

PHENIX

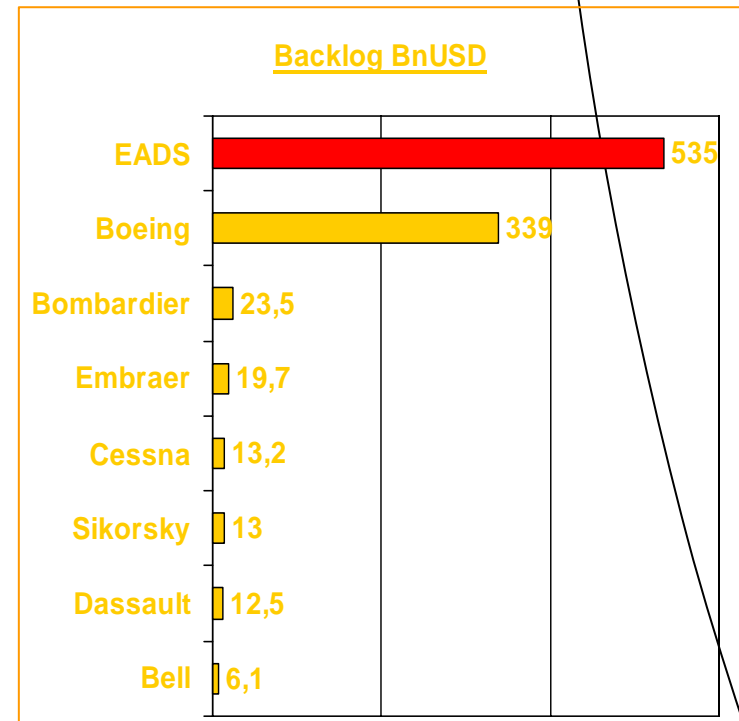
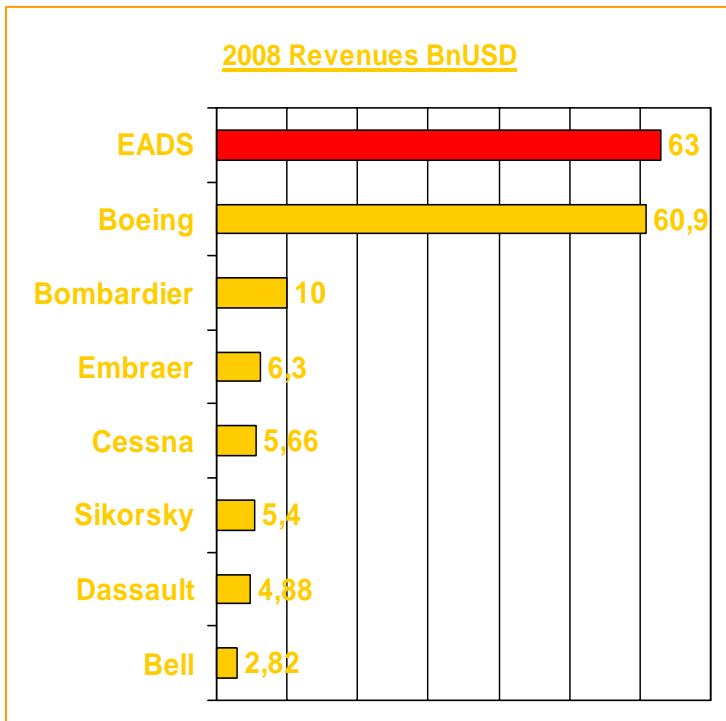
The EADS programme for PLM Processes, Methods & Tools harmonization

On behalf of Jean-Yves MONDON
SOUBEYRAN Amaury





- Order book as at June 09: € 391 Bn
- Revenues as at June 09: €20.2 Bn
- Airbus: 254 deliveries
- Eurocopter: 236 deliveries
- Astrium: Ariane 31st consecutive successful launch



EADS

Date of foundation: July 10, 2000



EADS Chief Executive Officer **Louis Gallois**



- EADS PLM STRATEGY: PHENIX program
- PHENIX METHODOLOGY
- SOME PHENIX KEY DRIVERS

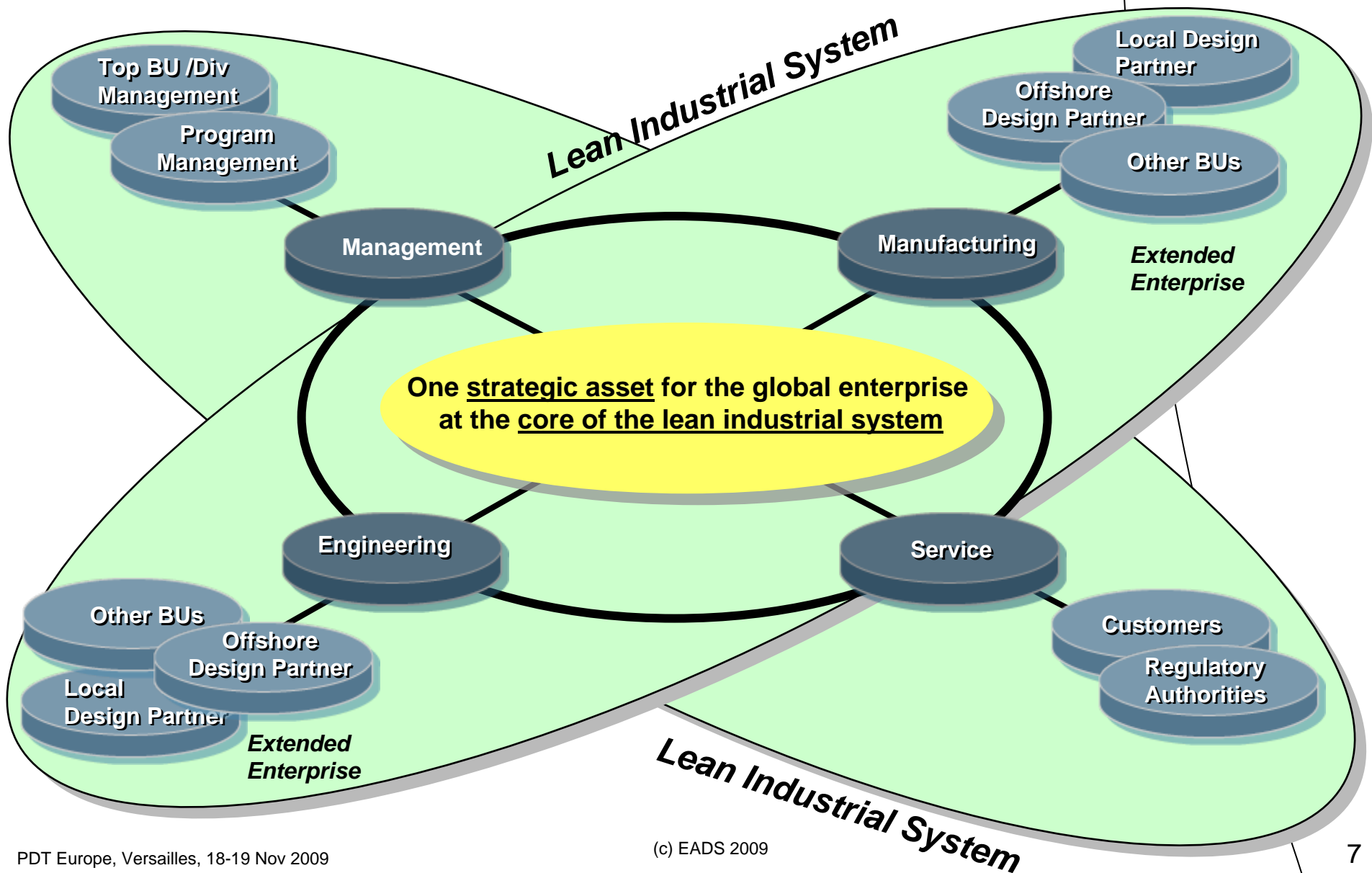
▪ PHENIX GLOBAL COLLABORATION: PHUSION orchestrator

