

OPDIM

Open Product Documentation and Information Management in PLM-Context



EADS

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PDE 2009

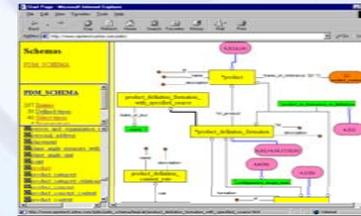
The 11th NASA-ESA Workshop on Product Data Exchange



JOTNE EPM TECHNOLOGY

World leaders in Industrial Data Management using ISO standards

- Data modeling**
Create your own data models, or use for viewing and documentation (ISO)
- Database management**
The ideal tool for data integration and application development projects
- Rule engine**
Validate your data sets, using your own business, knowledge rules or any other sets of rules
- Web services**
For use in web server applications (thin clients)



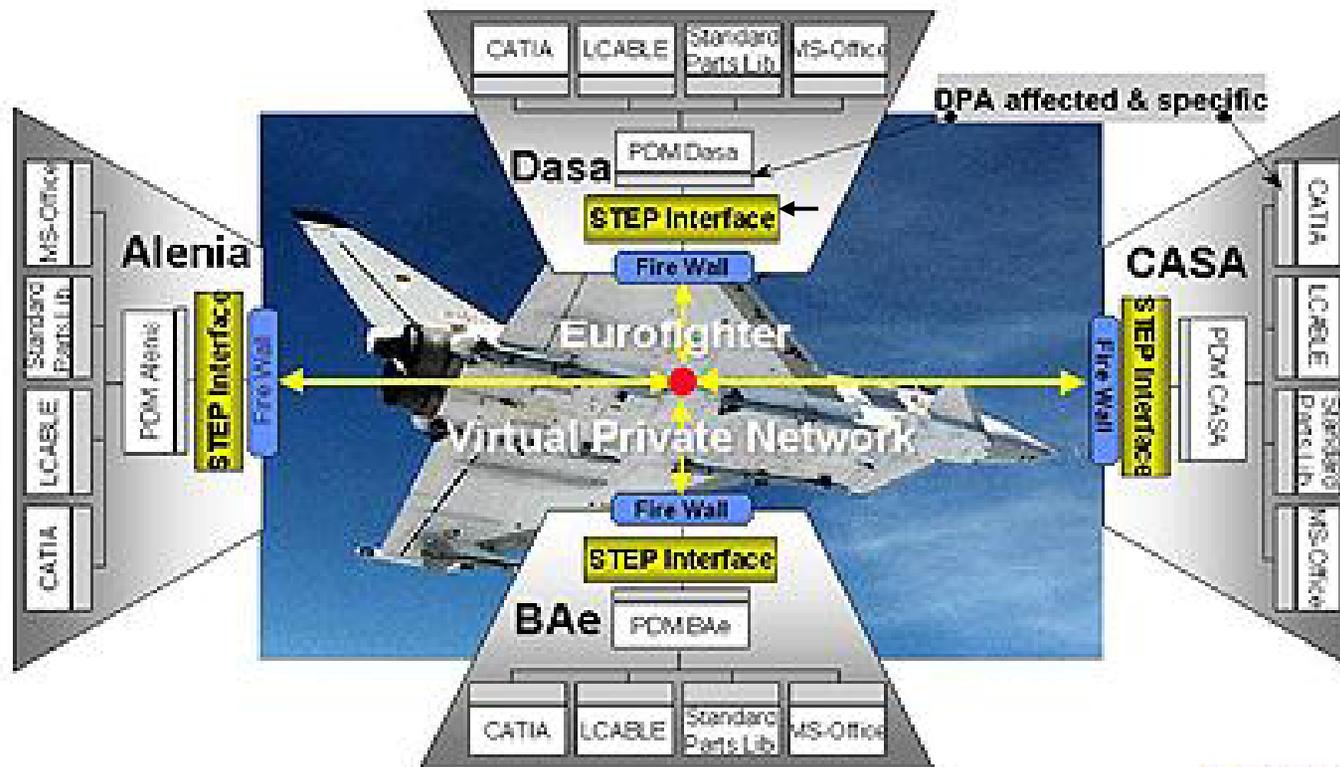
Universal Solutions for Interoperability and Sharing of Product Data



