

# VENICE LANDSCAPE: BETWEEN THE WORLD HERITAGE SITE AND CRUISE TOURISM

## Abstract

Since 1987, Venice and its Lagoon is an UNESCO World Heritage site. However, from 2014 it risks to be included in the "World Heritage in Danger" list due to the complexity in the governance and protection of the heritage. Nowadays, the city is approaching its breaking point caused by many factors related to the bad effects of tourism. This paper focuses on the effects caused by the cruise industry in consideration of an increasing issue particularly felt by the inhabitants and ever more analyzed by the scientific community. Firstly, this paper analyzes the impact caused by the cruise tourism and its relation with the UNESCO site. Secondly, two kind of possible risks for the area (immaterial and material) are identified. Finally, this research mainly contributes to identify the scheme of the stakeholders in order to develop a future governance network necessary to establish actions to improve the actual situation.

**Keywords:** UNESCO site, cruise tourism, Venice

## Introduction

The modern world is facing a whole series of challenges such as climate change and resources exploitation as well as the speed with which we move from one place of the globe to another. Moreover, haste and frenzy are driving not only our daily life but as well our tourism habits. It can't be denied that Venice is one of the most famous tourist cities in the world. Since the "grand tour" period, the lagoon city is defined as a bestseller of international tourism. In addition, Venice and its Lagoon is part of the UNESCO world heritage list and it attracts about 11.7 million people a year [1]. Nonetheless, this site is struggling with climate change effects, over-tourism and constant exploitation of its cultural and natural resources. For all that reasons, it represents a model case study. With this in mind, this paper focuses on the complex relationship between the UNESCO world heritage site and the cruise tourism. The tourist presence in the city is divided into two main tourists' types characterized by the length of stay in the city. This paper focuses the attention on the daily tourist, also called "excursionist" or "one-day-tourists" [2] and precisely the cruise tourists. Nowadays, the cruise tourism lobbies the Venetian system from different point of view, such as economic, social and environmental. In this context, the paper tries to answer to the following question: "Has Venice already reached the tipping point in the tourism

destination life cycle?". Accordingly, the authors individualize the necessity to intervene within the governance structure of the city in order to enhance the future preservation and sustainable development.

## Venice: UNESCO heritage and Cruise Tourism

Venice and its Lagoon is widely known as one of the most beautiful cities and landscapes in the entire world and its characteristics are studied since many years. The state-of-the-art of this section presents two analysis of Venice: Venice as UNESCO World Heritage Site and a Venice's Cruise Market overview. Nowadays, these two realities create elements of interference on the territory of Venice. In this paper a separate analysis is proposed in order to create a state of the art which is propedeutic to the risk analysis defined in the next section.

## Venice as UNESCO World Heritage Site

The close relationship between Venice and UNESCO started in 1966, when the General Director of UNESCO of that time, René Maheu, launched one of the most significant international safeguarding campaign for the conservation of Venice, after the major flood of that year. In that context, UNESCO promoted several international actions, such as the establishment of International Private Committees for the Safeguarding of Venice, to safeguard the city from the "Acque Alte" (floodings) and to protect and restore the lagoon ecosystem.

Furthermore, in the late 1980s UNESCO also established an office in Venice, to promote the safeguarding policies. This is the only case, in its structure, of an office dedicated to a specific project [3]; that office was later on integrated into the UNESCO Regional Bureau for Science and Culture in Europe, established in the 1990s to facilitate the advancement of the overall UNESCO program with special focus on South-East Europe and the Mediterranean basin. Meanwhile, in 1987 the World Heritage Committee inscribed "Venice and its Lagoon" in the World Heritage List, on the basis of all six cultural criteria. It is a very rare fact, in the Convention system [3].

Nowadays, what concerns us more in terms of time and possible emerging consequences is the presence of the naval water flow of Great Ships within the Lagoon and the San Marco basin as well as the governance of the persistent whelming city tourism and the related side-effects of it.

