

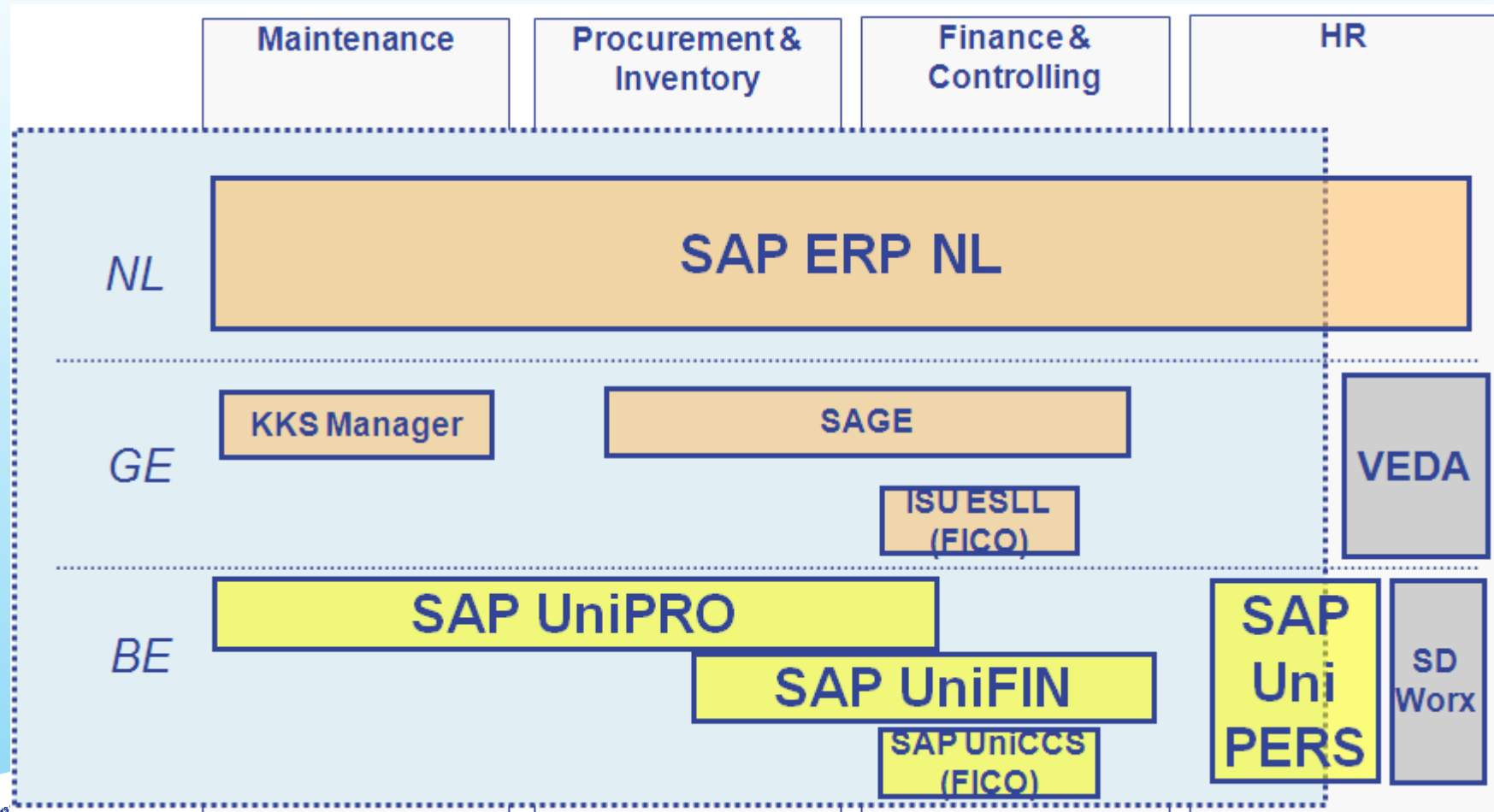
20/11/2009

Electrabel
GDF SUEZ

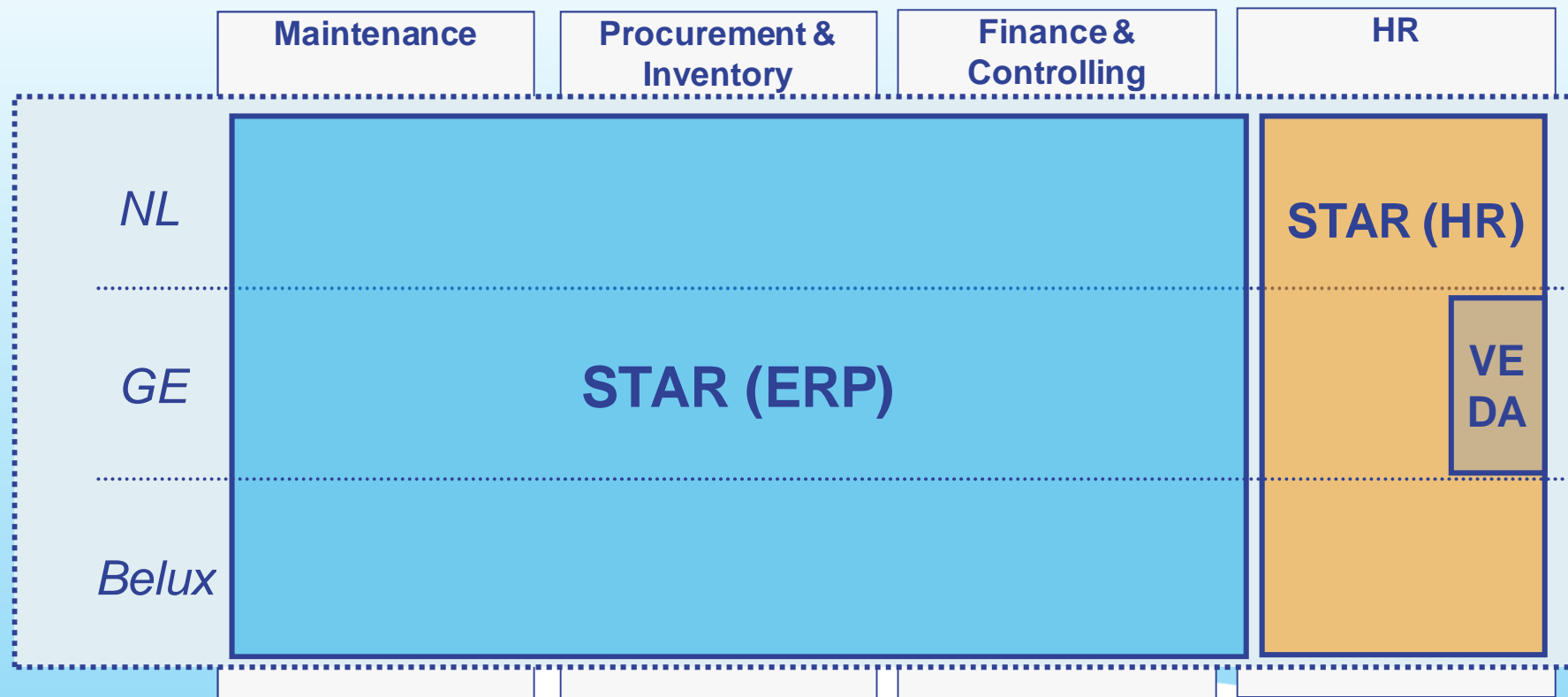


- 1. STAR objectives**
- 2. STAR approach and planning**
- 3. STAR Organisation**
- 4. Application architecture**
- 5. System architecture**
- 6. STAR Information Management and support model**
- 7. Highlights by Functional domain**

Past BENEDELUX Application Architecture was fragmented per country.
The current Application Architecture for Belgium was even further fragmented per Business Unit/Metier.

