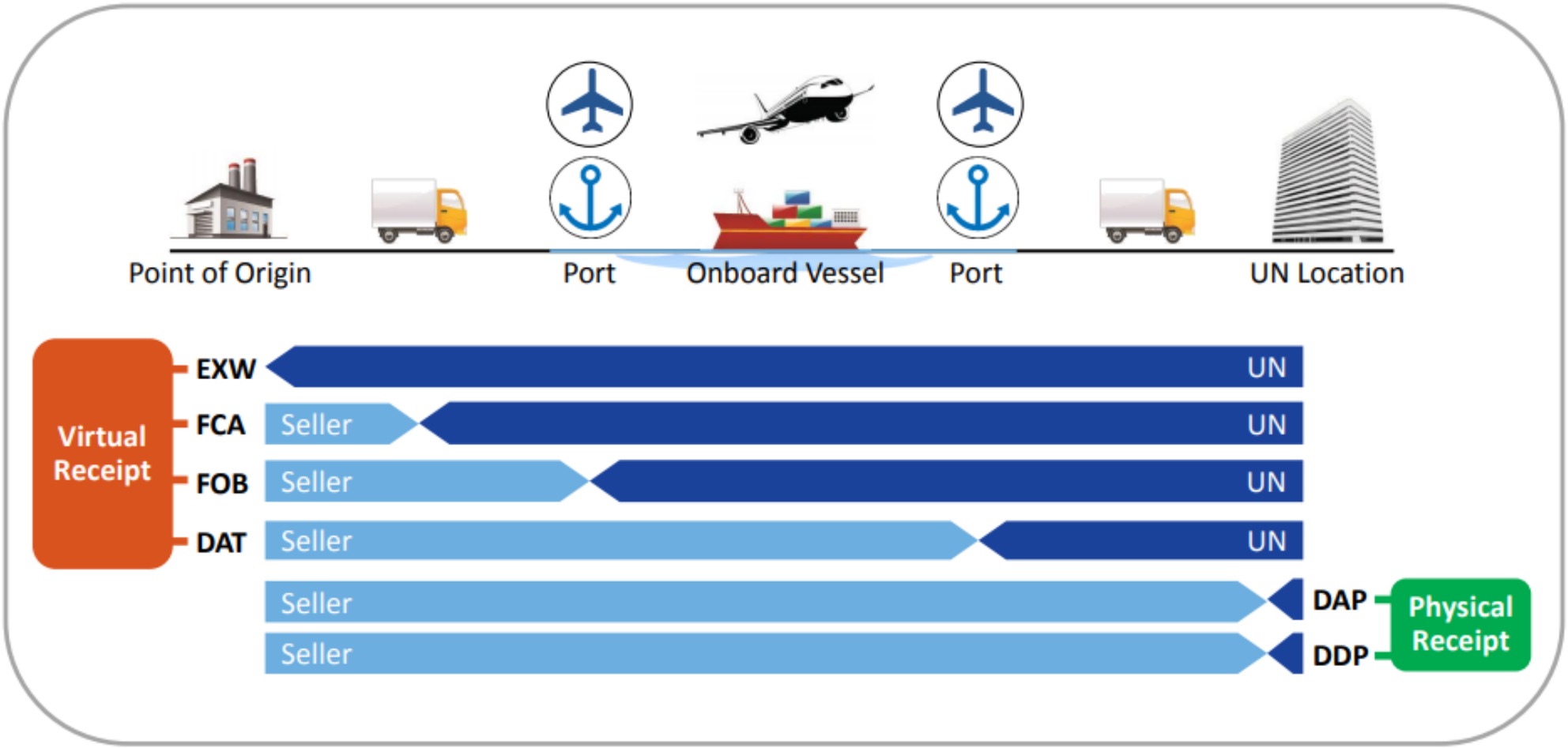
Goods Vendor

FCA/FOB/ DAT/ DAP

Create FO(s) Vendor Stage

Umoja System
Assign Vendor to FO(s)

TM Planner
Manage FO(s)



UNOE – PLAN PHASE – Goods vendor vs Freight Forwarder

Umoja System
Create DTR

Umoja System
Create Freight Unit

T M

Goods

Vendor

FCA/FOB/ DAT/ DAP

Create FO(s) Vendor Stage

EXW → **UN**

Umoja System
Assign Vendor to FO(s)

Who manages the legs?

Freight Order
Used for execution

TM Planner
Manage FO(s)

Pre (HoL -> Port)	Main (Port -> Port)	On (Port -> Destination)
Receiving Plant	Receiving Plant	Receiving Plant

UNOE – PLAN PHASE – Goods vendor vs Freight Forwarder

Umoja System
Create DTR

Umoja System
Create Freight Unit

T M

Goods

Vendor

FCA/FOB/ DAT/ DAP

Create FO(s) Vendor Stage

Umoja System
Assign Vendor to FO(s)

TM Planner
Manage FO(s)

Who manages the legs?

Freight Order
Used for execution

Pre (Source -> HoL)	Main (HoL -> Port)	On (Port -> Destination)
FCA: Vendor as carrier	FCA: Receiving Plant	FCA: Receiving Plant

UNOE – PLAN PHASE – Goods vendor vs Freight Forwarder

Umoja System
Create DTR

Umoja System
Create Freight Unit

T M

Goods

Vendor

FCA/FOB/ DAT/ DAP

Create FO(s) Vendor Stage

Umoja System
Assign Vendor to FO(s)

TM Planner
Manage FO(s)

Who manages the legs?

Freight Order
Used for execution

Pre (Source -> HoL)	Main (HoL -> Port)	On (Port -> Destination)
FOB: Vendor as carrier	FOB: Receiving Plant	FOB: Receiving Plant

UNOE – PLAN PHASE – Goods vendor vs Freight Forwarder

Umoja System
Create DTR

Umoja System
Create Freight Unit

T M

Goods

Vendor

FCA/FOB/ DAT/ DAP

Create FO(s) Vendor Stage

Umoja System
Assign Vendor to FO(s)

TM Planner
Manage FO(s)

Who manages the legs?

Freight Order
Used for execution

Pre (Source -> Port)	Main (Port -> HoL)	On (HoL -> Destination)
DAT: Vendor as carrier	DAT: Vendor as carrier	DAT: Receiving Plant

UNOE – PLAN PHASE – Goods vendor vs Freight Forwarder

Umoja System
Create DTR

↓

Umoja System
Create Freight Unit

T M

Goods

Vendor

FCA/FOB/ DAT/ DAP

Create FO(s) Vendor Stage

Umoja System
Assign Vendor to FO(s)

TM Planner
Manage FO(s)

Seller ——— DAP

Who manages the legs?