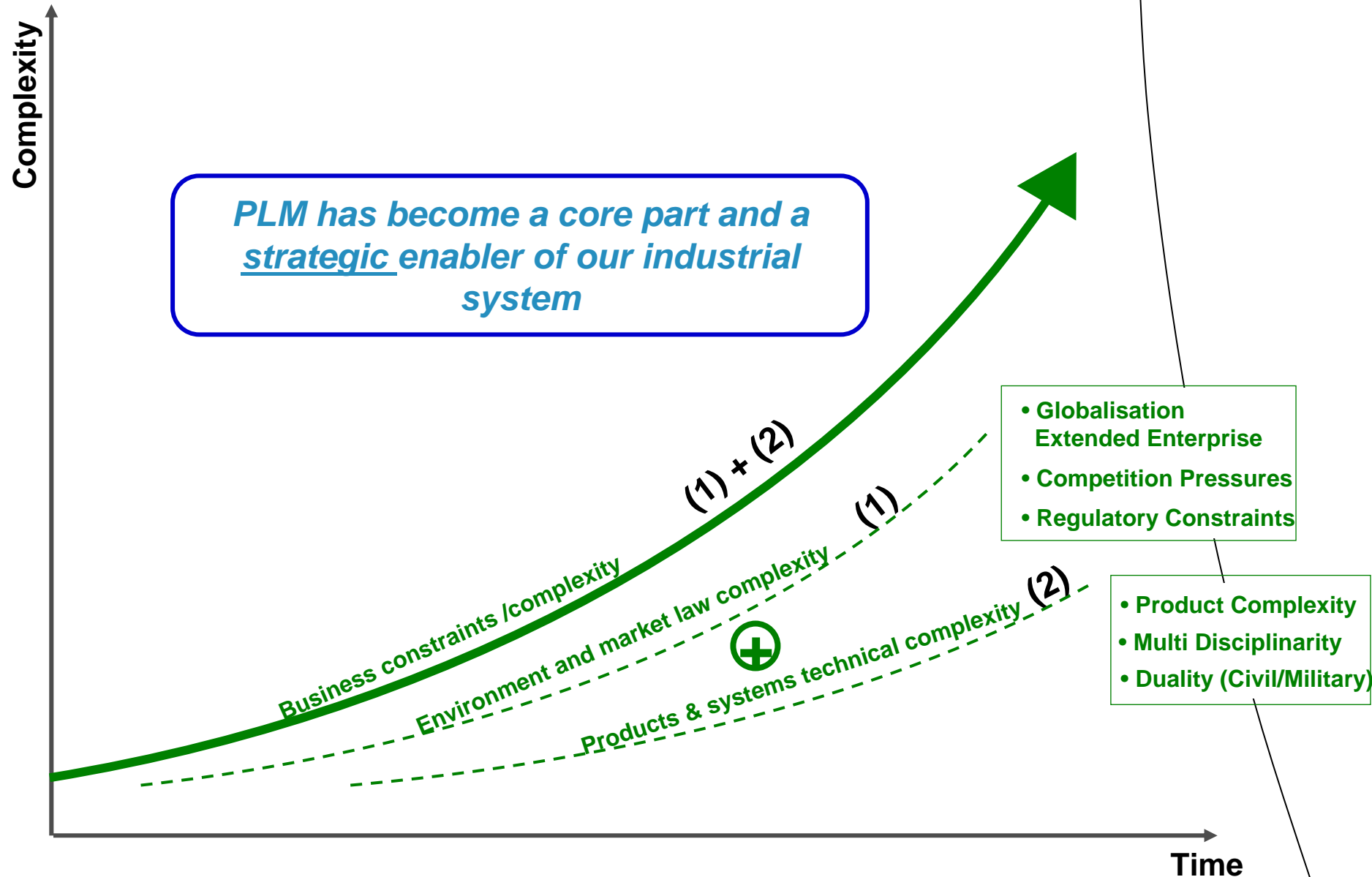
▪ STANDARDS



PLM IS STRATEGIC FOR EADS & ITS OPERATIONAL UNITS







INITIAL CONTEXT

- **Heterogeneity of situations**
(between & inside Div./BUs)

+ NEED OF

- Better protection **against industrial issues**
 - *Golden rules, lessons learnt, support to Governance (KPIs...),...*
 - *Common tools (Backbones) , shared product definition model*
- Stronger driving of **PLM solutions Providers**
- Sharing of **common services**
 - *Common training, technical support,...*
- Cooperation and **mutual support between BUs and different sectors (Military, Civilian, Space)**
 - *Efficient transfer of workload, expertise, readiness of high level skills & capabilities → balanced relations*
- **World Wide Enterprise globalization → adapted strategy & means. Harmonized processes in front of partners**
- **better influence on standards**

THE PHENIX PROGRAMME

PHENIX is the acronym for
“PLM Harmonization for ENhanced
Integration and eXcellence”

- Launched in 2007
- Objective: innovative harmonization of PLM between all EADS Operational Units
- Sponsored by the EADS CEO and the EADS Executive Committee
- Belonging to the EADS strategic priorities

