



# **SAP Premium Engagement Session**

## **SAP Transportation Management – Roadmap and Transformation**

June 15, 2023

PUBLIC

# Agenda

- Welcome - Mats Eriksson
- [Transportation Management – Roadmap and Transformation](#) - Eric Osterroth, Holger Wittmer
- [Introduction on Selective Transactional Data Migration](#) - David Nohe, Meike Helwig
- Closing - Eric Osterroth, Holger Wittmer, David Nohe, Meike Helwig



# SAP S/4HANA Transportation Management **Overview and Roadmap**

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SAP Logistics Product Management &  
Customer Success Management PCE

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SAP Logistics Product Management &  
Partner Success Management PCE



# Agenda

- 1. SAP TM - Strategy**
- 2. Overview and Highlights in SAP S/4HANA TM 2022**
- 3. Roadmap and Outlook**
- 4. Partner Success Management**

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# 01

## SAP S/4HANA TM Overview

# SAP Transportation Management **Solution Strategy**



## Functional

Continuous core improvement for SCE  
New industry capabilities  
Enhanced user experience



## Integration

Enhanced SCE platform integration  
Enhanced integration with SAP S/4HANA



## Deployment

SAP TM embedded in SAP S/4HANA  
SAP TM Standalone, connected to ECC or S/4HANA  
SAP TM in Cloud



## IoT & Networks

Real-time visibility via BN4L & partner networks  
Enhanced network enablement



**SAP S/4HANA**

**SAP Logistics Platform**

Warehouse Management

Transportation Management

Business Network for Logistics

**SAP S/4HANA**

**SAP Enterprise Management**



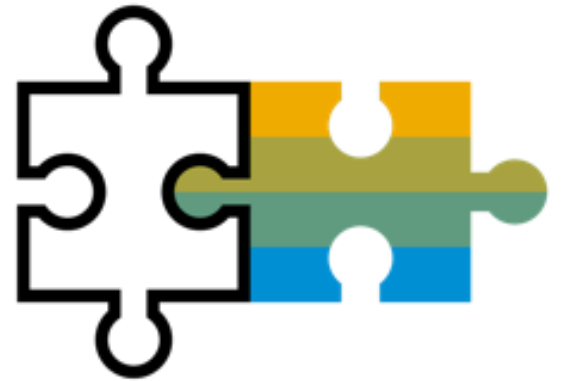
02

# SAP S/4HANA TM 2022

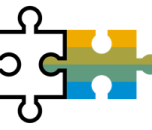
**Product updates and highlights**



# Integration



# General Integration Topics



## Make Inbound Deliveries visible for TM in the Stock Transport Orders process

### Scope

- Enable to connect inbound delivery to the inbound stop of a truck (Freight Unit inbound stop)
- Establish linkage between the inbound delivery and freight order in STO process
- LE-SHP to enable TM control key is set in the inbound delivery
- TM relevance, including ASR processes, Warehousing processing status, ...

Edit Road Freight Order with Subcontracting 6100009909 - Google Chrome

Idai2qm7.wdf.sap.corp:44320/ui2/nwbc/-roletest/Z\_TRANSPORTATION\_MANAGER/?sap-nwbc-node=app\_window\_body

SAP Edit Road Freight Order with Subcontracting 6100009909

Edit Refresh Copy Multiple Copies Check Follow Up Scheduling Subcontracting Create Service Order Schedule Set Status Load Plan Status (Stop) Execution Status Display Settings

General Data Business Partner Items Overview Stages Utilization Subcontracting Document Flow Charges Execution Notes Attachments Statuses Blocking Information Administrative Data Terms and Conditions

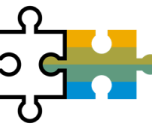
MK \* Change Hierarchy: Overview Insert Load Plan Status Unload Plan Status Execution Status Warehouse Processing Status Goods Movement Warehouse Door Status Move Up

Move Down

Details	Activity	Activity (Desc...)	Hand... Exec... Status	Hand... Exec... Status	Ware... Status	Warehouse Processing Status (Description)	Goods Movement Processing	Goods Move... Status	Goods Movement Status (Description)
DE HD-AA 1234						Completed			Not Processed Yet
SP_1040_01 (Shipping Point 1040 - Ad...			Not...			Completed			Not Processed Yet
WH Loading Stop LP_001 / 104 / 001	Load		Not...			Completed			Not Processed Yet
Consignment Order 4000000000	Loa...		Not...			Completed			Not Processed Yet
YFU1: Freight Unit Type 410003	Loa...		Not...			Completed			Not Processed Yet
SP_1010 (Shipping Point 1010 - Adres...	Unl...		Not...						
Consignment Order 4000000000									

All 2 Data saved successfully Business document with temporary number \$1 s... Save Cancel

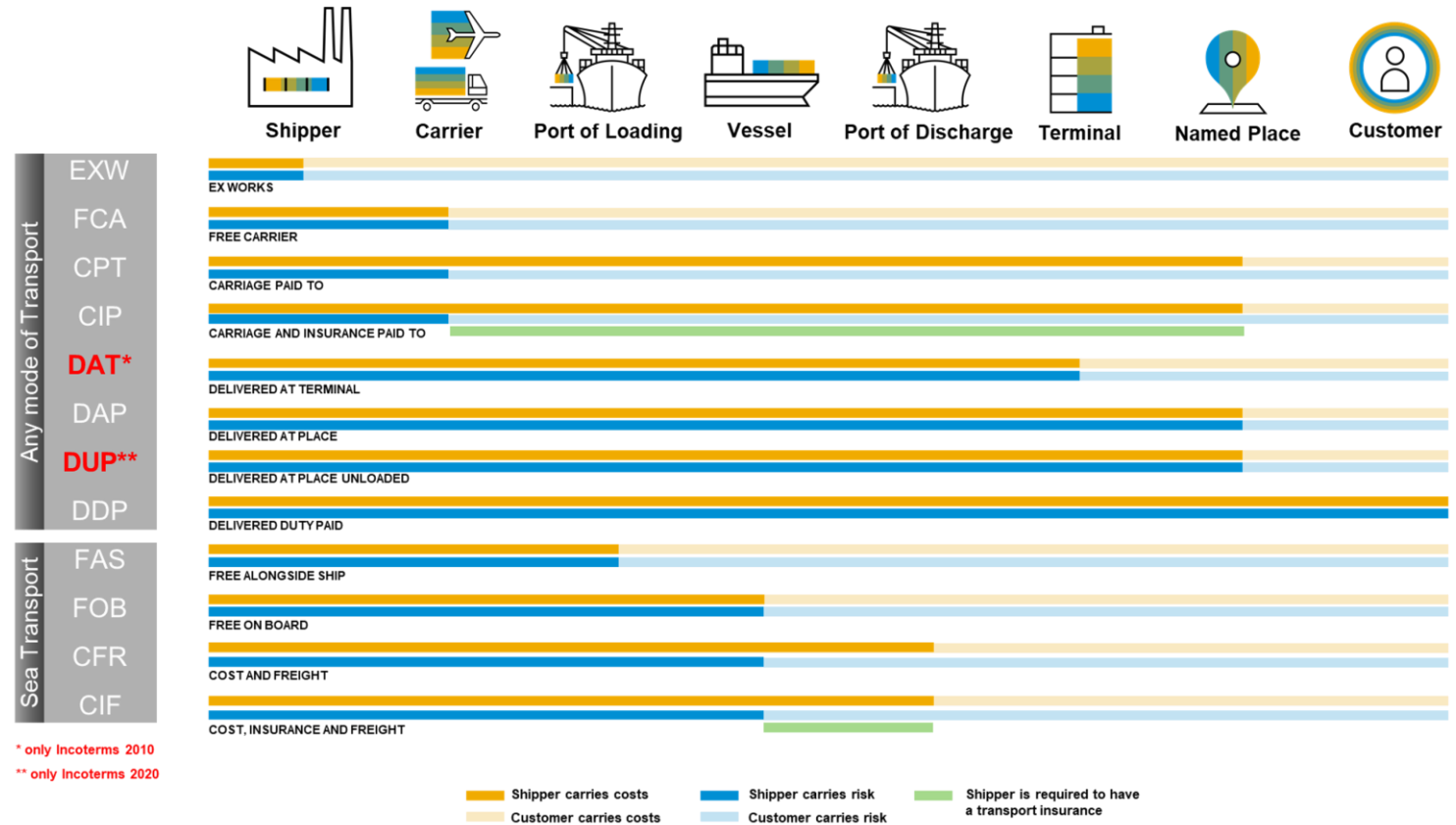
# General Integration Topics



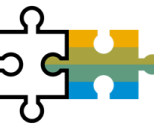
Enable Incoterms in the integration of SD, MM, and LE with transportation management, and in TM itself

## Scope

- Manage Incoterm Location as TM Location
- Incoterm Location in master data & predecessor documents
- New Stage Building option to incorporate Incoterm Locations



\* only Incoterms 2010  
\*\* only Incoterms 2020



# General Integration Topics and ASR Improvements

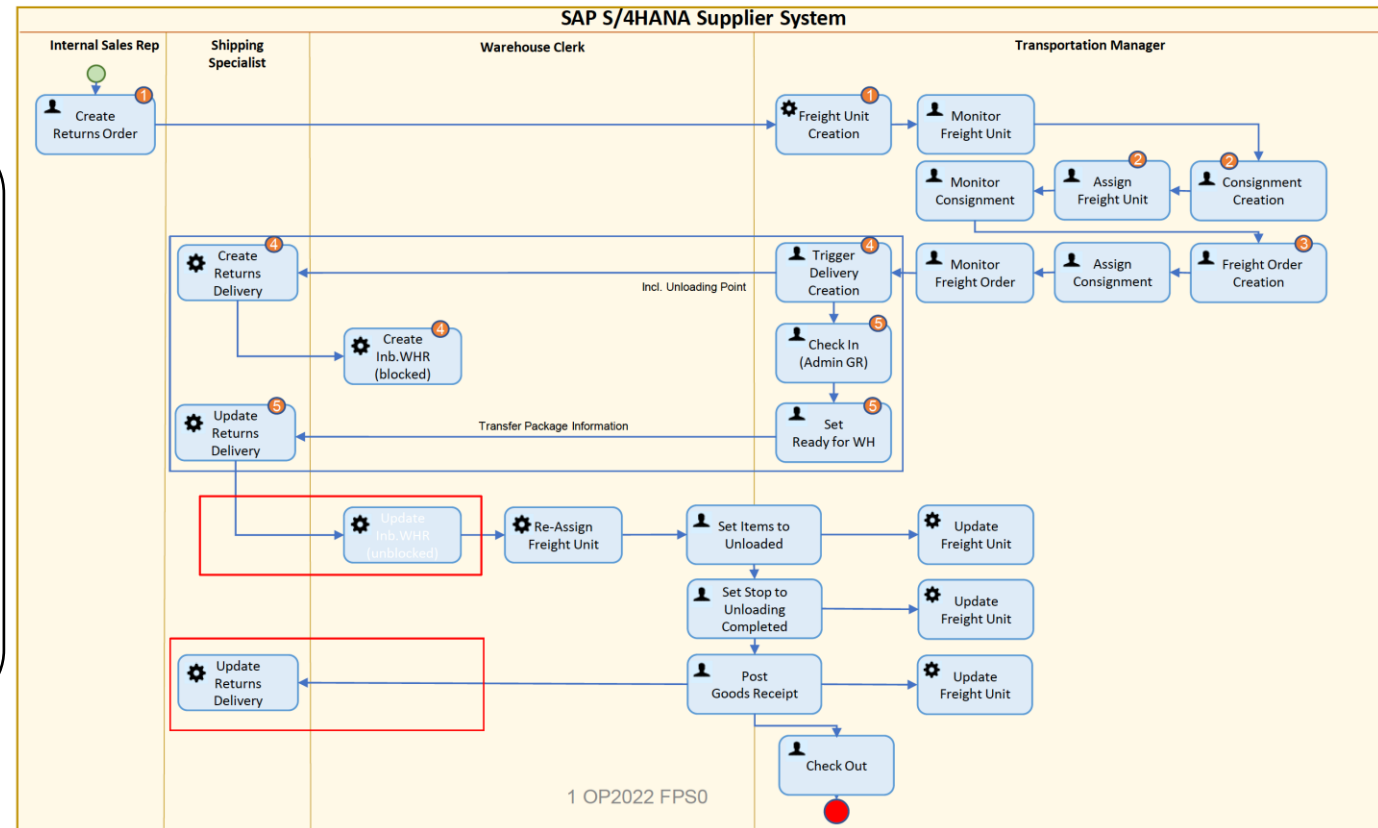


## Enable Delivery Handling for Customer Returns

### Scope

- Enable customer returns based on advanced shipping and receiving (ASR), the "planned" returns process:
  - Create a return order
  - Check freight unit determination in returns (manual check based on the advanced shipping notice)

### ASR Customer Returns Handling (excl. EDI Handling) - TM, LE, EWM





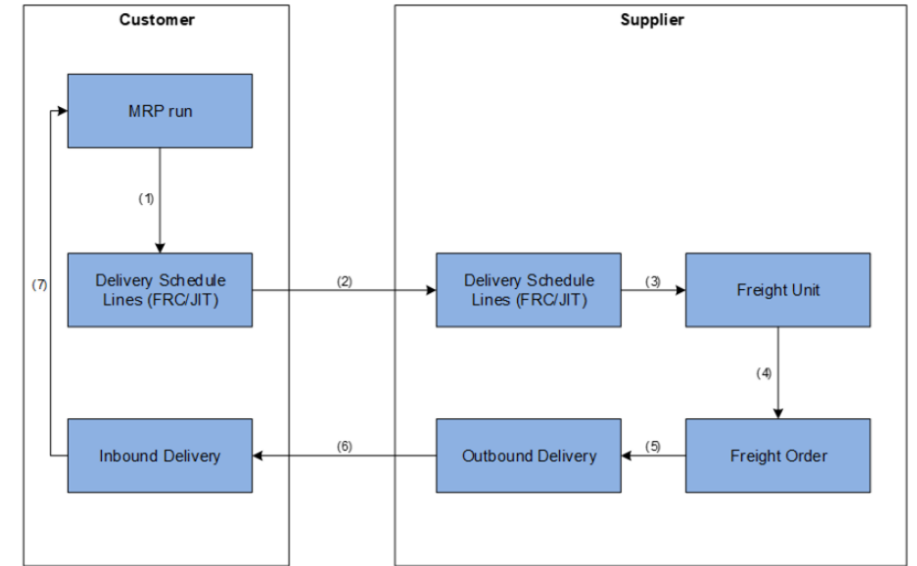
# General Integration Topics and ASR Improvements



## Support Sales Scheduling Agreements

### Scope

- **Seamless integration of Sales Scheduling Agreements with TM in regards to planning delivery schedules, forecast delivery schedules and JIT delivery schedules.**
- **Support of integration scenarios with TM for outbound deliveries that are created based on a sales scheduling agreement.**
- **Consideration of correction deliveries for freight unit building in TM.**
- **Consideration of a fiscal year change**
- **Consideration of transaction SACO**
- **For existing non-TM relevant Sales Scheduling Agreements, there is a possibility to be integrated with TM.**





# Planning and Optimization





# Scheduling of Freight Orders in Execution

Ignore Executed and In Execution Stops



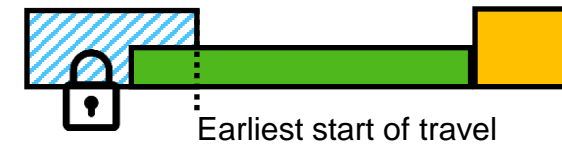
## Scope

- Improved handling of scheduling for freight orders in execution
  - Scheduling ignores all activities which are before the last activity that is executed or in execution
  - Scheduling ignores all activities at a stop with at least one activity executed
  - Scheduling will schedule the next activity later than the last date from execution and the last planned date of non-executed activities at the stop

Scenario before scheduling (delayed loading):



Scheduler treats stops in execution as unchangeable:



Scheduler result with the new feature:



# Creation of Capacity Documents Based on Groups



## Scope

- Creation of one freight document for each group of freight units
- Freight unit groups are created based on user-defined attributes (grouping rules)
- Different sets of grouping rules can be used per transportation mode / freight document category. For example, road freight orders are created based on different grouping rules than air freight bookings.

Freight Unit	P.	Loading Location	Unloading Location	Earliest...	T...	Latest ...	TL...	Gros...	G...	Gros...	G...	Execution Document	Material Freight Group
4200006500	✓	SP_1710	0010186001	06/27/2022	PST	06/28/2022	CET	90	KG	0,900	M3	\$2	MFG_1
4200006501	✓	SP_1710	0010186001	06/27/2022	PST	06/28/2022	CET	180	KG	1,800	M3	\$5	MFG_2
4200006600	✓	SP_1710	0010186001	06/27/2022	PST	06/28/2022	CET	90	KG	0,900	M3	\$2	MFG_1
4200006601	✓	SP_1710	0010186001	06/28/2022	PST	06/29/2022	CET	90	KG	0,900	M3	\$4	MFG_1
4200006602	✓	SP_1710	0017100003	06/27/2022	PST	06/27/2022	CST	90	KG	0,900	M3	\$3	MFG_1



Freight Booking	Actions	Status	Source Location	Destination Locat...	Departure Date
\$2	⌕	■	SP_1710	0010186001	06/27/2022
\$3	⌕	■	SP_1710	0017100003	06/27/2022
\$4	⌕	■	SP_1710	0010186001	06/28/2022
\$5	⌕	■	SP_1710	0010186001	06/27/2022

App: Transportation Cockpit



## Applied Grouping Rules:

- Source Location of Stage (Loading Location)
- Destination Location of Stage (Unloading Location)
- Earliest Date for Loading
- Material Freight Group

# Planning and Optimization



## Enable Mixed Layers with Package Building Optimizer (PBO)

## Scope

- Enable PBO to consider the master data definitions of layers and build layered pallets
- The layer definition can be done on real product level and on reference product level.
- A layer is visualized in the 3d scene as one big block
- PBO can create mixed layers
- The package building master data report offer some new checks regarding layer definition

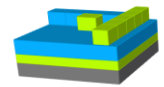
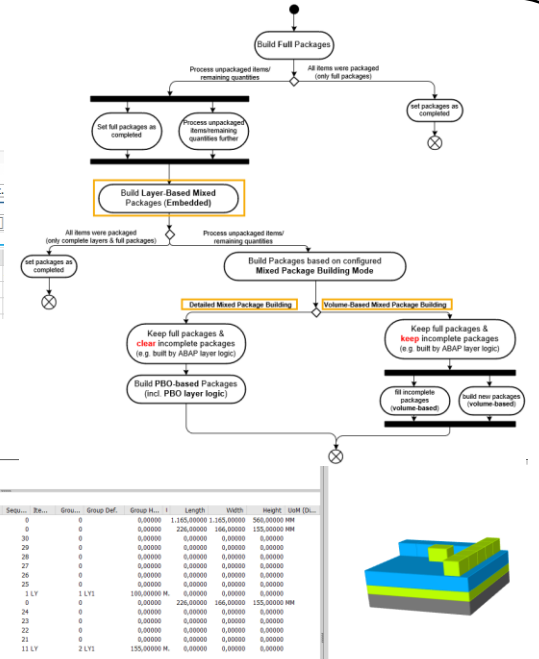
Change Material MM1\_RM\_BIB\_SMALL

Descriptions Units of measure Additional EANs Document data Basic data

Material MM1\_RM\_BIB\_SMALL

Units of measure/EANs/dimensions

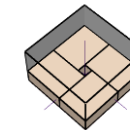
X	Alt	Alt < Y	Bun	Length	Width	Height	Un...	Volume
1	EA	<...1	EA	226	166	155	MM	5,815
1	LV1	<...10	EA				MM	
1	CPL	<...100	EA					

[illegible]

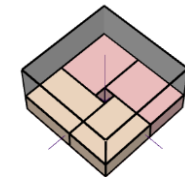
## Enable Merging of Similar Products

## Motivation

- **Mixed Layers:** Merging is a prerequisite to support this feature in PBO
- **Runtime:** PBO runtime scales with the number of different products, which can be drastically decreased by merging similar products on many scenarios
- **Solution Quality:** PBO always places patterns consisting of items from a single product. Merging allows for patterns consisting of items from multiple mergeable products, which can lead to more efficient space usage



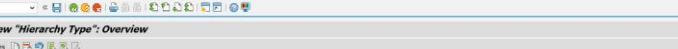
Before: Patterns consist of items of a single product



Now: Patterns can consist of items from mergeable products



- SAP Note [3065464](#) contains the definition of Basic Shipping vs basic TM vs advanced TM.
- SAP delivers 5 new page layouts serving as examples representing the features available for the basic variants:
  - One page layout per transportation mode (road, rail, air, ocean)
  - One page layout including all mentioned transportation modes
- SAP delivers new hierarchy types for the basic variants, too



The screenshot shows the SAP Fiori 'Change View' app in the 'Hierarchy Type: Overview' view. The app has a top navigation bar with the title 'Change View "Hierarchy Type": Overview' and a search bar. Below the navigation bar, there is a 'Debug Source' section with a tree view showing the hierarchy structure. The main content area displays a table with the following columns: Item Type, Description, Item Cat., Consumer of the Hierarchy, Item Type, and Related Documents. The table lists various hierarchy types, including 'Basic Planning for Air Freight Bookings', 'Basic Planning for Road Freight Orders with St. Road', 'Basic Planning for Road Freight Orders', 'Basic Planning for Ocean Freight Bookings with Sea', 'Basic Planning for Ocean Freight Bookings', 'Basic Planning for Road Freight Orders with Sea', 'Basic Planning for Road Freight Orders', 'Cargo Management', 'Cargo Management', and 'Cargo Management'. The 'Related Documents' column contains links to various documents, including 'Show Results with Full Context', 'Use Standard Behavior', 'Use Standard Behavior', 'Use Standard Behavior', 'Use Standard Behavior', 'Use Standard Behavior', 'Use Standard Behavior', 'Use Standard Behavior', 'Use Standard Behavior', and 'Use Standard Behavior'. The 'Item Type' column contains checkboxes for 'Show Results with Full Context' and 'Use Standard Behavior'.

