



Innovation in Product Cost Controlling: Cost Analysis Along the Value Chain based on the Universal Component Breakdown in S/4HANA Public Cloud

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Product Management S/4HANA Public Cloud

SAP

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Agenda

01

Cost transparency along the value chain

Capturing and analyzing detailed costs along the value chain

02

What is the Universal Component Breakdown (UCB)?

The value UCB adds as the evolution of and replacement for the classic cost component split

03

UCB in planning and goods movements

Product cost planning, origin breakdown, and breakdown updates during material movements

04

How can I use UCB today?

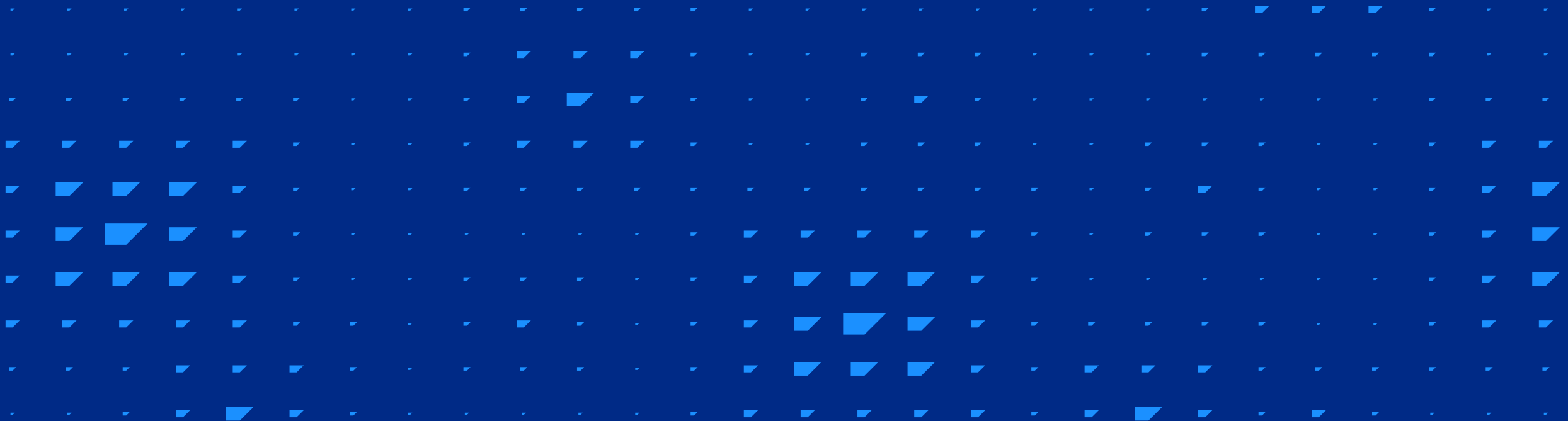
Current development status, parallel operation, and transition from the classic split

05

Outlook on upcoming developments

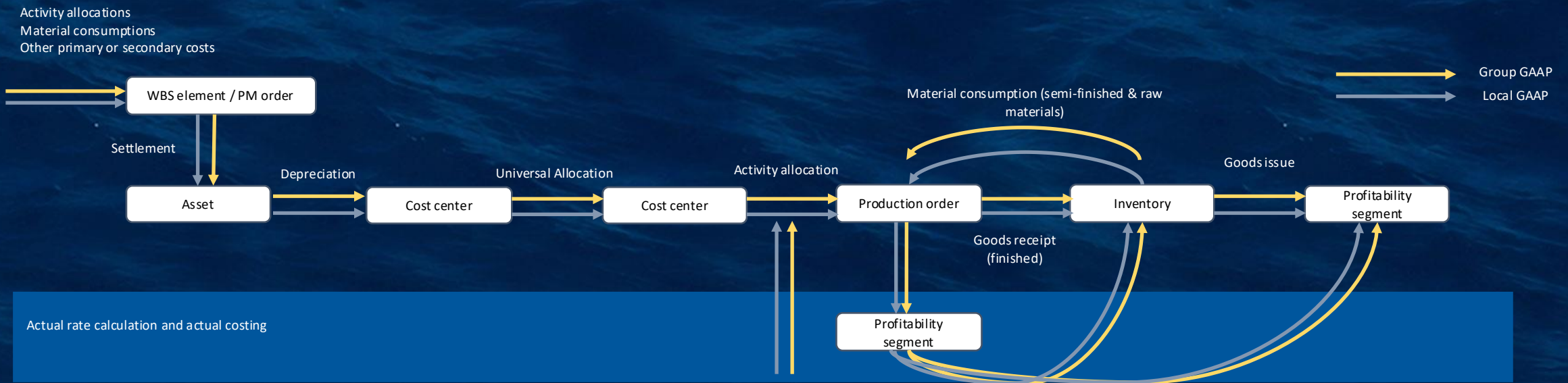
Scope extension and outlook

01: Cost transparency along the value chain



A closer look at a simplified value chain

Parallel value flows along the value chain (accounting principles, currencies, valuations) move costs through the group. A core task of controlling is to create cost transparency along these flows.



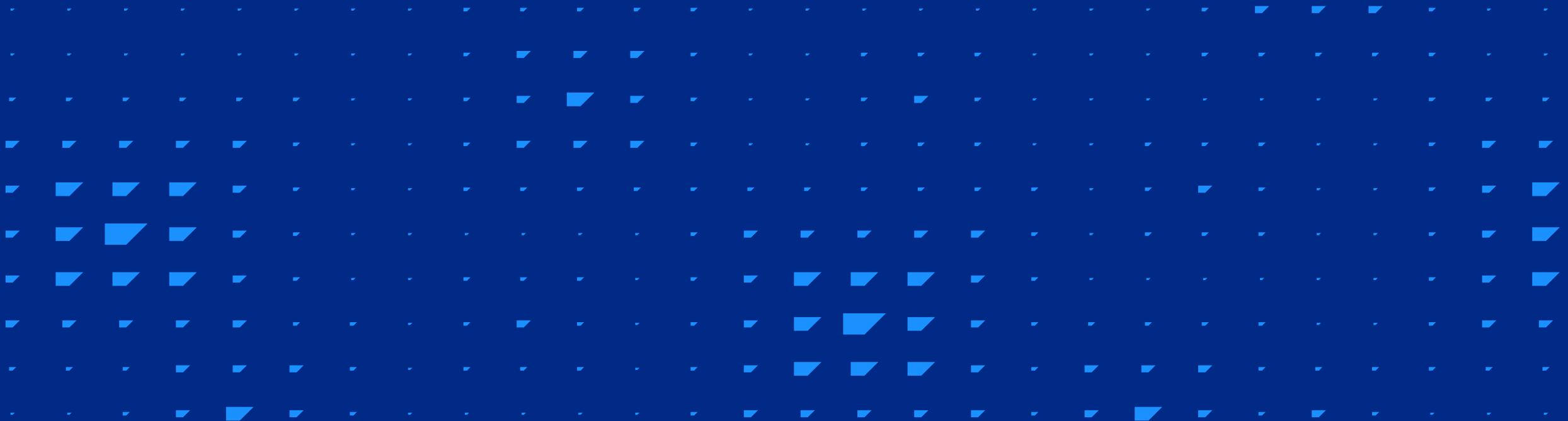
Options for analyzing cost flows

- Cost element and cost center accounting
- Product costing & cost object controlling
- Profitability analysis

Our goal

- Establishing an overarching methodology for the structured analysis of manufacturing and material cost information along the value chain.

02: What is the Universal Component Breakdown (UCB)?



The classic cost component split based on the cost component structure

- In product cost planning there are two views for presenting the cost of goods manufactured: the itemization and the **cost component split**
- The cost component split **groups costs into components across multiple levels**, which are defined by cost element assignments
- The cost component split is available in **product cost planning, actual costing** and, via the COGS split, in **Margin Analysis**
- But...

Material: FG228
Plant: 1010

Costing Data | Dates | Qty Struct. | Valuation | History | **Costs**

Costs Based On: Costing Lot Size 100 PC

Cost Component View	Total Costs	Fixed	Variable	Crcy
Cost of Goods Manufactured	1.960,07	114,62	1.845,45	EUR
Cost of Goods Sold	1.960,07	114,62	1.845,45	EUR
Sales and Administration ...	0,00	0,00	0,00	EUR
Inventory (Commercial)	1.960,07	114,62	1.845,45	EUR
Inventory (Tax-Based)	1.960,07	114,62	1.845,45	EUR

Cost of Goods Manufactured

Cost Components in Company Code Currency

C...	Name of Cost Comp.	Overall	Fixed	Variable	Crcy
101	Direct Material	950,00		950,00	EUR
102	Credits (Co/By-Pr)Cr				EUR
103	Third Party				EUR
104	Freight & Land. Cost				EUR
109	Material Overhead	26,25		26,25	EUR
201	Personnel Time	430,48	44,16	386,32	EUR
202	Machine Time	386,32	55,18	331,14	EUR
203	Set-Up Time	77,58	4,86	72,72	EUR
209	Production Overhead	89,44	10,42	79,02	EUR
301	Miscellaneous				EUR
		1.960,07	114,62	1.845,45	EUR

Limitations of the classic split

Availability

- The cost component split is a product cost accounting concept and is not fully available along the value chain

No parallel breakdowns

- In the Public Cloud no auxiliary cost component split is available; in On Premise and Private Cloud only one auxiliary CCS is possible

Old technical basis

- Limited number of breakdown components: historically a maximum of 40 breakdown elements (fixed + variable), a maximum of 60 after extension
- Support for a maximum of 2 currencies
- A maximum of 2 parallel breakdowns (On Premise / Private Cloud)
- No concepts for reusing breakdowns
- No room for modernization or other breakdown types

Business context

Additional use cases enabled by the Universal Component Breakdown

Outlook

The Universal Component Breakdown is intended to be the tool for breaking products or services down into their constituent parts across various dimensions.

This should be possible across the different production levels and along the value chain.

Analysis of costs by original production factors / primary costs

→ Showing the impact of price changes for resources used, such as energy or wages/salaries, on products and services.

Determining the CO₂ footprint of every product or service along the value chain

→ Improving the CO₂ footprint of your products by eliminating or substituting the manufacturing processes or components with the highest CO₂ emissions.

Availability of the breakdown information along the entire value chain and on the objects and accounts affected

→ Enables new analyses based on the components of a breakdown in financial accounting documents, account assignment objects, accounts, COGS split in ETO processes, and also beyond pure product cost controlling, e.g. for settlements, allocations, etc.

