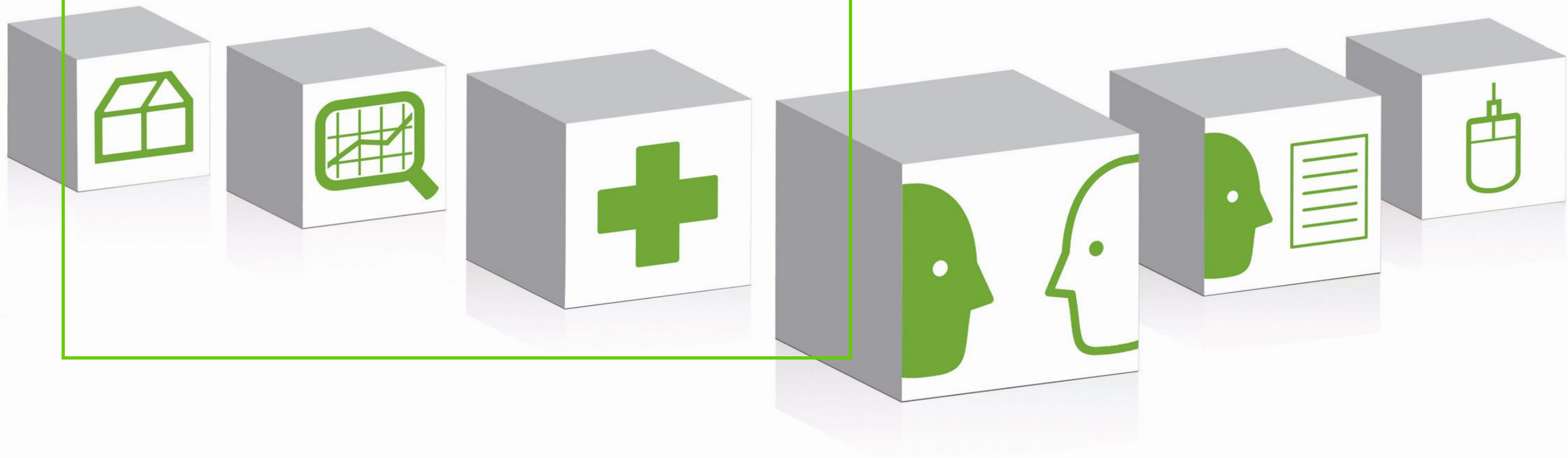


Mobilize Field Service with SAP Work Manager

Mihai Oros



Introduction



Mihai Oros

- ▶ Head of SAP Competence Center in OMV Petrom SA in Bucharest, part of the OMV Group
- ▶ >10 years in IT Management using SAP technologies



Contents



OMV at a glance

Where did we start?

What did we do?

Where are we now?

Implementation details

Key take away

Q&A



OMV at a glance

OMV at a glance

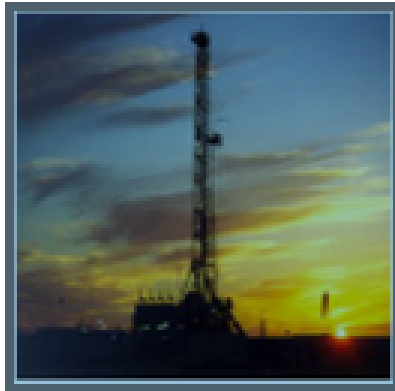


- ▶ OMV is the largest stock listed industrial company in Austria and an integrated, international oil and gas company
- ▶ Supplies more than 200 mn people with energy
- ▶ 3 business segments: Exploration & Production (E&P), Gas & Power (G&P), Refining & Marketing (R&M)

▶ Key figures:



OMV Business Segments



Exploration & Production:

- ▶ Oil and gas production of 303,000 boe/d in 2012
- ▶ Proven oil and gas reserves of 1.12 bn boe as at the end of 2012
- ▶ Operational activities in two core countries, Romania and Austria, as well as in a balanced international portfolio



Gas & Power:

- ▶ 2,000 km natural gas pipeline network in Austria
- ▶ Gas storage facilities with a capacity of 2.6 bcm
- ▶ Gas-fired power plant projects in Romania and Turkey
- ▶ Gas pipeline network with a marketed capacity of around 103 bcm/a



Refining & Marketing (incl. petrochemicals):

- ▶ Total refining capacity of 22 mn t per annum
- ▶ Network of approximately 4,400 filling stations in 2012
- ▶ Market share of around 20% in the Danube Region

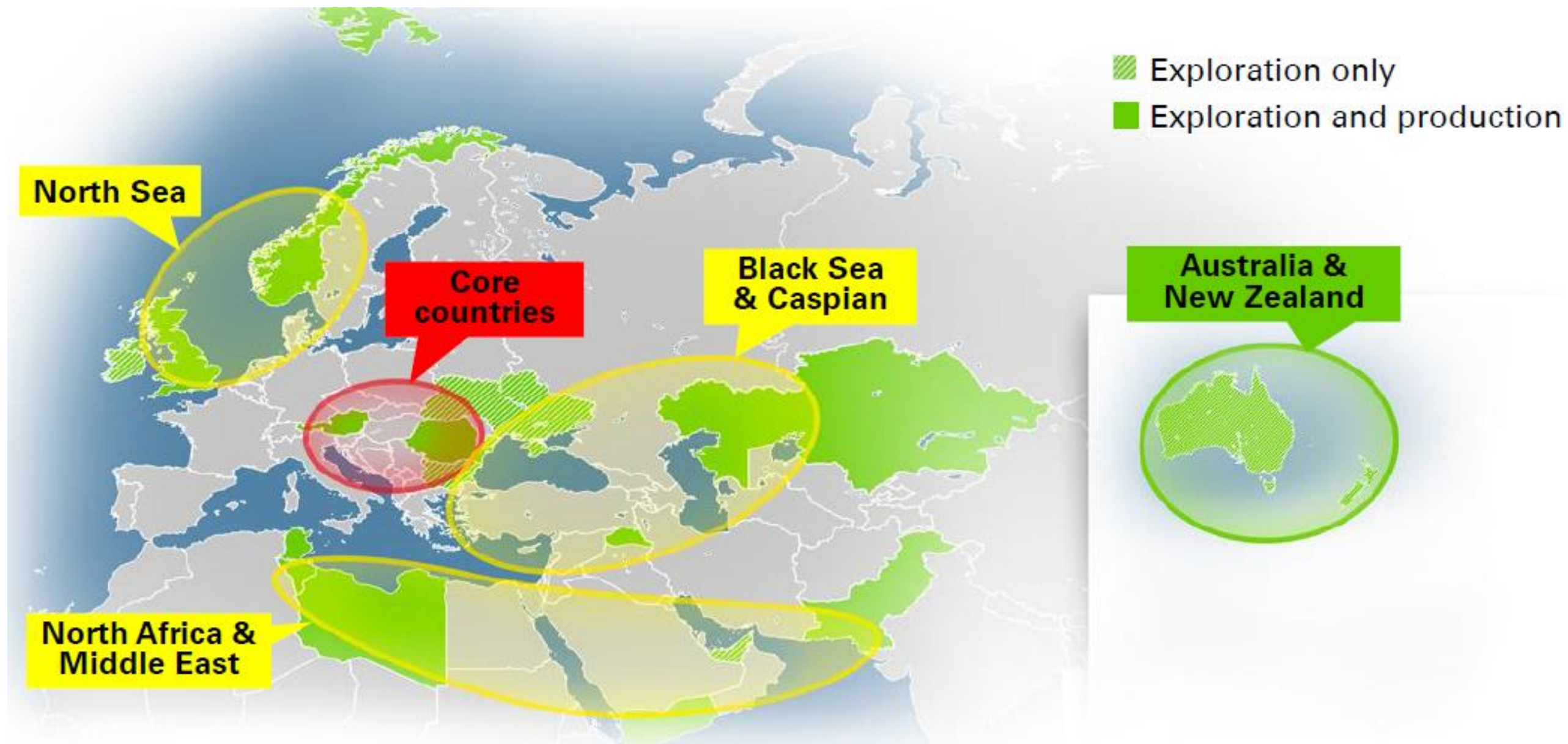


PETROM

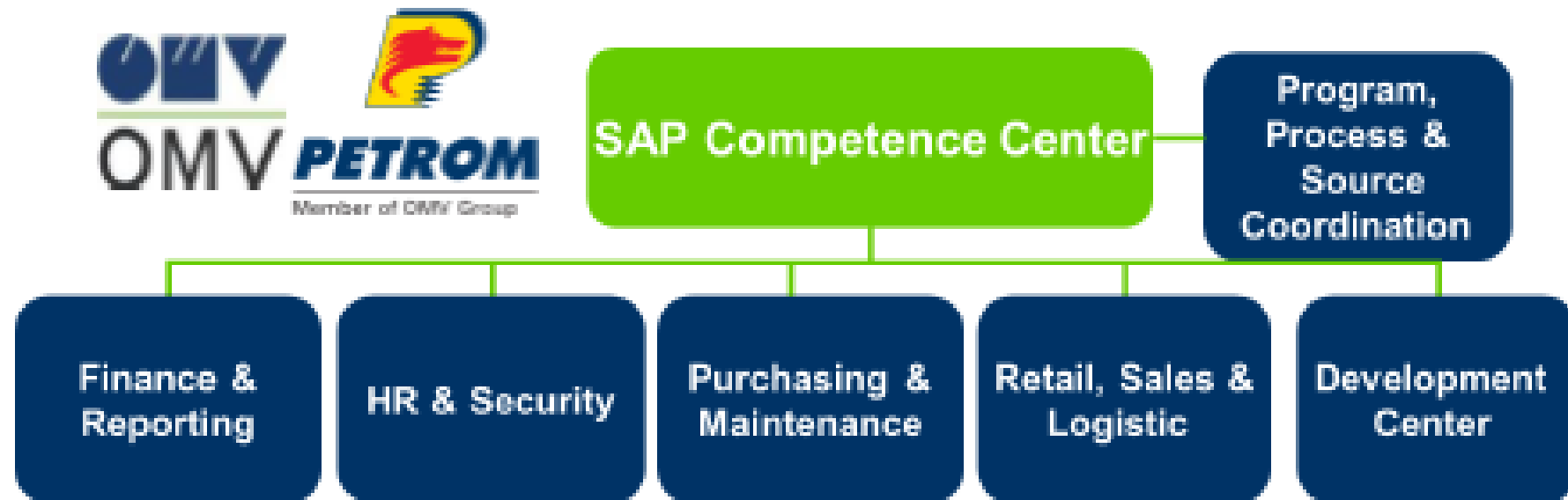
Member of OMV Group



E&P: explores, discovers and produces oil and gas worldwide



SAP Competence Center highest priority is to safeguard the stable operation of SAP IT solutions