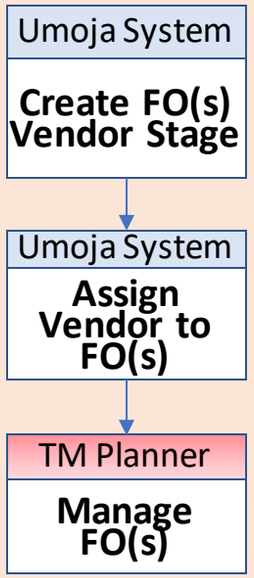
Freight Order
Used for execution

Pre (Source -> Port)	Main (Port -> Port)	On (Port -> Destination)
Vendor as carrier	Vendor as carrier	Vendor as carrier

UNOE – PLAN PHASE – GOODS VENDOR STAGE

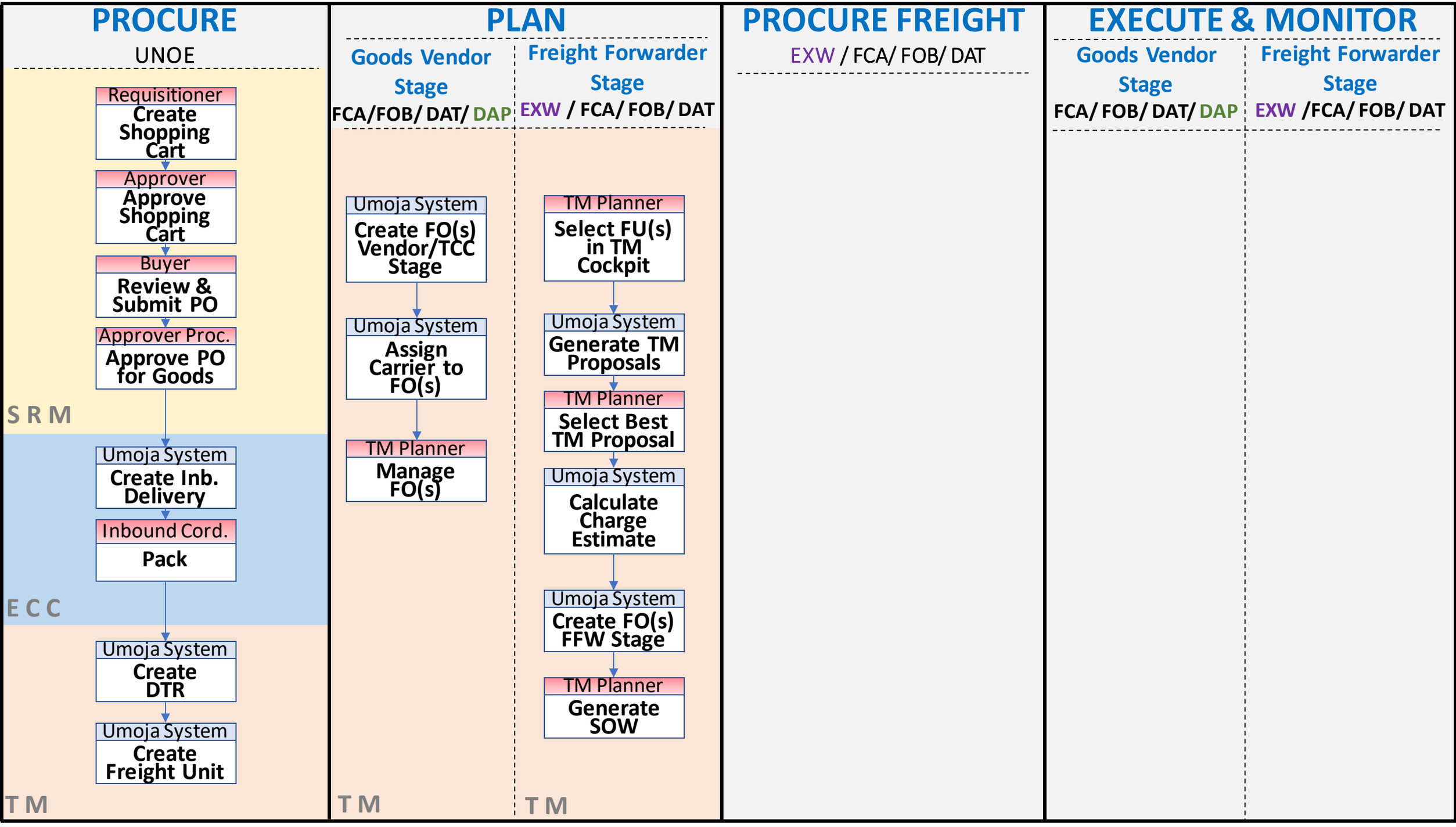
Goods Vendor

FCA/FOB/ DAT/ DAP



- In a UNOE scenario, the Goods Vendor stage applies to **FCA/ FOB/ DAT & DAP** Incoterms. In this stage the Goods Vendor is responsible for delivering the items to the agreed location.
- Based on the TM **Transportation Network** (Master Data), the system selects the default route between the vendor location and the delivery location and creates as many **Freight Orders** as legs in the route.
- The system automatically assigns the Goods Vendor *(e.g. Toyota)* as **Carrier** to these newly created Freight Orders.
- These automatically created Freight Orders are in "**Ready for Execution**" status allowing the Goods Vendor to connect to the Carrier Collaboration Portal (CCP) to submit the events related to each FO *(i.e. leg)*.
- Should the automatically created Freight Orders differ from the **vendor's actual route**, the TM Planner can delete and re-create them to reflect the real route and to facilitate the insertion of events at a later stage.

T M


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
Umoja System
Create FO(s) Vendor/TCC Stage
Umoja System
Assign Carrier to FO(s)
TM Planner
Manage FO(s)
T M
TM Planner
Select FU(s) in TM Cockpit
Umoja System
Generate TM Proposals
TM Planner
Select Best TM Proposal
Umoja System
Calculate Charge Estimate
Umoja System
Create FO(s) FFW Stage
TM Planner
Generate SOW
T M
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

UNOE – PLAN PHASE – FREIGHT FORWARDER STAGE – 1/4

Freight FW Stage
EXW / FCA/ FOB/ DAT

TM Planner

Select FU(s) in TM Cockpit

- In a UNOE scenario, the Freight Forwarder stage applies to **EXW** & **FCA/ FOB/ DAT** Incoterms. In this stage the Freight Forwarder is responsible for delivering the items to the final destination.
- Freight Units appear in the **Transportation Cockpit** filtered by **Profile** *(EXW vs non-DAP/EXW)*:.

Profile and Layout Sets (4)

Save | New | Copy | Refresh Unplanned Requirements | Refresh Job Status

Description	N...	Freight Unit Selection Profile	Transportation Unit Selection Profile
UNOE DAP 2		ZSEL_FU_UNOE_SUPPLIER_DELIVERED	ZSEL_FO_UNOE_SUPPLIER_DELIVERED
UNOE non-DAP/EXW Supplier Stage		ZSEL_FU_UNOE_SUPPLIER_DEL_STAGE	ZSEL_FO_UNOE_SUPPLIER_DELIVERED
UNOE EXW		ZSEL_FU_UNOE_EXW_FORWARDER_DELIVERED	ZSEL_FO_UNOE_FORWARDER_DELIVERED
UNOE non-DAP/EXW - FFW Stage		ZSEL_FU_UNOE_FORWARDER_DELIVERED	ZSEL_FO_UNOE_FORWARDER_DELIVERED

Goods Vendor Stage
- DAP
- FCA, FOB, DAT

Freight FW Stage
- EXW
- FCA, FOB, DAT

- Several Freight Units (FUs) with the same pick-up and destination locations can be **consolidated** to be transported together. There is a **time window** *(currently 7 days)* that allows multiple FUs to be consolidated.