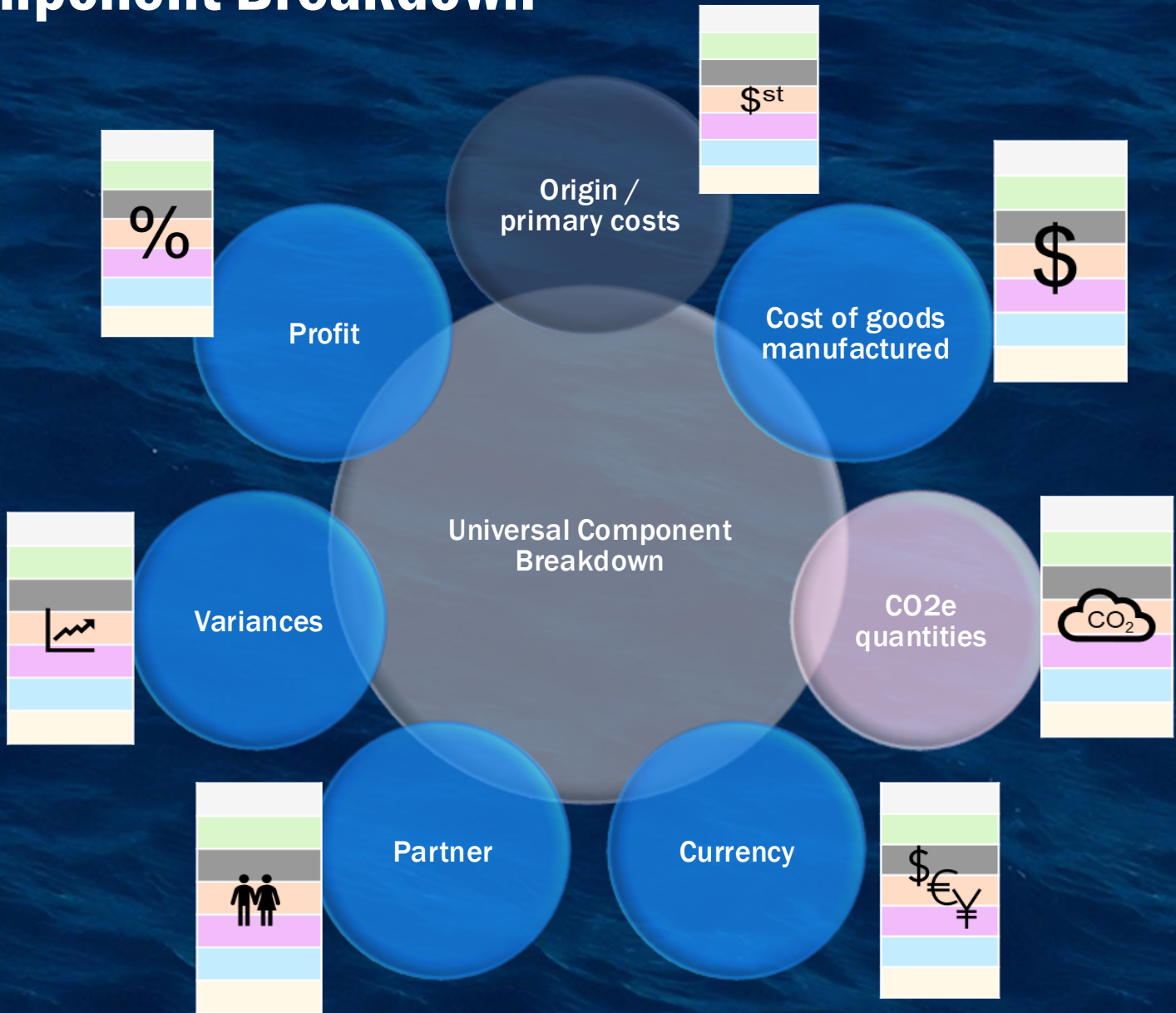
Modern technical basis

→ Enables (in theory) an unlimited number of parallel breakdowns and breakdown components to cover new use cases (partner breakdowns, currency breakdowns, precious-metal breakdowns, ...).

Universal Component Breakdown

Breakdown types

Outlook

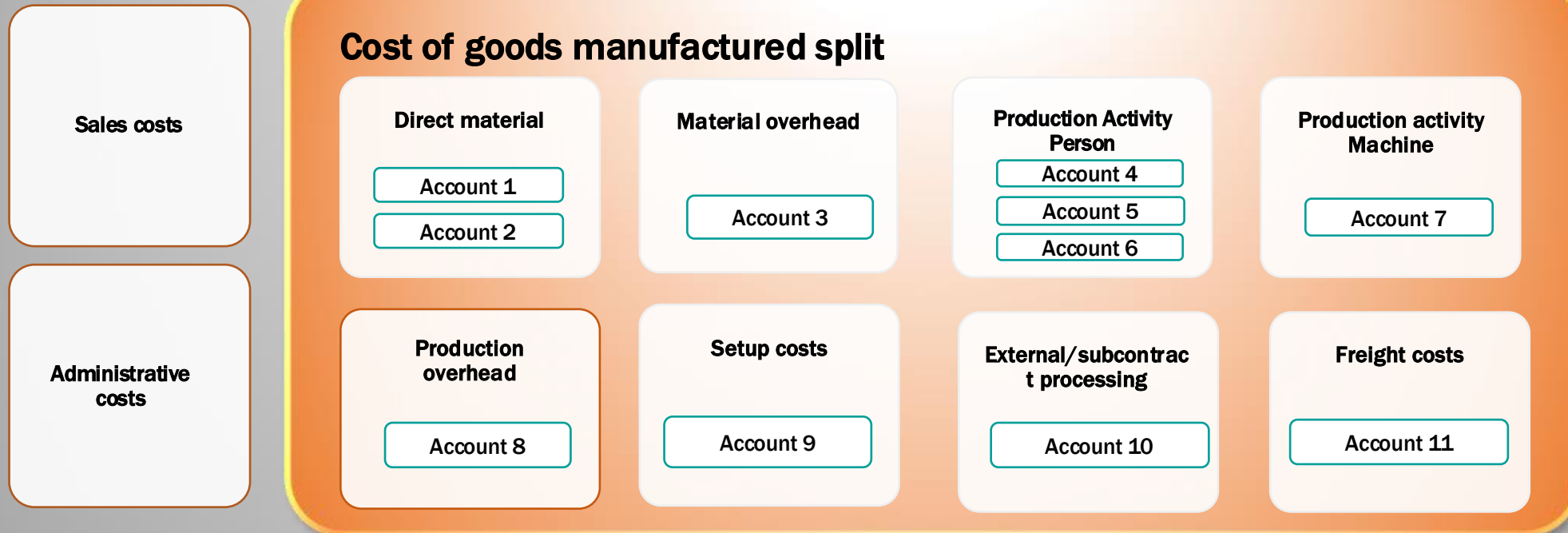


Universal Component Breakdown

Cost component split – production cost breakdown

- Enables the breakdown of the cost of goods sold (COGS) of a sellable product into fixed and variable manufacturing costs, including possible sales and administrative costs and individual cost components. These are also broken down for product profitability and contribution margin analysis.
- The breakdown of the cost of goods manufactured (COGM) explains the cost split from the perspective of the manufacturing process (material usage, internal activities, external activities, etc.).

Cost of goods sold split



*Cost of goods manufactured split

Universal Component Breakdown

Cost component split – origin / primary cost breakdown

An alternative way of presenting the cost of goods manufactured, in order to show the original production factors.

Makes it possible to trace the **impact of changes** in primary costs – rising energy prices, higher labor costs, or changes to depreciation rules – **on profitability**.

Without the split, these costs are **subsumed within the rate** and merely reported as a lump sum under production costs.

Cost of goods sold split

Sales costs

Administrative costs

Origin / primary cost split

Direct material

Account 1

Account 2

Material overhead

Account 3

Setup costs

Account 9

Wages

Account 12

Salaries

Account 13

Operating supplies

Account 16

Freight costs

Account 11

Production overhead

Account 8

External/sub contract processing

Account 10

Energy

Account 14

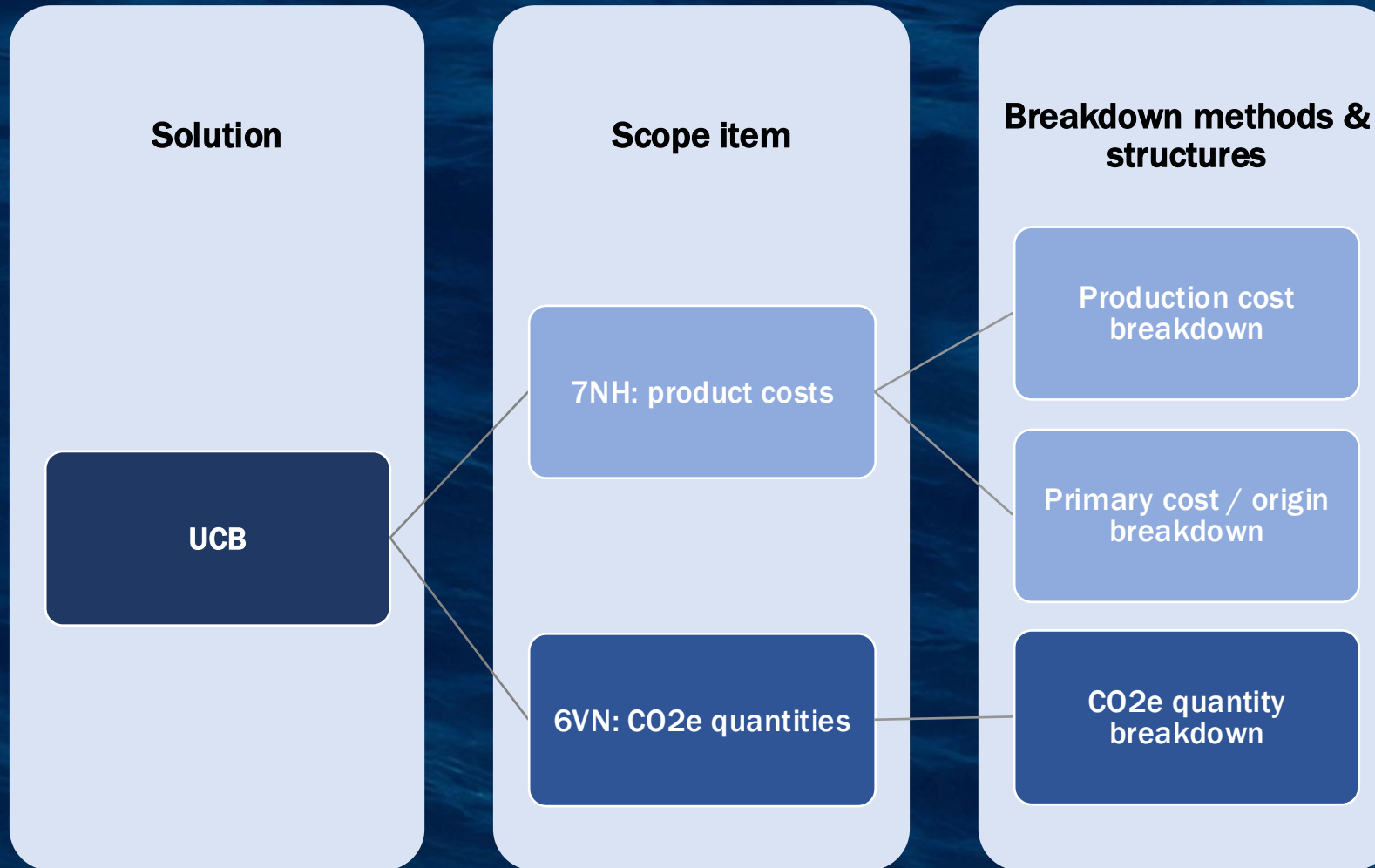
Maintenance

Account 15

Depreciations

Account 17

Overview: the Universal Component Breakdown solution



SAP Best Practice content – scope items and configuration

- Breakdown methods for product costs (7NH)
- Breakdown method for CO2e quantities (6VN)