Item Type	Description	Item Cat.	Consumer of the Hierarchy	Item Type	Related Documents
HT00A	Basic Planning for Air Freight Bookings	Air	Freight Document: Advanced Ship	Show Results with Full Context	Use Standard Behavior
HT001	Basic Planning for Road Freight Orders with St. Road	Sea	Transportation Cockpit: Freight	Show Results with Full Context	Use Standard Behavior
HT002	Basic Planning for Road Freight Orders	Sea	Transportation Cockpit: Freight	Show Results with Full Context	Use Standard Behavior
HT003	Basic Planning for Ocean Freight Bookings with Sea	Sea	Transportation Cockpit: Freight	Show Results with Full Context	Use Standard Behavior
HT004	Basic Planning for Ocean Freight Bookings	Sea	Transportation Cockpit: Freight	Show Results with Full Context	Use Standard Behavior
HT005	Basic Planning for Road Freight Orders with Sea	Sea	Transportation Cockpit: Freight	Show Results with Full Context	Use Standard Behavior
HT006	Basic Planning for Road Freight Orders	Sea	Transportation Cockpit: Freight	Show Results with Full Context	Use Standard Behavior
HT007	Cargo Management	All	Freight Document: Cargo	Show Results with Full Context	Use Standard Behavior
HT008	Cargo Management	All	Freight Document: Cargo	Show Results with Full Context	Use Standard Behavior
HT009	Cargo Management	All	Freight Document: Cargo	Show Results with Full Context	Use Standard Behavior



- Provide Packing Status Information
- Provide Messages According to Return Code
- Return Handling Unit Group Information

Item Hierarchy	Product Description	Action	Action	Quantity	UoM (Qty)	HU Group 1	HU Group 2	HU Group 3	HU Group 4	HU Group 5	Length	Handling unit gr. 1	
▼ Package MM0_PM_CHEP_PALLET (1)	MM0_Package Material_CHEP PALLET	⊖	🔧	1,000	CPL	MMU_1	MMU_2	MMU_3	MMU_4	MMU_5	1,165,000,000	1,165,000,000	Handling unit gr. 2
▼ Product MM0_PRD_PET_LARGE_1	MM0_Product PET LARGE 1	⊖	🔧	24,000	EA						380,000,000	280,000,000	Handling unit gr. 3
▼ Package MM1_PM_CHEP_PALLET (1)	MM1_Package Material_CHEP PALLET	⊖	🔧	1,000	CPL	MMU_1	MMU_2	MMU_3	MMU_4	MMU_5	1,165,000,000	1,165,000,000	Handling unit gr. 2
▼ Product MM1_PRD_PET_LARGE_1	MM1_Product PET LARGE 1	⊖	🔧	25,000	EA						380,000,000	280,000,000	318,000,000 MM

PackInstrctn MM1\_PI\_0002

Short text MM1 Packing Instruction\_0001

Admin. data Short Txts Dim. Components Usages Do

External name

Check profile 01

Do Not Print Ext. Shipping Label ☐

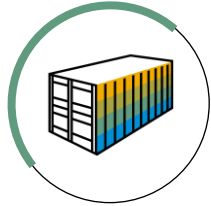
Handling unit gr. 1	MMU_1	HU group 4	MMU_4
Handling unit gr. 2	MMU_2	HU group 5	MMU_5
Handling unit gr. 3	MMU_3		





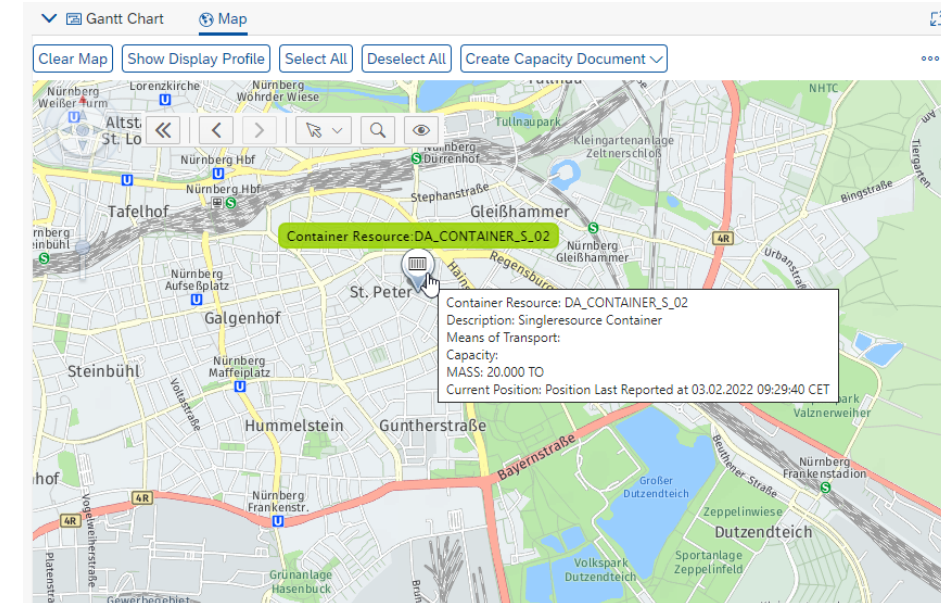
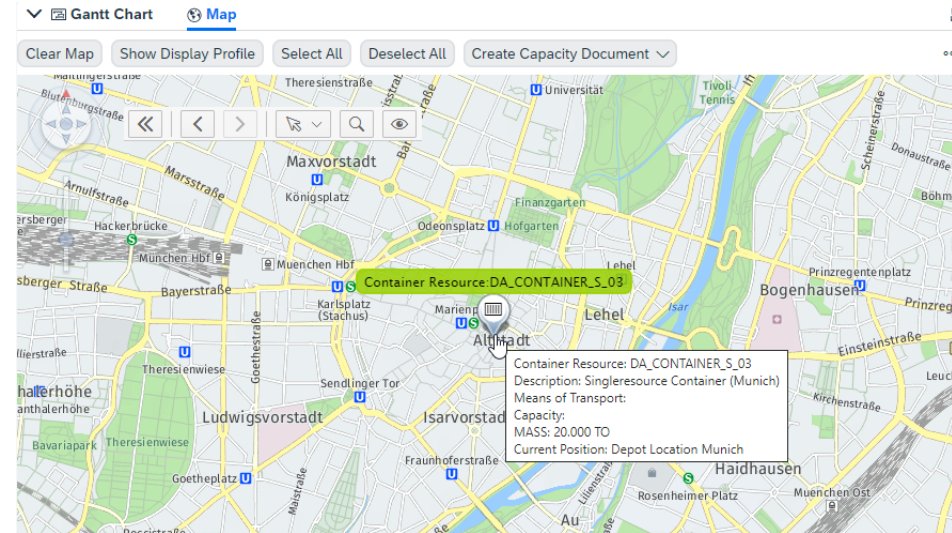
# Transportation Cockpit: Map

## Container Position

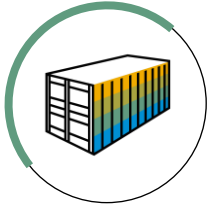


### Scope

- Container resources positions are displayed on the map
  - Depot location position
  - Actual reported position
  - Last planned location



# Triangulation



## Scope

- Drag & Drop Freight Order
  - Movement category in selection profile and selection criteria
  - New button to create triangulation
  - New button to revoke triangulation

A triangulation represents an empty container transport unifying an empty container provisioning and an empty container return in order to reduce the overall amount of empty miles and transportation costs.

Transportation Units

Movement Category	equal to	Empty Provisioning	⊖ ⊕
Movement Category	equal to	Empty Return	⊖ ⊕
Movement Category	equal to	Triangulation	⊖ ⊕
Documents Blocked for Planning	equal to	Include in Selection	⊖ ⊕

Package Unit Stage Hierarchy (0) Container Unit Hierarchy (7) Container Unit Stages (7) Package Unit (0) Package Unit Hierarchy (0)

Triangulation Container Unit Stages Create Capacity Document Create Multiple Capacity Documents Triangulation

Container Unit	Mov...	Movement Category...	Contain...	Equi...	Color	Stage	Plan...	Unloa
<input checked="" type="checkbox"/>	4500155256	ER	Empty Return	20G0	CN	10	●	
<input type="checkbox"/>	4500155259	EP	Empty Provisioning	42G0	CN	10	●	SL0_£
<input type="checkbox"/>	4500155262	EP	Empty Provisioning	20G0	CN	10	●	SL0_£
<input type="checkbox"/>	4500155584	ER	Empty Return	20G0	CN	10	●	SL0_BERLIN
<input type="checkbox"/>	4500155969	EP	Empty Provisioning	22G0	CN	10	●	OD_S
<input type="checkbox"/>	4500155970	EP	Empty Provisioning	22G0	CN	10	●	OD_S
<input checked="" type="checkbox"/>	4500157003	EP	Empty Provisioning	20G0	CN	10	●	SL0_£

Create Triangulation Revoke Triangulation

## Find Container Unit for Triangulation

Saved Searches:

Search Criteria

Transportation Unit	is		⊖ ⊕
Document Type	is		⊖ ⊕
Transportation Unit Category	is		⊖ ⊕
Forwarding Order	is		⊖ ⊕
House Bill of Lading/House Air Waybill	is		⊖ ⊕
Source Location	is		⊖ ⊕
UNLOCODE (Source Location)	is		⊖ ⊕
IATA Code (Source Location)	is		⊖ ⊕
Destination Location	is	ECG_CUST_HAM2	⊖ ⊕
UNLOCODE (Destination Location)	is		⊖ ⊕
IATA Code (Destination Loc.)	is		⊖ ⊕
Created By	is		⊖ ⊕
Created On	is		⊖ ⊕
Original Document	is		⊖ ⊕
Transportation Requirement Category	is		⊖ ⊕

Maximum Number of Results: 100

Search Clear Entries Reset to Default Save Search As:

Transportation Unit	Requirement	Source Location	Source Location Address	Source IATA Code	Source UNLOCODE	Destination Location	Destination Location Address	Destination IAT
4500000881						ECG_CUST_HAM2	/D-25557 Gokels / Klein Hamburg	



# Transportation Cockpit: Map

## Drag & Drop



### Scope

- Drag & Drop Freight Order
  - combine two neighboring or overlapping freight orders



# Further Innovations in The Area of Planning and Optimization



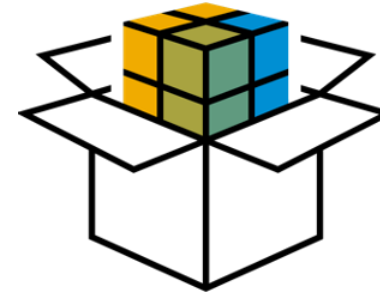
## Planning & Network

- Container resources: single versus multi resource
- Driver-related incompatibilities
- Scheduling
  - Improved error handling
- VSR Optimizer
  - Better usability
  - Beginning of defining work/drive time constraints
- Transportation Proposal
  - Consistency for all requirements docs



## Unified Package Building (UPB) & Load Planning

- More input fields for EWM & LO
- Usage of Packing Instructions
- Packing rules – relevant for PI & PS
- UPB Settings – easier maintenance & re-use in different planning profiles
- Manual load planning
- Create Multiple Load Plan PDF Files in Batch Run



## Package Building

- Detailed mixed package building
  - Considers master data definition for layers
  - Layer-based mixed PB vs PBO
- Package building optimizer
  - New way of building mixed pallets
- Load Plan Hierarchy
  - New way of looking at 3D images of pallet layers

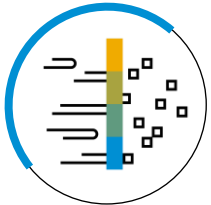


## Transportation Cockpit and Planning

- Freight Unit Building
- Page Layout – quickviews
- Transportation Cockpit Settings
- **Creation of Capacity Documents Based on Groups**
- Manual Planning with Local Resource Items
- New and Editable Fields in the Transportation Cockpit
- Map - Aggregation Window Considers All Selected Objects on Map



# Further Innovations: Charge Management



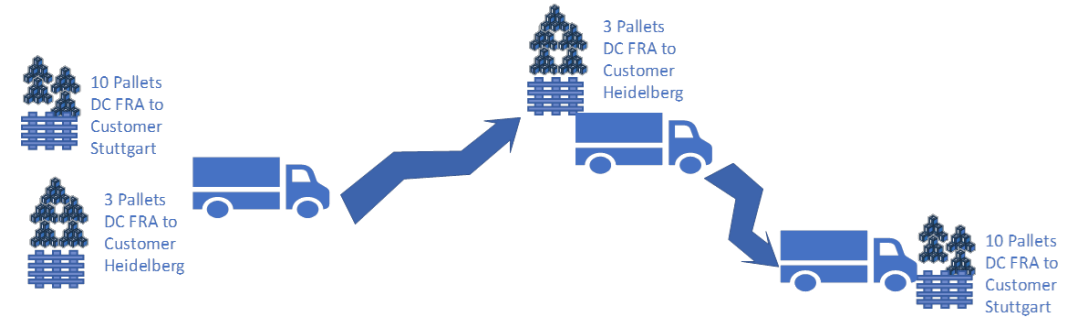
## Charge Calculation and Settlement for Consignment orders



## Charge Calculation for Planned distance and duration

### Scope

- Consignment Order for LTL Scenario
- Batch Report for Freight Settlement Document Creation/Posting
- Billing of Freight Cost



### Scope

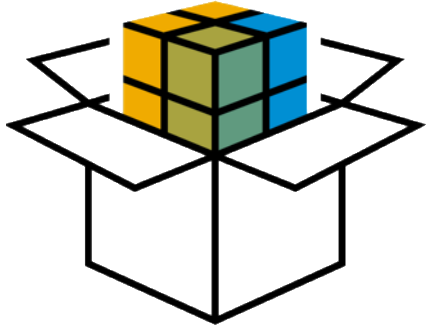
- Enable planned distance charge. The planned distance-based charges are used extensively in land transportation (Road(FTL) and rail ).
- The rate is received by carrier is based on the one of the dimension distance or as based on the calculation rule for location pair.

Structure	/SCMTMS/S_TCC_COMM_CALC_BASE		Active				
Short Description	Communication Structure Calculation Bases						
Attributes	Components	Input Help/Check	Currency/Quantity Fields				
Built-In Type							
74 / 211							
Component	Typing M...	Component Type	Data Type	Length	Decim...	Coordinate	Short Description
<a href="#">STRAIGHT_LINE_DIST_VAL</a>	1 Type ▾	/SCMTMS/DISTANCE	QUAN	31	14	0	0Transportation Distance
<a href="#">STRAIGHT_LINE_DIST_UNI</a>	1 Type ▾	/SCMTMS/DISTANCE_UOM	UNIT	3	0	0	0Distance Unit of Measure
<a href="#">ACTUAL_DIST_VAL</a>	1 Type ▾	/SCMTMS/DISTANCE	QUAN	31	14	0	0Transportation Distance
<a href="#">ACTUAL_DIST_UNI</a>	1 Type ▾	/SCMTMS/DISTANCE_UOM	UNIT	3	0	0	0Distance Unit of Measure
<a href="#">TOLL_DIST_VAL</a>	1 Type ▾	/SCMTMS/DISTANCE	QUAN	31	14	0	0Transportation Distance
<a href="#">TOLL_DIST_UNI</a>	1 Type ▾	/SCMTMS/DISTANCE_UOM	UNIT	3	0	0	0Distance Unit of Measure
<a href="#">DURATION_NET</a>	1 Type ▾	/SCMTMS/DURATION	DEC	11	0	0	0Duration
<a href="#">DURATION_GROSS</a>	1 Type ▾	/SCMTMS/DURATION	DEC	11	0	0	0Duration





# Further Innovations: Miscellaneous



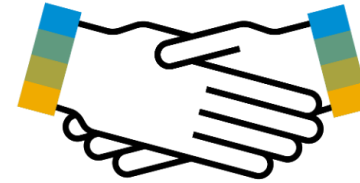
## Normalized Quantity

- Normalized quantity at items (product and package level) & general data tab of FO
  - Consistency for all requirements docs



## Interface enhancement for freight agreement and forwarding agreement

- Multiple Sales Org./Purchase Org. via proxy service – Inbound and Outbound Interfaces.
- Correct hierarchy relationship in 'Charge Item hierarchy'



## Collaboration App – Manage Execution of Freight Orders

- Fiori app for the service provider representatives to be able to manage the freight orders that are currently in execution

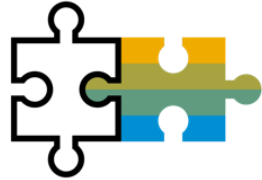


## Charge Calculation support for ASR sub-stops

- Sub stops = different loading/unloading points at same location
- Charge calculation extension on calculation sheet
- New logic for intermediary vs. sub stops

