

Report: Experts knew Genoa bridge had weakened 20 percent

August 20 2018, by Colleen Barry And Andrea Rosa



A view of the partially collapsed Morandi highway bridge, in Genoa, Italy, Sunday, Aug. 19, 2018. The unofficial death toll in Tuesday's collapse rose to 43 Saturday. (Luca Zennaro/ANSA via AP)

Engineering experts determined in February that corrosion of the metal cables supporting the Genoa highway bridge had reduced the bridge's strength by 20 percent—a finding that came months before it collapsed last week, Italian media reported Monday.



Despite the findings, newsmagazine Espresso wrote that "neither the ministry, nor the highway company, ever considered it necessary to limit traffic, divert heavy trucks, reduce the roadway from two to one lanes or reduce the speed" of vehicles on the key artery for the northern port city.

A large section of the Morandi Bridge collapsed Aug. 14 during a heavy downpour, killing 43 people and forcing the evacuation of more than 600 people living in apartment buildings beneath another section of the bridge.

Overnight, workers heard creaking noises coming from the part of the bridge that was still standing, so firefighters suspended an operation allowing evacuated residents to retrieve their belongings from apartments under the bridge.

The governor of Liguria, Giovanni Toti, said checks were under way to determine what risks may be present. Work continued to clear the tons of bridge debris that cascaded onto a dry riverbed below.

"The area under the bridge is off-limits, except for extreme necessities, because the firefighters decided to further verify following the noises we had today," Toti told The Associated Press. He said a ministerial commission would decide what apartment and other buildings would eventually be demolished for a new bridge to be built.





Candles and flowers are laid for the victims of the Morandi Bridge collapse in Genoa, Italy, Monday, Aug. 20, 2018. Engineering experts determined in February that corrosion of the metal cables supporting the Genoa highway bridge had reduced the bridge's strength by 20 percent, a finding that came months before it collapsed last week, an Italian newsmagazine reported Monday. (Luca Zennaro/ANSA via AP)

Prosecutors investigating the bridge's collapse have said, among other things, they are looking at possible faulty maintenance or design flaws.

Prosecutor Francesco Cozzi said Monday they are also looking for any possible weakness in oversight. He said he could not say yet whether the presence of a moveable maintenance platform weighing several tons on the bridge's underside contributed to the collapse.

He repeated that the investigation will take time but said "certainly it will



be done in a reasonable time frame."

In its report, Espresso cited the minutes of a meeting of the Genoa public works superintendent, which included Roberto Ferrazza, an architect named to head a government commission looking into the disaster, and Antonio Brencich, an engineer who has been outspoken about the bridge's flaws.

Espresso reporter Fabrizio Gatti told SKY TG24 that a 20 percent reduction in strength would not be significant in a modern bridge, but on a structure with the known defects of the Morandi Bridge it should have merited swifter, more decisive action.



A frame grab taken by a footage of a security camera and released by the Italian Finance Police Monday, Aug. 20, 2018, shows the debris of the collapsed highway Morandi bridge in Genoa, Tuesday, Aug. 14, 2018. (Italian Finance



Police via AP)

"Everyone was well aware of the situation on that bridge," Gatti said.

But after that report, former Transport Minister Graziano Delrio told a news conference Monday that "no one ever signalled the necessity of limiting traffic" on the bridge.

Still, bidding on a 20-million-euro (\$22.8-million) contract to reinforce two of the major supports for the bridge, including one that collapsed, was scheduled to close next month.

The Italian government, meanwhile, appeared divided on how to proceed in relation to Autostrade per l'Italia, the company that operated the section of highway that collapsed.

Transport and Infrastructure Minister Danilo Toninelli was quoted by the Milan daily Corriere della Sera as saying that he supported the nationalization of Italy's toll highways like the including the bridge.





A frame grab taken by a footage of a security camera released by the Italian Finance Police Monday, Aug. 20, 2018, showing a section of the highway Morandi bridge falling down in Genoa, Italy, Tuesday, Aug. 14, 2018. (Italian Finance Police via AP)

"Think of all the revenues that would return to the government through tolls, to use not to donate to shareholders' dividends but to reinforce the quality of service and security on our roadways," Toninelli was quoted as saying.

But Deputy Premier Matteo Salvini, who is also Italy's interior minister, told reporters he remains in favour of public-private cooperation in infrastructure.

Premier Giuseppe Conte says procedures have begun to revoke



Autostrade per l'Italia's concession to operate some 3,000 kilometers (nearly 1,900 miles) of Italian highways, about half of the total highways operated by private companies.

Italy's main union confederation estimates it would cost Italy between 15 billion and 18 billion euros to revoke the highway rights.

The company that owns Autostrade, Atlantia, closed down 4.6 percent at 18.43 euros Monday, after a late opening due to volatility. It shed 22 percent last Thursday, the first trading day after the government announced its intentions, before returning to positive territory Friday.

© 2018 The Associated Press. All rights reserved.

Citation: Report: Experts knew Genoa bridge had weakened 20 percent (2018, August 20)

retrieved 23 April 2024 from

https://phys.org/news/2018-08-experts-knew-genoa-bridge-weakened.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.