7NH: CB0B, CBPB

6VN: QB01

SAP Define and Assign Method for Universal Com.: Display					
Dialog Structure					
UCB Methods					
UCB Method Assignments					
UCB Methods					
UCB Method	Type	Cost Brkdn Struc.	Qty Brkdn Structure	Name	
CB0B	COSTBD Cost Breakdown	OB		Origin Cost Breakdown	
CBPB	COSTBD Cost Breakdown	PB		Production Cost Breakdown	
QB01	QTYBD Quantity Breakdown		Q1	GHG Emission Breakdown	

7NH/6VN:

Activation for all ledgers and company codes

SAP Define and Assign Method for Universal Com.: Display						
Dialog Structure						
UCB Method Assignments						
UCB Method Assignments						
Ledger	Company Code	UCB Method	Valid From	Valid To	MainMethod	
++	++++	CB0B	01/01/2023	12/31/9999	☐	
++	++++	CBPB	01/01/2023	12/31/9999	☒	
++	++++	QB01	01/01/2023	12/31/9999	☒	

6VN:

Default unit of measure for CO2e quantities

SAP Define Quantity Breakdown Structures: Display				
Dialog Structure				
Quantity Breakdown Structures				
Quantity Breakdown Structures				
Qty Brkdn Structure	Type	Unit	Name	
Q1	GHGC GHG Category	KG	GHG Emission Breakdown	

Production cost breakdown defined as a UCB cost structure

SAP standard customizing

SAP Define Cost Breakdown Structures: Display							
 Define Cost Breakdown Structures: Display							
   							
Dialog Structure							
▼ Cost Breakdown Structures							
▼ Cost Breakdown Components							
Assign G/L Accounts							
Cost Breakdown Views							
Cost Brkdown Struc. 							
Cost Breakdown Components							
Cost Brkdown Comp.	Include in Inventory		Include in COGS		Rollup	Sequence	Name
110	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Material (Raw/Trade)
120	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Material (Packaging)
130	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Material (Semi-Finished)
140	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Credits (Co/By-Pr)
150	T Include Total Costs	▼	M Include as COGM	▼	☒	0	3rd Party (Ext/Sub)
160	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Freight
170	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Material Overhead
210	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Personnel Time
220	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Machine Time
230	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Set-Up Time
290	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Production Overhead
310	T Include Total Costs	▼	M Include as COGM	▼	☒	0	Miscellaneous
350	Do Not Include	▼	S Include as Sales and Admin Costs	▼	☐	0	Admin & Sales Overhead

Origin / primary cost breakdown defined as a UCB cost structure

SAP standard customizing

SAP Define Cost Breakdown Structures: Display							
Dialog Structure		Cost Brkdwn Struc.					
- Cost Breakdown Structures - Cost Breakdown Components - Assign G/L Accounts - Cost Breakdown Views		Cost Breakdown Components					
Cost Brkdwn Comp.	Include in Inventory	Include in COGS	Rollup	Sequence	Name		
110	T Include Total Costs	M Include as COGM	☒	0	Material (Raw/Trade)		
120	T Include Total Costs	M Include as COGM	☒	0	Material (Packaging)		
130	T Include Total Costs	M Include as COGM	☒	0	Material (Semi-Finished)		
140	T Include Total Costs	M Include as COGM	☒	0	Credits (Co/By-Pr)		
150	T Include Total Costs	M Include as COGM	☒	0	3rd Party (Ext/Sub)		
160	T Include Total Costs	M Include as COGM	☒	0	Freight		
170	T Include Total Costs	M Include as COGM	☒	0	Material Overhead		
180	T Include Total Costs	M Include as COGM	☒	0	Travel Cost		
190	T Include Total Costs	M Include as COGM	☒	0	Energy/Water		
200	T Include Total Costs	M Include as COGM	☒	0	Depreciations		
240	T Include Total Costs	M Include as COGM	☒	0	Maintenance		
250	T Include Total Costs	M Include as COGM	☒	0	Personel Costs		
260	T Include Total Costs	M Include as COGM	☒	0	No Split Activity Cost		
290	T Include Total Costs	M Include as COGM	☒	0	Production Overhead		
310	T Include Total Costs	M Include as COGM	☒	0	Miscellaneous		
320	T Include Total Costs	M Include as COGM	☒	0	Non Assigned		
350	Do Not Include	S Include as Sales and Admin Costs	☐	0	Admin & Sales Overhead		

Greenhouse gas emissions by scope defined as a UCB CO2e quantity structure

SAP standard customizing

SAP Define Quantity Breakdown Structures: Display			
    			
Dialog Structure			
▼ Quantity Breakdown Structure			
Quantity Breakdown Components			
Qty Brkdwn Structure 			
Quantity Breakdown Components			
Qty Brkdwn Component	GHG Category	Name	
1.01	1.01	Scope 1 – Stationary combustion	
1.02	1.02	Scope 1 – Mobile combustion	
1.03	1.03	Scope 1 – Process emissions	
1.04	1.04	Scope 1 – Fugitive emissions	
1.99	1.99	Scope 1 – Unclassified	
2.01	2.01	Scope 2 – Purchased electricity	
2.02	2.02	Scope 2 – Purchased steam	
2.03	2.03	Scope 2 – Purchased heating	
2.04	2.04	Scope 2 – Purchased cooling	
2.99	2.99	Scope 2 – Unclassified	
3.01	3.01	Scope 3.1 – Purchased goods and services	
3.02	3.02	Scope 3.2 – Capital goods	
3.03	3.03	Scope 3.3 – Fuel- and energy-related activities	
3.04	3.04	Scope 3.4 – Upstream transportation and distribution	
3.06	3.06	Scope 3.6 – Business travel	

Architecture overview

Cost and CO2e breakdowns are referenced in the tables via a UCB_ID

Material cost estimates (KEKO)

Keys				UCB_ID
		...		4710
		...		

Material prices (FMLT_PRICE)

Keys				UCB_ID
		...		4711
		...		

FI documents (ACDOCA)

Keys				UCB_ID
		...		4711
		...		

Plan data (ACDOCP)

Keys				UCB_ID
		...		4712
		...		

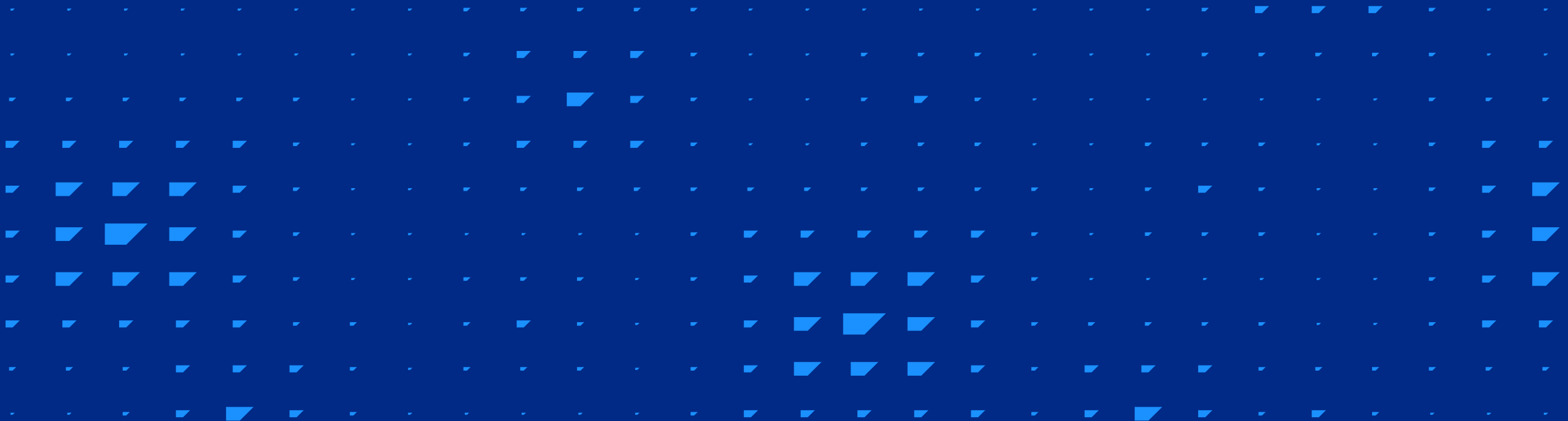
Rates (ACCOSTRATE)

Keys				UCB_ID
		...		4713
		...		

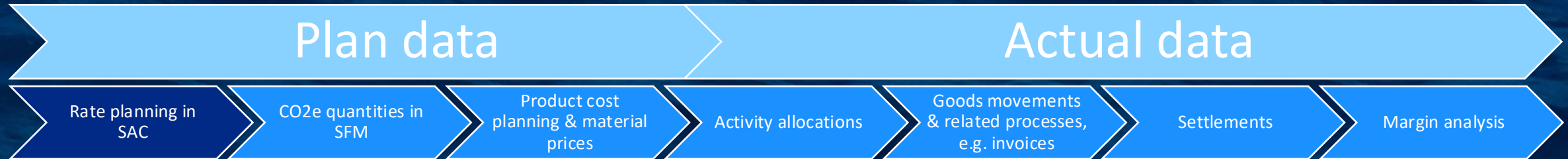
Universal Component Breakdown (ACCBD)

UCB ID	UCB method	UCB component	Quantity	Value
4711	CBY1	1 (Material)		300.00€
4711	CBY1	2 (Landed Cost)		300.00€
4711	CBY1	3 (Wages)		400.00€
4711	QBQ1	11 (Scope 1 Direct Emissions)	1.00KG	
4711	QBQ1	12 (Scope 2 Energy – Location Based)	2.00KG	
4711	QBQ1	13 (Scope 3.1 Purchased Goods and Services)	5.00KG	

03: UCB in planning and goods movements



Cost rate breakdown as the result of rate planning in SAP Analytics Cloud (1)



For the primary cost split, costs must be planned at cost element level by activity type.

