

MASTIL will develop new assistance and management tools that will increase flexibility and competitiveness of naval repair and conversion processes.

ITC-20161098

- These tools will make it possible to guide the operator and collect/transfer those incidents that occur throughout the naval conversion process.
- Framed within the FEDER-Innterconecta 2016 Program, the project consortium is led by GHENOVA and complemented by EASYWORKS, SCIO IT and METALSHIPS companies. The University of Vigo and AIMEN take part therein as collaborating entities.
- These technologies will positively impact the manufacturing efficiency, lead-time, process innovation capability and working conditions.

The MASTIL project proposes the development of tools focused on the operator in order to allow for working towards the implementation of new management methodologies and comprehensive help in the naval conversion and repair process.

For this purpose, new manufacturing technologies and methodologies based on the combination of spatial data processing and CAD modelling, along with augmented reality, applied to the naval sector are to be studied. This will be carried out through a new movable tool concept based on a Tablet type PC that will allow the operator be assisted and provide support in the supervision of the naval conversion and repair processes.

In this way, these new TIC tools will make it possible to guide the operator and collect/transfer those incidents occurring throughout the naval conversion process by means of vertical integration of the tools with the management and design (ERP/PDM) systems.

Main Innovations

To fulfil these targets, the project envisages the development of systems able to assist during the acquisition and generation of the CAD 3D model regarding the vessel to be converted as well as the development of scene tracking and tracing systems intended for determining the position and orientation of the operator.

Likewise, the development of two new movable tools guiding the operator during the naval conversion process are also scheduled. In particular, a system of assistance to the outfitting and machinery assembly and a conversion management and supervision system. Finally, an integral management system of the naval conversion process shall be implemented aimed at allowing a bidirectional communication between the engineering and the execution stages.

NOTA PRENSA



These technologies will have a positive impact on manufacturing efficiency, lead-time, process innovation capacity and working conditions and they will provide the conversion processes with flexibility, competitiveness and agility.

Intersectoral collaboration

The project endowed with a budget of 1,23 million euros and a total duration of 30 months, is part of the FEDER-Innterconecta 2016 Program.

The companies taking part in MASTIL cover the entire value chain of the project, from technology developers, naval engineering, product management and shipyards. Led by GHENOVA, an engineering and naval architecture company, the consortium is complemented by EASYWORKS that will be in charge of the product information management as it is an expert in PDM solutions and CAD, 3D design; SCIO IT that will deal with the development of the movable tools and METALSHIPS as final user of the developed technologies.

This group of undertakings join forces with AIMEN Centro Tecnológico in the development of industrial solutions based on a vision and the University of Vigo to get the 3D models through the acquisition of point clouds.

MEMBERS

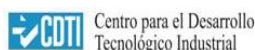


COOPERATING ENTITIES:



Universidade de Vigo

FINANCING



Subvencionado por el CDTI