Lead time & cost
reduction

Answer to the increasing
complexity of business

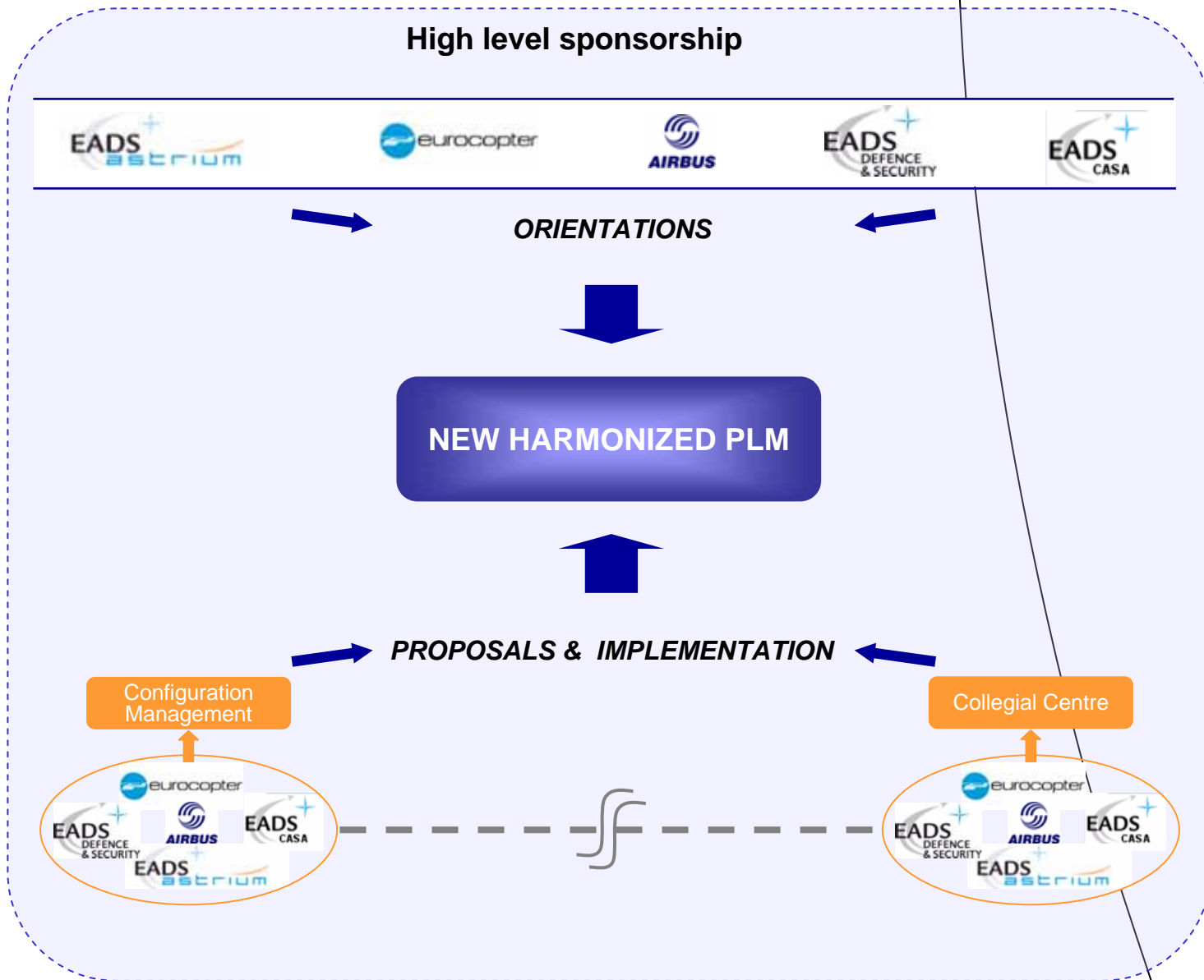
PHENIX METHODOLOGY



Multi divisional
integrated approach

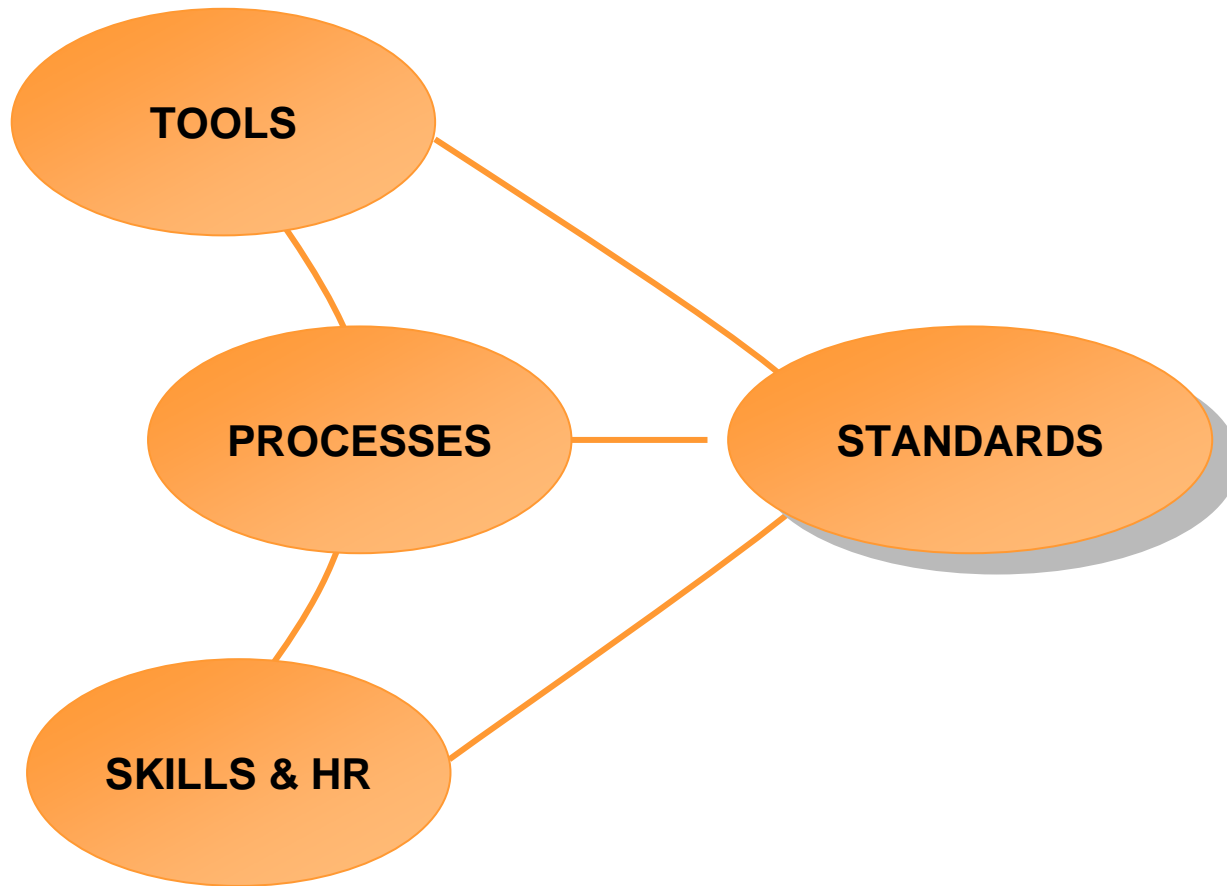
"Integration"
Process

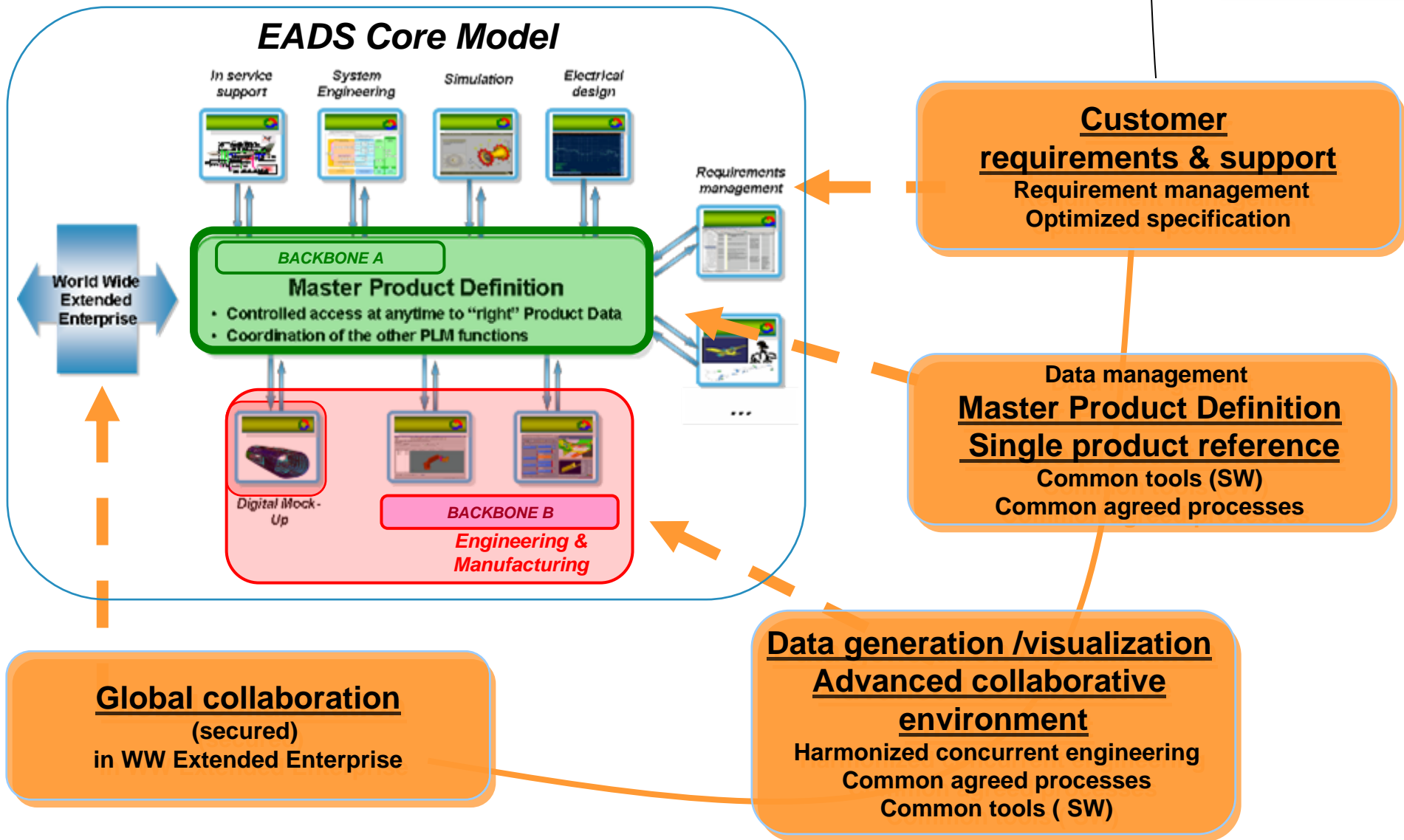
Multi divisional
integrated approach



SOME PHENIX KEY DRIVERS