# Areas of Our Investments in SAP S/4HANA TM in 2022

## Integration



**Improvement of Execution Driven Integration through Logistics Integration Engine**



**Enable Incoterms in the integration of SD, MM, and LE with transportation management, and in TM itself**



**Support SD scheduling agreement**



**Make Inbound Deliveries visible for TM in the Stock Transport Orders process**



**Advanced Shipping and Receiving  
Customer Returns Handling**

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## Planning & Optimization



**Unified Package Building**



**Planning & Network Improvements**



**Layers in Package Building Optimizer**

## Strategic Freight Procurement

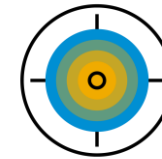


**Carrier collaboration Improvements**



**Improve usability and user efficiency in rate and demand administration**

## Further Innovations



**Charge Management Improvements**



**Transportation Cockpit for basic shipping**



**TM Analytics Improvements**



**Settlement: Customer specific status for individual lifecycle management**



**SAP SDD: Van seller scenario**

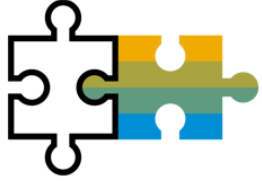
# 03

## Roadmap and Way forward

# Areas of Our Investments in SAP S/4HANA TM in 2023

Plan only  
subject to change

## Integration



**Advanced Shipping and Receiving in side-by-side SAP EWM scenario**



**Adv. S&R ad-hoc loading**



**Package based Shipping from production**



**Multimodal Consignment**



**Receiving Cargo for multiple shipping points at once**

## Industry Specific



**SAP Direct Distribution – Preseller / Merchandiser Scenario**



**Retail best practice scenarios and performance tuning**

## Strategic Freight Procurement

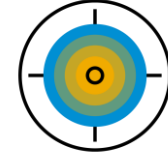


**Tradeline and route handling**



**Carrier collaboration Improvements**

## Further Innovations



**TM Analytics Improvements**



**Group Logistics in embedded SAP S/4HANA TM**



**Basic sales order scheduling**



**Basic Shipping enhancements:  
Transportation Cockpit for basic shipping**

# SAP S/4HANA Transportation Management

## Product road map overview – Key innovations

Plan only  
subject to change

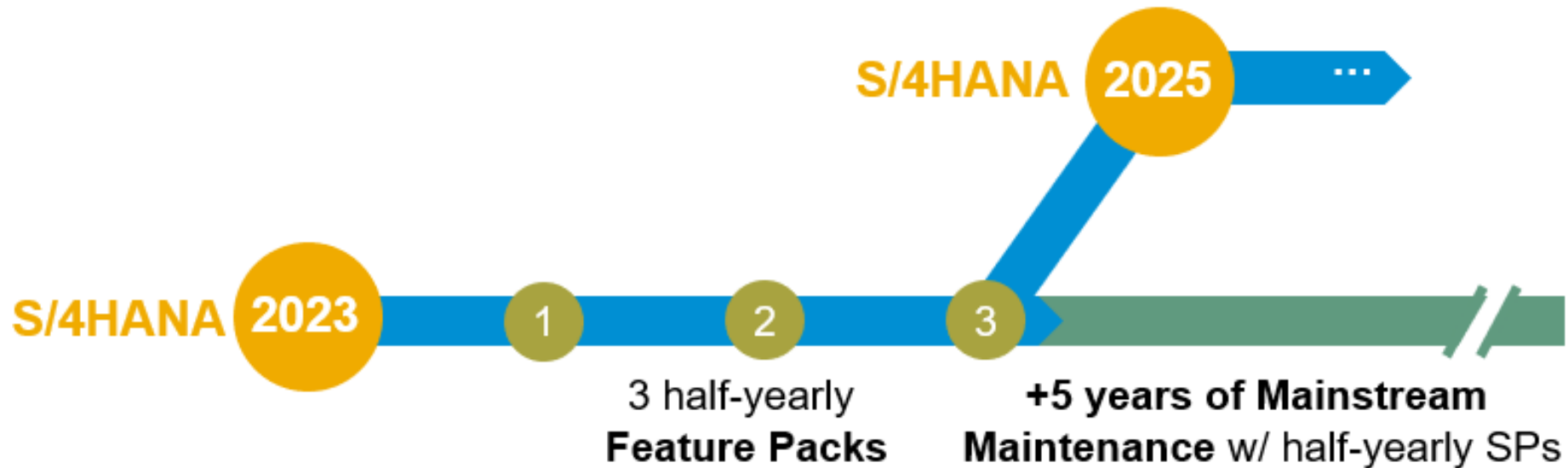


2022 - Recent Innovations	2023 – Planned Innovations <sup>1</sup>	2023 – Planned Innovations <sup>1</sup>	2023 FPSx – Product Direction <sup>1</sup>
<b>Enhanced SAP TM – SAP EWM Integration</b> <ul style="list-style-type: none"> <li>Improvement of Execution Driven Integration through Logistics Integration Engine</li> </ul> <b>Enhanced Integration</b> <ul style="list-style-type: none"> <li>Make LE Inbound Deliveries visible for TM in the Stock Transport Orders process</li> <li>SD Scheduling Agreements (FPS2)</li> </ul> <b>Planning and Optimization</b> <ul style="list-style-type: none"> <li>Layers in Package Building Optimizer</li> </ul> <b>Industry Beverages</b> <ul style="list-style-type: none"> <li>SDD: Van seller scenario</li> <li>End of Day Update Considering Services <ul style="list-style-type: none"> <li>Adjust Plan Manually Within Cut-Off Times</li> </ul> </li> </ul> <b>Settlement</b> <ul style="list-style-type: none"> <li>Agreement Management – Lifecycle Management</li> <li>Allowed changes in FO after Accruals and Invoice Posting</li> </ul> <b>Strategic Freight procurement</b> <ul style="list-style-type: none"> <li>Demand and rates management</li> <li>Carrier collaboration Improvements</li> </ul>	<b>Advanced Shipping &amp; Receiving</b> <ul style="list-style-type: none"> <li>Side-by-side enablement for outbound scenario</li> <li>Shipping &amp; Receiving Cockpit</li> <li>RF support for EWM</li> <li>Cross Handling Unit (local package item)</li> <li>Updates from TM after 'ready for warehousing' (carrier, door)</li> <li>Return delivery for purchasing documents with GTS integration</li> </ul> <b>Collaboration Apps</b> <ul style="list-style-type: none"> <li>Carrier Invoices / Disputes Management</li> <li>Self Billing / Disputes Management</li> </ul> <b>Strategic Freight Procurement</b> <ul style="list-style-type: none"> <li>Manual awarding on detailed levels</li> <li>Usability improvements</li> </ul> <b>Industry Oil &amp; Gas</b> <ul style="list-style-type: none"> <li>Freight Unit building for TD shipment</li> <li>New transportation mode category</li> <li>Charge calculation and settlement for TD shipments</li> </ul> <b>SAP Business Network for Logistics</b> <ul style="list-style-type: none"> <li>Support of Ocean booking</li> </ul> <b>Industry Retail</b> <ul style="list-style-type: none"> <li>Best practice scenarios</li> <li>Performance tuning</li> </ul>	<b>Functional enhancements</b> <ul style="list-style-type: none"> <li>Loading meter in charge calculation and subcontracting</li> <li>Collective processing of Freight Orders</li> <li>Sales Order Scheduling <ul style="list-style-type: none"> <li>Default Route (w/o FU)</li> <li>Path Finder</li> </ul> </li> <li>Hours of Service Regulations for US and Europe</li> <li>Field List Configurability for Transportation Cockpit</li> <li>Load Consolidation during FU Building</li> <li>3D Load Planning</li> <li>Advanced ICo Sales / STO</li> <li>Analytics Content for Disputes</li> </ul> <b>Non Functional improvement</b> <ul style="list-style-type: none"> <li>Data Migration from S/4HANA TM to Embedded TM</li> </ul>	<b>Advanced Shipping &amp; Receiving</b> <ul style="list-style-type: none"> <li>ad-hoc loading</li> <li>Multimodal Consignment</li> <li>Receiving Cargo for multiple shipping points at once</li> <li>RF support for EWM for container</li> <li>Cross Handling Unit (package unit)</li> <li>Make EWM Inbound Deliveries visible for TM in the Stock Transport Orders process</li> <li>Planned packages for warehouse</li> <li>Release for loading</li> <li>ASR side-by-side integration with GTS</li> <li>Trailer Management</li> <li>Loading Sequence</li> </ul> <b>Sustainability</b> <ul style="list-style-type: none"> <li>Calculate and display emissions for road</li> <li>Allocation of Emissions to the Freight Unit Item</li> <li>Enhance Web Service with emission data</li> </ul> <b>Enhanced Integration</b> <ul style="list-style-type: none"> <li>Support of international address versions</li> </ul> <b>Strategic Freight Procurement</b> <ul style="list-style-type: none"> <li>Complete roadmap</li> </ul> <b>Functional enhancements</b> <ul style="list-style-type: none"> <li>automatic triggering of customer invoice</li> <li>Sales Order Scheduling <ul style="list-style-type: none"> <li>Default Route (per FU)</li> <li>Transportation Proposal Optimizer</li> </ul> </li> <li>One-Step Optimizer</li> <li>Enable distribution of master data for package building</li> <li>Departure reversal (TU based)</li> <li>Group Logistics in embedded SAP S/4 TM</li> </ul> <b>Non Functional improvement</b> <ul style="list-style-type: none"> <li>Monitoring for Advanced Shipping &amp; receiving</li> </ul> <b>Industry Beverages</b> <ul style="list-style-type: none"> <li>SDD: Preseller/Merchandiser scenario</li> </ul>

<sup>1</sup> This is current state of planning and may be changed by SAP at any time without a notice



## The Changes In Brief: **TM** will follow this strategy



- Starting with SAP S/4HANA 2023
- Stable two-year release cycle
- 3 easy to consume innovation shipments via Feature Packs every 6 months
- All 3 Feature Packs allow for enhancements to/new Fiori Apps
- Mainstream maintenance duration for each release is extended from 5 to 7 years

# 04

## Partner Success Management

# SAP TM Partner Success Management - PSM

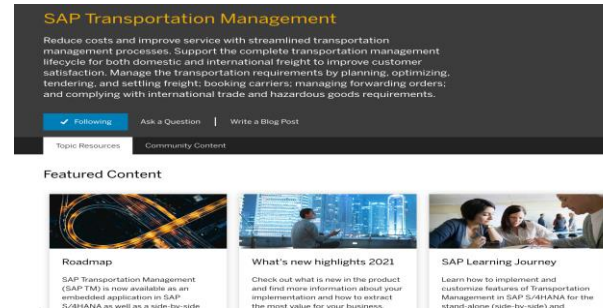
## Introducing Partner Success Management

PSM as a renewed central point of contact for you

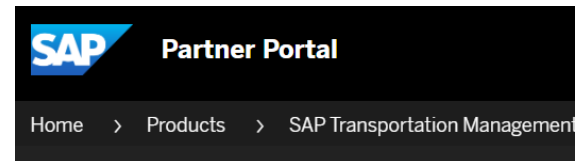
PSM to offer valuable content



**Dr. Holger Wittmer**  
Product Manager  
SAP Transportation Management



[SAP TM community](#)



[SAP Partneredge](#)



[SAP WorkZone](#)

# SAP TM Partner Success Management - PSM

Be part of our (Remote-) Solution Acceptance Test!

Be one of the first to get hands on to new developed features

Have the chance to give Feedback on early base

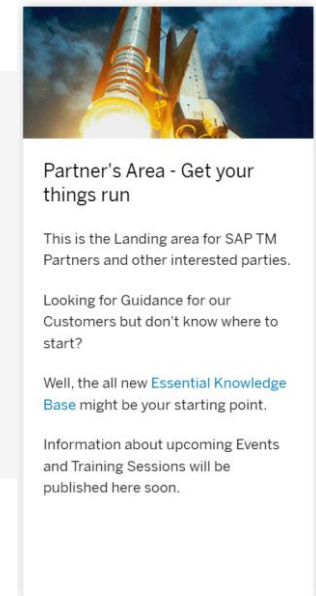
Get in contact with SAP Product Development

New Content in the SAP TM Community

PSM to store all types of essential information for you - our Partners – in the Community

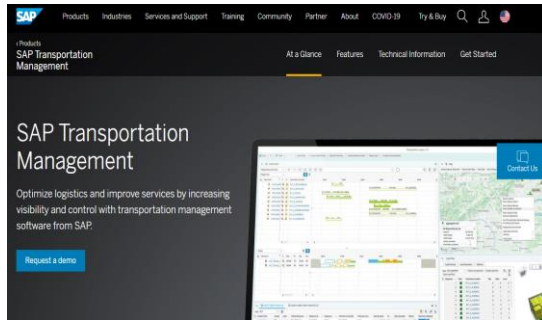
Searching for Guidance? --> [Essential Knowledge Base](#)

PSM will offer Rollout Sessions (Blogs dealing with What's new, Adv. S&R, Online Trainings...)

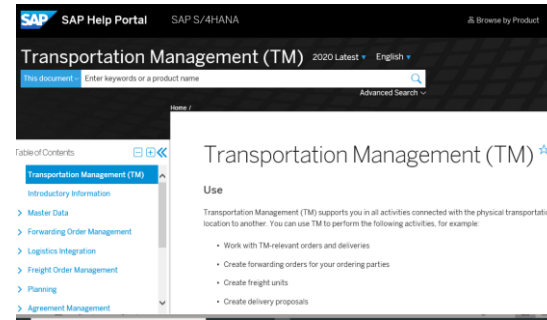


[SAPLogisticsPartnerSuccMgmt@sap.com](mailto:SAPLogisticsPartnerSuccMgmt@sap.com)

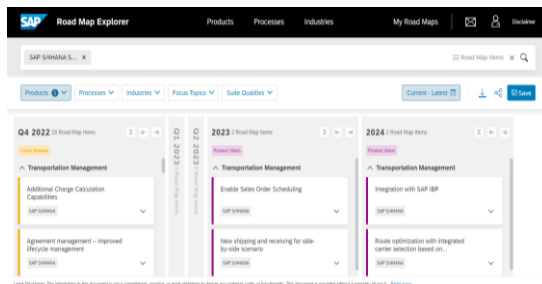
# Where to find more information on Transportation Management



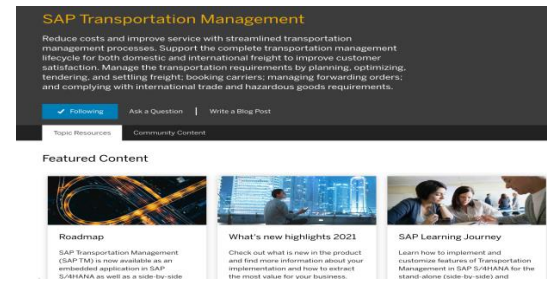
[SAP Transportation Management Landing Page](#)



[SAP Transportation Management Help portal](#)



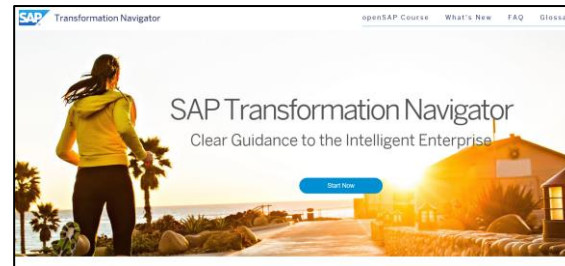
[TM Interactive Roadmap](#)



[SAP TM community](#)



[SAP TM Learning Journey](#)



[SAP Transformation Navigator](#)



[SAP Supply Chain Logistics Compendium](#)



[SAP Digital Supply Chain Resource Centre](#)



[S/4HANA Cloud Community](#)



[SAP TM LinkedIn Community](#)



# Thank you :)



**Eric Osterroth**  
Product Manager SAP TM Cloud ERP &  
[Customer Success Management](#)



**Dr. Holger Wittmer**  
Product Manager SAP TM Cloud ERP &  
[Partner Success Management PCE](#)



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# SAP Premium Engagement

## SAP Transportation Management (TM) Transformation

David Nohe, Premium Hub Center of Expertise (CoE) EMEA – TM Expert, Customer Success, SAP  
Meike Helwig, Premium Hub Center of Expertise (CoE) EMEA – Team TM Lead, Customer Success, SAP

June 15, 2023

# Agenda

## Transportation Management and Transformation

### 1 What's new in SAP S/4HANA 2023 – solution highlights, Roadmap and Transformation Content

Eric Osterroth, Head of Customer Office, SAP Product Engineering, SAP SE

Holger Wittmer, Head of Partner Success Management, SAP Product Engineering, SAP SE

### From planning to implementation - Premium Engagement Services for TM transformation projects

Who can Premium Engagements support your projects transforming most efficiently to SAP S/4HANA?

- ### 2
- Services and Migration Methodology
  - Introduction Custom-Code Impact Analysis for SAP TM (CCIA) Service
  - Introduction Selective Data Transition Planning (SPW) Service
  - Introduction Innovation Proof of Concept (iPoC) for transactional Data Migration

David Nohe, Premium Hub Center of Expertise (CoE) EMEA – TM Expert, Customer Success, SAP

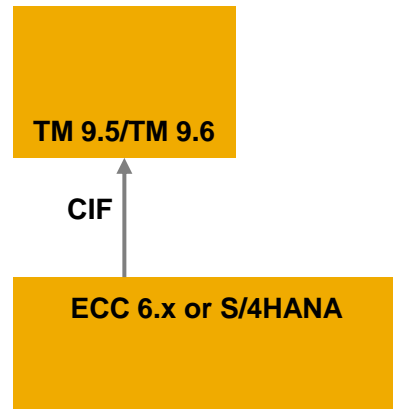
Meike Helwig, Premium Hub Center of Expertise (CoE) EMEA – Team Lead TM, Customer Success, SAP

### 3 Open Discussion and Q&A with the Experts



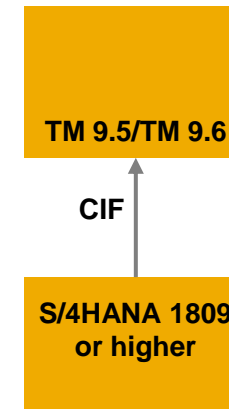
# From SAP TM to SAP S/4HANA

## Migration Scenarios: Side-By-Side TM vs Embedded TM



A

- **Side-By-Side** S/4HANA TM (1809 or higher) as destination of the migration
- Core Interface (**CIF**) is not longer used with SAP S/4HANA
- Data Replication Framework (**DRF**) used for integration – Material Master, Business Partner, Location Master (including Plant/Shipping Point)
- Customer/Vendor Integration (**CVI**) used to transform Customer and Vendor Master into Business Partner in SAP ECC or SAP S/4HANA and vice versa
  - Business Partner is the leading entity in SAP S/4HANA

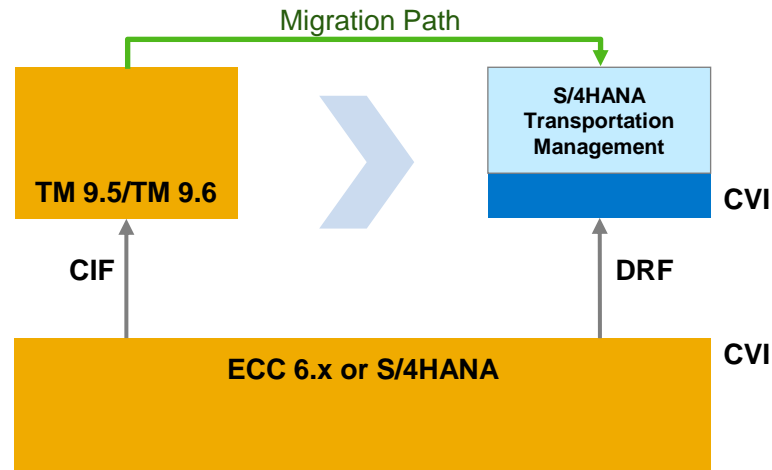


B

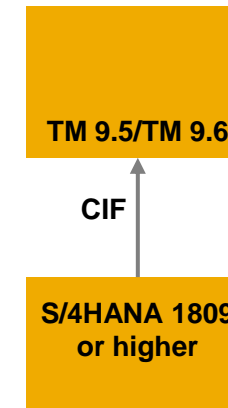
- **Embedded** S/4HANA TM (1809 or higher) as destination of the migration
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  - TM in SAP S/4HANA is directly accessing Product and Business Partner Master

# From SAP TM to SAP S/4HANA

## Migration Scenarios: Side-By-Side TM vs Embedded TM



**A**



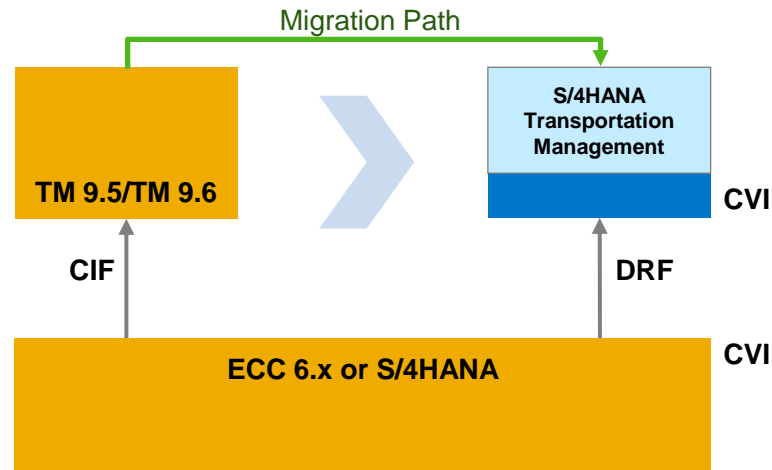
**B**

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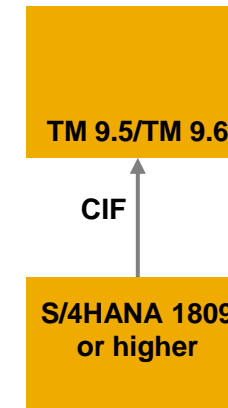
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# From SAP TM to SAP S/4HANA

## Migration Scenarios: Side-By-Side TM vs Embedded TM



**A**



**B**

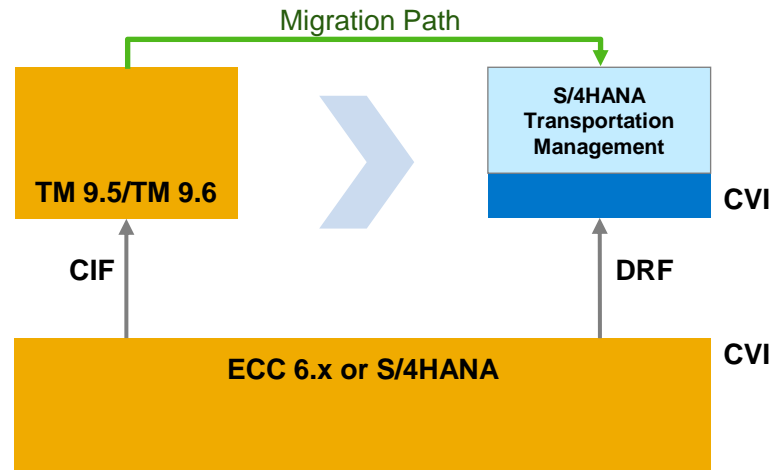
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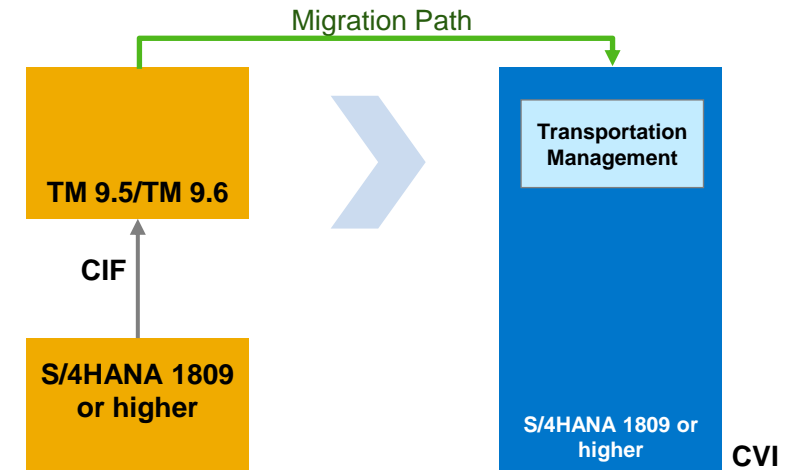
# From SAP TM to SAP S/4HANA

