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## **THE PRINCIPLES OF ELECTRIC POWER SYSTEMS DATABASES CREATING, FUNCTIONAL CODE REVIEW FOR GIS IMPLEMENTATION AT ELECTRIC POWER COMPANY OF MACEDONIA**

### **ABSTRACT**

The electric power infrastructure, as a part of the living space infrastructure, beside common infrastructure characteristics, has its own characteristics, which are described in this work.

The ways and the methods of collecting, grouping and processing of electric power infrastructure information are treated, aiming the complete GIS implementation at A.D. ESM.

The information partitioning and selection are guided by the basic electric power infrastructure elements partitioning, such as electric power objects and electric power lines.

Information is divided in two informational partitions, such as spatial data and attributes, which are also divided into different data groups. Each data group will be treated according to the basic GIS principles: integration, accessibility, space transformation, linguistic and terminology definition, accuracy and visuality.

Analyse of F code creating, for the equipment functional coding at A.D.ESM is presented, experiences, dilemmas and recommendations are also presented in this paper.

**Keywords:** GIS, spatial data, objects, databases, F code, integration, accessibility, accuracy, visuality.