10 years of supporting Eurofighter



Efficient Data processing architecture (DPA)
in a long term aircraft project



Antipodes and
Technote Brasil/Portugal

Aerospace related PLCS projects



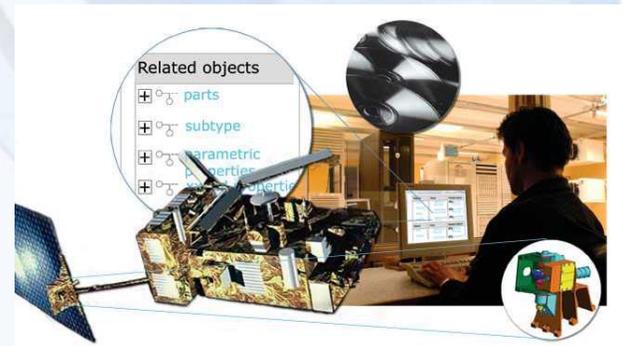
Eurofighter



Gripen



JSF



ESA

Other PLCS projects

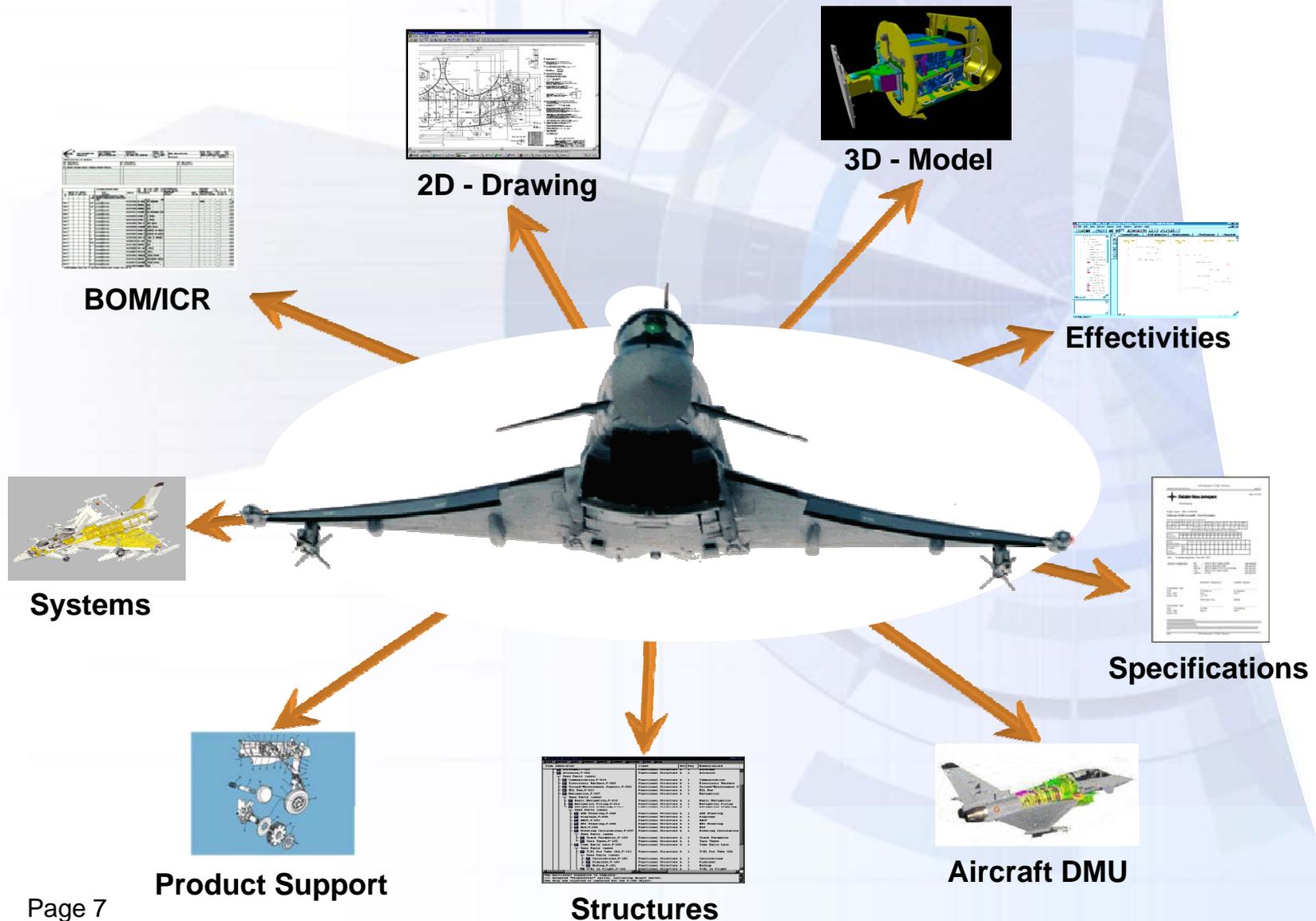


Jotne EPM Technology contributes to

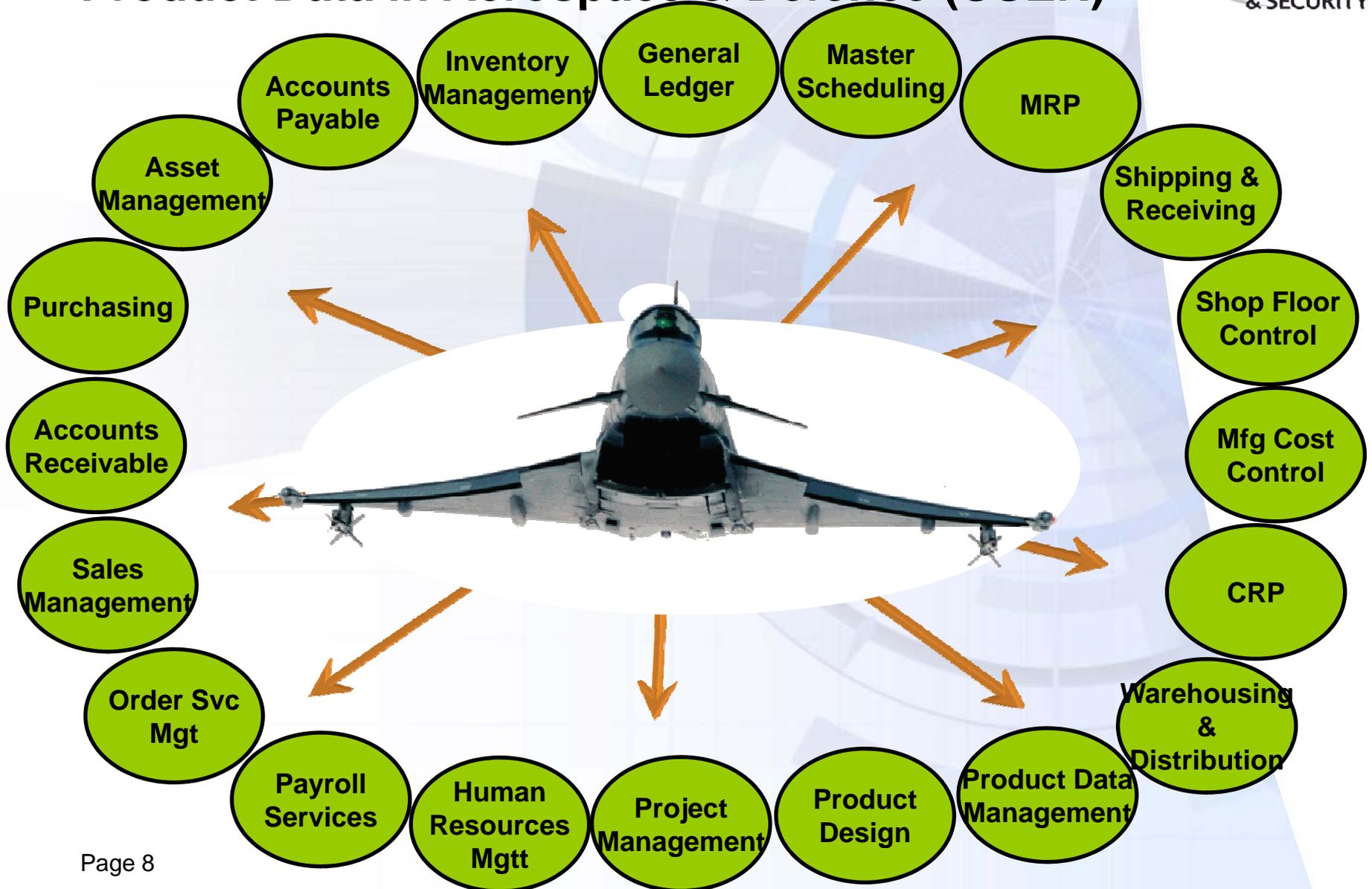
AGENDA

- Open Product Documentation and Information Management (OPDIM)
 - Product Data in Aerospace & Defence
 - Internal and External Requirements and Needs
 - Concept of OPDIM
 - Major Objectives of OPDIM
 - OPDIM-Program-Overview
 - Demo + PLCS Video