## Migration Scenarios: Side-By-Side TM vs Embedded TM



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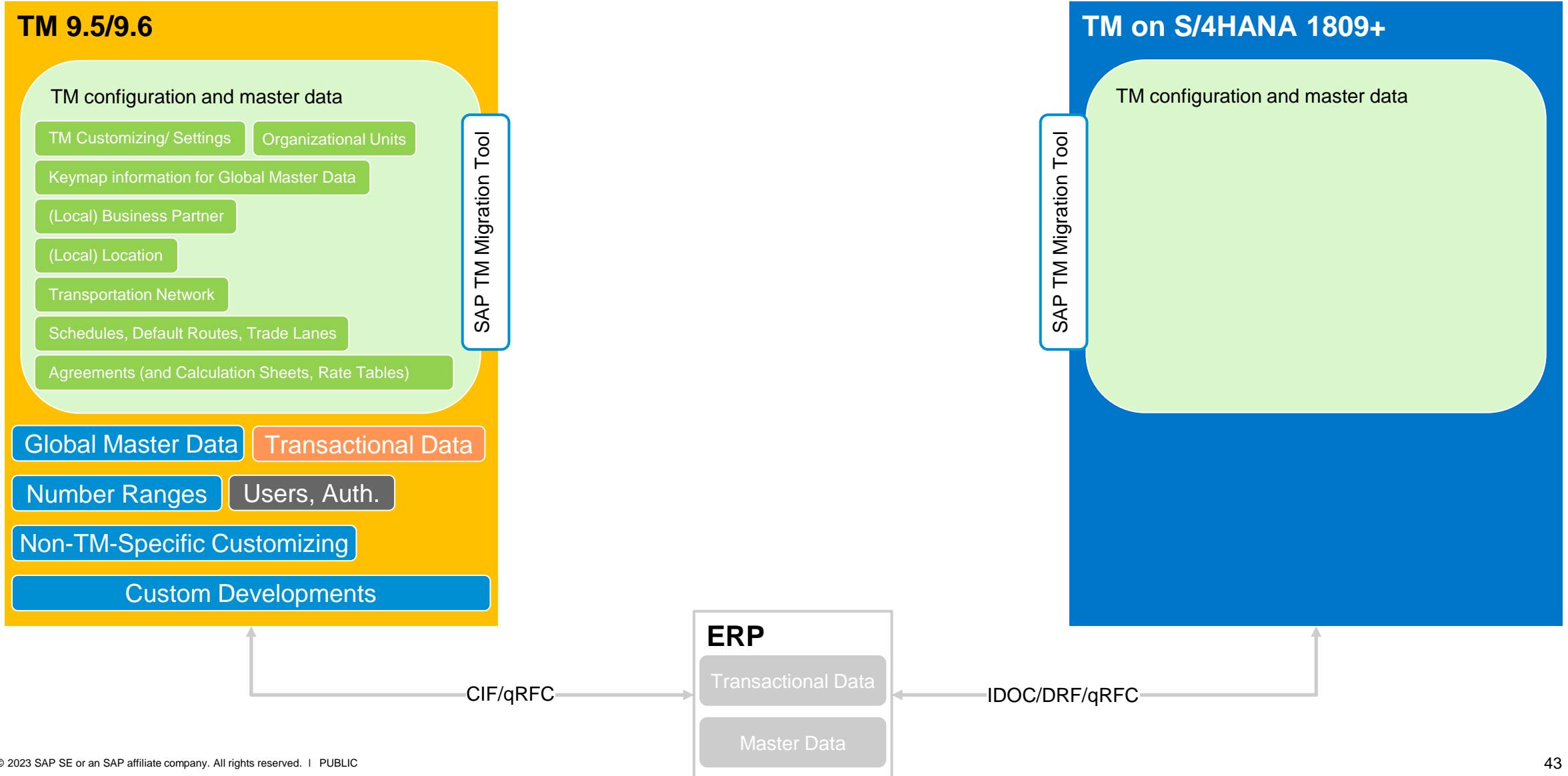


B

- **Embedded** S/4HANA TM (1809 or higher) as destination of the migration
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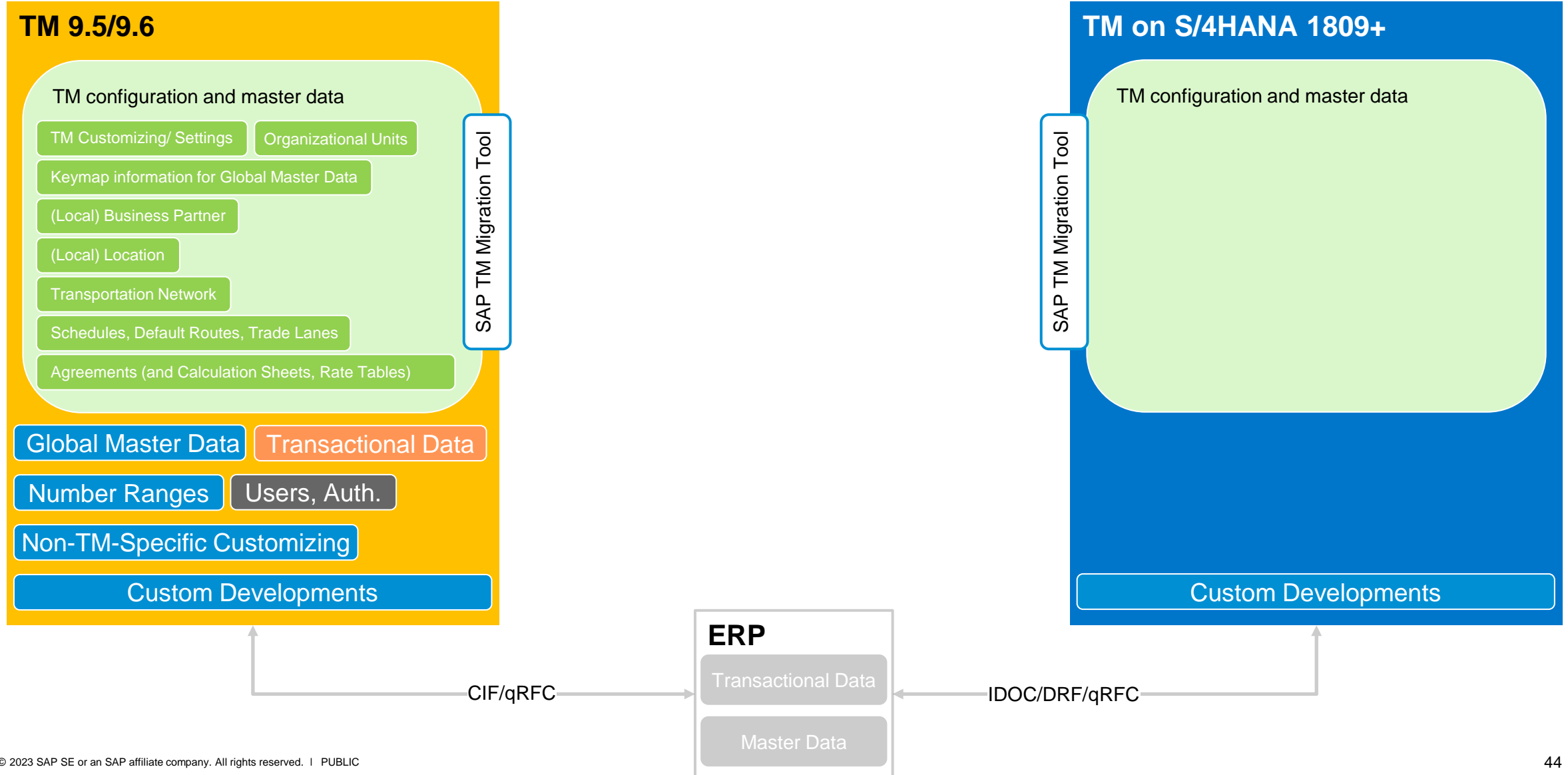
# From SAP TM to SAP S/4HANA

## SAP Default/Standard Migration Approach



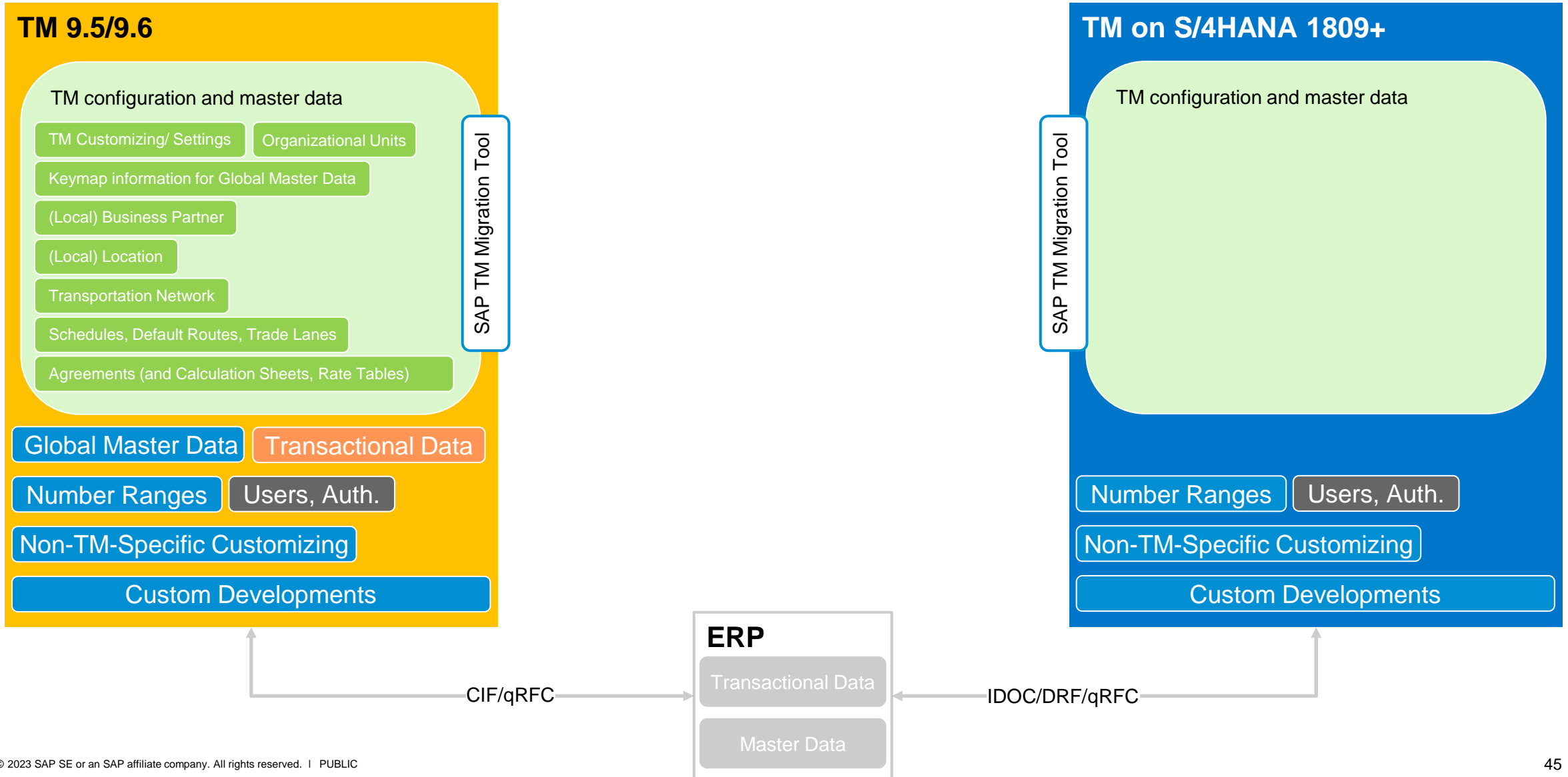
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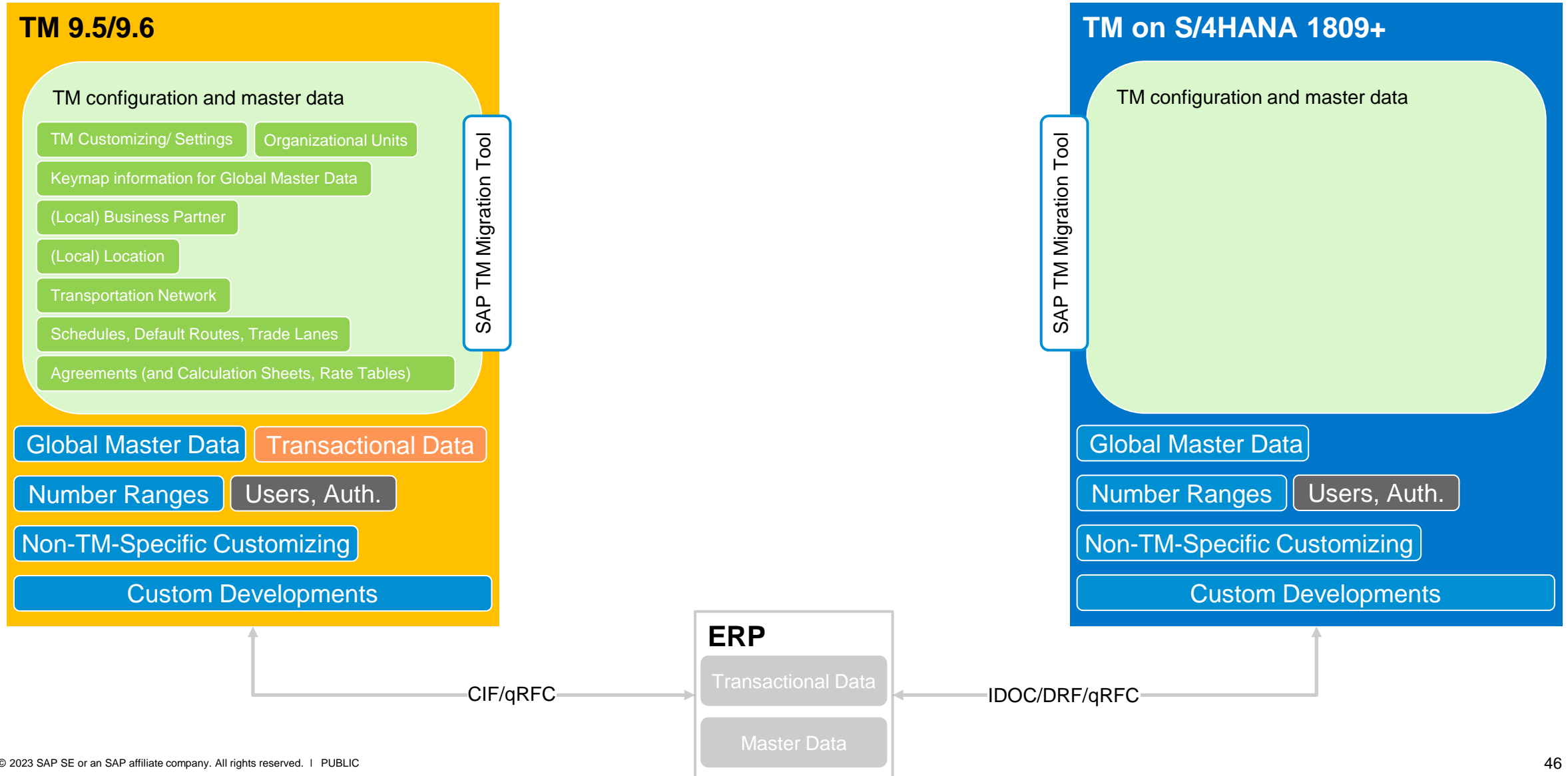
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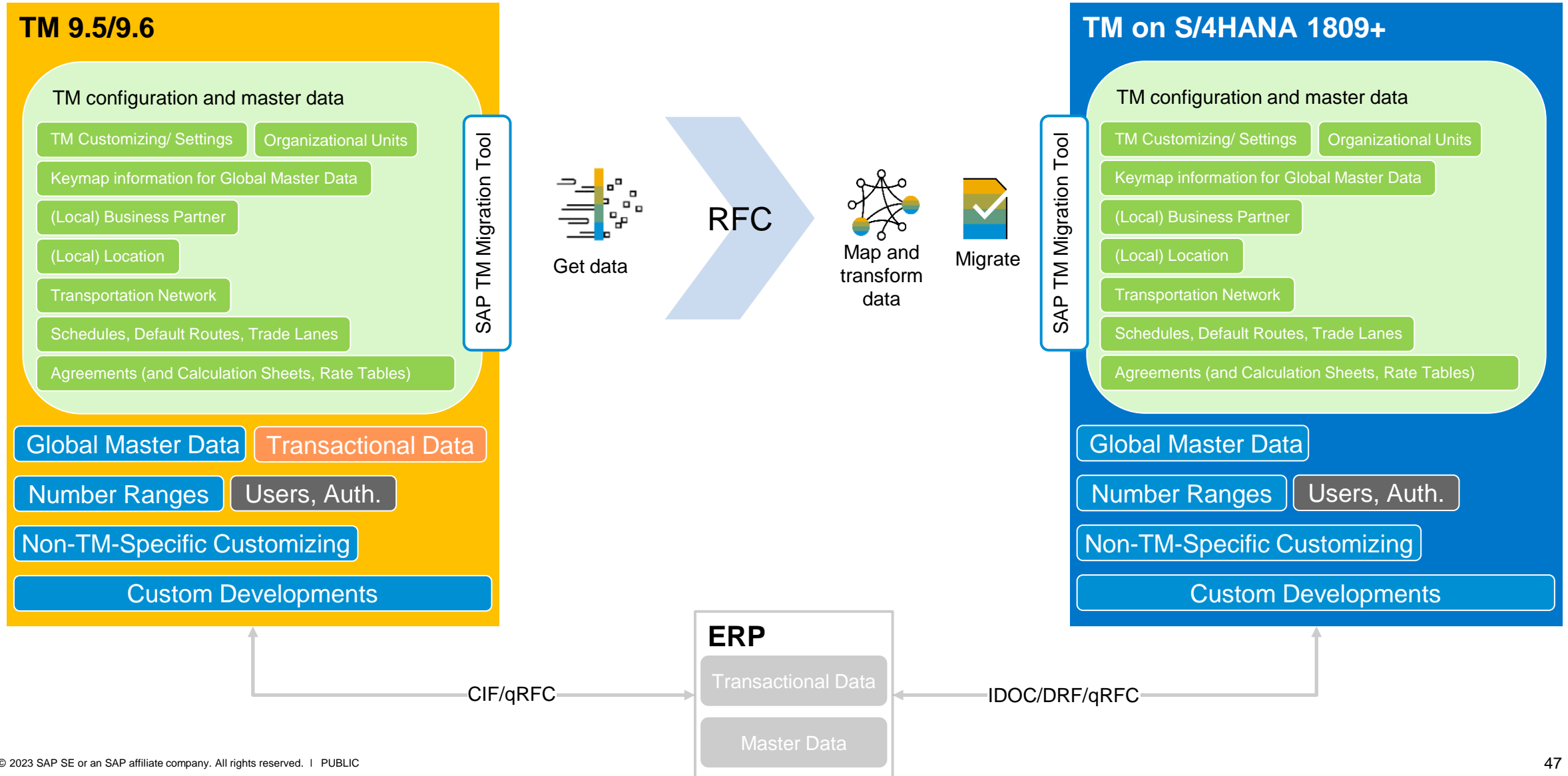
# From SAP TM to SAP S/4HANA

## SAP Default/Standard Migration Approach



# From SAP TM to SAP S/4HANA

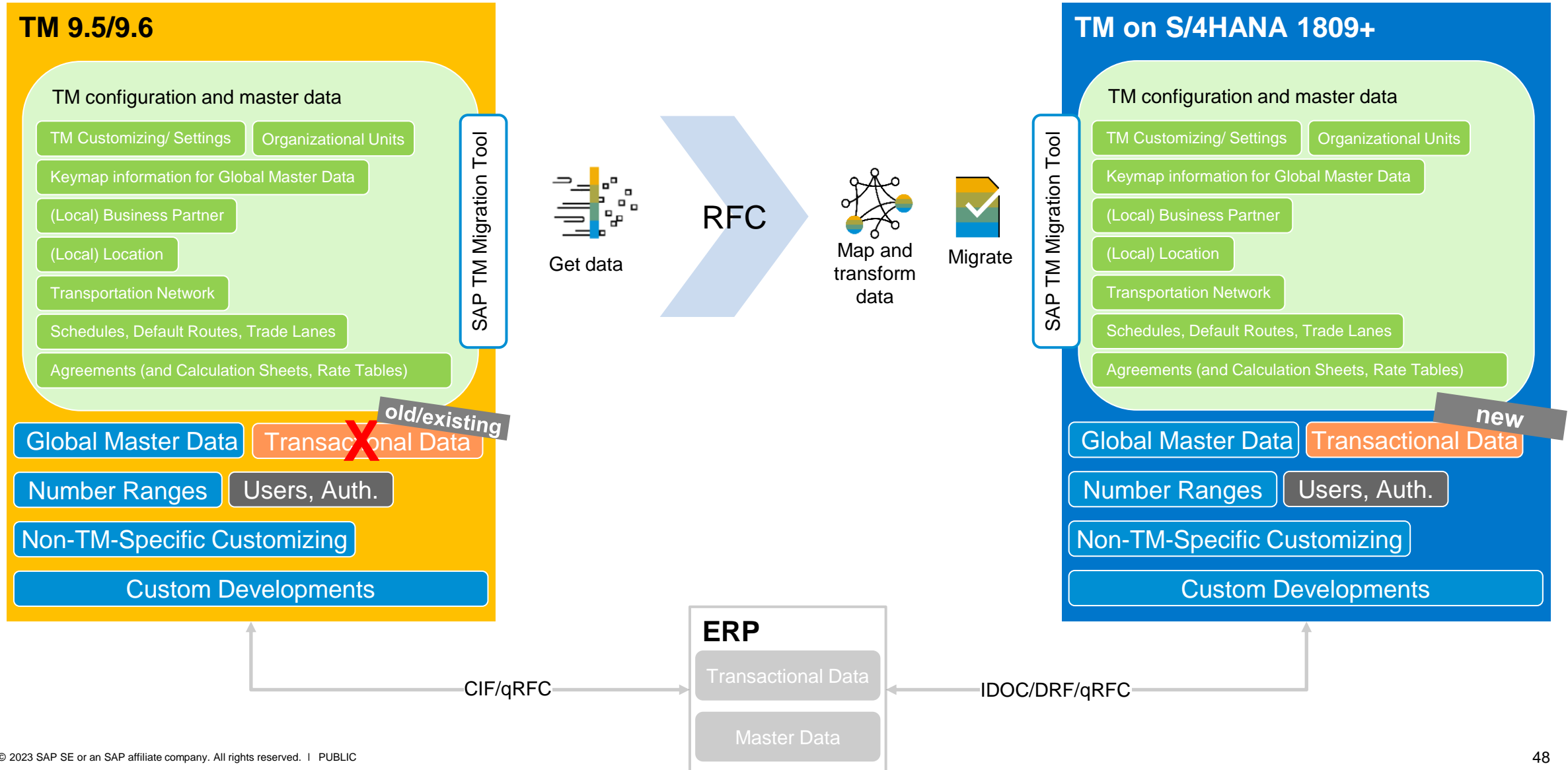
## SAP Default/Standard Migration Approach





# From SAP TM to SAP S/4HANA

## SAP Default/Standard Migration Approach



# Transformation Scenarios

## Typical challenges

How does an SAP S/4HANA **conversion** impact existing transportation management processes?

Which **tools and services** could help for the transition from LE-TRA or SAP TM to TM on SAP S/4HANA?