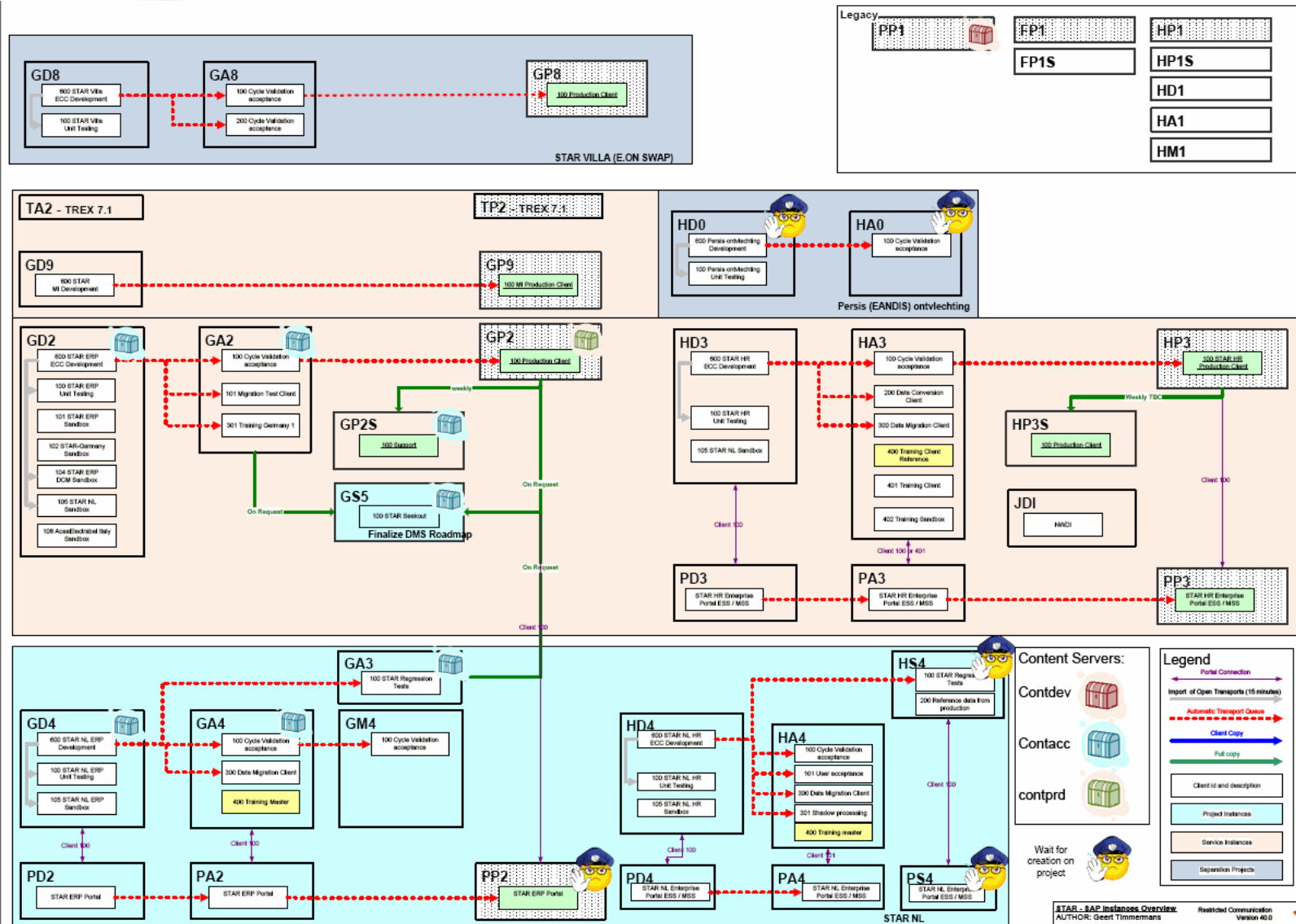


The STAR programme will implement a Strategic Target Architecture to support business processes in Germany, Belgium and The Netherlands by 2010.



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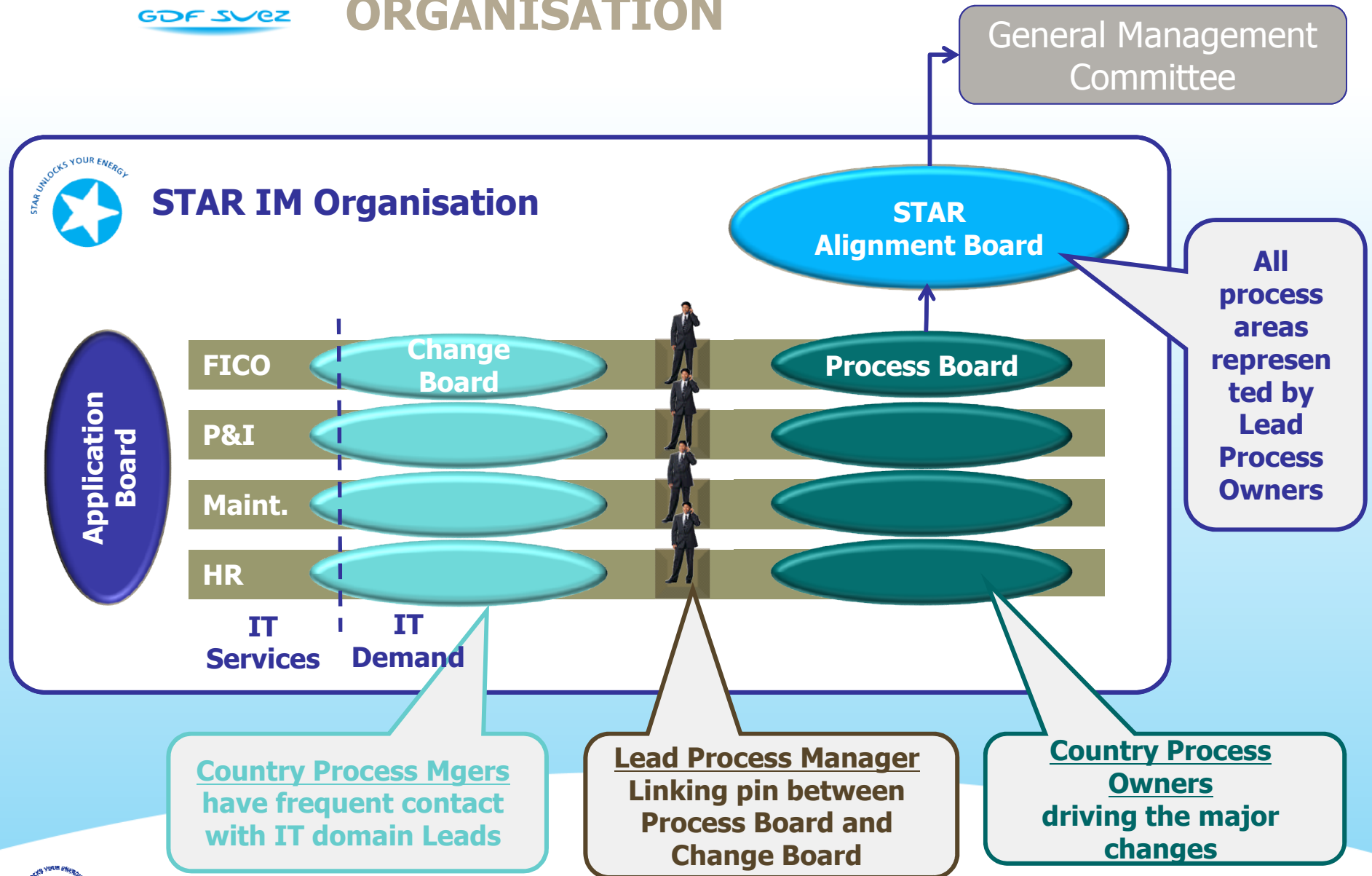
STAR SYSTEM LANDSCAPE (SAP INSTANCES)



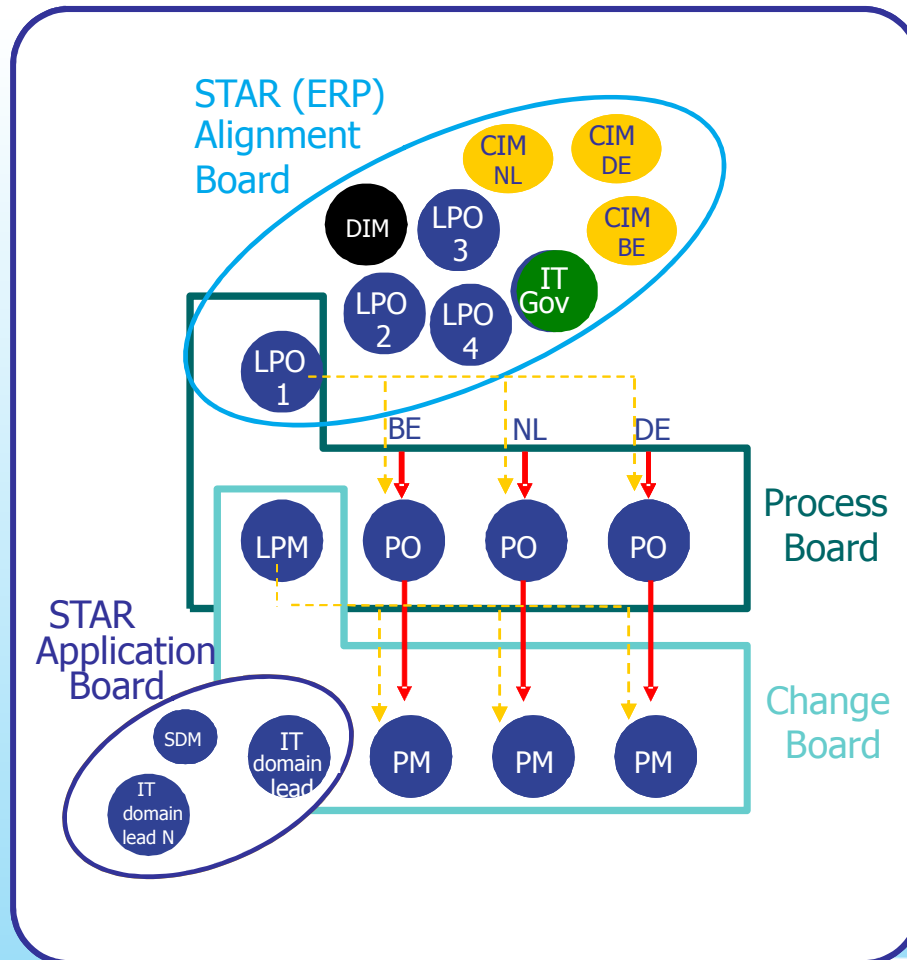


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STAR INFORMATION MANAGEMENT ORGANISATION



DECISION-MAKING STRUCTURE



↓ The **hierarchical** Reporting Line

-is function-related

-in link with the coaching and development

The hierarchical superior gives the global objectives and the final evaluation.

