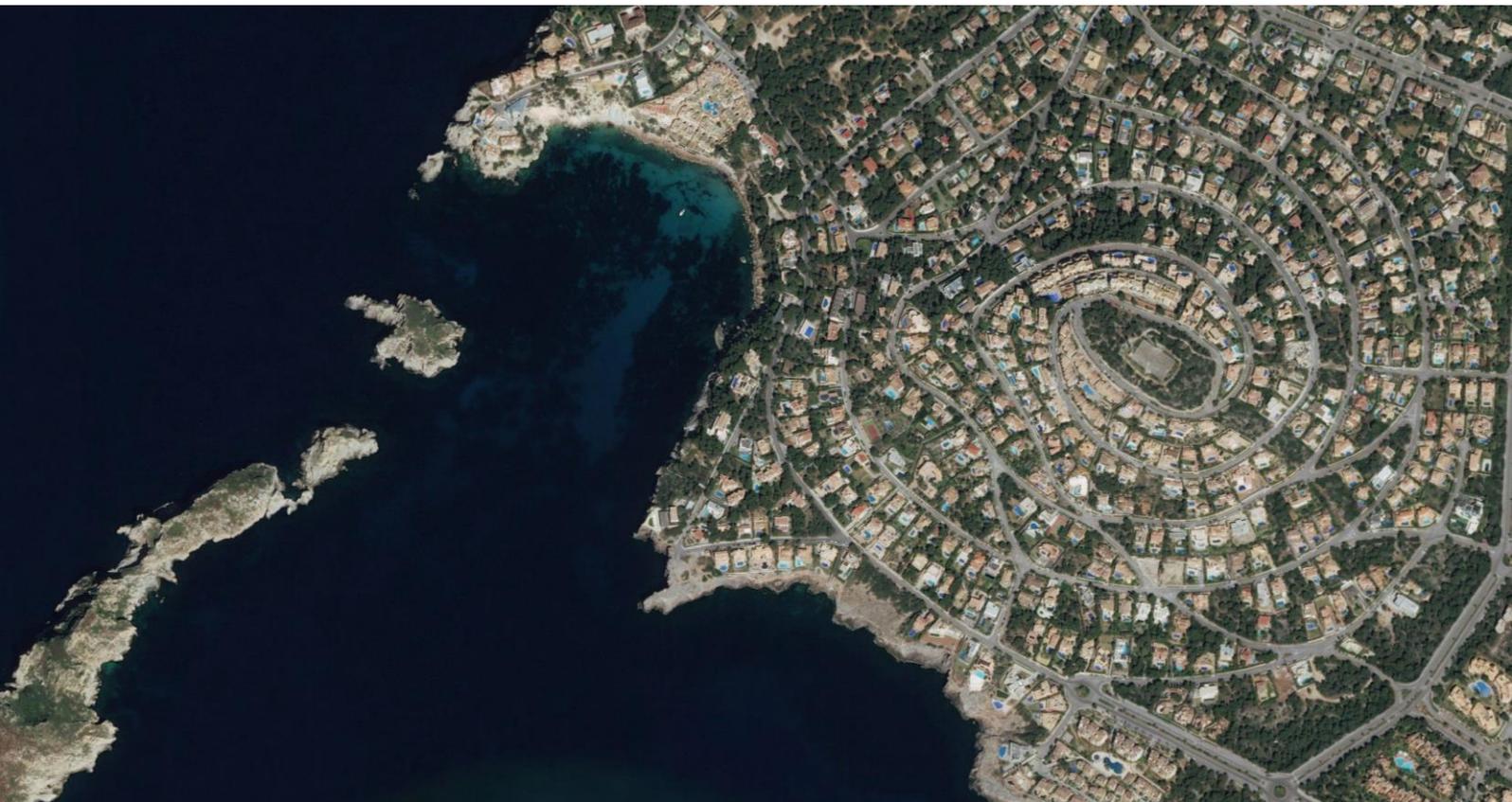


Tourism and the environment

Towards a reporting mechanism in Europe



ANNEX 12. Indicator assessment TOUR07

Spatial impact of tourism facilities (2). Marinas



Cover design: ETC/ULS

Cover photo: Coastal urbanisation in Mallorca (Spain), © Bing Maps

Layout: Francesc Romagosa (ETC/ULS)

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Indicator name: TOUR007 – Spatial impact of tourism facilities (2). Marinas

Assessment

Indicator name

TOUR007b - Spatial impact of tourism facilities (2): Number of moorings per km of coastline

Key policy question

Are we reducing the spatial impact from tourism infrastructures?