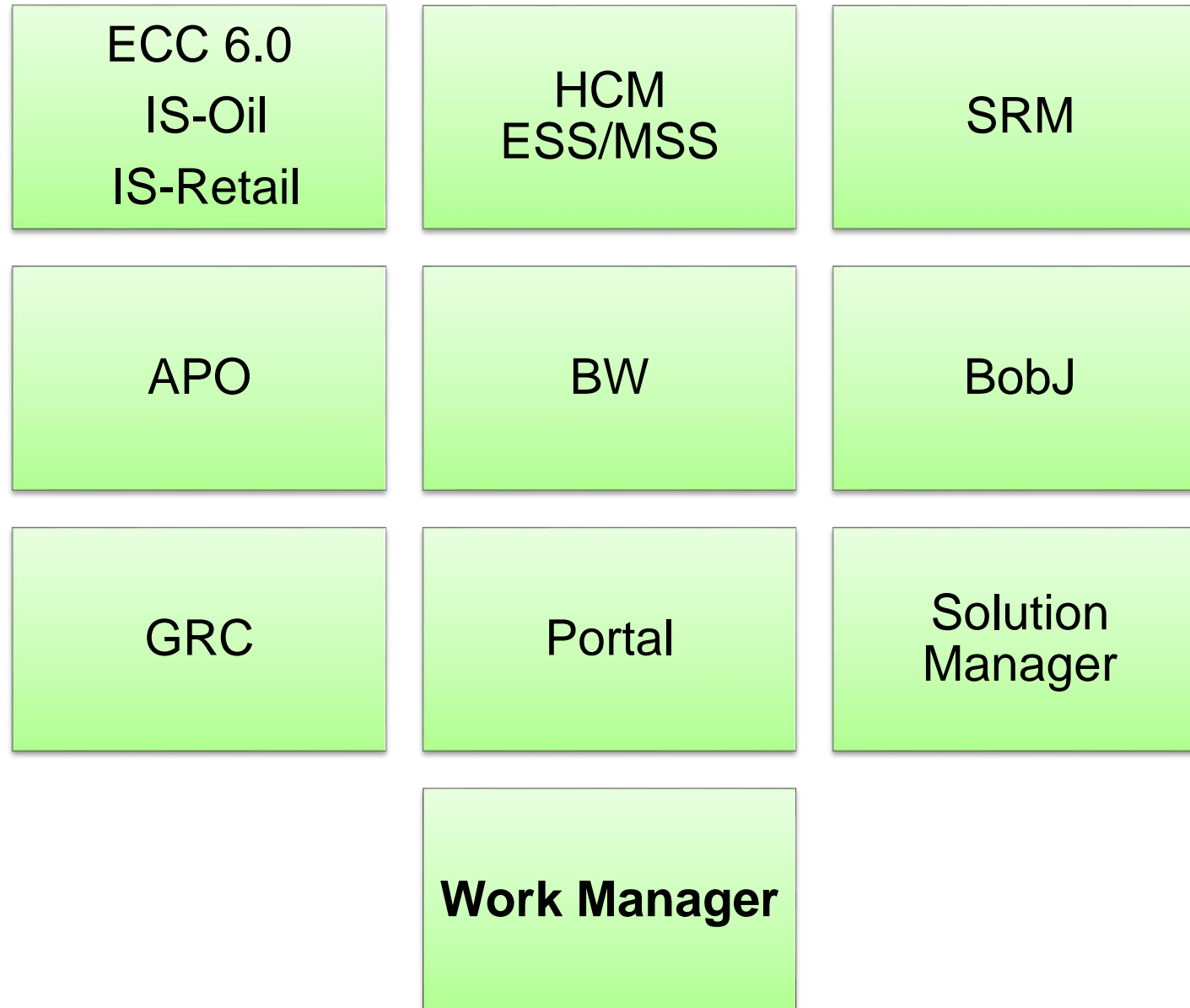
Part of Global Solutions IT -the internal Shared Service Center for OMV Group

- ▶ Approx. 110 employees in Vienna and Bucharest
- ▶ Main tasks:
 - ▶ Optimize the efficiency of SAP operations
 - ▶ Support the implementation of new business requirements

