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Characteristics and Dynamics of the Latvian, Lithuanian and Egyptian Marine Cadastre

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“How inappropriate to call this planet Earth when it is quite clearly Ocean” – Sir Arthur C. Clarke

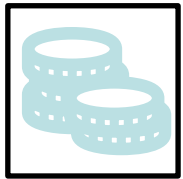
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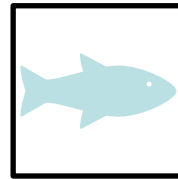
Five cross-cutting programmes of the Integrated Maritime Policy of the EU to solve governance issues, legal issues and spatial information issues for the development of marine cadastre



(Sustainable) Blue
Economy



Maritime Spatial
Planning (MSP)



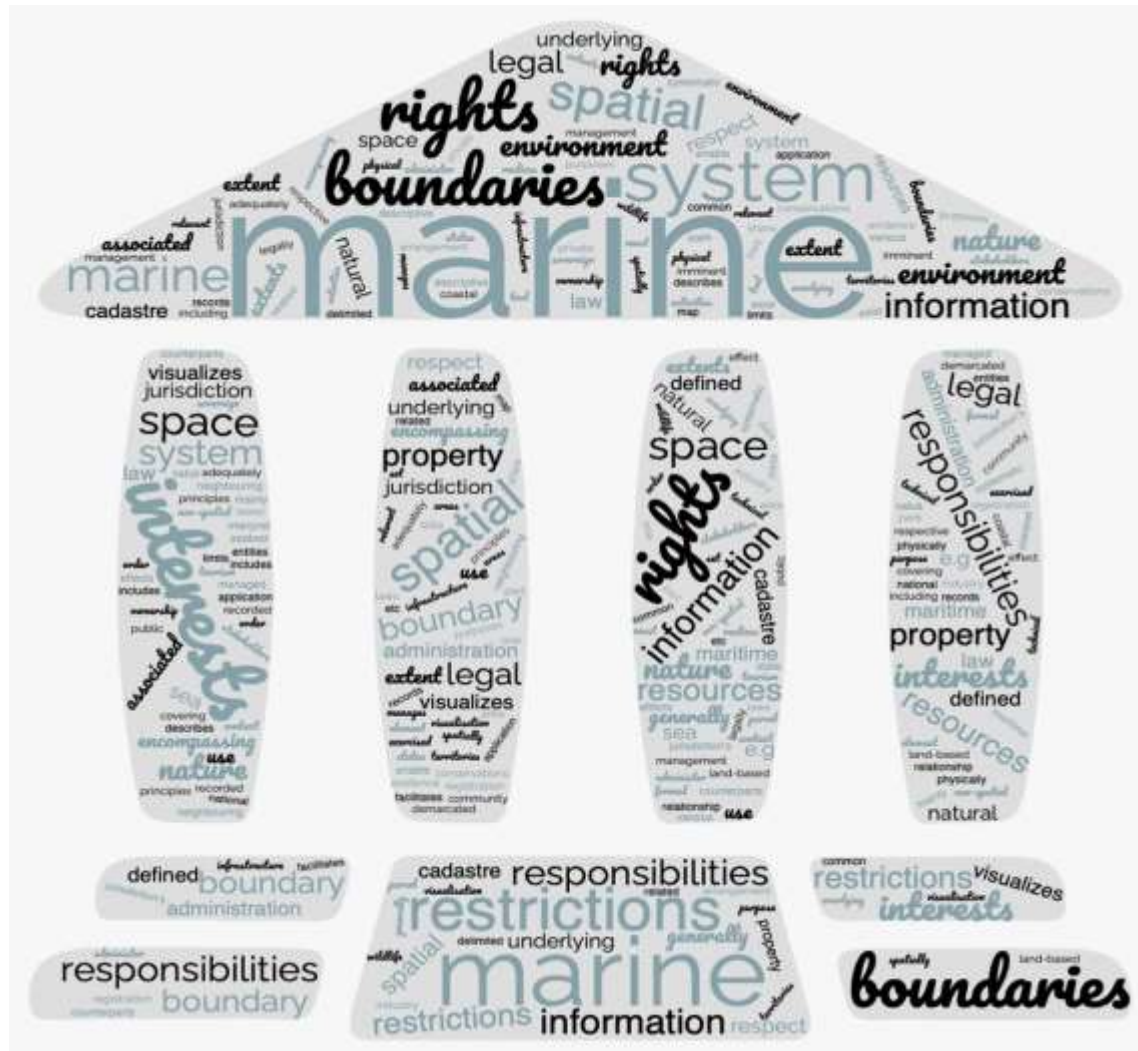
Sea basin
strategies



Integrated maritime
surveillance



Marine data and
knowledge



Marine/Maritime Cadastre as a Multipurpose, Multidimensional, 3-Rs Driven and Use-Oriented

- the most common characteristics of these definitions are boundaries and the 3Rs, namely, rights, restrictions, and responsibilities

