

## Innovation of productive process of Marghera shipyard and cyber protection of related industrial networks

The project aims at streamlining the productive process through the study and development of an integrated system of innovations to be deployed in particular during the first building steps of hull components.

Currently, the project is passing the assessment phase that will determine the opportunity to set up high quality prebuilt modules, having the purpose to maximise the productive efficiency. Indeed, such modules would enable to shift the effort of the processing phase from outdoor workspaces or on board the finished ship, directly to fully equipped indoor workshops.

The project focuses also on the review of procedures for the next building steps of hull composition. In particular, thanks to the introduction of new tools and equipment, procedures will be modified in order to improve not only the readiness of blocks preparation and sections, but also production efficiency and operations safety.

Marghera shipyard is the site where Fincantieri intends to extensively experiment on all processes the newest and most advanced digital technologies, which will fully leverage new IoT paradigms, properly considering cybersecurity impacts. Such innovations are supposed to have high impact on the definition of suitable solutions and on the actual process design, based on academic literature on digitalization of production processes.