



## Use of SAP Commodity Management for the precious metal trading activities of the Heraeus Group

Christian Veith – SAP Mining and Metals Forum – Darmstadt – October 2014

---

## Agenda

1. Overview Heraeus Group
2. Overview Heraeus Precious Metal Trading
3. Precious Metal Trading As Is - SAP Environment
4. Precious Metal Trading To Be – SAP Environment
5. Summary New SAP system TRD companies
6. Current project status – Roll-Out new SAP for TRD companies

## Overview Heraeus Group

- A globally active precious metals and technology Group
- Family-owned for over 160 years
- Active in global markets characterized by a clear differentiation lasting growth and attractive returns
- Over 12,500 employees in more than 110 companies\*
- 2013 product revenue: €3,6 billion
- 2013 precious metals trading revenue: €13,5 billion



\* as of: December 31, 2013

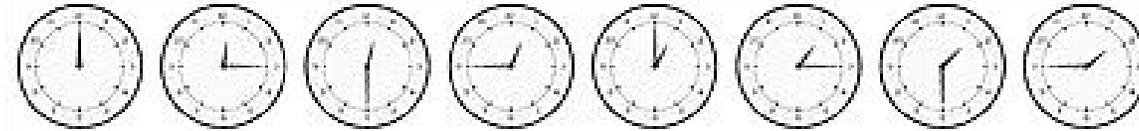
## Overview Heraeus Group

### ■ Heraeus's business groups

- Precious Metals
- Materials and Technologies
- Sensors
- Biomaterials and Medical Products
- Quartz Glass
- Specialty Light Sources



# Overview Heraeus Precious Metal Trading



SHANGHAI | HONG KONG | HANAU | NEW YORK

**GLOBAL TEAM  
LOCAL  
EXPERTISE**

**AROUND THE  
GLOBE  
AROUND THE  
CLOCK**

**CLOSE TO THE  
MARKET  
CONNECTED TO  
THE CUSTOMER**

**ALL SEVEN  
PRECIOUS  
METALS**

GOLD | SILVER | PLATINUM | PALLADIUM | RHODIUM | RUTHENIUM | IRIDIUM

# Overview Heraeus Precious Metal Trading

## VALUE CHAIN

### LOOP SERVICES

#### ALL-ROUND SOLUTION

Integral collaboration with Heraeus Recycling and Heraeus Product Businesses

=> Enhanced convenience and efficiency for clients

#### DIVERSE CUSTOMERS

Extensive customer base of leading companies across industries and regions

=> Exceptional flexibility and client understanding

#### RELIABLE PARTNERSHIPS

Relationships with mining companies, industrial users, traders, financial institutions and investors  
=> Great insight into all aspects of the value chain

## INFRASTRUCTURE

### „ONE-STOP-SHOP“

#### ALL LOCATIONS PROVIDE

- ❖ **Trading & Hedging Services**
- ❖ **Back-Office Operations**
- ❖ **Worldwide Logistics & Deliveries**
- ❖ **Transfers via Weight Accounts**
- ❖ **Financing**
- ❖ **Market Analysis & Research**

#### BENEFITS

- ❖ Fast operational workflows
- ❖ Leveraged knowledge from immediate interaction along the operational process

## QUALITY

### SUSTAINABLE SOURCING

#### INTERNALLY

Metals from extensive refining activities of the Heraeus Group

#### EXTERNALLY

Metals from primary producers providing stability of supply in times of volatility & uncertainty

#### SUPPLY CHAIN POLICY

Stringent adherence to our Supply Chain Policy ensures sourcing from legitimate and ethical sources

## LEADERSHIP

### ONE STEP AHEAD

#### READY FOR THE FUTURE

At the forefront of market watch and analysis to anticipate market events and reactions

#### SUPPORTING DECISION-MAKERS

Internal and external know-how sharing to provide direction and support in decision making

#### MEMBERSHIPS

- ❖ LBMA & LPPM
- ❖ IPMI & IPA
- ❖ Silver Users Association
- ❖ German Precious Metals Association