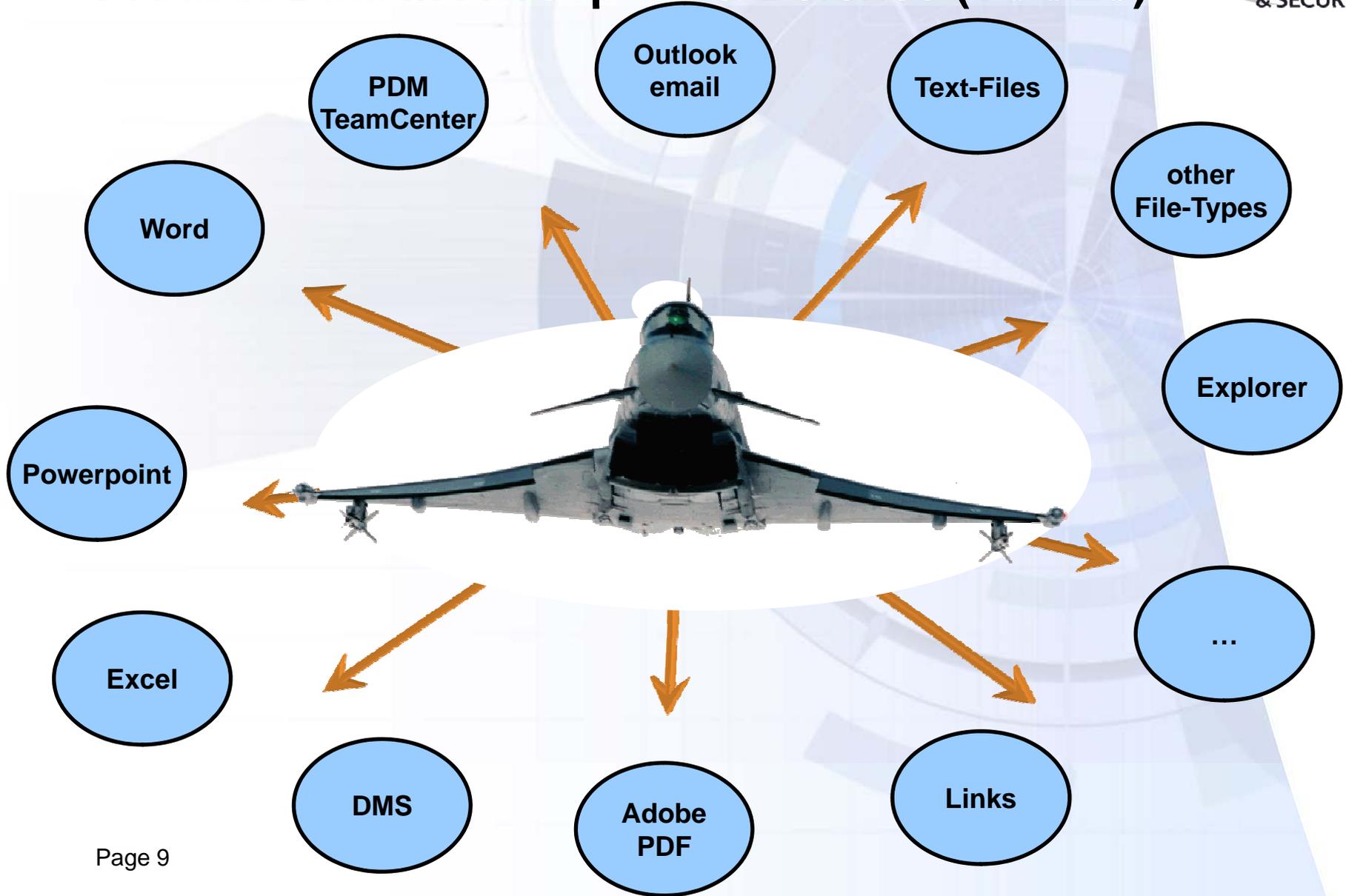
Product Data in Aerospace & Defence



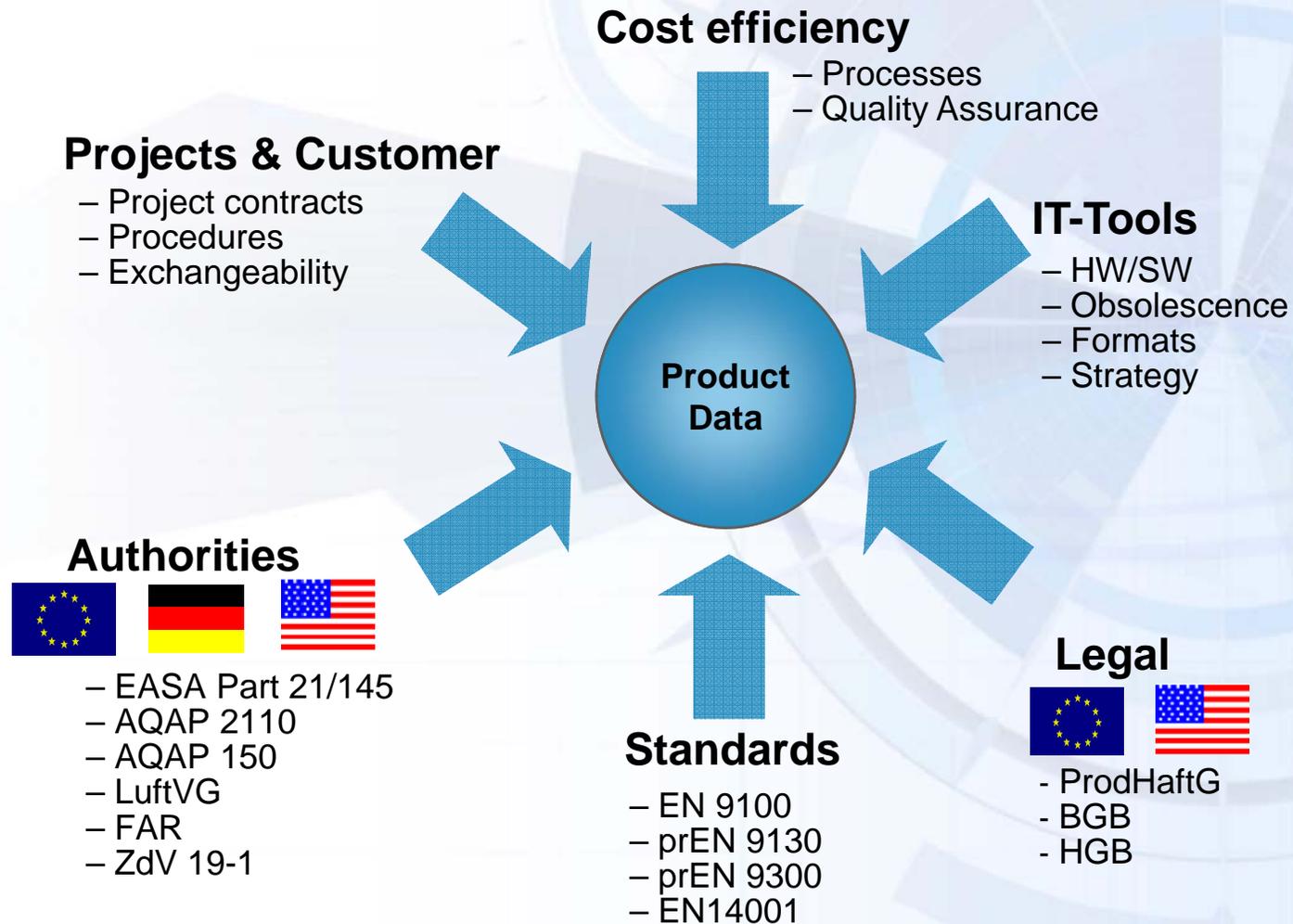
Product Data in Aerospace & Defence (USER)



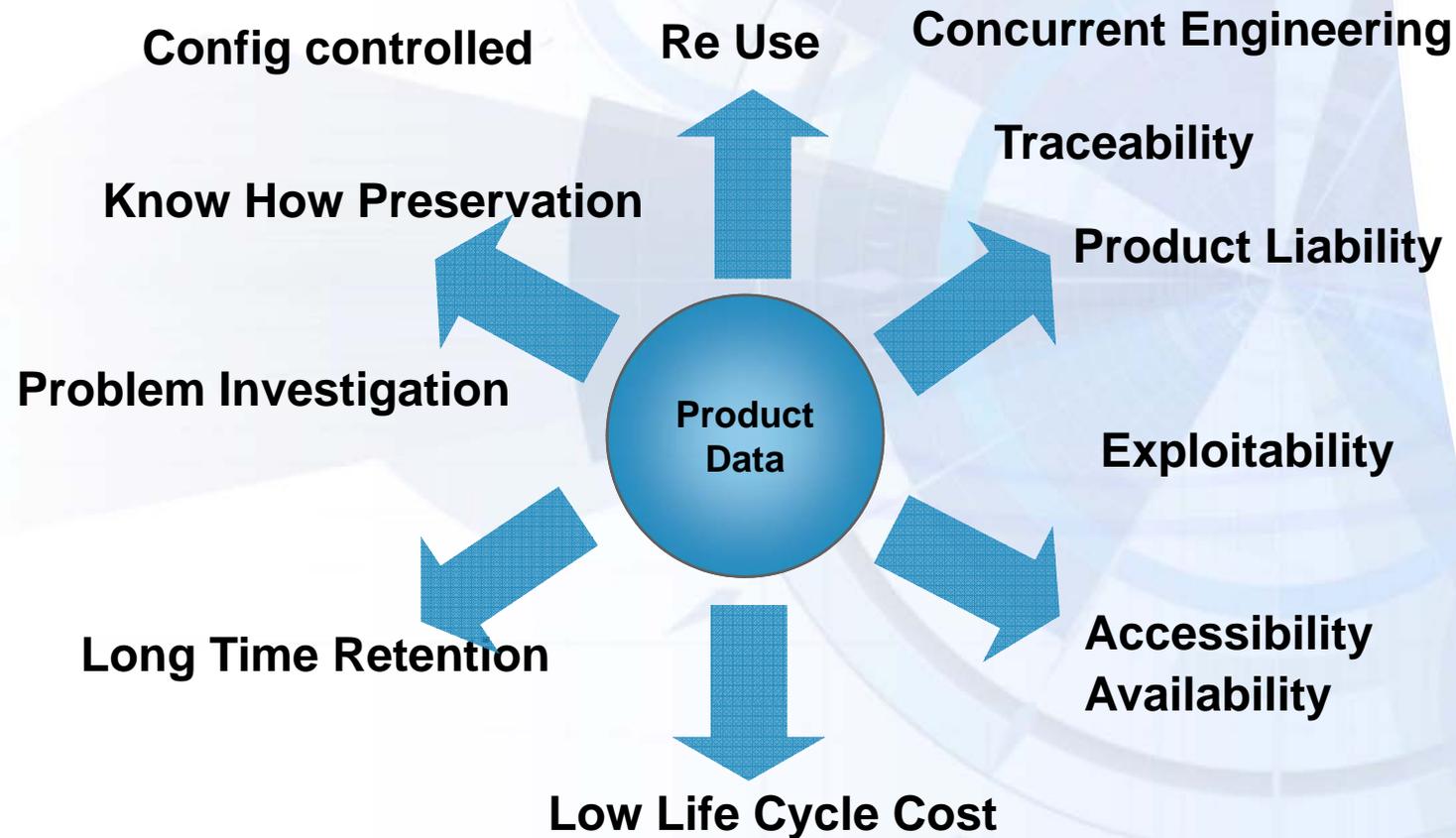
Product Data in Aerospace & Defence (TOOLS)



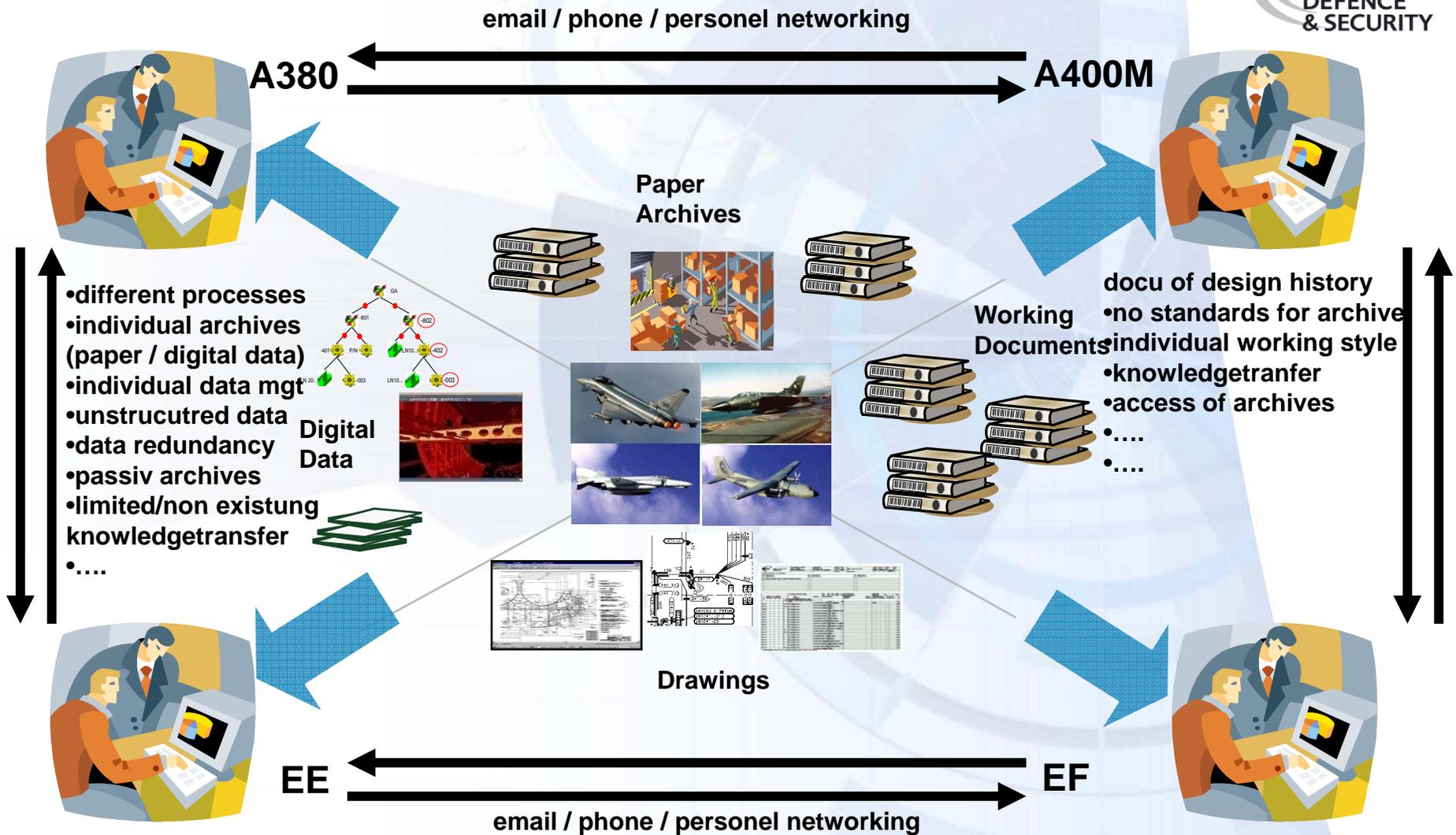
Internal & External Requirements to Product Data