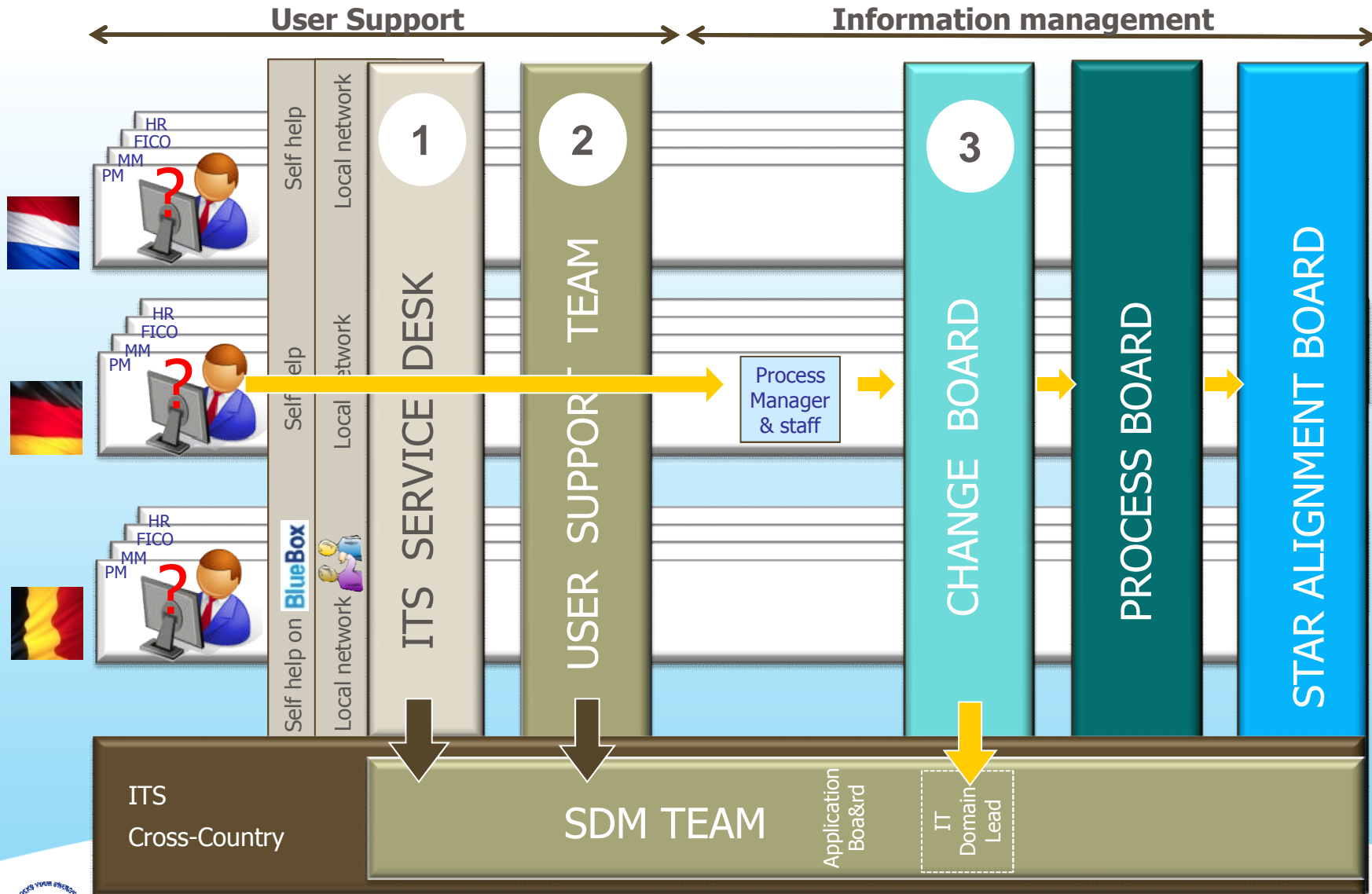
↓ The **functional** Reporting Line

-is process domain-related

- in link with governance, guidance and support provided for the activities related to the process domain

The functional superior gives the objectives and evaluation related to the process domain. According to specific case, goals setting and evaluation of PO/PM could be ensured by hierarchical superior of the LPO/LPM.

USER SUPPORT & INFORMATION MNGT CAPABILITY - OPERATIONAL VISION



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Financial Accounting

- New GL with parallel ledgers, local/group currency, document splitting on segment, derivation of functional area, group/operational and local chart of accounts,...
- In order to comply with legal and corporate reporting needs: IFRS, local GAAP, P&L by function, cost by technology, segmentations,...).
- AR and AP integrated with SD and MM (P&I track).
- AA in combination with parallel ledgers, valuation areas for IFRS, local GAAP, others.
- Banking and Cash management: Unibank to distribute Electronic bank statements, Cash concentration, Cash journals,...
- Profit center as new dimension in FI. Master record is used to derive segment.

Controlling

- Cost elements, cost centers, internal orders => STAR CO model (origin -> destination)
- 1 controlling area
- CATS : internal ITS resources enter working hours on IO's (Mini HR provided by STAR HR)

Project systems

- In combination with IM to plan and budget on projects mainly for Generation

Interfaces

- With other SAP platforms: ISU systems (B2B / B2C for BE, DE, NL) and HR
- With external systems: TPM (MAO and ZAINET), ICARUS, LEXWARE, SCHLEUPEN,...

Reporting

- BI with cubes for FI, CO and AA.
- Maximum usage of standard SAP reports

- **Attention points:**

- Integration with other modules and other systems (interfacing)
- Data migration: Importance of correct conversion, impact from migration in logistic modules on FICO not to be underestimated.
- Change management and training of end-users.
- Set-up of support organization in cooperation with (business) Lead Process Managers and Process Managers

- **Remarkable points:**

- Harmonization and standardization of business processes and SAP solutions (CO model, chart of accounts,...)
- Fast closing performed by central team
- Master data management by central team
- definition of the STAR codebook

- **Dangerous points:**

- Scope changes and revision of choices made.
- Decentralization of configuration, developments and migration during project phase : need for communication, documentation and monitoring is important.
- Data migration needs to be well integrated in different tracks.

- **Difficulties/difficult to stabilize:**

- New GL in combination with document splitting, impact on/from other modules and closing activities.
- Validations and substitutions.

- **Developments:**

- Interfacing: Batch input replaced by usage of BAPI's. Monitoring via BAPI tool.
- Unibank: Dispatching and monitorin of electronic bank statements to correct SAP platform in correct format.
- Validations and substitutions via BADI's.

Plant Maintenance

Plant Maintenance covering technical objects, Notifications & Orders to use with:

- corrective maintenance
- preventive maintenance
- integration with Finance & controlling
- integration with P&I (logistic)
- post maintenance activities

Planning

- Project system for Plant Shutdown planning, long term planning
- OpenPS, integration with Microsoft Project

WCM

Work Clearance Management (Safety module)

- WCA covering: approval, safety & permit management
- WCD covering: tagging and untagging to secure persons/installation
- Templates: predefined WCA's & WCD's

DMS

Document Management

- Work Flow management
- Auto PDF conversion
- TREX search for content metadata (full text search)
- Lucene as alternative search solution for SAP context metadata
- NAS (integration UNIX/WINDOWS shares with Windows Explorer) to limit data loss

Reporting

- BI system for KPI reporting
- EveryAngle for operational reporting (daily refreshed)

• Attention points

- at start of project, resources available without pre-definition of the level 3 process content => long design period
- under estimation of data migration, conversion and upload aspects
- change process towards end-users
- integration with other modules
- data management end-to-end process and the adequate tools
- multiple languages, extra development, translation

• Remarkable points

- re-design to standardize (standard SAP)
- simplification by using Work Flow (automated process)
- harmonization of the detailed processes

• Dangerous points

- offshore development, a lot of rework, communication and time scale
- ad hoc programming for data migration
- multiple steps for uploading data, alignment and planning !
- decentralization of customizing, configuration and development
- multiple languages, severe impact on safety, instability of language depended objects

• Difficulties/difficult to stabilize

- DMS (not all process steps are waterproof), combination of solutions and slow search performance lead to unsatisfaction of the user
- harmonization, details taken out of the scope of the project, occur afterwards (=> change requests !)

