



IPCOS

History

Experiences

Current status



- Started on April 13th 1995 as ISMC
- Spinoff ESAT-SISTA
- Shareholders:
 - KU Leuven LRD
 - Bart De Moor
 - Peter Van Overschee
 - Christiaan Moons
 - Paul Vanvuchelen
- Office: first in the basement then above the ESAT library
- Capital: 30 000 Euro
- Offering: Solve all kinds of control problems (services)





- Accept all requests from industry:
 - Drilling for sewers
 - Automotive gear boxes
 - Medical and high speed printers
 - Off highway vehicles
 -
- Conclusion after some projects: Very limited budgets for automation projects in these industries
- Solution: Move to Chemicals, Petrochemicals, Refining,....
- Start development of RaPID (for IPCOS' engineers, sell)



Strategy: We can solve ALL control problems

- First slogan: “Reality is just another model”
- Our solutions can be used in all markets: chemicals, mechatronics, HVAC, drilling, *satellites*,...
- Process know-how is key. Talk the language of the customer. Know the business case of the offered solutions,
- Focus on a few markets where you build up your know-how. For IPCOS: Refining, Petrochemicals, Fertilizers (*example BASF*),...



- Start partnership with IPCOS Technology (ex AspenTech staff)
- Start projects with Shell on Well testing
- Focus on (Petro)Chemicals and Glass (via IPCOS Tech)
- Start development of own INCA MPC technology
- Participation in several R&D projects on polymers
- Merge with IPCOS Technology in 2002
- Commercial brand name becomes IPCOS
- Business with Shell grows very fast (exclusive agreement)



Strategy: We will change the world

- Not everybody is ready for your bright ideas.
 - E.g. INCA4Batch, PathFinder, DyMont....
- Market research is key, but difficult. There is a big difference between
 - “I am interested”,
 - “I want to pay for it when you have the solution ready”
 - And finally “I order it. Here is the money”.



- Still large focus on R&D projects on e.g. polymers
- Promote new technologies in new markets (DyMont)
- Shell business booms. IPCOS is involved in R&D, prototyping, software development, installation, maintenance,... of Shell products for oil production
- Search for growth: KBC PE becomes a share holder



- Acquisition of AptiTude:
 - Offices in UK and India
 - New MIMO PID Tuner technology: AptiTune
 - Get a position in the refinery and ethylene market
- Start ME office (piggyback on large APC project in UAE)
- IPCOS' Glass offering is offered via TNO