Key Requirements for Product Data Aerospace & Defence



Situation today



Summary of Requirements and Needs

- Gather ALL relevant product information
- Enable the user to structure local information
 - according to PDM structure
 - according to other useful breakdowns
- Enable efficient start of new projects
- Enable search
 - free text
 - structured
- Ensure privacy and security
- Enable offsite use
- Improve systems interoperability
 - Reuse of product definition data in support engineering
 - Smooth link back from support engineering to PDM
- Enable PLCS standard based data delivery to customers
- Enable efficient use of support feedback data
 - Smooth link from feedback data to PDM

Objectives of OPDIM

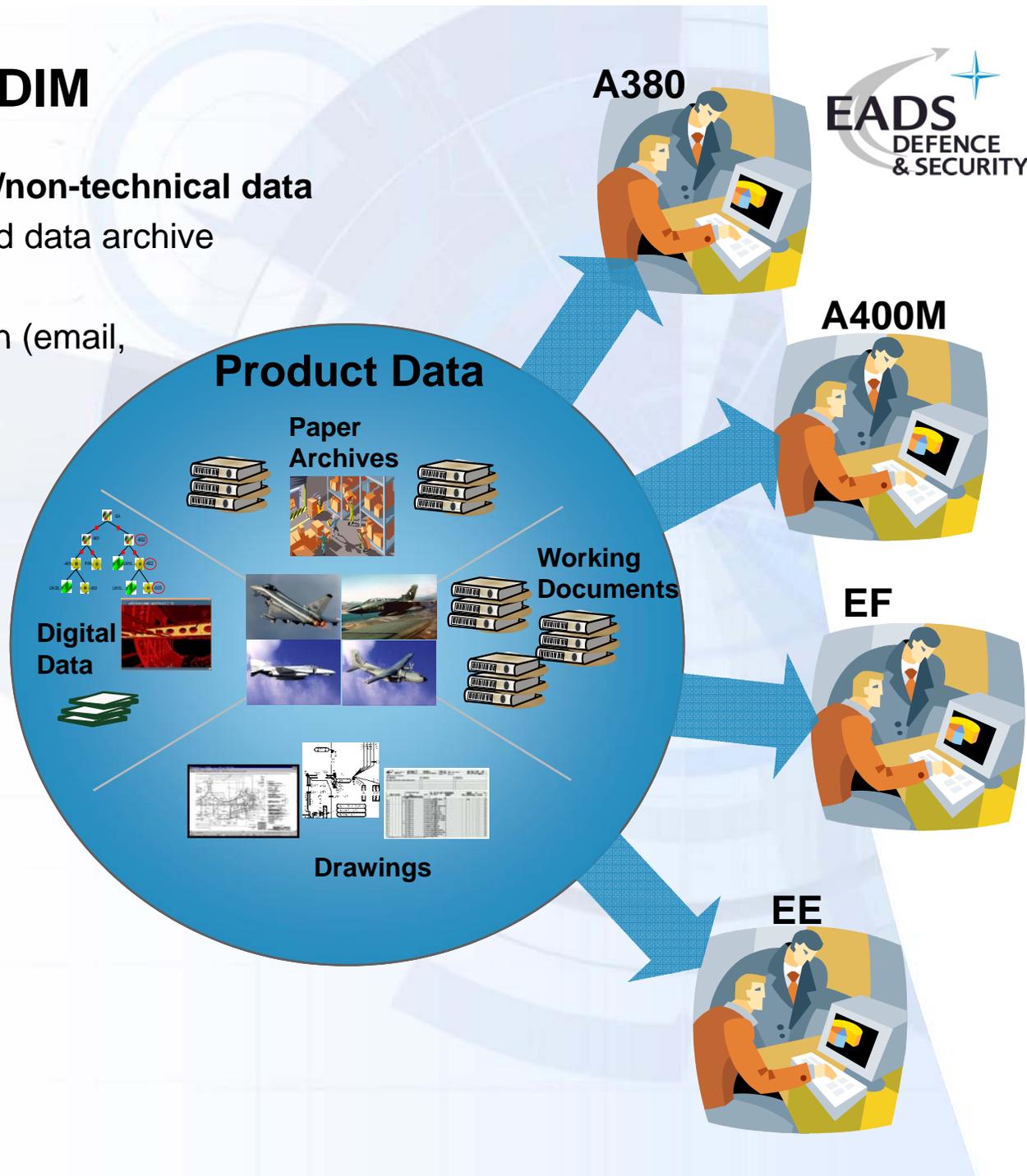
Harmonization of technical/non-technical data

- Redundance-free structured data archive
- One master document
- Harmonized communication (email, supplementary details)
- Individual Data Access
- Knowledge Mgmt
- Liability Proofs
- LTA
- Other LC Application (ISS)
- Maximize working archive
- enterprise wide knowledge/data sharing

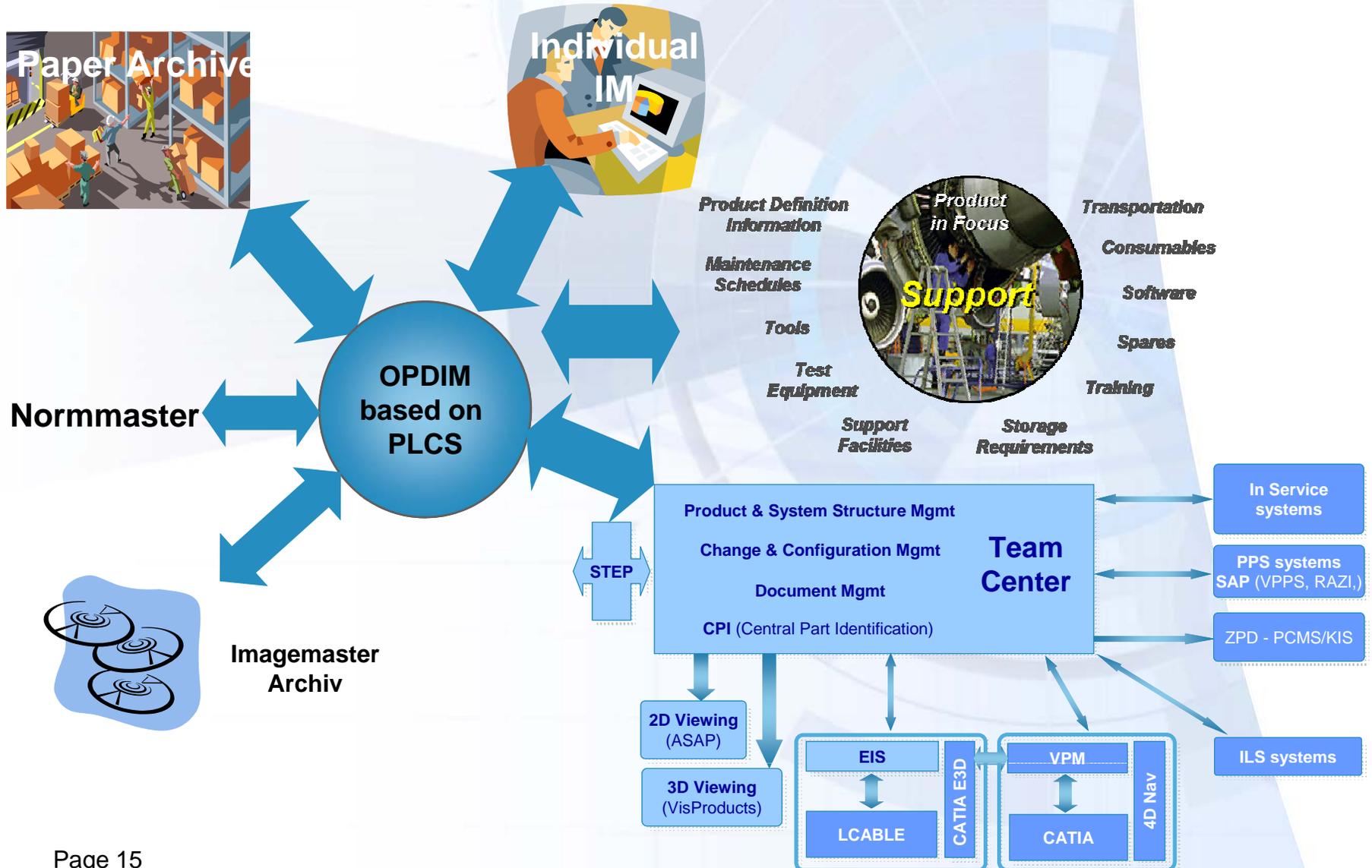
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Side Effects

- Less paper archives
- Less haddisk space
- ...



