National Institute for Research and Development in Tourism

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Title EN	**GIS information tools in green-blue infrastructure connectivity analyses. Pilot study: Bucharest metropolitan area**
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Description	Green-blue infrastructure system planning successfully contributes to curbing urban sprawl and land uses affecting sustainability and green spaces. Implementation green-blue areas in large cities must account for a vision, historical and geographical context, socioeconomic issues, and governing mechanisms. Romanian periurban landscapes are under pressure and particularly important to introduce effective cooperation, design common green spaces, use green infrastructure planning tools, and increase public participation. The methodology is designed as a part of urban and territorial development of big cities, sectoral policies and financial instruments, relying on processing land use data based on landscape values, requirements of GIS tools, and correct choice of green nuclei. The analysis was carried out at regional and local levels. The results were overlapped with data on the property type to change corridors routes, so that they intersect as few private lands as possible. Finally, for a realistic assessment of connectivity, we overlapped the resulting raster with high-resolution Copernicus satellite images. Strategic spatial planning is crucial to make outdoor spaces resilient to climate change and extreme weather. A green-blue infrastructure requires integrating land management and strategic spatial planning. The main issues are collecting data, assessing their quality, and managing large amounts of data. For this reason, connectivity analyses require GIS and a good knowledge of landscape features like biodiversity and socio-economic values, connectivity issues and type of ecosystem services provided.