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3.10

Cruise Tourism Initiative

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VENICE, ITALY

3.25

2014 WORLD MONUMENTS WATCH FINAL REPORT

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3.20

Cruise Tourism Initiative

Venice, Italy

2014 WORLD MONUMENTS WATCH

FINAL REPORT
NOVEMBER 2014



Fondazione Venezia 2000 cultura e impresa



mesa

On the cover

A view of Venice and
the St. Mark's basin from
atop the campanile of
San Giorgio Maggiore

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Canaletto (Giovanni Antonio Canal),
St. Mark's basin, circa 1738





The passage of a cruise ship in the Giudecca Canal. On the foreground, the Venetian Arsenal



Executive summary

The issue of large cruise ships in Venice came forcefully into public debate since the Government, following the tragic accident that occurred in front of the Isola del Giglio in January of 2012, published the Clini Passera Decree to impose a ban on vessels of medium and large size limitation of transit through the St. Mark's Basin and the Giudecca Canal, stipulating that an alternative route must be chosen.

Many reasons generate doubts about the presence of large ships in Venice. The main problem is how close the ships pass by the historic fabric of the city to arrive at the Maritime Station, through the St. Mark's Basin and the Giudecca Canal. Main concern and the reason of adversity are the danger of accidents and then collision of the ship with the historical city, the issue of alteration of the urban landscape, as well the damage to environment caused by ships. Further objections have been raised regarding the effects generated by the passage of ships in lagoon as their passage is supposed to create a suction effect, which could damages the bottom of the canal and could increases building deterioration caused by wave action.



Top
Bernardo Canal, Venice, a view of the entrance to the grand canal with the St. Mark's basin, XVIII century

Above
Canaletto (Giovanni Antonio Canaletto), View of the Santissimo Redentore and San Giacomo church, 1747-1755

In total seven project proposals were presented. Some of them can be grouped since they share a common approach and we can therefore compare them in five scenarios. The first three of them plan to keep the Maritime Station in its current location and to change only the route of the cruise ships, while in the remaining two scenarios a new maritime station is designed in locations different from the current one. Only in the fifth scenario the cruise ships remain entirely out of the lagoon, through the construction of an outer port.

The scenarios analyzed in the study are:

- P. 47
- P. 53
- P. 59
- P. 65
- P. 71

Scenario 1 — Maritime Station through Contorta Canal

Scenario 2 — Maritime Station behind Giudecca Island

Scenario 3 — Maritime Station through Vittorio Emanuele III Canal

Scenario 4 — A new Maritime Station in Marghera

Scenario 5 — Outer port at inlet of Lido

All scenarios provide for the maintenance of the cruise in Venice, as converge in the awareness of the importance of the sector to the economy of Venice and beyond.

¹

The interviews have been carried out with:

Paolo Costa
President of
Port Authorities

Silvio Testa
One of the leaders
of Movimento
No Grandi Navi

Antonio Giroto
Chief of the
planning area
of the Municipality
of Venice

Matteo Zoppas,
Chief of Venetian
Industrial
Association,
Confindustria
Venezia

Cesare De Piccoli
Promoter of the
Outer Port solution

Claudio Orazio
Mayor of the
Municipality of
Cavallino Treporti

The interviews carried out ¹, as well as various meetings of public discussion that are followed in the city, have revealed what are the most important positions.

The most advanced projects are: the new Contorta Canal to reach the Maritime Station (**Scenario 1**), the new maritime station in Marghera accessible through the existing Petroleum Canal (**Scenario 4**), and the Outer Port (**Scenario 5**).

→ The Contorta Canal project (**Scenario 1**) was presented by Venice Port Authority and it plans to dig a new canal (4 km long, 100 meters wide and 10 deep), allowing cruise to reach the current station maritime passing from the central lagoon, without entering the city. Total cost of the project, following the Port Authorities, would be 148 million euro and the time of completion would be 19 months. This solution is strongly opposed by environmentalists and some experts in hydraulics, who fear that the creation of a new artificial canal could generated environmental damage to the lagoon, causing the loss of sediment and increasing the phenomenon of wave motion, as happened in the sixties after realization of the Petroleum Canal. On the other side, the Port Authority argues that the project could instead be an opportunity for morphological recovery of the southern lagoon sediments using the results from the excavation of the Contorta Canal.

- Marghera project (**Scenario 4**) involves reuse of an area of the first industrial zone, located in the mainland. To access this new station, cruise ships would use the commercial ship route, sailing along the Petroleum Canal. Planned interventions are soil remediation, changing the morphology of some canals of the industrial area to achieve the docks and (if confirmed necessary) excavation of a minor canals to allow two-way traffic. The project would redevelop the waterfront of Mestre/Marghera, triggering a process of urban regeneration of Porto Marghera (industrial area of the city, currently largely abandoned) and at the same time to value the area of the Maritime Station. Estimated cost for the construction of a new ferry terminal in Marghera is 250 million euro, expected time of completion is six years, stepping for "operational modules". The Port Authority underline some critical issues about Marghera project, as accessibility problems (conflict between path of merchant ships and path of cruises), small basins of evolution and the constraint to the passage of large ships near the terminal chemical and oil for safety reasons.

- The Outer Port project (**Scenario 5**), conceived by Mr. Cesare De Piccoli (ex-European parliamentary and Italian politician) and developed by Duferco Engineering, is considered the most appropriate solution from a large part of environmentalists. It is the only project that provides that the large cruise ships (over 40,000 tonnes) don't come into the lagoon, and moor on a special dock located in the sea side part of the inlet of Lido. The passengers, as well as supplies, would be transported by boat to the Maritime Station, where would continue to take place all the transactions related to the departure and arrival of the cruise. Estimated cost of the project is 128 million euro, expected time of completion is approximately 2 years. This project stressed that its advantage is also the possibility to operate in case of exceptional high tide, when the mobile flood gates of MOSE will close inlets. On other side weakness point of the project would be logistic solution, since all transports (people and supplies) are by boat. Port Authority underline that logistic solution would create unsustainable traffic density conditions in lagoon, and also that currents and winds of the inlet place wouldn't provide adequate security for the mooring of large vessels. Also Cavallino Treporti, Municipality very close to Lido's inlet, is opposed to Outer Port project because in their opinion project would damage its environmental, its landscape and its economy.

Whatever will be the decision, it will imply a decisive choice for transformation of the city of Venice and the entire lagoon area

Currently all the three projects, Contorta, Outer Port and Marghera, are under environmental impact assessment (EIA) process. The EIA is a mandatory step for the approval of every great infrastructural project in Italy, and is carried out by a ministerial committee which evaluates the environmental sustainability of the submitted projects. Result of the evaluation can be an approval, or the request for modifications and/or additions, as well as the decision of not feasibility. Therefore, meanwhile awaiting the outcome of the ongoing evaluations, actually the only decisions taken are related to the restriction of transit number and limitation of cruise-ships tonnage allowed.

Considering the complex effects generated by each solution, in terms both of logistics and both of urban environmental implications, and considering the lively public debate in the last months (many observations have been presented for environmental assessments by individuals, organizations and institutions) any real and definitive solution appears still far to reach. Whatever will be the decision, it will imply a decisive choice for transformation of the city of Venice and the entire lagoon area, to its natural and historic environment and for the socio and economical dynamics.



MARITIME
STATION

GIUDECCA
CANAL



The current Maritime Station
located in the insular city

Introduction

In the 20th century one of the main criticalities for the city of Venice was represented by the 1966 tragic flood and by the evermore frequent high waters; the Italian Government answered to these criticalities trying to concentrate significant resources, through the “Special Law for Venice” and through projects dedicated to physical and socioeconomic safeguarding. At the same time private Committees concentrated their efforts to restore and preserve monumental buildings otherwise at risk.

The safeguarding of the lagoon is, as it was, a main problem and every intervention for its protection has to be seen in a single unit vision considering the lagoon as a unique system from the hydrogeological and morphological point of view. UNESCO World Heritage Site Management Plan “Venice and its Lagoon” (2012) points out the main criticalities of Venice in the following way:

The main urgencies that beset the lagoon and the historical settlements, given the advanced stage reached in completing the systems for defence against acque alte, are primarily identified as wave motion (moto ondoso) induced by wind and water traffic, the destruction of the bed of the lagoon caused by the illegal harvesting of shellfish in the lagoon, pollution and the issues related to the conservation of the built heritage and its transformation of its functions due to the progressive loss of resident population in the historical centre and in the lagoon islands and to the growing pressure of tourism, which is in danger of becoming unsustainable.

Attention is to be focused not only on the value of a single monument or building but also to the city of Venice as a whole



This chain of issues is threatening not only the physical integrity of the city but also its cultural and social identity.

Once the safeguarding of Venice from high waters has been solved by the mobile flood gates called MOSE (to be completed by 2016), nowadays, in the XXI century, one of the most significant criticalities is represented by the increasingly touristic flows which are an ever-growing unbearable pressure on the fragile urban fabric and social identity of the historic city of Venice.

Attention is to be focused not only on the value of a single monument or building but also to the city of Venice as a whole. The range of attention has to have a metropolitan dimension in order to start with a new policy. The definition of the main theme can be suggested by the description the UNESCO site gives on tourism and its impact on the socio-economic and environmental structure of Venice.

The uniqueness and originality of the natural, urban, and historical-cultural environmental Values of the “Venice and its Lagoon” Site are key elements in attracting tourism to the area. Tourism is an important economic resource and a substantial development opportunity; however, the extent of the phenomenon and the dimensions it has assumed in the last few years are exerting considerable impacts on and changes to the urban fabric and the management and socio-economic organization of the historic city. In certain periods and on the occasion of special events, the pressure of tourists on the old city and on some built areas of the lagoon territory is so great that it causes huge discomfort to the residents and might be having adverse effects on the environment, to the point of jeopardizing the Site heritage.

With more than 20 million tourists visiting Venice every year, a significant dimension is to be attributed to the big cruise ships which lately have been increasing to the number of more than 5/6 big ships and almost 20,000 passengers on tour in Venice during the weekends.