• Developments

- Work Clearance Management, but with EHP4 will be reduced
- DMS
- PM-Cockpit, overview on the relationship of maintenance data (notifications, orders, WCA, WCD, etc... & extra functionalities not covered by standard SAP.
- multiple language + regional language solution for WCM and printout of permits
- bundled printing of WCM related documents like Tags, permits and pm-order

SCOPE PURCHASING & INVENTORY MANAGEMENT

MM

Purchasing & Inventory:

- Purchasing: purchase requisitions (PReq), purchase orders (PO), contracts & RFQ/quotations
- Inventory management
- Logistic invoice verification
- Physical inventory

Workflow

For Preq, SES, Invoice approval

E-Catalogs

To order frequently used articles

Invoice scanning

With Dokustar software

Web tool

Web tool available for suppliers and integrated with SAP

- Upload Service Entry Sheet
- Pre-invoicing
- Status reporting

Reporting

- BI system for KPI reporting
- EveryAngle

EXPERIENCE PURCHASE & INVENTORY MANAGEMENT

- Attention points
 - Datamigration
 - Change process for the end-user (end user training and change management !!!)
 - integration with other modules
 - More involvement from Business people in the project
 - Trainings
 - Autorisations
- Dangerous points
 - offshore development, a lot of rework done by dev. team
 - Re-design after implementation of the processes
 - Business was not ready to implement the new processes
 - Integration with other tracks



PM & WCM



Don't turn it into a mousetrap!!

OUR DEFINITION OF WORK CLEARANCE MANAGEMENT

- **Is the PROCESS of**
 - Isolating equipment(s) ("*tagging process*") in order to **provide a safe work area** for the personnel to perform their work and tests without interfering in the production process
 - Define all necessary **safety measures** needed
 - Delivering a **Work Permit** which authorizes you to execute the work

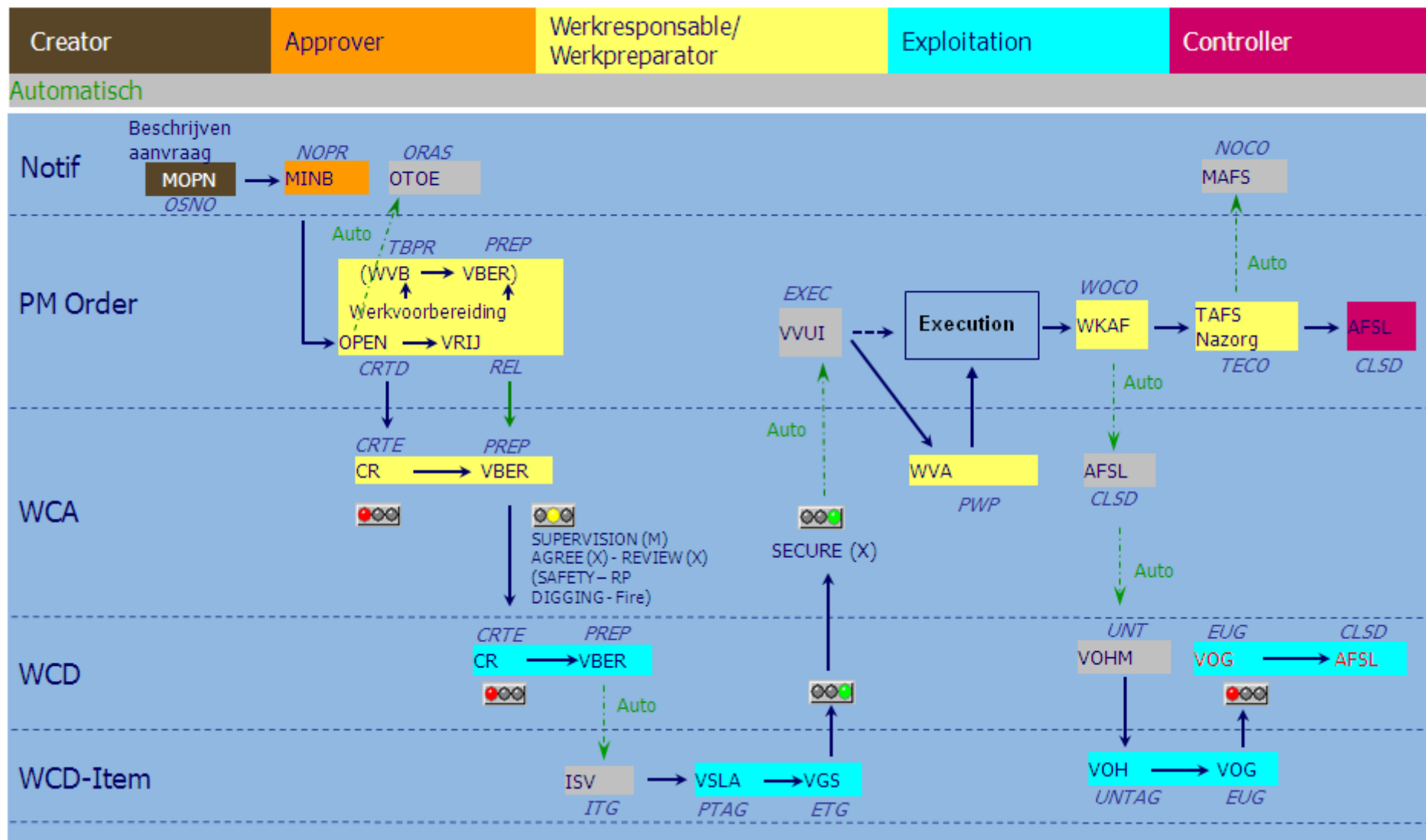
To avoid



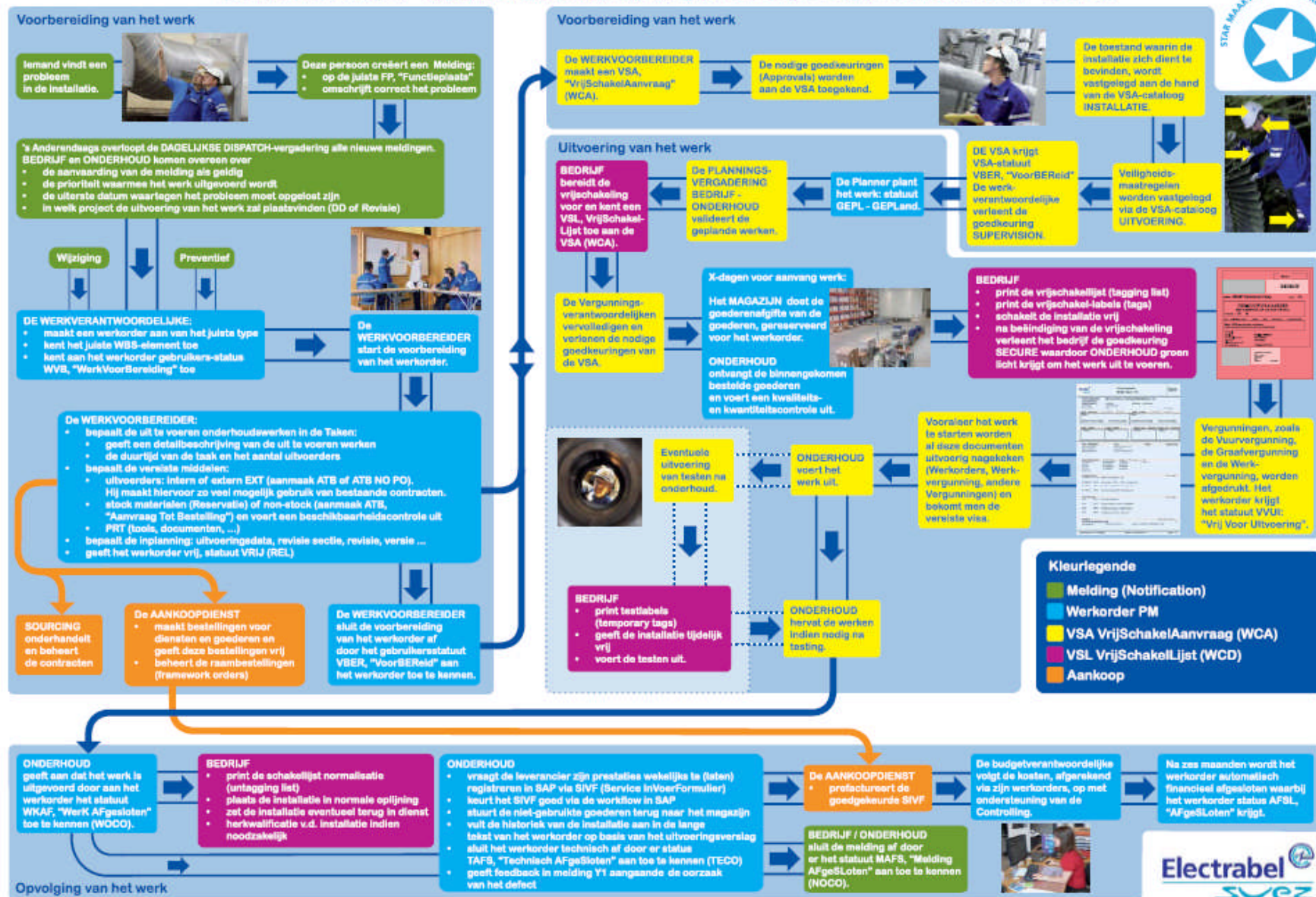
DO WE NEED WCM...



