SPATIAL DATA INFRASTRUCTURE FOR ECOLOGICAL ENVIRONMENT

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The main objective is to ensure the sustainable development of Energy, requires the development of enterprise geographic information systems (GIS) for the modeling of energy systems. The corporate GIS in Ukraine will increase the energy efficiency of the management of energy companies.

In general, web-based spatial data infrastructures (SDI) such as INSPIRE consist of institutional and technical frameworks for the creation, exchange, and use of geospatial information throughout an information-sharing community. Such frameworks can be implemented narrowly to enable the sharing of geospatial information within an organization or broadly to enable the sharing of geospatial information at national, regional, or global levels. In all cases, spatial data infrastructures provide a coherently managed means for posting, discovering, evaluating, and exchanging geospatial information by participating information producers and users.

The purpose of INSPIRE is to tie European geospatial information producers and users together in a single, geospatial information-sharing network to improve decision making and operations in service of a productive and sustainable Europe. The target users of INSPIRE include European Community policy makers, planners, and managers and their organizations along with commercial businesses and the general European public.

Smart grid technology will communicate with consumers and consumer devices and make alterations to help lower costs, improve equipment utilization, and reduce carbon emissions. To do this, utilities should fully integrate GIS into the overall IT framework.

Overall, GIS offers the following advantages:

- publish fast, intuitive web maps tailored to any audience, dramatically strengthening business and resource decisions with real-time geointelligence. ArcGIS Web Mapping APIs complement this technology and support the development of web map-based applications consuming ArcGIS for Server services;

- geographically enable IT investments, shrinking data and application redundancy, optimizing system configurations, and consolidating enterprise systems;

- centrally manage geodata, providing better data security and integrity for an organization's most important information assets;

- simplify access to large volumes of imagery resources, significantly reducing storage costs and data processing overhead;

- extend GIS to the mobile workforce, increasing the accuracy and value of field data collection projects and asset monitoring as well as resource and event.

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