Supporting more than 9.000 sap users in more than 14 countries

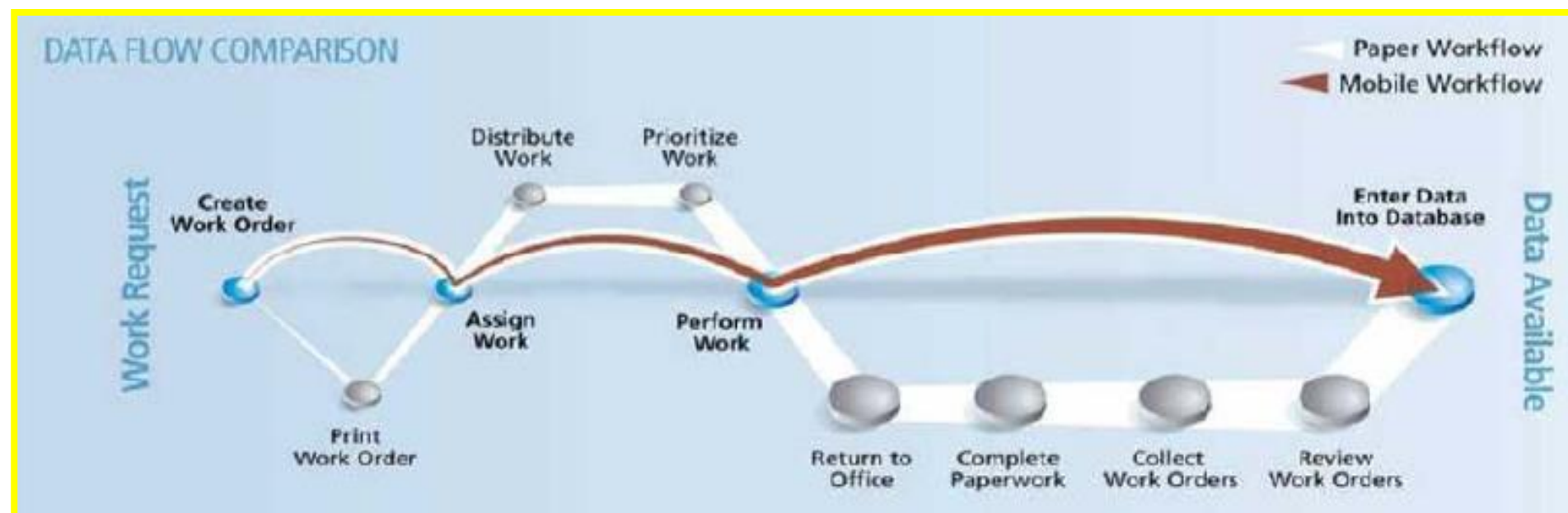


► SAP Products in use:





Where did we start?



Situation before the project



OMV Petrom Exploration & Production Maintenance business unit in Romania is using **standard SAP Plant Maintenance** to manage approx. **200.000 work orders** per year.

Maintainable facilities

- ▶ Flow lines & pipelines: >25,000 km
- ▶ Productive oil wells: >7000
- ▶ Productive gas wells: >600
- ▶ Water injection wells: >700
- ▶ Gathering stations: >600
- ▶ Gas processing units: >30
- ▶ Tank farms: >50
- ▶ Compressor stations: >100



Process Pain points...



- ▶ Planners prepare & provide working package to technicians via **paper**
- ▶ Technicians **execute works** and **write** details of executed work **on paper** work package (fault codes / catalogue, summary of executed work; split of activity timings; corrective notification if needed)
- ▶ Paper is reviewed by Quality Inspector
- ▶ Technicians **return** work package to planners **within 2 to 3 days** after work completion
- ▶ Work package provided is most of the time **incomplete**, resulting in **false data analysis** resulting in **ineffective actions** taken to improve maintenance activities



What did we do?

Simplifying Work Order Process



Why?

- **Avoid printing papers**, physical hand-over of documentation, phone communications, **a lot of travel time** for the different actors involved, that in the current process lead to **delays and alignment disruptions**

What?

- Implementation of a **State of the Art Mobile application** for SAP PM and Field Service that will easily allow the field workers and quality inspectors to access SAP data (Work Orders, Notifications, Contracts, Master Data...) and remotely record Services, Activities and Materials Consumption

How?

- Assure the on-line and also **off-line access** to the relevant SAP PM data for the field workers for:
 - **Instant data entry**
 - **Location-independent**
 - **Improved data quality through prevention of transfer errors**



PETROM

Member of OMV Group





Where are we now?