Freight Unit Stages (10/12)

Split/Merge | Stages | Create Capacity Document | Create Multiple Capacity Documents | Remove Capacity Document

I..	Freight Unit	S...	P	Loading Location	Unloading Loc...	Earliest Requested Date...	Latest Requested Date...	E
	4100000361	40		MOMBASA_PORT	SPSSA2	07.01.2019	12.12.2018	1
	4100000353	20		DURBAN_PORT	SPSSA1	26.11.2018	03.12.2018	0
	4100000400	20		DURBAN_PORT	SPSSA1	04.03.2019	11.03.2019	0
	4100000401	20		DURBAN_PORT	SPSSA1	10.03.2019	17.03.2019	0
	4100000394	20		DURBAN_PORT	SPLBA1	10.03.2019	06.04.2019	0

Several FUs can be consolidated for transportation purposes

UNOE – PLAN PHASE – FREIGHT FORWARDER STAGE – 2/4

Freight FW Stage
EXW / FCA/ FOB/ DAT

TM Planner
Select FU(s) in TM Cockpit

↓

Umoja System
Generate TM Proposals

↓

TM Planner
Select Best TM Proposal

- The system displays a list of transportation proposals for the set of FUs selected based on the existing Transportation Network Master Data.
- Transportation Proposals are organized in the following way:
  - Transportation Proposal Number
    - Freight Unit Number
      - Legs of Goods Vendor Stage *(pre, main, on)*
      - Legs of Freight Forwarder Stage *(pre, main, on)*

** TM Planner will select the best proposal based on distance, duration, etc.*

Transportation Proposals

Define Filter

Document Hierarchy	Selected	P	M	Means of Transport	Source Location	Destination Location	Loading St...	Unloading...	Distance	D...	Duration	Carrier
Transportation Proposal 11				UNOE_SEA	SU1110001300	SPSSA1	21.11.2018...	20.03.2019...		KM		1110001300
Freight Unit 4100000401				UNOE_SEA	SU1110001300	SPSSA1	21.11.2018...	20.03.2019...		KM	1,090:55	1110001300
Stage 00001				UNOE_TRK	SU1110001300	AMSTERDAM_PORT	21.11.2018...	29.11.2018...		KM	187:00	1110001300
Stage 00002				UNOE_SEA	AMSTERDAM_PORT	RICHARDS_PORT	29.11.2018...	27.12.2018...		KM	686:38	1110001300
Stage 00003				UNOE_TRK	RICHARDS_PORT	DURBAN_PORT	11.03.2019...	11.03.2019...		KM	1:55	1110001300
Stage 00004				UNOE_SEA	DURBAN_PORT	MOMBASA_PORT	11.03.2019...	19.03.2019...	3,012.552	KM	198:37	
Stage 00005				UNOE_TRK	MOMBASA_PORT	SPSSA1	19.03.2019...	20.03.2019...	1,336.961	KM	16:42	
Freight Unit 4100000400				UNOE_SEA	SU1110001300	SPSSA1	21.11.2018...	20.03.2019...		KM	1,090:55	1110001300
Stage 00001				UNOE_TRK	SU1110001300	AMSTERDAM_PORT	21.11.2018...	29.11.2018...		KM	187:00	1110001300
Stage 00002				UNOE_SEA	AMSTERDAM_PORT	RICHARDS_PORT	29.11.2018...	27.12.2018...		KM	686:38	1110001300
Stage 00003				UNOE_TRK	RICHARDS_PORT	DURBAN_PORT	11.03.2019...	11.03.2019...		KM	1:55	1110001300
Stage 00004				UNOE_SEA	DURBAN_PORT	MOMBASA_PORT	11.03.2019...	19.03.2019...	3,012.552	KM	198:37	
Stage 00005				UNOE_TRK	MOMBASA_PORT	SPSSA1	19.03.2019...	20.03.2019...	1,336.961	KM	16:42	
Transportation Proposal 12				UNOE_SEA	SU1110001300	SPSSA1	21.11.2018...	22.03.2019...		KM		1110001300
Freight Unit 4100000401				UNOE_SEA	SU1110001300	SPSSA1	21.11.2018...	20.03.2019...		KM	1,090:55	1110001300

UNOE – PLAN PHASE – FREIGHT FORWARDER STAGE *(EXW-FCA)* - 3/4

Freight FW Stage
EXW / FCA/ FOB/ DAT

TM Planner
Select FU(s) in TM Cockpit

↓

Umoja System
Generate TM Proposals

↓

TM Planner
Select Best TM Proposal

↓

Umoja System
Calculate Charge Estimate

↓

Umoja System
Create FO(s) FFW Stage

- The system creates the new **Freight Orders** for the FFW stage based on the proposal selected *(one for each leg).*

Freight Orders/Freight Bookings (2)

New | Remove Vehicle | Mass Change | Check | Fix | Unfix | Scheduling | Carrier Selection | Tendering | Calculate Charges | Search:

Mode of Transport	Document	Status	Maxi...	Source Location	Destination Location	Departure Date	Dep...	D..	Planned Arrival D...	Plan...	A.	Gross Duration	Total Net Dur...	Net...	N...	Carrier	Fixin...	Dan...	Means of Tr...
	6100010624		0%	DURBAN_PORT	MOMBASA_PORT	11.03.2019	08:55:36	C...	19.03.2019	16:33:15	U..	198:37	150:37	9,600	KG	ZDUMMY_CAR			UNOE_SEA
	6100010625		8%	MOMBASA_PORT	SPSSA1	19.03.2019	16:33:15	U...	20.03.2019	09:15:58	U..	16:42	16:42	9,600	KG	ZDUMMY_CAR			UNOE_TRK

- The Carrier is defaulted to ZDUMMY_CAR until the freight is awarded and the real carrier is assigned.
- The system automatically calculates the estimated Charges based on the “Charges Master Data”.

Display UNOE Planned Frt Order (FF Deliv) 6100010624

Save | Cancel | Edit | Refresh | Copy | Multiple Copies | Check | Follow Up | Scheduling | Subcontracting | Create Service Order | Schedule | Set Status

General Data | Business Partner | Items | Stages | Utilization | Subcontracting | Document Flow | **Charges** | Execution | Notes | At

Invoicing Status:	01	Not Invoiced	Calculation Date:	26.11.2018	17:02:14 CE
Charge Calc. Status:	02	Calculated	Manually-Changed Calc. Date:		
Total Amount in Local Currency:	9,854.70	USD	Exchange Rate Date:	26.11.2018	
Total Amount in Document Currency:	9,854.70	USD	Manually-Changed Exchange Rate Date:		
Rounded Total Amount in Document C... :	9,854.70	USD			
Rounded Amount Difference in Docum... :	0.00	USD			
Late Changes:					