Modular OPDIM Architecture



What and Why PLCS:

- PLCS is a data model that includes product definition and product operation and support
- PLCS is an ISO standard
- PLCS is a mature data model (3rd generation)
- PLCS is the most powerful specification for support publicly available
- PLCS is supported by NATO and several of its MoDs
- PLCS has compatible and relevant sister standards in ISO 10303, STEP
- PLCS is compliant with the ISO 10303 implementation methods

OPDIM

Key Potentials



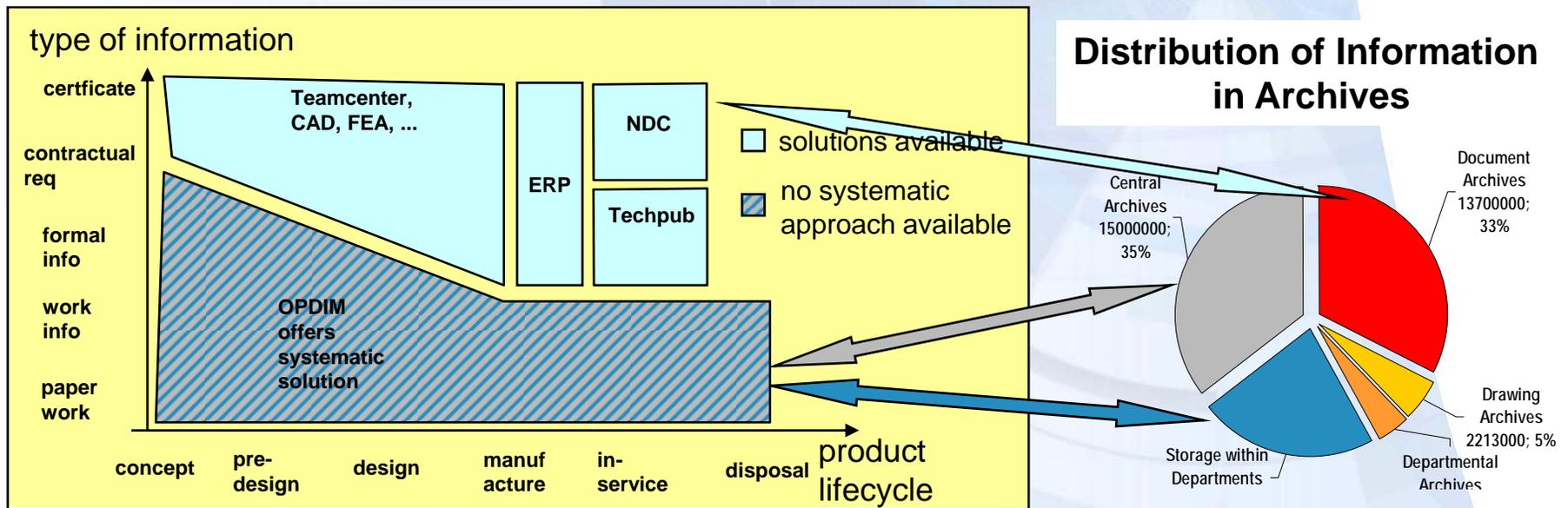
| | Design Goal | Benefit |
|--|---|---|
| | Making systematically available individually archived / stored information | <ul style="list-style-type: none"> • Reducing cost for search • Facilitating information re-use • Facilitating knowledge management • Minimizing risk of lost of information • Facilitating harmonisation of individual IT environment • Avoiding redundant data storage • Reducing storage cost |
| | Filling gap between systematically in legacy systems managed and individually maintained information | |
| | Integrating office tools (Word, Outlook) | |
| | Enabling of cost-efficient data integration throughout the entire product lifecycle | <ul style="list-style-type: none"> • Enabling interoperability of systems throughout entire lifecycle • Facilitating data exchange, communication within supply chain • Facilitating extended enterprise approaches |
| | Enabling cost efficient value added services during support phase | <ul style="list-style-type: none"> • Improving competitiveness by enabling new / improved services at competitive cost • Enabling reaction on up-coming customer demands |
| | Providing functions for document handling and communication for project teams | <ul style="list-style-type: none"> • Reducing project set-up cost • Facilitate harmonising of individual IT environment • Improving efficiency for early project phases / small projects • Facilitate ability of working in often changing project environments |

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Enabling Information Management in all environments

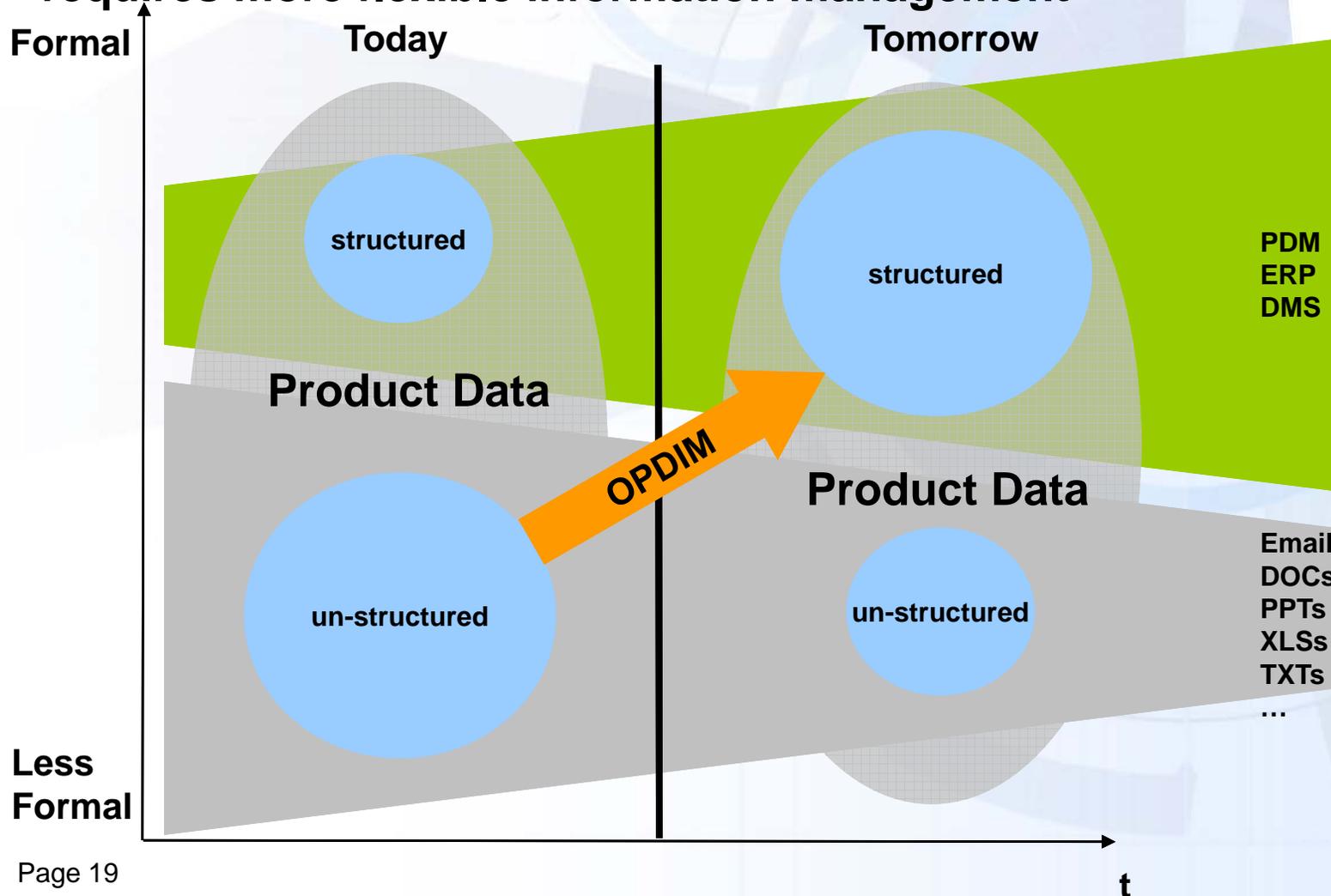


Closing of gaps in IT environment within the company where information is not systematically managed thus enabling common infrastructures for individual data processing environment



Evolution of formal and less formal Product Data

Shorter development cycle of more complex products requires more flexible information management

