



# Project Description VeSiKi

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## VeSiKi Project Description

The BMBF research program “IT-Security for Critical Infrastructures” has been initiated as part of the “High Tech Strategy 2020” of the German Federal Government.. In order to evaluate and to improve IT Security of critical infrastructures, the project VeSiKi “Networked IT-Security of Critical Infrastructures” (Vernetzte IT-Sicherheit Kritischer Infrastrukturen, acronym “VeSiKi”; FKZ:16KIS0214), accompanies various projects from different critical infrastructure backgrounds to establish a collaborative research process among these projects (see joint research projects: <http://vesiki.w3.rz.unibw-muenchen.de>).

It serves as a platform which allows research institutions and providers of critical infrastructures to access results derived within this collaborative process.

From knowledge engineering point of view the VeSiKi project provides an ontology for IT-Security in critical infrastructures. The ontology for IT-Security in critical infrastructures integrates the following subontologies in form of terminological knowledge (TBox concepts) to build up the model:

- The subontology **Project** covers a cross sectoral analysis and classification of project information and results like project institution, competence, critical infrastructure and approach.
- The subontology **IT-Security** covers the IT-Security relevant aspects like, threats, controls and vulnerabilities and is linked via critical infrastructure to the CRITIS subontology and consequently to the appropriate assets of an organization.
- The subontology **Compliance** covers norms and standards, regulations and applicable laws and measurements. The compliance ontology is linked to the it-security ontology to gain first indication of an appropriate threat. The results of the aforementioned various project approaches inter-relate with available measurements or extend the measurements by integrating new approaches.
- The subontology **CRITIS** links the cross sectoral classification of the projects with critical infrastructures relevant aspects like Asset, Organization and Critical Infrastructure.

The project members are engaged to fill in the assertational knowledge in form of ABox Instances according to the specified TBox concepts. Thus, the subontologies together build up a common knowledge base for project teams of research institutions and providers of critical infrastructures.