Case study background

- Two oceans and four seas: the Atlantic and Arctic Oceans, the Baltic Sea, the North Sea, the Mediterranean Sea, and the Black Sea make up **Europe's coastline** of approximately **70 000 kilometres**
- Focus of the research looking at the development of the marine/maritime cadastre in the light of the maritime spatial planning (MSP) (rapid adoption of maritime spatial plans in 22 coastal Member States) and Sustainable Blue Economy
- Against this background, case studies from three countries – Latvia, Lithuania (Baltic Sea), and Egypt (Mediterranean Sea) are looked at

Baltic Sea

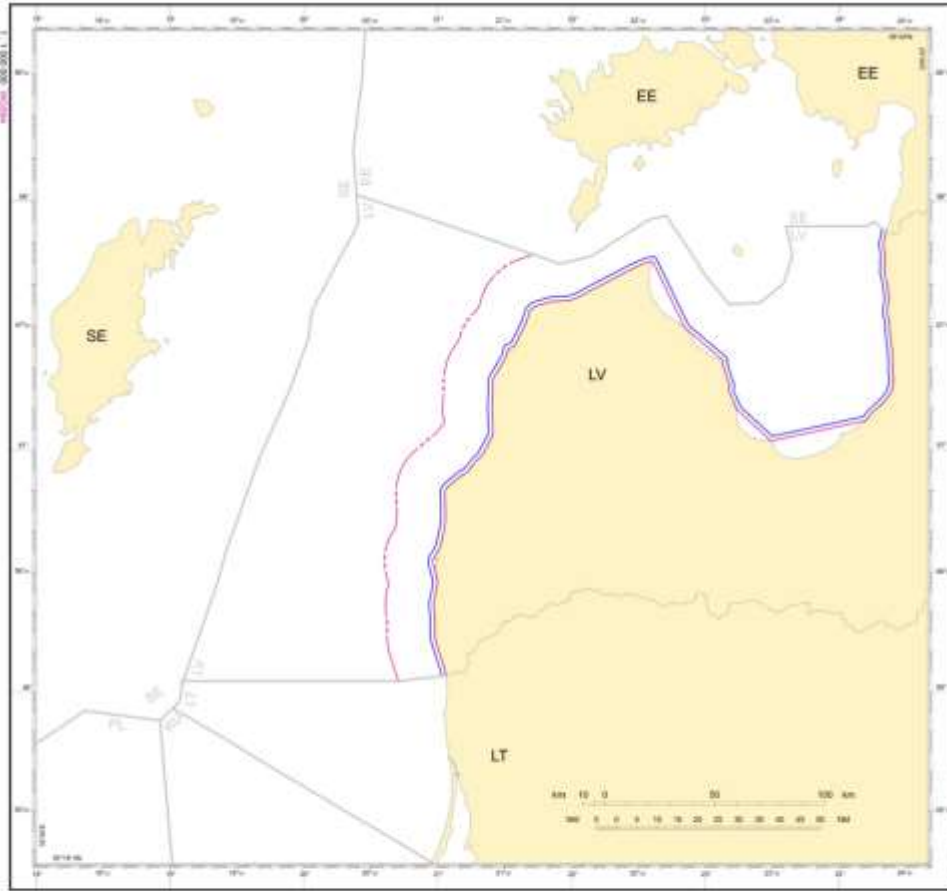
- The Baltic Sea is the largest expanse of brackish water in the world, semi-enclosed and relatively shallow, covering about **149,000 square miles** (386,000 square km)
- 9 coastal countries of which 8 are EU Member States with clear borders



Mediterranean Sea

- The Mediterranean Sea – an intercontinental, nearly landlocked sea that connects Europe and Africa, stretching from the Atlantic Ocean to Asia in the east – has been referred to as the “cradle of Western civilization.” The Mediterranean Sea, which includes the Sea of Marmara, covers over **970,000 square miles** (2,510,000 square km)
- Some two dozen separate states – a wide mixture of EU and non-EU Member States with unclear borders