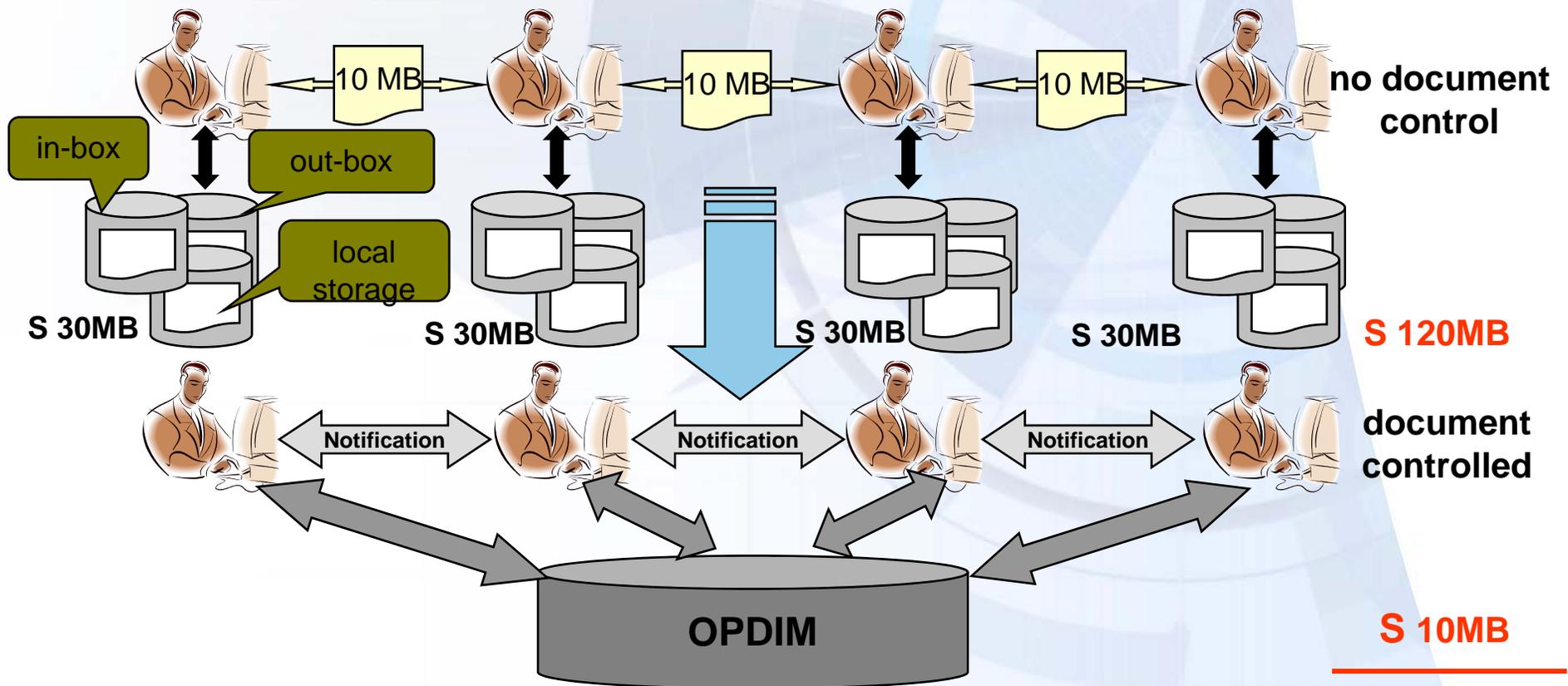


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Integrating Office Tools

Benefits:

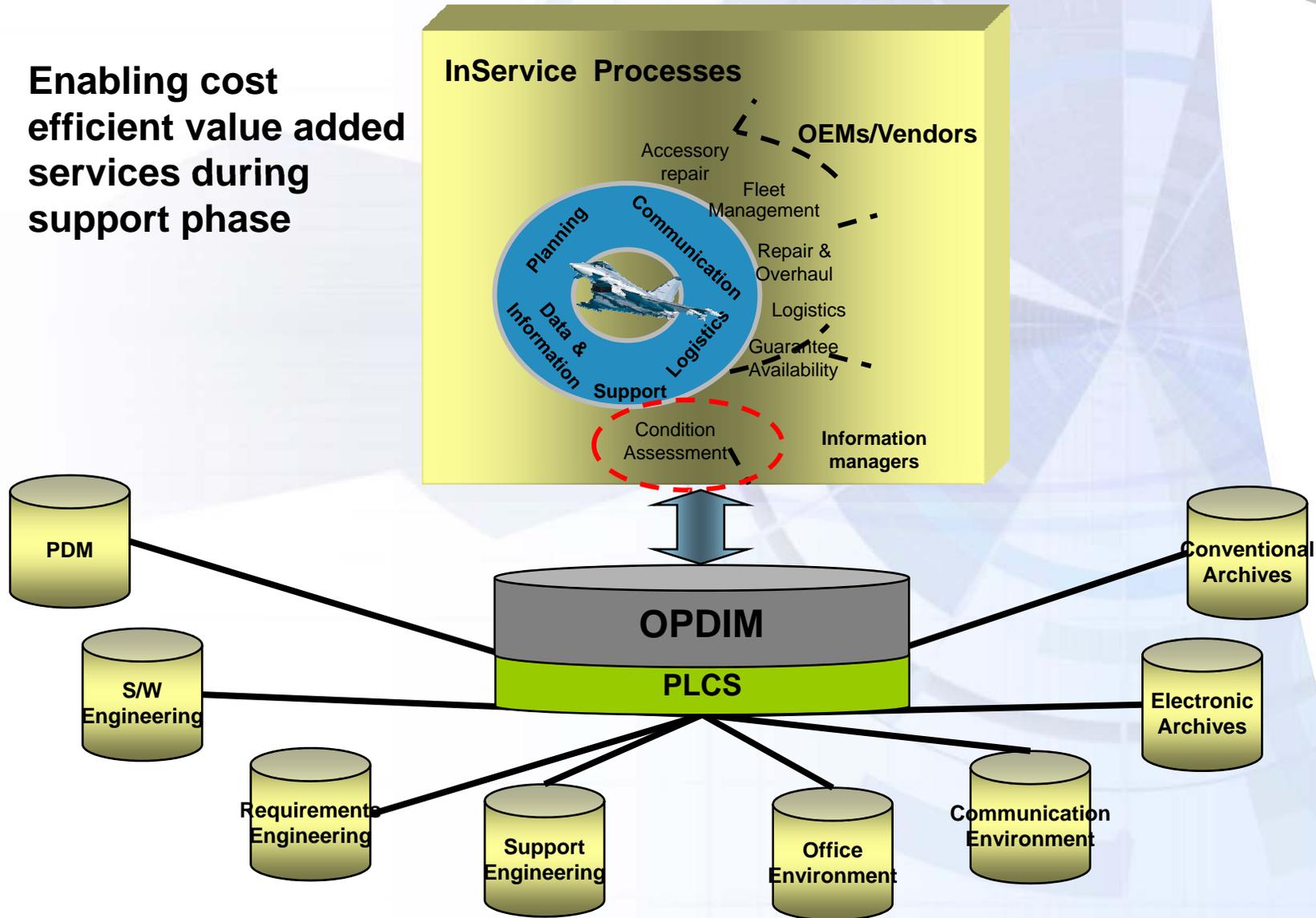
- significant reduction of storage cost
- document controlled (all parties work on same document)
- availability of information beyond local environment



