

*Competitiveness and Innovation
of the Aerospace & Defence Industry*



**Worldwide launch of
BoostAeroSpace
European Aerospace Digital Hub**

Paris AirShow, June 21st, 2011

Jean Botti, EADS

Pierre Faure, Dassault Aviation - AirDesign

Matthias Naumann, EADS - AirSupply

Jean Ferlus, Safran – AirCollab

Patrick Boquet, Thales - AirSecure

<http://www.boostaerospace.com>



BoostAeroSpace leadership

EADS / AIRBUS



Jean Botti



Guus Dekkers



Matthias Naumann



Philippe Laflandre

**DASSAULT
AVIATION**



Jean Sass



Pierre Faure

SAFRAN
AEROSPACE · DEFENCE · SECURITY



Denis Vercherin



Jean Ferlus

THALES



Roger Dernoncourt



Patrick Boquet

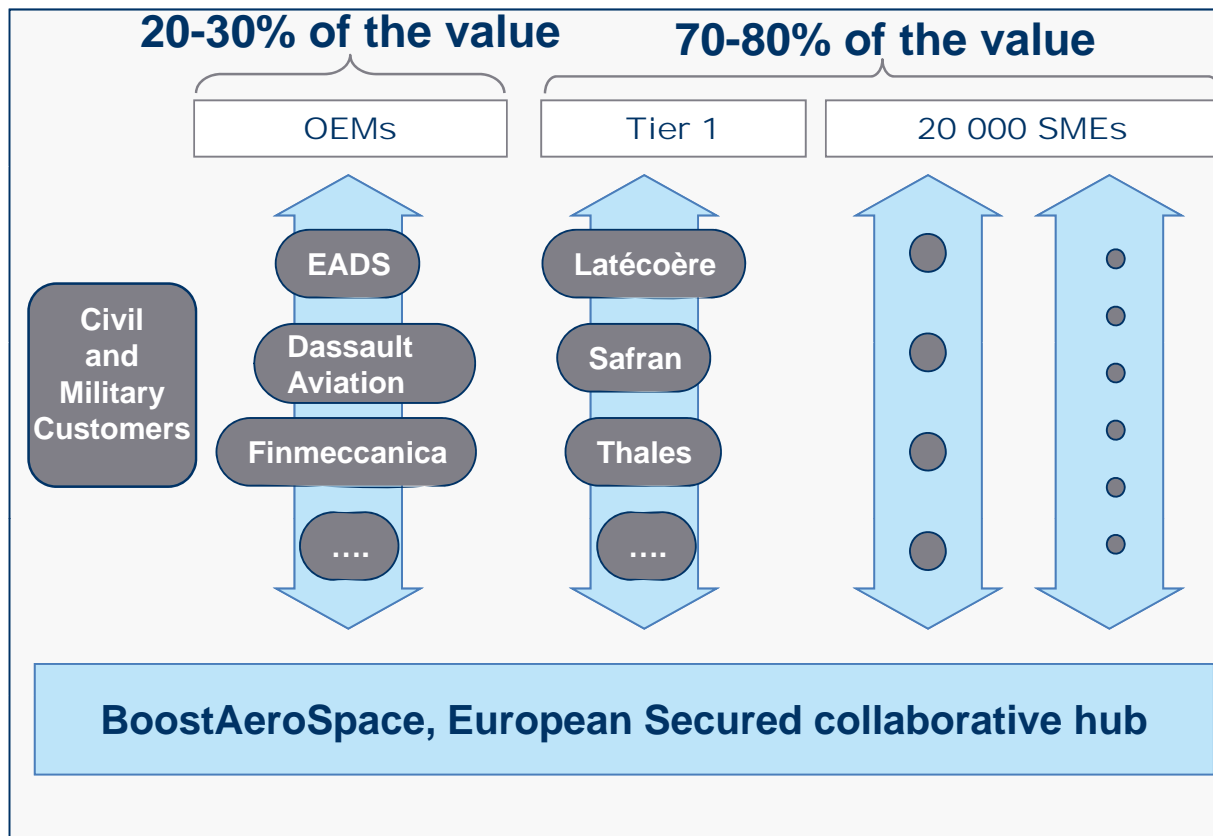
1. BoostAeroSpace Vision and Ambition

2. BoostAeroSpace Services

- ▶ AirSupply
- ▶ AirDesign
- ▶ AirCollab

3. BoostAeroSpace Deployment

BoostAeroSpace, a joint initiative to increase European Aerospace & Defence competitiveness...