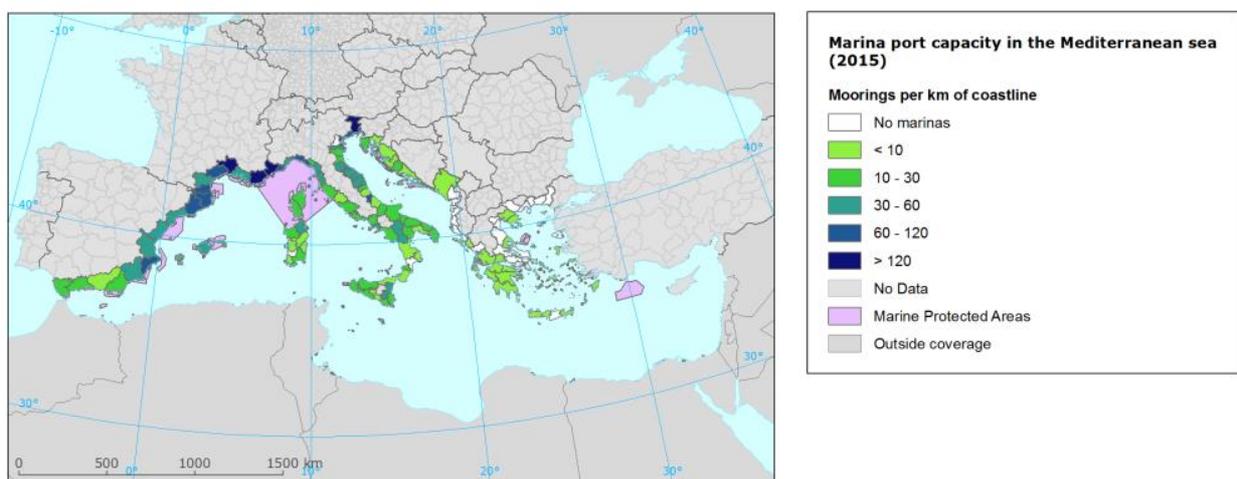
Key message

Tourism boating infrastructures, in particular marinas, have a strong impact on the coastal and marine environment if not properly designed, managed and monitored. Marinas can modify coastal dynamics (changes in terms of erosion and sediments deposition), with a strong impact on the coastal morphology. The maintenance of yachts and recreational shipping activities also have an impact on the quality of water and the seabed ecosystems in the vicinity of yachting harbours (e.g. due to the application of anti-fouling materials, cleaning of boats, oil discharges, etc.).

Key assessment

Europe has the highest number of marinas (ca 9,000) worldwide, despite the fact that its boat fleet is generally smaller compared to other regions. In 2010, in the Mediterranean alone, 946 marinas were recorded: 860 in Southern Europe and the remaining along the North African coast, in Middle East countries and in Turkey. The density of boats was estimated per kilometre of coastline, resulting in 8,000 in Italy and 10,000 in France (79,000 in the USA), whereas the highest density of boats per 1,000 inhabitants was recorded in Scandinavian countries (ca 170 boats per every 1,000 inhabitants in Norway, versus ca 10 boats in the UK), probably due to a historically well developed maritime tradition.

The highest pressure of marinas, considering the number of moorings per km of coastline, in the case of the Mediterranean Sea, is concentrated in the coastal NUTS3 regions of the Gulf of Lion (S of France and NE of Spain). The lowest pressure occurs on Greece and Western Balkans. In terms of the islands that constitute important tourism destinations in the Mediterranean, the highest pressures can be observed in Mallorca, while the pressure is lower on the Eastern Mediterranean coast.



Specifications

Indicator definition

Number of moorings per km of coastline in NUTS3 regions.

DPSIR

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Rationale

Marinas are important tourist attractions on the coast since they provide added value to the services offered in a particular place and tend to attract people with a specific tourism demands. The construction of the marinas often affects coastal ecosystems and has impacts the coastal morphology. However, the size of the marina in terms of moorings is an important indicator of the intensity of use. The more moorings a marina port has, the higher is the potential pollution by boat maintenance activities and the higher the potential pressure of recreational shipping activities. Studies have shown that antifoulants residues are present in many port sediments, but the mobilization of pollutants bound in surface sediments in the frequently disturbed port environment represents a serious threat for the local marine environment in general. Finally, since the indicator is aggregated at NUTS3 level, the number of moorings is provided per km of coastline in order to have comparable figures.

Policy context

EC and national policies on tourism and sustainable tourism.

EU regulations regarding coastal and marine ecosystems: Marine Strategy Framework Directive, Habitat Directive.

National and sub-national spatial planning regulations.

Methodology for indicator calculation

Yachting harbour location and its size in terms of moorings have been extracted from different sources for the Mediterranean coast. The EEA coastline dataset was split by NUTS3 regions in order to obtain the length of coastline within each NUTS3 region. The number of moorings corresponding to the NUTS3 regions was divided by the length of its coastline.

Data specifications

Data source: Plan Bleu, Federación Española de Asociaciones de Puertos Deportivos y Turísticos (FEAPDT), Portbooker.com.

Data sets uncertainties

Data for Spain come from the National Federation of Yachting harbours, hence are validated. Data for other countries is taken from a regional assessment (Plan Bleu) and a commercial web portal, hence attached with certain uncertainty as it does not represent official reporting data.

Ownership and contacts

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