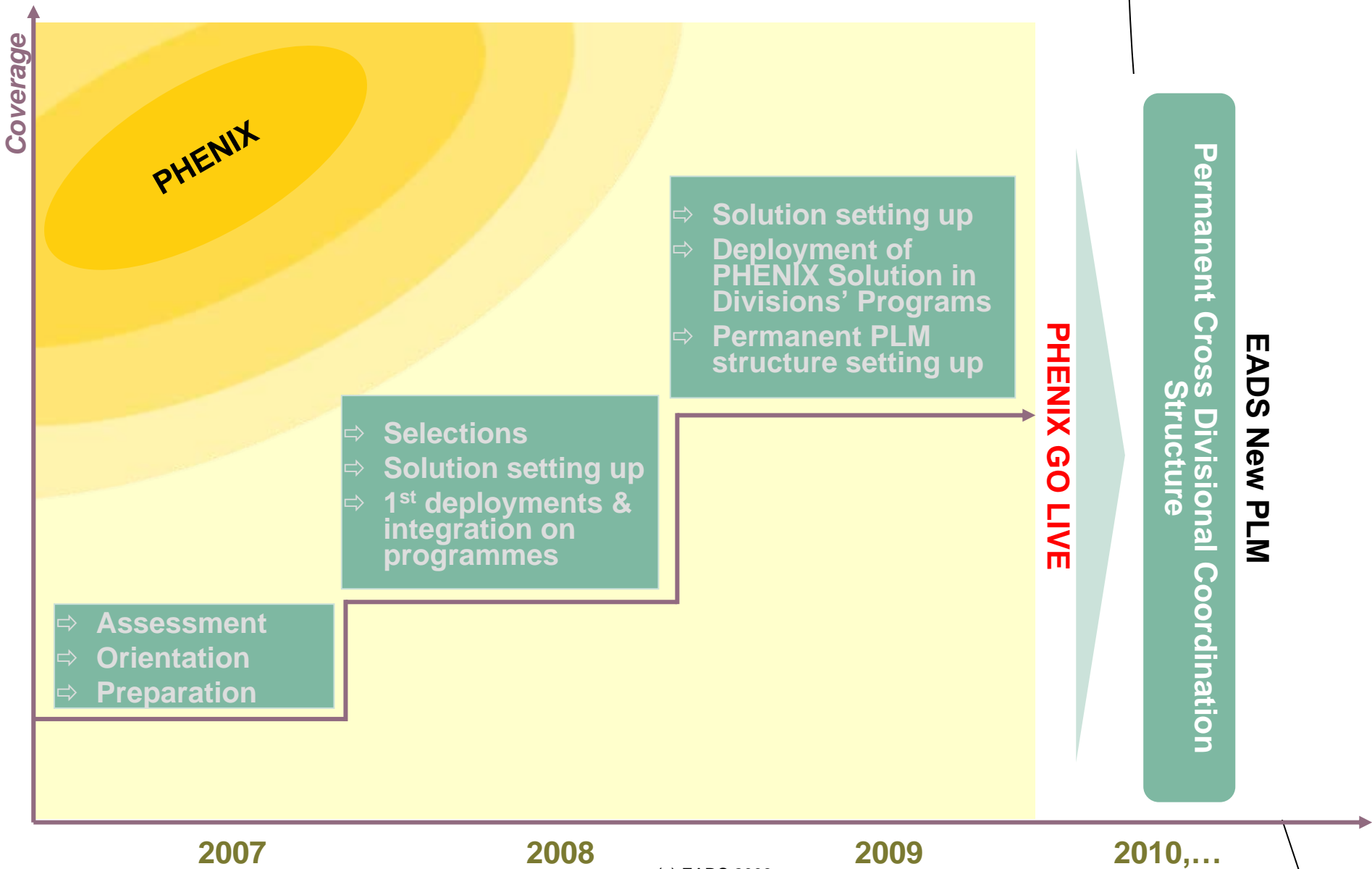
Efforts are concentrated on:





SOME KEY ACHIEVEMENTS

First convergence towards harmonization and innovation in 3 years



PHENIX GLOBAL COLLABORATION PHUSION Collaboration processes orchestrator



Pressure for Risk sharing and serialized launch of new products leads to outsourcing of 70-80% of the value chain



