

The background image is a composite. On the left, there are industrial pipes and valves. On the right, a hand is shown typing on a black keyboard. Overlaid on the entire image are various technical diagrams, including a circular flow diagram with the text "=0.H1.T1P001 m³/s", a valve symbol labeled "+ T202", and several rectangular boxes containing symbols like "Y205", "GO+", and "L204".

## Comos® - ISO 15926 Interoperability to Manage Supply Chain Information - In Action

### PCA Forum & Members Meeting, Kuala Lumpur, 2009

Geoff Turner

# It's Time for Change People

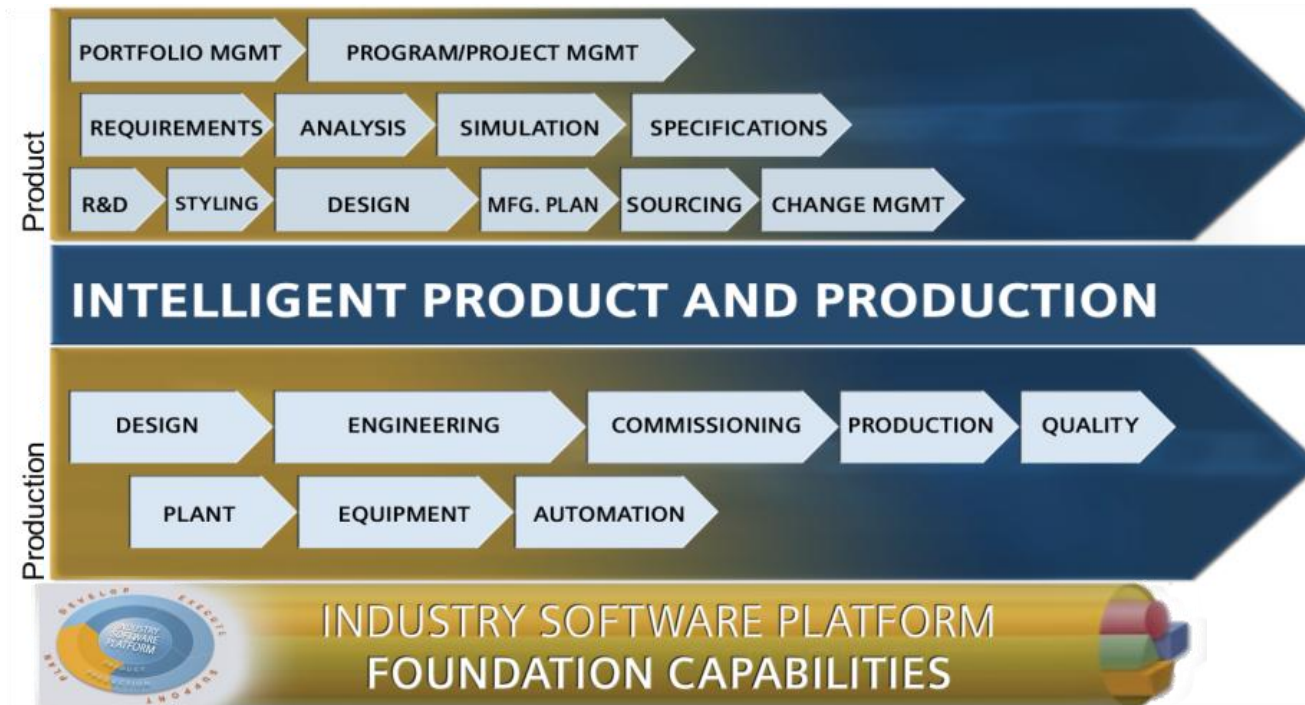


... Barack Obama

# Siemens offers complete Industry Software Portfolio for the Process & Power Industries



Industrial Software Platform: We do standards everyday



Integrated Approach to Innovation

# Simple yet sophisticated!



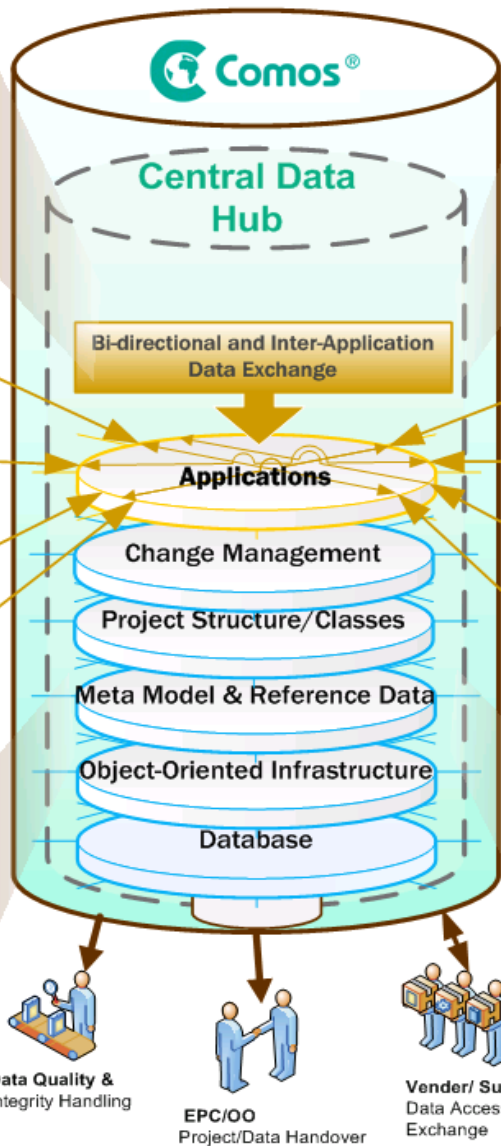
### APPLICATIONS

- Comos Basic
- Comos Feed
- Comos PT
- Comos Maintenance
- Comos Mechatronics
- Comos Web
- Comos PQM