The management of touristic flows and the definition of a sustainable solution for the big ships are one of the priorities for the city of Venice. The study deals with the issue of cruise ships in Venice, highlighting their impact on the lagoon ecosystem and the city, its importance to the local economy, and the issue of identifying a more sustainable solution for the transit of ships in the city, in accordance with recent government decisions. In fact, many projects identify alternative routes for cruise ships, avoiding the passage through the heart of the city along the St. Mark’s Basin and the Giudecca Canal.

A cruise ship passing through Giudecca Canal







The current maritime station and
the entrance to the Giudecca Canal



Context

Venice Lagoon is made up of a large stretch of water enclosed and protected by the shoreline and the barrier Island of Lido and Malamocco. The presence of the three inlets, Chioggia, Lido and Malamocco, enables the continuous movement twice per day of current input and output, thereby ensuring a constant exchange of water and the health of the entire ecosystem. Over the centuries significant interventions were carried out in the lagoon which generated changes to its hydrogeological structure. One of the latest and most significant interventions occurred at the end of the 50s with the digging of a canal between the inlet of Malamocco and the industrial area of Marghera, called Malamocco-Marghera Canal or Canal of Petroleum, functional for the transit of merchant ships.

Many studies attribute the Canal of Petroleum as one of the main causes of the phenomenon of the loss of material of the lagoon, as it opened up a great route for the transit of currents, which added to the action wave generated by the passage of large ships has led to the leaking sediments. It has been shown that the part of the lagoon to the south of the canal of Petroleum is deepening, transforming into an extension of the sea; mitigation works like the creation of new artificial islands, underwater stone walls, and so on, are not effective in reversing this trend: the natural emerging *barene* in one century have been reduced from over 100 km² to 60 km² in 2000 and today they have been reduced further to 47 km², resulting in the permanent modification of the entire natural environment and upsetting the lagoon's delicate equilibrium.

Among its recommendations the ODEC Territorial Reviews (2010) indicates the recognition and integration into policy of environmental concerns, "Third, given its environmental vulnerability and the fact that 75% of the province of Venice is below mean sea level, the application of a "climate lens" could better protect the region's population and economy. Given its vulnerability to climate change, erosion, rising sea levels, rising temperatures and water pollution, an environmentally blind development model cannot be sustainable in the long-term".

Even the city of Venice, for different causes which are not directly related, has undergone significant changes in recent years, in this case to its socio-economic characteristics. The population of the city of Venice underwent a drastic decrease in the second half of 20th century, particularly in the historical city. Just in last decade, from 2001 to 2011, the resident population of the historical center of Venice declined by more than 10%, from 65,970 to 59,284 inhabitants. The most significant drop was recorded by the population between 25 and 34 years, while those aged over eighty are growing, contributing to the phenomenon of an aging population.

This phenomenon is in contrast to the upward trend in the tourism sector, which has grown significantly, especially in recent years. In the historic center of Venice alone about 2.5 million tourist arrivals were recorded in 2011, with tourist numbers reaching 6.2 million. The total number of tourists who visit Venice, taking into account also those visiting for only a day, the number of tourists is more than 20 million. It is a tourism of short duration, more intense in the summer months, but still suffers from peak attendance at special events.

While tourism is an important economic resource and provides significant development opportunities, the extent of the phenomenon and the scale of past few years, are producing significant impact on and changes to the urban fabric as well as on the management and socio-economic organization of historic city.

In this context cruise ship tourism has particular impact and has grown exponentially over the last 10 years in Venice. From 2002 to 2012 the number of cruise ship passengers has increased at an average annual rate of 13.1% (+1.23 million units in absolute terms), reaching more than 1.7 million passengers who embarked or disembarked in 2011. Based on estimates of growth over the recent years, a modest estimate is that this trend is expected to increase by 2-3% per year.

The size of the cruise ships berthing in Venice is very diverse. They range from small ships of a few thousand tons to large cruise ships of more than 100,000 tons, which are over 300 meters long.

Cruise ship tourism has grown exponentially over the last 10 years in Venice, reaching more than 1.7 million passengers who embarked or disembarked in 2011

The prevalence of the tourists who come to the city, however, arrive with vessels of medium and large size, with a passenger capacity of higher than 4,000 passengers. On weekends, mainly in the period between May and October, 5-6 cruise ships are present in Venice, with an average attendance of around 20,000 people.

The port of Venice plays an important role in the international scene as a homeport, that is a place of departure and destination for cruises, second in the number of passengers only to Barcelona on Mediterranean Sea. The easy accessibility of the port along with the strong attraction of the city has facilitated this role. In general most passengers arrive in Venice to embark on cruises by plane and almost all of them stay in the city a few days either before or after the cruise. It has been estimated that about 16% of hotel stays in 2011 was attributed to the cruise tourism. These aspects make it clear how significant the revenue generated by cruise tourism is, both for tour operators in the city and for all the sectors related to the supply of goods and services to the ship.

At the same time, however, the presence of cruise ships in Venice is considerate a problem, as has been claimed by the committees and environmentalists as well as recognized by the government. The main problem is how close the ships pass by the historic fabric of the city to arrive at the Maritime Station, through the St. Mark's Basin and the Giudecca Canal.





The presence of cruise ships in Venice is considered a problem, as has been claimed by the committees and environmentalists as well as recognized by the government

The large size of vessels compared with the detailed and close urban fabric of Venice raises an issue of alteration of the urban landscape. Main argument against the passage of ships is the enormous damage that could be caused in the event of an accident. It is no coincidence that the government imposed restrictive measures for the transit of vessels following the serious accident that occurred on the Island of Giglio in 2012.

Many also point to the damage to environment caused by ships. A recent study of the Regional Environmental Agency (ARPAV) shows that about 7% of fine dust in the municipal area of Venice is generated by medium-large size ship emissions. Further objections have been raised regarding the damage generated by the passage of ships in lagoon as their passage creates a suction effect, which damages the bottom of the canal and increases building damage caused by wave action.



Administrative frame



5.1

To protect Venice and its lagoon, the Italian Government adopted various special laws, especially since the tragic flood of 1966. Since 1973 a special law for Venice, the first of several, declare it as a site of national primary interest and aim to protect the entire environment and artistic patrimony, protect the hydraulic balance, protecting the environment against air pollution and socio-economic development of the Venetian territory. Moreover, these laws were specifically related to decisions made regarding the implementation of the high water protection system with mobile flood gates called Mose, which is currently nearing completion. The laws provide the necessary funding and define competences and objectives that the various Authorities and Agencies must pursue.

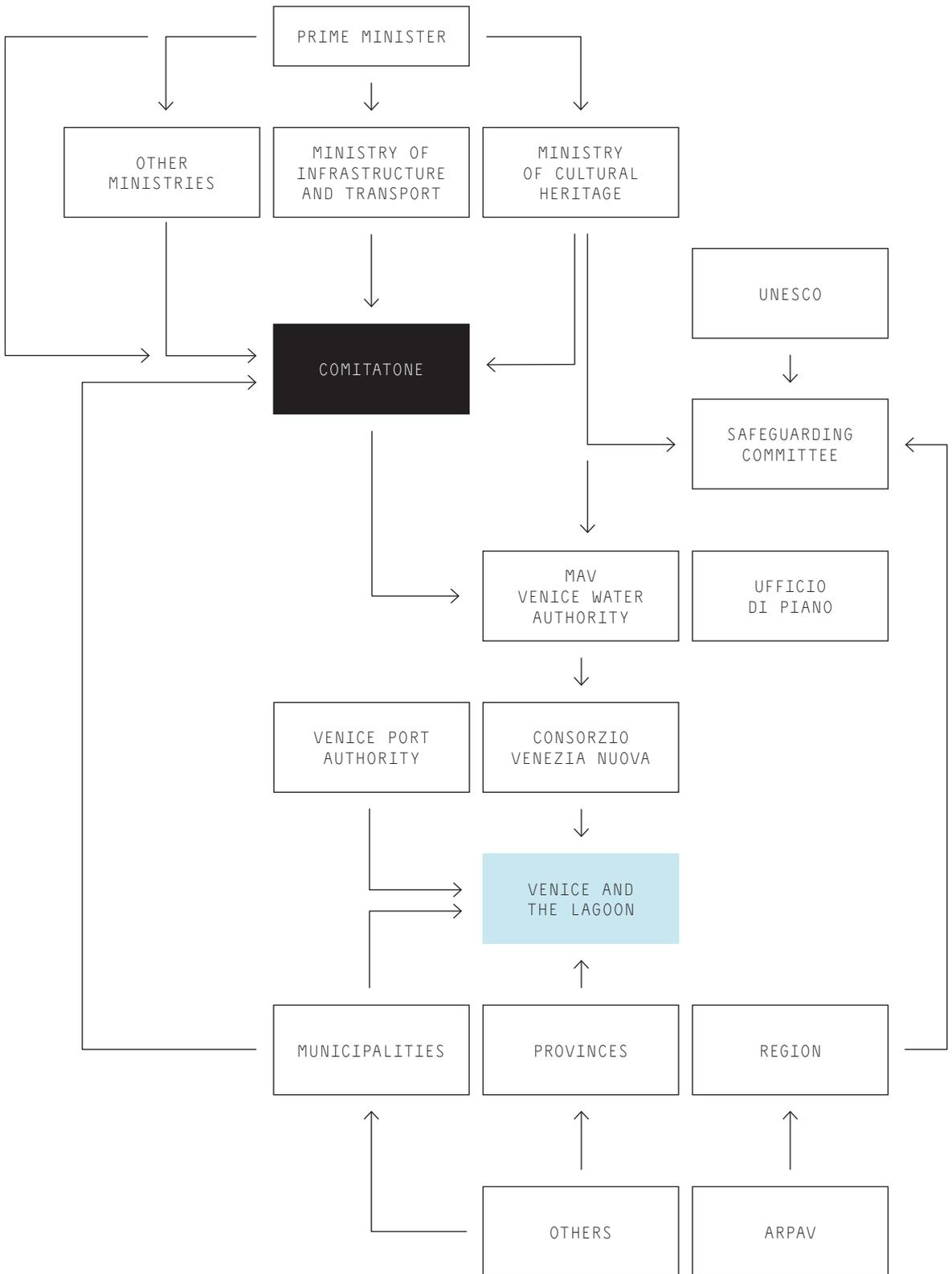


Fig. 1
Actual decisional situation

The current framework of competencies includes:

- **National government**, the duty of the physical defense of the lagoon and hydro-geological equilibrium, through the Venice Water Authorities (MAV), a former body since 1500, depending actually from Public Works Ministry;
- **Region Veneto**, responsible for urban planning and pollution issues, especially those related to water basins;
- **Municipalities of Venice and Chioggia**, responsible for the safeguard and maintenance of the urban centers and settlement on the lagoon islands.