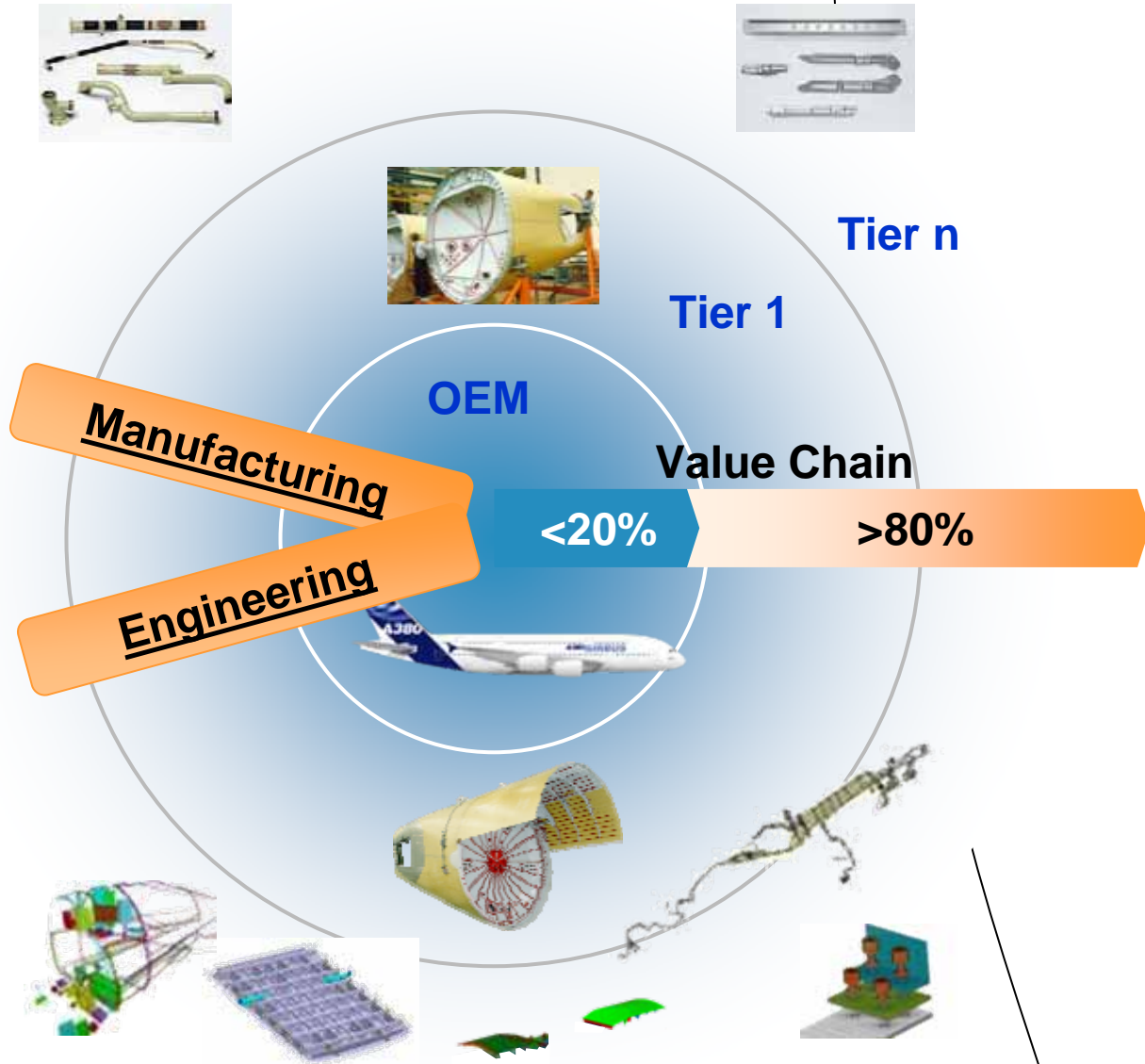
Not only Build to Print but also Engineering is increasingly outsourced



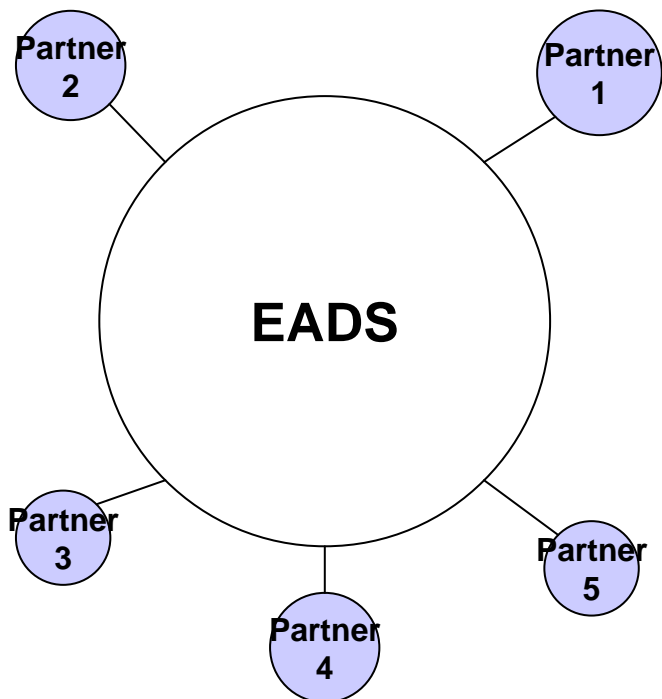
Tier 1 takes over significant responsibilities for the product in all life cycle phases



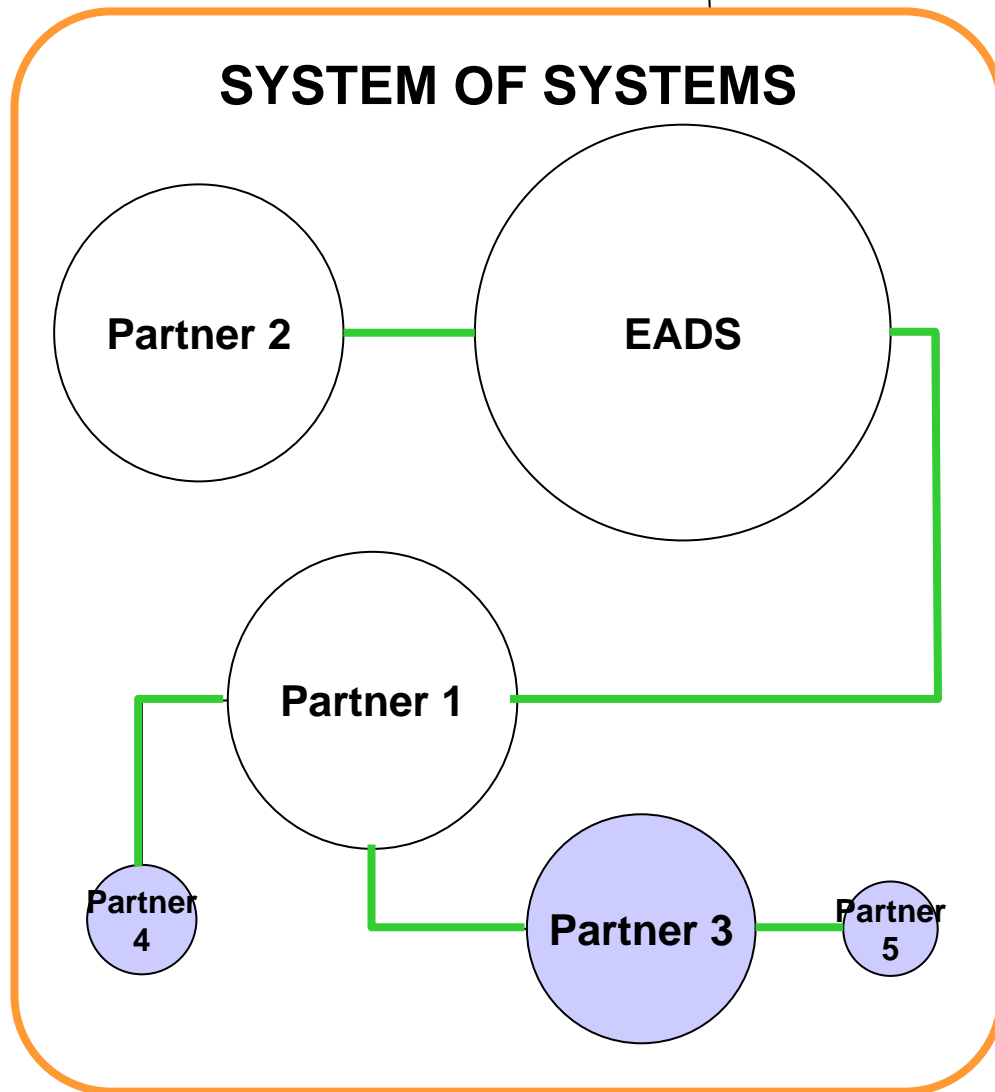
Tier 1 will manage more and more subcontracting, even more (in numbers) than the OEM