- Comos Interfaces

### Third Party Application Integration

Comos Motion X is a flexible and scalable integration platform for the handling & exchange of structured data between Comos and Third Party Applications. Engineering tools and enterprise solutions can be integrated into a centralized data source. Comos Motion X features:

- System & platform independent data exchange
- Centralized data management
- Data quality management & integrity



#### Planning

- Activities, milestones
- Quality and progress

#### Process Design

- FEED, P&ID
- Pipe spec, Parameters

#### EE&IC DESIGN

- Eng Index Data, Loop diagrams, Datasheets, Panel Dwgs.

#### 3D Design

- Pipe spec, part catalogue, Line Info, ISO drawings Material Specs

#### Document Control

- Document Meta data
- Electronic Files

#### Material Management

- Package information
- Engineering Requisition
- MTO

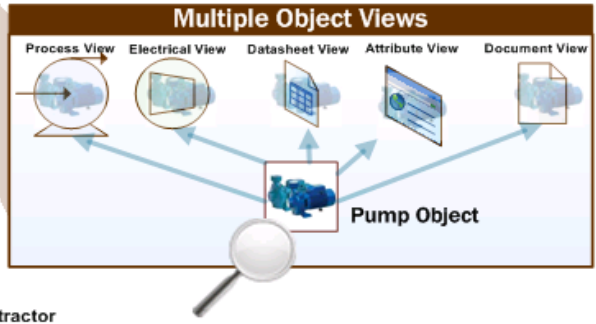
#### Construction Management

- Fabrication Status Eng. Index Data, MTO, As-Builts.