...because competitiveness must be organised at industry level

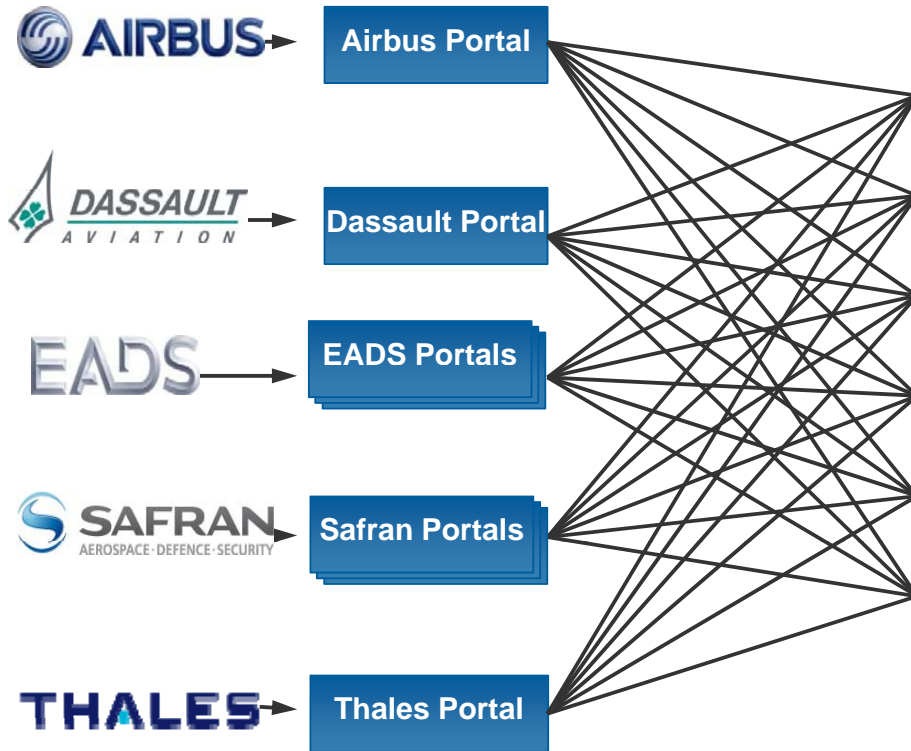
Digital integration of the Supply Chain key factor of competitiveness ... but individual portals don't allow the multi-tier collaboration



- ▶ **Before BoostAeroSpace**
 - Individual Portals of OEMs
 - No Portals for Tier n



- ▶ **No digital integration after Tier 1**
- ▶ **Complexity and overcosts for suppliers**



Suppliers

...

LATELEC . LIEBHERR
AEROSPACE . MESSIER
BUGATTI . AUBERT &
DUVAL . EATON
AEROSPACE . PECHINEY .
ROCKWELL COLLINS .
DAHER . HONEYWELL .
EADS SOGERMA
SERVICES . SOURIAU .
TECHNOFAN . THALES
AVIONICS . HAMILTON
SUNDSTRAND . SKF .
ALKAN . PARKER . POTEZ
. RADIALL . TECHSPACE .
ROXEL . MANOIR
INDUSTRIES . AVNET .
AERAZUR .
INTERTECHNIQUE .
RATIER FIGEAC . NEXANS
FRANCE . AIRCELLE .
SMITHS . LISI AEROSPACE
. JOINT FRANCAIS . MAP .
JPR . SAINT GOBAIN .
ROSSI AERO . ECE .
FORGES BOLOGNE .
FENWAL SAFETY
SYSTEMS . KAISER .
DEUTSCH . AMPHENOL .
HELLERMANN TYTON .
FISCHER ADVANCED
COMPOSITE . SAGEM SA .
LACROIX . JEHIER .
KORRY ELECTRONICS .
ACE AERONAUTIQUE .
COMPOSITES AQUITAINE

....