What is the right **deployment option** for my transportation management solution?

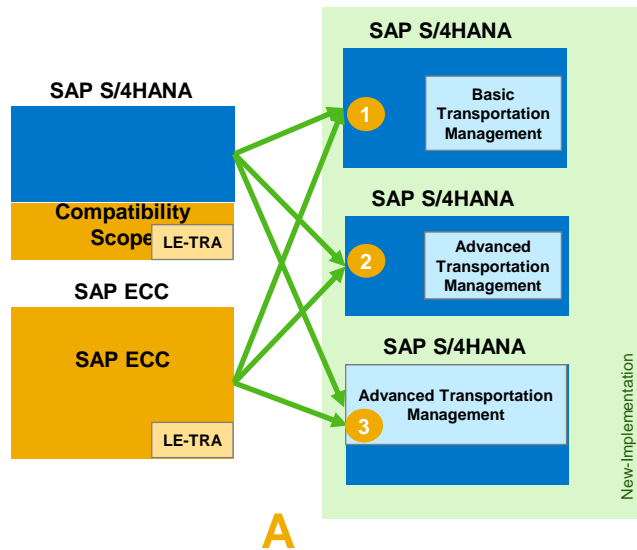
How does SAP S/4HANA **embedded TM work** (integration, functionality, master data)?

How can we **integrate transportation management transformation into overall program roadmap**?

Are there **functional differences between** TM and TM on SAP S/4HANA and how do they affect me?

# Transformation Scenarios

## Transportation Management Solutions



A

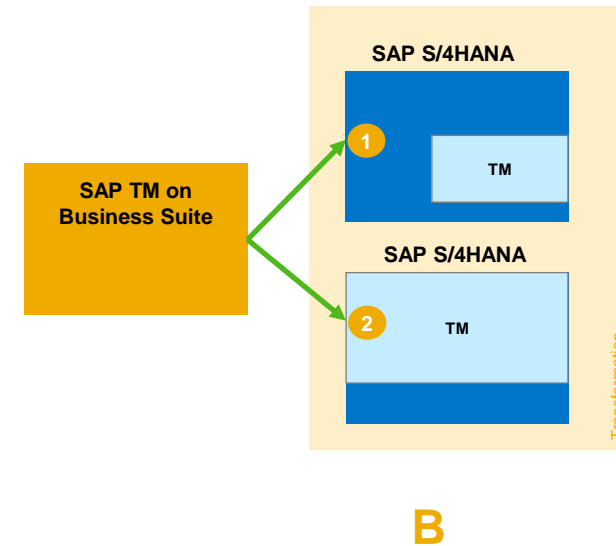
- Transformation from **LE-TRA** to either **Advanced Transportation Management** or **Basic Transportation Management**.
- Deployment Options:
  1. Basic Transportation Management embedded in SAP S/4HANA
  2. Advanced Transportation Management embedded in SAP S/4HANA
  3. Advanced Transportation Management on SAP S/4HANA side-by-side



[End of Mainstream Maintenance for Extended Warehouse Management and Transportation Management](#)



[Selective Extension of Compatibility Pack Usage Rights to 2030 for Transportation \(LE-TRA\), Customer Service \(CS\), and Production Planning in Process Industry \(PP-PI\)](#)

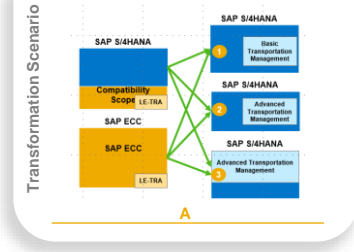


B

- Transformation from **SAP TM on business suite** (e.g. 9.4, 9.5, etc.) to **TM on SAP S/4HANA**.
- Deployment Options:
  - Transportation Management embedded in SAP S/4HANA
  - TM on SAP S/4HANA side-by-side

# Premium Engagement Services

## Transportation Management Transformation



Design Evaluation



1

### Target Process Design

- As-Is – To-Be **Process Mapping** (High-Level)
- High-Level **Gap List**
- **Target SAP S/4HANA Release**

### Target Solution Landscape

- **Integration Scenarios**
- Considering operations, maintenance, scalability/sizing aspects, functional coverage
- Optional: **Sizing**
- **Deployment** options and validation

Expert Sizing



2

IT Planning



Innovation Strategy  
Roadmap



3

### Transformation Roadmap

- **Planning** of transformation journey to target solution architecture
- Considering **rollout planning** and **overall transformation**

# Premium Engagement Services

## Transportation Management Transformation

### Custom-code compatibility check

- Identify **custom-code incompatible** to SAP S/4HANA based on CCM tools with specific checks for Transportation Management.

### Planning PoC activities

- Define **activities, goals, prerequisites and responsibilities** for PoC on migration activities.

### Perform productive migration

- Migration of transactional data** in customer landscape (D, Q, P, etc.).

Intelligent Custom  
Code Management

Selective Data  
Transition Planning  
Workshop

Innovation Discovery

Innovation Proof of  
Concept

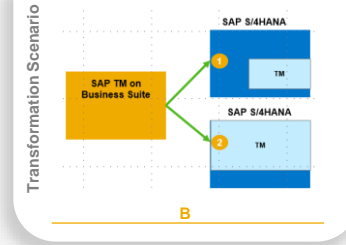
Selective Data  
Migration

### Planning migration project

- Analysis of the current system landscape**, functionality and customer specific enhancements.
- Definition of **migration procedure** incl. sequencing, share of responsibility and estimated duration.

### Perform Proof of Concept

- Run Proof of Concept** to verify migration approach and adjust according to customer specifics.
- PoC can be viewed as **“pre-project” to productive migration**, due to re-use of contents.







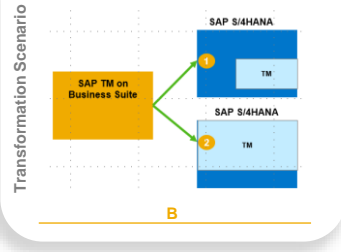
**Service Spotlight**

**Intelligent Custom Code Management Analysis**



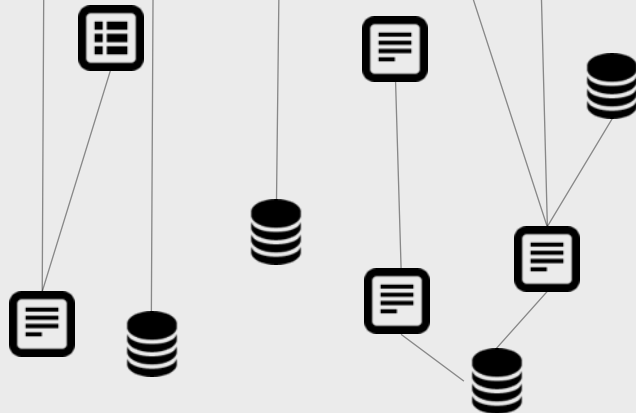
# Introduction: Intelligent Custom Code Management for TM

Service Content: Challenge for your custom code during S/4HANA transformation



## SAP Business Suite System

Custom code

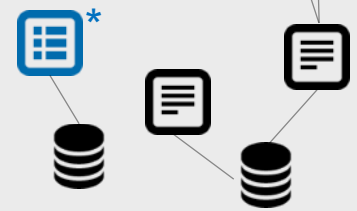


SAP code

Custom  
code has to  
be adapted

## SAP S/4HANA System

Custom code

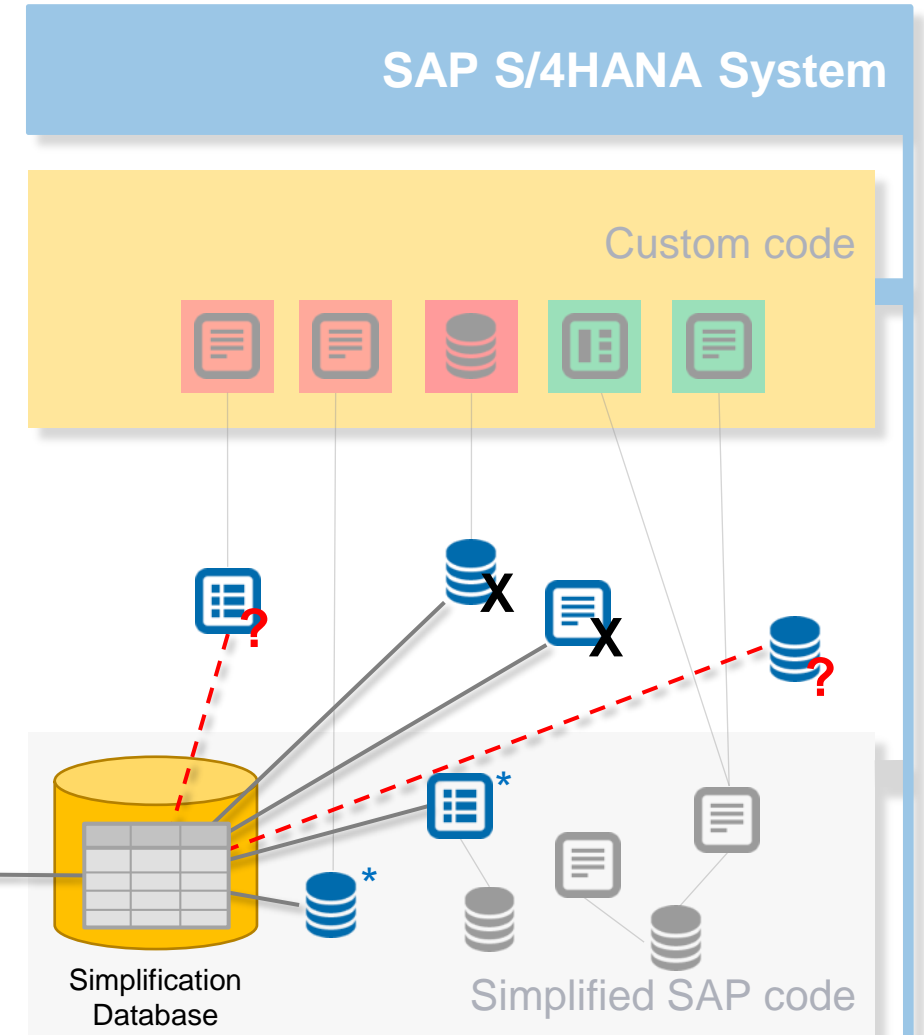
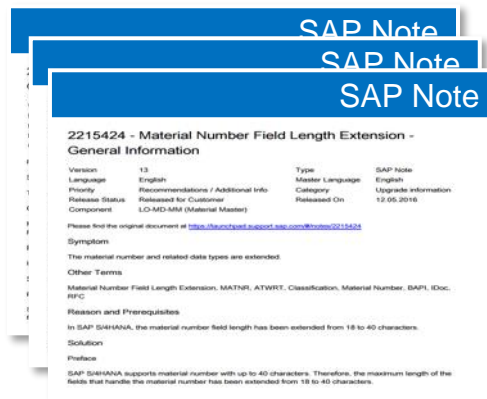


Simplified SAP code

# Introduction: Intelligent Custom Code Management for TM

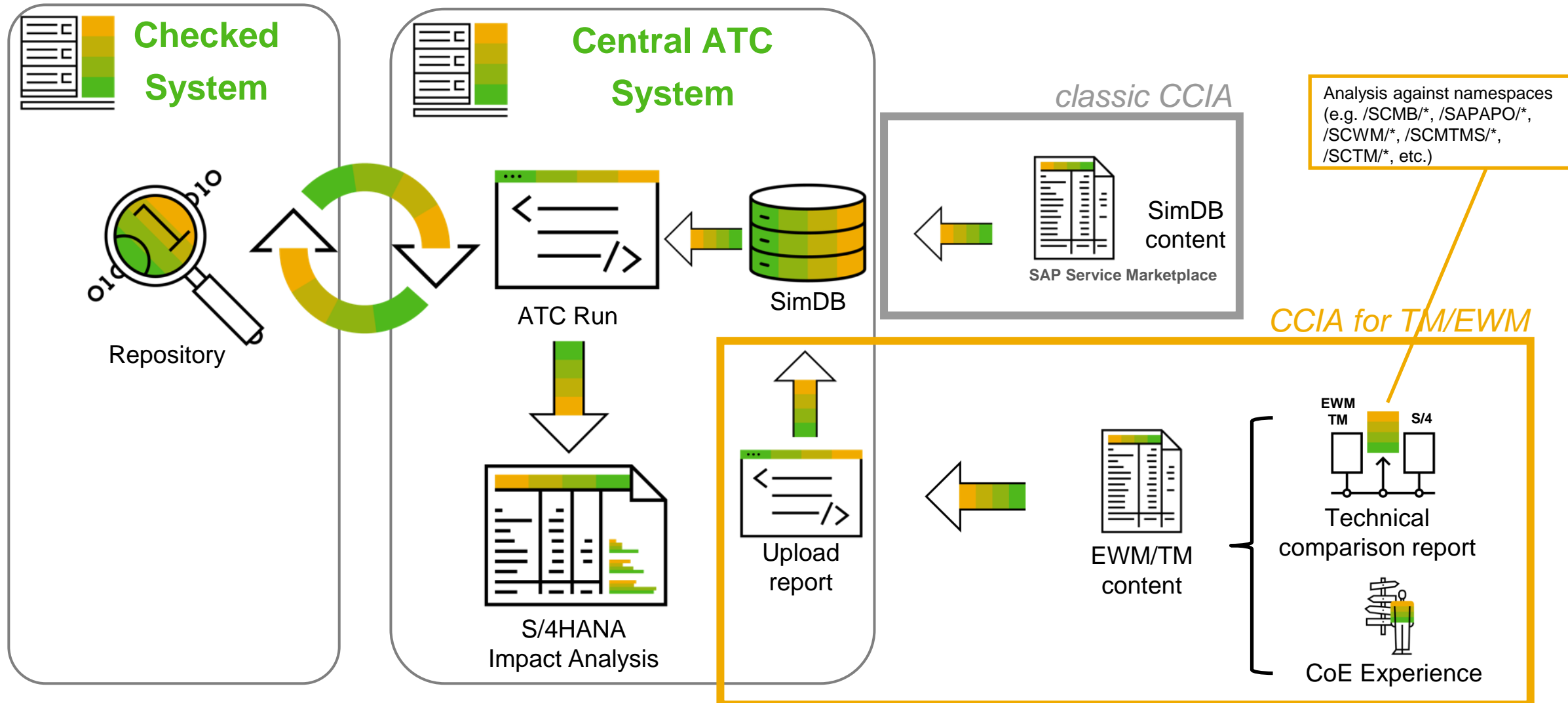
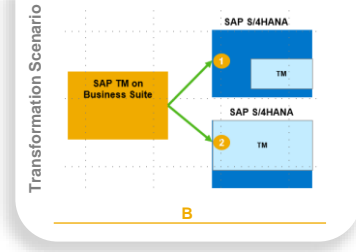
## Challenge for TM / EWM Customers

- The simplification database does not support (yet) some logistics components:
  - **Transportation Management (TM)**
  - **Extended Warehouse Management (EWM)**
- The Custom Code Impact Analysis service would produce limited results for the custom code on these systems.
- The Custom Code Impact Analysis for TM/EWM service aims at bridging this gap by providing **additional content** to the SimDB on those components.



# Introduction: Intelligent Custom Code Management for TM

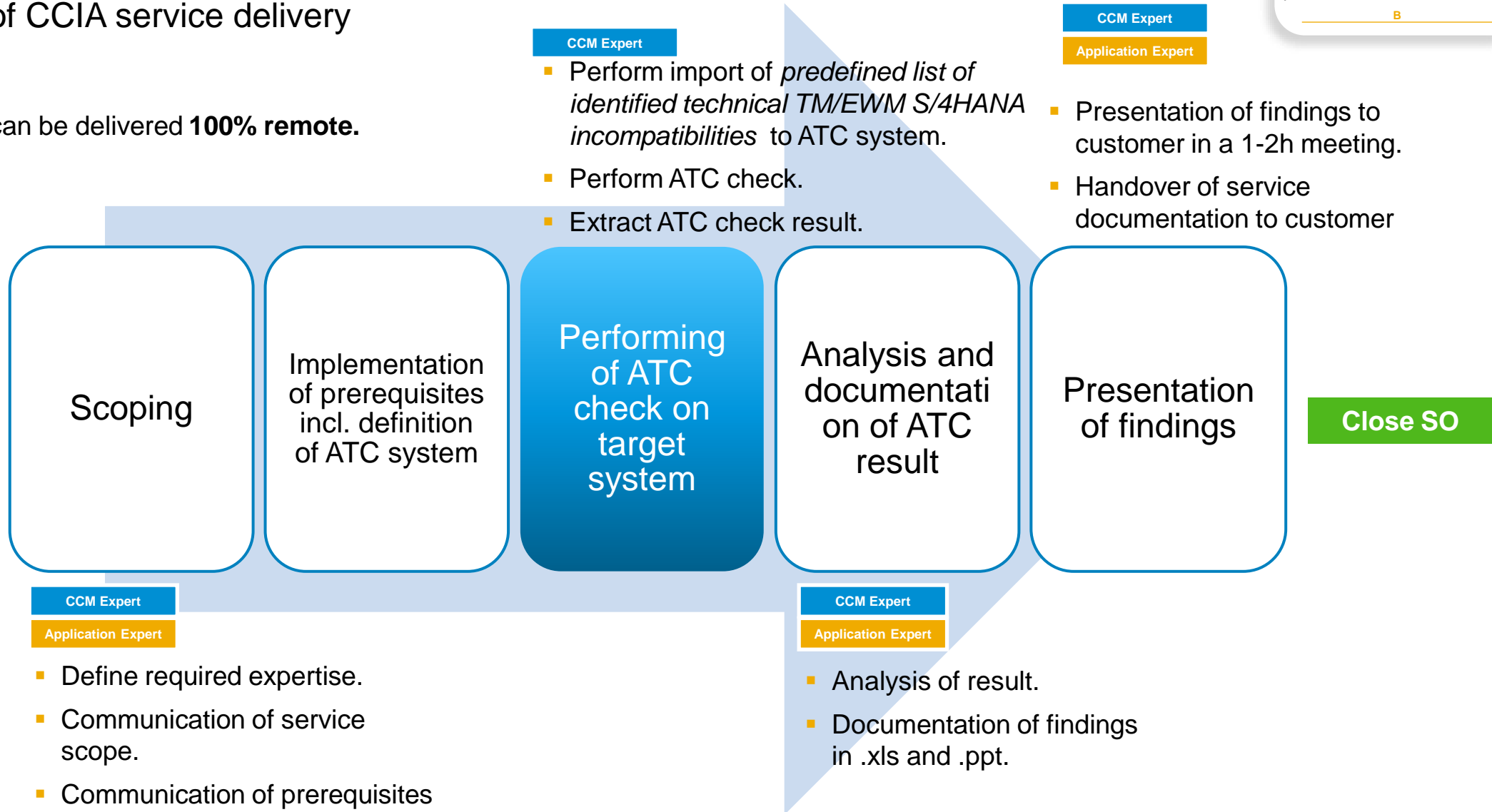
## Service Execution



# Introduction: Intelligent Custom Code Management for TM

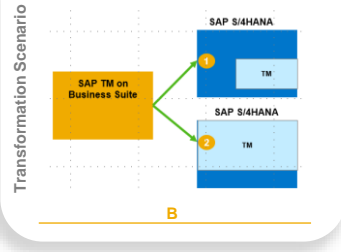
## Typical steps of CCIA service delivery

Typically service can be delivered **100% remote**.



# Introduction: Intelligent Custom Code Management for TM

## Service Execution 2



1. CCM experts **analyses result based on generic SAP S/4HANA incompatibilities** (e.g. Empty SELECT/ENDSELECT, EXIT/RETURN/LEAVE in SELECT, etc.)
2. TM experts **analyses result based on EWM/TM application incompatibilities** (e.g. CIF-Badi implementation, usage of standard method with changed interface in SAP S/4HANA).
  - Analyze **application specific findings**.
  - Document **findings and recommendation in result .xls**.
  - Document **findings and recommendation in .ppt** incl. aggregation to management summary.

Priority	Check Title	Check Message	Object name	Object Type	Referenced Object	Simplification Item Category	Include Name	Line Number	Count	Check Status
1	S/4HANA: Search for usages of simplified objects	Usage of no longer available development object	YSTM_BW_TRQ	TABL	SCMTMSOLV_BLOCK_REASON SCMTMSOLV_TORROT	X			0	Positive
1	S/4HANA: Search for usages of simplified objects	Usage of no longer available development object	YSTM_CORE_FG	VIEW		X			0	False Positive

**SAP Analysis**

**Finding**  
Data element SCMTMSOLV\_BLOCK\_REASON (CHAR2) does not exist anymore in SAP S/4HANA.  
The data element is used in the following custom-own tables and views:  
YSTM\_BW\_TRQ  
Z0XTN00107  
Z0XTN00108  
The data element is being replaced by data element LFSP (CHAR2).