UNOE – PLAN PHASE – FREIGHT FORWARDER STAGE *(EXW-FCA)* - 4/4

Freight FW Stage
EXW / FCA/ FOB/ DAT

TM Planner
Select FU(s) in TM Cockpit

↓

Umoja System
Generate TM Proposals

↓

TM Planner
Select Best TM Proposal

↓

Umoja System
Calculate Charge Estimate

↓

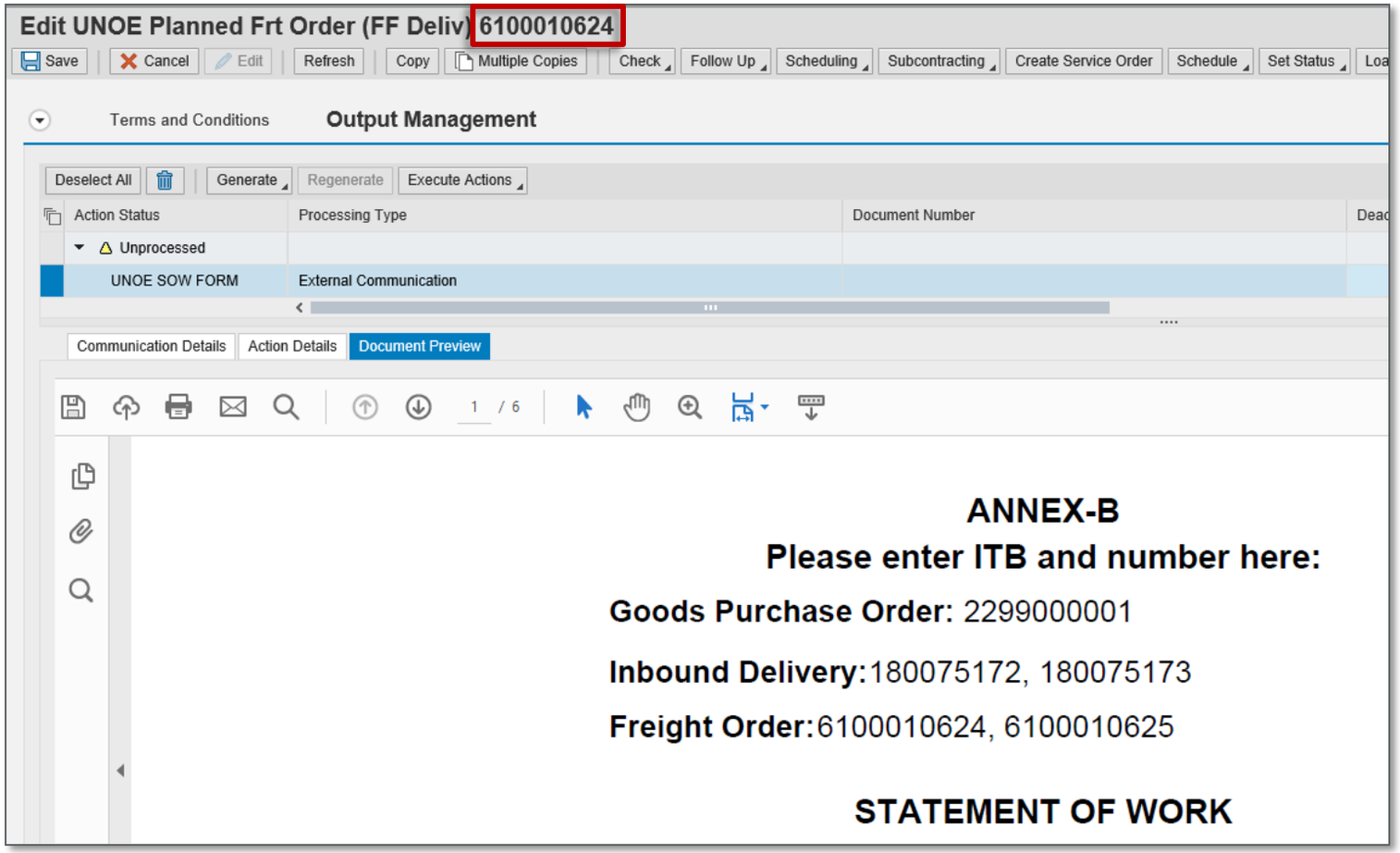
Umoja System
Create FO(s) FFW Stage

↓

TM Planner
Generate SOW

T M

- A "**Statement Of Work**" document (SOW) can be downloaded from each Freight Order. The SOW can be printed and **edited**. The SOW serves as an input for the Freight Procurement phase.
- The **SOW** includes all the Freight Orders related to the same Shipment.



- Specific templates are available for UNOE, COE & Troops.
- Only the UNOE/STO short form SOW in TM shows the multi-level packaging.
- The logic/layout for UNOE and STO short form SOW are the same, the form might look different due to content of the shipment.

UNOE – Statement of Work

TM Planner

Generate SOW

- Shipments that are (partly) carried out by UN owned carriers are reflected on TM SOWs Short Form.
- This functionality should work for all types of UN responsible shipments (except DAP or DAP-like shipments).
- The SOW serves as a base document for solicitation. In some cases, part of the shipment or the whole shipment are carried out with UN owned assets:
  - When the whole shipment is carried out with UN owned carriers, no SOW for solicitation would be provided in TM.
  - For partly delivered shipments with UN owned carrier, the parts that are transported by UN owned carrier will be excluded from the SOW. This is only for the first FO(s) or last FO(s).

NOTE: After planning in TM is done, the UN owned carrier needs to be assigned to the Freight Order(s) (FOs) that will be carried out with UN assets. Only afterwards the SOW can be generated and will show the requirements minus the parts assigned to UN owned carrier.

UNOE – Statement of Work

TM Planner

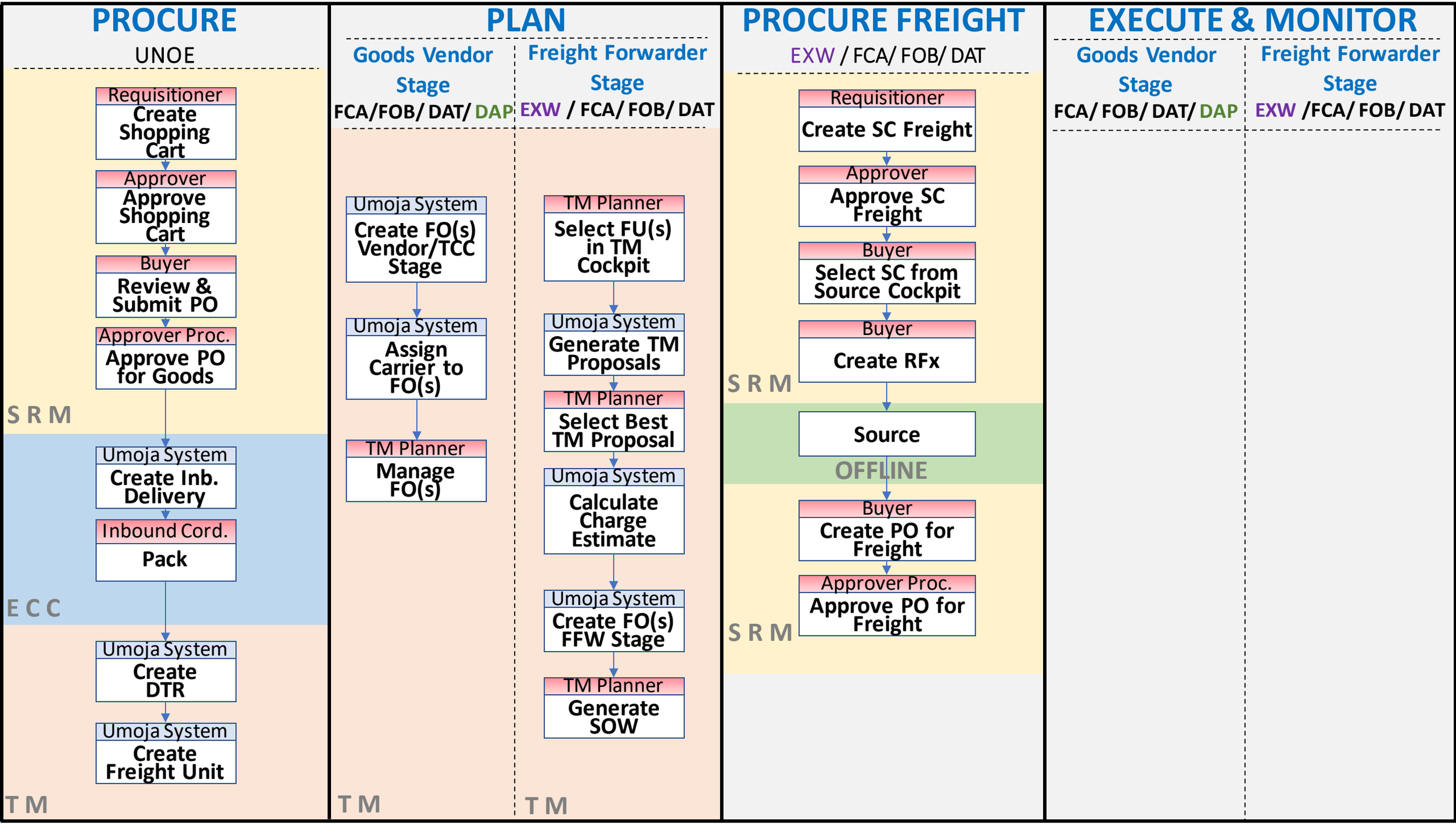
Generate SOW

Only the UNOE/STO short form SOW in TM currently:

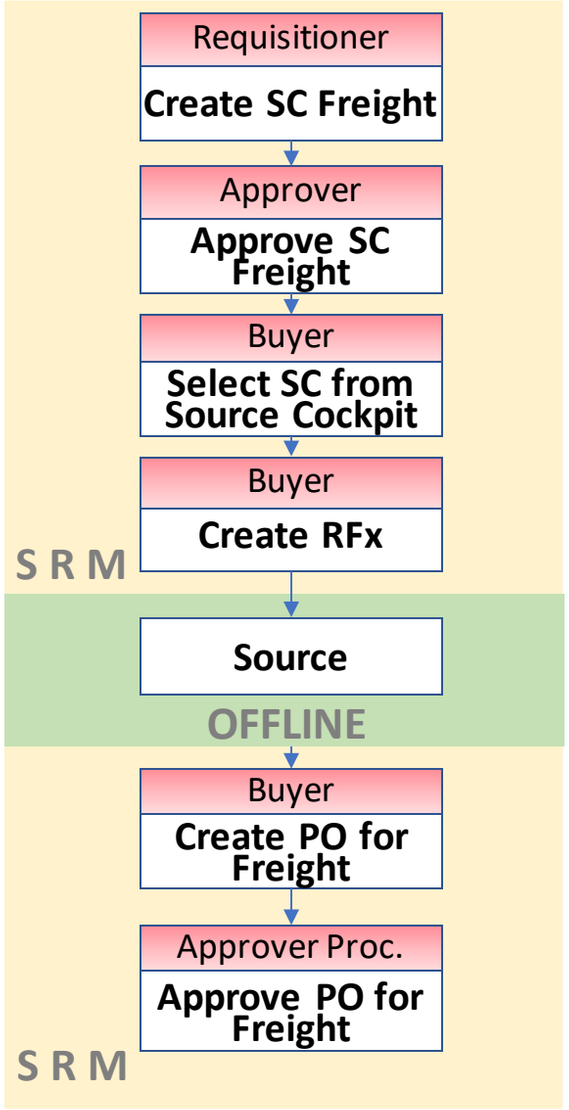
- Adjusts to exclude UN owned carrier portions.
- Shows the FOs, locations, and dates adjusted according to UN owned carrier assignment for STO and UNOE shipments.

The SOW Short Form needs to be refreshed (or re-generated) after UN owned carrier was assigned to TM FO(s) to show adjustment of location(s)/date(s). Like this it will show the requirements minus the FOs for the parts where the UN owned carrier will be used.

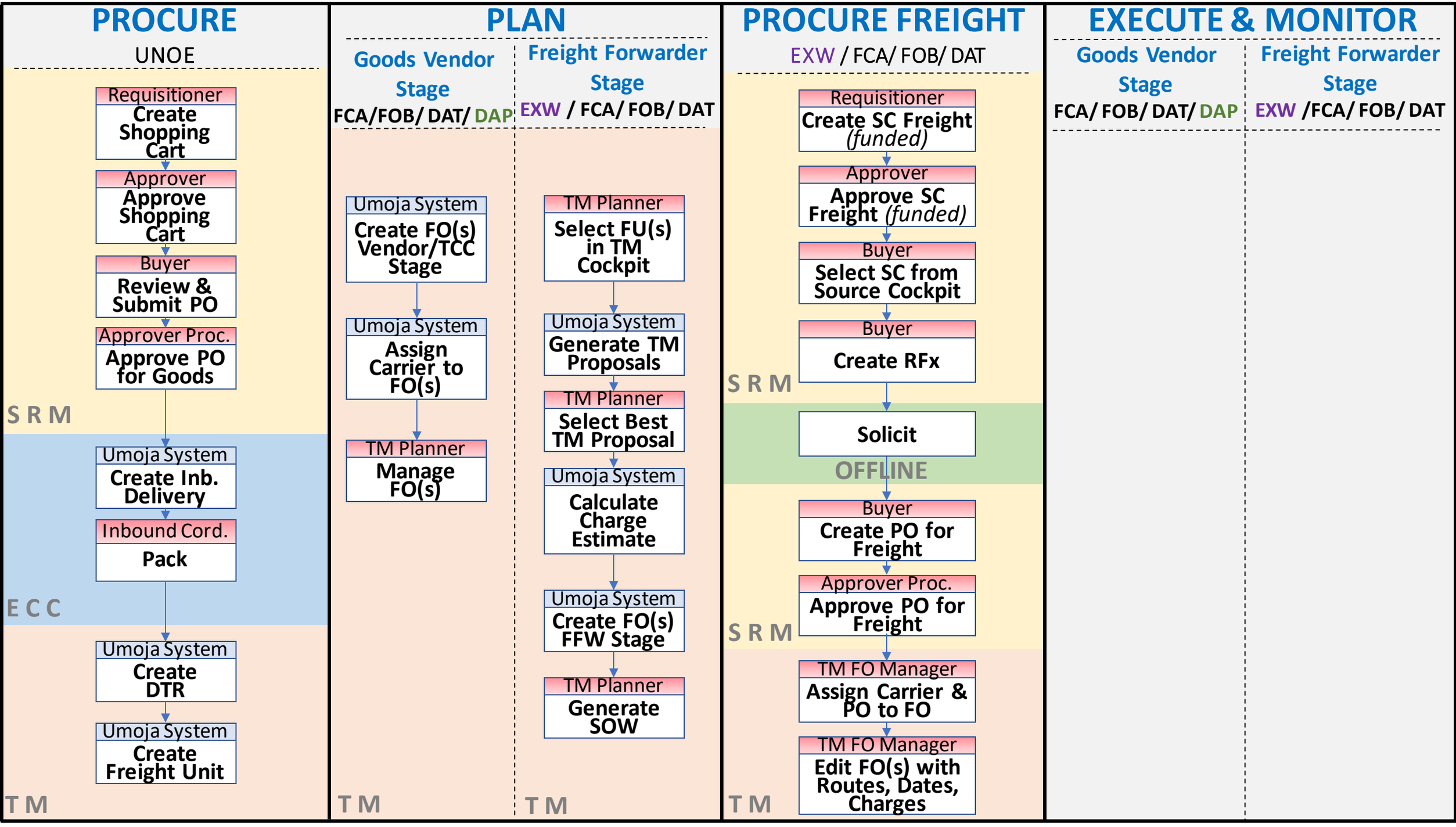
NOTE: In case that the SOW does not show the requirement excluding the UN owned carrier assigned parts, delete the SOW Short Form and then create a new SOW Short Form. This functionality does not work if FO(s)/legs is in the middle of a shipment and the responsibility of one entity was assigned to an UN owned carrier. Only if the first FO(s) or last FO(s) is assigned to a UN owned carrier.