Launch of BoostAeroSpace, a cooperation project in 2009 by Airbus, Dassault Aviation, EADS, Safran and Thales to provide standardized and interoperable services to all industrials of A&D Supply Chain

BoostAeroSpace will increase the competitiveness of the European A&D industry through the digital integration from OEMs to SMEs



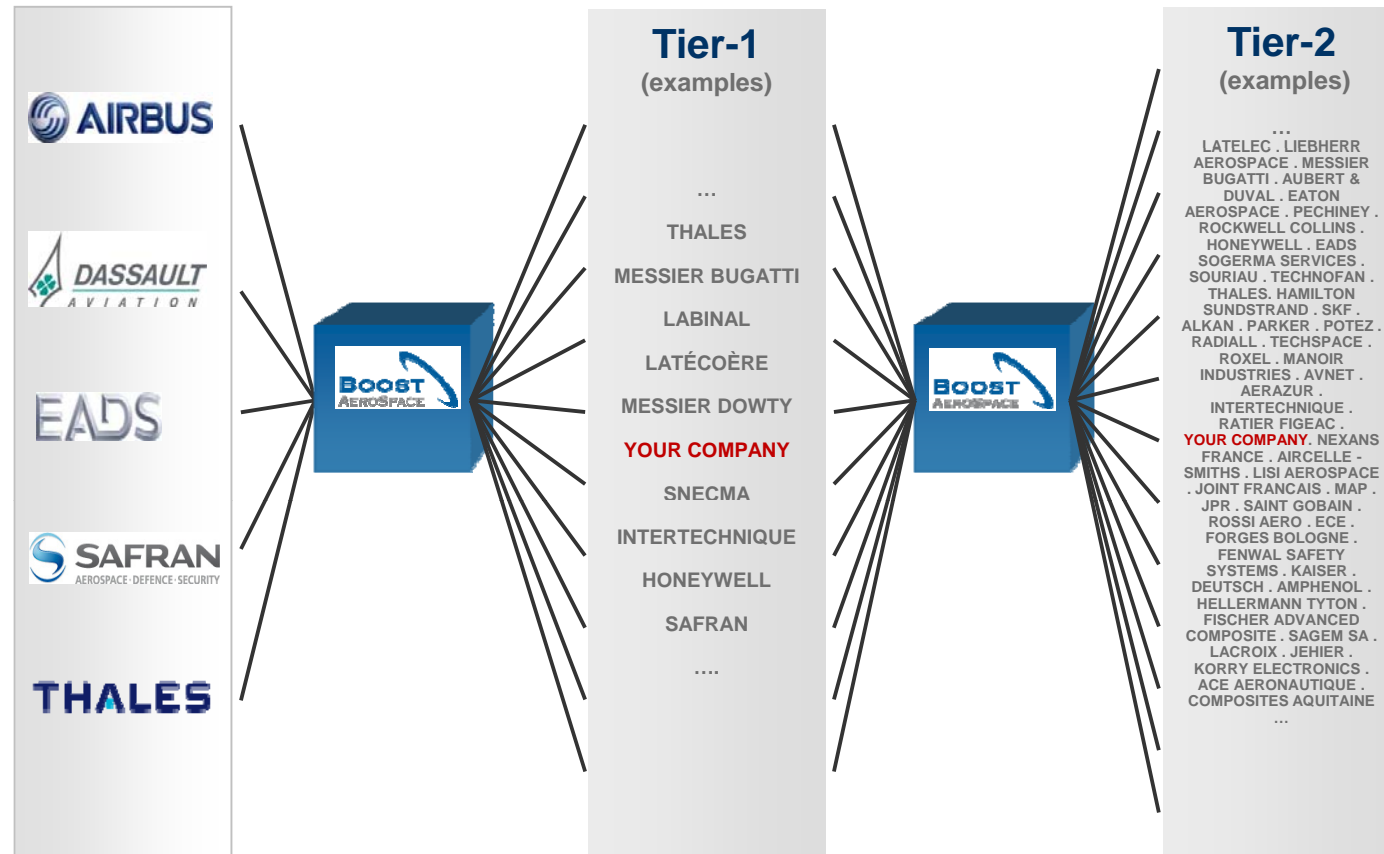
▶ With BoostAeroSpace

- Same Portal for the industry;
- Suppliers able to use it with their own suppliers in Software as a Service mode;
- Interoperability and standards;
- Best practice of our industry;
- Easy and fast to deploy.