In fact, in 2014 the international community put pressure on the Committee to take actions

towards Italy, therefore the first Advisory Mission in Venice took place in 2015. The year after, the discussion was opened at the 40th session of the Committee, in Istanbul. As a matter of fact, Italy had been asked to implement within two years proper solutions, otherwise Venice and its Lagoon would have been classified in the World Heritage in Danger list. The final decision that should have been taken in 2019 during the 43th session of the Committee was postponed by a year after sending another Advisory Mission to Venice early in 2020.

What we know, at the moment, is that the Advisory Mission was held in Venice between January and February 2020. However due to the pandemic of Covid-19 the 44th session of the Committee was postponed as well as the final decision.

Meantime a new UNESCO Chair on Water Heritage and Sustainable Development was assigned to Ca' Foscari University. Could this be a sign of how strong the relationship between UNESCO and Venice is (or should be)? Surely, even if Venice is universally known for its artistic and cultural heritage even independently of the recognition of UNESCO, there is no doubt that since the international safeguarding campaign of 1966 UNESCO has helped to keep the focus on the need for its conservation, contributing to the achievement of significant objectives (e.g. approval of the law of 16 April 1973, No. 171 - Interventions for the safeguard of Venice [3]).

## Cruise market overview of Venice

Since 1980 the Cruise Industry has shown an increasing growth and also nowadays it is one of the fastest growing sectors in the world. Cruise Lines International Association (CLIA), the world's largest cruise industry trade organization, published the 2019 State of the Cruise Industry Outlook report predicting a continuous growth throughout 2019 with an estimated 30 million passengers worldwide, compared to 28.2 million in 2018, 25.8 million in 2017, and 7.8 million in 1998. The increasing globalized cruise phenomenon can be attributed to both to the development of onboard product (e.g. the technological advances in the design of ships and onboard services [4]) and to the shore-based tourism opportunities (e.g. land excursions, intermobility and new port areas [5]). Although difficult to believe, the cruise industry continues to make a positive impact on communities around the globe by sustaining 1,108,676 jobs equalling \$45.6 billion in wages and salaries and \$134 billion total output worldwide in 2017 [6].