But there are also competences for the Ministry of “Beni Culturali” with regard to the artistic and heritage patrimony, the Ministry of Merchant Marine for navigation and vessel control in the lagoon, the Ministry of Transport for the railways and access means to the city. In 1984 a commission in charge of the coordination of the above mentioned bodies, called “Comitatone”, was created. This commission is responsible for coordinating and supervising the interventions provided by special law, and is made up of local authorities and ministerial representatives, while the Venice Water Authorities plays the role of technical secretariat.

Hereafter the figure of the actual decisional situation as described in the “OCSE” Report on Venice of 2010 highlighted the framework for relations between all institutions and agencies involved in the protection and preservation of the city and lagoon of Venice.

The Comitatonone is currently involved in choosing a project that allows a different, more sustainable and more secure access to the cruise ships. In 2012, in fact, the government as a result of serious accident on the island of Giglio, and on strong demand from committees of environmentalists, imposed a ban on vessels of medium and large size (over 40,000 tons) which prohibits them from transitting through the St. Mark’s Basin and the Giudecca Canal, stipulating that an alternative route must be chosen. Currently, pending the identification of a solution, the number of large vessels using this route has been reduced.

MARCH 2ND,
2012

Recent resolutions on cruises

“Clini-Passera” Decree: Inter-ministry Decree n° 79

Limitation to transit through the St. Mark’s Basin and Giudecca Canal for commercial or passenger vessels weighing over 40,000 tons, to apply once alternative maritime routes have been established, as to be identified by the Maritime Authority.

NOVEMBER 20TH,
2013

Resolution of Ministry of Infrastructure and Transport

Limitation of transit, determined by the Government as a result of the numerous protests of citizen committees. In particular:

From January 1, 2014 the transit of ferries is forbidden and the number of cruise vessels over 40,000 tons using the Giudecca Canal must be reduced by 20% (from 2012).

From November 1, 2014 the transit of vessels over 96,000 tons will be definitively banned.

Must assure a reduction of daily moorings (not more than 5 cruisers over 40,000 tons) and a reduction of transit during the central hours of the day, concentrating arrivals and departures at dawn or late evening.

DECEMBER 5TH,
2013

Ordinance n° 153/2013 of Maritime Authority

A few days later the Maritime Authority (“Capitaneria di Porto”) confirmed in detail the previous ministry resolution.

JANUARY 31ST,
2014

Regional Administrative Tribunal (TAR) Decision

With an autonomous ruling the TAR suspended the previous Ministry resolution and delivered an ordinance accepting the opposition’s request put forth by the Venice Passengers Terminal: as no alternative solutions were proposed, consequently the cruise transit situation returned what it was previously, effectively postponing implementation of the resolution.

APRIL 18TH,
2014

Cruise Ship Companies decision

In consideration of the above prescriptions and resolutions, cruise operators responsibly decided to limit transits and respect the indications of the Maritime Authority; the CLIA (Cruise Lines International Association) formally engaged in this direction during a meeting held with the Ministers of Transport, Environment and Cultural Patrimony after the National Government declared its commitment to find an alternative route to reach the cruise terminal, which would avoid passing through the St. Mark's Basin and the Giudecca Canal, by 2016. Furthermore the cruise ship companies agreed to use fuel with reduced sulfur levels (under 0.1%) during transit and stay in the lagoon and to respect the conditions established for vessels over 40,000 tons throughout 2014.

AUGUST 8TH,
2014

Comitatone decision to assess the environmental impact of the Contorta Canal project

Comitatone has decided to open the procedure of environmental impact assessment for the realization of Canale Contorta-Sant'Angelo project, the alternative route to reach the Maritime Station proposed by Port Authorities. With this decision the limitation of transit returns valid from 1st January 2015.

SEPTEMBER 20TH,
2014

Environmental impact assessment also for Marghera project

The Marghera project proposed by Arch. D'Agostino that plans to build a new maritime station in an old industrial area of Porto Marghera, has been subjected to Environmental Impact Assessment.

SEPTEMBER 22ND,
2014

Environmental impact assessment also for Outer Port project

The Venice Cruise 2.0 project proposed by Mr. De Piccoli with Dufenco engineering that plans to build an Outer Port, has been subjected to Environmental Impact Assessment.





Water canals in the lagoon.
On the background, Venice Lido
seen from St. Mark's basin

Five scenarios

The main aim of this initiative, as indicated by the WMF, is to provide an independent report and survey to be used as a discussion tool for all parties involved, both public and private, as well as to ensure community participation in the entire decision process regarding Cruise Tourism. Our intention is to provide an independent summary, evaluation and comparison of the different alternative projects and studies which have been carried out for cruise accessibility and terminal location in recent years, and to provide as much necessary information as possible to the competent authorities and main parties so that they might choose the most appropriate proposal, which can then be further developed in order to find a long term solution.

The main aim of this initiative is to provide an independent summary, evaluation and comparison of the different alternative projects and studies for cruise accessibility and terminal location

All the projects analyzed, have been presented to the authorities respecting the requirements and aims defined by the Clini-Passera decree in 2012. The main goal of each project is to find an alternative route which would prevent cruise ships from passing through St. Mark's Basin and Giudecca Canal, thus avoiding the historical center of city.

The projects were analyzed on the basis of relevant existing materials, derived in part from official documents and in part from information reported by the press. Given the limited time available and the aim of work, the technical accuracy of the information regarding size, cost and construction times has not been verified. The next step of the work will be to verify this information with the authors or proposing stake-holders, in order to have final confirmation and an updated survey with the scope of raising general attention and consensus of the report.

In total seven project proposals were presented. Some of them can be grouped since they share a common approach and we can therefore compare them in five scenarios. The first three of them plan to keep the maritime station in its current location and to change only the route of the cruise ships, while in the remaining two scenarios a new maritime station is designed in locations different from the current one. Only in the fifth scenario the cruise ships remain entirely out of the lagoon, through the construction of an outer port.

The presented scenarios are:

- P. 47 **Scenario 1** — Maritime Station through Contorta Canal
- P. 53 **Scenario 2** — Maritime Station behind Giudecca Island
- P. 59 **Scenario 3** — Maritime Station through Vittorio Emanuele III Canal
- P. 65 **Scenario 4** — A new Maritime Station in Marghera
- P. 71 **Scenario 5** — Outer port

Each scenario is compared to the current situation and outlines its proponent, technical features, accessibility and economic, employment and environmental impact. Particular emphasis is given to the issue of accessibility as it is an element which determines the efficiency of the port. Accessibility is understood as both the ease with which the passengers and goods reach the ship as well as the way ship arrives at its destination. The environmental impact of the individual project choices is also an important issue, since, as has been pointed out by many experts, the effects caused by the digging of canals and the transit of large vessels can have significant impact on the lagoon's ecosystem. The description of each scenario ends with a outline of the main strengths and weaknesses of each proposal.



MESTRE

AIRPORT

COMMERCIAL PORT

MARITIME STATION

VENICE

LIDO

LAGUNA DI VENEZIA

BOCCA DI MALAMOCCO

Commercial route

Passenger route

Current status

CAVALLINO

Maritime
station
passing
through
Giudecca
canal

BOCCA
DI LIDO

1.1 LOCATION

The Venice passenger port is located in the insular city, mainly in the areas of Maritime Station, as well as in the areas of Santa Marta, San Basilio and along Seven Martyrs Shore, for a total area of over 260.000 square meters of which 47.267 are covered, and includes an area of 123.700 square meters of water surface. Altogether there are five kilometers of shore and eight passenger terminals, out of which seven are located in Maritime for big-sized ships and one is located in San Basilio and Santa Marta's areas for middle-sized ships.

Maritime Station has recently been renovated. The berths for mega yachts placed in the historic center have been equipped with new services. There is also dock dedicated to diporto (pleasure crafts) in the West Channel in Marghera.

There is also a commercial port in Venice which is located in Marghera. Merchant ships entering into the lagoon from the inlet of Malamocco, and further along Channel Malamocco-Marghera, also known as the Channel of Petroleum, come to Marghera, where the industrial area is located. The Ferry Port terminal (RO-RO) has recently been moved from the Maritime Station to Fusina, which is located to the south of the industrial area.

1.2 ACCESSIBILITY AND TOURIST FLOWS

The Port of Venice is composed of two main entrances: the inlet of Malamocco for cargo ships (commercial / industrial traffic) and ferries, and the inlet of Lido port for cruise ship traffic, fast ships and yachts. Therefore, all passenger ships, except ferries, enter from the inlet of Lido passing along San Marco Basin and Giudecca Canal and reach the Maritime Station, enjoying the view of Piazza San Marco, Giudecca Canal and the entire city from above.