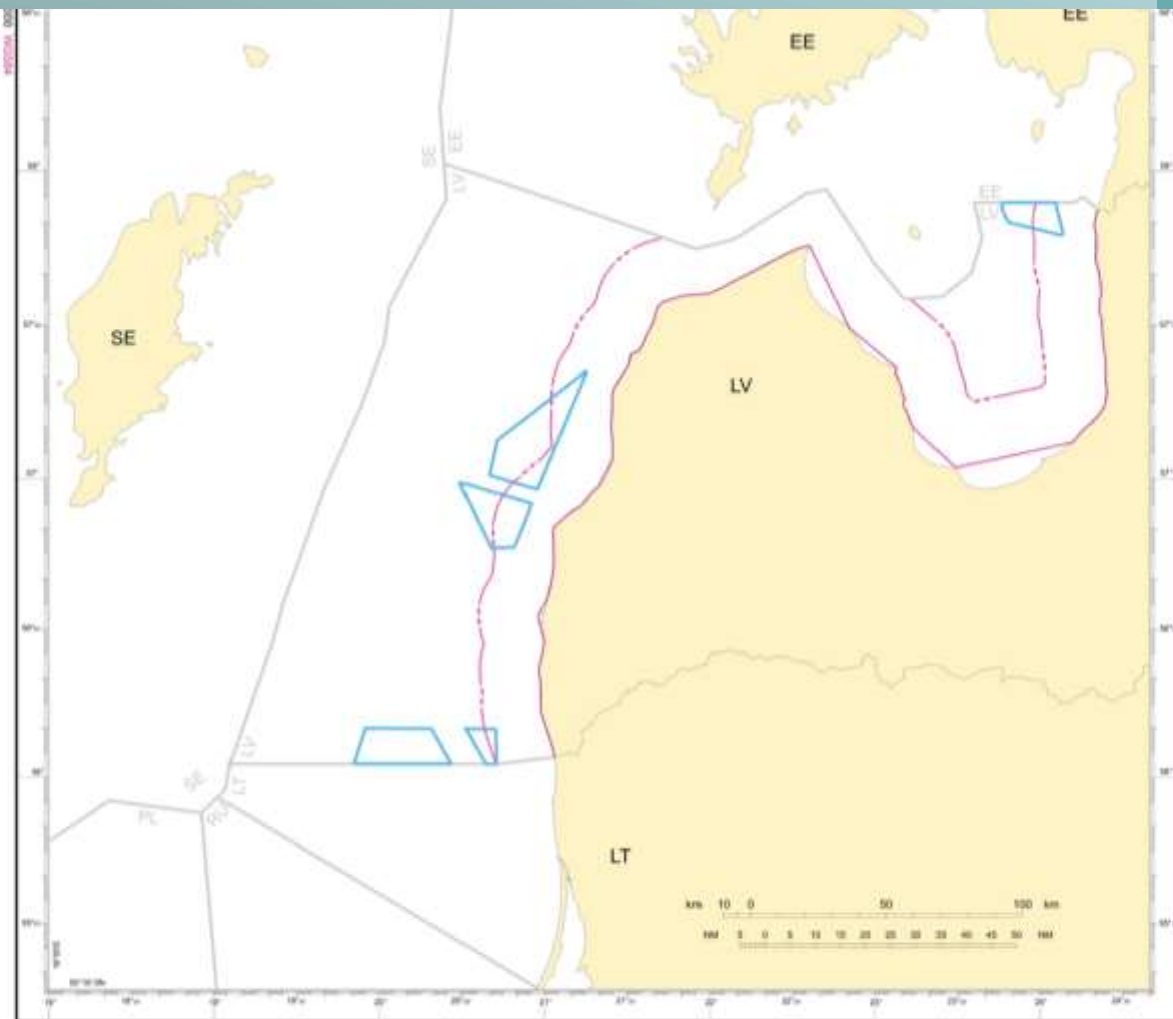


Source: authors' production.
 Figure 2a: Boundaries of Latvia – baseline, 2 km zone and the boundaries of territorial waters and the EEZ presented cartographically.



Source: authors' production.
 Figure 2b: Boundary of the baseline in nature: Kurzeme Open Sea beach.

Figure 2: Boundaries of Latvia – baseline, 2 km zone and the boundaries of territorial waters and the EEZ presented cartographically (left) and in nature (right).



Source: authors' production.

Figure 3: Boundaries of Latvia – baseline, the boundaries of territorial waters and the EEZ with wind farm exploration areas presented cartographically.

Conclusions I

- The shorter the sea border for each country, the more attention it pays to the issues of the marine governance and marine **information system**.
- The main drivers of the development of the maritime cadastre are international and regional regimes and instruments (e.g., the European Union's Integrated Maritime Policy with its core elements such as Blue Growth, maritime spatial planning, and sea basin strategies).
- The maritime cadastre is a vision for the future. However, the development of maritime spatial plans is a precondition for the development of a Multipurpose, Multidimensional, **3Rs-Driven and Use-Oriented Maritime Cadastre**.
- Given the importance of **offshore wind energy** as a driver for offshore use, it is expected that records of offshore wind energy production infrastructure will begin to build many maritime cadastres.

Conclusions II

- In parallel with these processes, awareness of **surveyors**, the geodetic community in general and, especially, responsible state institutions, as well as the wider public needs to be raised regarding the rationale for the maritime cadastre.
- Other issues to take into account:
 - the internationally applied unit of measurement, the “**nautical mile**” (instead of “kilometre”);
 - integration in the maritime cadastre of all maritime areas adjacent to each coastal state as territorial waters and EEZ (zoning of UNCLOS),
 - inclusion of the 3Rs in the cadastre only (without involving land registers),
 - periodic updates of the **baseline**.

Thank you for your time & attention !

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