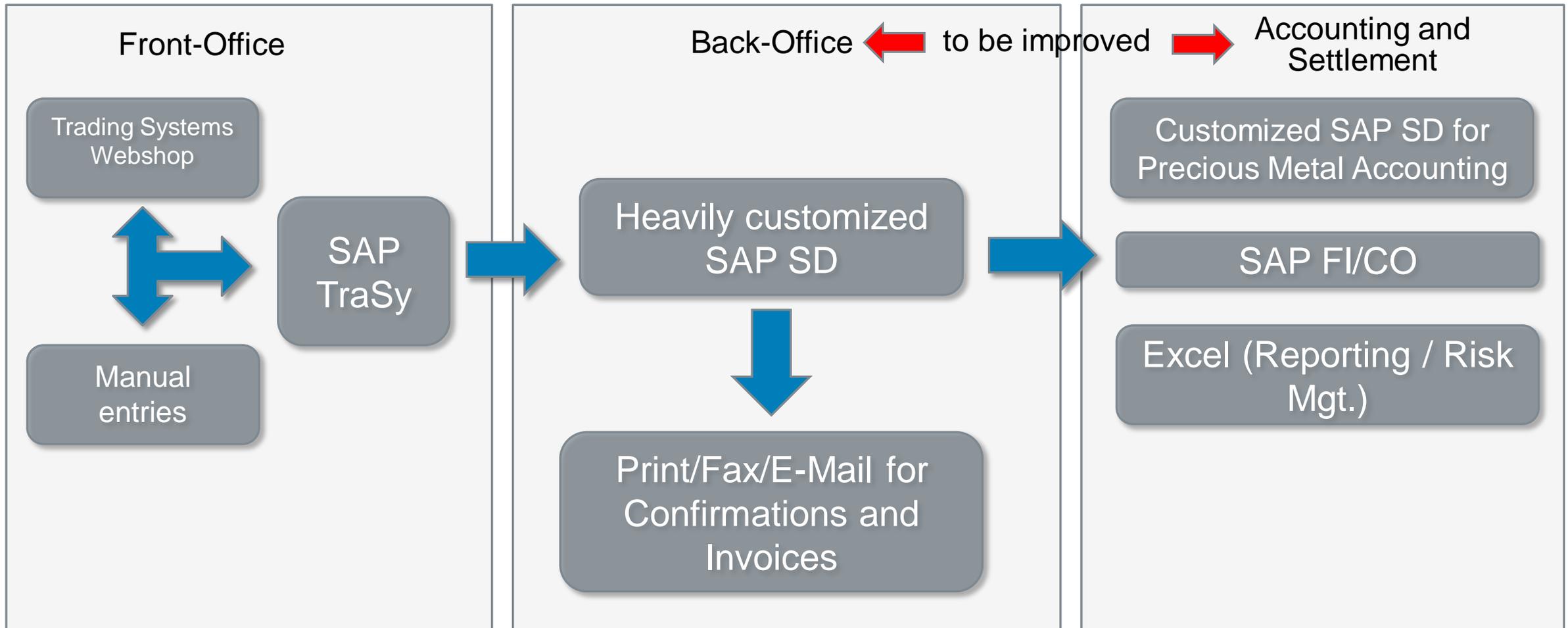
=> We actively participate in trade organizations and are a recognized leader in the market