▶ Business value

- Increase competitiveness;
- Reduce cycle time & costs;
- Enhance quality



EADS

BoostAeroSpace, high added value services covering the main collaborations of the extended enterprise ...



- ▶ Drawings
- ▶ 3Dmodels
- ▶ Configurations
- ▶ Forecast
- ▶ Purchase Orders
- ▶ Deliveries
- ▶ Documents
- ▶ Projects
- ▶ E-meetings

...with a Service Provider for each service

1. BoostAeroSpace Vision and Ambition

2. BoostAeroSpace Services

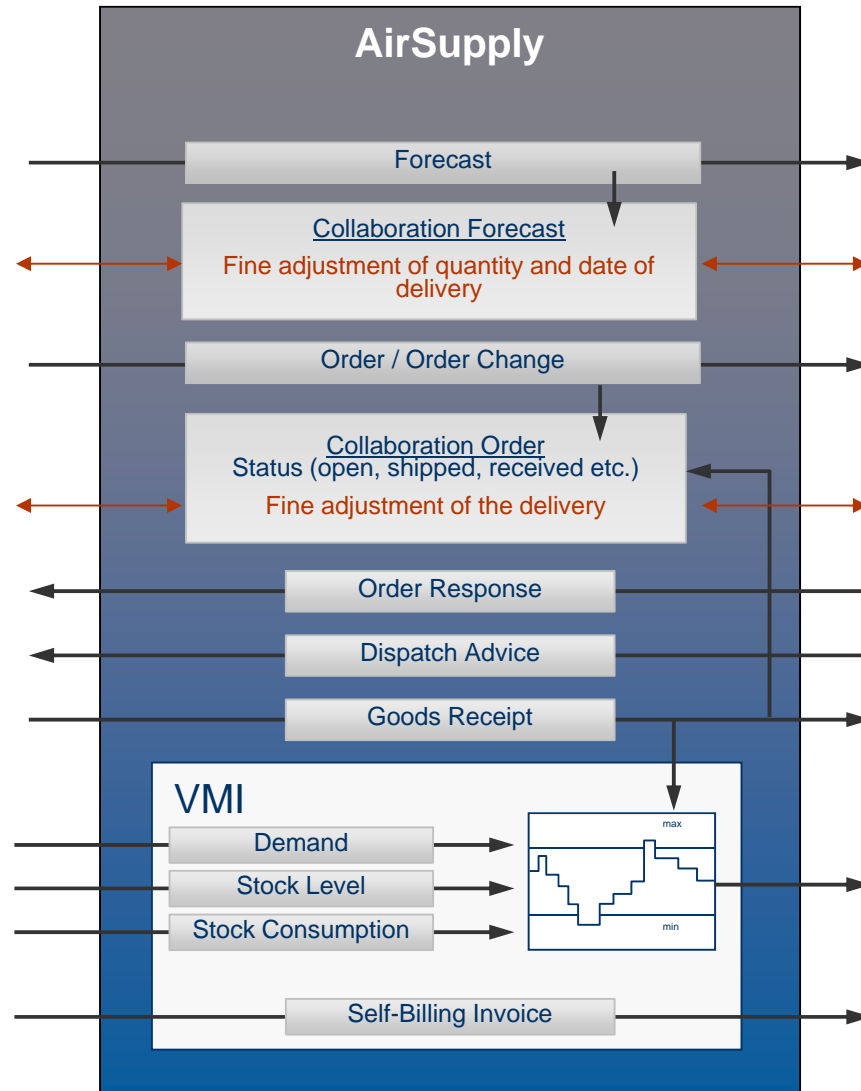
- ▶ AirSupply
- ▶ AirDesign
- ▶ AirCollab

3. BoostAeroSpace Deployment

Overview of AirSupply functions



Customers, e.g.



Suppliers, e.g.

