

# The oldest traditional Trawler of Cyprus on its way to the Data Cloud and MemoryTwin

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Lambousa is a 25-meter long wooden boat the type of liberty, built in 1955 in Greece. It was registered in Cyprus in 1965 and was used as a fishing trawler until 2004, when it was withdrawn according to EU Fishing Policy (EU Directive 2008/56/EC). The boat was preserved in the sea, as a monument of the local cultural heritage by the Municipality of Limassol. In 2020, the boat was dry docked and a European fund of more than one million Euro, was acquired for its full restoration. The project began in January 2023, undertaken by a local marine maintenance company. More than 20 different traditional craftsmen were engaged in a combination of simultaneous works and completed the restoration in one year. The project was under the supervision of a municipal engineers' team and an archaeologist-consultant and superintendent, in order to record the restoration procedures and follow traditional shipbuilding technics during the restoration.

This, constitutes the largest, the most in detail renovation, the most expensive and complex multidisciplinary project of its type in Cyprus and most probably in the Eastern Mediterranean.

The UNESCO Chair on Digital Cultural Heritage at CUT team, in cooperation with the Municipality of Limassol and with the support of two EU projects H2020 ERA Chair Mnemosyne and the Digital Europe Eureka3D, undertook the detail 2D and 3D survey of the boat including its entire intangible/memory.

For the digital surveying a high-resolution photogrammetry and LIDAR was undertaken, which concluded with an accurate 3D model. The entire data acquisition and survey were based on the results of the newly published EU Study on quality in 3D digitisation of tangible cultural heritage.

In addition, an online platform for the holistic digital documentation of the boat including its entire biography/memory is under development to serve further research and the multidisciplinary community of users. The complex 3D reconstruction of the trawler and its related records such Paradata and Metadata will be harvested in Europeana and presented during the Europeana's TwinIT-Event at the headquarters of the European Commission in Brussels on the 14th of May 2026.

This is the first time in the EU that a 3D object is harvested in Europeana using the Eureka3D methodology based on the latest requirements from the EU policy on the Data Cloud in Cultural Heritage by utilizing the full power of EGI Data Cloud Infrastructure.

This contribution discusses the boat's characteristics, its restoration procedures and the positive impact for the preservation of the local Maritime Cultural Heritage by creating the exact #MemoryTwin and make all information and data available under open-access to the entire world.

## Topic

Needs and solutions in scientific computing: Digital Twins

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