

# The New Genoa Bridge

## Project detail

### DURATION

15 months from the beginning of the construction (execution of the first pole for the pile number 6, April 2019) to the inauguration (August 3rd, 2020)

### PROJECT PARTNERS/STAKEHOLDERS

#### Lead agency:

Struttura Commissariale per la Ricostruzione del viadotto Polcevera dell'autostrada A10

#### Main contractor:

Webuild – Fincantieri JV: PerGenova

### CONTRACT VALUE

€202M (AUD \$332M)

### CONTRACT TYPE

Design and build

### DESCRIPTION

#### Background

Built in the '60s, the Polcevera Bridge (also called the Morandi Bridge by its designer) was considered both a modern monument to the city of Genoa and a symbol of Italian engineering. It was one of the most crucial hubs of the country's highway network.

The abrupt collapse of the bridge in the summer of 2018 caused widespread community dismay and resulted in a rift between the western and the eastern parts of Genoa with enormous disruption to traffic. Rebuilding the bridge in the shortest time possible became a national challenge and imperative.

#### The legal framework

The so-called 'Genoa Model' (Modello Genova) has become a synonymous in Italy for a quick procedural model for contract management and realization of complex infrastructural projects. Far from being an extraordinary procedure, it arose due to an Italian law which refers to the EU directive (2014/24/EU) and constitutional principles.

The resulting process that was followed to both award and carry out the work in the shortest possible time ensured quality and respect for the principles of protection of pre-eminent mandatory public interest.

#### Figures

- 18 piers and 2 abutments for the main structure
- 80,000 m<sup>3</sup> of excavations
- 67,000 m<sup>3</sup> of concrete
- 9,000 tons of steel reinforcement
- 17,000 tons of steel metal work
- 10,000 m of piles



## Procurement process

The client's primary objective was to complete the work in the shortest possible timeframe, while complying with applicable rules and laws.

Site planning was developed during the execution of the works, which required immediate investigations and approvals to allow fast execution. For this reason, the authorisation process to allow suppliers and subcontractors to enter the jobsite had to be rapid.

Customer and Works Management were organised with a performance focused technical structure and an extremely streamlined chain of command.

This made it possible to contain project approval times and supply and execute contracts in extremely short timeframes (approximately 1/3 of what is considered normal).

The procurement phase continued in parallel with Project development, including extremely short lead times and work cycles running 24 hours a day.

## Delivery process

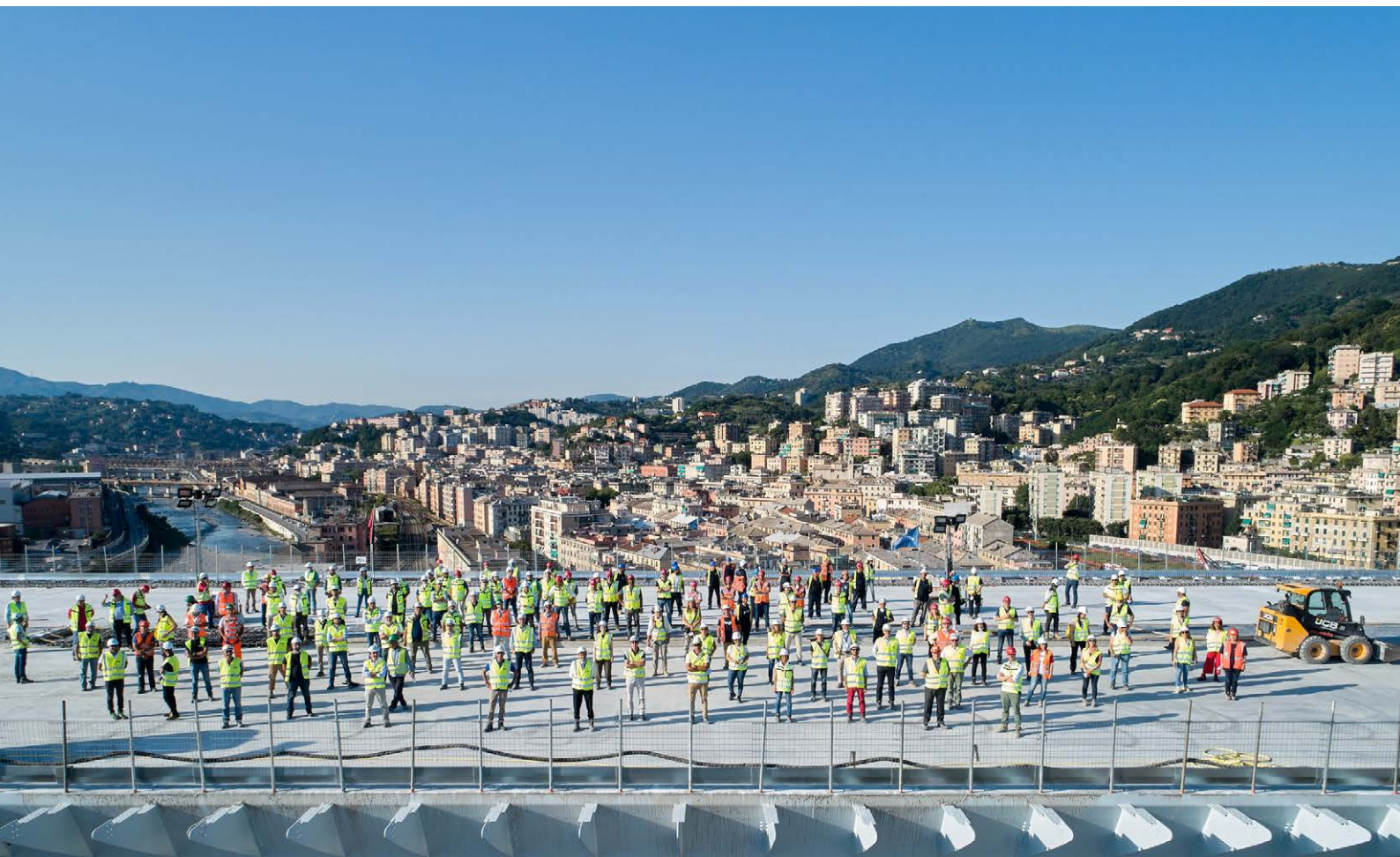
A nationwide imperative has been a key factor in rebuilding the Polcevera bridge, particularly regarding the extremely short timeframe for its construction.