PM STATUS DIAGRAM



DE LEVENSLIJP VAN EEN WERKORDER IN DE ONDERHOUDSDIENST - DOEL



THE PM PROCESS AT ELECTRABEL

Electrabel

PM

Notification

PM Order

Work Clearance Management:

Module to manage the tagging procedure and workpermits

WCA : Work Clearance Application

Groups all the approvals and safety conditions required to approve the Workpêmit.

For here the Workpermit will be printed, the only valid document that approve you to start working in the field.



WCM

Post maintenance activity

dismantle/install equipment

Predictief / Preventief Onderhoud

Create PM order

prepare

relase PM order

Planning PM order

Prepare WCA

Approve WCA

WCD

Create WCD

Tagging

Testing

Untagging

WCD : Work Clearance Document

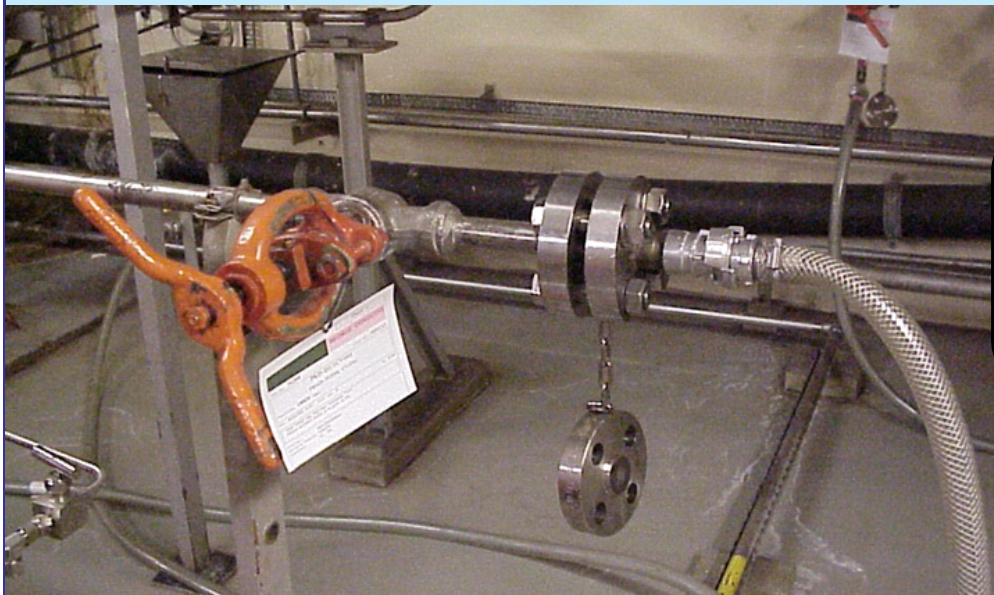
The WCD is the supporting document for the tagging procedure. It consist of 2 screens, header and the tagging -items (WCI).

The tagging-items represents the required positions of the functional locations .



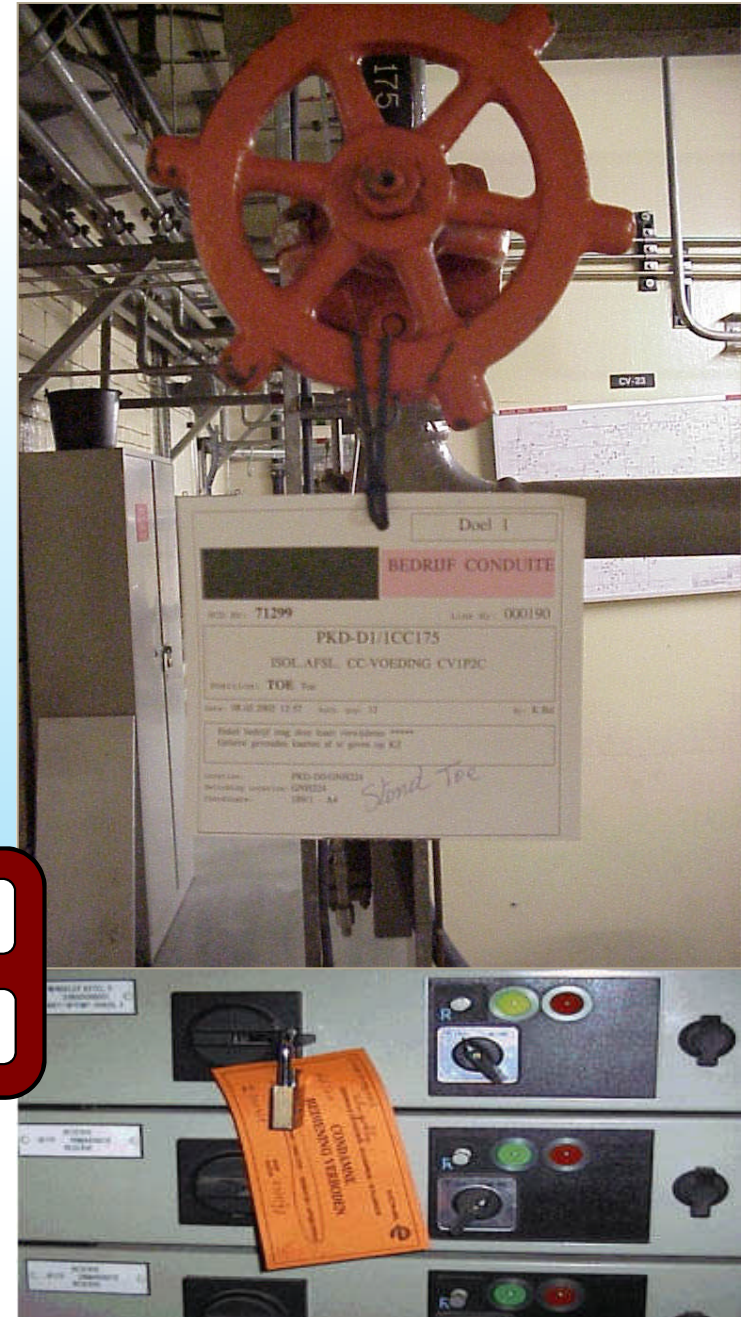
THE PROCESS: DETAILS

- Tagging:
 - Conflict check (simulation/real)
 - Different types of conflict:
Error/warning/no conflict
 - Special authorization for ignoring red conflict
 - Clearance: Green traffic light if all items tagged
 - Final approval 'Operations' on work permit