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
Umoja System
Create FO(s) Vendor/TCC Stage
Umoja System
Assign Carrier to FO(s)
TM Planner
Manage FO(s)
T M
TM Planner
Select FU(s) in TM Cockpit
Umoja System
Generate TM Proposals
TM Planner
Select Best TM Proposal
Umoja System
Calculate Charge Estimate
Umoja System
Create FO(s) FFW Stage
TM Planner
Generate SOW
T M
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
Requisitioner
Create SC Freight
Approver
Approve SC Freight
Buyer
Select SC from Source Cockpit
Buyer
Create RFx
S R M
Source
OFFLINE
Buyer
Create PO for Freight
Approver Proc.
Approve PO for Freight
S R M
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

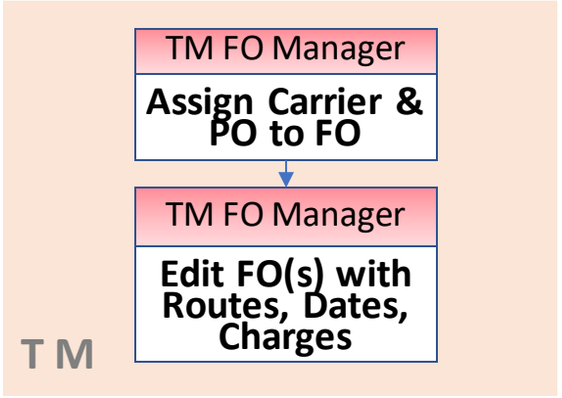
UNOE – PROCURE FREIGHT PHASE – 1/2



- The Freight Procurement steps in the system remain very similar as they currently are.
- Below some items to be considered with the TM implementation:
  - ✓ Freight Services are requested in a separate Shopping Cart *(no more $1 line for freight in the goods shopping cart).*
  - ✓ The SOW to be attached in the Freight Shopping Cart can be downloaded directly from Umoja TM.
  - ✓ TM is now the single source of information for the transportation requirements.


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
Umoja System
Create FO(s) Vendor/TCC Stage
Umoja System
Assign Carrier to FO(s)
TM Planner
Manage FO(s)
T M
TM Planner
Select FU(s) in TM Cockpit
Umoja System
Generate TM Proposals
TM Planner
Select Best TM Proposal
Umoja System
Calculate Charge Estimate
Umoja System
Create FO(s) FFW Stage
TM Planner
Generate SOW
T M
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
Requisitioner
Create SC Freight (funded)
Approver
Approve SC Freight (funded)
Buyer
Select SC from Source Cockpit
Buyer
Create RFx
S R M
Solicit
OFFLINE
Buyer
Create PO for Freight
Approver Proc.
Approve PO for Freight
S R M
TM FO Manager
Assign Carrier & PO to FO
TM FO Manager
Edit FO(s) with Routes, Dates, Charges
T M
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT

UNOE – PROCURE FREIGHT PHASE – 2/2



- Once the freight services have been awarded, the Freight Order in TM has to be updated with the **selected carrier** and the related **purchase order number**.
- Once the carrier is assigned in the FO, the FO execution status changes to "**Ready for Execution**" allowing the freight forwarders to submit the related events.
- Moreover the Freight Order needs to be updated with:
  - ✓ Actual **Route**: If the route selected by the carrier is different to the planned route, the FO has to be updated with the new route as it is used to report events.
  - ✓ Actual **Dates**: The planned dates need to be updated in the Freight Order based on the information provided by the Freight Forwarder .
  - ✓ Actual **Charges**: The Freight Order charges have to be updated with the actual ones appearing in the Freight Purchase Order. The system allows comparing the estimated charges and the actual charges for reporting purposes.

TM

TM FO Manager

Edit FO(s) with Routes, Dates, Charges

UNOE – Update Locations in Freight Unit (Exceptions 1/2)

The Transportation Planning in TM is done at a time before the exact route is known. Hence, after the solicitation process has ended, it might be required that one or more locations of the shipment route in TM need to be updated.

The standard process is to update the locations on the main carriage of the FOs. In rare cases this FO update can lead to a planning removal, in such a case the User should leave the FO without saving and use the below described process.

The **change of locations on the FU** should be only used if the location change on the Freight Order (FO) would lead to a planning removal.

T M

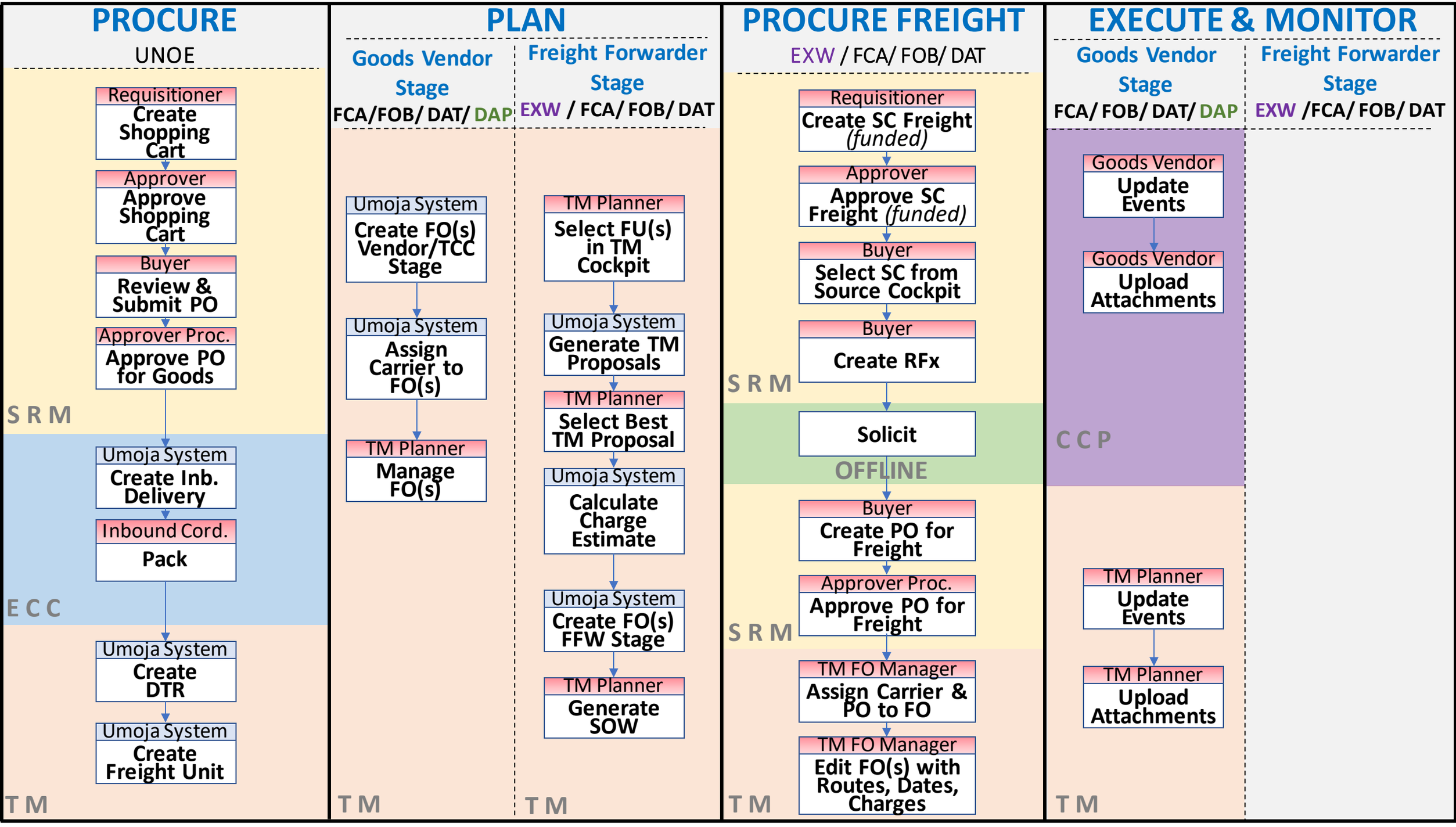
TM FO Manager

Edit FO(s) with Routes, Dates, Charges

UNOE – Update Locations in Freight Unit (Exceptions 2/2)

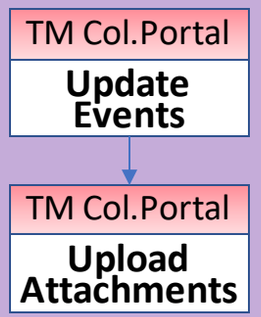
These updates are usually done by PD or other colleagues responsible and should be done at the same time when the carrier and SRM freight PO are updated. The timely update is important as after the carrier has been assigned the FOs get send to the CCP and are visible to the Freight Forwarders for further action.