GOLD | SILVER | PLATINUM | PALLADIUM | RHODIUM | RUTHENIUM | IRIIDIUM

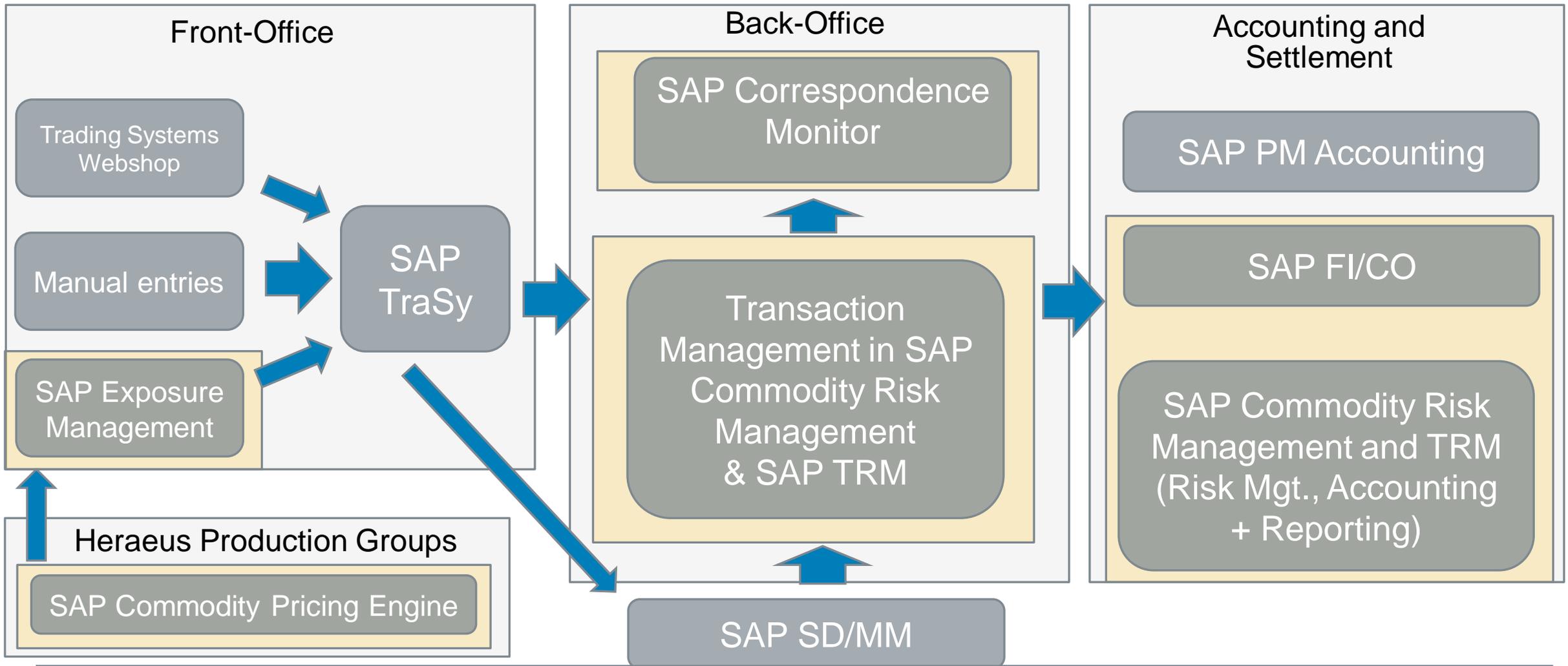
## Heraeus SAP History

- Heraeus became SAP customer in 1981
- Heraeus Precious Metal Trading implemented highly modified version of SAP SD and custom developed trading system (TraSy) and precious metal accounting system to support precious metal trading processes.
- In 2012 Heraeus started project Magellan to globally harmonize all processes in one single SAP system.
  - Decision to use SAP Commodity Risk Management and SAP TRM for trading
  - Heraeus production groups use SAP Commodity Procurement and Sales including the Commodity Pricing Engine (CPE) for commodity pricing.
  - Integration between CPE and Exposure Management is used to extract commodity price exposures and then transfer and manage them within the Heraeus Precious Metal Trading group.

