

## Observation for urban planning: The GEOURBAN Project

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Sustainable urban planning and management demand innovative concepts and techniques to obtain up-to-date and area-wide information on the characteristics and development of the urban system. The increasing availability of Earth Observation (EO) technologies has provided new opportunities for a wide range of urban applications, such as mapping and monitoring of the urban environment, socio-economic estimations, characterization of urban climate, analysis of regional and global impacts and urban security and emergency preparedness. However, a gap exists between the research-focused results offered by the urban EO community and the application of these data and products by urban planners and decision makers. Hence, the main objective of the GEOURBAN (ExploitiNG Earth Observation in sUstainable uRBan plAnning & maNagement) project (<http://geourban-fp7-eranet.com/>) was to bridge this gap by demonstrating the ability of current and future EO systems to depict parameters of urban structure and urban environmental quality at detailed level. In the framework of GEOURBAN, the urban planners' perspective was taken into account in developing a Web-based Information System (WIS). The GEOURBAN WIS has the potential to support urban planning by providing a set of EO-based indicators easily transferable to any city and understood and by non-experts. Three cities with different typologies and planning perspectives were selected as case studies: Tyumen (Russia), Tel-Aviv (Israel) and Basel (Switzerland). The adaptation of the system to forthcoming missions was also addressed, therefore it is expected that a fully operational tool can be developed in the future. This presentation introduces the conceptual approach towards the integration of EO-based geo-information into urban and spatial planning and discusses results of the indicators and the WIS developed and evaluated by using remote sensing data.