Preparation
Clearance

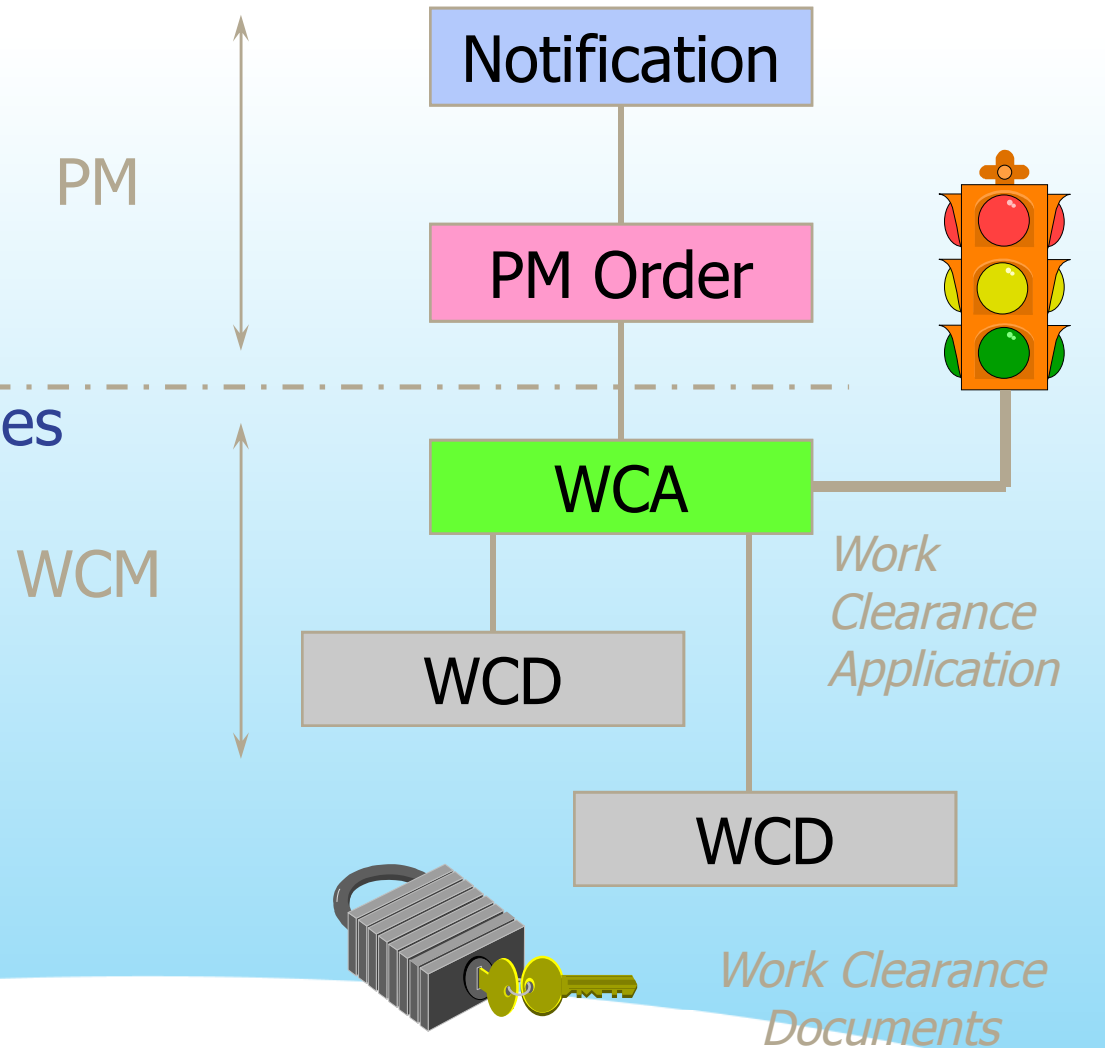
Procedure
Tagging



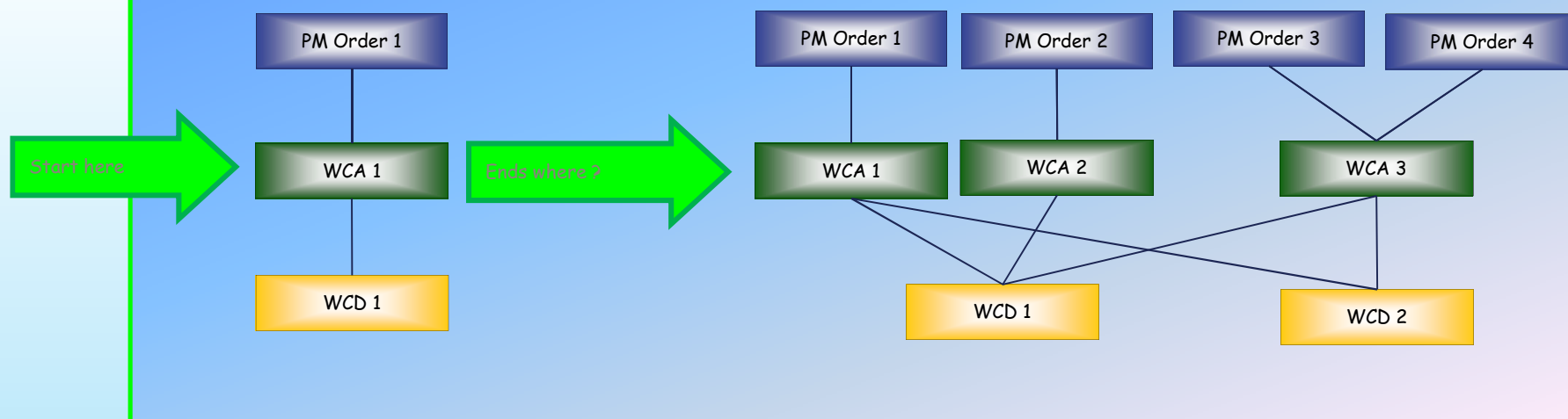
THE PROCESS: OVERVIEW

Important Work Clearance advantage:

- Status- and approval control
- Standard Work Clearances Library (copy functions)
- Conflict checks
- Tag/Untagging control
- Object linking
- Requalification/ testing



Reporting



- From easy to complex structures
- Large volumes, maximum grouping
- High level monitoring and reporting

Transaction WCLE

Lijst Bewerken Ga naar Systeem Help

Lijstbewerking op meerdere niveaus - Wijzigen

Orders VSAs (WCAs) VSLs (WCDs) Bewerken

BE00

529512 Afgezonderd voor isolatiewerken 08.09.2009-01.05.2011 PVI-11-HAA **WCD**
VBER INBW VGS VBER

1005807 Realisatie zwavelinjectie SPEC 03.01.2009-26.08.2010 PVI-10-PBE50 **INSTALLATIE UITVOERING**
VBER WVA WVA

3152609 Realisatie zwavelinjectie SPEC 28.03.2009-29.03.2009 PVI-10-PBE50
WCM VVUI VRIJ DTRU AFRV ARBV DAFO GBW* VBER GEPL

1015824 PO: BACK-UP INSTALLATIE STEG 16.01.2009-08.09.2010 PVI-10-CKZ **INSTALLATIE UITVOERING** **WCA**
VBER WVA WVA

3453810 PO: BACK-UP INSTALLATIE STEG 19.01.2009-31.01.2009 PVI-10-CKZ
WCM VVUI VRIJ AFRV GMCP PLKF VOCA VBER GEPL

1034845 Aardingsfout op heater gas dryer. 09.02.2009-02.10.2010 PVI-11-MKG55-AH001 **INSTALLATIE UITVOERING**

3413532 Aardingsfout op heater gas dryer. 03.08.2009-10.08.2009 PVI-11-MKG55-AH001 **PM Order**
WCM VVUI VRIJ AFDR AFRV ARBV GBW GBON* VBER GEPL

1058651 Bevestiging reeling koeltoren roest door 12.03.2009-02.11.2010 PVI-10-URA **INSTALLATIE UITVOERING**
VBER WVA WVA

3447722 Bevestiging reeling koeltoren roest door 20.08.2009-31.12.2009 PVI-10-URA
WCM VVUI VRIJ AFDR AFRV GMCP VOCA VBER GEPL

1131257 Nieuwe gasopwarming isoleren 24.07.2009-16.03.2011 PVI-11-HAA50-AA **INSTALLATIE UITVOERING**
VBER WVA WVA

5001342748 Nieuwe gasopwarming isoleren 08.08.2009-31.12.2009 PVI-11-HAA50-AA
WCM VVUI VRIJ AFRV GMCP VOCA VBER GEPL

- Good overview of the related objects
- Direct Access to the objects and there components
- upwards or downwards reporting

PM cockpit

Linked objects Refresh Requery Normal Notification 1.963 Order 3.753 WCA 3.244

Notifctr	P	Order	FuncLoc.	Description	SysStatus	User Status	PG	Mn.wk.ctr	P...	On	Created by	Revision	Required Start	Required End	Chngd on
110654	2	5001	PKD-D0/0BR52	10781 afkui	NOPR NO		MN	A1	D0	24.08.2009	FBL051		30.09.2009	30.11.2009	26.08.2009
110709	2	5001	PKD-D0/0DV-F	Sensor 751	NOPR OR		MN	I2	D0	16.09.2009	IBH305		17.09.2009	25.09.2009	17.09.2009
110536	2	5001	PKD-D0/0LW30	10304 Overt	NOPR NO		MN	A1	D0	09.07.2009	AHD104		24.07.2009	06.08.2009	25.08.2009
110669	2	5001	PKD-D0/0MWY1	oogdouche	NOPR NO		MN	VW3	D0	31.08.2009	EGI035		31.08.2009	21.09.2009	31.08.2009
110699	2	5100	PKD-D0/0MWVP	WF5675 vbr	NOPR OR		MN	TOB	D0	12.09.2009	FAA002		14.09.2009	30.09.2009	14.09.2009
110699	2	5100	PKD-D0/0MWVP	WF5676 vbr	NOPR OR		MN	TOB	D0	12.09.2009	FAA002		14.09.2009	25.09.2009	14.09.2009
110636	1	5001	PKD-D0/0VP50	stelling filter	NOPR OR		MN	TOK	D0	17.08.2009	EEA023		18.09.2009	21.10.2009	19.08.2009
110715	2	5001	PKD-D0/0B14D	Batterij op h	NOPR OR		MN	E2	D0	18.09.2009	HDJ349		18.09.2009	21.09.2009	21.09.2009
110715	0	5001	PKD-D0/0G14	Klaxon volgt	NOPR OR		MN	E2	D0	18.09.2009	HDJ349		18.09.2009	18.09.2009	18.09.2009
110710	1	5001	PKD-D0/0G14F	Gekwalifice	NOPR NO		MN	I4	D0	17.09.2009	BIB118		17.09.2009	18.09.2009	18.09.2009
110713	1	5001	PKD-D0/0D0R1	Opvullen var	NOPR OR		MN	TOIL	D0	18.09.2009	BIB118		18.09.2009	18.09.2009	18.09.2009
110711	1	5001	PKD-D0/0ESP30	Opmerking	NOPR OR		MN	HW	D0	17.09.2009	FHR391		17.10.2009	17.12.2009	18.09.2009