**Recommendation**  
Replace the data element in the relevant custom-own database tables.  
This change can be done in SAP S/4HANA only.  
Top of the removed components of structure SCMTMSOLV\_TORROT are used in CDS view:  
BLOCK\_REASON  
BRC\_EXC  
BRC\_PLAN  
DATEIME\_BK\_EXE  
DATEIME\_BK\_INV  
DATEIME\_BK\_PLA  
INV\_BLOCK\_REASON  
USER\_ID\_BK\_EXC  
USER\_ID\_BK\_INV  
USER\_ID\_BK\_PLA

### Custom Code Impact Analysis (CCIA)

#### SAP Transportation Management at Red Bull

SAP Services CoE Application Integration  
October-December 2020

CONFIDENTIAL

#### Custom Code Impact Analysis for TM Summary

- There are 166 results identified by custom code impact analysis on TM impacted objects.
- From these 166 results 32 are rated as "positive", which are leading to code adjustments being required.
- From these 166 results 134 are rated as "false positives", as they are using standard data elements or ABAP modularization units (e.g. class, methods, tables, data elements), which are changed in SAP S/4HANA, but the changes have no impact on custom implementation.
- Note: The "false positives" are provided with the excel attached, to be reviewed by the project team.
- Please find the major findings based on ATC analysis in the table listed below:

Substructure Object	Impact	Action	Count
BUT0ID (TABL)	The DB table BUT0ID (additional identifiers) is not used in S/4 stack.	Transform CIF enhancements to S/4HANA master data interfaces (e.g. ALE or DRF) and adapt to CIF mapping tables (e.g. CIF_VENDOR).	4
SCMTMSOLV_BLOCK_REASON (STEL)	Usage of no longer available data element.	Replace data element SCMTMSOLV_BLOCK_REASON by data element LFSP.	3
SCMTMSOLV_BUYC / SCMTMSOLV_BUYCT (TABL)	Usage of no longer available table.	Replace table SCMTMSOLV_BUYC and SCMTMSOLV_BUYCT by table TALS and TALEST.	4
SCMTMSOLV_BUYC_CODE (STEL)	Usage of no longer available data element.	SCMTMSOLV_BUYC_CODE is replaced by data element PARTNO.	4
SCMTMSOLV_GET_BUSINESS_PARTN (CLASS)	Method signature changed.	Consider changes to method signature in custom-own implementation.	1
SCMTMSOLV_TOR_ROT (TABL)	Structure changes in SAP S/4HANA.	Parameters from structure are being removed in SAP S/4HANA.	1
SCMTMSOLV_TOR_PARTN_X (TABL)	Structure changes in SAP S/4HANA.	Parameters from structure are being removed in SAP S/4HANA.	5
SCMTMSOLV_TOR_PARTN_X (TABL)	Structure changes in SAP S/4HANA.	Parameters from structure are being removed in SAP S/4HANA.	6

Details on the affected objects can be checked directly on the Central ATC system (RAG).

#### Custom Code Impact Analysis for TM Detailed Findings

**BUT0ID (TABL)** - The DB table BUT0ID (additional identifiers) is not used in S/4 stack.

**Finding**

- A select on DB table BUT0ID is used in custom own implementation Y001\_CA\_CIF\_HELPER=>GET\_BUY\_AND\_LOC\_ID enhancement to CIF interfaces.
- As CIF is replaced by ALE or DRF interface, the corresponding custom implementation has to be transformed to new master data interface.
- The DB table BUT0ID (additional identifiers) is not used in S/4 stack.

**Recommendation**

- In case the enhancement is still required in SAP S/4HANA replace select on DB-table BUT0ID by select on CIF-mapping tables - CIF\_VENDOR\_LINK (Vendor) and CIF\_CUST\_LINK (Customer).
- As the corresponding CIF-mapping tables contain only either vendors or customers, a check on Business Partner Identification Types (C\_BUPA\_CIDENT) might not be required anymore.
- Further logical system identifying source system of business partner master data is not available in standard anymore. In case this parameter is still required it can be filled with a custom-own implementation in ALE or DRF interface.
- This change can be done in SAP S/4HANA only.



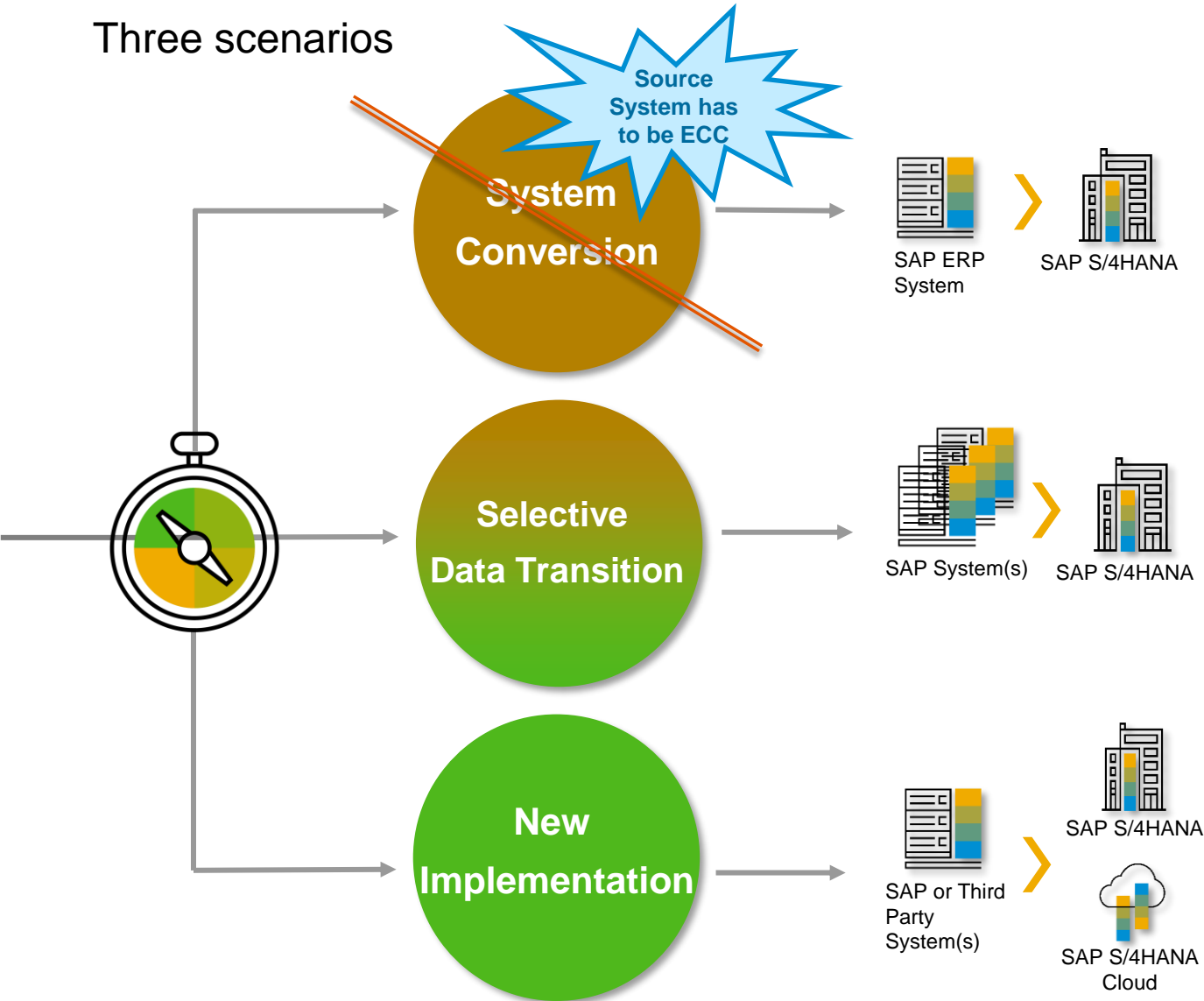
**Service Spotlight**

**Selective Data Transition Planning Workshop**



# Introduction: Selective Data Transition Planning Workshop for TM

Three scenarios



## Bring your business processes to the new platform

- A complete technical in-place conversion of an existing SAP ERP system to SAP S/4HANA
  - Adopt new innovations at your speed
- Delivery model: included in SAP S/4HANA shipment

## Partly re-use, partly re-implementation

- Covers the migration of relevant business data from SAP ERP to SAP S/4HANA
  - Allows to combine redesign of business processes with the option of retaining historical data
  - Transactional Data Migration: Realized by a combination of standard functions used for a new implementation or data migration with complementing expert functions which are not released to general availability
- Delivery model: as a service / consulting project

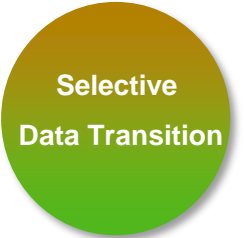
## New implementation / re-implementation

- Reengineering and process simplification based on latest innovations
  - Highly standardized, fueled with best practices & based on a clean core
  - Implement innovative business processes with preconfigured best practice content on an innovative platform
  - Migrate your master data & retire old landscape
- Delivery model: included in SAP S/4HANA shipment



# Introduction: Selective Data Transition Planning Workshop for TM

Transition to SAP S/4HANA

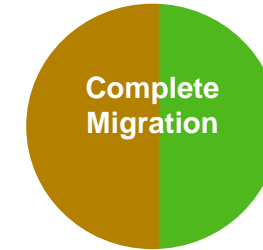


## SAP Standard Migration Concept



- Selective data migration (Transportation master data, settings and customizing) to the new platform using standard TM migration tool
- After phase in, new documents are only created in new TM system
- Workflow takes place in two systems for a certain period of time
- **Migration of transactional data not foreseen**
- Custom master data has to be taken care by customer

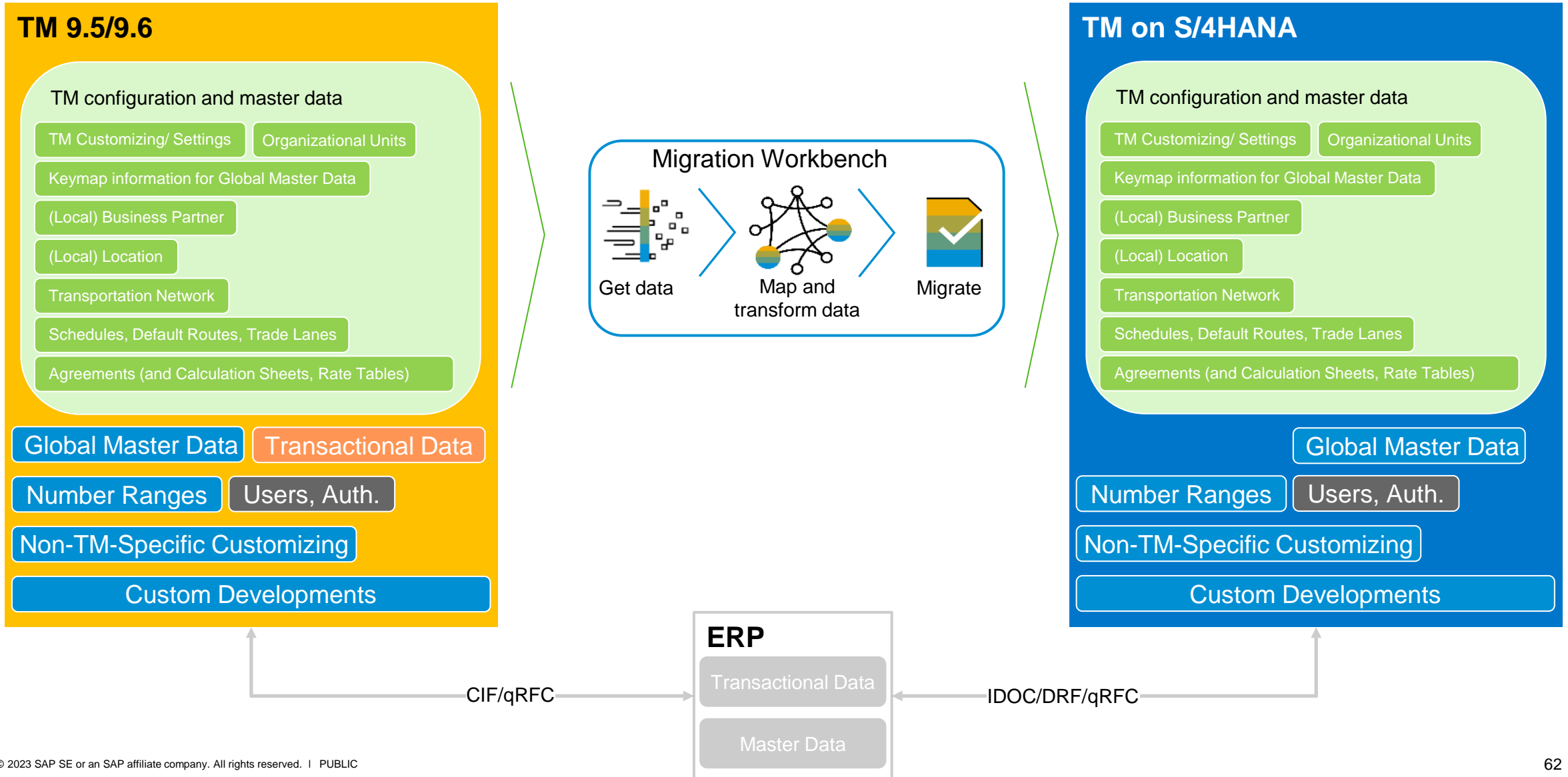
## CoE Migration Concept



- Bring TM system and data to the new platform
- Even though a system conversion is not possible for TM migration project, this is a new approach which is very close to a conversion
- Complete data migration (Transportation master data, **transactional data**, settings and customizing) to SAP S/4HANA TM system using different tools like the Data Migration Workbench and the standard TM Migration Tool
- Including migration partly on database level
- Adopt new innovations at your speed