#### Program Management

- Revisions, Redlining, Index data, Document Check in/out

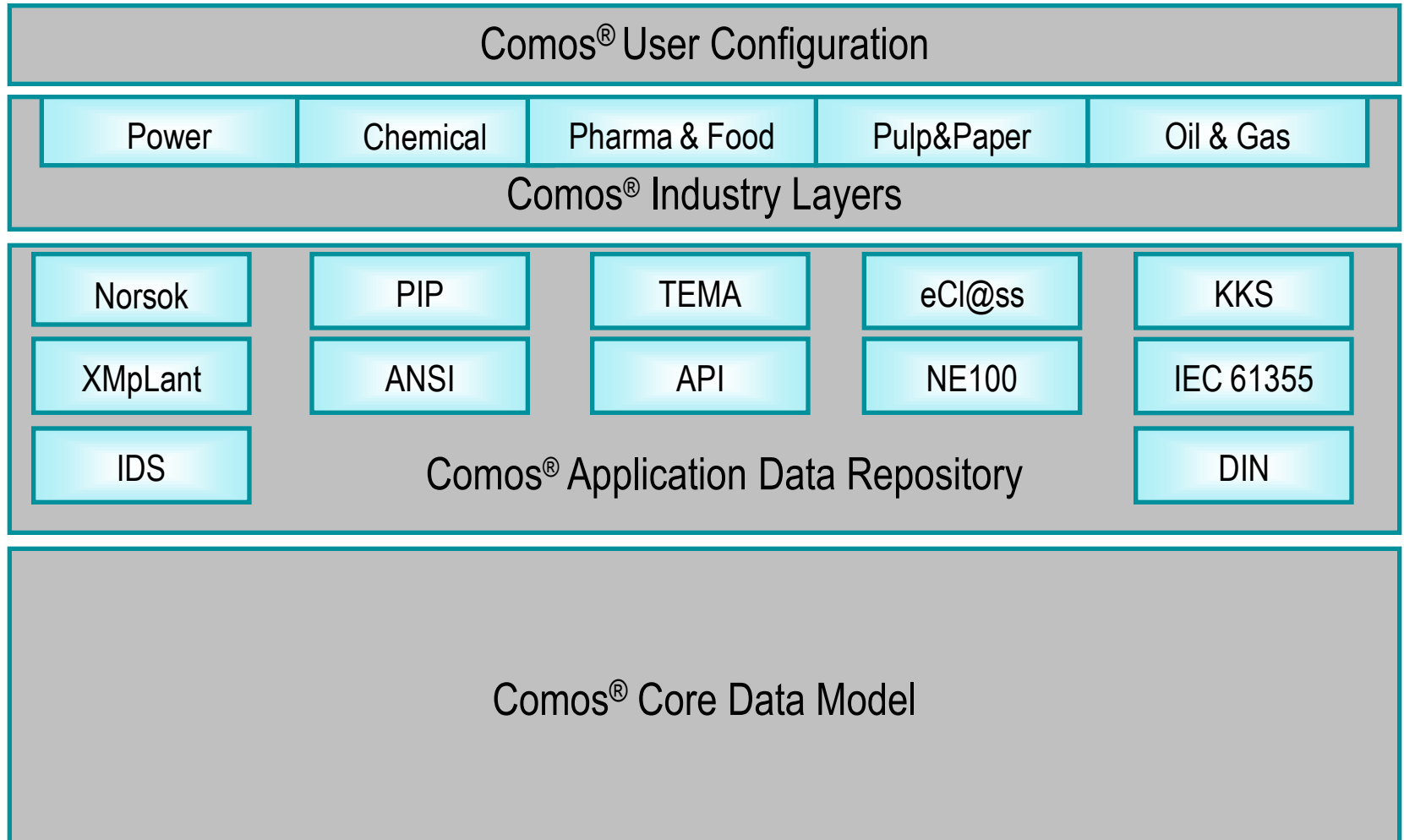
1. Workflow harmonization
2. Data consolidation & standardization
3. Improved confidence of data accuracy
4. Controlled accessibility & collaboration
5. Enterprise memory retention for re-use