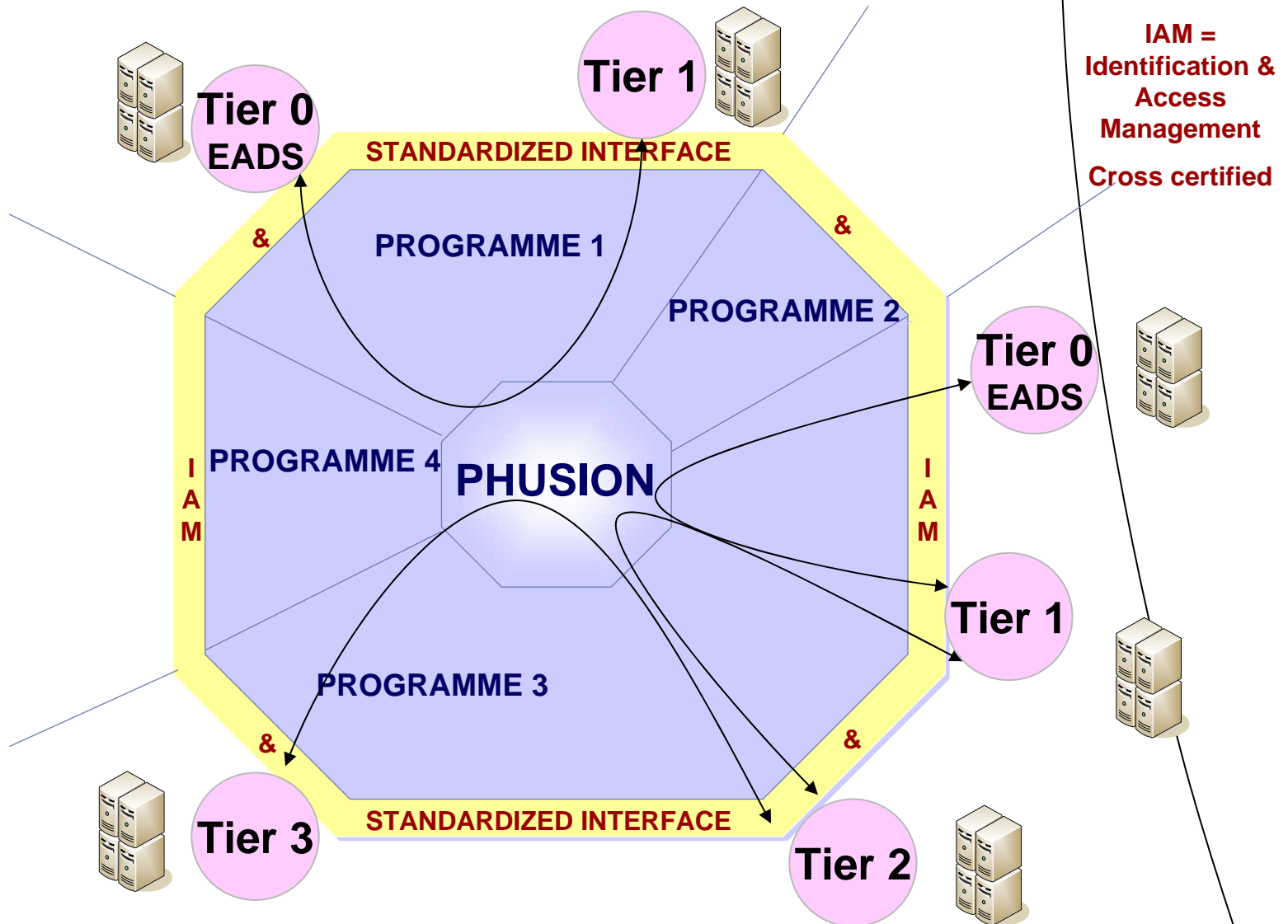
EADS CENTRIC SYSTEM



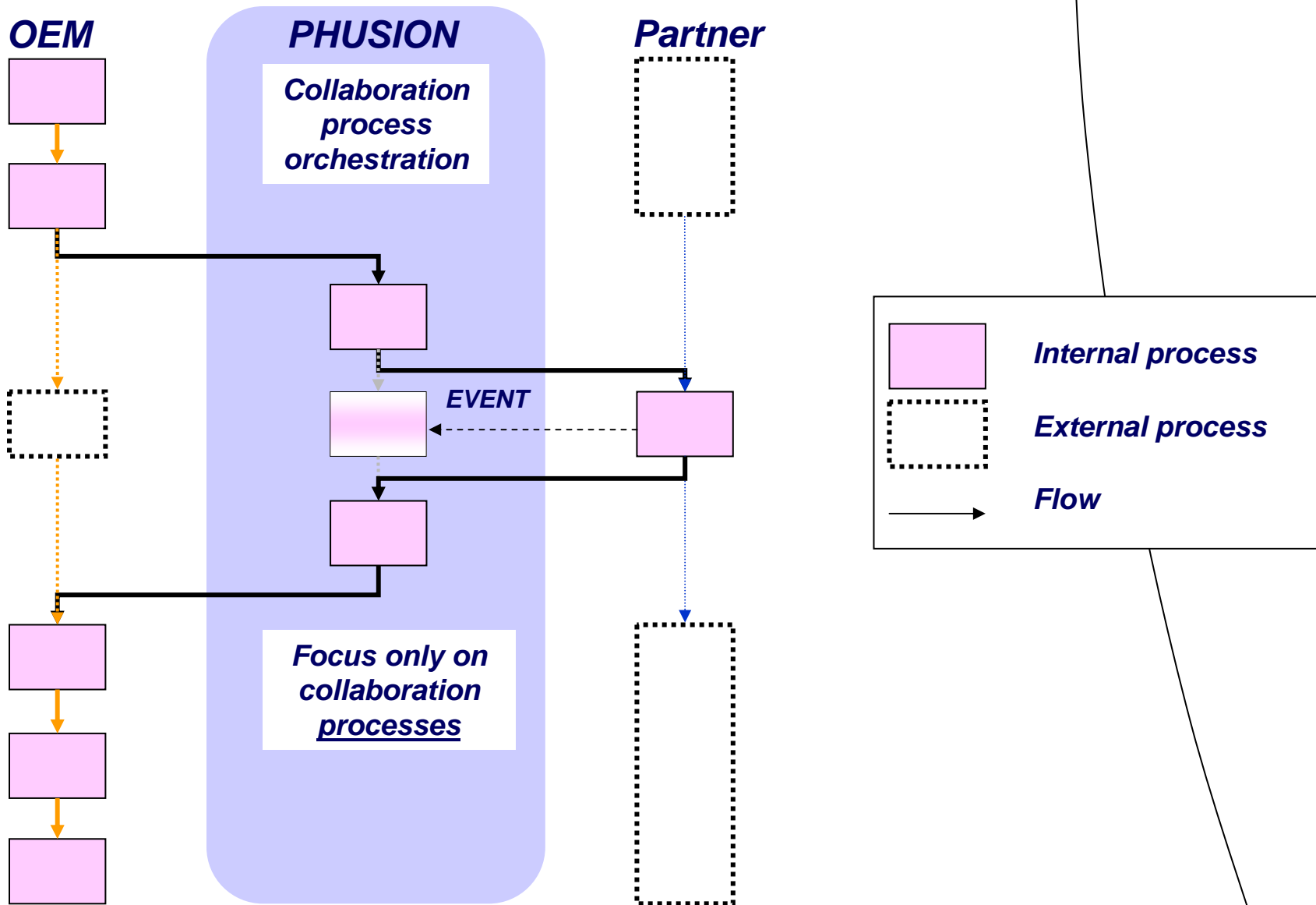
SYSTEM OF SYSTEMS



→ New challenge: Tier-0 to Tier-n interoperability



→ The technical solution for Tier-0 to Tier-n interoperability



→ Advanced collaboration services

- The PHUSION orchestrator enables partners to access advanced services for collaboration: Read/ consultation, Digital mockup review, Co-design, Specific services (clash detection),
- PHUSION allows a concurrent **use of collaboration tools and services** based on a set of shared data in compliance with the Intellectual Property protection rules, as partners work in a neutral secured environment