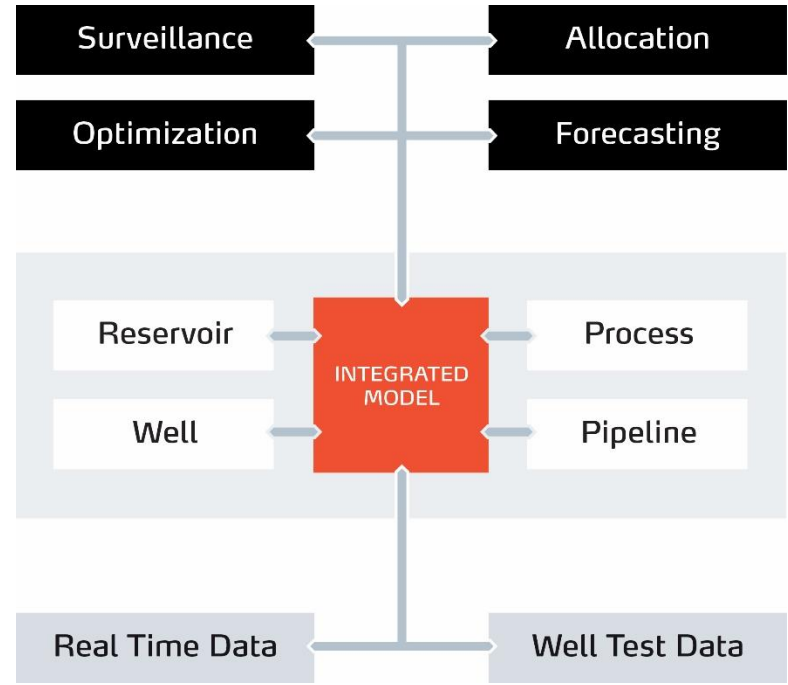


- General:
 - Management buy out in 2013
- DOF
 - Start supplying services to non-Shell customers (Total, BP, Lukoil, BG,...)
 - Develop technology independent service portfolio for the Oil industry.
 - Partner with technology vendors like Petex, OVS,..
- APC -> POE (Plant Operations Excellence)
 - Focus on strategic markets (gas proc., refining, petrochem)
 - Start cooperation with AspenTech
 - Grow ME business
 - Diversification with Alarm Mgmt and modelling



