The analysis of the effect of risk reduction planning alternatives on reducing the risk now and in the future and the support of decision makers in selecting the best alternatives is of highest relevance. Herein, Spatial Decision Support Systems SDSS are most promising. The SDSS will be composed of a number of integrated components, dealing with multi-hazard risk analysis, selection of alternatives for risk reduction, creation of scenarios related to climate change, land use change and population change, comparing of risk results from the alternatives and scenarios using cost-benefit analysis, cost-effective analysis and spatial Multi-Criteria Evaluation, and the visualization of the end results in the form of maps, risk curves and tables. The Risk Assessment component allows to carry out spatial risk analysis ranging from simple exposure to quantitative analysis. The envisaged users of the platform are organizations involved in planning of risk reduction measures.

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