The project was widely backed by all the main political parties and, more importantly, by public opinion. Reconstructing a safe bridge, in the least possible time became a matter of national pride. Media coverage has been unprecedented for infrastructure works.

This had the consequence of an extraordinary push for delivering the bridge, and the CJV was enabled (by means of the special 'Genoa Decree') to swiftly proceed through design and construction phases.

Operational meetings were scheduled frequently to ensure adequate communication and decision-making opportunities and maintain the rapid pace of delivery.

The extremely well-defined chain of command and frequent communication opportunities enabled the resolution of issues prior to these having an impact on execution times.







## Outcomes and achievements

The pace of work was quick and demanding. A month after the tender was awarded in December 2018, the contract was signed (even before the technical designs were completed). The necessary permits were given without delay – a rarity in Italy.

Construction work was coordinated and performed with high efficiency a key priority. Workers began driving piles into the dry Polcevera riverbed while demolishers were still removing the wreck of the Morandi Bridge. Once the first piers were erected, they started installing the steel spans for the deck while the remaining piers were still being completed.

The construction site hummed with activity 24 hours a day, seven days a week – save for Christmas and a few days of bad weather. It did not even close

for COVID-19. By declaring the project of national importance, the government allowed work to progress after extra health and safety measures were put in place to minimise as much as possible the risk of infection among the workers.

From the laying of the first pier to the delivery of the completed structure, it took 420 days and more than 10,100 hours of work. At the peak of construction activity, more than 1,000 people specialised in 40 trades were working on the site, often times at 20 stations contemporaneously.

There was high engagement with Italian companies to support the delivery of this project, with a considerable number of these being small and medium sized. Nearly 330 small to medium sized companies from across Italy provided more than €160 million in supplies and services, equivalent to almost 80% of the value of the project.



*'The Genova Bridge teaches us is an important lesson. It came at the cost of people's lives, at the cost of a city remaining disconnected for two years. We overcame this situation by rebuilding the bridge. In addition to my pride as a builder and the pride of those who did it with their very hands, there is sense of pride among Italians in seeing that we are capable of rebuilding in record time a piece of infrastructure.'*

*'We put a lot of skill and passion into this project. We worked day and night with a sense of civic duty. We were proud to collaborate with 330 small companies from all over Italy, every one of them representing the excellence of our 'Made in Italy'. It was an example of team spirit, the same that inspires our Progetto Italia: practicality, extraordinary competence and passion. Today we deliver the keys to the bridge that belongs to all Italians. We show the world that we are able to create public works that are innovative and safe, because the lives of those who work and use bridges, roads, trains and metros every day remain an absolute priority. We unfurl this flag of commitment and success to recover so many lost years and opportunities, working to help the country take a new turn so that we can leave an inheritance to the next generation.'*

*PIETRO SALINI, CEO Webuild*

*'Today Genoa is starting again. Our country can face and overcome difficulties and can go back to racing.'*

*GIUSEPPE CONTE, Italian Prime Minister*

Genoa's mayor, MARCO BUCCI, called the new bridge 'a message of trust and competence for the future.'

*'We are suspended between grief and pride. The country showed its best side, competence, energy, resilience.'*

*RENZO PIANO, the new bridge's architect and a native of Genoa*

*'It takes at least a couple of months of negotiation to get a contract for important infrastructure like a bridge. But when the extraordinary commissioner came here, he said: "Let's be clear that we only leave this room after we have reached an agreement." That was a Monday. On Friday, January 18, 2019, we signed the contract.'*

*ARTURO COLLINASSI, Head of Contract Department Domestic Operations, Webuild*

*'There was this desire to do the job, a collaborative spirit felt by everybody involved. This should be the norm on a construction site.'*

*STEFANO MOSCONI, Construction Site Director, Pergenova*