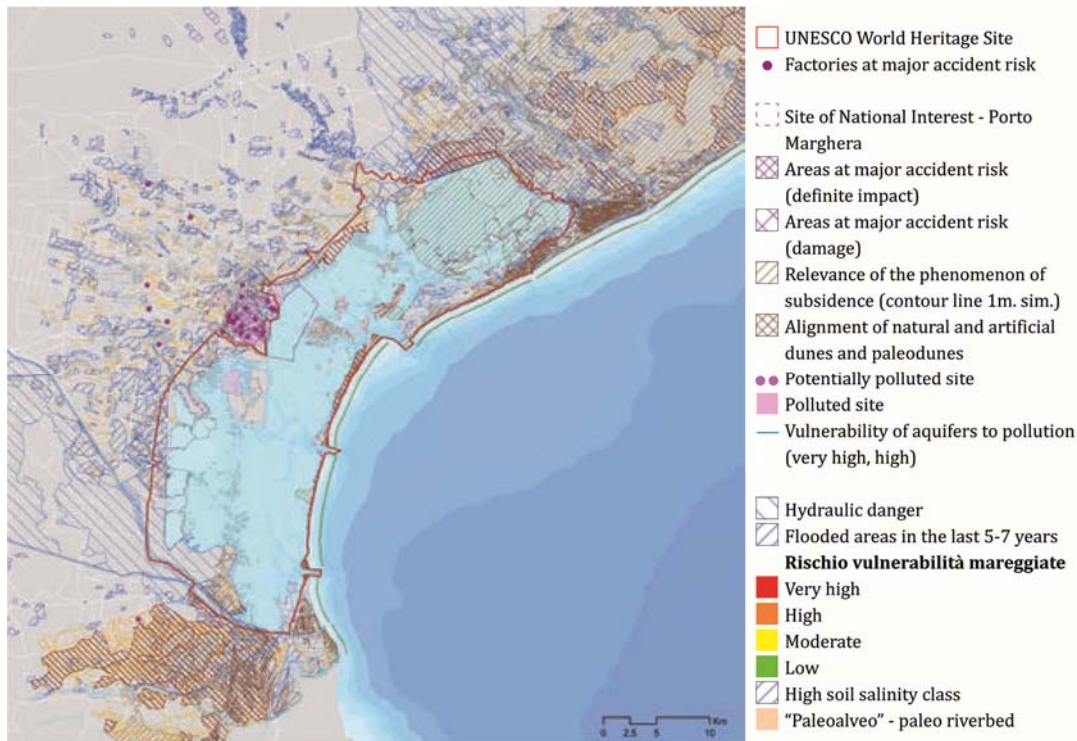


Fig. 1. The vulnerability and fragility map of Venice (source: Venice and its Lagoon Management Plan 2012-2018, p.58).

The European area covers the 26% of global passengers and 2017 marks a further growth for European demand, with 6.69 million passengers. Moreover, the CLIA in its 2017 European Economic Contribution Report shows a contribution of record €47.86 billion to the European economy due to the cruise industry. The Mediterranean area is characterised by a patchwork of ports [7] with six leading ports for people movement (Barcelona, Civitavecchia, Balearic Islands, Marseille, Venice, and Piraeus). The solutions provided by this paper on the area of Venice are relevant and associate to other cruise destination areas with similar characteristics, such as Dubrovnik and Kotor. Venice area has an increasing trend in people movement, from 1.215.088 in 2008 to 1.427.812 in 2017 and can receive until 7 cruise ships simultaneously. The huge number of passengers embarked/disembarked in the Venice area cause multiple reactions in the local population due to their awareness of Venice's vulnerability and fragility (Fig. 1).

Moreover, the increasing number and size of cruises entering in Venice's lagoon raise questions on safety and security and on social and environmental impacts. For all this reasons, in the last years, the Port Authority imposed restrictions for the cruise industry. Firstly, they have restricted the tonnage of ships that can enter in the San Marco Basin and in the Giudecca Canal. Secondly, in the 2018 they increased the restrictions by introducing an algorithm, which considers not only the tonnage but encourages the use of even more green ships with cutting-age technology. As a result the cruise ships number has decreased from 535 cruise in 2008 to 466 in 2017.

#### The material and immaterial risks of Venice

Since the 80s, tourism has been the economic force of Venice area. The local population has benefited from this development in terms of work, economic income and investments [8]. However, the growing tourism demand has

created a strong gap between the residents and local entrepreneurs due to the need to provide services and infrastructure for visitors. Moreover, it is a need to preserve the vast artistic and cultural heritage of the city as well as the natural environment of the lagoon (Figs. 2, 3).

In the recent years, many researchers are studying the effects of the tourism on the Venice area, precisely because the lagoon is increasingly affected by various factors that have been developed over the years and nowadays they are appearing unmanageable. Also UNESCO [9] pointed out a list of elements that are particularly concerning about the safeguarding of the World Heritage Site: big cruise-ships in the Lagoon, digging new