# Precious Metal Trading As Is - SAP Environment



# Precious Metal Trading To Be – SAP Environment



## Precious Metal Trading To Be – SAP Environment

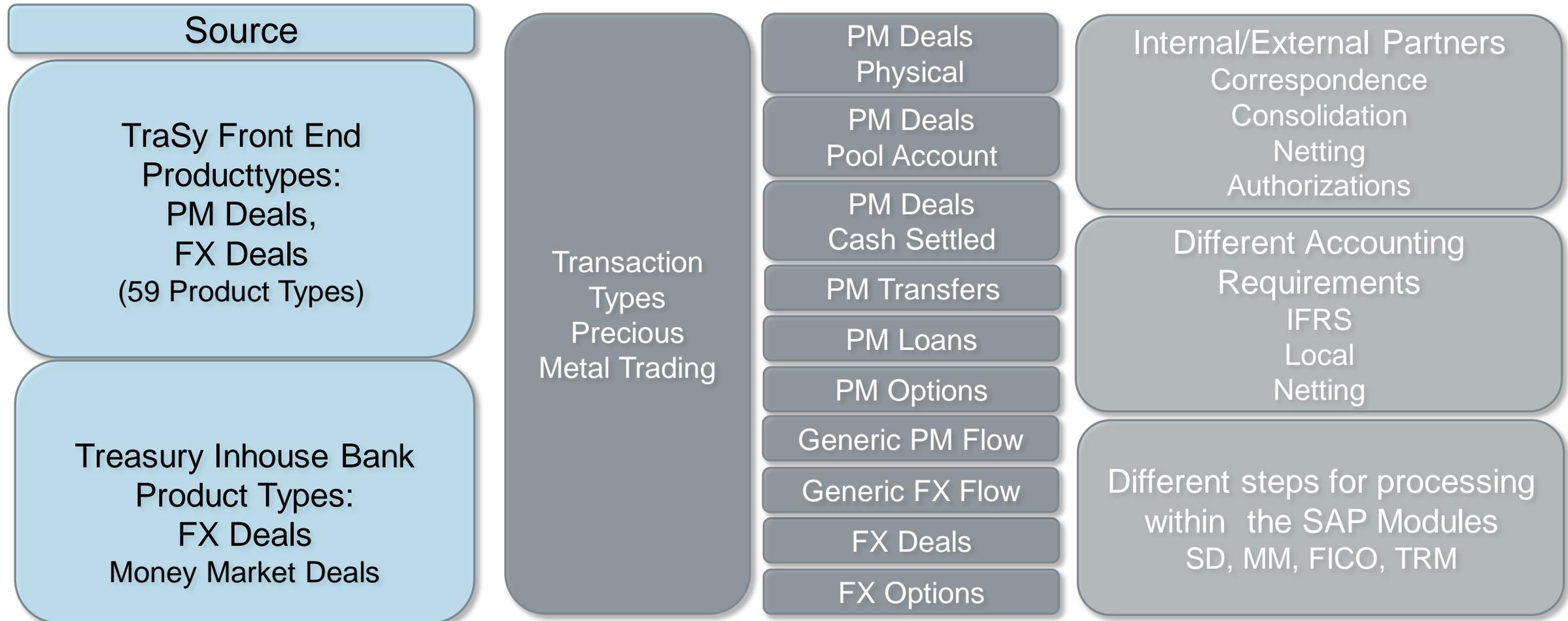
- Use of SAP Standard wherever possible
- Main areas of enhancements within SAP Standard (Part I):
  - Front End System:
    - Interface with Heraeus-own-developed SAP Front-End/User Interface for Trading (TrasY)
  - Transaction Processing:
    - 1 ■ Product type / Transaction type to separate the various kind of transactions
    - Interface SAP TRM with SAP SD/MM for physical handling of precious metals
  - 2 ■ Enriched tab strips in SAP Commodity Risk Management to handle precious metal specific data
    - Link between SAP Commodity Risk Management and Heraeus developed Precious Metal Accounting system

## Precious Metal Trading To Be – SAP Environment

### ■ Main areas of enhancements within SAP Standard (Part II):

- SAP Correspondence Monitor
- 3 ■ Development of Swift MT 600 format in the SAP Correspondence Monitor
- Controlling/Accounting/Reporting
  - Sales/Cost of Sales Recognition – Process for PM transactions
- 4 ■ Precious Metal Risk reporting to cover specific Heraeus requirements

# Heraeus Precious Metal Trading Product Type set up in SAP 1



# Enriched tab strips to handle precious metal specific data 2

The screenshot displays the SAP 'Commodity Forward Display: Initial Screen'. At the top, there is a toolbar with various icons. Below it, the title bar reads 'Commodity Forward Display: Initial Screen'. The main content area is divided into several sections:

- Header Fields:**
  - Company Code: 1820 HMH Hong Kong, HK
  - Transaction: 6000000000394
  - Product Type: 906 TRD Com Pool Extern
  - Activity: 1 Contract
  - Transaction Type: 200 Sell
- Tab Strip:** A horizontal strip of tabs is visible, including 'Structure', 'Additional Data', 'Product Specific', 'Administration', 'Other Flows', and 'Pa...'. The 'Additional Data' and 'Product Specific' tabs are highlighted with a red rectangular box. A grey arrow points from the text 'Enhancements within SAP Standard' to this red box.
- Partner Information:**
  - Partner: 1001021 Deutsche Bank / Taunusanlage 12 / 60320 Frankfurt
- Commodity Information:**
  - Commodity ID: PD Palladium
- Quantity/Price Table:**

Quantity/Price	
Quantity/Unit	10.000,000 G
Price/Unit	1.800,00000 HKCT
Spot Price	1.800,00000 HKCT
Contango/Back	0,00000 HKCT
Forward Date	22.08.2013
Payment Date	22.08.2013

Enhancements within SAP Standard

# Enriched tab strips to handle precious metal specific data 2

Company Code	1820	HMH Hong Kong, HK	Transaction	6182000001000
Product Type	905	TRD Com Pool Intern	Activity	2 Contract Settleme...
Transaction Type	200	Sell		

Structure Additional Data **Product Specific** Administration Other Flows Pa...

