

This thesis is devoted to the analysis of open accessible digital libraries in science and research and, at practical level, thesis puts Czech national metadata sets prepared within research and ETD digital libraries development in the Czech Republic. The second chapter presents terminology issues in digital libraries area and general models of digital libraries - „Kahn-Wilensky“ architecture and Reference Model Open Archival Information System (OAIS) with special regard to institutional repositories. The third chapter contains the survey of development and current state of open access to information in science and research and its main resources including initiatives of its support. The fourth chapter presents selected systems of open access electronic archives or digital libraries in science and research. Included are selected systems and services in computer science, economics, library and information science, social science, the specific British system of internet resources Intute, digital libraries with citation services and ETDs digital libraries. The fifth chapter presents the outputs of research – Czech national metadata sets for ETDs description and communication with added issues of persistent identifiers of information entities.