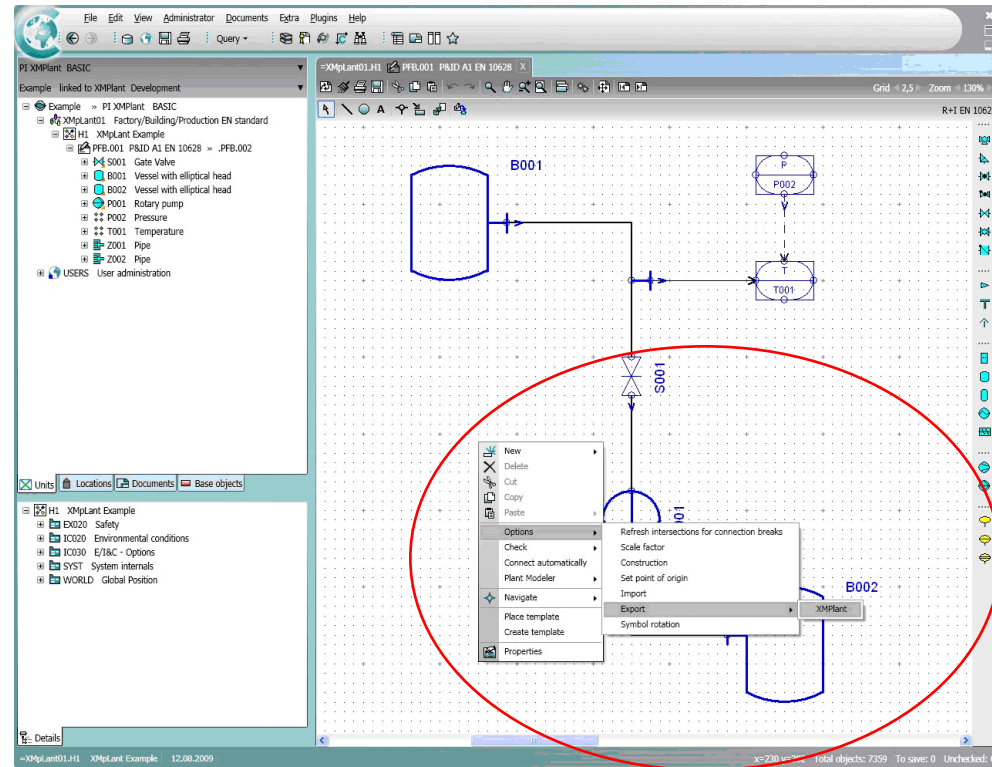
Data Quality & Integrity Handling

EPC/OO Project/Data Handover

Vendor/ Sub Contractor Data Accessibility & Exchange



- XMpLant enclosure data is imported into Comos and provided for use with further Comos modules.
- Data can just be exported from Comos via XMpLant for use in other locations, systems or suppliers
- Configurable interface requiring no manual intervention or complex programming.

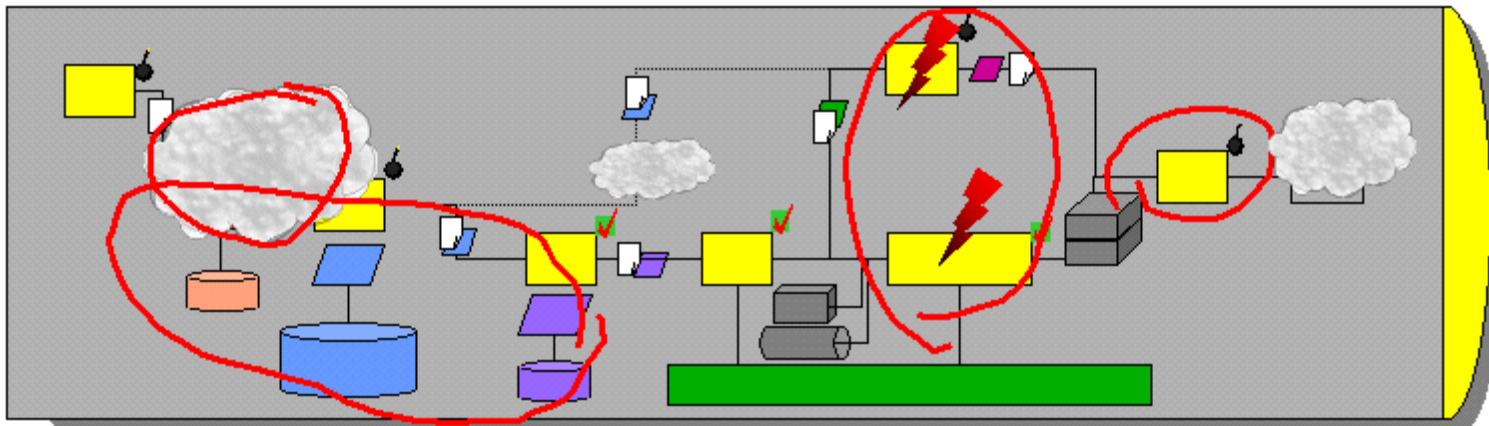




- Compliant ISO 15926 data exchange between Comos and external applications
- Consistent approach to handover of data
- Optimized support at the intelligent P&ID construction
- Higher quality by an automated data flow in and from external applications
- Time-saving at the data transfer from basic to detailed engineering
- Improved exchange possibilities with branch offices and suppliers
- ISO 15926 Dictionary Compliant XML Exchange Files