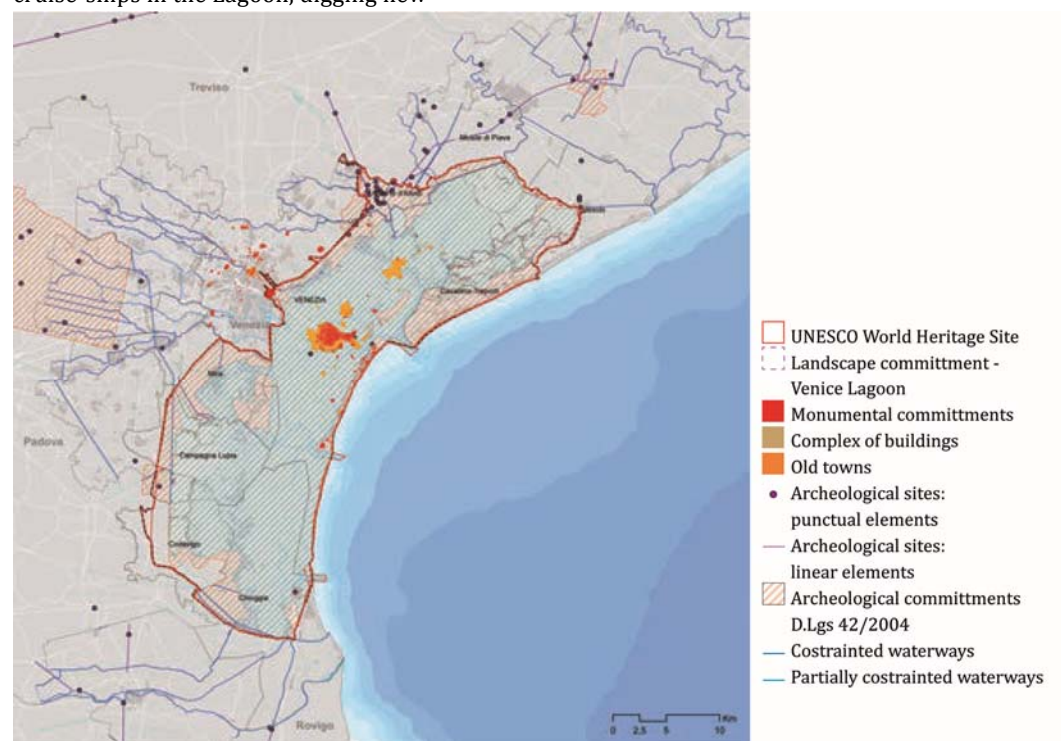


Fig. 2. The preservation map of Venice (source: Venice and its Lagoon Management Plan 2012-2018, p.58).

channels for big cruise-ships, potential threats for nature, also in relation with MoSE, tourism pressure, lack of maintenance of buildings, change of use of buildings, crowding-out inhabitants and loss of traditional craftsmanship. As we can see later on in this paragraph, several of these elements will also be identified by other researchers. Since 2014, Settis argues [10] that the tipping point of Venice won't be caused by irruption of a new civilization (that could be tourism) but the loss of awareness regarding the role of its uniqueness and diversity. Moreover, this paper in the forward chapters supports the Settis thesis by introducing the peoples' awareness as a key for the future projects' success.

Furthermore, as argued several times by the economist Van der Borg [11], it would have been better if Venice had previously estimated the future economic impacts, both positive and negative on the city itself.

In addition to the economic impacts, since 2007 Marvin e Davis [12] started to analyse the sociocultural impact of the tourism on the city. The morphological configuration of Venice doesn't allow to delimitate, circumscribe and dedicate a specific area to the tourism system, due to the vast distribution of attractions and monuments all over the area/city.

Consequently, there isn't a distinction between the areas purely dedicated to tourism and other areas designated to activities and services of residential users. This has led to a necessity to individualize the tools for over-tourism management [13], given the fact that the majority of residents are moving out from the lagoon area in order to use their accommodations for touristic purposes. The problem of over-tourism is clearly visible also in other studies where Venice is identified as a leisure park. For example, Fabbri [14] identifies the historic city as an urban scenography where the tourists can cause diverse problems to the locals. An example for that is the congestion of the public transportation.