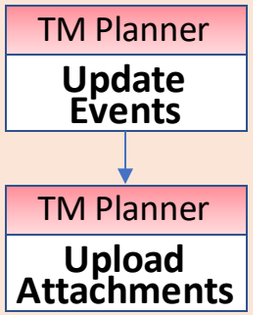
- FCA shipments with “Any_Port” location, need to be updated after the solicitation process has ended.
- Locations on FO or FU cannot be updated anymore if status of FO is “in execution”.
- FOs with dummy carrier (unassigned) or with *any_port* as source or destination location cannot be sent through EDI.
- SAP standard does not allow location changes on shipments with >1 AIR or SEA leg. In such cases if the (air)ports need to be changed, the existing FOs and FU need to be deleted and planning need to be executed with the correct (air)ports route.
- In cases of STO FCA, the ports from Handover location to Final destination cannot be updated on FU.
- Only the destination location of a stage can be changed


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
Umoja System
Create FO(s) Vendor/TCC Stage
Umoja System
Assign Carrier to FO(s)
TM Planner
Manage FO(s)
T M
TM Planner
Select FU(s) in TM Cockpit
Umoja System
Generate TM Proposals
TM Planner
Select Best TM Proposal
Umoja System
Calculate Charge Estimate
Umoja System
Create FO(s) FFW Stage
TM Planner
Generate SOW
T M
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
Requisitioner
Create SC Freight (funded)
Approver
Approve SC Freight (funded)
Buyer
Select SC from Source Cockpit
Buyer
Create RFx
S R M
Solicit
OFFLINE
Buyer
Create PO for Freight
Approver Proc.
Approve PO for Freight
S R M
TM FO Manager
Assign Carrier & PO to FO
TM FO Manager
Edit FO(s) with Routes, Dates, Charges
T M
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT
Goods Vendor
Update Events
Goods Vendor
Upload Attachments
C C P
TM Planner
Update Events
TM Planner
Upload Attachments
T M

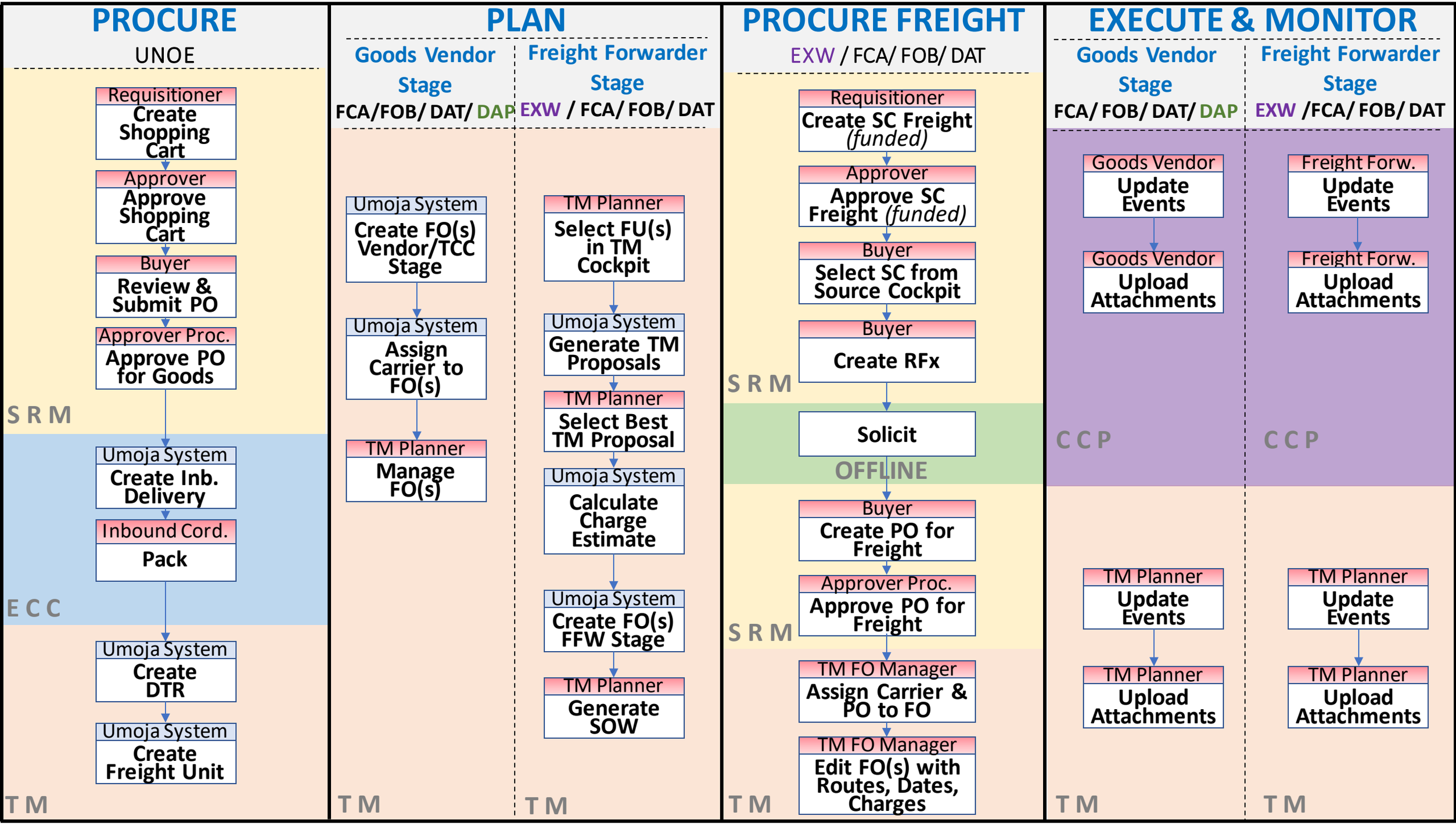
UNOE – EXECUTE & MONITOR PHASE - GOODS VENDOR STAGE

Goods Vendor / TCC Stage
FCA/ FOB/ DAT/ DAP

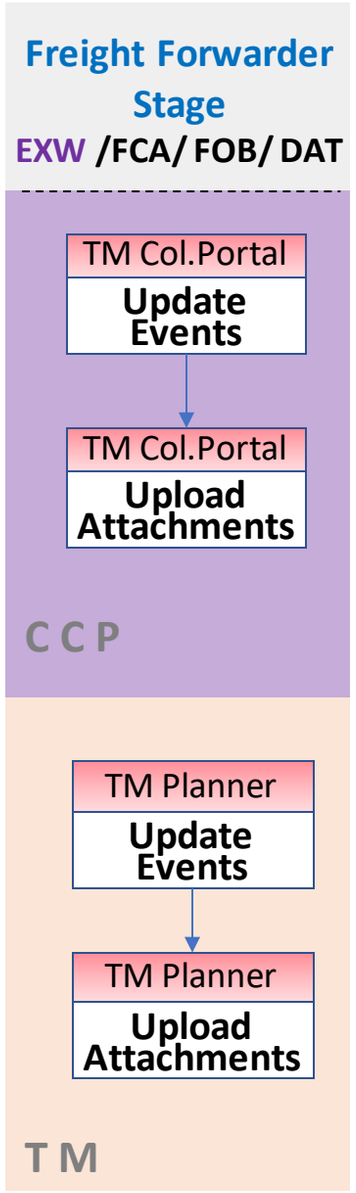




- Goods Vendors will be provided with login credentials for the Umoja Carrier Collaboration Portal (CCP).
- In CCP, Goods Vendors will see the Freight Orders they are responsible for the transportation. They will be able to submit events and upload attachments:
  - ✓ Examples of **Events**:
    - ✓ **Planned**: Loading Start/End, Departure, Arrival, etc.
    - ✓ **Unexpected**: Delay, Damage, etc.
  - ✓ Examples of **Attachments**: Packing List, Bill of Lading, Proof of Delivery, etc.
- All Events/Attachments submitted via CCP are displayed in TM.
- In case the vendor cannot connect to CCP, Umoja role "**TS.01 TM Planner and TS.02 Manage Freight Orders**" can update the related events/attachments directly in the TM module. These Events/Attachments are also displayed in CCP
- Once the first event is submitted, the FO execution status changes to "**In Execution**". No changes in the route are further allowed.
- Other Umoja follow on documents:
  - **DAP**: Physical Goods Receipt
  - **FCA**: Virtual Goods Receipt & Stock Transport Order