IPCOS HISTORY

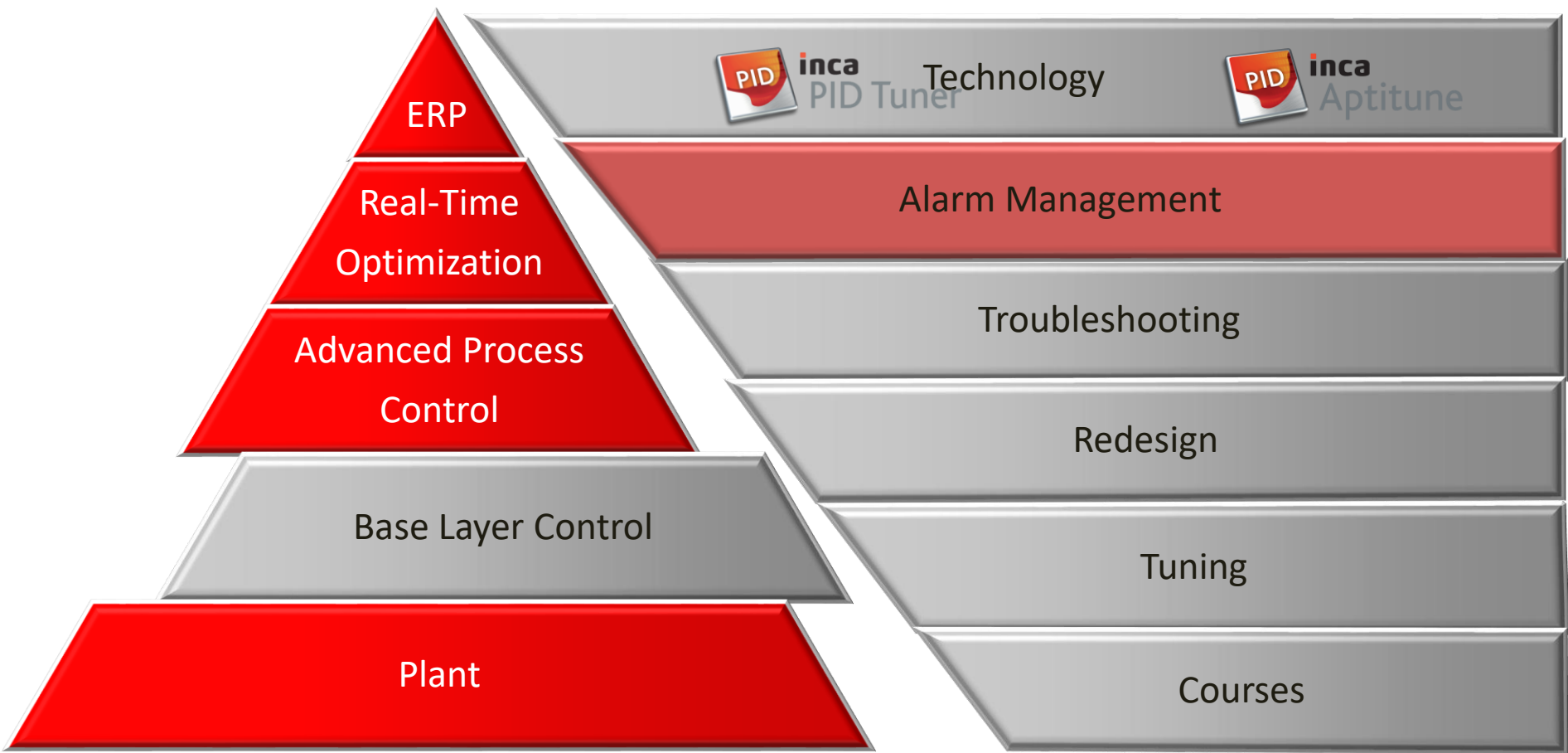
2010-Today: Digital Oilfields





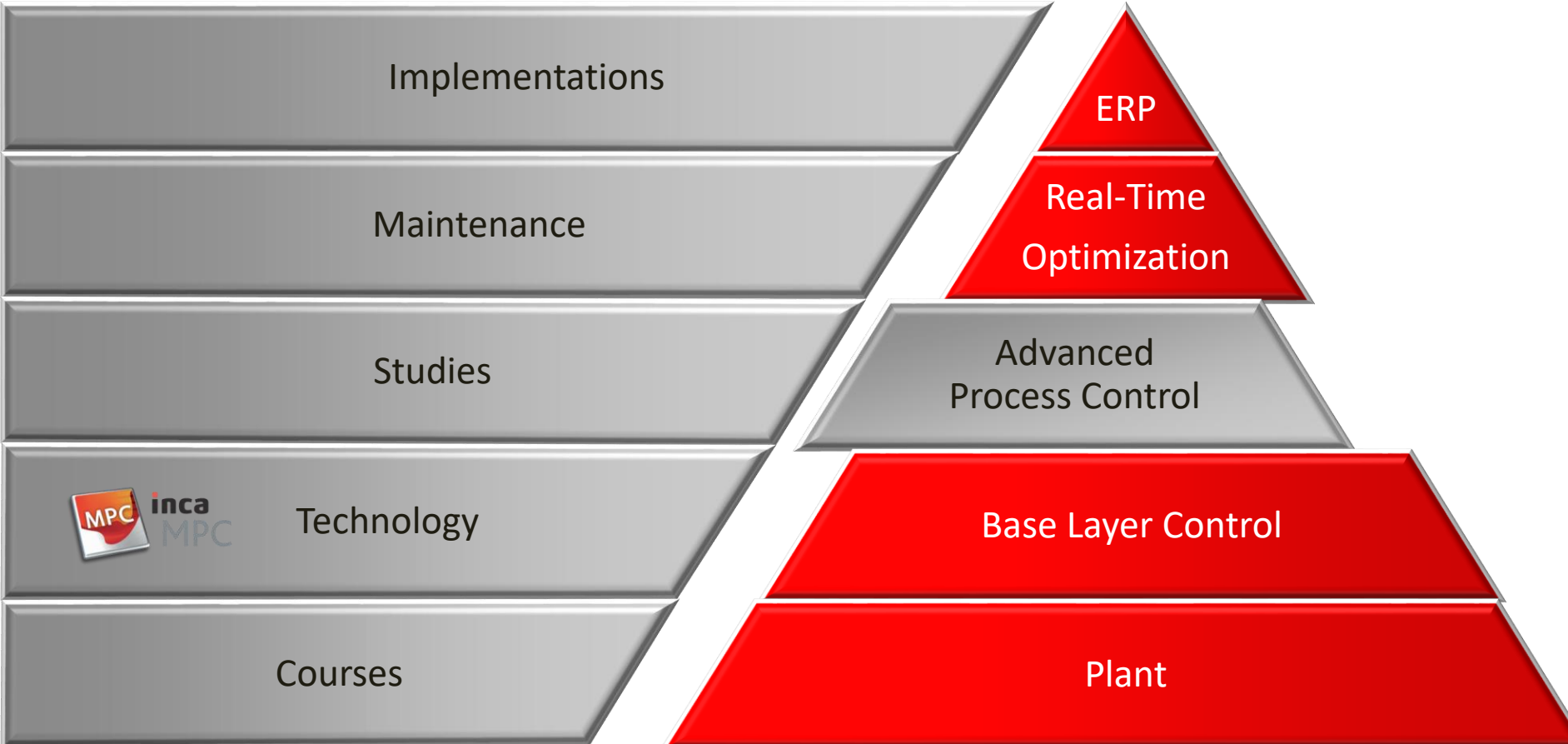
IPCOS HISTORY

2010-Today: APC





IPCOS Offering 2010-Today: APC





Sales: Our solutions sell themselves

If we explain how sophisticated the solution is, it will sell itself...

- The site director of a refinery does not know what MPC is.
- “If all you have is a hammer, everything looks like a nail”
 - Chemical eng: new catalyst, other recipes
 - Mechanical eng: larger heat exchanger
 - Financial: reduce costs
 - Control eng: tune PID’s, APC,....
- Even guaranteed benefits might not be convincing enough
- Difference between:
 - Market pull: refining, petrochem
 - Market push: batch, specialties, fertilizers (initially)





Sales: The benefits are obvious

Do the exercise

- Ethylene
 - Proven production increases of 3 to 10%:
 - E.g. 5% increase in Ethylene production on a 1 MT/Y plant generates a margin: $650 \text{ US\$/Ton} \times 50000 \text{ Ton/year} = 32.5 \text{ M US\$}$
 - Fertilizer:
 - E.g. 1% increase in ammonia production on a 3000 T/d plant generates a margin: $200 \text{ US\$/Ton} \times 30 \text{ Ton/day} \times 365 \text{ days/year} = 2.19 \text{ M US\$}$
 - Gas to Liquid Plant:
 - Measured after APC implementation: 73 M US\$/year
- No brainer if these numbers are guaranteed... but no thanks