Distances from current maritime station

COMMERCIAL PORT	10 KM	15 MINUTES
AIRPORT	14 KM	20 MINUTES
A57 (MESTRE BELTWAY)	13 KM	15 MINUTES
A4 (TRIESTE-MILANO)	21 KM	19 MINUTES
A27 (TREVISO-BELLUNO)	17 KM	19 MINUTES

The position of the Maritime Station is strategic and enables good accessibility for both cargo and passengers. It is 14 kilometers from the Marco Polo airport and 10 kilometers from the commercial port. It is connected to the main road infrastructures (Romea State Road SS309-E55, Padana Superiore Regional Road SR11, A4 and A27 highways, as well as to Triestina State Road SS14), and the rail network for freight. The station is equipped with parking lots and a fast connection via monorail (called the “people mover”) which connects to the bus terminal (Piazzale Roma).

Good accessibility to the port, its position in the Mediterranean Sea and the overwhelming appeal Venice has as a tourist destination, have encouraged the development of Venice as a homeport. In fact Venice is, after Barcelona, the second largest homeport in the Mediterranean Sea for number of cruise ship passengers.

In 2012 the total number of passengers was about 1.74 million, of which 88.6% used the station as a port to embark and to disembark. Of these, it was estimated that about 60% arrived in the city by plane and at the port by cruise lines buses. Generally, cruise passengers embarking and disembarking in Venice spend at least one night in the city. It was calculated that, during 2011, 16% of all hotel guests in Venice were related to cruise tourism.

1.3 ECONOMIC AND OCCUPANCY IMPACT

The cruise industry in Venice generates considerable revenue in the area, especially related to its homeport feature. It is estimated that the value added generated by demand for goods and services in Venice is approximately 3.26% of the GDP of the city of Venice and 0.96% of that of the province. Employment represents 4.1% of the total employment in the municipality of Venice and 1, 19% of those of the entire province.

In particular, ships with a tonnage of medium-large size (more than 40,000 tons) have significant impact and passengers on these ships represented 93.6% of the total passengers in 2012.

1.4 ENVIRONMENTAL IMPACT AND THE DECISION TO FIND OTHER SOLUTIONS

The ship route through the Giudecca Canal, together with the number and the size increase of cruise ships, has raised a heated debate in recent years about the potential damage to the historic city, both in the event of an accident and the damage caused by waves and pollution from ships. The visual impact of large ships in the urban landscape is also much debated.

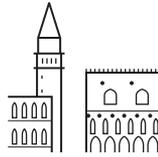
In the event of an accident along the Giudecca Canal, the possible collision with the banks would occur in the areas where sea floor is deep. In other areas, such as in front of Piazza San Marco, danger of collision is excluded due to shallow waters in the proximity of shores. It can be said that in the event of an accident, not unlikely given that some minor episodes have occurred in the past, parts of the city could be compromised. Other studies show that the passage of ships cause an effect of erosion of the seabed due to the reverse current generated by the passage of big ships.

For these reasons, combined with the two serious cruise ship accidents in 2012 in the Italian ports of the Island of Giglio and Genoa, in March 2012 the Italian government decided with a ministerial decree to set limits to the size of the ships transiting the Giudecca Canal. The following implementation decrees established that from January 1, 2014 the number of cruise ships with a tonnage of more than 40,000 tons was to be reduced by 20%, and the passage of ships with tonnage exceeding 96,000 tons was to be prohibited from November 1, 2014. These decisions were accompanied by research on alternative solutions for the arrival of big ships in Venice.

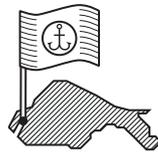
Another aspect to be highlighted is what will happen in the future in the event of exceptional tides (110 cm above sea level) when the mobile flood gates of Mose, which is currently nearing completion, are activated: in those circumstances access to the lagoon inlets will be closed, and entrance for big ships will only be possible through the navigation a specific lock set up in Malamocco, but with a limit for vessels larger than 250 meters long.

Strengths and weaknesses of the current status

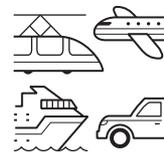
STRENGTHS



The **view of the city** while passing through San Marco Basin and along the Giudecca Canal

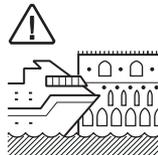


The **location** of the Maritime Station in **Venice island**



The strategic **location** of the Maritime Station **in relation to the main infrastructure**

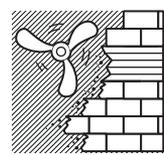
WEAKNESSES



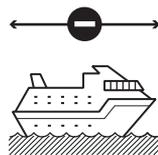
The **risk of safety and safeguarding** of Venice due to the passage of big ships in the Giudecca Canal



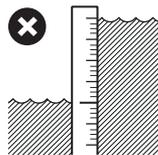
Visual impact on the landscape of big ships compared with the city



The **erosion of the seabed** caused by the passage of ships



The **size limitations** set by the Government about the feasibility of cruise ships transiting through the Giudecca Canal



In the future, **limits of accessibility in the event of exceptional tide**



MESTRE

AIRPORT

COMMERCIAL
PORT

MARITIME
STATION

VENICE

CONTORTA
CANAL

LIDO

LAGUNA
DI VENEZIA

BOCCA
DI MALAMOCCO

Commercial route
Passenger route

1

CAVALLINO

BOCCA
DI LIDO

Maritime
station
passing
through
Contorta
canal

THE PROJECT PROPOSED BY THE PORT AUTHORITY OF VENICE EXPECTED TO DREDGE A NEW CANAL ON THE TRAIL OF A SMALL EXISTING CANAL, CONTORTA SANT'ANGELO CANAL, IN ORDER TO CONNECT THE CANAL OF PETROLEUM TO THE CURRENT MARITIME STATION.

1.1 PROJECT AREA

The project would allow the Maritime Station to be maintained while providing a change in the cruise ship route which would no longer pass through the inlet of Lido, but would use the inlet of Malamocco and then proceed along the Canal of Petroleum and the new Contorta Canal to reach the Maritime Station.

1.2 FEATURES

The project proposes to:

- create new Contorta Canal, for a length of 4 km, a width of 100 meters and excavation of about 7 million of sediment cubic meters;
- implement "environmental mitigation works" and enlargement of part of the Petroleum Canal.

The Port Authority has estimated that the construction of the new canal will cost 148 million Euro, and will require a period of 19 months to be completed. According to the opinion expressed by the preliminary environmental impact assessment drawn up by Ministry of Environment in the September 2013, the time required for the implementation of the project would be at least 4 years, taking into account also working to place underground sections of power line and pipeline currently transiting along the Contorta Canal, adjustments to the Petroleum Canal and basin evolution of the Maritime Station.

The estimated time does not take into consideration time for project permits. The project is now at the stage of preliminary study and was subjected to the procedure of environmental impact assessment (EIA), as decided by the Comitatore meeting of August 8 last.

1.3 ACCESSIBILITY AND TOURIST FLOWS

The maintenance of the Maritime Station implies that there are no changes in the management of services, loading and unloading of goods, and in the embarkation and disembarkation of passengers and crew.

The only difference with the current situation affects the route of ships, which will increase the length of the route into the lagoon, from approximately 5 km to 12 km.

Moreover, the path of cruises along the Canal of Petroleum will be the same for commercial ships and ferries. This overlap may generate complexity in planning trips.

1.4 ECONOMIC AND OCCUPANCY IMPACT

The longer route taken by ships in the lagoon can lead to higher costs for tug boats, with a slight increase also in the number of people employed.

1.5 ENVIRONMENTAL IMPACT

The excavation of a new canal, which in fact will put the city in direct connection with the Canal of Petroleum, raises serious doubts about effects that could damage the lagoon environment and the historical city. Conservation groups and some of the leading experts on Italian hydraulics are opposed to this project.

In fact, many studies attribute the realization of the Canal of Petroleum as one of the main causes of the phenomenon of loss of material from the lagoon and its consequent morphological modification, as explained in the introduction.

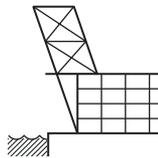
There would also be the phenomenon of reverse current generated by the passage of large ships, and the increase in speed of tidal currents as a result of the creation of a wide and rectilinear water way. So as expected for the Canal of Petroleum, the port authority has proposed the implementation of "environmental mitigation works" to decrease the action of tidal flows, wind and wave power. However the opponents of this project underlined as the analysis of the effect of mitigation works already done, shows that they are not enough to cancel out the phenomenon of the lagoon's loss of material.

While the construction of the new Contorta Canal solves the problem of the passage of large ships from the Giudecca Canal, on other hand it would run the risk of generating hydro-morphological instability in the central lagoon (similar to what has in the past been generated by the Petroleum Canal) and the risk of accentuating the already existing instability phenomena of static foundations and of buildings.

Another aspect to be take into consideration is the limit of navigation in case of an exceptional tide, when Mose is activated. This scenario does not provide alternatives to the limits presented in this case.

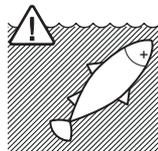
**Strengths and weaknesses
of scenario "Maritime station
passing through Contorta Canal"**

STRENGTHS

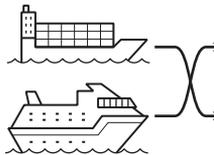


On-going use of the Maritime Station, with advantages in terms of investment and logistical position

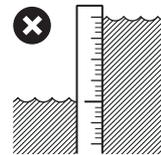
WEAKNESSES



Environmental risk for lagoon and historical city represented by the excavation of the new Contorta Canal and its connection with Petroleum Canal



Complexity in planning trips arising from **overlapping of the access route** of cruises with that of merchant ships and ferries



In the future, **limits of accessibility** in the case of exceptional tides



MESTRE

AIRPORT

COMMERCIAL
PORT

MARITIME
STATION

VENICE

Passenger route

LIDO

LAGUNA
DI VENEZIA

BOCCA
DI MALAMOCCO

Commercial route

2

CAVALLINO

BOCCA
DI LIDO

Maritime
station
passing
behind
Giudecca
canal

VENICE TERMINAL PORT (VTP), THE MANAGEMENT TRUST OF MARITIME STATION, HAS PUT FORTH A PROJECT WHICH PROPOSES TO REACH THE CURRENT MARITIME STATION THROUGH A NEW CANAL PASSING BEHIND GIUDECCA ISLAND. THIS PROJECT HAS BEEN PROPOSED BY PARLIAMENTARIAN ENRICO ZANETTI OF SCELTA CIVICA.

