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Vehicles & Vessels - Design, Development and Production

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LINCOLN: Lean Innovative Connected Vessels

The European vessel industry is traditionally a leader in the sector. In the last decades, to stay competitive worldwide, it has repositioned at the high-end of the market, characterized by specialized design and production with high complexity and technological content.

This implies new challenges in complex product creation with reduced costs, fast design and optimal production time. This is more valid for SMEs and for emerging maritime sectors, where traditional vessels cannot comply with their requirements.

A comprehensive approach starting from early vessels design stages can help to overcome these issues. The Lean Innovative Connected Vessels (LINCOLN, EC grant No. 727982) project proposes an integrated solution based on lean design methodology, internet of things tools, high performance computing simulation and sustainability methods, such as life cycle cost analysis and life cycle cost. This is validated with three specific industrial cases, related to small and medium vessels and mainly coastal activities. The adoption of this approach along the maritime value chain can also foster the introduction of new business models •