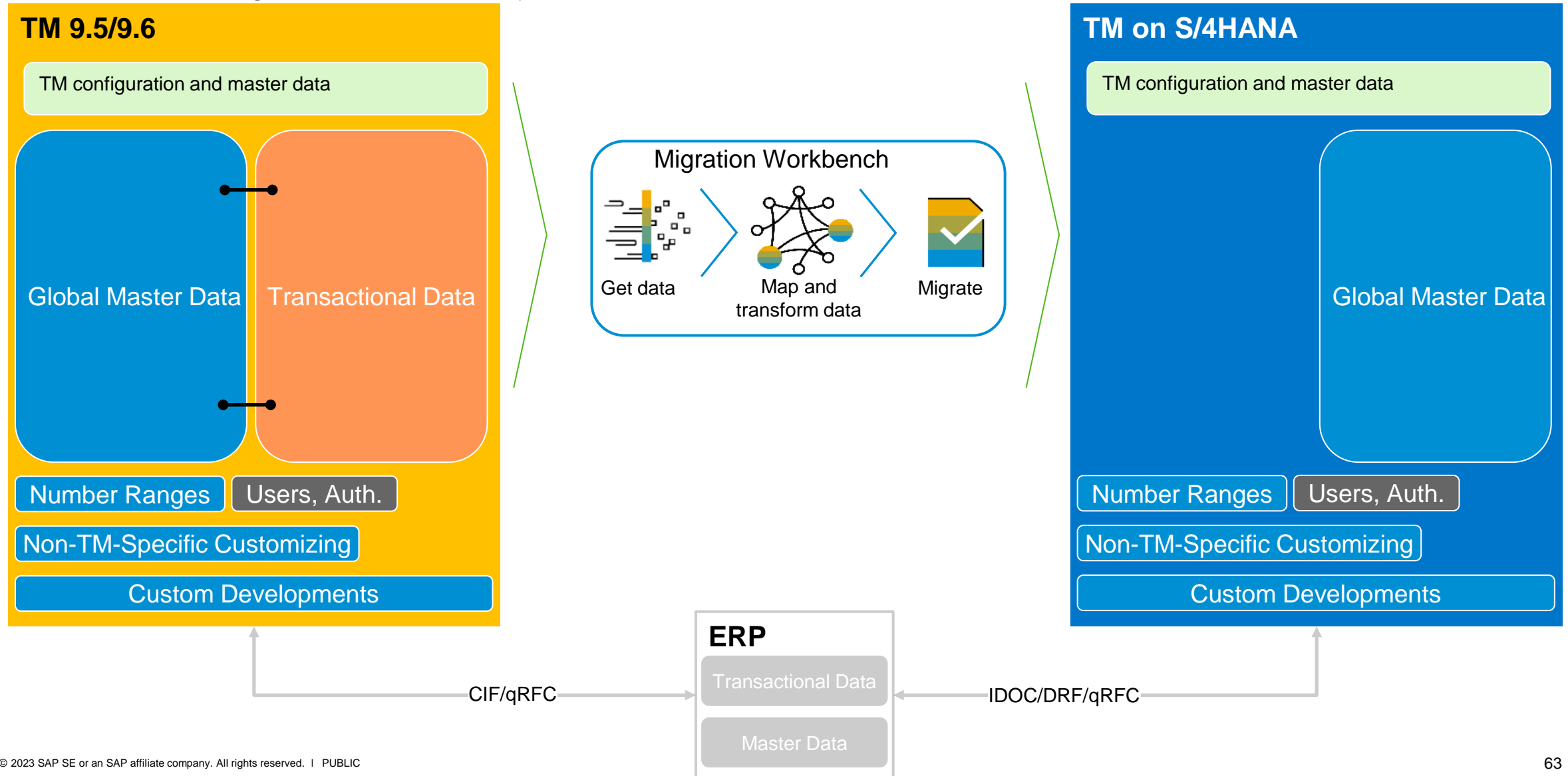
# From SAP TM to SAP S/4HANA

## SAP S/4HANA Migration Approach by CoE EMEA & SAP DMLT



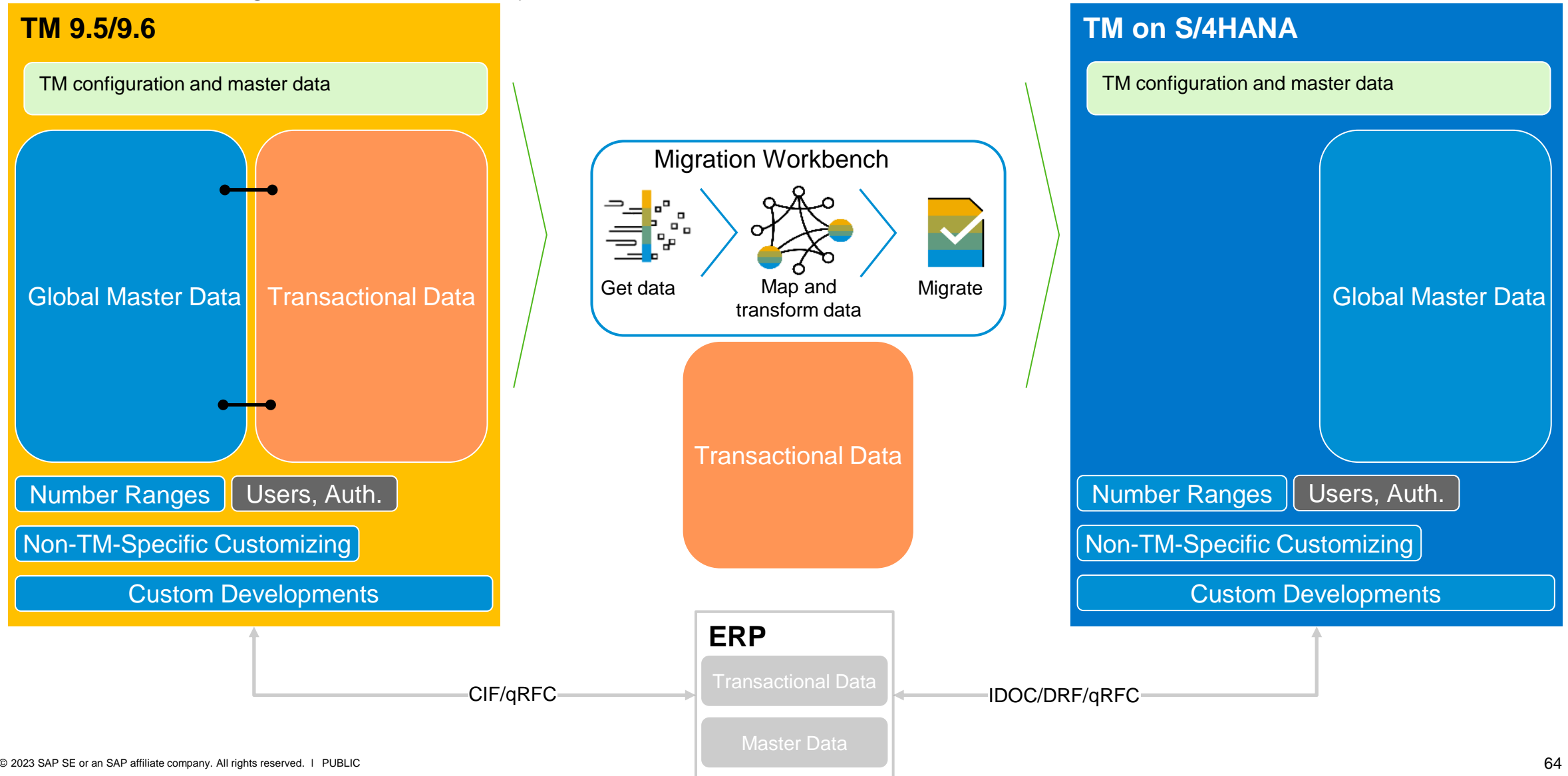
# From SAP TM to SAP S/4HANA

## SAP S/4HANA Migration Approach by CoE EMEA & SAP DMLT



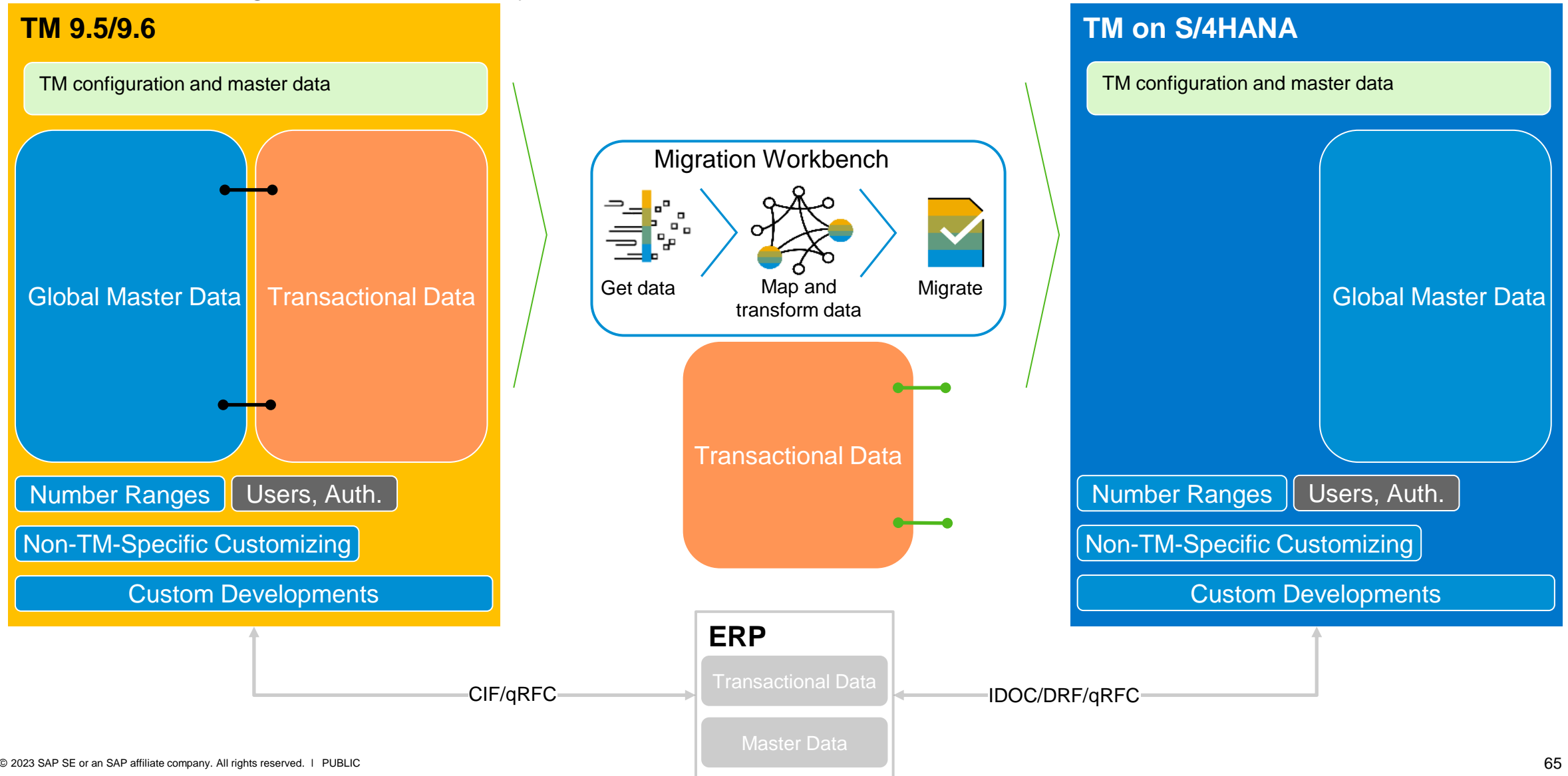
# From SAP TM to SAP S/4HANA

## SAP S/4HANA Migration Approach by CoE EMEA & SAP DMLT



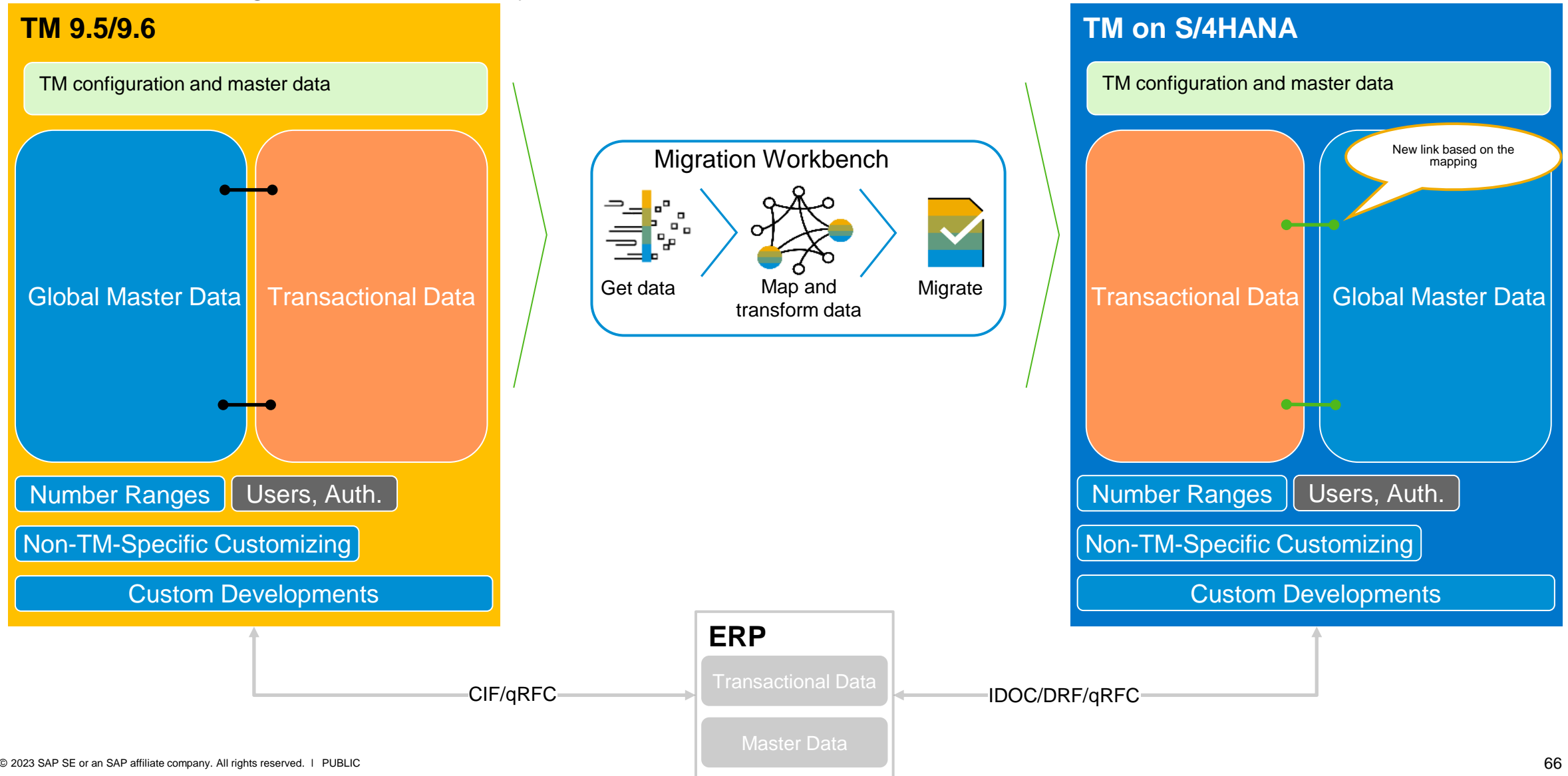
# From SAP TM to SAP S/4HANA

## SAP S/4HANA Migration Approach by CoE EMEA & SAP DMLT



# From SAP TM to SAP S/4HANA

## SAP S/4HANA Migration Approach by CoE EMEA & SAP DMLT







**Service Spotlight**

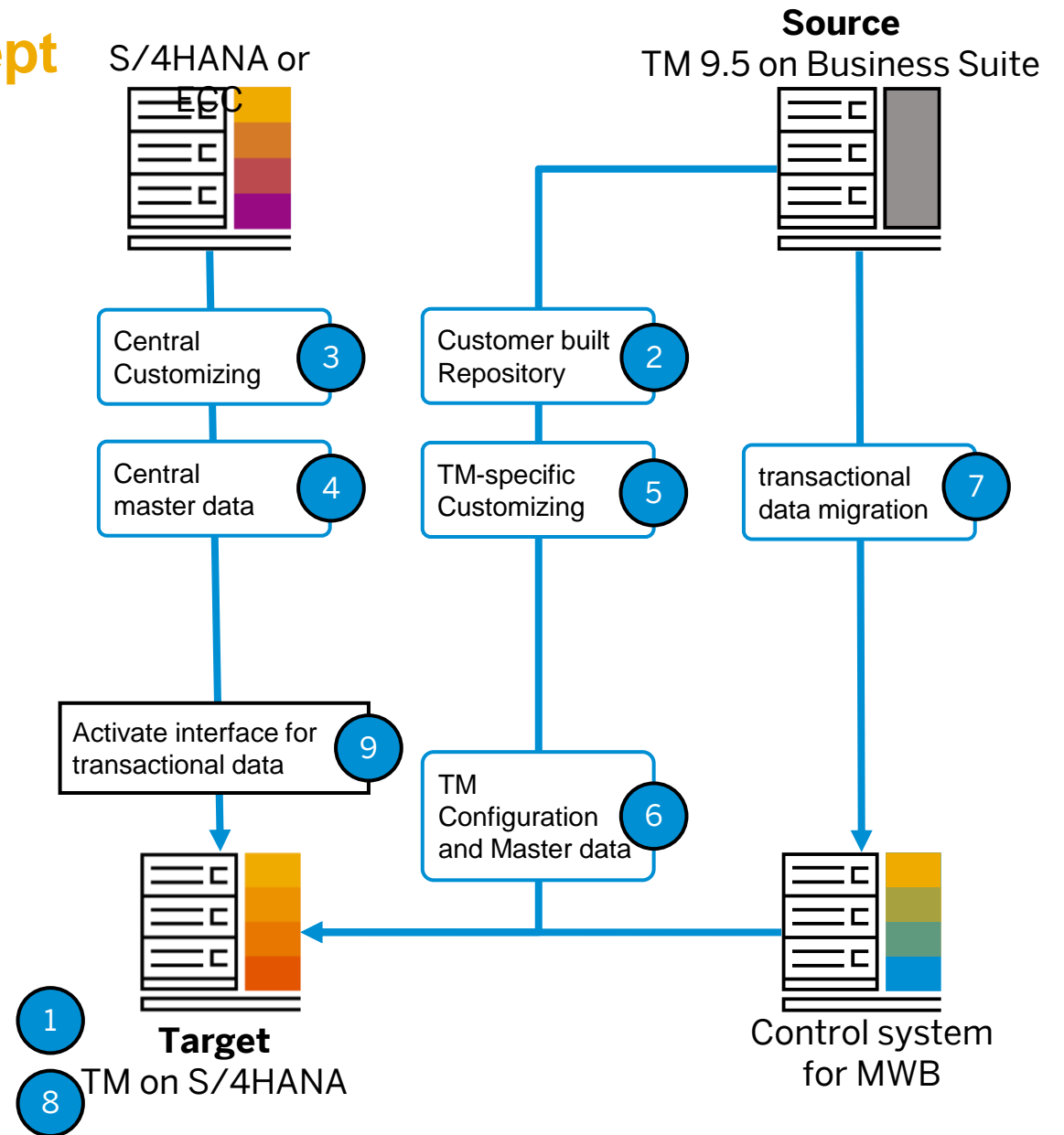
**Innovation Proof of Concept**



# Introduction: Innovation Proof of Concept

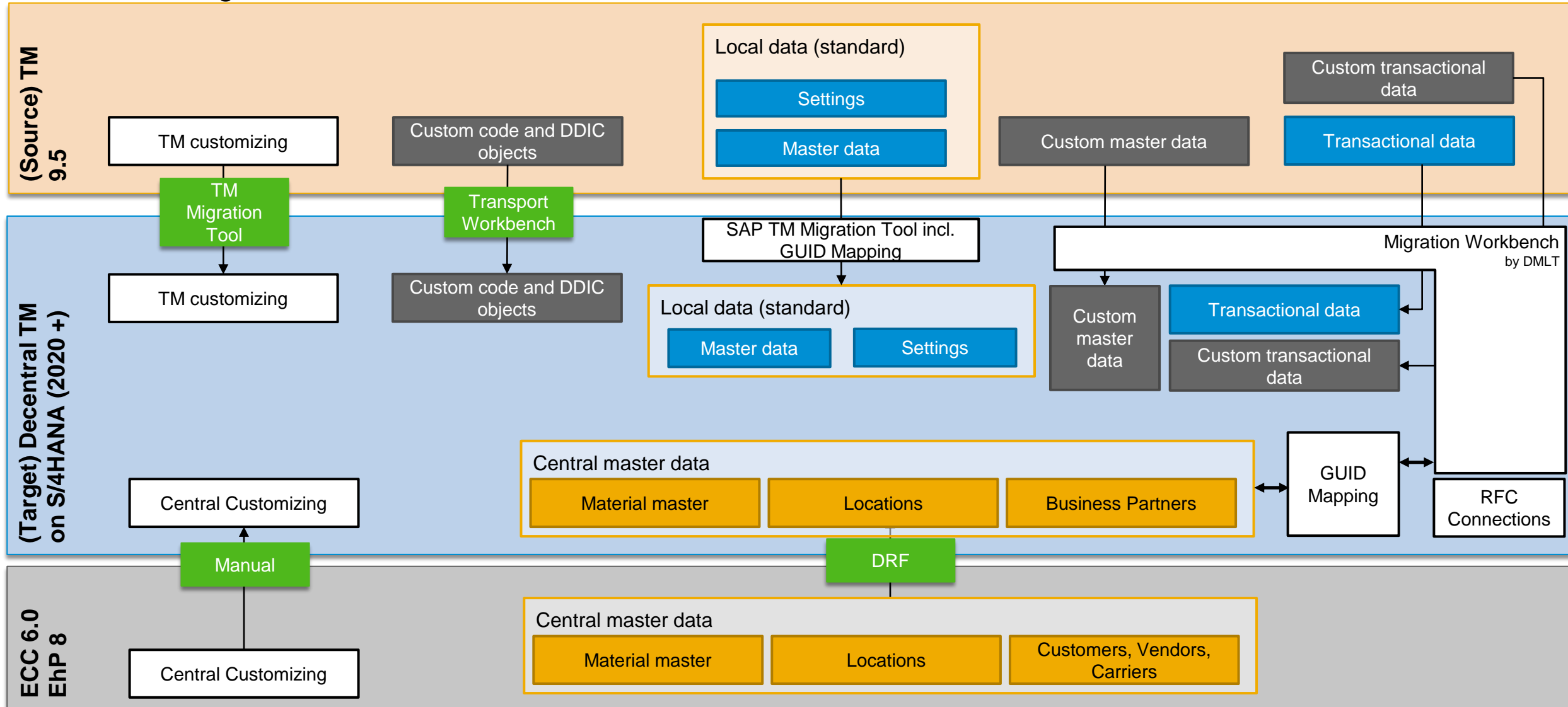
## TM Migration Process Overview

1. Basic setup of TM on S/4HANA and integration to ERP
2. Migration of custom code and custom DDIC objects
3. Non TM-specific customizing migration
4. Central master data transfer from ERP
5. TM-specific customizing migration
6. Execution of the Migration Tool
7. Complete migration of transactional data
8. Adaption of user, role and authorization
9. Activate interface for transactional data transfer



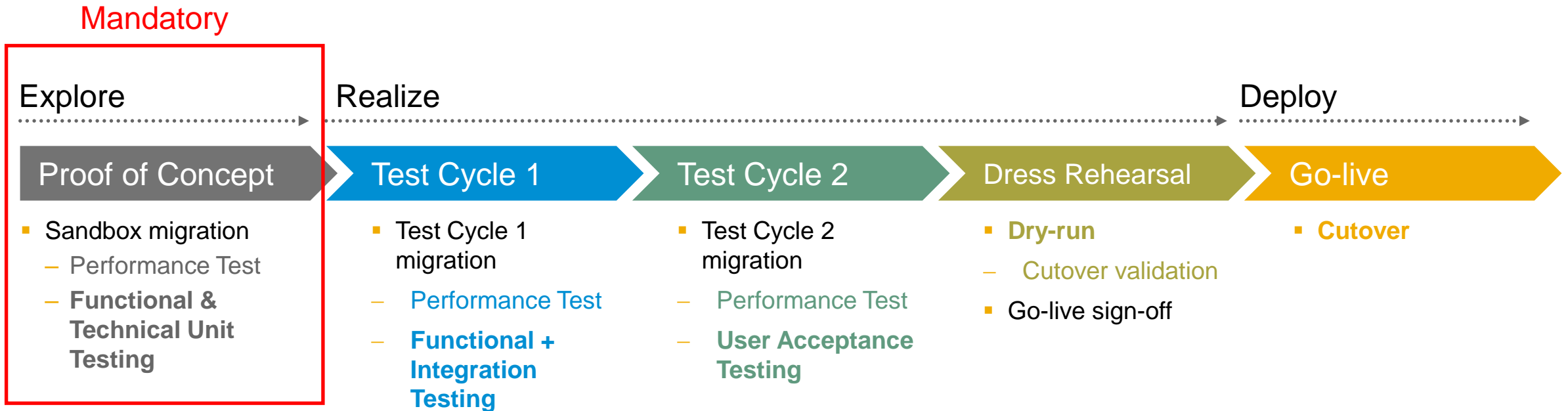
# Introduction: Innovation Proof of Concept

## Overview migration activities



# Introduction: Innovation Proof of Concept

## Transactional Data Migration – Typical Project Test Cycles



*Note: Number of test cycle may vary on different customers and depends on the complexity of the SDT project.*

# Introduction: Innovation Proof of Concept

SAP S/4HANA Migration Approach by CoE EMEA

## Migration approach

- It migrates the system as it is considering data model changes in SAP S/4HANA – **no documents must be closed**
- Fast and **convenient way to transform** without impacting business operations or logistics (IT/technically driven approach)
- **Short productive downtime**
- SAP S/4HANA **transformation “feels” close to upgrade**

## Restriction

- The target S/4HANA system **must be greenfield system** – no TM Data must exists in the system
- We migrate **all or nothing** – no carve out is possible

## Outlook

- Migrate selected documents – **enable carve out**

# Agenda

## Transportation Management and Transformation

### 1 What's new in SAP S/4HANA 2023 – solution highlights, Roadmap and Transformation Content

Eric Osterroth, Head of Customer Office, SAP Product Engineering, SAP SE

Holger Wittmer, Head of Partner Success Management, SAP Product Engineering, SAP SE

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## From planning to implementation - Premium Engagement Services for TM transformation projects

Who can Premium Engagements support your projects transforming most efficiently to SAP S/4HANA?

- ### 2
- Services and Migration Methodology
  - Introduction Custom-Code Impact Analysis for SAP TM (CCIA) Service
  - Introduction Selective Data Transition Planning (SPW) Service
  - Introduction Innovation Proof of Concept (iPoC) for transactional Data Migration

David Nohe, Premium Hub Center of Expertise (CoE) EMEA – TM Expert, Customer Success, SAP

Meike Helwig, Premium Hub Center of Expertise (CoE) EMEA – Team Lead TM, Customer Success, SAP

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### 3 Open Discussion and Q&A with the Experts

# Open Discussion and Q&A with the Experts



# Thank you.

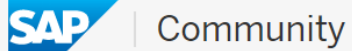


## Premium Engagement **Additional Information**



### Important **SAP Notes**

- [2769186 - System Transformation SAP TM to TM in SAP S/4HANA](#)
- [2881166 - FAQ : Stock Room Management](#)



### Important **SAP Blogs**

- [10 Steps for Migrating to SAP EWM on SAP S/4HANA Platform](#)
- [SAP EWM on Business Suite to SAP EWM on SAP S/4HANA: A new concept for Data Migration](#)
- [Handling of open documents while migrating to SAP EWM on SAP S/4HANA Platform](#)
- [SAP Transportation management \(TM\) on S/4HANA – Deployment options, Features and Migration](#)
- [Stockroom management in S/4HANA – Advantages and Limitations](#)
- [S/4 HANA Stock Room Management](#)



## Premium Engagement

### Additional Information



- [Transforming Warehouse and Transportation Logistics Solutions to SAP S/4HANA – Overview on Challenges and Service offerings](#)
- [New Service for Custom-Code Impact Analysis \(CCIA\) for EWM and TM](#)
- [End of Mainstream Maintenance for Extended Warehouse Management and Transportation Management](#)
- [Safeguarding for SAP Extended Warehouse Management \(EWM\) and Transportation Management \(TM\)](#)
- [Selective Extension of Compatibility Pack Usage Rights to 2030 for Transportation \(LE-TRA\), Customer Service \(CS\), and Production Planning in Process Industry \(PP-PI\)](#)

## SAP S/4HANA Upgrade and Product Integration Roadmap

- [Create an Innovation Strategy and a High-level Road Map for SAP TM embedded in SAP S/4HANA](#)
- [Create an Innovation Strategy and a high-level Road Map for SAP EWM](#)



## Premium Engagement

### Additional Information

## SAP Notes

Application	Time	Source
LE-WM on S/4 HANA Stack	Compatibility Scope until 2025	<a href="#">2269324 - Compatibility Scope Matrix for SAP S/4HANA on-premise</a>
Stock Room Management on S/4 HANA Stack	Maintenance accordingly S/4 HANA release	<a href="#">2577428 - Road map for LE-WM in SAP S/4HANA</a> <a href="#">2881166 - FAQ : Stock Room Management</a> <a href="#">2882809 - Scope Compliance Check for Stock Room Management</a>
LE-TRA on S/4 HANA Stack	Compatibility Scope until 2030 (excl. LE-TRA Route)	<a href="#">2269324 - Compatibility Scope Matrix for SAP S/4HANA on-premise</a> <a href="#">2270199 - S4TWL - Transportation (LE-TRA)</a> <a href="#">3097176 - Migration from SAP ERP or SAP LE-TRA to SAP S/4HANA Transportation Management</a>
SCM Applications – Business Suite 7 on NetWeaver Stack	Maintenance until 2027 Extended until 2030	<a href="https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/maintenance-strategy/s4hana-business-suite7.html">https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/maintenance-strategy/s4hana-business-suite7.html</a>  <a href="#">1648480 - Maintenance for SAP Business Suite 7 Software including SAP NetWeaver</a>