2.1 PROJECT AREA

This proposal provides for the on-going use of the Maritime Station, as the previous scenario, and moreover provides for maintaining the use of the entrance of the cruises from the mouth of Lido, in fact, changing only the way that ships perform today in front of the Giudecca Canal.

2.2 FEATURES

The project is at a preliminary stage in developing the concept. It had, however, already hypothesized a cost of 60 million euro for the construction of the canal, providing for the disposal of approximately two million cubic meters of uncontaminated sludge and the implementation of the necessary infrastructures. Estimated construction time is two years. The estimated time does not take into consideration time needed for project permits.

2.3 ACCESSIBILITY AND TOURIST FLOWS

In this proposal, compared to the previous scenario, maintaining the route of entry of ships allows no change in the current routes of merchant ships and ferries from cruises. Also the length of the entire route that cruises cross in the Laguna, remains similar to the present.

2.4 ECONOMIC AND OCCUPANCY IMPACT

This scenario does not cause any change to the current economic and employment situation.

2.5 ENVIRONMENTAL IMPACT

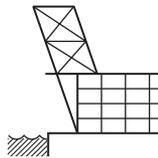
The creation of a new canal could alter the balance of the lagoon with hydromorphological phenomena such as those described in the previous scenario. In addition, this channel would pass for a stretch of the lagoon which is still untouched, in the vicinity of the residential and monumental context of the Giudecca and other smaller islands, such as the Island of San Servolo and the Island of Grace, resulting in the risk of weakening static stability.

Moreover, the excavation of a canal behind the Giudecca would completely alter the geography of the island, which would be compressed between two canals, becoming a sort of divider between the path of big ships and small and medium ships. As in the previous scenario, this project does not solve the limit of navigation in the event of exceptional tides, when Mose is activated.

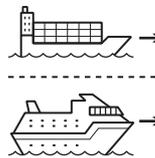


Strengths and weaknesses of scenario "Maritime station passing behind Giudecca Island"

STRENGTHS



On-going use of the Maritime Station, with advantages in terms of investment and logistical position

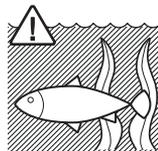


Maintains distinct routes merchant ships and ferries from those of the cruise ships

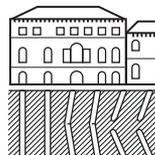


The **view of the city** during the arriving in Maritime Station

WEAKNESSES



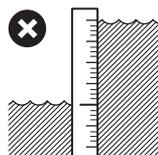
Environmental risk for a stretch of the lagoon still untouched, specifically the one behind Giudecca Island



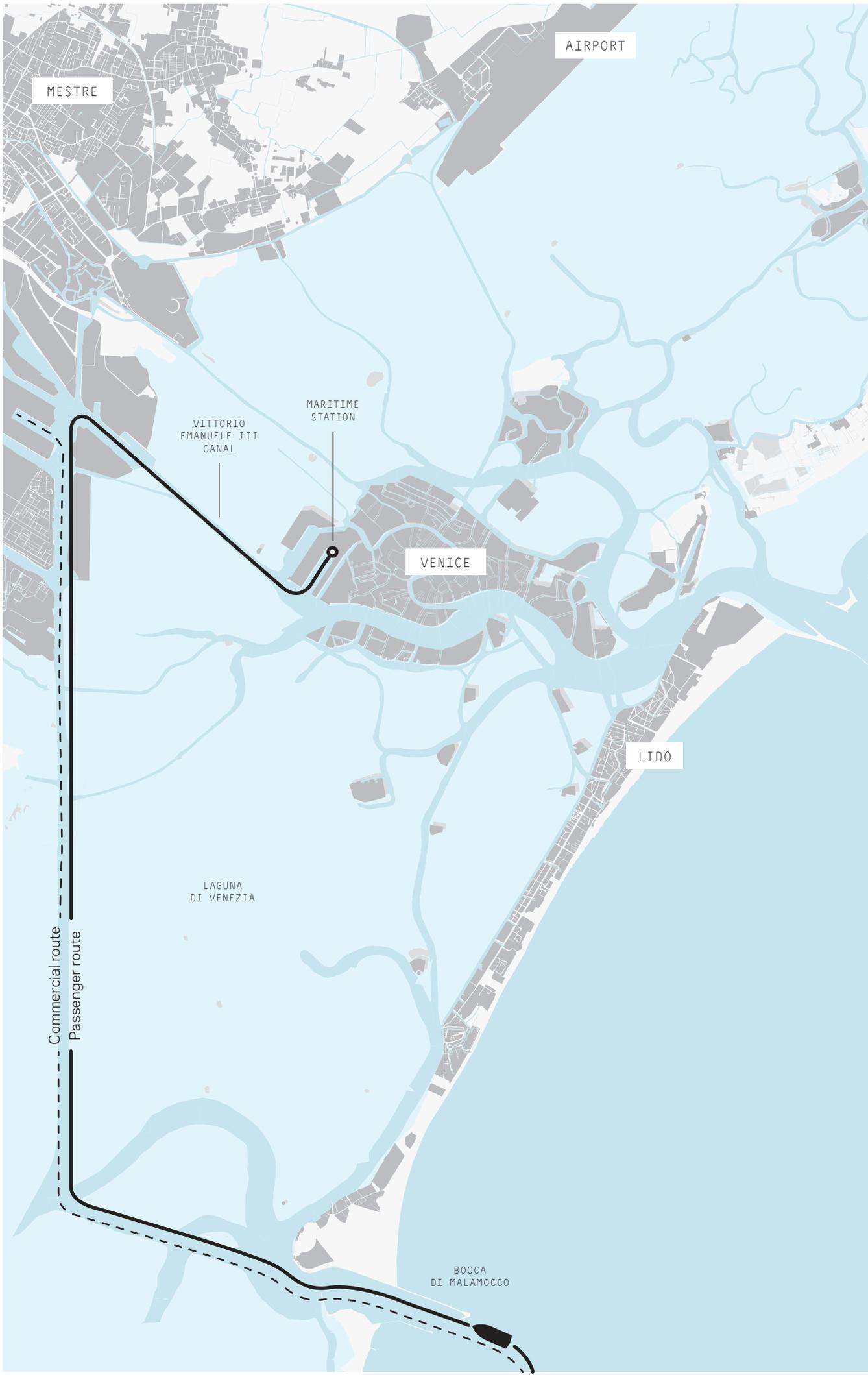
Risk of weakening the **static stability** for Giudecca Island and the small Island adjacent the new canal



Alters the geography of the Giudecca Island, which would be compressed between two canals



In the future, **limits of accessibility** in the event of exceptional tides



MESTRE

AIRPORT

VITTORIO EMANUELE III CANAL

MARITIME STATION

VENICE

LIDO

LAGUNA DI VENEZIA

BOCCA DI MALAMOCCO

Commercial route
Passenger route

3

CAVALLINO

BOCCA
DI LIDO

Maritime
station
through
**Vittorio
Emanuele
III Canal**

ANOTHER SOLUTION AIMED AT MAINTAINING THE CURRENT LOCATION OF THE MARITIME STATION PROPOSES THAT CRUISE SHIPS PASS THROUGH CANAL VITTORIO EMANUELE III. THIS PROPOSAL HAS BEEN PRESENTED BOTH BY MR. GINO GERSICH AND BY DR. LUIGI BRUGNARO OF CONFINDUSTRIA VENEZIA (INDUSTRIAL ASSOCIATION OF VENICE).

3.1 PROJECT AREA

The proposal provides for the on-going use of the Maritime Station and a change in the route of cruises that would utilize the inlet of Malamocco, the Canal of Petroleum, the new canal south of Trezze Island and then Vittorio Emanuele III Canal to reach the Maritime Station.

3.2 FEATURES

The proposal would require:

- Excavation of a new canal to the south of Trezze Island, for a length of about 3 km;
- The enlargement of part of the Petroleum Canal.

The proposal has not been backed up by a feasibility study and estimates of time and costs of implementation have not been given.

3.3 ACCESSIBILITY AND TOURIST FLOWS

This proposal is very similar to first scenario which concerns the excavation of a new Contorta Canal. In fact, both proposals allow use of the Maritime Station to be maintained and the route of the cruise ships mostly along the Canal of Petroleum, with a variation only on how the ships reach the Maritime Station. The Venice Port Authority has pointed out that the use of the Vittorio Emanuele III Canal could have technical problems due to the narrow maneuvering spaces caused by a curve in the canal with an angle that is less than 90 degrees. Another negative aspect is the merging of commercial and cruise traffic.

3.4 ECONOMIC AND OCCUPANCY IMPACT

This scenario does not cause any change to the current economic and employment situation.

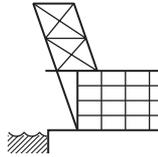
3.5 ENVIRONMENTAL IMPACT

This scenario concerns both the re-use of the Vittorio Emanuele III Canal and the realization of a new canal to the south of Trezze Island as well as the enlargement of Canal of Petroleum, which would modify this part of lagoon. Studies on the environmental impact have yet to be carried out.