## Today's challenges...

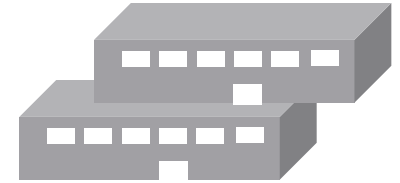
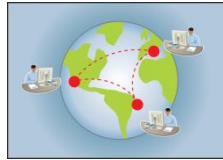
- Multiple engineering tools / multiple data input
- IT supported, but 'islands' of solutions or expensive interfaces
- Sequential working process
- Numerous meetings to make collaboration possible
- Economic pressure: faster, better, quality, cheaper
- Customers wants to have a hand-over strategy based on a "Digital Process Plant" approach



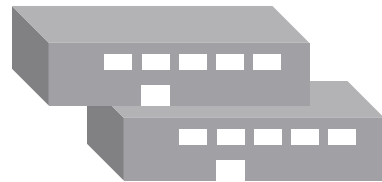


# 1. Foster Wheeler Energy Oy (FWE Oy)

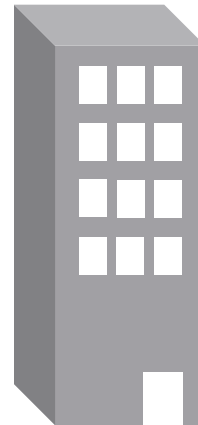
Aveva®  
Global



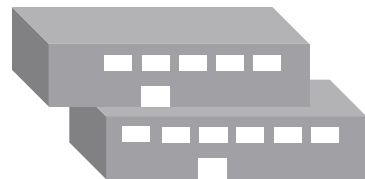
3rd Party 3D/2D Design



3rd Party Engineering



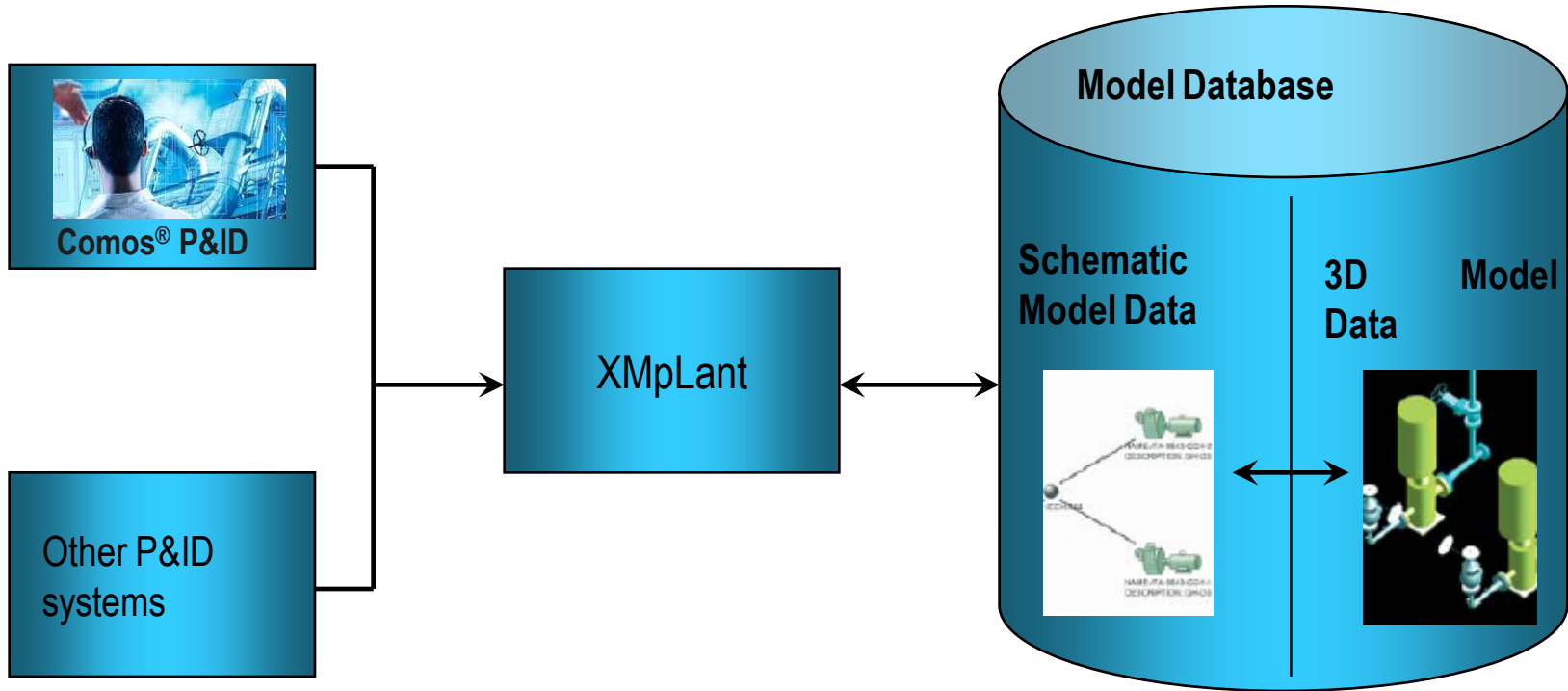
FW-HQ



FW-Site 1



FW-Site N



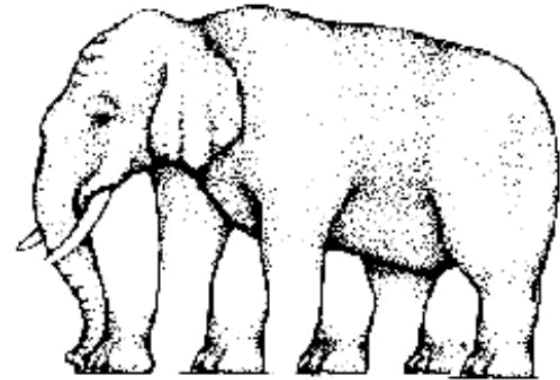
- XML export based on ISO15926 for the Comos® P&ID data
  - P&ID diagram
  - Equipment data
  - Pipe data
  - Fitting data
- Configuration of the Comos® P&ID PDMS® XML Interface (mapping)
- Controlled data exchange between Comos® and PDMS®

# 1. GDF Suez E&P Norge - work in progress



1. *Comos will be used to manage all operational engineering, documentation and maintenance management tasks at Gaz de France Norge, especially in the operation of the Gjøa field.*
2. *Terje Overvik, Managing Director Gaz de France Norge: "Comos Industry Solutions GmbH won the contract after fending off fourteen other competitors during the initial and final tender rounds. **Comos Industry Solutions came across as professional and reliable during the negotiations and their systems provided the best functionality to meet Gaz de France Norge's requirements...** In fact, the technology and commercial teams unanimously decided to award the contract to Comos Industry Solutions."*