The fixed/variable split is supported and carried over.

Saved data can be transferred to S/4HANA.

SAP | Stories | EW_SAP_FL_IFP_IM_OPEX_Act... | ☆ | ✕

File | Edit | Insert | View | More

Company Code: 1710 (Company Cod...) | Cost Center: Operations

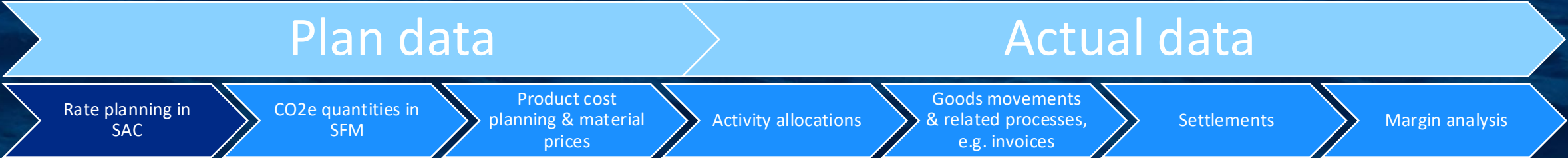
Cost Rates | Total Activity Output | Activity Output to Partner | Reporting + ▾

				Time ▾	2025	P01 (2025)	P02 (2025)	P03 (2025)	P04 (2025)	P05 (2025)	P06 (2025)
Cost Center	Cost Center Activity Type	Unit	G/L Account	Fix/Variable Code							
17101301 Manufacturin...	1 Machine hours 1	H	Totals		160.00	160.00	160.00	160.00	160.00	160.00	160.00
			61008000 Travel Expen...	Totals	30.00	30.00	30.00	30.00	30.00	30.00	30.00
				Variable	30.00	30.00	30.00	30.00	30.00	30.00	30.00
			63001000 Electricity an...	Totals	15.00	15.00	15.00	15.00	15.00	15.00	15.00
				Fixed	15.00	15.00	15.00	15.00	15.00	15.00	15.00
			94111000 Overhead Ma...	Totals	25.00	25.00	25.00	25.00	25.00	25.00	25.00
				Variable	15.00	15.00	15.00	15.00	15.00	15.00	15.00
				Fixed	10.00	10.00	10.00	10.00	10.00	10.00	10.00
			94112000 Overhead pro...	Totals	50.00	50.00	50.00	50.00	50.00	50.00	50.00
				Fixed	50.00	50.00	50.00	50.00	50.00	50.00	50.00
			94301000 Machine hou...	Totals	40.00	40.00	40.00	40.00	40.00	40.00	40.00

Device: Auto ▾

Universal Component Breakdown along the value chain

Cost rate breakdown as the result of rate planning in SAP Analytics Cloud (2)



SAP

S/4HANA Cloud

Manage Cost Rates - Plan

My Favorites

Search or Launch App

MF

Standard

Search

Valid On: 12.04.2026

Cost Center: 17101301 (Manufacturing 1 (...)

Activity Type: 3 (Setup Production)

Currency:

Go

Adapt Filters (3)

Cost Rates (1)

Standard

Add

Edit

Copy

Timeline

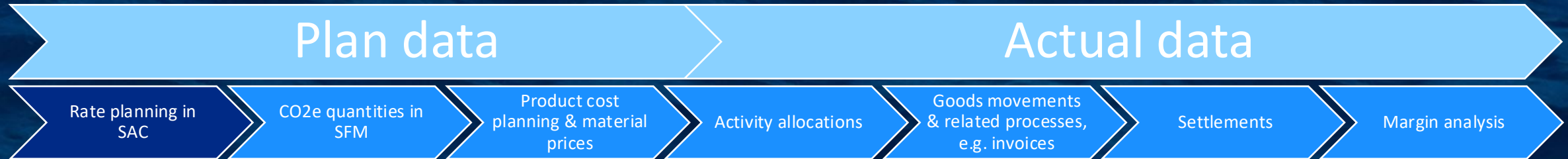
Upload

Analysis

Delete

☐ Cost Center	Activity Type	Ledger	From Year	From Period	Fixed Rate	Variable Rate	Per	Activity Unit	Component Breakdown	
☐ 17101301 (Manufacturing 1 (US))	3 (Setup Production)		2024	001	0,00 USD	30,00 USD	1	H	Display	

Cost rate breakdown as the result of rate planning in SAP Analytics Cloud (3)



View Component Breakdown

Breakdown Items (9)

Standard

Ledger	Comp. Brkdwn Method	Cost Brkdwn Comp.	Qty Brkdwn Component	Amount in Transaction Currency		Amount in Company Code Currency		Quantity
Comp. Brkdwn Method: CBOB (Origin Cost Breakdown)								
0L (Ledger 0L)	CBOB (Origin Cost Breakdown)	180 (Travel Cost)		1,00		0,00	USD	0,000
0L (Ledger 0L)	CBOB (Origin Cost Breakdown)	190 (Energy/Water)		10,00		0,00	USD	0,000
0L (Ledger 0L)	CBOB (Origin Cost Breakdown)	200 (Depreciations)		6,00		0,00	USD	0,000
0L (Ledger 0L)	CBOB (Origin Cost Breakdown)	240 (Maintenance)		4,00		0,00	USD	0,000
0L (Ledger 0L)	CBOB (Origin Cost Breakdown)	250 (Personel Costs)		9,00		0,00	USD	0,000
Comp. Brkdwn Method: CBPB (Production Cost Breakdown)								
0L (Ledger 0L)	CBPB (Production Cost Breakdown)	203 (Set-Up Time)		30,00		0,00	USD	0,000
Comp. Brkdwn Method: QBQ1 (GHG Emission Breakdown)								
0L (Ledger 0L)	QBQ1 (GHG Emission Breakdown)		2.01 (Scope 2 - Purchased electricity)	0,00		0,00		2,000 KG
2L (Ledger 2L)	QBQ1 (GHG Emission Breakdown)		2.01 (Scope 2 - Purchased electricity)	0,00		0,00		2,000 KG
3L (Ledger 3L)	QBQ1 (GHG Emission Breakdown)		2.01 (Scope 2 - Purchased electricity)	0,00		0,00		2,000 KG

Close

Universal Component Breakdown along the value chain

Material cost estimate – access to both breakdown solutions

Plan data

Actual data

Rate planning in
SAC

CO2e quantities in
SFM

Product cost
planning & material
prices

Activity allocations

Goods movements
& related processes,
e.g. invoices

Settlements

Margin analysis

SAP S/4HANA Cloud | Create Material Cost Estimate with Quantity Structure

Cost Estimate | Edit | Goto | Costs | Extras | Settings | System | Help |

Display | Next Material | Costing Structure Off | Detail List Off | Hold | Information on Cost Estimate | Log with All Messages | Switch Currency

Costing Structure

	E...	Total value	C...	Quan...	U...	Resource
FG228		1.960,07 EUR		100	PC	1010 FG228
Assembly		12,93 EUR		0,500	H	10101301 ASSEMBLY
Assembly		94,22 EUR		3,333	H	10101301 ASSEMBLY
Assembly		104,99 EUR		3,333	H	10101301 ASSEMBLY
RM122		75,00 EUR		100	PC	1010 RM122
RM128		165,00 EUR		100	PC	1010 RM128
SEMI25,PD,ExternalProcure		575,00 EUR		100	PC	1010 SG25
SEMI224,MTO,PD,Subassen		87,85 EUR		100	PC	1010 SG224
Mechanical Processing		12,93 EUR		0,500	H	10101301 TECHNIC 3
Mechanical Processing		4,72 EUR		10	MIN	10101301 TECHNIC 1
Mechanical Processing		5,26 EUR		10	MIN	10101301 TECHNIC 1
RAW124,VB,Consumption		35,00 EUR		100	PC	1010 RM124
Testing		12,93 EUR		0,500	H	10101301 TESTING 3
Testing		4,72 EUR		10	MIN	10101301 TESTING 1
Testing		5,26 EUR		10	MIN	10101301 TESTING 1
OH Material		2,45 EUR				10101201 94111000
OH production		4,58 EUR				10101301 94112000
RM27		75,00 EUR		100	PC	1010 RM27
RAW16,PD		25,00 EUR		100	PC	1010 RM16
Final Acceptance		12,93 EUR		0,500	H	10101301 TESTING 3
Final Acceptance		94,22 EUR		3,333	H	10101301 TESTING 1
Final Acceptance		104,99 EUR		3,333	H	10101301 TESTING 1
Packaging		12,93 EUR		0,500	H	10101301 PACK01 3
Packaging		94,22 EUR		3,333	H	10101301 PACK01 1
Packaging		104,99 EUR		3,333	H	10101301 PACK01 1
Testing		12,93 EUR		0,500	H	10101301 TESTING 3

Costing Data | Dates | Qty Struct. | Valuation | History | **Costs**

Costs Based On: Costing Lot Size | 100 | PC

Cost Component View

	Total Costs	Fixed	Variable	Crcy
Cost of Goods Manufactu...	1.960,07	114,62	1.845,45	EUR
Cost of Goods Sold	1.960,07	114,62	1.845,45	EUR
Sales and Administration ...	0,00	0,00	0,00	EUR
Inventory (Commercial)	1.960,07	114,62	1.845,45	EUR
Inventory (Tax-Based)	1.960,07	114,62	1.845,45	EUR

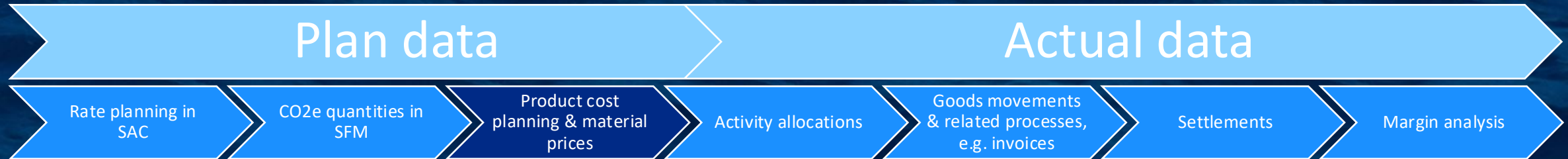
Cost of Goods Manufactured

Access to CCS and UCB

Itemization in Company Code Currency

ItemNo	I.	Resource	Cost Eleme	Total Value	Fixed Value
1	E	10101301 ASSEMBLY 3	94303000	12,93	0,81
2	E	10101301 ASSEMBLY 1	94301000	94,22	13,46
3	E	10101301 ASSEMBLY 11	94311000	104,99	10,77
4	M	1010 RM122	51100000	75,00	0,00
5	M	1010 RM128	51100000	165,00	0,00
6	M	1010 SG25	54300000	575,00	0,00