Assignment of work order

Access of work order information

Technical documentation and work time confirmation

Technical acceptance



- ▶ Work orders are assigned to Quality Inspectors by responsible planner and the orders are put in daily schedule



EPS Maintenance, Program zilnic pentru

19 - Feb - 2013

Data emiterii:	18-Feb-13
Asset:	Asset 3 Muntenia Ve
Activitate:	Mecanica
Numar total de ore om disponibile azi:	61
Document:	EPS MNT-RO-RPL-A1-11-07-01

Sector productie	Nr. comanda de lucru / Retea	Locatie functionala	Echipament	Prioritate	p comanda
SITE Poiana Lacului					
SECTOR 10 POIANA	50070107374	3A13-010-TFPL-55		2	EC01 Inlocuire haba BA4 cu
SECTOR 10 POIANA	50070108780	3A13-010-10CO-10-WPH-3327	RE059232	3	EP01 MMT-Inlocuipon 2"
SECTOR 10 POIANA	50070084863	3A13-010-2HIN-10-2738		4	EP01 MENTENANTA MECA
FC VALCELE	50070114890	3A13		4	EP01 PDV-FC13 FEB. 2013
SECTOR 10 POIANA	50070094297	3A13-010-3HIN-10-2792		4	EP01 MENTENANTA MECA
SECTOR 10 POIANA	50070094298	3A13-010-3HIN-10-2714		4	EP01 MENTENANTA MECA
SECTOR 10 POIANA	50070094357	3A13-010-2HIN-10-2819		4	EP01 MENTENANTA MECA
SECTOR 10 POIANA	50070114346	3A13-010-9SAM-30		3	EC01 Dezafectare claviatura
SECTOR 10 POIANA	50070084204	3A13-010-15VT-21-TK-002	RE084212	4	EP01 INSPECTIE REZERV
SECTOR 10 POIANA	50070096422	3A13-010-6MOS-10-2959		4	EP01 MENTENANTA MECA
SECTOR 10 POIANA	50070096455	3A13-010-6MOS-10-296B		4	EP01 MENTENANTA MECA
SECTOR 10 POIANA	50070096482	3A13-010-6MOS-10-2932		4	EP01 MENTENANTA MECA
SITE Icoana					
FC VALCELE	50070114890	3A13		4	EP01 PDV-FC13 FEB. 2013
SECTOR 7 CIURESTI	50070127137	3A13-007-21BA-20-PSV-101-A	RE320497	4	EP01 ISCIR Revision equipr
SECTOR 7 CIURESTI	50070127180	3A13-007-21BA-20-PSV-102-C	RE320498	4	EP01 ISCIR Revision equipr
SECTOR 7 CIURESTI	50070128627	3A13-007-4STR-29		3	EC01 Conf leg tip "T"linie in
SECTOR 7 CIURESTI	50070129008	3A13-007-20BR-10-WPH-786	RE091632	3	EC01 demon ventile de pe i
SECTOR 7 CIURESTI	50070127158	3A13-007-21BA-20-PSV-101	RE320475	4	EP01 ISCIR Revision equipr
SECTOR 7 CIURESTI	50070026702	3A13-007-20BR-20-PIPE-001		3	EC01 Inlocuiegere 4"sparts
SECTOR 7 CIURESTI	50070096491	3A13-007-21BA-10-1146		4	EP01 MENTENANTA MECA
SITE atelier mecanic Poiana Lacului					
SECTOR 7 CIURESTI	50070122733	3A13-007-6STR-10-WPU-2887	RE121515	3	EC01 REPARATIE LAGAR CE
Mecanic / Electric / Instrumentatie / SP_CW / Analiza program Mecanic / Analiz					

Display Routine Maintenance Order (E&P) 50070133141: Central Header

Order: EP01 50070133141 MMT_Rem spart linie inj sd 1029 Ciur Sud

Sys.Status: TECO PCNF ESTC GMPS MACM MOBI PRC SE... RBL1 A01 MLP NTSP TPR

HeaderData Operations Components Costs Partner Objects Additional Data Location Planning Control

Person responsible

PlannerGrp: ESM / RE23 EPS Maintenance

Mn.wk.ctr: PET-MECH / RE23 PETROM Mechanical

User respons.: X01023179 Petru Constantinescu

Notifctn: 40007501264

Costs: 825,86 RON

PMActType: DTM DETECTED MAIN

SystCond.

Address

Dates

Bsc start: 19.02.2013

Priority: Medium -next 10 days

Basic fin.

