

The Strait of Messina Bridge



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Technical characteristics of the Strait of Messina Bridge

- Central suspended span: 3,300 metres
- Total length: 3,666 metres
- Height of the towers on each side: 399 metres
- Suspension cables: 4 of 1.26 metres in diameter
- Width of the deck: 60.4 metres
- Navigation clearance: 72 metres
- 3 road lanes in each direction
- 2 service lanes
- 2 rail tracks
- Maximum road capacity: 6,000 vehicles per hour
- Maximum rail capacity: 200 trains a day

The Bridge is designed to withstand

- windspeeds of over 200 km per hour
- an earthquake of 7.1 on the Richter scale

Rail runability was assessed by simulating real trains (HS, intercity, regional and freight trains) passing each other at different points on the bridge. Sizing of the bridge was based on the presence of two 750-metre-long freight trains on each track.



The records to be set by the Strait of Messina Bridge

	Strait of Messina Bridge	Existing record
Central suspended span	3.300 m	2.023 m - 1915Çanakkale (Turkey)
Deck width	60,4 m	45 m - 1915Çanakkale (Turkey)
Height of the towers on each side	399 m	318 m - 1915Çanakkale (Turkey)
Diameter of the suspension cables	1,26 m	1,12 m - Akashi Bridge (Japan)
Number of steel wires making up each cable	44.323	36.830 - Akashi Bridge (Japan)

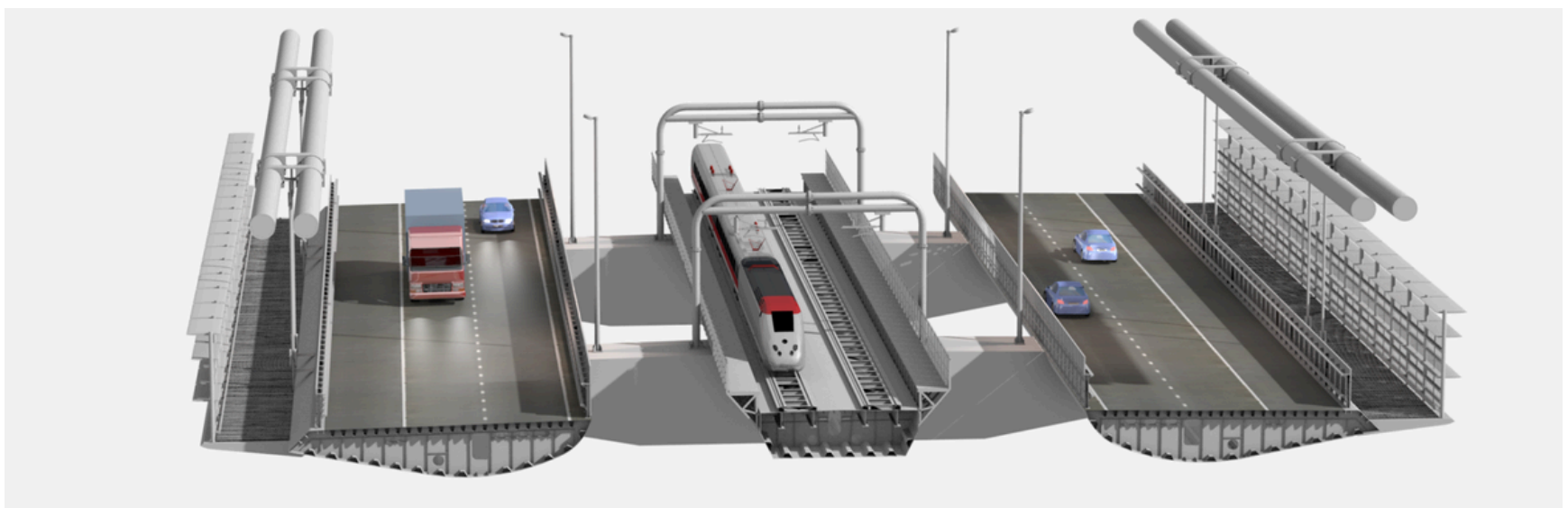


Messina Style

The Strait of Messina Bridge is an internationally recognised engineering solution, painstakingly developed over many years. With its span of 3.3 kilometres, it will be the world's longest suspension bridge.

One of its distinctive characteristics is the fact that it will carry both road and rail traffic, key to maximizing the benefits of the investment.

This solution has been used for various bridges built or under construction in China (Xihoumen), Hong Kong (Stonecutters), the United States (Oakland Bay) and Turkey (Çanakkale), becoming a global benchmark known as the “**Messina Style Deck**”.



Connecting the Bridge

20.3 km of road links

- **56%** through **tunnels**
- 2 lanes and a hard shoulder in each direction
- **A Free Flow** tolling system

20.2 km of rail links

- **92%** through **tunnels**
- railway standards that meet **EU rail interoperability technical specifications**
- **3 new underground train stations**
- completion of the Helsinki-Palermo rail corridor

Reduced journey times

- 1 hour shorter for light vehicles
- 1.5 hours for heavy vehicles
- 2 hours for trains



Socio-economic impact

Construction of the Strait of Messina Bridge will make a major contribution to enhancing collective wellbeing, bringing significant benefits for the national community, whilst improving both economic and environmental aspects.

Cost-benefit analysis:

- A Net Economic Present Value (NEPV) of €3.9 billion
- An Economic Internal Rate of Return (EIRR) of 4.51%
- An estimated reduction of approximately 12.8 million tons of CO₂eq is projected over the 2025-2063 period
- The main socio-economic benefit will be shorter journey times

Enhanced business competitiveness

Improved connectivity will help local firms grow their businesses, attract greater investment in logistics, tourism and trade and boost productivity.

A new metropolitan area in southern Italy

The Bridge will unite two cities, creating an urban area with a population of 400,000.

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A strategic project for the European Union

The Bridge is part of the Scandinavian-Mediterranean multimodal corridor, a rail freight route that is a high priority for the EU, crossing Europe from Helsinki and Stockholm to Palermo and Catania

The European Commission has confirmed that the project is of common interest, due to its ability to help achieve all the four objectives defined in the TEN-T corridor regulation: **cohesion, efficiency, sustainability** and increased **user benefits**.

The assessment also took into account the socio-economic and environmental benefits of the project, as well as reductions in journey times, noise emissions and pollution. The project's ability to increase accessibility and economic development in Calabria and Sicily through improved connections was also taken into account.

Stretto di Messina successfully participated in a European call for applications for the **Connecting Europe Facility for Transport**, open to all EU countries seeking financing for transport projects. In this regard, the European Commission highlighted the public interest in the project and confirmed the Bridge's **strategic role** within Europe.

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Stretto di Messina S.p.A.

Stretto di Messina holds the concession to design, build and operate a permanent road and rail link between Sicily and Calabria. This is a strategic project of priority national interest and forms part of the European Union's infrastructure network.

Shareholder	Percentage interest
Ministry of the Economy and Finance	55,162%
ANAS S.p.A.	36,699%
Rete Ferroviaria Italiana S.p.A.	5,829%
Calabria Regional Authority	1,155%
Sicily Regional Authority	1,155%

Key players in the project

To carry out the project, Stretto di Messina has put in place an innovative organisational structure, involving various players, including the General Contractor, the Project Management Consultant and the Environmental Monitor.



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