Type	Functional location	Description	Order	WCA	PlntWkCnt	P	Revision	Rev. Phase	UE	Sched. start	Sched. finish	Description of functional location	Int
YM01	PKD-FU/USB-SBU1	ADT defect	5001350966	1149547	BEKD	2	KDW-D	F		15.09.2009	29.09.2009	UITRUSTING STRALINGSBESCHERMING SITE	
YM01	PKD-FU/USB-SBU1	teletector defect	5001350978	1149578	BEKD	2	KDW-D	F		15.09.2009	29.09.2009	UITRUSTING STRALINGSBESCHERMING SITE	
YM01	PKD-FU/USB-SBU5	teletector defect	5001350982	1149582	BEKD	2	KDW-D	F		15.09.2009	29.09.2009	UITRUSTING STRALINGSBESCHERMING WAB	
YM01	PKD-D9/DTG-PP0206	11736 pomp steekt onvoldoende : vervange	5001351426	1150544	BEKD	2	KDW-D	WABDTGH5		15.09.2009	15.09.2009	VOEDINGSPOMP VAN H5 PUT NAAR BIOROTOR	Er
YM02	PKD-DTWAB0404	WF249 vervangen 1-3 branddet kring 25	5100027531	1153167	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	GANG	Wi
YM02	PKD-DTWAB0520	WF249 vervangen 1-2 branddet kring 26	5100027532	1153169	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	GANG	Wi
YM02	PKD-DTWAB0526	WF249 vervangen 1-3 branddet kring 28	5100027534	1153174	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	RELAISKASTEN	Wi
YM02	PKD-DTWAB0532	WF249 vervangen 1-4 branddet kring 32	5100027538	1153424	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	VENTILATIE VL EN KOELING CFV	Wi
YM02	PKD-DTWAB0555	WF249 vervangen 1-2 branddet kring 34	5100027540	1153434	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	VENTILATIE VL-VE0004/0005	
YM02	PKD-DTWAB0535	WF249 vervangen 1-2 branddet kring 35	5100027541	1153436	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	VENTILATIE OVG PULSIE	Wi
YM02	PKD-DTWAB0536	WF249 vervangen 1 branddet kring 36	5100027542	1153442	BEKD	2	KDW-D	WK99		15.09.2009	15.09.2009	VENTILATIE OVG AFZUIGING	Wi


Approva...	WCA	WCD	Order	Functional Location	Short Text	System status	User Status	SUPERVISION	AGREE	REVIEW	SECURE	RP	SAFETY
745678			3148193	PKD-D4/RW-VW0006	INBREUK AREI: IDENTIFICATIENUMMER.	PREP CLSD PWP	CLSD NWCD						
765072			3181726	PKD-D4/SIT-OMGEVING	SG R-2: uitmet. contain. bij verlaten Site	PREP PWP	PWP	✓					
899571			3413027	PKD-D4/IC-SYSTEEM	Visuele controle van IC-leidingen	PREP PWP	PWP NWCD	✓					
923428			3452055	PKD-D4/12OND-CM0002	12OND-CM002 storing	PREP CLSD	CLSD						
941874			3488193	PKD-D4/VAS-SYSTEEM	WD4881: Voorbereiden dossier VAS	PREP PWP	PWP						
1005648			5200000446	PKD-D3/MW-PP0004	Motor : Smeren lagers	PREP PWP	PWP	✓					
1016461			5300001510	PKD-D4/10EP06-007	WF14001: Bekijken voorbereidende werken.	PREP PWP	PWP NWCD						
1038800			5300009757	PKD-D4/EP-VW0290	NIET UITGEVOERD - test werking terugslag	PREP CLSD PWP	CLSD						
1039420			5300010323	PKD-D4/SF-OC0003	CONTOLE TRANSFERT SPG	CHNG	PREP	✗				✗	
1039675			5300010595	PKD-D4/CW-LY0551	plaatsen tussenstuk	PREP CLSD PWP	CLSD						
1039677			5300010593	PKD-D4/CW-LY0530	plaatsen tussenstuk	PREP CLSD PWP	CLSD						
1039745			5300010746	PKD-D4/RGB-GEROUM	Algemene kuiswerken	PREP PWP	PWP NWCD	✓				✓	

October 13th 2009

PM cockpit



Order	Type	Description	P	PlntWkCnt	Functional location	Revision	Sched.Fin.	SchedStart	Description of functional location
3360243	YM20	plaatsen FME herlading	2	BEKD	PKD-D4/RGB-GEBOUW	KD4-R-23	21.09.2009	21.09.2009	REACTORGEBOUW
5300804343	YM20	WF14001_b : wegnemen meting	2	BEKD	PKD-D4/OT1317-T	KD4-R-23	21.09.2009	21.09.2009	T METAAL KUSSENBLOK LAGER 3 VOOR
5300804348	YM20	WF14001_b : wegnemen meting	2	BEKD	PKD-D4/TS1212-T	KD4-R-23	21.09.2009	21.09.2009	TEMP. UITLAAT LAGEDRUKGEDEELTE 30
5001350965	YM01	automess defect	2	BEKD	PKD-FI/USB-SBU2	KDW-D	30.09.2009	16.09.2009	UITRUSTING STRALINGSBESCHERMING D1
automess defect									
23/09/09 Timmy De Groeve									
Zoemer onherstelbaar, toestel kan blijven dienen zonder geluidssignaal									
5001350966	YM01	ADT defect	2	BEKD	PKD-FI/USB-SBU1	KDW-D	29.09.2009	15.09.2009	UITRUSTING STRALINGSBESCHERMING SI
5300804360	YM20	A2: Open en dicht leggen dak	2	BEKD	PKD-D4/GCP0132	KD4-R-23	22.09.2009	22.09.2009	LOKAAL 132 VAN HET GCP-GEBOUW
A2: Open en dicht leggen dak									
Gelieve het dak open te leggen zodat wij de klep CW-VV0505 naar buiten									
kunnen manipuleren met een kraantje van Sarens.									
5200190973	YM10	Revisie van de motor : afkoppelen en na	1	BEKD	PKD-D4/VEN-VE0006	KD4-D	21.09.2009	21.09.2009	VENTILATOR PULSIE RELAISZAAL
Revisie van de motor : afkoppelen en na									
herstelling aankoppelen. Proefdraaien samen met Bedrijf									
5300804331	YM20	Assistentie voor opstellen testopstelling	2	BEKD	PKD-D4/FW-VV0139	KD4-R-23	19.09.2009	19.09.2009	SOLENOIDE STUURAFSL. FW-VV0110
5300804335	YM20	Assistentiewerk testopstelling	2	BEKD	PKD-D4/FW-VV0339	KD4-R-23	19.09.2009	19.09.2009	SOLENOIDE STUURAFSL. FW-VV0310
5300804313	YM20	I5 demontage/montage isolatie	2	BEKD	PKD-D4/FW-VV0212	KD4-R-23	21.09.2009	21.09.2009	ISOLATIEAFSL. VOEDINGSWATER "SEMPE
5001350869	YM01	Maken van hijshoog tussenflens	2	BEKD	PKD-D4/EW-PP0061	KD4-R-23	21.09.2009	21.09.2009	EKSTRAKTIEWATERPOMP H00FCONDENSOR
5300804453	YM20	WF14001_b : wegnemen meting	2	BEKD	PKD-D4/TS1570-P	KD4-R-23	21.09.2009	21.09.2009	STOOMDR. UITL.H0GEDR.GEDEELTE RECHT
5300804317	YM20	ww2,plts/vrwd ALU rolstelling	2	BEKD	PKD-D4/CW-EX0007	KD4-R-23	21.09.2009	21.09.2009	KOELTOREN
5300804332	YM20	Assistentiewerk testopstelling	2	BEKD	PKD-D4/FW-VV0140	KD4-R-23	19.09.2009	19.09.2009	SOLENOIDE STUURAFSL. FW-VV0112
5300804333	YM20	Assistentiewerk testopstelling	2	BEKD	PKD-D4/FW-VV0239	KD4-R-23	19.09.2009	19.09.2009	SOLENOIDE STUURAFSL. FW-VV0211
5300804334	YM20	Assistentiewerk testopstelling	2	BEKD	PKD-D4/FW-VV0240	KD4-R-23	19.09.2009	19.09.2009	SOLENOIDE STUURAFSL. FW-VV0212
5300804336	YM20	Assistentiewerk testopstelling	2	BEKD	PKD-D4/FW-VV0340	KD4-R-23	19.09.2009	19.09.2009	SOLENOIDE STUURAFSL. FW-VV0312
5100027384	YM02	wf315 Openen en sluiten van vertikale	2	BEKD	PKD-D4/BKR-660878A	KD4-R-23	21.09.2009	21.09.2009	DOORV. RANDLOK = D4/BKR0721
wf315 Openen en sluiten van vertikale									
brandvaste kabeldoorvoering. Tussen de lokalen BKR801 (Niveau +5) &									
BKR721 (Niveau +4)									

		WERKVERGUNNING BEKD / Doel 1 / P3		Nr VSA 1000311																										
FUNCTIEPLAATS: PKD-D1/CW1P1A DOMPELPOMP IN LOK CW1P3 (PAXPOMP D1)																														
SORTEERVELD: SORTEERVELD PKD-D1/CW1P1A HERK																														
STANDPLAATS: D1/WVG RUIJTE: CW1P1A/A																														
Beschrijving: Onderhoud pomp Revisiesectie: CW-D1 LT Zie bijl.1:																														
AANVANG WERK: 01.07.2008 08:00:00 EINDE WERK: 02.07.2008 10:00:00																														
Datum:		Datum:																												
Vergunningsverantwoordelijke		Werkverantwoordelijke		Vergunningsverantwoordelijke																										
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START TESTEN		EINDE TESTEN		BEGIN TIJD. NORMAL. EINDE TIJD. NORMAL.																										
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THE WORKPERMIT

REPORT GENERATED FROM DIFFERENT OBJECTS

Partners on WCA

Approvals given on WCA

Catalog information on WCA

Covered PM Order(s)

