Supporting marine dimension in Croatian NSDI - marine cadastre and marine SDI concepts

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Coastal areas and marine areas have a special importance for coastal countries, and generally for the region and the global contemporary society. Intensive exploitation of their resources in all maritime sectors: marine, energy, tourism and fishing and all that, combined with climate change, is at the present time a lot of pressure on the preservation of the marine environment. The European Union defined Integrated Maritime Policy, which is a basic document for the strategic policy of integrated and sustainable development of marine areas of the EU countries, which have established many legislative regulations, such as the Water Framework Directive, the Marine Strategy Directive, Habitats Directive, the Ports Policy, transport policy, etc. Croatia, as a typical coastal country, with a very significant share of coastline and territorial waters (35% of total area) in their legislation and legal regulations pertaining to the sea coast (Maritime Law, the Law on Maritime Domain and Seaports...) defines the various activities (maritime transport, trade, tourism, environmental protection, aquaculture, exploitation of marine resources, etc.), which also require integrated management for sustainable development of these areas of development and coordination with coastal areas of the Croatia. That building and establishing spatial data infrastructures, is in at the present time model, which allows integrability and interoperability of spatial information and services. However, in modern maritime community, there is consensus that these models have not handled enough problems of complexity of marine areas and especially the complexity of the problem of integration of land and marine environment. Because of that, today many maritime countries are also considering the development of the concept of the Marine cadastre and Marine spatial data infrastructure (MSDI). Their institutionalized and implemented concepts should enable the planning, management and adoption of appropriate policies, so as to allow the use of appropriate spatial marine data and products. The benefits of Marine cadastre, using information technology policies and standards over the MSDI, will allow overcoming the gaps and complexity between the land and marine environment. This paper describes the objectives of defining and identifying marine cadastre of the Adriatic Sea, as a very important instrument for the efficient management and sustainable development. It describes the relation between the concept of future MSDI and their relationship to the NSDI in Croatia. Prominent role of the Croatian Hydrographic Institute in line with initiatives in International hydrographic community (IHO), the importance of hydrographic information, such as multipurpose of spatial information and related GIS layers, products and services, as well as a vision for an Integrated Maritime Information System, based on the described concepts.

Ključne riječi: Marine cadastre, Marine SDI, National SDI (NIPP), IHO

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