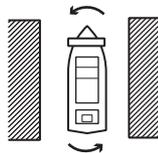
**Strengths and weaknesses
of scenario "Maritime station
through Vittorio Emanuele III Canal"**

STRENGTHS

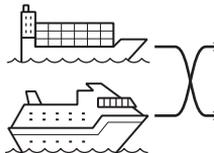


On-going use of the Maritime Station, with advantages in terms of investment and logistical position

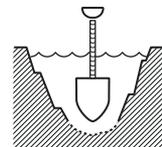
WEAKNESSES



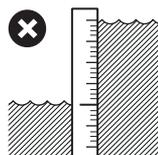
Technical problems about the narrow **maneuvering spaces**



Admixture between commercial and cruise traffic



Modification of part of lagoon for **excavation and enlargement of canals**



In the future, **limits of accessibility** in the event of exceptional tide



Length of the path in lagoon (2 hours instead than 1 hour)



MESTRE

AIRPORT

NEW CRUISE
TERMINAL

CANALE
DELLE TRESSE

VENICE

LIDO

LAGUNA
DI VENEZIA

BOCCA
DI MALAMOCCO

Commercial route
Passenger route

4

CAVALLINO

A new maritime station in **Marghera**

BOCCA
DI LIDO

THE ARCHITECT D'AGOSTINO HAS SUBMITTED A PROJECT PROPOSAL WHICH PLANS TO RELOCATE TO MARGHERA TERMINALS FOR CRUISES ABOVE 40,000 TONS. THIS PROPOSAL WAS ALSO APPROVED BY THE FORMER MAYOR OF VENICE, GIORGIO ORSONI.

4.1 PROJECT AREA

The project aims to re-use part of the first industrial area of Marghera to build a new port, divided into two terminals: one in the North Industrial Canal, and the other in the Brentelle Canal. To access this new station, the cruise ships would access the lagoon from the inlet of Malamocco and sail along the Canal of Petroleum, using the commercial ship route.

The current Maritime Station would be partially used for cruise ships less than 40,000 tons and for yachts, while the remaining part would be reconverted for other uses.

4.2 FEATURES

The project proposes to:

- change the current layout of the North Industrial Canal and Brentelle Canal, retreating 45 meters of the existing docks to accommodate a maximum of four ships along the North Industrial Canal and one ship along the Brentelle Canal;
- dredge the canal to increase the depth to -10.50 meters, along with the work of embankments;
- develop an urban regeneration project in a part of the current Maritime Station in Venice;
- ensure, if necessary, the doubling of the transit route along the Trezze Canal for two-way traffic.

Estimated cost is about 250 million euro. The estimated time of completion is six years for the construction of two terminals, stepping for "operational modules", while has not been planned time for project permits. The project is now at the stage of preliminary study and was subjected to the procedure of environmental impact assessment (EIA).

4.3 ACCESSIBILITY AND TOURIST FLOWS

The strong point of this proposal is high degree of accessibility for people and goods guaranteed by the new location, which is no longer on Venice island but on the mainland. This position also facilitates the enlargement of the tourist interest for the mainland.

The weak point is the problem of interference and path overlap made by cruises with that of trade. The Port Authority has highlighted this issue as a negative aspect.

4.4 ECONOMIC AND EMPLOYMENT IMPACT

The creation of a second maritime station would double some functions of the service, with the consequence of a partial increase both of people employed and management costs. This impact was not taken into account.

4.5 ENVIRONMENTAL IMPACT

The project will involve the construction of local dredging to reach a depth of 10.5 meters and probably the construction of the Trezze Canal. These interventions could generate changes to the environmental balance of the lagoon in those areas. Although these issues have not



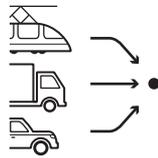
yet been studied in detail, it can be said that they will have minor impact compared to those generated by the creation of a new canal such as the Contorta Canal.

The hypothesis of the new Maritime Station in the Venetian mainland

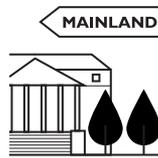
The project also provides for the reclamation and reuse of part of the former primary industrial area of Marghera. At the same time, the presence of industrial activities near the project area, could pose a risk to the safety of the project site in the event of accidents. As in the previous scenario, this project does not solve the limit of navigation in the event of exceptional tides, when Mose is activated.

Strengths and weaknesses of scenario "Marghera"

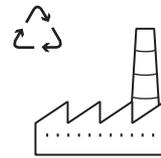
STRENGTHS



High degree of accessibility of the area and creation of a logistic integrated hub



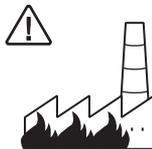
Facilitates the enlargement of the basin of **tourist interest** to the mainland



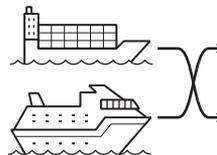
Reuse of part of the former primary industrial area of Marghera

Opportunity to develop urban regeneration project both in Marghera and both in Maritime Station area in Venice

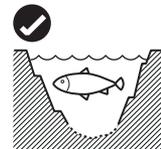
WEAKNESSES



Safety risk in the event of accidents during industrial activities



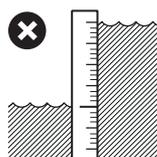
Problem of interference and **route overlap** made by cruises with that of trade



The need to compensate for the **environmental impact** arising from dredging and the eventual widening of the Canal of Trezze



Need to **convert** part of the maritime station for other uses



In the future, **limits of accessibility** in the event of exceptional tides



MESTRE

AIRPORT

COMMERCIAL
PORT

MARITIME
STATION

VENICE

LIDO

LAGUNA
DI VENEZIA

BOCCA
DI MALAMOCCO

Commercial route

5

CAVALLINO

Outer port

NEW CRUISE
TERMINAL

BOCCA
DI LIDO

FOUR PROJECT PROPOSALS UNITED BY THE IDEA OF LOCATING THE CRUISE SHIP TERMINAL OF MEDIUM AND LARGE SHIPS (ABOVE 40,000 TONS) IN THE OUTER PART OF THE INLET OF THE LIDO, BEYOND THE BARRIERS OF MOSE, HAVE BEEN PRESENTED BY FOUR DIFFERENT PROFESSIONALS.

5.1 PROJECT AREA

The four hypotheses can be grouped into two subgroups, depending on the location of the new terminal inside the inlet of Lido:

- the project conceived by Cesare De Piccoli (ex-European parliamentary and Italian political) and developed by Duferco Engineering, plans to build the new station with a linear structure placed in parallel to the dam of Punta Sabbioni;
- the three projects presented respectively by the group Boato Stefano, Carlo Giacomini, Maria Rosa Vittadini, the group Alderman Luciano Claut and engineer Vincenzo Di Tella, and the project submitted by architect Gianni Fabbri, plans to locate the new terminal at the center of the St. Nicholas Canal connecting the artificial island of Mose, in the center of the harbor's mouth.

All of these projects involve in part maintaining the function of the Maritime Station for berthing small cruises and yachts and converting it for other uses. Some of these projects (Claut and Fabbri) propose relocating a section of the Maritime Station for disembarking passengers in the city, at the Arsenal.

5.2 FEATURES

The main feature of these projects is the will not to implement interventions in the lagoon, but to create an outer port. In addition, technical solutions are based on the principle of reversibility, foreseeing a short construction period (of about two years). The time needed for project permits has not been planned yet.

The proposals have different levels of detail. Among these, the one presented by De Piccoli-Duferco and called Venice Cruise 2.0 is the most detailed and is currently in the process of environmental impact assessment (EIA). In the proposal by De Piccoli-Duferco the estimated cost of the construction for the new terminal is 128 million euro and the estimated realization time is about of 24-26 months. All projects analyze the issue of the impact of currents and winds for the safety of cruises.

5.3 ACCESSIBILITY AND TOURIST FLOWS

One of the most delicate aspects of these proposals is the connection of the outer port with the infrastructure system, the current Maritime Station, the lagoon and the city. All projects are planning to make connections to the new terminal using water transport. It has been calculated that it would require more than 100 round-trip connections per day to move goods and passengers as well as other individual or group connections by taxi. To minimize the wave motion will be use ferries with capacity of 800 people.

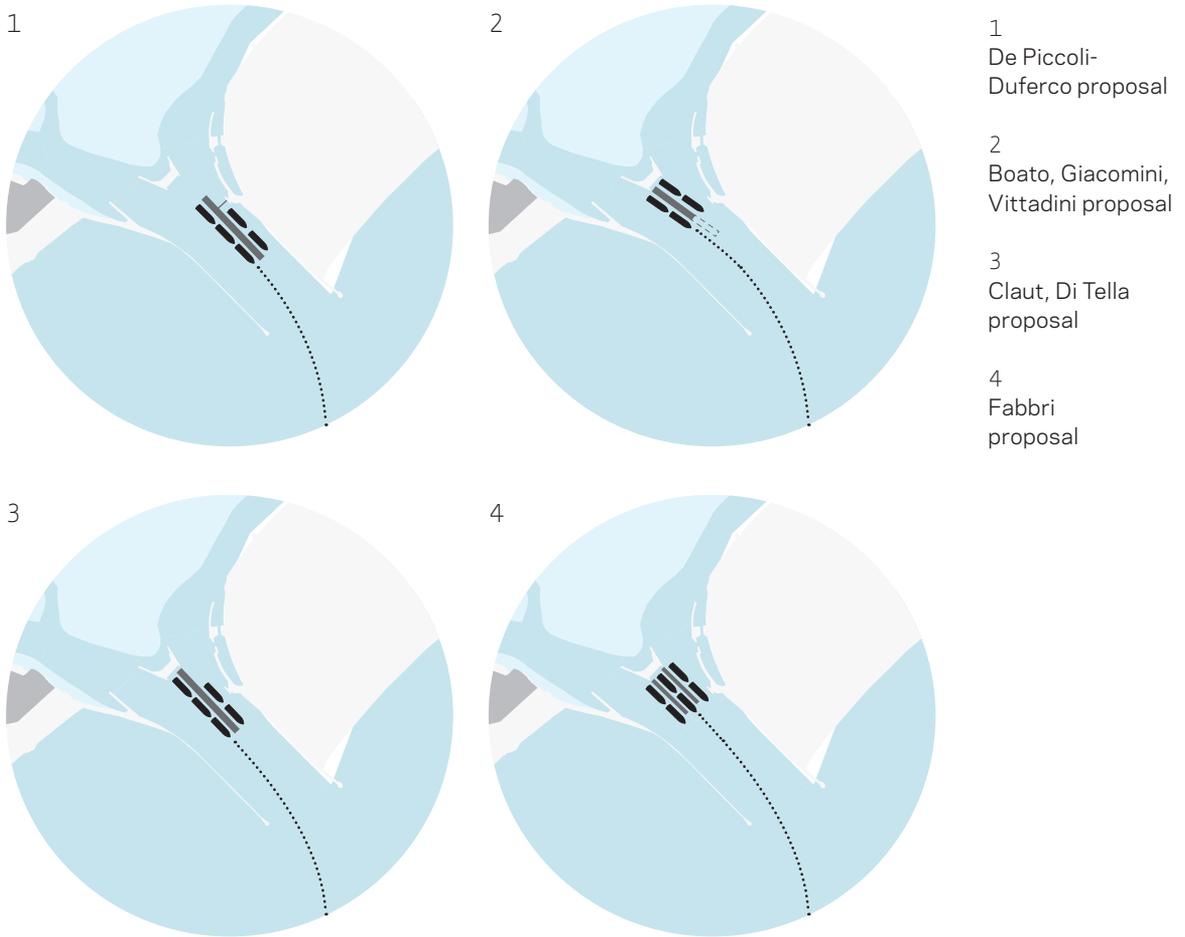
Station will be maintained for the operations of origin and destination cruise passengers. The supply of goods, fuel, water and waste disposal would be done by means of barges, with about 40 round-trip links per day.