LATELEC . LIEBHERR
 AEROSPACE . MESSIER BUGATTI
 . AUBERT & DUVAL . EATON
 AEROSPACE . PECHINEY .
 ROCKWELL COLLINS . DAHER .
 HONEYWELL . EADS SOGERMA
 SERVICES . SOURIAU .
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 . HAMILTON SUNDSTRAND . SKF
 . ALKAN . PARKER . POTEZ .
 RADIALL . TECHSPACE . ROXEL .
 MANOIR INDUSTRIES . AVNET .
 AERAZUR . INTERTECHNIQUE .
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 LISI AEROSPACE . JOINT
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 GOBAIN . ROSSI AERO . ECE .
 FORGES BOLOGNE . FENWAL
 SAFETY SYSTEMS . KAISER .
 DEUTSCH . AMPHENOL .
 HELLERMANN TYTON . FISCHER
 ADVANCED COMPOSITE .
 SAGEM SA . LACROIX . JEHIER .
 KORRY ELECTRONICS . ACE
 AERONAUTIQUE . COMPOSITES
 AQUITAINE

....

1. Standard Supply Chain Collaboration (Forecast – Call up – Despatch/Receipt)

1. Service Level improvement
 - Reduction of security stock
2. Procurement activity benefits
 - Forecast distribution, response type-in, monitoring...tasks productivity
3. Receipt activity benefits
 - No more data entry just confirmation of supplier data

2. VMI

1. Service Level improvement
 - above 99%
2. Inventory reduction
 - Security stock suppression for Customer (consigned VMI)
 - Global inventory reduction for Supplier (finished + in-process goods)
3. Quality improvement
 - Drastic reduction of non-quality impact
4. Process improvement
 - Procurement, Receipt, Inspection tasks suppression
 - Disputes reduction linked to reception, inspection and billing

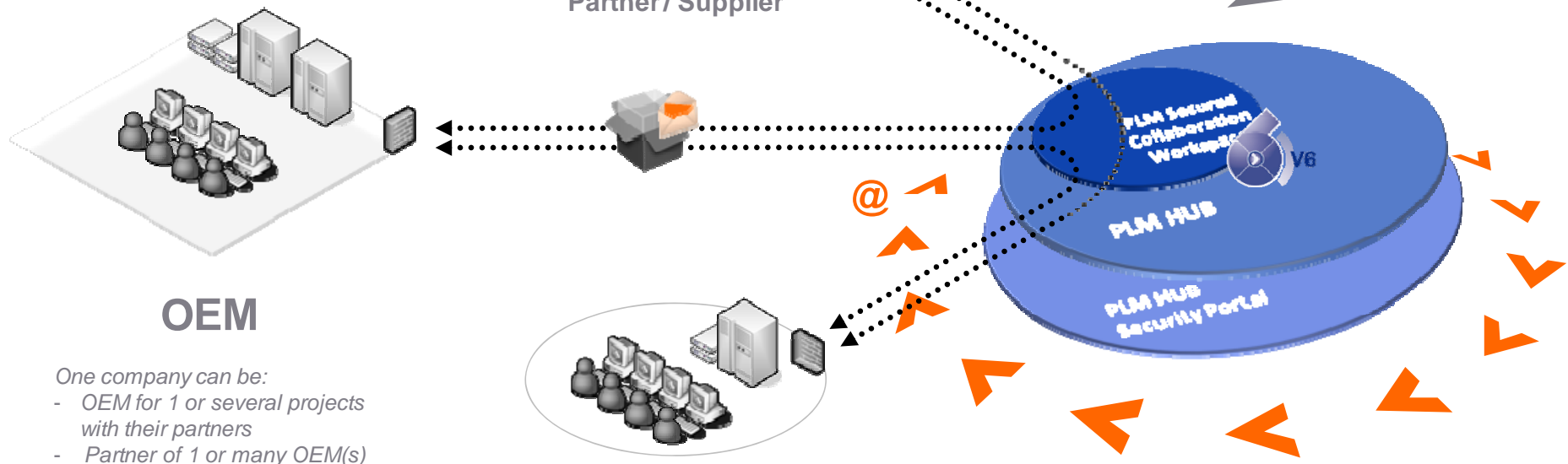
Overview of AirDesign functions

One single place for design collaboration between partners

- ▶ Highly secured and interoperable collaboration platform open to Internet
- ▶ Neutral Workspace for advanced PLM collaboration for Aircraft Program Design and Manufacturing
- ▶ Collaborative DMU to enable context deliveries and assembly/sub-assembly review