Material cost estimate – production cost breakdown



SAP S/4HANA Cloud

System ▾ Help ▾ ⚙️ ▾

Production Cost Breakdown (CBPB)

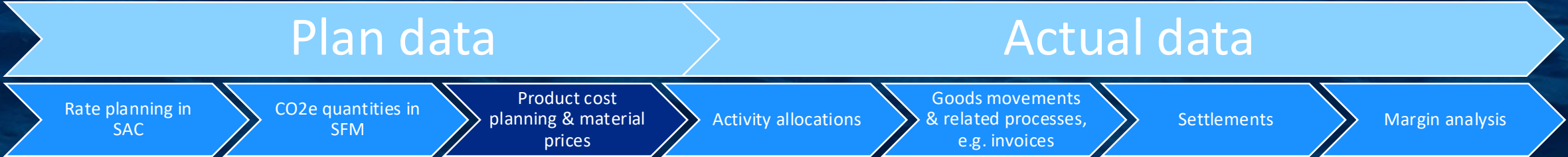
Material: FG228
Plant: 1010 Plant 1 DE
Costing Variant: PPC1 Standard Cost Est. (Mat.)
Costing Version: 01
Costing Date From: 13.04.2026
Costing Date To: 31.12.9999
Costing Lot Size: 100 PC

Component Breakdown Method: CBPB (Production Cost Breakdown)
Component Breakdown Method Type: COSTBD (Cost Breakdown)
Is Main Method: Yes
Cost Breakdown Structure: PB (Production Cost Breakdown)
Currency: Company code currency

CB ...	CB Comp. Name	TotalAmnt	FixedAmnt	VarAmnt	Currency
101	Direct Material	950,00		950,00	EUR
102	Credits (Co/By-Pr)Cr				EUR
103	Third Party				EUR
104	Freight & Land. Cost				EUR
109	Material Overhead	26,25		26,25	EUR
201	Personnel Time	430,48	44,16	386,32	EUR
202	Machine Time	386,32	55,18	331,14	EUR
203	Set-Up Time	77,58	4,86	72,72	EUR
209	Production Overhead	89,44	10,42	79,02	EUR
301	Miscellaneous				EUR
305	AdminSales Overhead				EUR
		1.960,07	114,62	1.845,45	EUR

Universal Component Breakdown along the value chain

Material cost estimate – primary cost / origin breakdown



System

Help

Production Cost Breakdown (CBPB)

Origin Cost Breakdown (CBOB)

GHG Emission Breakdown (QBQ1)

Material

Plant

Costing Variant

Costing Version

Costing Date From

Costing Date To

Costing Lot Size

FG228

1010 Plant 1 DE

PPC1 Standard Cost Est. (Mat.)

01

13.04.2026

31.12.9999

100 PC

Component Breakdown Method

Component Breakdown Method Type

Is Main Method

Cost Breakdown Structure

Currency

CBOB (Origin Cost Breakdown)

COSTBD (Cost Breakdown)

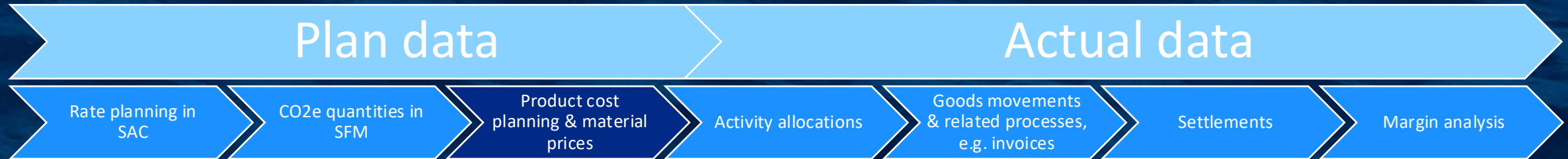
No

OB (Origin Cost Breakdown)

Company code currency

CB ...	CB Comp. Name	± Total A...	± FixedAmnt	± VarAmnt	Currency
110	Material (Raw/Trade)	375,00		375,00	EUR
120	Material (Packaging)				EUR
130	Material (Semi-Finished)	575,00		575,00	EUR
140	Credits (Co/By-Pr)				EUR
150	3rd Party (Ext/Sub)				EUR
160	Freight				EUR
170	Material Overhead	26,25		26,25	EUR
180	Travel Cost				EUR
190	Energy/Water				EUR
200	Depreciations				EUR
240	Maintenance				EUR
250	Personel Costs				EUR
260	No Split Activity Cost	894,38	104,20	790,18	EUR
290	Production Overhead	89,44	10,42	79,02	EUR
310	Miscellaneous				EUR
320	Non Assigned				EUR
350	Admin & Sales Overhead				EUR
		• 1.960,07	• 114,62	• 1.845,45	EUR

Material cost estimate – CO2e quantity breakdown



SAP S/4HANA Cloud

System ▾ Help ▾ ⚙️ ▾

My Favorites ▾ Search or Launch App 🔍 🔔 🔒 🗨️ ⓘ MF

- [Production Cost Breakdown \(CBPB\)](#)
- [Origin Cost Breakdown \(CBOB\)](#)
- [GHG Emission Breakdown \(QBQ1\)](#)

GHG Emission Breakdown (QBQ1)

Material	FG228	Component Breakdown Method	QBQ1 (GHG Emission Breakdown)
Plant	1010 Plant 1 DE	Component Breakdown Method Type	QTYBD (Quantity Breakdown)
Costing Variant	PPC1 Standard Cost Est. (Mat.)	Is Main Method	Yes
Costing Version	01	Quantity Breakdown Structure	Q1 (GHG Emission Breakdown)
Costing Date From	13.04.2026		
Costing Date To	31.12.9999		
Costing Lot Size	100 PC		

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Σ|▼
½|▼
🖨
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📊|▼
🔗

QB ... ^	Quantity Breakdown Component Name	Quantity	Qty.UoM
2.01	Scope 2 - Purchased electricity	74,330	KG
3.01	Scope 3.1 - Purchased goods and services	2.400,000	KG
		▪ 2.474,330	KG

Universal Component Breakdown along the value chain

Direct activity allocation / production confirmation (1)



Header Information

Journal Entry Date:
14.04.2026

Translation Date:
01.04.2026

Fiscal Year:
2026

Total Amount in Glob. CrCY:
300,00 USD

Posting Date:
14.04.2026

Fiscal Period:
4

Controlling Area:
A000 (Controlling Area A000)

Allocation Items (1) | Standard * ▾

Download Template ▾

Sender Cost Center	Sender Activity Type	Receiver Cost Center	Receiver WBS Element
17101301 (Manufacturing 1 (US))	3 (Setup Production)		
Item Text:			
Quantity: 10,000 H			
Total Cost Rate in Trans. CrCY: 30,00 USD			
Amount in Transaction Currency: 300,00 USD			
Account for Allocation: 94303000 (Setup Production)			
Receiver Order: 1005424			

Journal Entries (3) | Standard ▾

Journal Entry	Source Ledger	Ledger Group	Journal Entry Type	CO Business Transaction Type	Company Code
2300000352	0L		CO (Secondary Cost)	RKL (Actual Activity Allocation)	1710 (Company Code 1710)
2300000352	2L		CO (Secondary Cost)	RKL (Actual Activity Allocation)	1710 (Company Code 1710)
2300000352	3L		CO (Secondary Cost)	RKL (Actual Activity Allocation)	1710 (Company Code 1710)

Universal Component Breakdown along the value chain

Direct activity allocation / production confirmation (2)



SAP

S/4HANA Cloud

Line Item in Ledger View

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Search or Launch App

2300000352 /

000002

General Information

Output Details

Notes

Component Breakdown

Component Breakdown

Breakdown Items (1)

Standard

Comp. Brkdown Method: CBPB (Production Cost Breakdown)

Ledger: OL (Ledger OL)

Cost Brkdown Comp.	Amount in Company Code Cu...	Variable Amount In Company ...	Fixed Amount in Company Cu...	Amount in Global Currency	Variable Amount In Global Cu...	Fixed Amount in Global Curre...
203 (Set-Up Time)	300,00 USD	300,00 USD	0,00 USD	300,00 USD	300,00 USD	0,00 USD
	300,00 USD	300,00 USD	0,00 USD	300,00 USD	300,00 USD	0,00 USD

Component Breakdown

Breakdown Items (5)

Standard

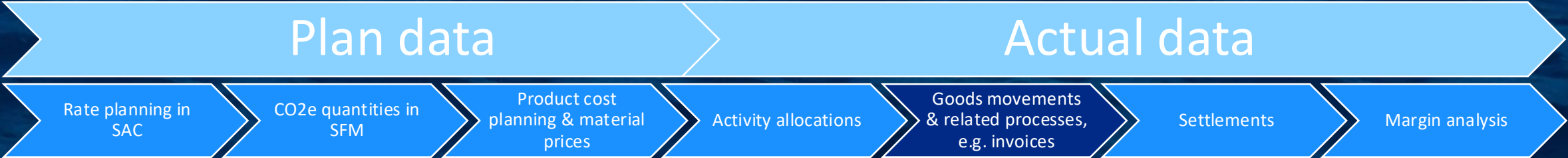
Comp. Brkdown Method: CBOB (Origin Cost Breakdown)

Ledger: OL (Ledger OL)

Cost Brkdown Comp.	Amount in Company Code Cu...	Variable Amount In Company ...	Fixed Amount in Company Cu...	Amount in Global Currency	Variable Amount In Global Cu...	Fixed Amount in Global Curre...
180 (Travel Cost)	10,00 USD	10,00 USD	0,00 USD	10,00 USD	10,00 USD	0,00 USD
190 (Energy/Water)	100,00 USD	100,00 USD	0,00 USD	100,00 USD	100,00 USD	0,00 USD
200 (Depreciations)	60,00 USD	60,00 USD	0,00 USD	60,00 USD	60,00 USD	0,00 USD
240 (Maintenance)	40,00 USD	40,00 USD	0,00 USD	40,00 USD	40,00 USD	0,00 USD
250 (Personel Costs)	90,00 USD	90,00 USD	0,00 USD	90,00 USD	90,00 USD	0,00 USD
	300,00 USD	300,00 USD	0,00 USD	300,00 USD	300,00 USD	0,00 USD

Universal Component Breakdown along the value chain

Example: goods receipt without purchase order, movement type 501 (1)



Note: in many goods movements the FI documents are populated with the inventory-price breakdown, e.g. for consumptions. In the case of processes involving external values (e.g. movement type 561) or goods movements with inherent meanings (e.g. purchasing processes with movement types 101 or 501), new logic is applied in part and document lines are generated to represent correct UCB breakdowns along the chain.