PROCURE
UNOE
Requisitioner
Create Shopping Cart
Approver
Approve Shopping Cart
Buyer
Review & Submit PO
Approver Proc.
Approve PO for Goods
S R M
Umoja System
Create Inb. Delivery
Inbound Cord.
Pack
E C C
Umoja System
Create DTR
Umoja System
Create Freight Unit
T M
PLAN
Goods Vendor Stage
FCA/FOB/ DAT/ DAP
Freight Forwarder Stage
EXW / FCA/ FOB/ DAT
Umoja System
Create FO(s) Vendor/TCC Stage
Umoja System
Assign Carrier to FO(s)
TM Planner
Manage FO(s)
T M
TM Planner
Select FU(s) in TM Cockpit
Umoja System
Generate TM Proposals
TM Planner
Select Best TM Proposal
Umoja System
Calculate Charge Estimate
Umoja System
Create FO(s) FFW Stage
TM Planner
Generate SOW
T M
PROCURE FREIGHT
EXW / FCA/ FOB/ DAT
Requisitioner
Create SC Freight (funded)
Approver
Approve SC Freight (funded)
Buyer
Select SC from Source Cockpit
Buyer
Create RFx
S R M
Solicit
OFFLINE
Buyer
Create PO for Freight
Approver Proc.
Approve PO for Freight
S R M
TM FO Manager
Assign Carrier & PO to FO
TM FO Manager
Edit FO(s) with Routes, Dates, Charges
T M
EXECUTE & MONITOR
Goods Vendor Stage
FCA/ FOB/ DAT/ DAP
Freight Forwarder Stage
EXW /FCA/ FOB/ DAT
Goods Vendor
Update Events
Goods Vendor
Upload Attachments
C C P
Freight Forw.
Update Events
Freight Forw.
Upload Attachments
C C P
TM Planner
Update Events
TM Planner
Upload Attachments
T M
TM Planner
Update Events
TM Planner
Upload Attachments
T M

UNOE – EXECUTE & MONITOR PHASE – FREIGHT FORWARDER STAGE



- Freight Forwarders will be provided with login credentials for the Umoja Carrier Collaboration Portal (CCP).
- In CCP, Freight Forwarders will see the Freight Orders they are responsible for the transportation. They will be able to submit events and upload attachments.
- All Events/Attachments submitted via CCP are displayed in TM.
- In case the vendor cannot connect to CCP, Umoja role "**TS.01 TM Planner and TS.02 Manage Freight Order**" can update the related events/attachments directly in the TM module. These Events/Attachments are also displayed in CCP
- Once the first event is submitted, the FO execution status changes to "**In Execution**". No changes in the route are further allowed.
- Other Umoja related documents:
  - **Predecessor documents** : Virtual Goods Receipt & Stock Transport Order
  - **Follow-on documents** : Physical Goods Receipt

TRANSPORTATION MANAGEMENT ENTERPRISE ROLES

- **TS.01 TRANSPORTATION PLANNER & EXECUTION**

  Main function is to create Freight Orders to execute a transportation plan. They can also submit events.

  This enterprise role has three flavors: UNOE, COE & Troops.

  - ✓ Query DTR (UNOE): display transportation requirements
  - ✓ Create/ edit FO (UNOE): execute the transportation plan in the cockpit on the FU selected
  - ✓ Submit events for FO: expected and unexpected
  - ✓ Generate Statement of Work (SoW) for freight

- **TS.02 MANAGE FREIGHT ORDER**

  Main function is to update Freight Order stages, dates, actual charges, carrier and Freight PO. They can also submit events.

- **TS.03 TM DISPLAY ALL**

  - ✓ Display access is granted to all TM documents: DTR, FU, and FO and Events against the FO
  - ✓ Monitors progress/ status of events of shipments through TM Cockpit

- **TS.04 TM MASTER DATA MAINTAINER**

  Main function is to maintain the Transportation Network (Locations, Zones, Lanes, etc.) and Transportation Rates.

  - ✓ Create, Change and Display Vendor in ECC
  - ✓ Manages Core Interfaces Master data from ECC to TM (Business Partners, Vendors, materials, plants, shipping points, etc)
  - ✓ Maintains TM Master Data (Locations, Transshipment Points, Handover Locations, Lanes, Zone, Network, Org. Structure, Default Routes)
  - ✓ Maintains SRM shipping addresses

TRANSPORTATION MANAGEMENT ENTERPRISE ROLES

- **TS.05 COLLABORATION PORTAL**

  Access the Carrier Collaboration Portal to submit related Events & Attachments.

  ✓ Vendors and Freight Forwarders: View awarded FO and submit events in CCP, including attachments/ notes.

- **TS. 06 TMEM Production Support**

  Assigned to Tier 1, Tier 2A, Tier 2B and Tier 3 (Umoja Support Desk, Umoja Service Center, Umoja Global Support)

- **TS.07 TM STO Transportation Planner**

  [similarly to TS.01],

  ✓ Creates Outbound Delivery after the STO is posted in TM by RD. 06: Logistic Users

  ✓ For non DAP and ExW, liaise with receiving plant TM planner to advise which FO to use for planning from handover location to final destination.

- **TS.08 TM STO Freight Procurement**

  [similarly to TS.02]

- **TS. 09 TM STO Display all**

  [similarly to TS.03]

TRANSPORTATION MANAGEMENT ENTERPRISE ROLES

- **BI.84_BI: SC_TMEM_Basic User**

TM & EM view access to summarized and formatted reports.

- ✓ Run, print, schedule, distribute formatted reports as published by Power Users in public folders or shared by Analytic Users

- **BI.85_BI: SC_TMEM_Analytic User**

Access to comprehensive analysis areas which can be challenging to use and misinterpreted.

- ✓ Create customized reports in Analysis Areas
- ✓ Share their prepared reports with others by BI inbox.

- **BI.86_BI: SC_TMEM_Power User**

Create customized reports in Analysis Areas reports.

- ✓ Publish reports: save a report in the public folder that is accessible to all BI users of the module.

TM RELATED ACRONYMS

ACRONYM	FULL FORM	ACRONYM	FULL FORM
SRM	Supplier Relationship Management	**DTR**	Delivery-based Transportation Requirement
ECC	ERP Central Component	**FWO**	Forwarding Order
TM	Transportation Management	**LOA**	Letter of Assist
CCP	Carrier Collaboration Portal	**FU**	Freight Unit
IBD	Inbound Delivery	**PO**	Purchase Order
SC	Shopping Cart	**SOW**	Statement of Work

THANK YOU!

Questions?