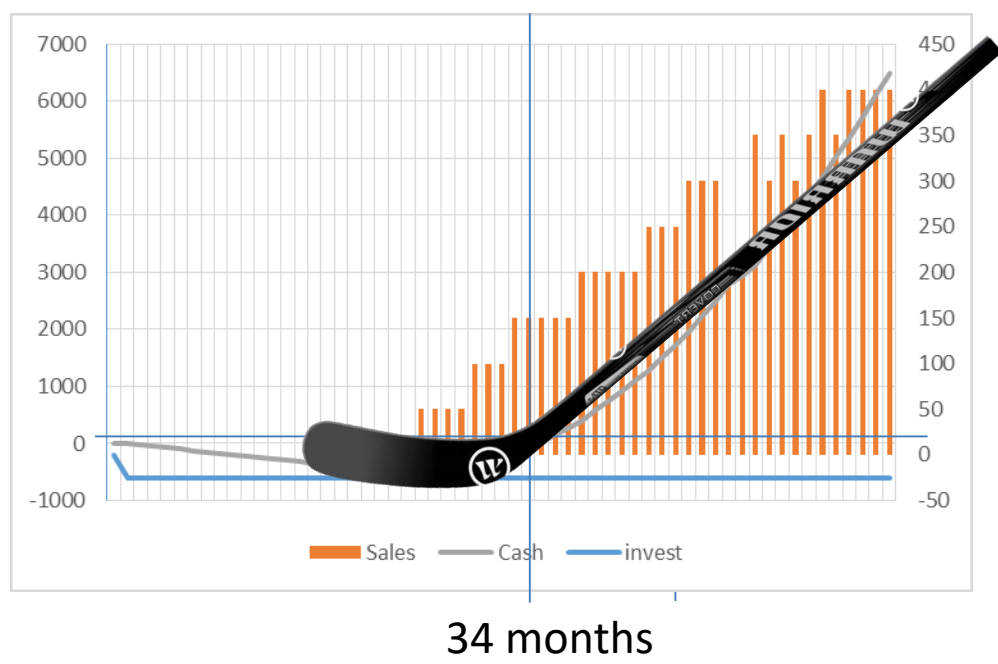
Sales: Arguments against APC often used

- I will apply APC in the future. First I will:
 - Do a revamp in 2 years
 - Buy a new DCS
 - See that my instrumentation/equipment is perfect
 -
- Operators get lazy with APC, or at least they lose the skills to operate the plant
- My plant is already running in an optimal way. I don't need that.
- My operators are not smart enough to understand what is going on in that black box
- I don't believe that these benefits are reachable
- Has this been done at a plant that is exactly the same as mine?
- Is it safe? A PC that controls my plant....



Business Plan: the hockey stick will rescue you

- Product development cost: 25 K/month
- Sales starts after 2 years (what if only after 3 years??)
- 1 license = 50K





- If Turnover = f (#people): what if you can't find them?
- Hire people based on one 'big' project
- Career opportunities within a SME (flat structure)
- Key people will leave
- Not everybody wants to travel ... (Pakistan, Iran, Nigeria)
- Solutions:
 - Hire HR person
 - Open office in Pune (India): APC engineers are there!
 - Open office in Houston: Exxon demand
 - Open office in Abu Dhabi: Local staff enforced by ME countries/customers

Belgium (HQ)