**TraSy Ticket No.** 1017

Purchasing Document		Commodity Value Date	04.04.2014
Sales Document		Goods Issue Date	
Tax code	X0	Goods Receipt Date	
<input type="checkbox"/> Tax in Local Currency		Payment Value Date	08.04.2014
<input type="checkbox"/> Metal Value Date Update			

TrasY Integration

SAP SD / MM - Logistics Integration

Company Code	1820	HMH Hong Kong, HK	Transaction	5182000000007
Product Type	920	TRD Com Loan Int	Activity	2 Contract Settleme...
Transaction Type	200	Borrowing		

Structure Additional Data Product Specific Administration Other flows Payment det...

**Commodity Leasing**

Commodity	PD	Palladium
Price	779.00000	1 OZT
Quantity	5,000.000	OZT

PM Leasing Enhancement using SAP Money Market

# SAP Correspondence Monitor 3

**Correspondence monitor - Matching view**

Standard view Assignment view Matching view

Outgoing correspondence objects

Direction	Attachment	Note	AlertCO	Status	CoCode	Trans.	Co key	Recipient	Channel	Format	PTyp	TTyp	Start of Term	End of Term	Contract Date	Nominal Amnt	Currency	NomIntRte	Int.Amou
←				Delivered	0001	2285	3568	DEUBA	FAX	PDF_CNF_MM	51A	100	28.08.2008	28.08.2009	28.08.2008	100,00	EUR	4,0000000	4,0000000
←				Delivered	0001	2284	3567	DEUBA	FAX	PDF_CN						100,00	EUR	4,0000000	4,0000000
←				Delivered	0001	2283	3566	DEUBA	EMAIL	SAPSCI						100,00	EUR	4,0000000	4,0000000
←				Delivered	0001	2281	3563	DEUBA	EMAIL	SAPSCI						10,00	EUR	2,0000000	0,2000000
←				Delivered	0001	2274	3549	DEUBA	FAX	PDF_CN						10,00	EUR	2,0000000	0,2000000
←				Delivered	0001	2267	3542	DEUBA	FAX	PDF_CN						100.000,00	EUR	3,0000000	3.000,00000
←				Delivered	YHW1	1057	3386	DEUBA	FILE	MT320						25.400,00	EUR	22,0000000	238,3000000
←				Delivered	0001	2200	3335	DEUBA	FAX	PDF_CN						123.123,00	EUR	4,0000000	136,8000000
←				Delivered	0001	2200	3334	DEUBA	FILE	MT320						123.123,00	EUR	4,0000000	136,8000000
←				Delivered	0001	2180	3246	DEUBA	FAX	PDF_CN						1.000.000,00	EUR	10,0000000	25.000,00000
←				Matched	0001	2170	3230	DEUBA	FAX	PDF_CN						15.400,00	EUR	15,0000000	327,9000000
←				Delivered	0001	2170	3229	DEUBA	FILE	MT320						15.400,00	EUR	15,0000000	327,9000000
←				Delivered	TRM1	1400	3201	DEUBA	FILE	MT320						10.000.000,00	EUR	3,0000000	75.000,00000
←				Delivered	TRM1	1399	3200	DEUBA	FILE	MT320						10.000.000,00	EUR	3,0000000	75.000,00000
←				Matched	TRM1	1399	3198	DEUBA	FILE	MT320						10.000.000,00	EUR	3,0000000	75.000,00000

Outbound Communication  
SWIFT  
Fax  
E-Mail

Incoming correspondence objects

Direction	Attachment	Note	AlertCO	Status	CoCode	Trans.	Co key	Recipient	Channel	Format	Date	Nominal Amnt	Currency	NomIntRte	Int.Am
→				Received	0001	2350	3712	DEUBA		MT399	08	11.000.000,00	EUR	3,0000000	137.5000000
→				Matched	0001	2274	3428		FILE	MT515				0,0000000	
→				Received	0001	2203	3345	DEUBA		PDF_CN	08	650.000,00	EUR	3,7000000	668,0000000
→				Received			3337	DEUBA		PDF_CN	08	123.123,00	EUR	4,0000000	136,8000000
→				Matched	0001	2170	3283		FILE	MT547				0,0000000	
→				Received	0001	2190	3278		FILE	MT544				0,0000000	
→				Received	0001	2190	3275		FILE	MT544		1.200.000,00		0,0000000	
→				Received	0001	2190	3275		FILE	MT544		1.200.000,00		0,0000000	
→				Matched	TRM1	1399	3199	DEUBA	FILE	MT320	08	10.000.000,00	EUR	3,0000000	75.0000000
→				Received	TRM1	1345	2533	DEUBA	FILE	MT320		10.000.000,00	EUR	3,0000000	75.0000000
→				Received	TRM1	1128	2501	DEUBA	FILE	PDF_DS_MM		10.000,00	EUR	10,0000000	168,0000000