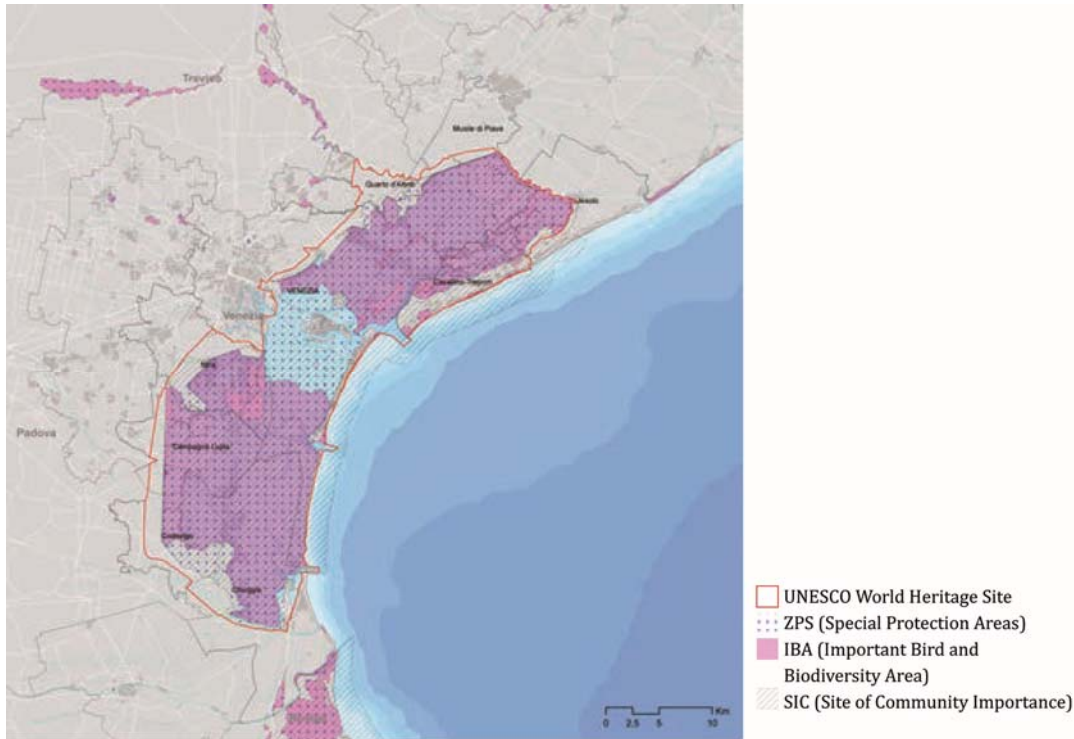


Fig. 3. The SIC, ZPS and IBA areas map of Venice (source: Venice and its Lagoon Management Plan 2012-2018, p.49).

Among all type of Venice's tourism, the cruise tourism cannot be overlooked because it is one of the main entry routes for tourists in the city [15]. It attracts a high number of tourists and this can cause a variety of impacts on the area e.g. on the landscape, on the constructive structures, on the heritage and the people, without generating a long-term wealth condition in the city. There are many papers in the literature [16]-[17]-[18]-[19]-[20] that analyse the cruise impacts on the Tourism Destination such as emissions (e.g. pollution, noise, smoke), alteration of heritage and the environment, endangerment of citizenship, architectural and cultural heritage and the environment.

This paper expands on the current debate by proposing two main categories of risks which are detectable in the Venice area: material and immaterial ones. Hereafter, a synthetic description of both possible risk categories that Venice area is currently undergoing (Tab. 1). The five identified risks of Venice were chosen based on the "interference" elements between tourism – cruise tourism in particular - and Venice as an UNESCO Site. Furthermore, these risks can lead to various effects on the Venetian territory. Leaving aside the economic and environmental risks due to a wide analysis in the literature (e.g. [21], [22]), this paper focuses on the remaining risks. For example, the social risk emerges for residents and students in the difficulty of renting an apartment because it is too expensive and as a consequence of that they

move to the mainland.

In this regard, some researchers [23] have evaluated the impact of tourism on residential uses of the city and have measured the sustainability of growth of the tourism facilities in the period 2008-2019.