## Premium Engagement

### Additional Information

#### SAP Blogs

- [Basic version of Transportation Management vs LE-TRA in SAP S/4HANA](#)
- [SAP Transportation management \(TM\) on S/4HANA – Deployment options, Features and Migration](#)
- [Stockroom management in S/4HANA – Advantages and Limitations](#)

#### Guides

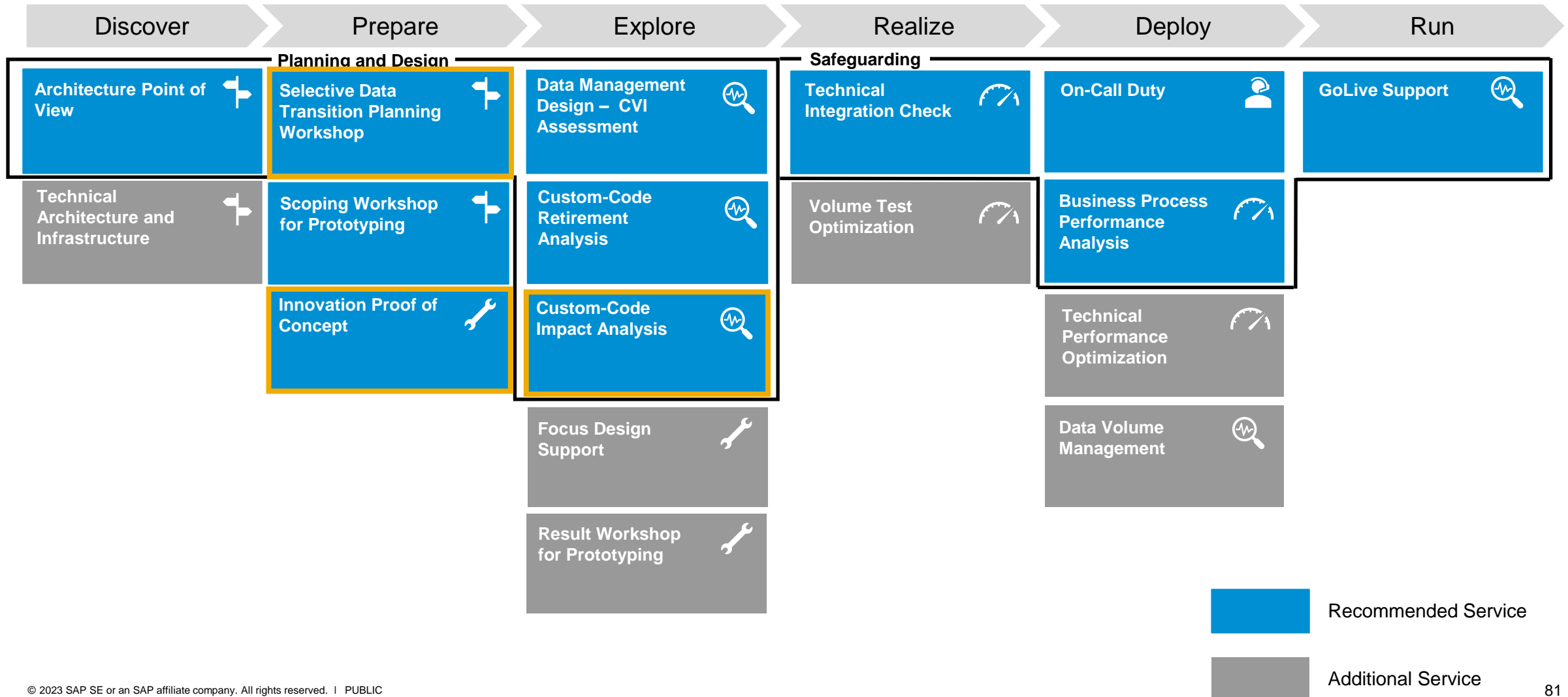
- [How do LE-TRA processes work in basic Transportation Management?](#)

To learn more about our service offering and schedule a call with our experts contact your **Technical Quality Manager (TQM)** or your **Sales Account Manager**.

# Warehouse Management transformation

Recommended service plan and additional services

## B) SAP EWM / TM (on business suite) to SAP S/4HANA



# Motivation & Challenges

## Common Demand with SAP S/4HANA Transformation

### Identifying the right solution



- Which **solutions are available** and what is the impact on project and functionality?
- What are the **features and limitations** of target solutions chosen?
- Which **deployment option** and product version is best fit for customer situation/demand?

### Define migration options and transformation roadmap



- Depending on target solution and product version, which **migration options** are there?
- How can the transformation of solutions being **integrated into overall SAP S/4HANA transformation**?

### Adopt functional and technical innovations



- How to **innovate** warehouse and transportation management processes with new solution capabilities available?
- How to **increase process efficiency** and productivity with target solution architecture?

### Proof of Concept

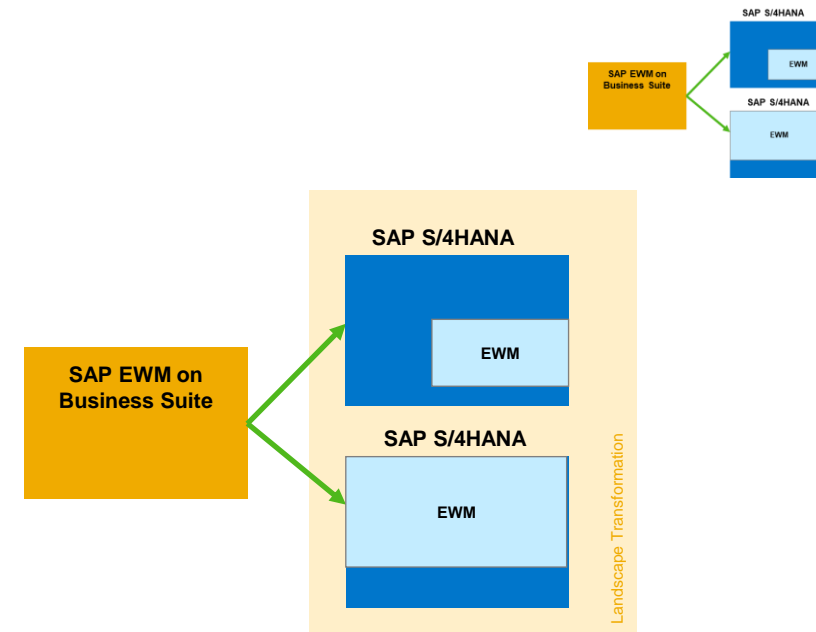
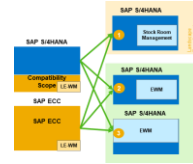
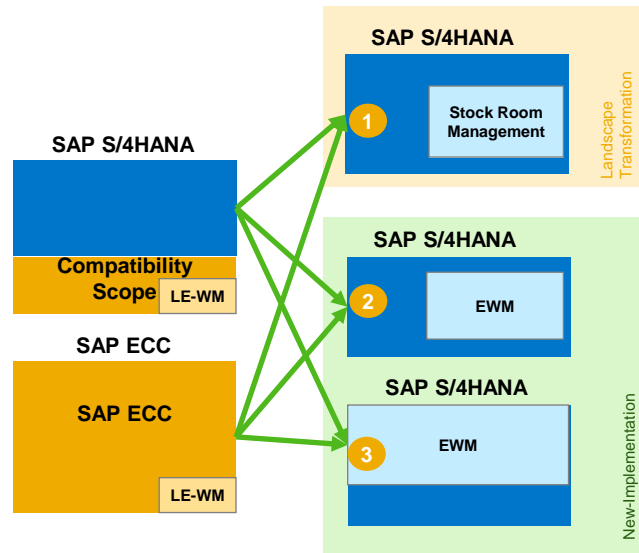


- **Reduce risks** and **optimize planning** for transformation by building a business case to showcase value of target solution, validation with transformation efforts and adjustment requirements, as well as product capabilities in alignment with product roadmap.



# Transformation Scenarios

## Warehouse Management Solutions



- Transformation from **LE-WM** to either **Extended Warehouse Management Management** or **Stock Room Management** solution architecture.
- Deployment Options:
  1. Stock Room Management (STRM) in SAP S/4HANA
  2. EWM embedded in SAP S/4HANA
  3. EWM on SAP S/4HANA side-by-side

- Transformation from **SAP EWM on business suite** (e.g. 9.4, 9.5, etc.) to **EWM on SAP S/4HANA**.
- Deployment Options:
  - EWM embedded in SAP S/4HANA
  - EWM on SAP S/4HANA side-by-side



# Advisory Service

## Transformation Enablement





# Core Challenges LE-WM Transformation

LE-WM **functionalities are restricted available** in Stock Room Management



- Which **LE-WM functionality can be continued** to be used?
- Which **LE-WM functionality is not in Stock Room Management scope** anymore?
- Which non-Stock Room Management **functionality is in use by current solution?**

Functions are available but with **new business objects and technologies**



- **Transfer Orders** are replaced by Warehouse Orders and Warehouse Tasks.
- Functionality available with extended LE-WM are available in **standard solution scope of EWM** (e.g. Yard Management).
- **Additional EWM solution capabilities** are available (e.g. Waves, 2-step picking, transportation units, kitting, value added services, etc.).

Which **target solution** to transform to?



- There are **multiple options transforming** warehouse operations to EWM – embedded or decentral – or remaining in stock room management, depending on warehouse complexity and requirements (e.g. transportation management integration).

# Premium Engagement

## Typical Challenges

### When to transform?

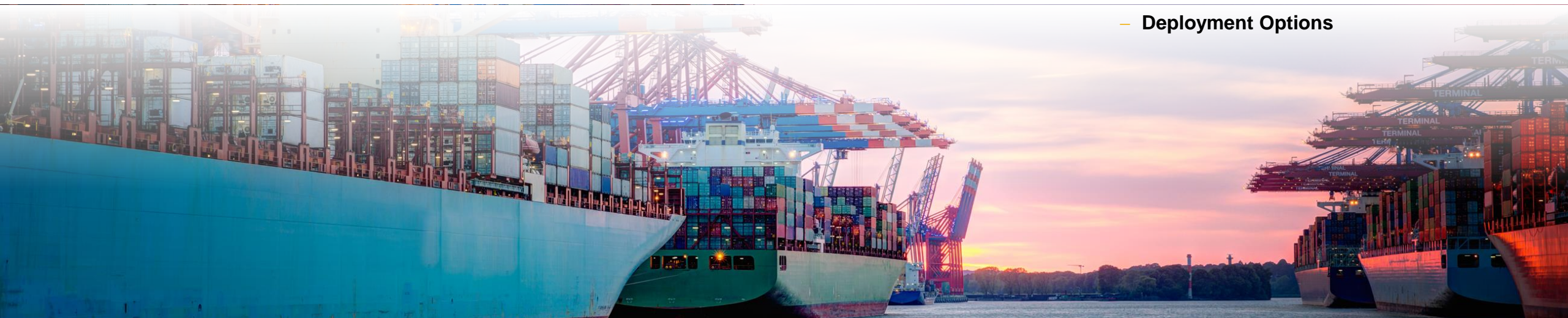
- Majorly the transformation of logistics areas is done either
  - During** the S/4 transformation
  - After** the S/4 transformation
  - Independent** from the S/4 transformation

### How to transform?

- Depending on the **decision based on company value drivers** type of transformation is to be chosen
  - System Conversion**
  - Landscape Transformation**
  - New Implementation**

### What to transform?

- Defining which content of redesign in terms of
  - Functions**
  - Processes**
  - Enhancements**
  - Interfaces**
  - Solution components**
  - Deployment Options**



# Specific challenges moving from LE-TRA to SAP TM

Functions are not yet available but planned on product roadmaps



- IS Automotive Transaction BORGR – Inbound Transport and Delivery management is not equivalently replaced.
- Interfaces, like SHPMNT05-Idoc (for delivery and shipment creation/update/communication to/from vendor/customer) are not equivalently replaced.
- Delivery Schedule integration in SAP S/4HANA Supply Chain for Transportation Management not yet available.

Functions are available but with new business objects and technologies



- Shipments (LE-TRA) are replaced by Freight Orders (SAP TM) and Transportation Units (SAP EWM).
- Idoc-Interfaces are replaced by WebServices.
- Available migration tools and guides are unknown or not available.

Functions are moving from one solution to the other



- Package Planning is available in SAP TM Package Builder, SAP EWM Package Builder and SAP EWM via Packaging Specification.
- Door Appointment Management is planned to be moved from SAP EWM to SAP LBN.

Solution concepts are not consistently designed in standard applications



- Master Data Distribution is available using different interface-technologies (DRF, Idoc/ALE, CIF).

# Service Overview



## Service Overview

- With the Advisory Service customers get support in an early phase of a project to define one or several customer specific roadmap options for SAP Transportation Management.
- Main topics in this service are:
  - SAP Transportation Management (TM) in S/4HANA and possible transition paths from LE-TRA to SAP TM in S/4HANA.



## Expectations and Results

- Information sessions about SAP TM, comparison SAP LE-TRA vs. SAP TM, Integration-Functions and Restriction on EWM-TM Integration.
- Discussion of customer core business process on level 1 incl. identification of most important custom-enhancements and functions as well as mapping on To-Be system landscape.
- Information session on SAP TM functions and concepts, integration aspects for SAP S/4 with SAP TM, and SAP Product Compliance specific customer questions on solution restriction, SAP Roadmap.



# Service Offering

## Example Delivery 1/3



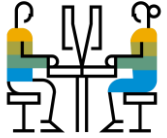
### Agenda and Preparation

- Align with customer on specific topics of interest (e.g. functional introduction to solution, special topics).
- Prepare system demonstration based on Model Company for Logistics Execution (optional)
- Prepare demonstration content (optional)
- Understand customer process on high level (level 1 – process level) based on process documentation.

01.01.2019	
Time	Topic
09:00-09:30	<b>Kick-Off</b> <ul style="list-style-type: none"><li>▪ Agenda</li><li>▪ Introduction Round</li><li>▪ Goal of Workshop</li></ul>
09:30-11:00	<b>SAP Transportation Management – Introduction</b> <ul style="list-style-type: none"><li>▪ Order Integration</li><li>▪ Planning</li><li>▪ Execution</li><li>▪ Settlement</li><li>▪ Benefits</li></ul>
11:15 –12:00	<b>Comparison - SAP TM vs. LE-TRA</b> <ul style="list-style-type: none"><li>▪ Comparison Functionalities</li><li>▪ Benefits SAP TM</li><li>▪ Maintenance End LE-TRA</li></ul>
12:00-13:00	<b>Lunch</b>
13:00-14:00	<b>SAP Transportation Management Demo</b> <ul style="list-style-type: none"><li>▪ SAP TM Basic Shipping Domestic Outbound</li><li>▪ SAP TM planning using SCM Optimizer in the Transportation Cockpit</li></ul>
14:00-15:30	<b>AS-IS Process Discussion</b> <ul style="list-style-type: none"><li>▪ Discussion of AS-IS process</li></ul>
15:30-17:00	<b>Mapping of the TO-BE processes (SAP and Customer)</b> <ul style="list-style-type: none"><li>▪ Mapping of the possible scenarios in SAP TM</li></ul>
16:30-17:00	<b>Summary and Open Points</b>

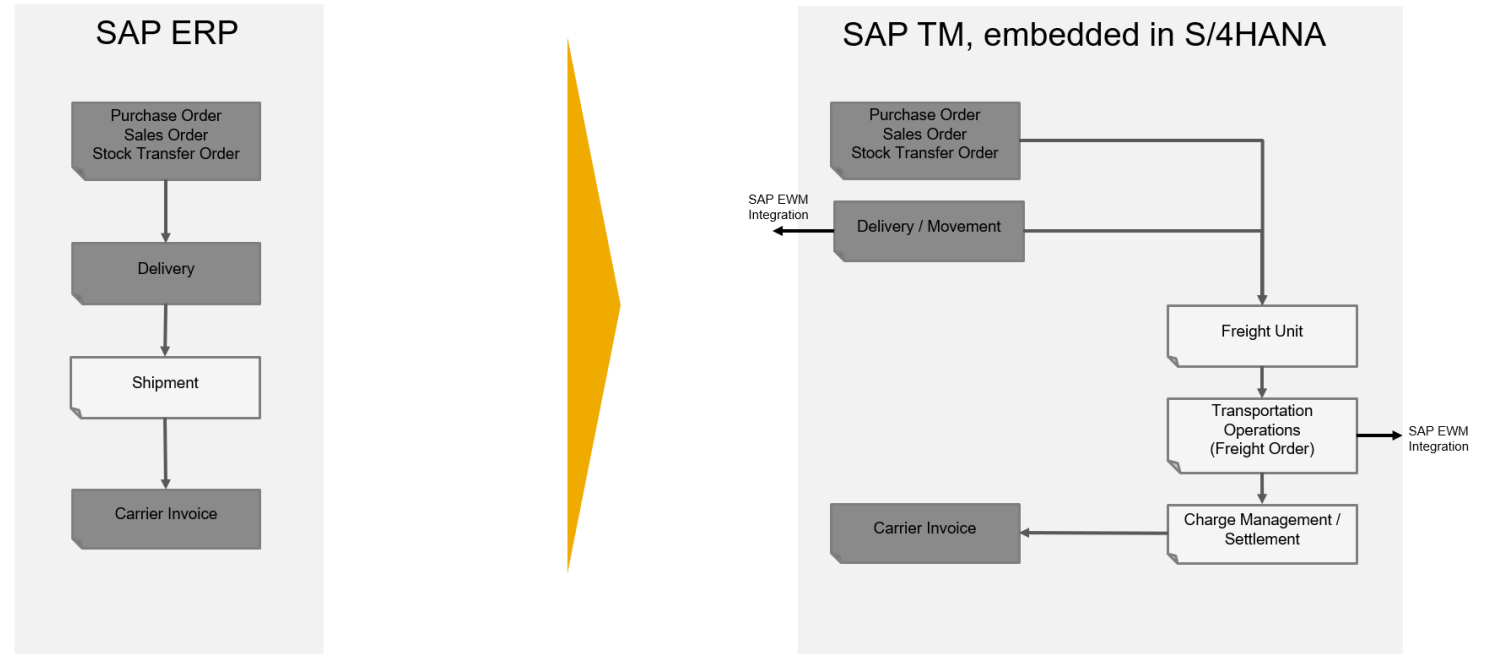
# Service Offering

## Example Delivery 2/3



### Workshop Execution

- Information on SAP product roadmap and solutions capabilities.
- Mapping of existing solution objects to S/4 objects (e.g. Shipment – Freight Order)
- High level process assessment (As-Is => To-be).
- Focus on critical custom-enhancement and process steps.



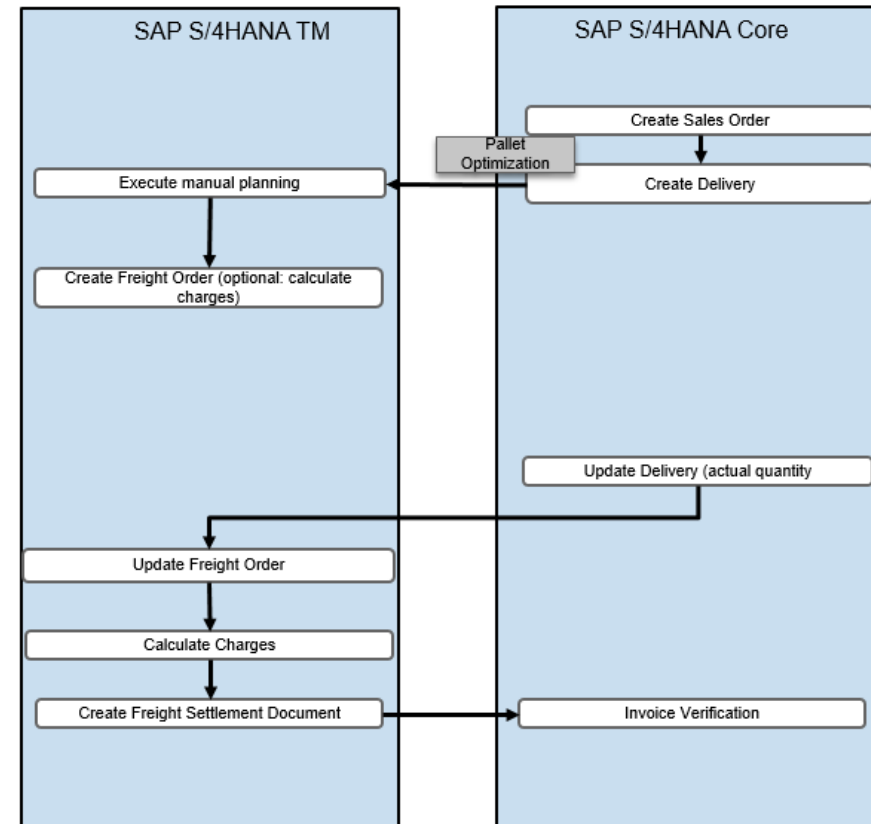
# Service Offering

## Example Delivery 3/3



### Deliverable and Follow-Up

- Target architecture (embedded vs. decentral)
- Implementation strategy and road map
- High-level process definition
- High-level gap analysis (impact of / how to deal with major add-ons, custom code, showstoppers)



# Why should a customer buy the Advisory Service?

Advisory Service is the right choice for customers who require

- **Guidance** for architectural decisions.
- **Overview** on planned roadmap and new functionalities.
- **Starting point** for transformation projects.
- **Basis** for continuous support throughout transformation projects.
- **Transformation projects** from LE-TRA to SAP S/4HANA TM and/or LE-WM to SAP S/4HANA EWM to understand how the best practices transportation and warehousing process flow will be
- **Learning and enablement activities**

