Venice

Location: The historic city of Venice stretches across 117 small islands in the marshy Venetian Lagoon along the Adriatic Sea in northeast Italy.

Size: Approximately 415 km², of which 260 km² is a lagoon and 155 km² comprised of land above sea level: mainland, islands, littorals.

Population: 270,000 of which 90,000 living in the “water city“.

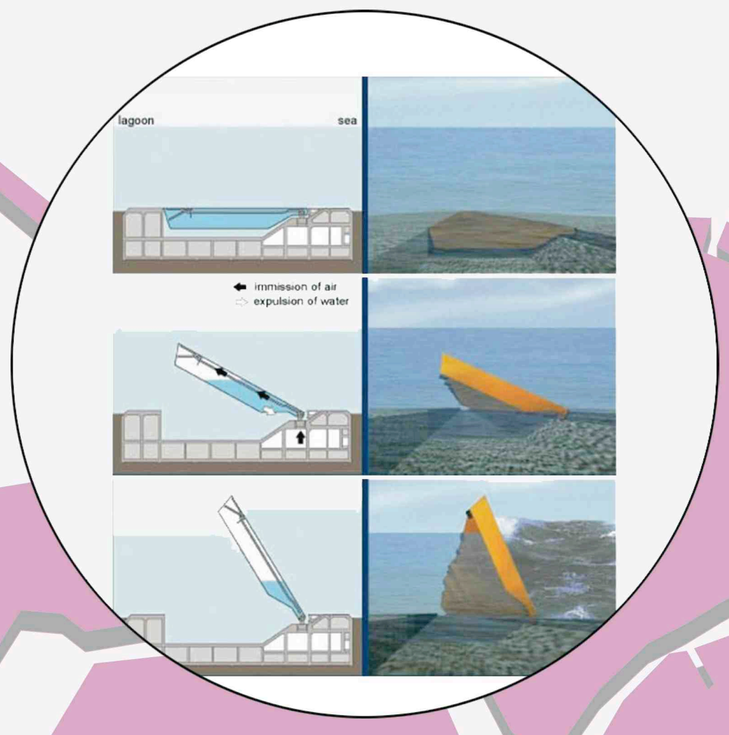
Main risks:
Flooding tide events, “aqua alta”, as well as sea level rise due to global climate change and local subsidence, which makes flooding tides more frequent.

Role model for cultural heritage protection

“In this third millennium, facing global changes, we are committed to defending the city against risk of disasters, not only for the safety of citizens, but also to preserve our cultural heritage, and to make it available to humankind in a sustainable and durable way.”

Giorgio Orsoni, Mayor of Venice

Infrastructure

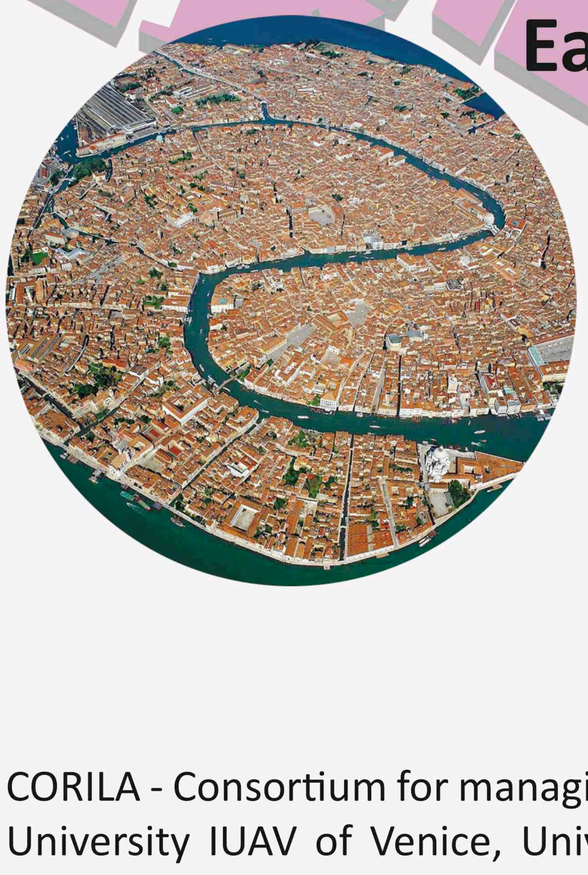


- The mobile tidal barrier system (MOSE), which will defend Venice and its lagoon from floods, is expected to be completed in 2014 and today the progress of work is 60 per cent. MOSE is part of the plan of works defined by the Italian Government and is implemented by the Ministry of Infrastructure and Transport - Venice Water Authority.
- Other interventions, including city pavements rising, inner canals dredging and urban maintenance are implemented directly by the Municipality.
- The physical and environmental defence of the whole lagoon ecosystem is combined with the defence of Venice’s heritage, made of historical buildings and cultural assets of inestimable value.

Safety culture

Citizens are aware of the need to protect their assets and, thus, the cultural heritage of the city, such as the protection and improvement of ground floors; the adaptation of electrical systems; and the arrangement of steel barriers to be applied at the entrance of the buildings.

Early Warning System



Technical staff Tidal at the Forecasting and Early Warning Centre elaborates, three times a day, the two days long tide forecast and communicates it to the citizens through different means: website, local newspapers, info points, graphic displays and answering service. In case of flooding tides, alerting services are activated: siren alarm, call manager, alerting sms and phone calls.

Partners:
CORILA - Consortium for managing the scientific research on the Venice lagoon and its associated bodies: University Ca’ Foscari, University IUAV of Venice, University of Padua, National research Council (CNR), National Institute for Oceanography and Experimental Geophysics (OGS)