

## Cruise Carrying Capacity Project Proposal Summary

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Cruise tourism is an important driver of growth and development that generates multiple implications on the calling destinations. The way, in which the industry affects port-cities depends both on the domestic conditions, such as the characteristics of the cruise port, the size of destination, the developmental stage of the sector (Stefanidaki & Lekakou, 2012), and the operational profile of the market. The dominant perception, that cruise tourism is the source of income generation, is contested and currently the industry receives criticism for its non-economic effects. On the other hand, it is argued that the organizational basis of cruise ships and passengers' activities make the sector 'a sustainable and sociologically harmless option' (Ritter & Schafer, 1998).

A contemporary challenge faced by cruise destinations is this of ships' gigantism. In the 1970s the average capacity of a cruise ship was 800 passengers. About 30 years later this capacity has been more than doubled, reaching 1900 passengers with the average growth rate of the fleet, during the period 2008–2012, estimated at 5.7% (ISL, 2011). Currently, the dominant companies of the market invest in giant constructions which can accommodate 6000 passengers and crew together, surpassing in size the number of residents in small towns and villages. This is not a random choice, since the ship's size is directly linked to the attractiveness and profitability of each company. The bigger the ship, the more services and activities are added (Di Vaio & Varriale, 2013; Kwortnik, 2007) aiming at satisfying diverse needs, motives and expectations. To that extent, the variety of the offered onboard activities combined with the shrinkage of stay hours in port of calls, aims at increasing sales (Di Vaio & Varriale, 2013) and onboard revenues.

Extremely large vessels require more advanced infrastructures and as such problems related to the capabilities of the destination and its hosting competence might be present. Overcrowding is a common phenomenon observed in popular destinations. An indicative example is this of Santorini. The island's population is 15,250 inhabitants and during 2012, 718 calls and 839,000 passengers (Hellenic Port Association, 2012) were recorded, meaning that the island was serving on a daily basis approximately 4650 passengers corresponding to 30% of the island's population. These numbers are doubled during peak season (Vaggelas, 2014).

The European Commission in the context of Blue Growth recognized cruise shipping as a sustainable blue activity which has a substantially contribution to European economies. The economic benefits of the cruise activity are well documented in relevant literature but there is criticism on the way the cruise experiences are staged at destinations and thus terms such as 'cocoon', 'bubbles' are used to imply that ashore activities are generated in a controlled environment and thus the potential economic impact is limited.

On the other hand, the recipients of the benefits and side effects of the activity-meaning the society- have not been systematically studied. The recent demonstrations in one of the most famous cruise destinations (Venice) may be used as a representative incident of a raising awareness of the local communities regarding the cruise activity and its

impacts both on the city and the way of life. Antagonistic relationships between locals and visitors are a clear indication of early stages of unsustainable development.

How impacts are balanced is a core and rhetoric question around cruise destination development, requiring a concept and a process for the facilitation of destination planning. Carrying capacity is an old fashioned concept more urgent than ever due to the emerging trends in the cruise industry. Spatial dimension affects the actual capacity of the destination but CC is not a single dimensioned concept since the perception of the society expressed through values and culture- creates the wider context of acceptance and consequently can determine the cruise carrying capacity.

In this context, the aim of this project is to identify and address the contemporary challenges of cruise destinations and more specifically to generate a uniform monitoring scheme integrating economic, social and environmental parameters, based on destinations' specific characteristics and level of development.

The major output of the project will be an indicator scheme available to the various local stakeholders and policy makers to be used both for monitoring purposes and informative reasons.

Within, a structured planning process with defined policy objectives, the suggested scheme could provide, knowledge on capacity issues, investment and transport infrastructure planning, (transport connections, terminals etc) as well on rejuvenation scenarios for the alternative uses of port and destination facilities in excess. Eventually, in congested destinations, the application of the model can be used for the allocation of vessels' and passengers' flows.