→ Security

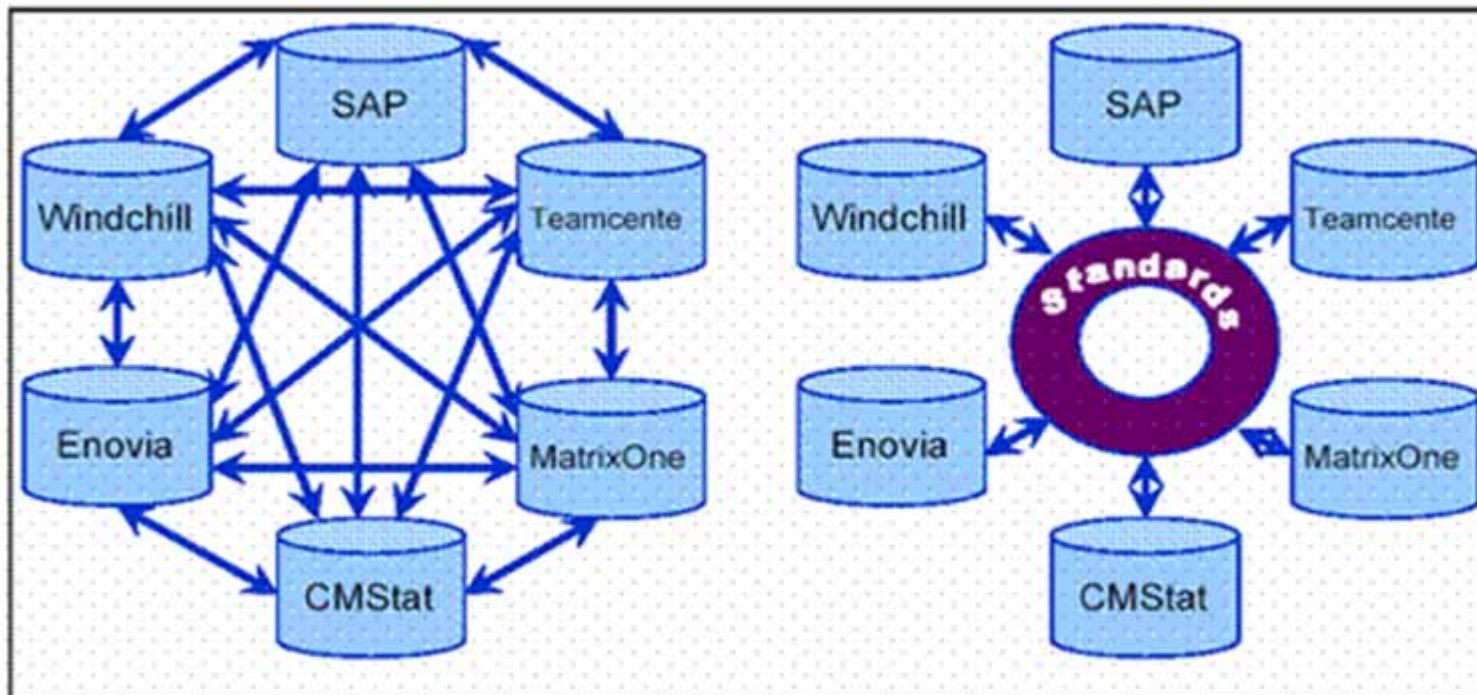
- As collaboration is done through it, the orchestrator can ensure security **compliance with EADS security policy** : there is one collaboration channel per partner and no external access to domestic systems and data.
- In case of high security constraints, it will be possible to implement a **special instantiation** in the EADS business unit.

→ Standardisation

- PHUSION connects partners through a **standardized interface**, which enables the partners to use of their own processes and tools
- **data models, collaboration processes and tools are standardized** in order to facilitate the connection with multiple partners.