Further architectural and art risks are for example identifiable through the physical damage caused to the canals' docks by the cruising ships. Until now, the damage was from a structural perspective but imagine in the future a cruise ship would break-in San Marco square; the damage would result in an inestimable loss of the UNESCO heritage. In this context, some researchers [24] introduced the Multi-Criteria Decision Analysis (MCDA) for the identification of a sustainable cruise line route by the weighing of various criteria and metrics related to the environment, economy, and social sustainability.

Moreover, from the aforementioned analysis it can be deduced that a difficulty in managing, maintaining and preserving heritage emerges. Therefore, this leads to a necessity to individualize a new managing system, which could save Venice from the current unsustainable over-tourism [25]. The introduction of an innovative network governance could project Venice to a sustainable territory-development as well as to new tools for a more efficient management and education of tourists.

Classification	Material Risks	Immaterial Risks
Environmental	Water and air pollution	Landscape distorted perception
Economic	Transformation in a theme park	Loss of artisan men craft
Social	Overtourism	Social impoverishment
Architectural and artistic	Heritage and urban damage	Loss of historical memory
Cultural	Loss of public space	Loss of traditions and urban identity

Tab. 1. Classification of the material and immaterial risks of Venice.

### Players and stakeholders of Venice

In order to be able to hypothesize plans, actions and punctual projects that can enhance the overall situation in the Venetian area by improving the management, education and awareness of tourists, as mentioned above, the first necessary step to project a reticular way of governance is to identify the scheme of the players and the stakeholders. Everyone of them can have a different role linked to the governance, protection or enhancement of the city and the lagoon, but first of all heading back to one (or more) of the three systems visible in (Fig. 4).

Hereafter, a synthetic description of the players and stakeholders that play a major role in the governance, protection, enhancement and daily life of the Venice area.

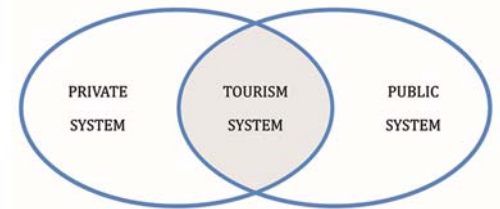


Fig. 4. The three system scheme of players and stakeholders' (source: authors processing).

#### Private system

In this group the authors point out the unorganized groups of stakeholders, as:

- Locals: inhabitants, resident and commuting students, resident and commuting workers, etc.
- Tourists: overnight staying tourists, one-day tourist (or excursionists).

#### Tourism system

This group includes all the figures involved in the tourism industry:

- Hospitality: hotels, B&Bs, vacation rentals, etc.
- Restaurateurs: restaurants, pubs, cafés, take away, etc.
- Cruise tourism: passengers logistic, freight logistic, port authority, municipality.
- Tourism workers: tour operators, tourist guides, info points, etc.

#### Public system

This group classifies the different institutions that are public or have a public role. For each type of institution, some examples are listed as followed:

- Regional or local authorities: regions, provinces, municipalities, etc.
- Peripheral state institutions: superintendence of archeology, fine arts and landscape, water authority, port authority, etc.
- Agencies: consortia, chambers of commerce, health authorities, environmental agencies, smart control room (to study and track tourist flows), etc.
- Subsidiary companies: public transportation, passenger terminal, etc.
- Cultural institutions: museums, art galleries, schools, universities, institutes of higher education, etc.
- Companies operating in the arts and crafts as well as in the cultural and

entertainment sector: film productions, design, works of art, etc.

- Organized groups: local associations, lobbyists like trade associations, etc.
- Managing body of the World Heritage Site: formed by regional and local authorities, peripheral state institutions and the Steering Committee; this last one is composed of the representatives of each entity responsible for the Site, with the functions of addressing, programming and controlling the activities related to the management of the UNESCO Site.

As can be seen, this list highlights the amount and variety of players and stakeholders that are involved within the group. As a matter of facts it emerges how articulated the managing body of the UNESCO World Heritage site is taking all the other identified players and stakeholders into account. Therefore, it seems necessary to develop an innovative reticular organism to make them dialogue and collaborate in the best way.