AirDesign Functions

- UC1 - Technical Data Package Exchange
- UC2 - PLM Collaboration using Data Exchange
- UC3 - Co-review
- UC4 - Share Catalog & New Part Request Process
- UC5 - PLM collaboration @Hub :



One company can be:

- OEM for 1 or several projects with their partners
- Partner of 1 or many OEM(s)

- ▶ **Increase the PLM digital integration of the supply chain from Primes to Tier n**
 - Enable the sharing of the DMU between the industrial partners
 - Enable the sharing of the DMU between design, manufacturing, production and support
 - Enable suppliers to launch PLM collaboration programs with their own suppliers

- ▶ **Improve the security and the traceability of the exchanges**

- ▶ **Ensure interoperability through the use of international PLM standards**

- ▶ **Increase Design team productivity**

- ▶ **Increase user productivity**
 - No learning curve to collaborate in new projects/communities

- ▶ **Reduce IS costs**
 - Reduced inter enterprises “point to point” software products interfaces and associated costs: standard and unique interface to work with all partners
 - Reduced administration costs

Overview of AirCollab functions



- Manage the repository of all project **documents** in progress
- Manage **dashboard** of the project **tasks** progress and publish
- Manage the repository of **applicable standards** of the project
- Plan project **e-Meetings**
- Organise my project through **sub-projects**
- Manage project **calendars, milestones and alerts**
- Collaborate on **documents creation and validation (Workflow)**

Title	Due Date	Task Status	Delivery
Material purchase	6/4/2010	In Progress	
Validator specifications	6/12/2010	In Progress	Delivery Specifications
Delivery	6/30/2010	Not Started	

With two separate environments

1. **Open AirCollab:** accessible with login/password to start quickly a collaboration with a partner not yet in BoostAeroSpace Circle of Trust;
2. **Secure AirCollab:** accessible with strong authentication only by users belonging to BoostAeroSpace Circle of Trust.

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- 1. Improve and accelerate collaboration across European A&D industry through deployment of a common tool based on “universal” softwares**
 - ▶ Microsoft Sharepoint
 - ▶ Microsoft Lync

 - 2. Increase team efficiency and productivity through**
 - ▶ Sharing of common environment and data
 - ▶ Enhanced real time communication

 - 3. Increase user productivity**
 - ▶ No learning curve to collaborate in new projects/communities
 - ▶ Personal cockpit gathering key information and alerts of all projects/communities he is involved in

 - 4. Reduce IS costs**
 - ▶ Reduced inter enterprises “point to point” software products interfaces and associated costs
 - ▶ Reduced administration costs