STANDARDS

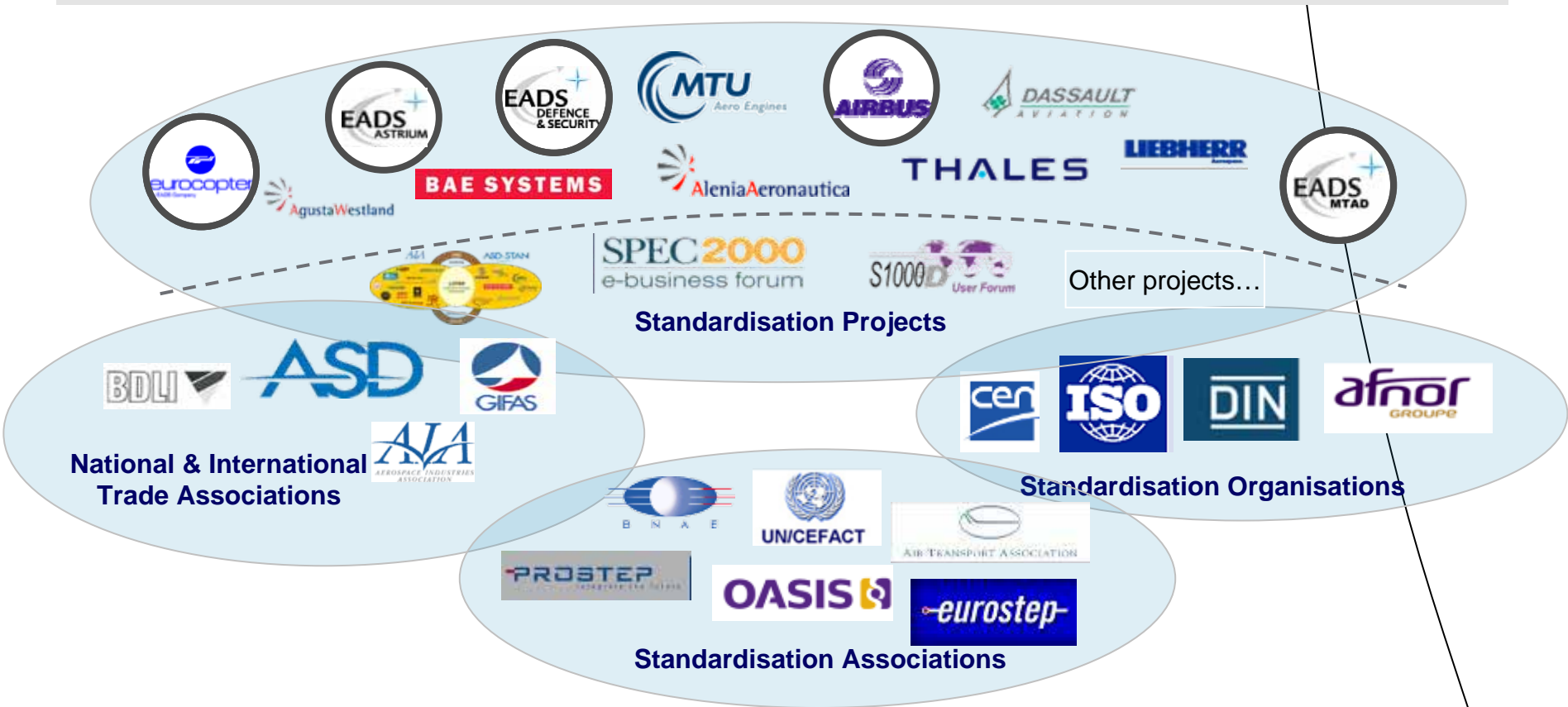


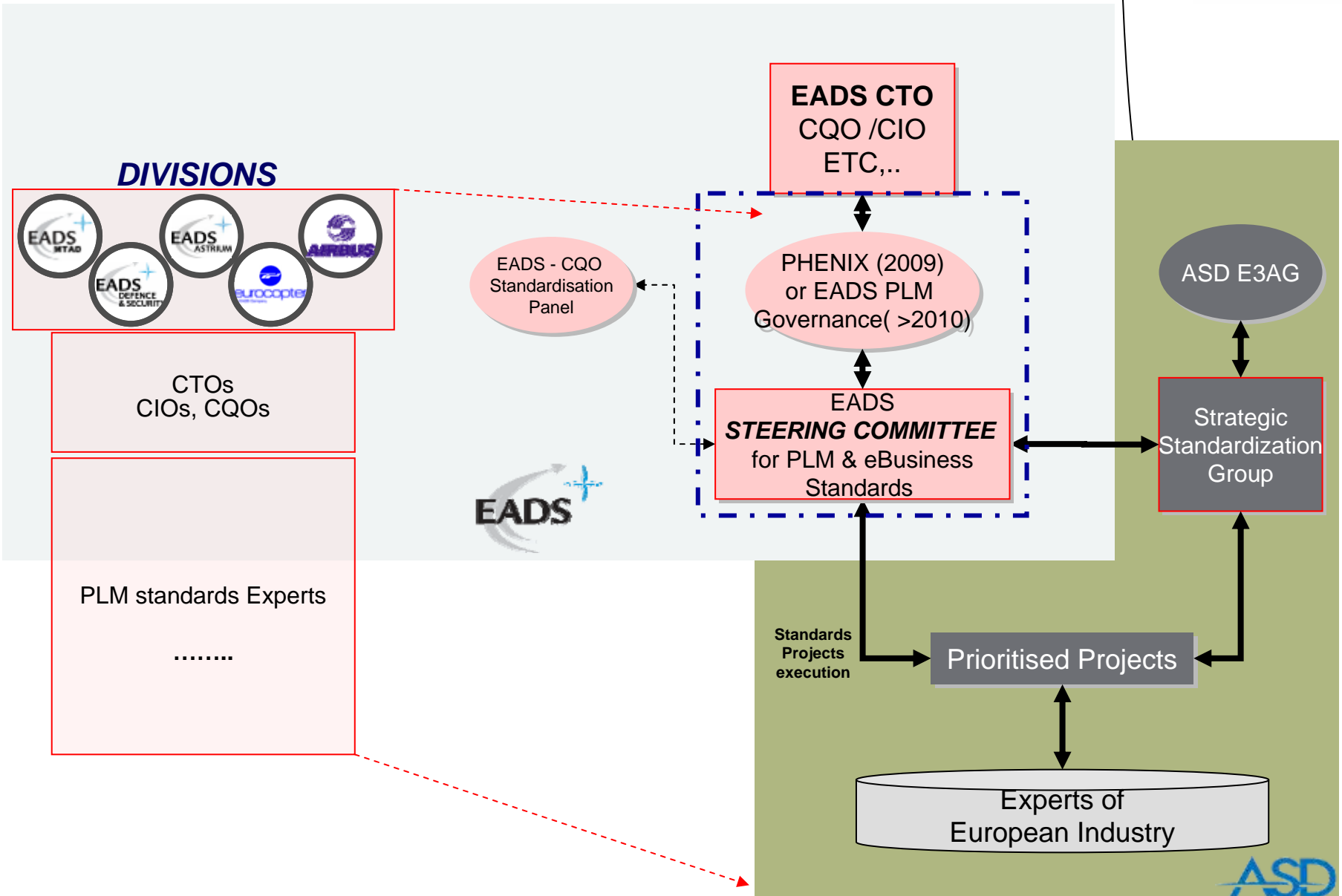


The use of standards allows interoperability in PLM:

- Within the Group between internal tools
- Within World Wide Extended Enterprise between heterogeneous systems (EADS vs Suppliers, partners, etc.)
- With the customer support and for operational purposes (ex NATO interoperability)
- For the Long Term Data Management and Archiving ...

- Many isolated initiatives and projects
- Leading US aerospace & defence position regarding eBusiness
- Many different IT solutions based on different technologies and standards
- Limited number of experts in Europe
- Tiers 1 and SME are not involved





THANK YOU

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