As previously mentioned, this first subdivision of the players and stakeholders is, in the authors' opinion, the first step to succeed in defining actions and projects aimed at improving the governance and the degree of involvement and awareness of the tourists. Subsequently, the second fundamental step in this direction must be the in-depth analysis of all the general and specific skills of the entities, companies and more generally of all the players examined so far.

Furthermore, it is essential to support this analysis that either the general and specific interests, that concern the various stakeholders identified so far nor the identified residents, will be incorporated.

Therefore, once all these data have been identified, it will be possible to start designing a network organization that is constantly able to evaluate the current situation and offer new, effective and shared solutions for the protection, enhancement and sustainable development of Venice, also starting from a better management of tourist flows and more awareness and disclosure in the tourists.

Actually, the authors consider rather difficult that single projects, carried out by individual entities, manage to have the strength to bring real improvements in such a complex and articulated situation, especially if there is no sharing of choices and objectives. In fact, the involvement (inhabitants included), are on one hand warmly suggested by UNESCO within the site management strategies [26] and can on the other hand really make a difference in the success of the projects put in place, mobilizing a collective and widespread effort. All this must take place through the grouping of skills and interests according to the different objectives (protection, enhancement, sustainable development), creating a multilevel network organization.

Thus, this organization will consist of the various networks comprising players and stakeholders united by single themes and objectives and by a macro-network that holds them all together at a higher level, allowing the comparison and dialogue between them to be maintained constantly open in a profitable exchange work.

## Conclusions

The paper stresses the importance of a new governance scenario for Venice and its Lagoon. As widely known from 2014, the UNESCO community is considering to include Venice in the World Heritage in Danger list due to the complexity in the governance and protection of the heritage. After the analysis of material and immaterial risks that Venice's territory is facing, the researchers find in the concept of an innovative network governance the way to loosen up Venice from the current unsustainable tourist situation. To achieve this objective it is necessary to identify the scheme of the players and the stakeholders and to analyze general and specific skills of the entities, companies and more generally of all the players examined so far. Only after this stakeholders' interpretation it is possible to hypothesize plans, actions and punctual projects that can enhance the overall situation in the Venetian area by improving the management, the education and the awareness of the tourists. Future works foresees a refinement phase of stakeholders' characteristics and interests to start a participatory programming by including all the stakeholders with the aim to start the preliminary phase of the network governance process.

## REFERENCES

- [1] Città di Venezia - Assessorato al Turismo, *Annuario del Turismo. Dati 2017*.
- [2] UNESCO, *Mission Report 2015, List of recommendations*.
- [3] Bandarin F., *L'UNESCO e Venezia: mission not accomplished in Venezia, il dossier UNESCO e una città allo sbando*, G. Fabbri, F. Migliorini, G. Tattara, Libreria Editrice Cafoscarina, Venezia 2020, pp.162-167.
- [4] Nolic M., Spoladore D., Carciotti S., Buqi R., Sacco M., *Cabin as a Home: A Novel Comfort Optimization Framework for IoT Equipped Smart Environments and Applications on Cruise Ships, Sensors (Basel), 19(5)*, 2019, p. 1060.
- [5] Carciotti S., Marin A., Ukovich W., *Smart Cruise Destinations and the evolution of ICTs: new scenario for cruise ships*, Proceedings of AESOP annual congress: Planning for transitions, book of abstracts, pp. 1165, 2019.
- [6] *Risposte e Turismo, proceedings conference Italian Cruise Watch 2018, report by Risposte e Turismo*.
- [7] Carciotti S., Marin A., Ukovich W., (2019) *Smart Cruise Destination: an innovative network governance framework, PORTUSplus 8*
- [8] Caroli R., Soriani S., *Fragile and Resilient Cities on Water: Perspective from Venice and Tokyo*. Cambridge Scholars Publishing 2017.
- [9] UNESCO, *Mission Report 2015*, pp.31-42
- [10] Settis, S., *Se Venezia muore*, Giulio Einaudi editore, Torino 2020.
- [11] Van der Borg J., *Tourism and Urban Development. The impact of tourism on urban development: towards a theory of urban tourism, and its application to the case of Venice, Italy*, Rotterdam 1991.
- [12] Marvin G., Davis R., *Turismo e Città d'Arte. Quali costi sociali a Venezia?*, Conference proceedings "Turismo e Città d'Arte" (Venezia, 15 ottobre 2005), Venezia 2007.
- [13] Seraphin H., Sheeran P., Pilato M., *Over-tourism and the fall of Venice as a destination*, Journal of Destination Marketing & Management, issue 9, 2018, pp. 374-376.
- [14] Fabbri G., Migliorini F., Tattara G., (2020), *Venezia, il dossier UNESCO e una città allo*