3. *"The systems will contribute greatly to us meeting our goals in Integrated Operations," Operations Manager Kjell Ola Jørgensen explains.*
4. *With the new systems, the operational staff will be able to obtain all necessary information on their desktops without the need for manual interventions. This allows for faster, better and more precise decisions and solutions in daily operations.*
5. *Comos Industry Solutions will work closely with Gaz de France Norge to implement the new systems, and will also establish integration with other systems, third-party support and data import.*





How many legs does this elephant have?

## Risk or Ignorance

...it's not about the technology anymore, it's about people and process...

Svein Ivar Sagatun ... StatoilHydro

*IO 09 Science & Practice Integrated Operations , Trondheim September 2009*

- Pockets of ignorance
  - Fundamental change in behaviour
  - Integrated Operations
  - Contracts stipulating ISO 15926 Dictionary complaint exchange files
  - Motivation to act
  - Project Risk is lowered
  - Continuous Improvement
- 
- **2009. Is this the year it changed ...**

### Workshop

- Understanding of critical Business Processes
- Define areas of interest
- Investigate use and value of best practice for your company

### Assessment

- Analysis of workflow
- Analysis of current work procedures
- Areas of value by use of best practice workflow
- Areas of value by use of Comos®
- ROI calculation

### Agreed business relationship

- Have a conversation in the break
- Geoff Turner +44 7818 553905
- Seppo Turunen +358 40 750 2226 [seppo.turunen@siemens.com](mailto:seppo.turunen@siemens.com)
- [Info.dk@comos.com](mailto:Info.dk@comos.com)