SAP Display Material FG228 (Finished Product)

Additional Data Org. Levels

Plant data / stor. 2 Accounting 1 Accounting 2 Costing 1 Costing 2 Plant stock

Material: FG228
Descr.: FG228
Plant: 1010 Plant 1 DE

Current Period Previous Period Last Period in Prev. Year Future Costing Run

General Valuation Data

Total Stock: 342 Base Unit: PC Piece
Division: 00 Valuation Cat.:
Valuation Class: 7920 VCI V Valuated UoM:
VC: Sale Ord. Stk: ML act. Mat. Price Analysis
Project Stock VC: Price Determ. Transaction-Based

Prices and Values

Currency Type: Company Code Currency: EUR
Ledger: 0L Ledger 0L
Currency: CCo CrCy Company Code Currency
Valuation View: Legal
Period/Year: 004/2026
Standard Price: 19.60
Price unit: 1
Price Control: S
Inventory Value: 6,783.28

Production Cost Breakdown (CBPB)

Material: FG228
Plant: 1010 Plant 1 DE
Costing Variant: PPC1 Standard Cost Est. (Mat.)
Costing Version: 01
Costing Date From: 04/13/2026
Costing Date To: 12/31/9999
Costing Lot Size: 100 PC

CB Comp.	CB Comp. Name	Σ TotalAmt	Σ FixedAmt	Σ VarAmt	Currency
101	Direct Material	950.00		950.00	EUR
102	Credits (Co/By-Pr)Cr				EUR
103	Third Party				EUR
104	Freight & Land. Cost				EUR
109	Material Overhead	26.25		26.25	EUR
201	Personnel Time	430.48	44.16	386.32	EUR
202	Machine Time	386.32	55.18	331.14	EUR
203	Set-Up Time	77.58	4.86	72.72	EUR
209	Production Overhead	89.44	10.42	79.02	EUR
301	Miscellaneous				EUR
305	AdminSales Overhead				EUR
		1,960.07	114.62	1,845.45	EUR

SAP Display Document: Data Entry View

Display Currency General Ledger View

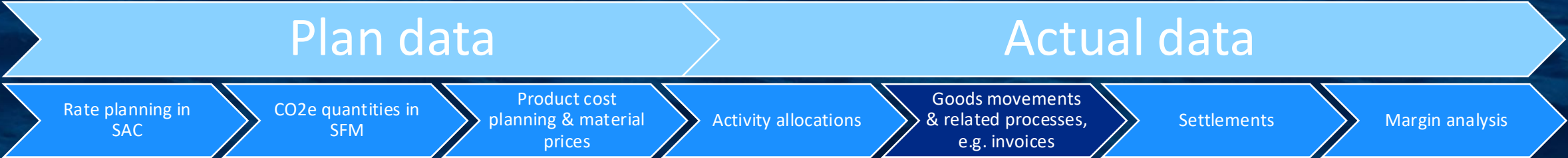
Data Entry View

Document Number: 4900043434 Company Code: 1010 Fiscal Year: 2026
Document Date: 04/14/2026 Posting Date: 04/14/2026 Period: 4
Reference: Cross-Comp.No.:
Currency: EUR Texts Exist: Ledger Group:

Co...	Itm	PK	Account	Description	Amount	Curr.	Tx
1010	1	89	13400000	Inventory FinishedGd	1,960.00	EUR	
	2	91	54400000	Inv Chg Fin Goods	1,960.00-	EUR	
	3	83	52041000	Loss Prc Var PRD	0.00	EUR	

Universal Component Breakdown along the value chain

Example: goods receipt without purchase order, movement type 501 (2)



The posting to the inventory account is always made with the breakdown of the valid inventory price. This applies regardless of the movement type.

4900043434 /

000001

Inventory posting (BSX)

General Information Output Details Notes Component Breakdown

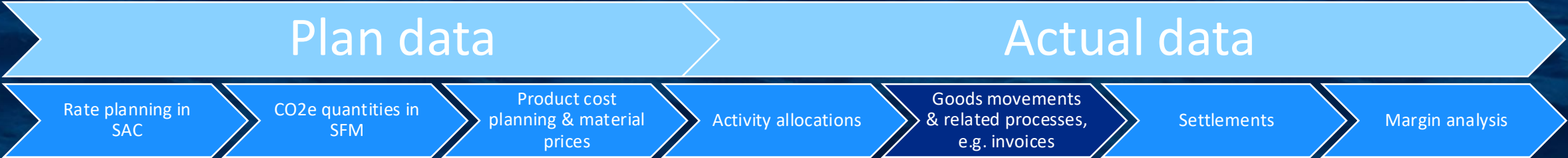
Component Breakdown

Breakdown Items (6) Standard Comp. Brkdw Method: CBPB (Production Cost Breakdown) Ledger: 0L (Ledger 0L)

Cost Brkdw Comp.	Amount in Company Code Cu...		Variable Amount In Company ...		Fixed Amount in Company Cu...		Amount in Global Currency		Variable Amount In Global Cu...		Fixed Amount in Global Curre...	
101 (Direct Material)	950,00	EUR	950,00	EUR	0,00	EUR	1.176,00	USD	1.176,00	USD	0,00	USD
109 (Material Overhead)	26,00	EUR	26,00	EUR	0,00	EUR	32,00	USD	32,00	USD	0,00	USD
201 (Personnel Time)	431,00	EUR	387,00	EUR	44,00	EUR	533,00	USD	478,00	USD	55,00	USD
202 (Machine Time)	386,00	EUR	331,00	EUR	55,00	EUR	479,00	USD	411,00	USD	68,00	USD
203 (Set-Up Time)	78,00	EUR	73,00	EUR	5,00	EUR	96,00	USD	90,00	USD	6,00	USD
209 (Production Overhead)	89,00	EUR	78,00	EUR	11,00	EUR	111,00	USD	98,00	USD	13,00	USD
	1.960,00	EUR	1.845,00	EUR	115,00	EUR	2.427,00	USD	2.285,00	USD	142,00	USD

Universal Component Breakdown along the value chain

Example: goods receipt without purchase order, movement type 501 (3)



In this case the posting to the offsetting account is made with the breakdown of an external procurement process, even though the material has an inventory price based on a cost estimate with BOM and routing. The breakdown component is derived via the assignment of the material's consumption account. In the case of a goods receipt for a purchase order (101), other cost components can also be taken into account, e.g. freight costs via freight conditions in the purchase order.

4900043434 /

000002

Inventory change (GBB)

General Information Output Details Notes Component Breakdown

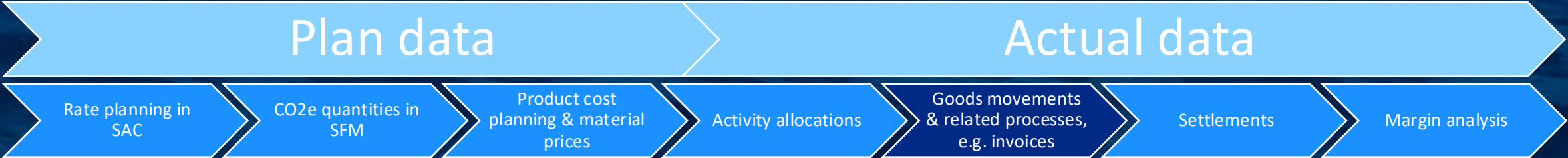
Component Breakdown

Breakdown Items (1) Standard Comp. Brkdwn Method: CBPB (Production Cost Breakdown) Ledger: 0L (Ledger 0L)

Cost Brkdwn Comp.	Amount in Company Code Cu...	Variable Amount In Company ...	Fixed Amount in Company Cu...	Amount in Global Currency	Variable Amount In Global Cu...	Fixed Amount in Global Curre...
101 (Direct Material)	-1.960,00 EUR	-1.960,00 EUR	0,00 EUR	-2.427,00 USD	-2.427,00 USD	0,00 USD
	-1.960,00 EUR	-1.960,00 EUR	0,00 EUR	-2.427,00 USD	-2.427,00 USD	0,00 USD

Universal Component Breakdown along the value chain

Example: goods receipt without purchase order, movement type 501 (4)



Without UCB this posting line is not created, because the document already balances. In this case, however, a delta breakdown must be determined between the inventory-price breakdown of the inventory account and the “procurement breakdown” of the offsetting account. In substance, this corrects the inventory breakdown to the correct procurement breakdown. This approach is similar to an actual cost component split in actual costing.

4900043434 /

000003

Price difference (PRD)

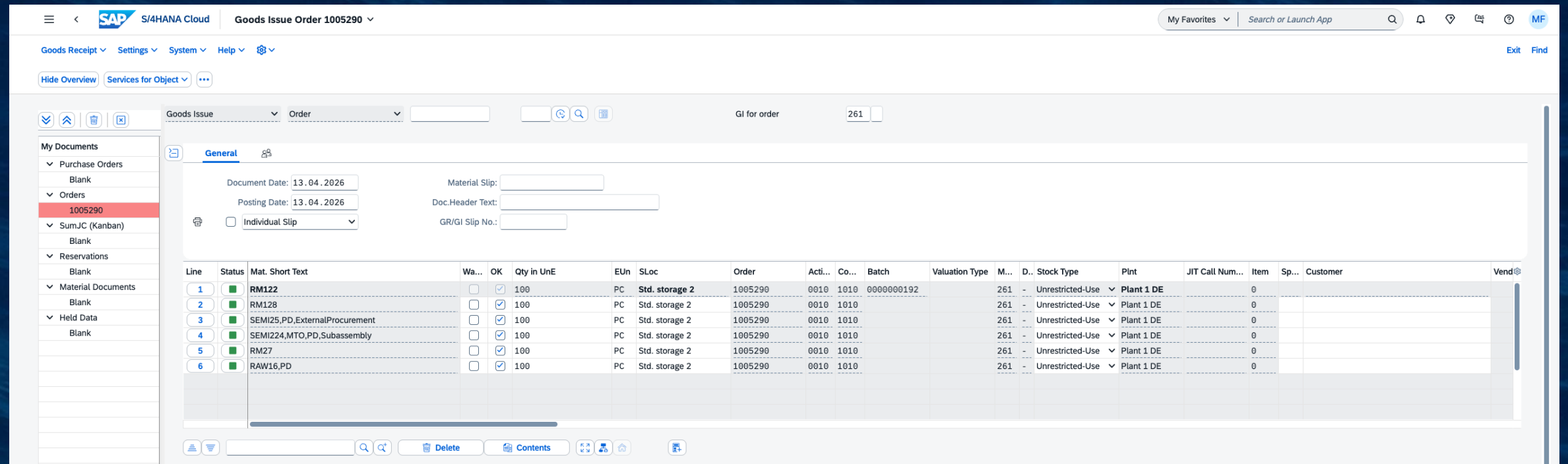
General Information Output Details Notes Component Breakdown