Revision: NSC NON CRITIC pentru siguranta

Reference object

Func. Loc.: 3A13-007-7BAD-29-... FLOWLINE WATER ,WELL 1029

Equipment

First operation

Operation: MMT_Rem spart linie inj sd 1029 Ciur Sud

Cckey: Calculate duration

Assignment of work order

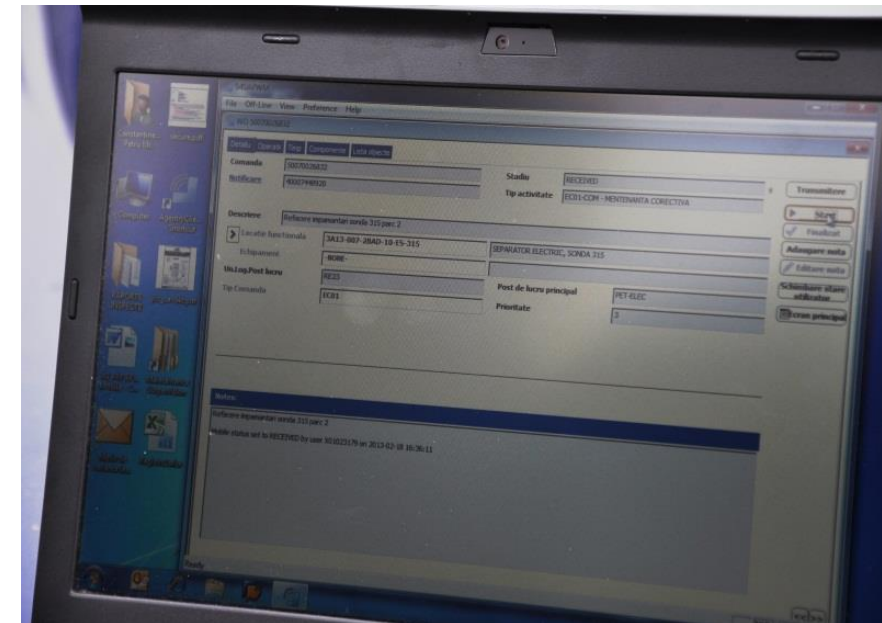
Access of work order information

Technical documentation and work time confirmation

Technical acceptance



- On the work place the Quality Inspector starts the work order using his laptop without connectivity



Assignment of work order

Access of work order information

Technical documentation and work time confirmation

Technical acceptance



- ▶ After the work is released, Quality Inspector creates **time confirmation**, completes the **notification** and **documents** executed activities.



PETROM

Member of OMV Group



Assignment of work order

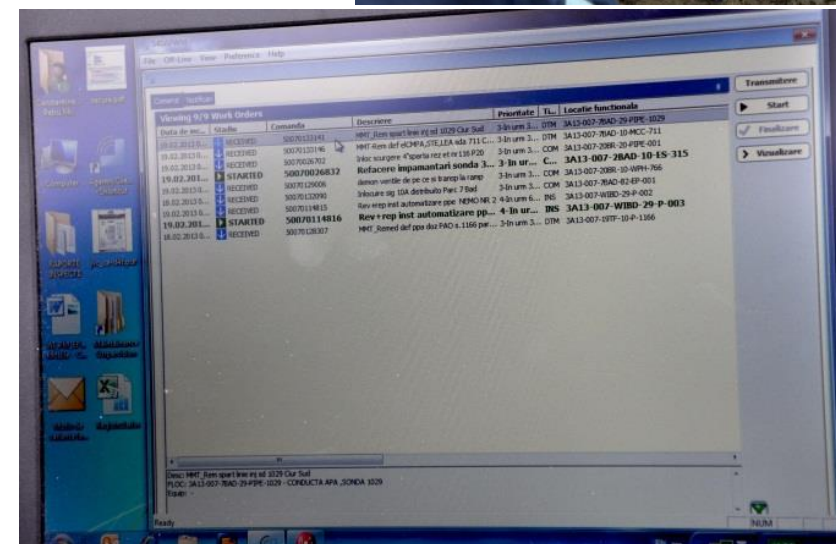
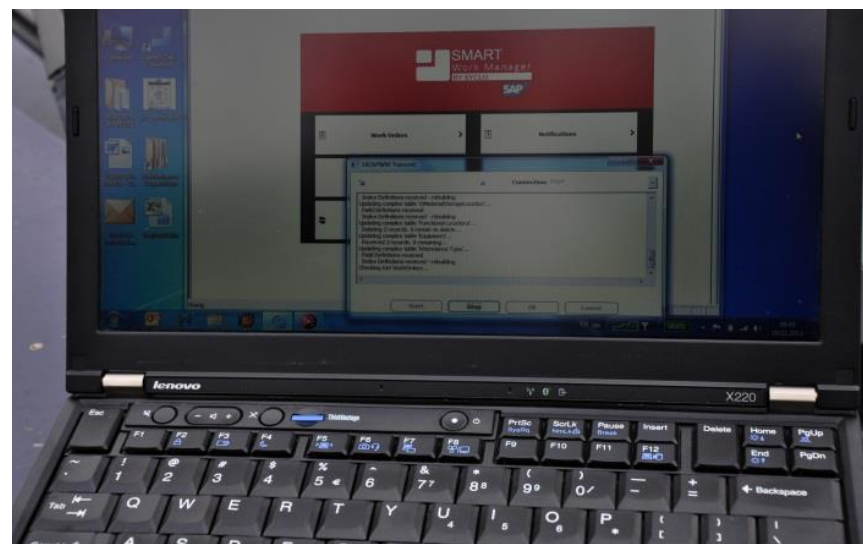
Access of work order information

