

COLLABORATION HUB FOR HETEROGENEOUS ENTERPRISES

The Collaboration Hub for Heterogeneous Enterprises work package will develop a solution covering technical, methodological and organizational issues, which will make the industrial partners less dependent on software and IT-hardware changes. Part of this solution is the provision of a Collaboration Hub, which will form a foundation for the Operational Environment of the Virtual Enterprise. This Operational Environment will give everyone, within the heterogeneous IT environment of all partners, the ability to securely and traceably find and publish information, exchange media and collaborate interactively.

The aim for this Work package is also to integrate the Virtual Enterprise¹ (Fig. 1) based on the approach that any partner – regardless of its present internal IT-solution will be able to participate fully within the Virtual Enterprise. This will enable any Small to Medium Enterprise, regardless of internal IT-system for configuration and project management, to participate in Virtual Product development using the Collaboration Hub as their direct integration point to their present system support (Fig. 2).

The work within the work package is broken down into four tasks:

- **Product Use Case Requirements Capturing** – Defines use case scenarios based on requirements captured through participation in identified work packages from sub-projects aircraft and engine.
- **Collaboration Hub Services** – Defines the Collaboration Hub standard services descriptions, which is the logical definition of the Collaboration Hub.
- **Context and Content Management** – Develops recommendations for standards usage, “business” data structures and contributes in the development of new standards
- **Operational Environment Realisation** – Enables and publishes the structure for the Operational Environment framework and shows practical hands on demonstrations based on basic services.

The technical results so from this work package include:

- Detailing and development of the VIVACE Virtual Enterprise Collaboration-Hub (VEC-Hub) architecture and design (Fig. 3).
- Realize the VEC-Hub core Web Services using Share-A-space for distributed data management and FIPER for workflow.
- VIVACE Use Cases (WEM Update and Validation, Turbine Rotor Design, and 7 Day Proposal) have been analyzed and applied to the VEC-Hub scenario.
- Initial extensions to the information model have been developed
- A requirements model was published to support AP233/AP239 extension development
- Initiate of ISO/NWI for EXPRESS driven binary data representation
- All deliverables from the work package are public

¹ *We have defined a “Virtual Enterprise” to be the network of partners and suppliers that work to together to reach common goals. In this environment there is no single organization that can decide which IT infrastructure, tool set and process that is to be used. These are also very heterogeneous across the typical partnership network.*