OPDIM

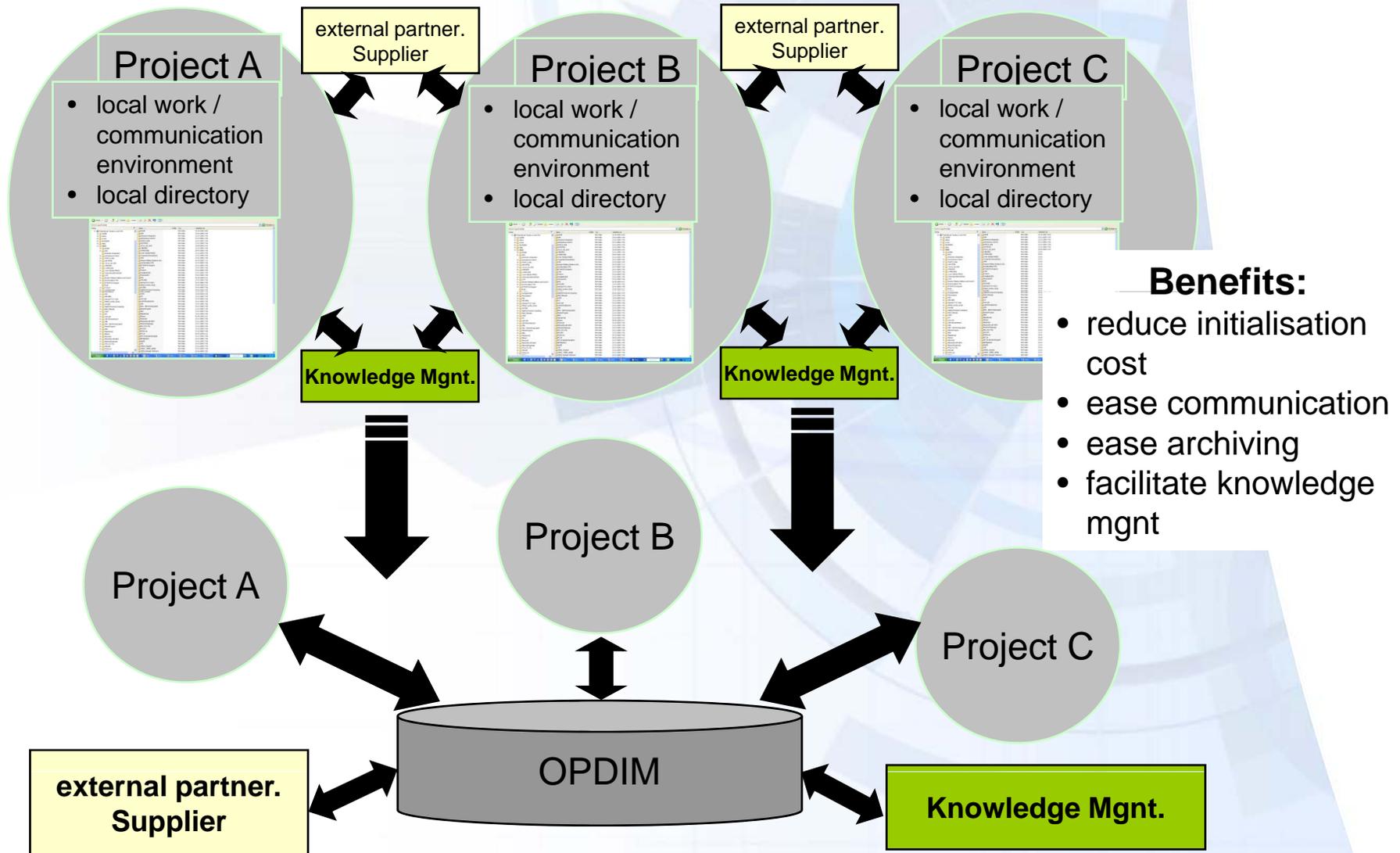
New services during support phase

Enabling cost efficient value added services during support phase



OPDIM

Providing functions for document handling and communication for project teams

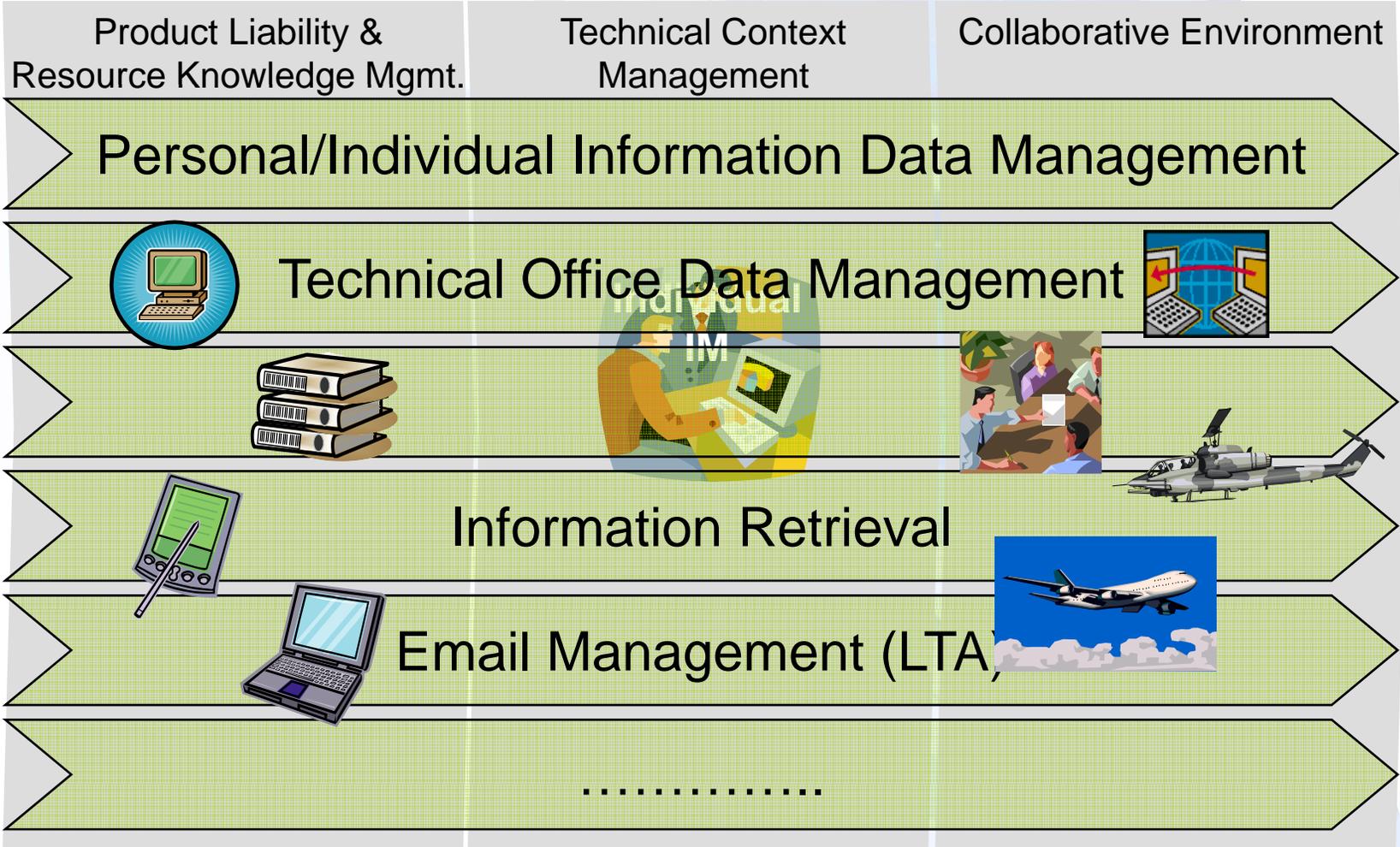


OPDIM – The project

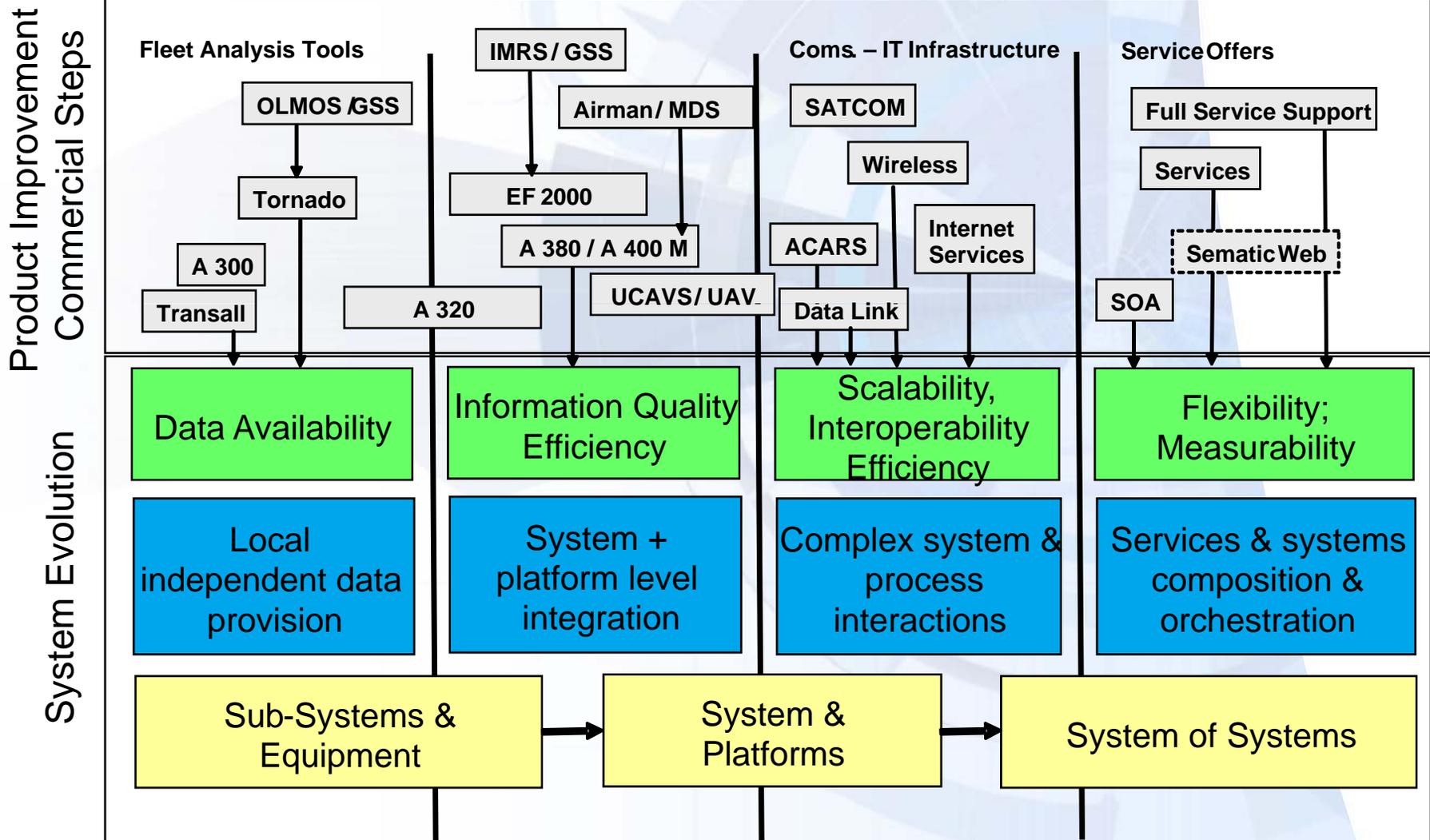
- Partners
 - EADS Deutschland GmbH
 - Jotne EPM Technology AS
- Funded by
 - Norwegian Ministry of Defence
- 2+ year project; start Oct 2007
- about 2.5 m€
- Result of phase 1:
 - Demonstrator of a comprehensive product information management system
 - desktop information integration and archival application
 - interfaces to PDM and ILS