Security, foundation of the BoostAeroSpace trust circle

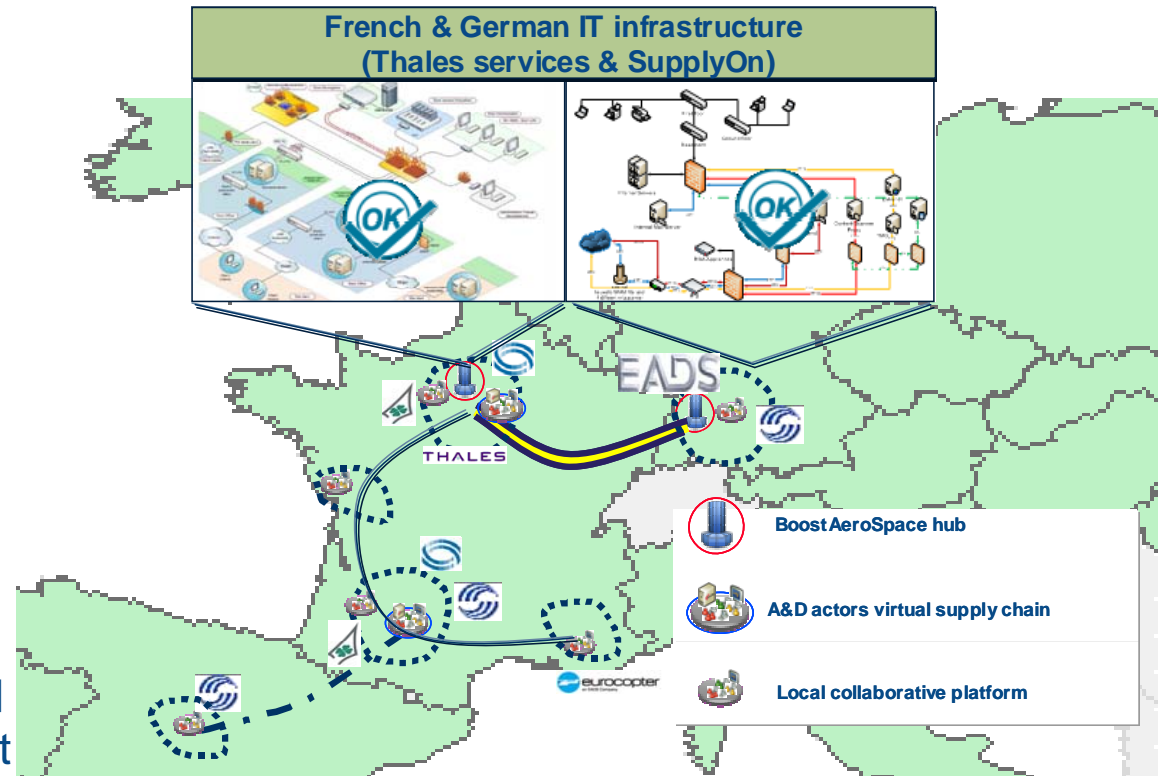
- ▶ **A Security Management Authority (SMA)** composed of the Security Officers will define and ensure the **Security Policy of BoostAeroSpace**

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- ▶ **State of the art secured infrastructure**
 - Strong access controls;
 - Full control of data confidentiality.



- ▶ **Protect the “Common House”** where the collaboration is performed
- ▶ **Share information between trusted parties** which comply to the same set of rules
- ▶ **Protect the data of the Hub users**



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How to join BoostAeroSpace as a Customer ?

I subscribe to BoostAeroSpace, then I buy the services

BoostAeroSpace Circle of Trust



BoostAeroSpace Business Value
 Circle of Trust,
 Issues & Change Management,
 Security Policy ,
 New versions specification and funding,
 User groups animation,
 Deployment coordination

BoostAeroSpace Company (*)

Subscription Contract

Customers
 5 Hub founders
 Other Hub customers : other OEMs, Tier 1, ...

Frame Contract

Run Mode Contract

Buy, Supply, Collaborate

Service Providers

PLM Services SP: DS	Collaboration Services SP: Thales S.	SCM SP: SupplyOn
BoostAeroSpace Portal IAM and Security Services SP: Thales Services		
PKI Services SP: EADS		

Service Providers
 Services
 Support
 Warranties
 Liability

Aerospace Suppliers

①

②

(*) Company creation subject to regulatory authorizations

As a Customer, my Company subscribes to BoostAeroSpace ... and I can deploy in some months



1. **My company signs the subscription contract and**
 - a. Accepts the Security Policy
 - b. I have a voice in the common governance
 - c. I have the guaranty to be part of circle of trust
2. **I buy the Services from the Service providers**
3. **I deploy the Services**
 - ▶ AirCollab : deployment project ~ 1 month
Administration setup - User training - site creation
 - ▶ AirDesign : deployment project ~ 8 months
Process mapping - Step connector - Pilot - Deployment
 - ▶ AirSupply : deployment project ~ 12 months
Process mapping - M2M connect – Migration -Pilots - Deployment

Your points of contact



▶ **Dassault Aviation**

Pierre Faure, AirDesign

pierre.faure@dassault-aviation.fr



▶ **EADS**

Matthias Naumann, AirSupply

Matthias.naumann@eads.net



▶ **EADS**

Philippe Laflandre, Security

philippe.laflandre@eads.net



▶ **Safran**

Jean Ferlus, AirCollab

jean.ferlus@safran.fr



▶ **Thales**

Patrick Boquet, Infrastructure integration

patrick.boquet@fr.thalesgroup.com