

# GIS BASED DECISION SUPPORT SYSTEM FOR DETERMINATION HYDROGRAPHIC AND CARTOGRAPHIC PRIORITIES

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This paper has intention to propose the use new methodologies and tools, such as GIS and multicriteria analysis in determining hydrographic surveying priorities at area of responsibility of Hydrographic Institute .Decision to determine the areas for highest priorities for hydrographic surveying is quite certainly influenced by a series of parameters that can be gathered in several groups and layers (economic activities, morphology, physical oceanography, bathymetry, type of presentation,etc...)

The combination of methods of multicriteria analysis and GIS overlay techniques result in series of polygons of equal or similar quality making the basis for determining the priority of hydrographic survey.GIS technology has been chosen which enables spatial overlaying of different layers of chosen parameters, and Arc/Info and ArcView GIS modules, together with PROMETHEE method of multicriteria analysis has found most appropriate.Expected result of this research have to help planning process in Institute for managing hydrographic surveying activities along East Coast of Adriatic Sea. Use of this model will enable more effectively prioritize surveying areas taking in considerations all physical and economical parameters.

KEYWORDS: multicriteria analysis, geographic information systems, hydrographic surveying