Component Breakdown

Breakdown Items (6) Standard Comp. Brkdown Method: CBPB (Production Cost Breakdown) Ledger: OL (Ledger OL)

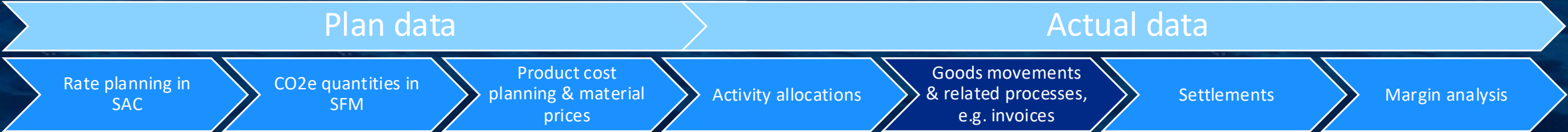
Cost Brkdown Comp.	Amount in Company Code Cu...		Variable Amount In Company ...		Fixed Amount in Company Cu...		Amount in Global Currency		Variable Amount In Global Cu...		Fixed Amount in Global Curre...	
101 (Direct Material)	1.010,00	EUR	1.010,00	EUR	0,00	EUR	1.251,00	USD	1.251,00	USD	0,00	USD
109 (Material Overhead)	-26,00	EUR	-26,00	EUR	0,00	EUR	-32,00	USD	-32,00	USD	0,00	USD
201 (Personnel Time)	-431,00	EUR	-387,00	EUR	-44,00	EUR	-533,00	USD	-478,00	USD	-55,00	USD
202 (Machine Time)	-386,00	EUR	-331,00	EUR	-55,00	EUR	-479,00	USD	-411,00	USD	-68,00	USD
203 (Set-Up Time)	-78,00	EUR	-73,00	EUR	-5,00	EUR	-96,00	USD	-90,00	USD	-6,00	USD
209 (Production Overhead)	-89,00	EUR	-78,00	EUR	-11,00	EUR	-111,00	USD	-98,00	USD	-13,00	USD
	0,00	EUR	115,00	EUR	-115,00	EUR	0,00	USD	142,00	USD	-142,00	USD

Example: material consumption on a production order (1)



Universal Component Breakdown along the value chain

Example: material consumption on a production order (2)



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S/4HANA Cloud

Line Item in Ledger View

4900042629 /

000001

Inventory

General Information

Output Details

Notes

Component Breakdown

Component Breakdown

Breakdown Items (1)

Standard

Comp. Brkdwn Method: CBPB (Production Cost Breakdown)

Ledger: 0L (Ledger 0L)

Cost Brkdwn Comp.	Amount in Company Code Cu...		Variable Amount In Company ...		Fixed Amount in Company Cu...		Amount in Global Currency		Variable Amount In Global Cu...		Fixed Amount in Global Curre...	
101 (Direct Material)	-75,00	EUR	-75,00	EUR	0,00	EUR	-93,00	USD	-93,00	USD	0,00	USD
	-75,00	EUR	-75,00	EUR	0,00	EUR	-93,00	USD	-93,00	USD	0,00	USD

4900042629 /

000002

Inventory change

General Information

Output Details

Notes

Component Breakdown

Component Breakdown

Breakdown Items (1)

Standard

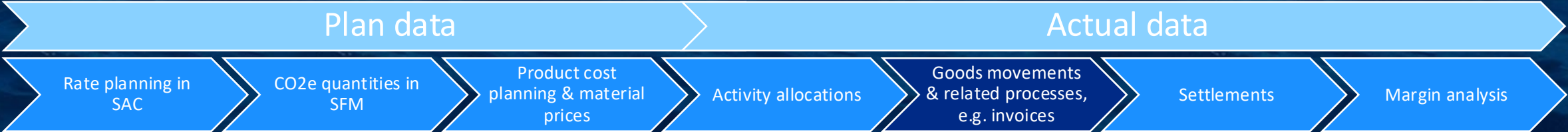
Comp. Brkdwn Method: CBPB (Production Cost Breakdown)

Ledger: 0L (Ledger 0L)

Cost Brkdwn Comp.	Amount in Company Code Cu...		Variable Amount In Company ...		Fixed Amount in Company Cu...		Amount in Global Currency		Variable Amount In Global Cu...		Fixed Amount in Global Curre...	
101 (Direct Material)	75,00	EUR	75,00	EUR	0,00	EUR	93,00	USD	93,00	USD	0,00	USD
	75,00	EUR	75,00	EUR	0,00	EUR	93,00	USD	93,00	USD	0,00	USD

Universal Component Breakdown along the value chain

Result from the production order perspective



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SI/4HANA Cloud

Cost of Goods Manufactured - Review Booklet >

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Standard >

Reset

🔗 >

Ledger:*

Reporting Date:*

Company Code:*

Component Breakdown Me...:*

Cost Component Hierarchy:

Currency Role:*

Product:

Order:

OL (Ledger OL)

13.04.2026

1010 (1010)

CBPB (CBPB)

10

1005290 x

Go

Adapt Filters

Actual Cost Component Breakdown >

Period-Over-Period

No Active Page Filters

Auto-Refresh: ON

Rows: Cost Component by Product >

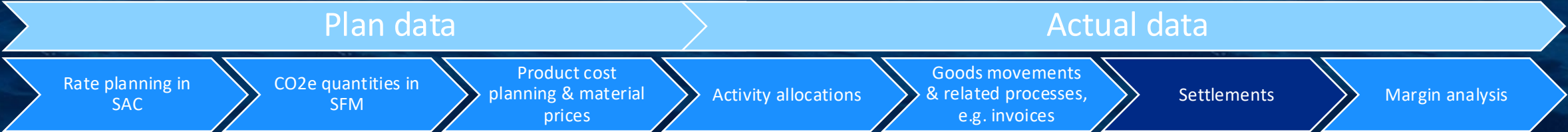
Columns: Period-Over-Period >

🔄

		Measures		Total Amount		
		Structure		Reporting Fiscal Period 2026004	Previous Fiscal Period 2026003	Diff. RP 2026004 - PP 2026003
Product	↑↓	↑↓	Cost Breakdown Component	EUR		EUR
FG228		FG228	AdminSales Overhead	30,60	-	30,60
			Direct Material	950,00	-	950,00
			Machine Time	9,00	-	9,00
			Material Overhead	216,20	-	216,20
			PB/Not assigned	686,60	-	686,60
			Personnel Time	11,00	-	11,00
			Production Overhead	73,68	-	73,68
			Set-Up Time	26,00	-	26,00
			Totals	2.003,08	-	2.003,08

Universal Component Breakdown along the value chain

Example: settlement of production order variances



General Information

Output Details

Notes

Component Breakdown

General Information

General Data

Business Transaction Category:
EBVP (Event-Based Variance)

Assignment Reference:
1005290

Per. of Perf. Start:
–

Per. of Perf. End:
–

Fiscal Year of Ledger:
2026

Business Transaction Type:
EBVP

Reference Document Type:
EBWP

Reference Document:
400606804

Chart of Accounts:
YCOA

Translation Date:
13.04.2026

Fiscal Year Period:
004.2026

Posting Date:
13.04.2026

Journal Entry Date:
13.04.2026

Journal Entry Type:
SA

Account Assignment

Account Assignment Type:
OR (Order)

Account Assignment:
000001005290

Company Code:
1010 (Company Code 1010)

Controlling Area:
A000 (Controlling Area A000)

Order ID:
1005290

Group Reporting

Company:
1010 (Company 1010)

Consolidation Chart of Accounts:
Y1

Consolidation Financial Statement Item:
412200

Consolidation Subitem Category:
2 (Functional areas)

Consolidation Subitem:
YB20

Partner Account Assignment

Partner Profit Center:
YB110 (Product A)

Partner Segment:
1000_A (Segment A)

Component Breakdown

Breakdown Items (6)

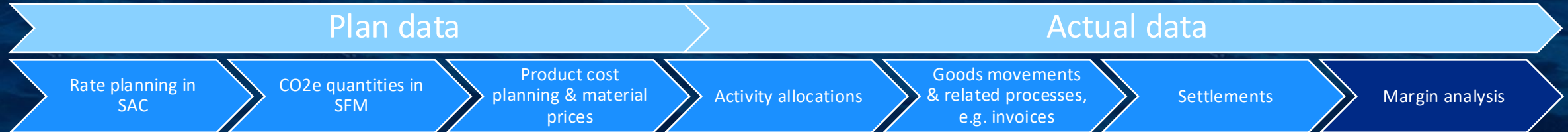
Standard

Comp. Brkdwn Method: CBPB (Production Cost Breakdown)

Ledger: OL (Ledger OL)

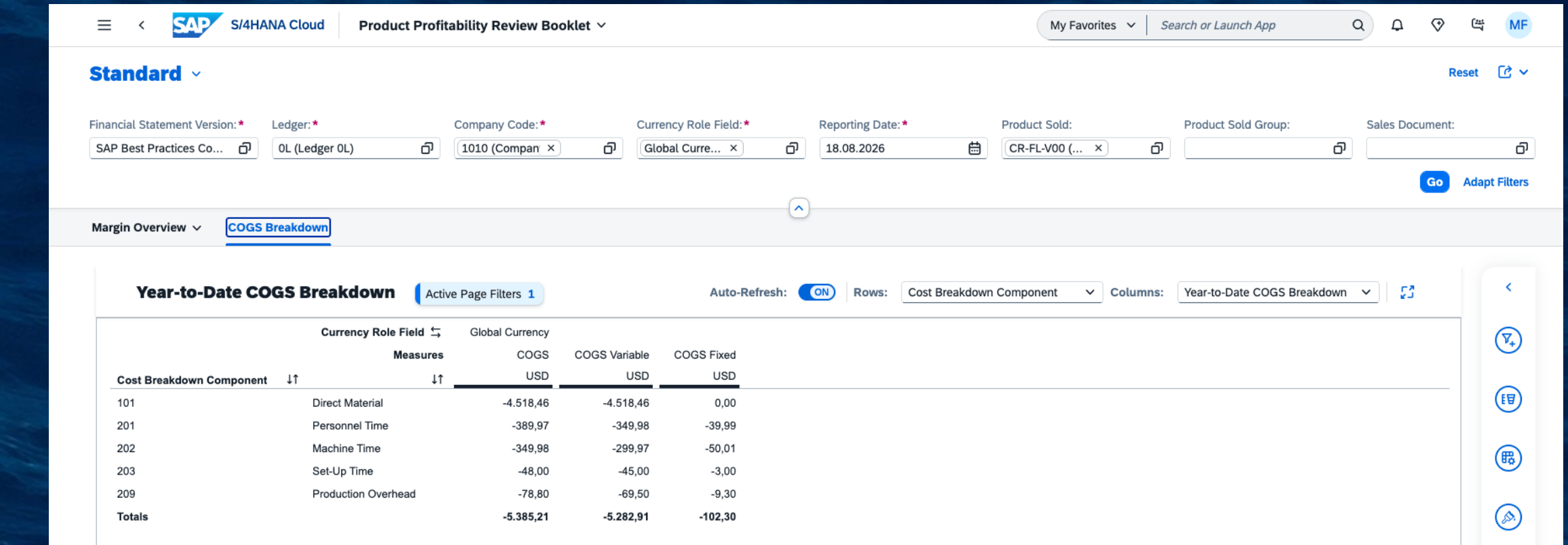
Cost Brkdwn Comp.	Amount in Company Code Cu...		Variable Amount In Company ...		Fixed Amount in Company Cu...		Amount in Global Currency		Variable Amount In Global Cu...		Fixed Amount in Global Curre...	
109 (Material Overhead)	-190,20	EUR	-190,20	EUR	0,00	EUR	-236,23	USD	-236,23	USD	0,00	USD
201 (Personnel Time)	20,04	EUR	177,00	EUR	-156,96	EUR	24,84	USD	218,40	USD	-193,56	USD
202 (Machine Time)	110,36	EUR	189,64	EUR	-79,28	EUR	136,88	USD	235,92	USD	-99,04	USD
203 (Set-Up Time)	32,00	EUR	39,00	EUR	-7,00	EUR	39,24	USD	47,64	USD	-8,40	USD
209 (Production Overhead)	15,32	EUR	38,64	EUR	-23,32	EUR	21,00	USD	51,52	USD	-30,52	USD
305 (AdminSales Overhead)	-30,60	EUR	-30,60	EUR	0,00	EUR	-37,89	USD	-37,89	USD	0,00	USD
	-43,08	EUR	223,48	EUR	-266,56	EUR	-52,16	USD	279,36	USD	-331,52	USD