Technical documentation and work time confirmation

Technical acceptance



- ▶ All the information regarding the job is transferred to SAP PM in real time (when connectivity is available) so the work order could be verified by planner and closed in time



PETROM
Member of OMV Group



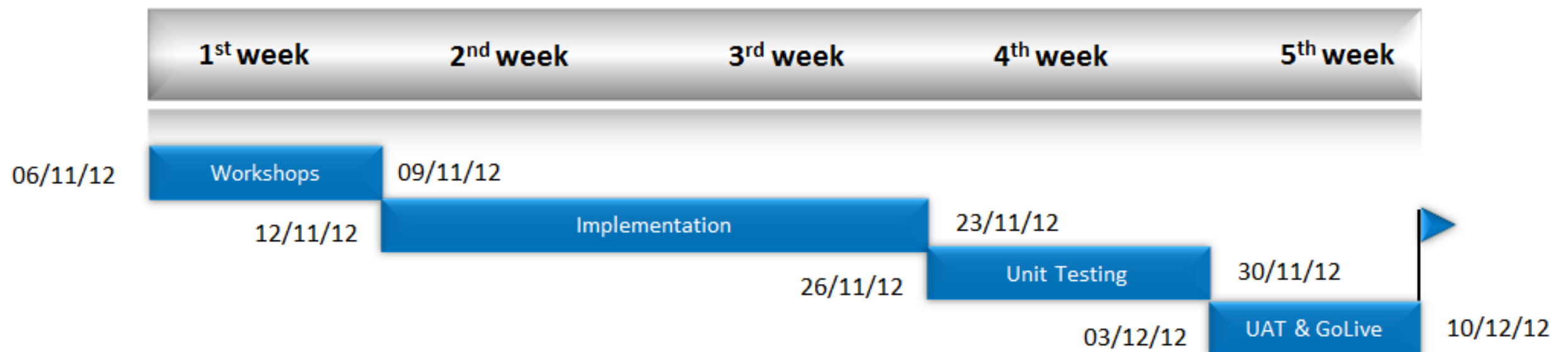


Implementation details

Project Timelines



SAP Work Manager solution was successfully implemented with minor enhancements in a very short span of **5 weeks** from the workshops to the go live.





Key take away

Key take away



- 1 Stick to the standard**
 - Allows quick project duration
 - Immediate benefits available
 - Atos standard solution available
- 2 Keep it simple**
 - Ease the usage for technicians
 - Decrease implementation effort
 - Lower effort for operations
- 3 Step by step**
 - Continuous improvement – phased approach
 - Learning by doing (real field experience)