October 13th 2009

32

Correctief onderhoud 5000000015 wijzigen: kop centraal

Order YM01 5000000015 Lager defekt

SysStatus WCM VVUI VRIJ AFRV OART VOCA OPEN

Werk afgesloten

Geef corresponderend VSA-nummer

Geef VSA nummer :

Verder

Operationele VSL Bewerken Extra Ga naar Schakelen Systeem Help

Operationele vrijeschakellijst wijzigen: schakeltaak

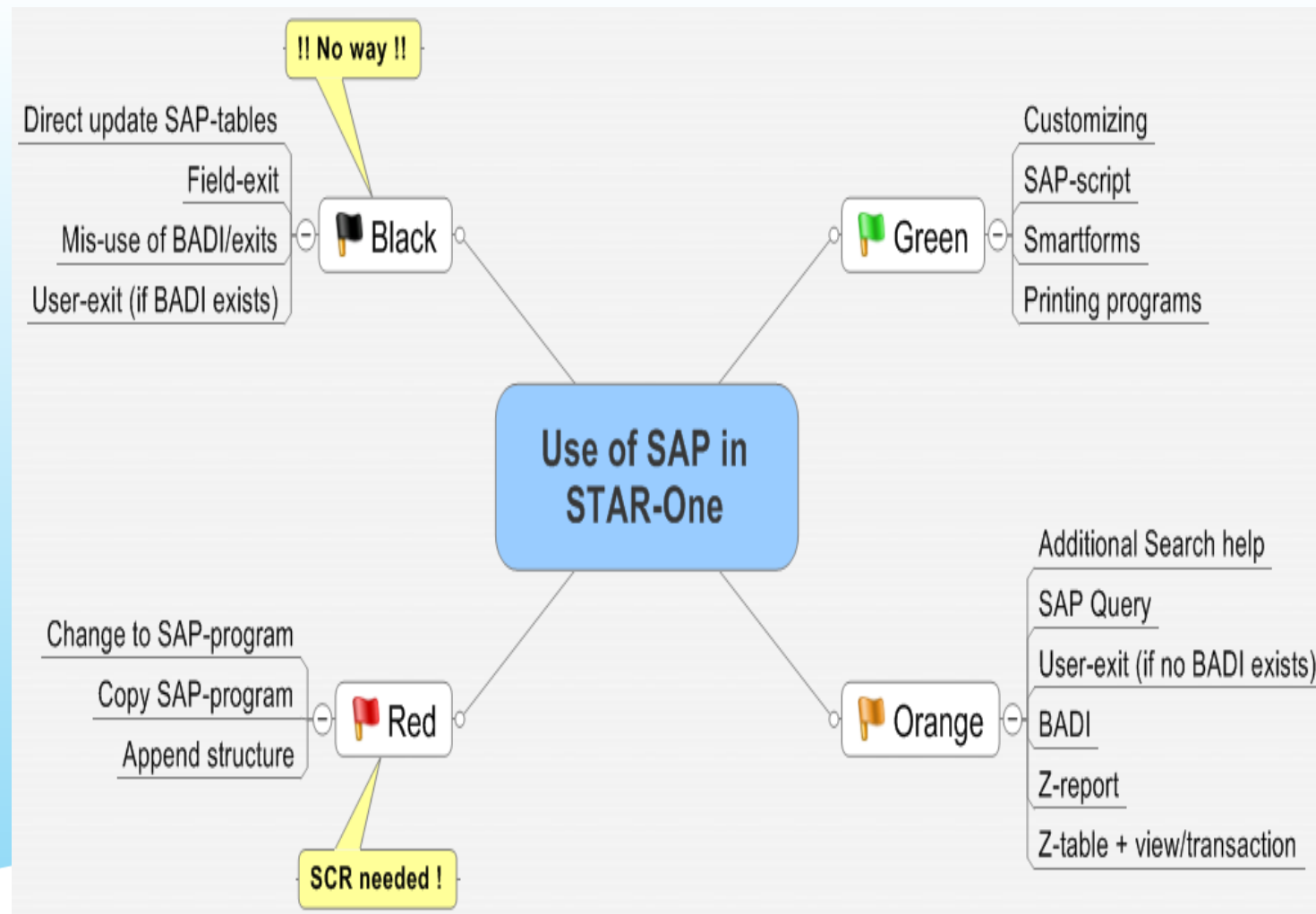
Vrijeschakeling opheffen Tijdelijk vrijeschakeling opheffen

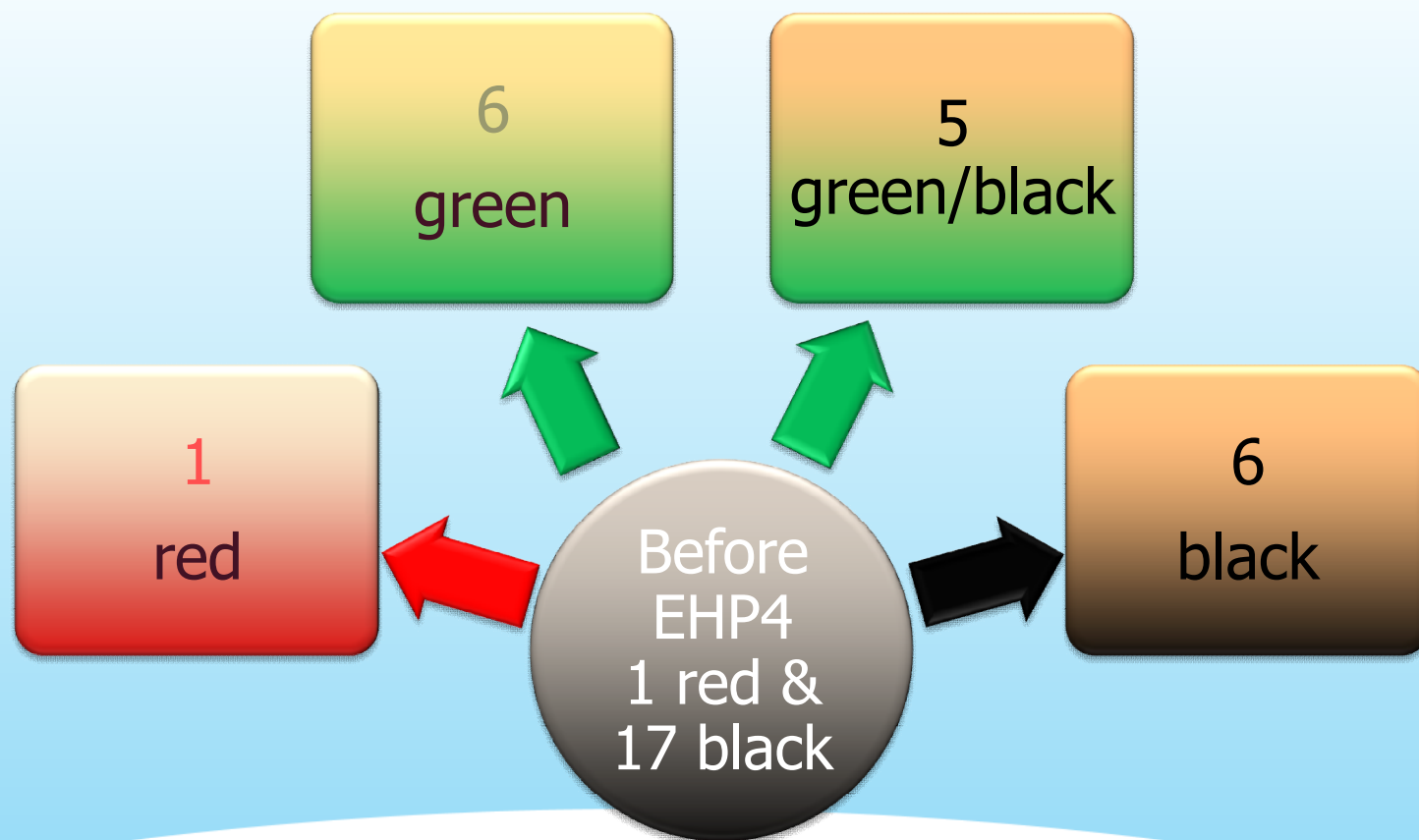
Vrijesch.lijst 100367 Training WCM

Status VBER INB W VOHM VGS VBER

PM Order WOCO (Work Completed)
→ WCA automatic CLSD (Closed)
→ WCD automatic UNT (Untaggable)

- Principles





Focus on WCM

- No use of external programs and/or complex interfaces
- Missing functionalities in the PM permits – a great additional value by using WCM
- Predefined fields/catalogs
 - Approvals/ blocking work clearance objects
 - Support to manage the tagging and untagging process:
 - Validation of the objects (and their master data)
 - Object links (linked FL's)
 - Conflict Management
 - Templates
- **Final Conclusion:** WCM is also useful for the less complex processes!

- WCM Dates handling
- Long text on PM <> as in WCM
- Language on PM <> as in WCM
- Conflict check different for FL/EQ and N lines (plant)
- Print Workpermit possible without saving
- WCM unknown in Project System
- WCA unknown in Preventive Maintenance



You've got the energy.

Electrabel
GDF SUEZ