Product Profitability Review Booklet (1)

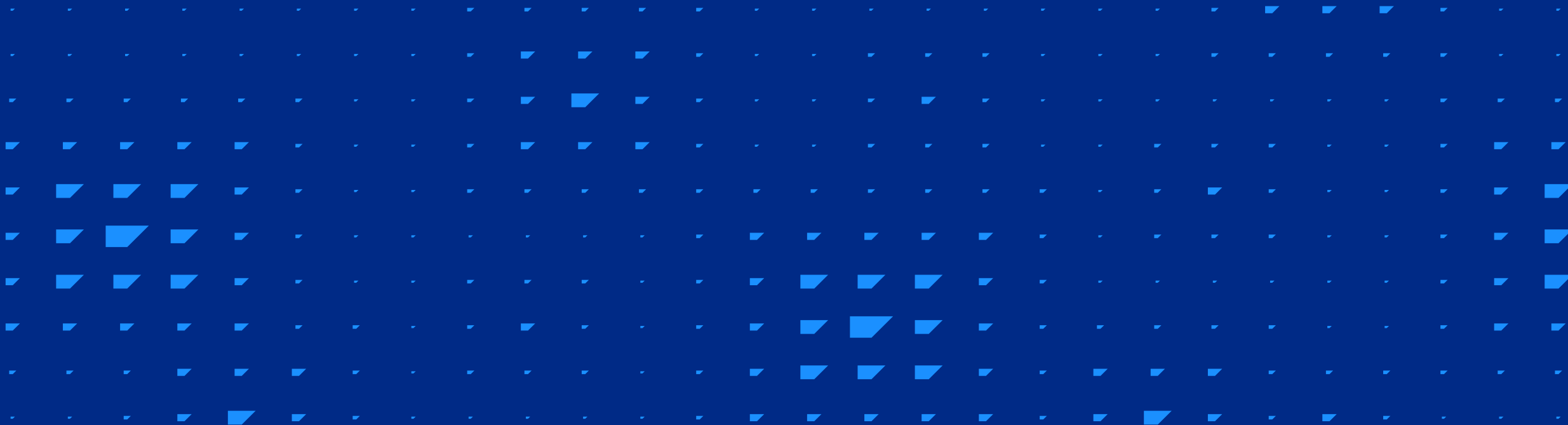


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Product Profitability Review Booklet (2)



04: How can I use UCB today?



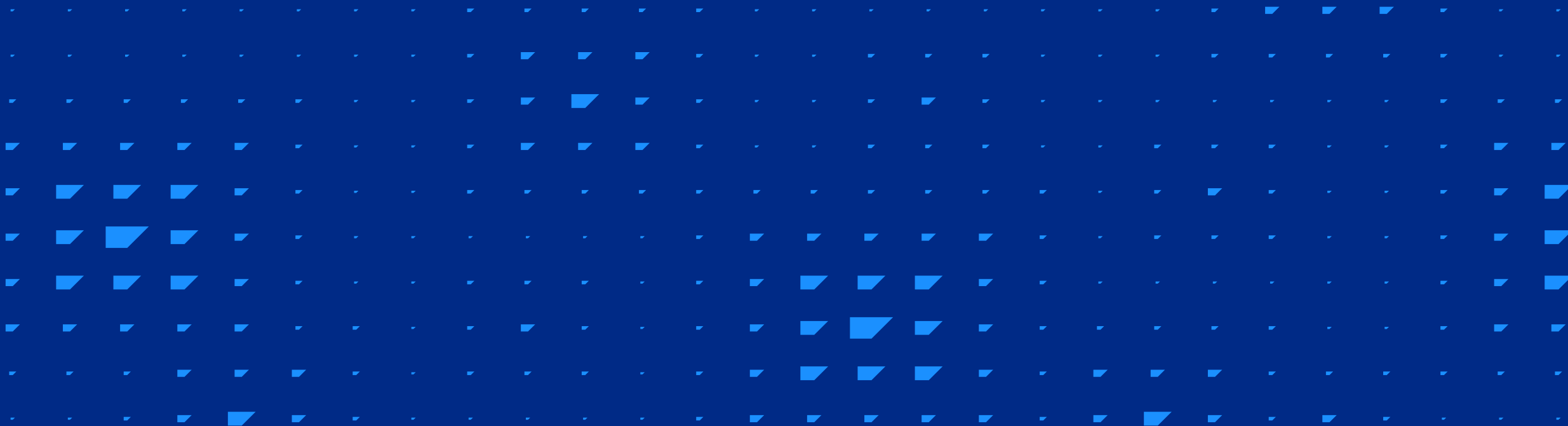
Current situation and usage options

- The Universal Component Breakdown is **not yet fully developed** and therefore cannot yet be used as a full replacement for the classic cost component split yet
 - Fully available in product cost planning and rate planning
 - Gaps in the actual value flow and in reporting (details on the following slide)
- The scope item BEG (product cost planning) can therefore be combined with the following UCB scope items and run in **parallel**:
 - 7NH: UCB cost breakdown methods CBPB (production costs) and CBOB (origin / primary costs)
 - 6VN: UCB quantity breakdown method QBQ1 (CO2e)
- The configuration of the classic split Y1 and the UCB structure PB must be identical (identical components and account assignments). This enables both a reconciliation and a clean transition from the classic solution to UCB
- Possible for greenfield / new implementations as well as subsequent activation via scope extension (currently no support when actual costing is used)

Process support with S/4HANA Public Cloud CE2608

Functionality	Support
Rate calculation (plan + actual)	Yes (SAC for plan, KSII for actual)
Cost center actual rate revaluation (KSII)	No
Product cost planning	Yes, except ETO project stock valuation with production order costing and additive costs
Material / inventory revaluations	Partial: supported with the “Change Material Prices” and “Upload Material Inventory Prices” apps; not for price release or MR21
Actual costing	Only with restrictions: requires goods movements, no cycles, no actual rate breakdown, no YTD costing runs, ...
Goods movements	Partial (2X1/2X2, 501/502, 101 for production orders)
Balance sheet valuation	No
Manufacturing controlling	Partial: analysis on cost objects and settlement possible; revaluation with actual rates (CON2) not possible; no order combination or product cost collectors
Overhead allocations	No (e.g. assessment, distribution, settlement)
Reporting / display	Partial (document line items, rates, prices, cost estimate, cost object reporting in the COGM Review Booklet)

05: Outlook on upcoming developments

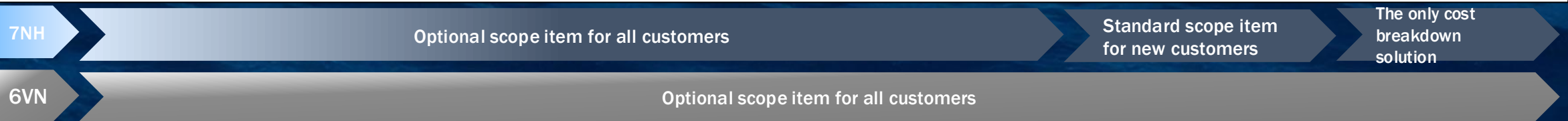


UCB in S/4HANA Public Cloud – outlook

Subject to
change

Summary

- UCB availability starting with release CE2502; UCB and CCS coexist until the classic split is replaced. A concrete timeline is not yet defined.
- Scope items 6VN (CO2e quantities) and 7NH (production costs) can be activated separately.
- The focus of the next releases will be extending actual posting support and its reporting.



CE2502 – CE2602

CE2608

CE2702

2027 and beyond

6VN

- Plan: rates, material costing, SFM/SAC integration

7NH

- Integration into the actual-data flow (first goods movements, manufacturing scenarios incl. variance calculation and settlement)
- Price changes
- Reporting in the COGM Review Booklet, FI document display, etc.
- Synchronization of CCS & UCB
- ...

7NH

- Adding missing goods movements
- Revaluation processes for price changes (CK24, CKME)
- Limited actual costing
- Extended reporting

6VN

- Extended scope based on market demand

7NH

7NH

- Plan: rates, material costing

- Full actual costing incl. subsequent activation
- UCB fully replaces the classic cost component split in terms of functionality
- Deprecation of the CCS in S/4HANA Public Cloud, incl. the option to deactivate the classic split
- Additional breakdown methods
- Overhead allocations
- UCB in the Private Cloud
- ...

Questions & Answers

Our offer: If you are interested in more information, please get in touch. We welcome feedback on the concept and are happy to share further detail on individual aspects or offer deep dives.

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Resources

- Blog with links to further resources: <https://community.sap.com/t5/enterprise-resource-planning-blog-posts-by-sap/universal-component-breakdown-ucb-revolutionizing-product-cost-management/ba-p/14240106>
- FAQ note: <https://me.sap.com/notes/3408777>
- SAP documentation: https://help.sap.com/docs/SAP_S4HANA_CLOUD/6b39bd1d0e5e4099a5b65d835c29c696/71a6d231c4fd404ca73b6b8d320aad25.html?version=2602.500

Thanks for attending this session!

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