Inbound Communication  
SWIFT

# Riskreporting: Precious Metal Position Report 4

Commodity Position Report										
PT 26.08.2013										
Commodity ID: PT										
Key Date: 26.08.2013										
Cut off date: 00.00.0000										
Period Buckets: K4 Cal. Year, 4 Special Periods										
CoCd	Comdty	Lo...	Fixd/Float	Direction	Direction of Position	DuePer	PTyp	Product Type Name	Qty Fixed:DisplayUoM	DUOM_C...
1820	PT	GEN		+	Buy Commodity (+)	2013/	905	TRD Com Pool Intern	9,77589	KG
							906	TRD Com Pool Extern	2,800	KG
						2013/			<b>12,57589</b>	<b>KG</b>
						2014/	900	TRD Com Physical Intern	2.340,000	KG
							906	TRD Com Pool Extern	6,000	KG
							911	TRD Com Cash Settled Extern	1,000	KG
							982	TRD Com Alloy Int	540,000	KG
							983	TRD Com Alloy Ext	270,000	KG
						2014/			<b>3.157,000</b>	<b>KG</b>
					Buy Commodity (+)				<b>3.169,57589</b>	<b>KG</b>
				-	Sell Commodity (-)	2013/	905	TRD Com Pool Intern	1,77701-	KG
							906	TRD Com Pool Extern	4,500-	KG
							983	TRD Com Alloy Ext	0,56430-	KG
						2013/			<b>6,84131-</b>	<b>KG</b>
						2014/	900	TRD Com Physical Intern	2.250,000-	KG
							906	TRD Com Pool Extern	5,555-	KG
							982	TRD Com Alloy Int	360,000-	KG
							983	TRD Com Alloy Ext	270,000-	KG
						2014/			<b>2.885,555-</b>	<b>KG</b>
					Sell Commodity (-)				<b>2.892,39631-</b>	<b>KG</b>
									<b>277,17958</b>	<b>KG</b>
									<b>277,17958</b>	<b>KG</b>
									<b>277,17958</b>	<b>KG</b>
									<b>277,17958</b>	<b>KG</b>

## Summary – New SAP system for precious metal trading companies

### Major achievements to be realized with the new SAP environment:

- Management of global exposure within Exposure Management
- More automation in the area of communication (Integration of Swift MT 600, SAP Correspondence Monitor)
- Replace (heavily customized) SAP SD solution with SAP Commodity Risk Management and SAP TRM Standard + Enhancements
- Eliminate weaknesses in the area of accounting, controlling and risk management
- Increase transparency by implementing SAP Standard

---

## Summary – New SAP system for precious metal trading companies

- Use SAP Standard processes for trading operations (For example: Create, Settlement, Post) wherever possible
- More flexibility in the future for upcoming changes in accounting
- Ability to participate with further SAP standard developments based on SAP Commodity Risk Management and SAP TRM (eg. EMIR)
- Close collaboration with SAP Group (SAP Consulting, SAP Custom Development and Solutions Team) to develop and implement the new SAP solution for Precious Metal trading activities.

---

## Current project status – Roll-Out new SAP for Heraeus companies

- Go Live new SAP system trading company Hong Kong: 30 March 2014 
- Go Live new SAP system Heraeus production company Singapore: July 2014 
- Go-Live scheduled for Trading company in Shanghai: 01 Nov 2014
- Trading companies in New York and Hanau scheduled to Go Live until 30 June 2015

**Thank you for your attention**

**Heraeus Metals Germany GmbH & Co. KG**

Heraeusstrasse 12-14

63450 Hanau, Germany

[www.heraeus-edelmetallhandel.de](http://www.heraeus-edelmetallhandel.de)



**Christian Veith**  
**Phone: +49 (0)6181 35-4801**  
**[christian.veith@heraeus.com](mailto:christian.veith@heraeus.com)**