*sbando*, Libreria Editrice Cafoscarina, Venezia 2020, pp. 288.

- [15] Skwierczynski, D. P., Reese, J. H., Hunnewell, N. B., & Vautrin, R. T., *Cruise Ships: Influencing the City of Venice*. Retrieved from <https://digitalcommons.wpi.edu/iqp-all/2155>, 2010.
- [16] Brida J.G., and Zapata-Aguirre S., *Cruise Tourism: Economic, Socio-Cultural and Environmental Impacts*, International Journal of Leisure and Tourism Marketing, Vol. 1, No. 3, 2009, pp. 205-226. Available at SSRN: <https://ssrn.com/abstract=1332619>
- [17] Brida, J.G., Del Chiappa, G., Meleddu M., Pulina M., *Cruise tourism externalities and residents' support: A mixed approach*, Economics: The Open-Access, Open-Assessment E-Journal, Kiel Institute for the World Economy (IfW), Kiel 2012, Vol. 6, Iss. 2012-40, pp. 1-26.
- [18] Caric H., Mackelworth P., *Cruise tourism environmental impacts e The perspective from the Adriatic Sea*, Ocean & Coastal Management, Issue 02, 2014, pp. 350-363.
- [19] Dragovic' B., Tzannatos E., Tselentis V., Meštrovic' R., Škuric' M., *Ship emissions and their externalities in cruise ports*, Transportation Research, Part D 61, 2018, pp. 289-300.
- [20] Giurrandino A., Carciotti S., *The role of UNESCO recognition in the territory government: activation of new governance models become tools for social, economic and environmental sustainability*, Culture della sostenibilità, in publication, 25/2020.
- [21] Bertocchi, D.; Visentin, F. *The Overwhelmed City": Physical and Social Over-Capacities of Global Tourism in Venice*. Sustainability 2019, 11, 6937.
- [22] Abbasov F., Earl T., Jeanne N., Hemmings B., Gilliam L., Ambel C., *One Corporation to Pollute Them All - Luxury cruise air emissions in Europe*, In house analysis by Transport & Environment, 2019.
- [23] CLIA, *Cruising in Venice, the economic impact in Venice*, research report 2017.
- [24] Asero V., Skonieczny S., *Cruise Tourism and Sustainability in the Mediterranean. Destination Venice*, in Mobilities, Tourism and Travel Behavior - Contexts and Boundaries, 2018, chapter 6.
- [25] Pesce, M., Terzi, S., Al-Jawasreh, R.I.M., Bommarito, C., Calgaro, L., Fogarin, S., Russo, E., Marcomini, A., Linkov, I., *Selecting sustainable alternatives for cruise ships in Venice using multi-criteria decision analysis*. Sci. Total Environ. 2018, pp. 642, 668-678.
- [26] UNESCO World Heritage - *Sustainable Tourism Online Toolkit - Guide 4, Engaging local communities and businesses*. Retrieved from <http://whc.unesco.org/sustainabletourismtoolkit/guides/guide-4-engaging-local-communities-and-businesses>