Port Authority underline that logistic solution would create unsustainable traffic density conditions in lagoon, and also that currents and winds of the inlet place wouldn't provide adequate security for the mooring of large vessels. Also Cavallino Treporti, Municipality very close to Lido's inlet, is opposed to Outer Port project because in their opinion project would damage its environmental, its landscape and its economy. Given the complexity of the scenario, the multiple geographical areas involved and the changes to the current infrastructure, these proposals highlight the need to involve the main public bodies involved (Port Authority, cruise companies, City, Airport).

Positive point of this scenario is the solution to the problem of accessibility in the event of the closure of the mobile flood gates of MOSE for exceptional high tide.

5.3 ECONOMIC AND EMPLOYMENT IMPACT

The creation of an additional station at the harbor mouth, without counting the further point of landing in the event of the creation of an arrival station at the Arsenal, implies probably an increase in staff and



operating costs. While decreasing costs for the operations of piloting and trailer on one side, the additional station increases costs relating to the handling of goods, the fuel supply, the rack, in addition to a slight increase for the connections of the passengers).

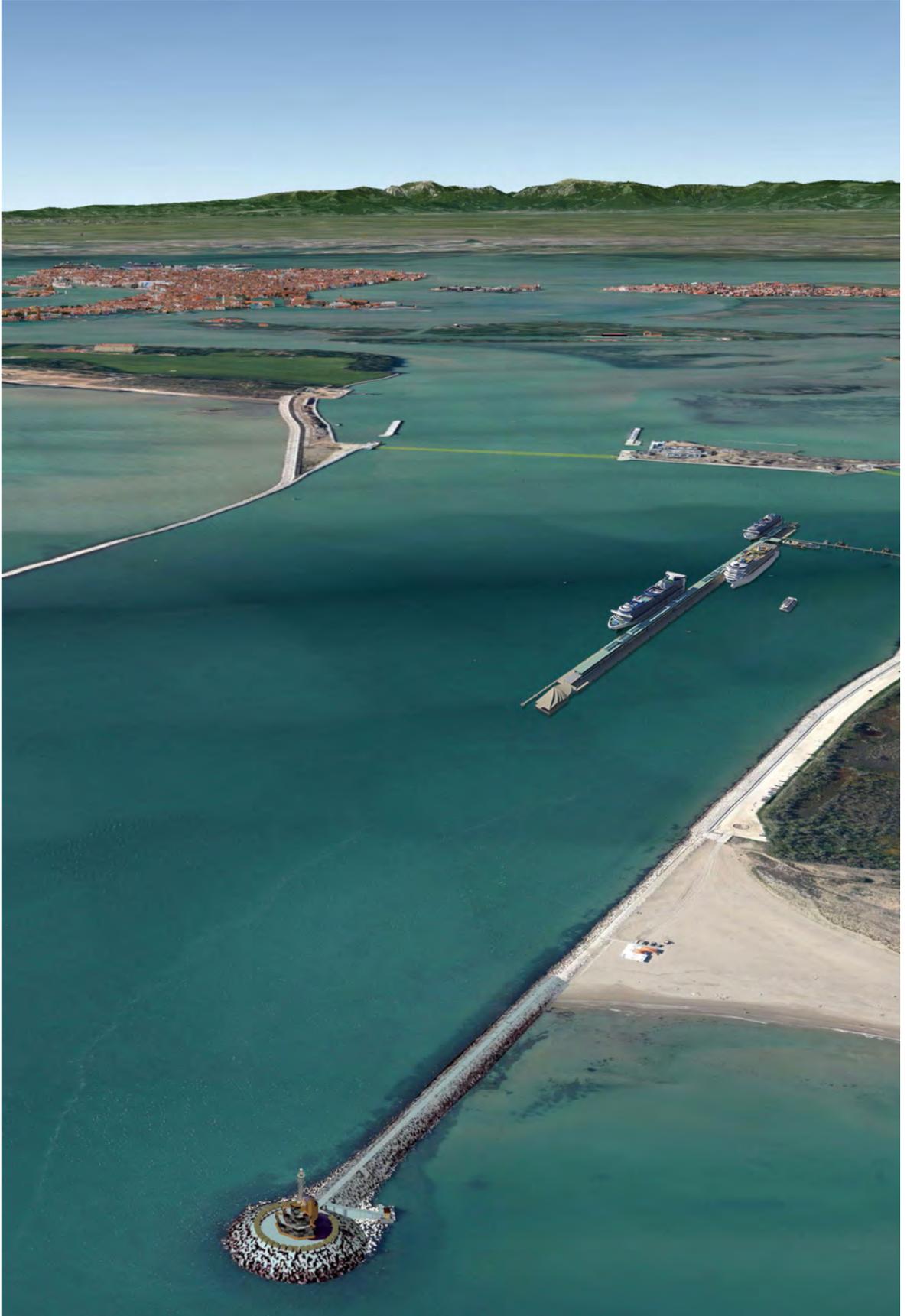
5.4 ENVIRONMENTAL IMPACT

The scenario Outer Port does not require any changes to the lagoon’s hydrodynamic balance. At the same time, it finds a solution to avoid the passage of cruise ships in St. Mark’s Basin and Giudecca Canal, thereby ensuring the preservation of Venice.

The De Piccoli-Duferco proposal plans to power the big ships by land, thereby reducing emissions. At the same time, the environment impact of emissions generated by the many boat connections to the outer harbor has not been calculated.

Right
An aerial view of the De Piccoli-Duferco proposal

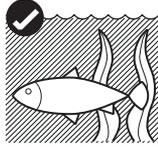
Page 76
Renderings of the De Piccoli-Duferco proposal





Strengths and weaknesses of scenario "Outer port"

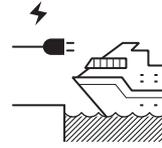
STRENGTHS



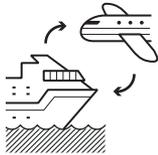
No changes to the lagoon's **hydrodynamic balance**



Solves the problem of **accessibility** in the event of exceptional tides (when Mose is in operation)



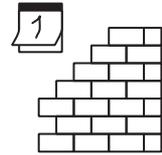
Reduction of ships' gas emissions through a power supply overland



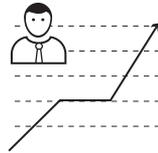
Shortens route to the Marco Polo airport



Technical solutions are based on the **principle of reversibility**

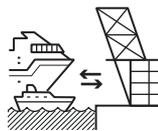


Short construction time (two years)



Increase of **employment**

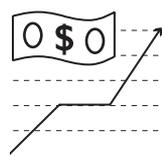
WEAKNESSES



Connections to the new terminal with water transport, with more than 100 round-trip connections per day



No protection from **currents and winds**



Increase of **management cost**



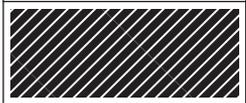
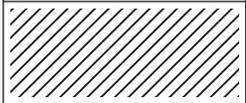
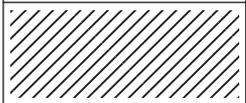
Impact on visual landscape of Lido and Cavallino Treporti

Comparison between scenarios

The comparison of the different scenarios has been implemented through an analytical evaluation of the criteria reflecting the socio-economic and environmental impact. Such evaluation is the result of the detailed analysis of the existing documentation and of the meetings that took place in September with the principal city stakeholders (→ TABLE 01).

Furthermore, a second matrix put into evidence the tradeoffs between the cost of each technical solution and the time required for the implementation of each project (→ TABLE 02).

TABLE 01
**Strengths and weaknesses
of different scenarios**

SCENARIO	0
AREA	Maritime station
PATH	Giudecca Canal
ENTRANCE	Lido
WORKS	—
VIEW OF VENICE FROM CRUISE	
VISUAL LANDSCAPE	
RISK OF ACCIDENTS INVOLVING HISTORICAL HERITAGE	
ENVIRONMENTAL IMPACT FOR THE LAGOON	
ACCESSIBILITY	
LOGISTICS	
ACCESSIBILITY IN CASE OF EXCEPTIONAL TIDE	
OVERLAP WITH TRAFFIC TRADE	
SECURITY OF MARITIME FUNCTION	

LEGEND

-  Strengths
-  Weaknesses
-  Main weaknesses

A
The city will be visible during the transportation of people to the city or to the maritime station. Passengers travelling directly to the airport will have impact on visual landscape of Lido and Cavallino.

B
Outer port project will have impact on visual landscape of Lido and Cavallino.