Personal Information Management Personal Working Environment

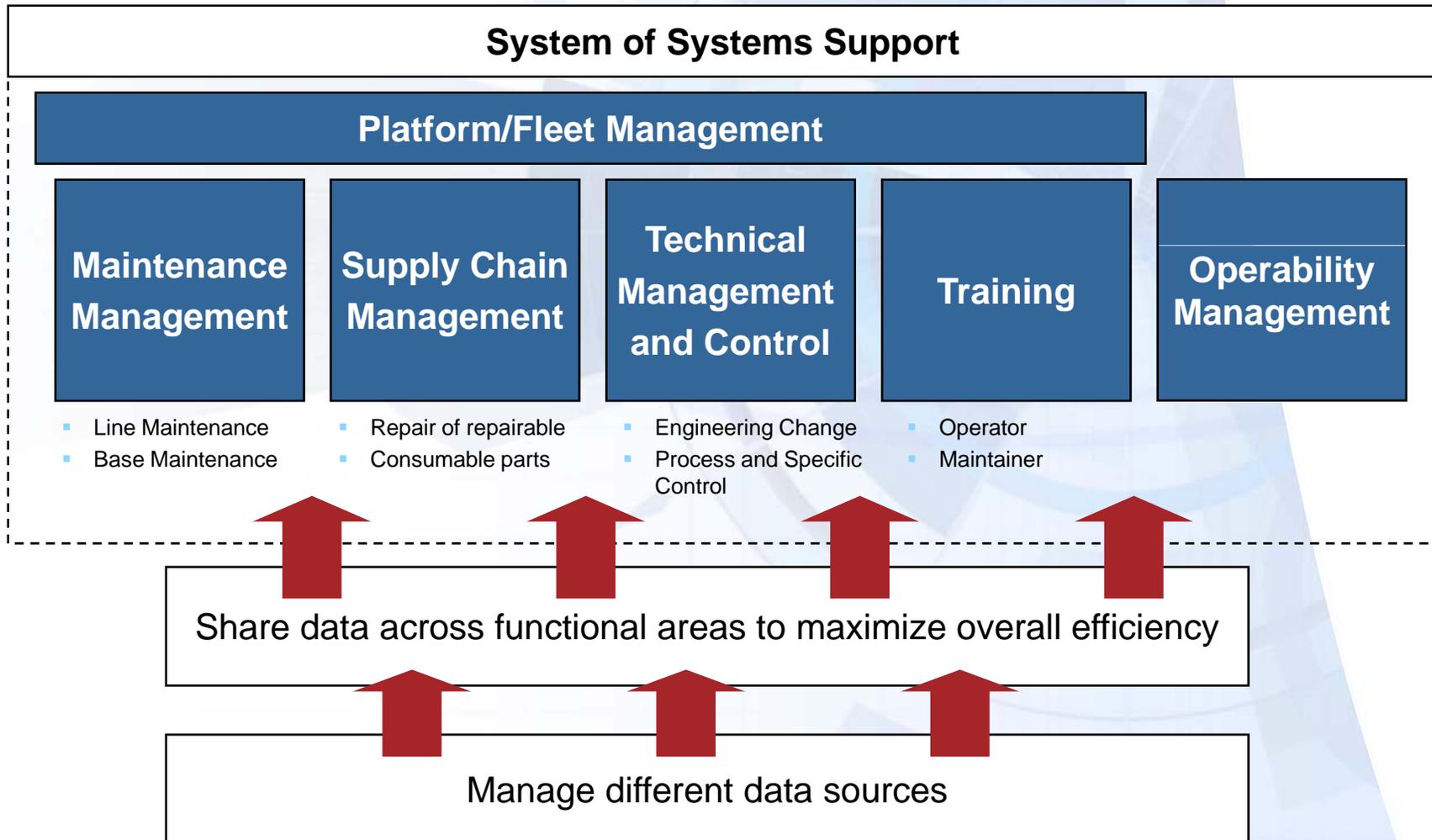


Performance Trends

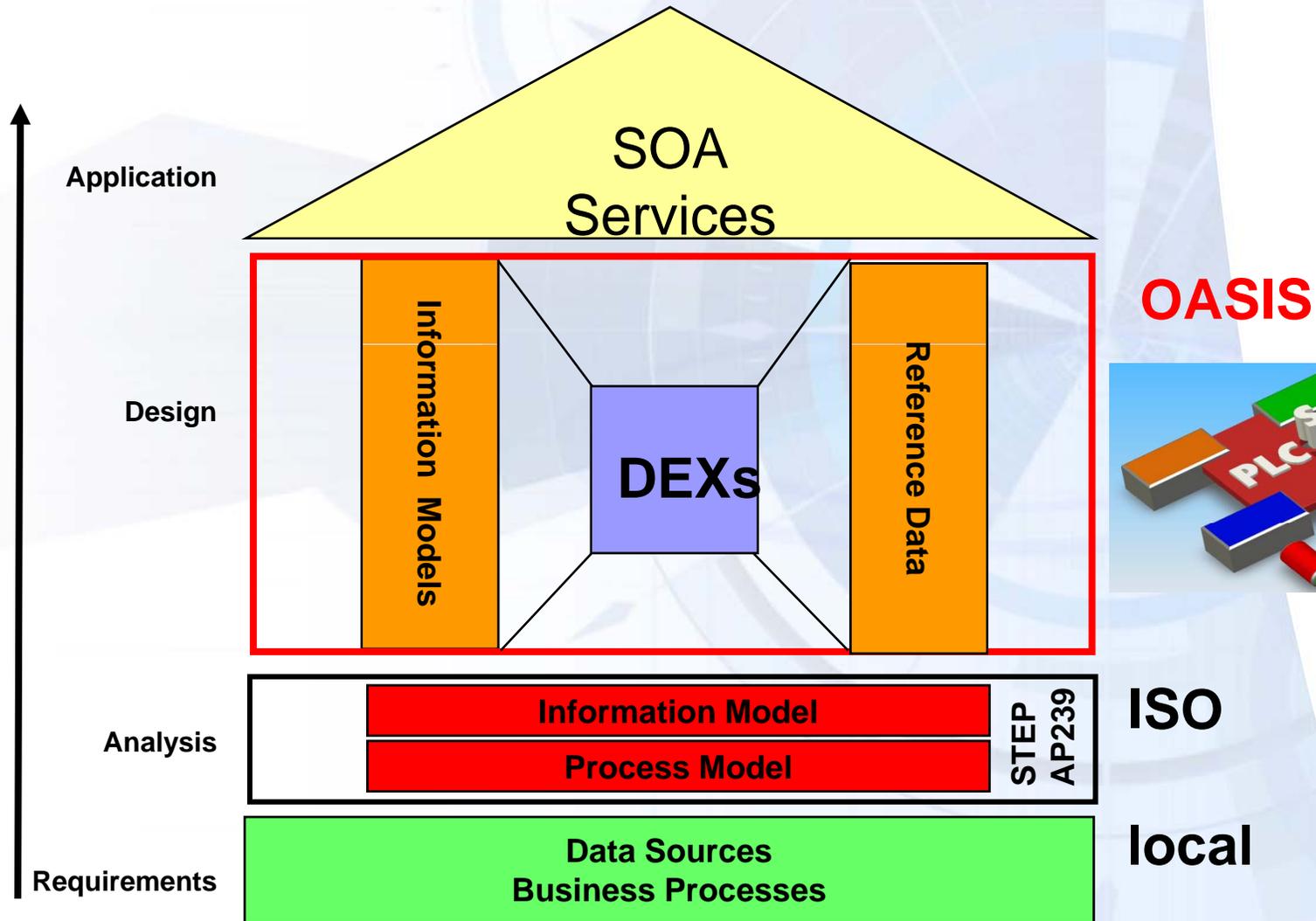


Possible Solution

Standardized data sharing enables the seamless integration of several functional support areas



Same constituents in all PLCS solutions



OPDIM Client Main features

- Search and Retrieval
- Collaboration
- Distribution and Workflow
- Document Capture, Planning and Production
- Advanced Document Management and Revision/Version control
- Bulk import/export and batch document conversion
- Integrated Security
- Traceability / Audit Trail
- Integrated with standard applications like:
 - Microsoft Office and Outlook
 - Microsoft SharePoint

About the OPDIM Client Background

- Module based best practice solution for Document and Information management
- Developed to meet requirements in the Engineering domain
- More than 20 years of experience
- Supporting Document Lifecycle, from Planning to Operations
- Supporting work processes with collaboration, integrated workflow and distribution
- Handles of all types of documentation
- Easy to integrate with other systems
- Low cost of ownership

THANK YOU!

QUESTIONS?

**Further Information:
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