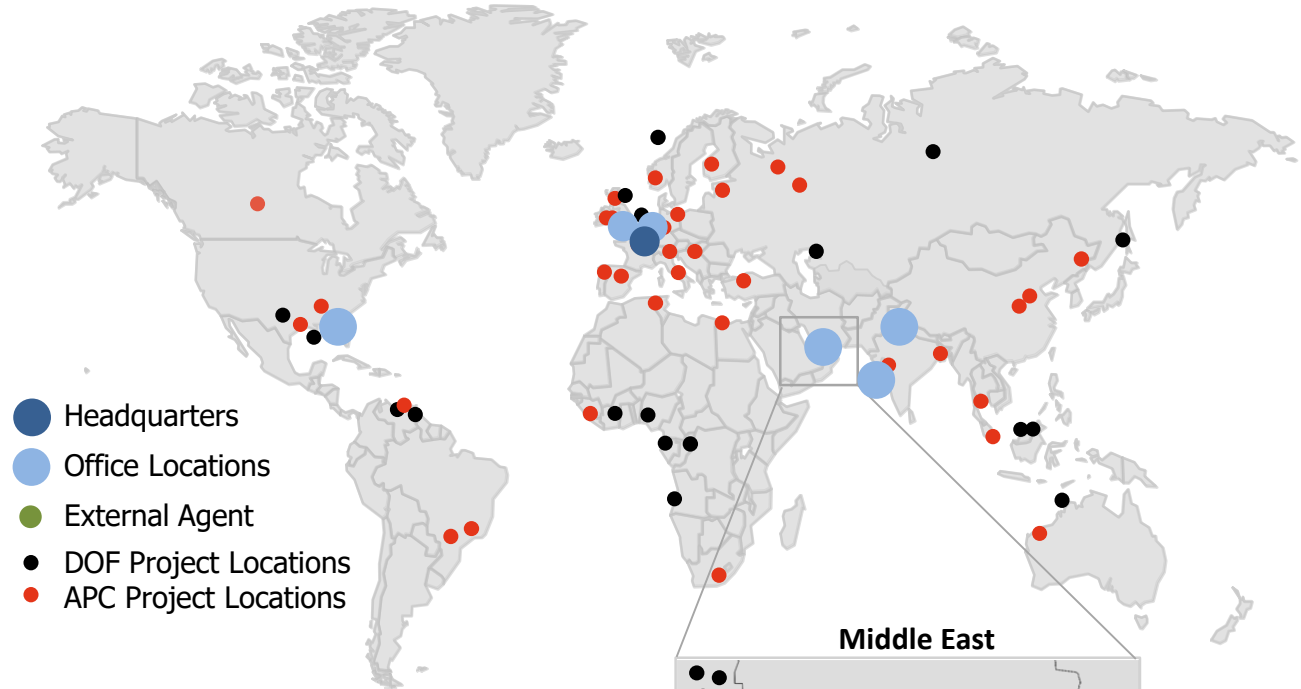
The Netherlands



UK

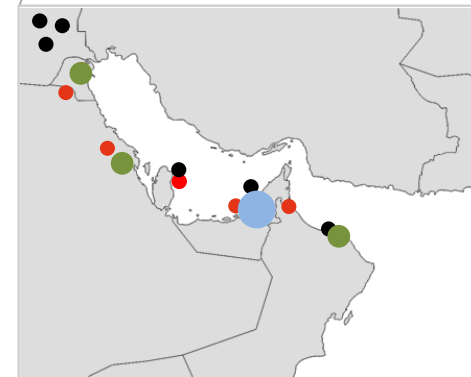


UAE



- Headquarters
- Office Locations
- External Agent
- DOF Project Locations
- APC Project Locations

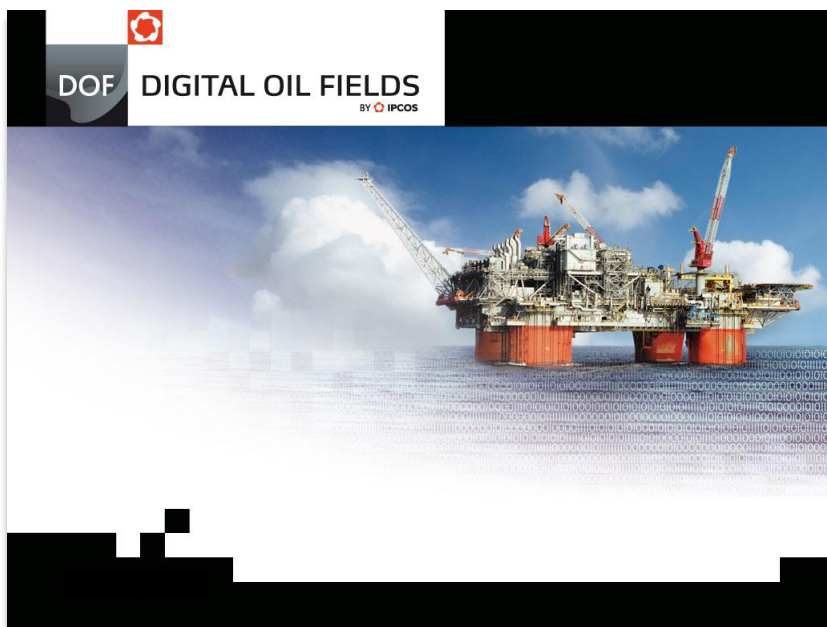
Middle East



Location	Employees
Belgium	26
Netherlands	14
UK	8
Middle East	7
US	1
India	10
TOTAL	66



IPCOS' Business Units





Our customers

Oil & Gas	Gas Processing	Refining
 <ul style="list-style-type: none">ShellTotalChevronBP, LukoilBritish Gas	 <ul style="list-style-type: none">GascoDolphinBPAl Khafji	 <ul style="list-style-type: none">Total, BPGunvorRam, IneosEssarShell
Petrochemicals	Chemicals	Fertilizers
 <ul style="list-style-type: none">BP ChemicalsTotal, SabicIneos, SolvayBASF, LanxessBayer	 <ul style="list-style-type: none">BASFCytecIneos, DSMWackerKuraray	 <ul style="list-style-type: none">YaraPCS NitrogenBASF, PICEurochemPetronas

DOF

Fertilizers

Glass

Energy

Specific markets



Generic

SIEMENS