1	2	3	4	5
Maritime station	Maritime station	Maritime station	Marghera	Outer port
New Contorta Canal	behind Giudecca Island	Vittorio Emanuele III Canal	Petroleum Canal	—
Malamocco	Lido	Malamocco	Malamocco	Lido
Digging of a new canal and enlargement of Petroleum Canal	Digging of a new canal	Digging of a new canal and enlargement of Petroleum Canal	Enlargement of canals and reuse of ex-industrial area	Realization of an outer port; connections for goods and passengers

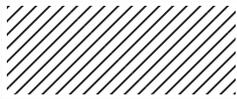
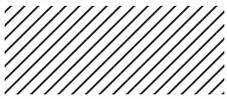
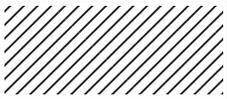
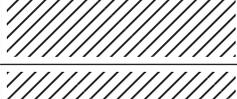
				
				
				
				
				
				
				
				
				

TABLE 02

Time's and cost's data

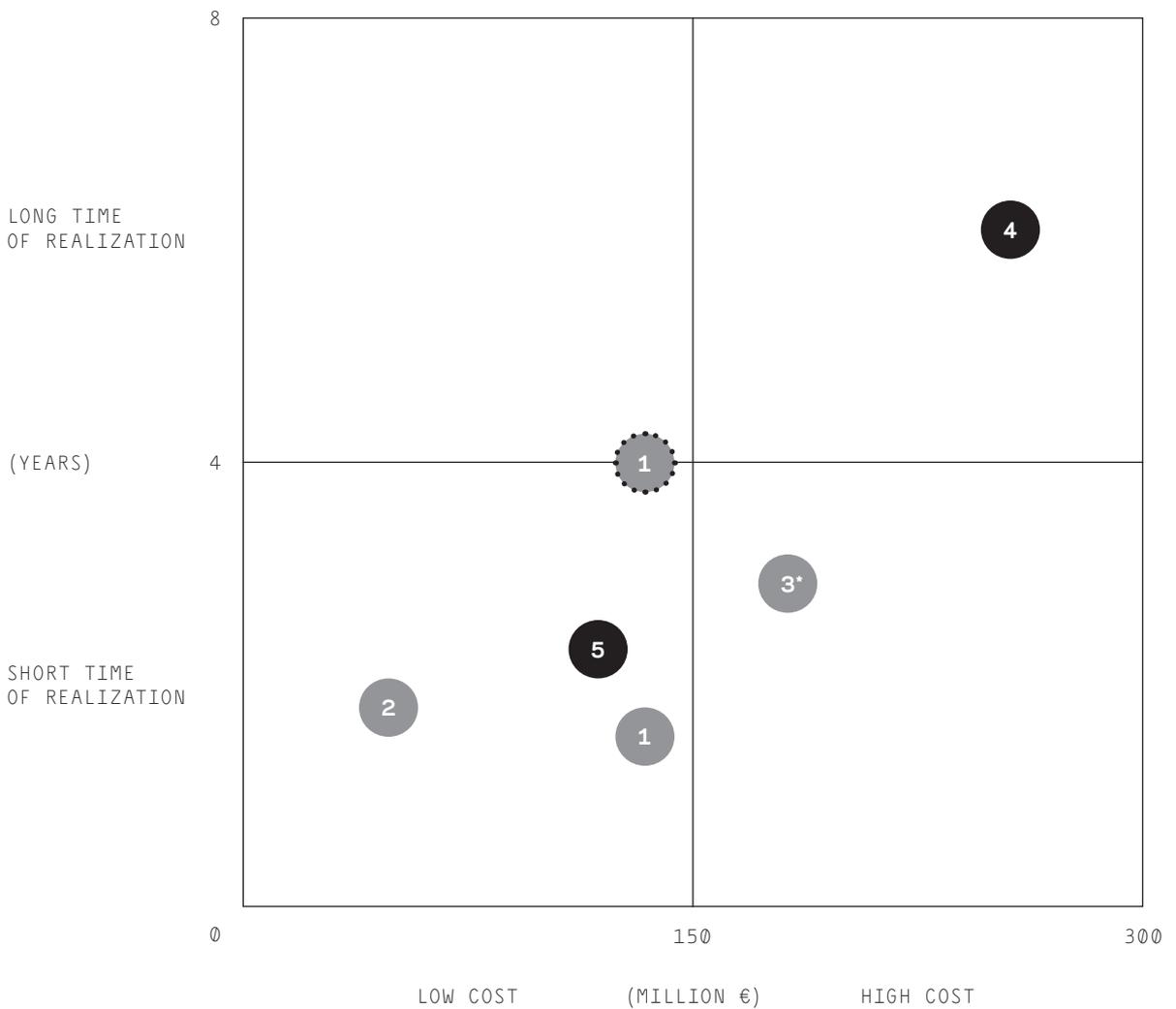
LEGEND



Scenarios that maintains the current maritime station



Scenarios that needs the realisation of a new maritime station



Source for time's and cost's data

Scenario 1 (Contorta Canal) Data on time of construction and costs taken from the article "Ecco come il Canale Contorta rivitalizzerà la laguna e salverà la crocieristica", published on *Il Gazzettino di Venezia e Mestre*, 26th September 2014; with the dotted circle is shown the time of realization stated in the preliminary environmental impact assessment of the Ministry of Environment of 27th September 2013;

Scenario 2 (behind Giudecca island) Data on time of construction and costs taken from the article "L'alternativa che 'piace' al porto", published on *Il Gazzettino di Venezia e Mestre*, 13th September 2013;

Scenario 3* (Vittorio Emanuele III Canal) Scenario without the estimate of time of construction and costs: the indicated values are derived from a comparative estimate with similar scenario;

Scenario 4 (Marghera) Data on time of construction and costs taken from the document *Nuovo porto passeggeri a Porto Marghera*, drawn up by arch. D'agostino in March 2014;

Scenario 5 (Outer port) Data on time of construction and costs taken from the document *Venice Cruise 2.0*, drawn up by Duferco in April 2014.





Canaletto (Giovanni Antonio Canal),
Santa Maria della Salute, circa 1740



Interviews



The study has demonstrated strengths and weaknesses of all the projects submitted. As the comparison clearly illustrates, the projects impact differently to some crucial trade off: environment and lagoon protection vs. accessibility and logistic. The interview carried out in September have enfatizaised the following position:

Paolo Costa, President of Port Authorities, argues that the only viable project, in the short term, is the Contorta Canal, which would ensure the navigability allowing the passage, at the same time, of merchant and passenger ships, permitting also the morphological recovery of the central lagoon;

Silvio Testa, one of the leader of ships movement, criticizes the selection process of the projects: he believes there should has been a greater public guide in the study and search for a solution;

Oscar Girotto, chief of the planning area of the Municipality, supports the creation of a new port in Marghera, and the Canal Vittorio Emanuele III as the path to follow for a short term solution;

Matteo Zoppas, chief of Venezian Industrial Association (Confindustria Venezia), highlights the negative impact on the employment generated by the reduction of the ships transit imposed by the decree, and doubt be a temporary situation as he believes that no project will be realized in the short term;

Cesare De Piccoli, proposes and supports the outer port (outside of lagoon) because he believes it is unwise to adapt the lagoon canals to the size of the ships, which will be in future increasingly large;

Claudio Orazio, Mayer of the Municipality of Cavallino Treporti, opposes to the outer port project, which would be located in the immediate vicinity of the municipal territory: the new infrastructure would determine a significant increase of the traffic and the change the skyline of the beaches. Consequently, the environmental values and the local economy, strongly based on tourism and specialized agriculture, would be negatively affected.

There are three projects that are currently being carried out and which is ongoing Environmental Impact Assessment (EIA) by the Ministry. The outcome of the EIA could be the request for modifications or additions, as the declaration of the non-feasibility of projects short term.

The emerged positions are in part contrasting with each other, and show that there is not currently a solution able to reconcile all points of view, but that every solution has focused on a specific aspect:

- **Contorta Canal** project (scenario 1) is supported by those who want to guarantee the port activity in the short term, with maximum efficiency logistics and accessibility;
- **Outer Port** project (scenario 4), is supported by those who believe that environment is a priority, and that should not be change the territory in pursuit of the increasingly large size of the ships;
- **Marghera** project (scenario 5), is supported by those who believe that the solution of great cruises is an opportunity for the city to rethink its urban structure and its relationship with the mainland.

There is not currently a solution able to reconcile all different points of view, but every solution has focused on specific aspects

If all the projects contemplate to give an answer in the short term, as required by the decree, only some are proposed as a final solution, in particular the hypothesis both of Outer Port and Marghera, while Contorta Canal would be just a short-term solution. The two long term scenarios appear markedly distant, the first in fact plans to build a new port outside of the lagoon, the second plans to reuse an area of the old industrial area located in the mainland for realization of a new port.

All the hypotheses will therefore markedly different consequences on the social, territorial and economic development of the city of Venice, on the metropolitan area and on the future hydro-morphology structure of the lagoon.

Every scenario presents strengths and weakness, and the final evaluation will have to take into account the priorities related to some crucial trade-offs: environment and lagoon protection vs. accessibility and logistics. Compromises will surely be necessary in order to find the definitive long term solution. None of the scenarios presented are feasible in the short term as all the proposals will surely require several years to be fully operational and the lengthy bureaucratic approval processes must also be considered.





A cruise ship in
St. Mark's basin

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LEGISLATIVE BILLS

Decreto n. 79 del 2 marzo 2012 (Decreto "Clini-Passera"), *Disposizioni generali per limitare o vietare il transito delle navi mercantili per la protezione di aree sensibili nel mare*

PRESS REVIEWS

from 04/2013 to 07/2014



Fondazione Venezia 2000 cultura e impresa

Marino Folin
Francesco Sbetti

with
Martina Bovo

WITH



Paolo Motta
Paolo Viola
Andrea Silipo



Ezio Micelli

IN COLLABORATION WITH



DESIGNED BY

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Marco Ferrari, Elisa Pasqual (with Marina Mangiat, Davide Porro)

PHOTOGRAPHY

Autorità Portuale di Venezia (pp. 8-9, 20-21, 90-91)
Delfino Sisto Legnani (Cover, pp. 26, 28, 34-35, 96-97)

TRANSLATIONS

Pamela Jean Santini



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