Organizational security system as a determinant of enhancing security culture of GIS

The purpose of this paper is to propose a way to measure security culture as a determinant of organizational safeguards for sensitive resources in GIS-class systems. Based on a critical analysis of the results of the risk estimation of sensitive resources in GIS, a variant of the model and then the methodology for measuring security culture was proposed, its basic elements were described, and then the criteria that should be met by each organizational safeguard, considered in the measurement of security culture, were identified and established. Based on the developed model of security culture measurement, methods for measuring this phenomenon in GIS from the perspective of the organizational safeguard system are indicated. Attention was focused on theoretical aspects and elements of best practice that indicate the feasibility of developing and applying a security culture model to measure security performance of GIS.
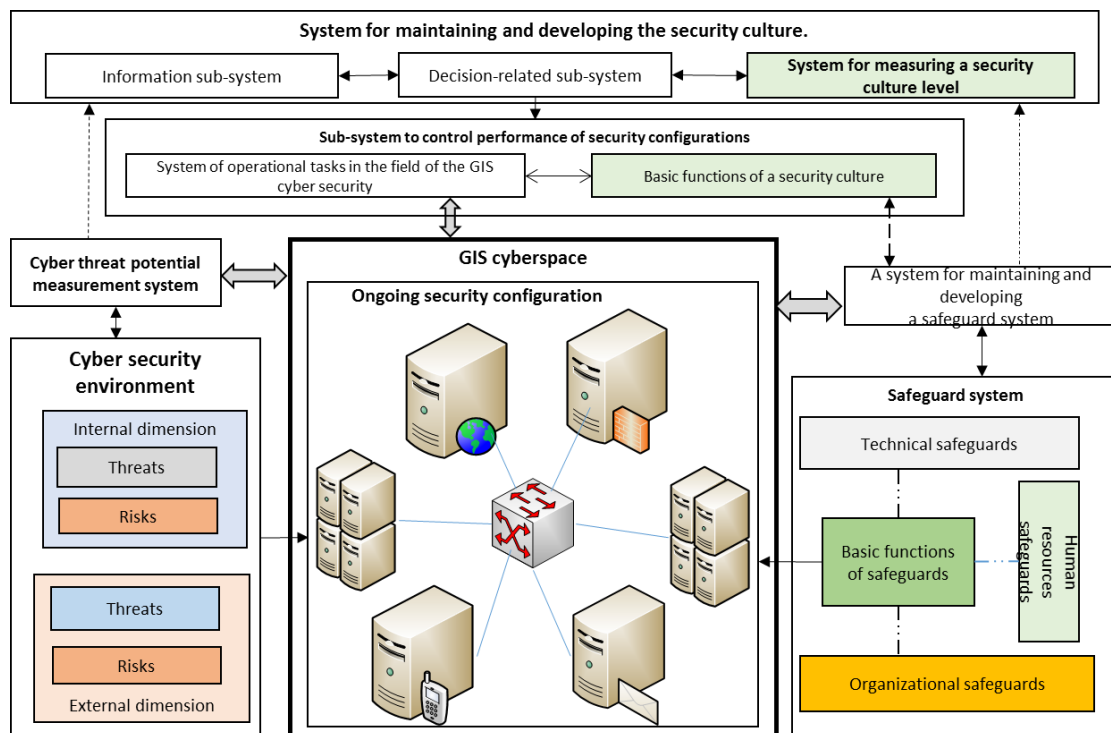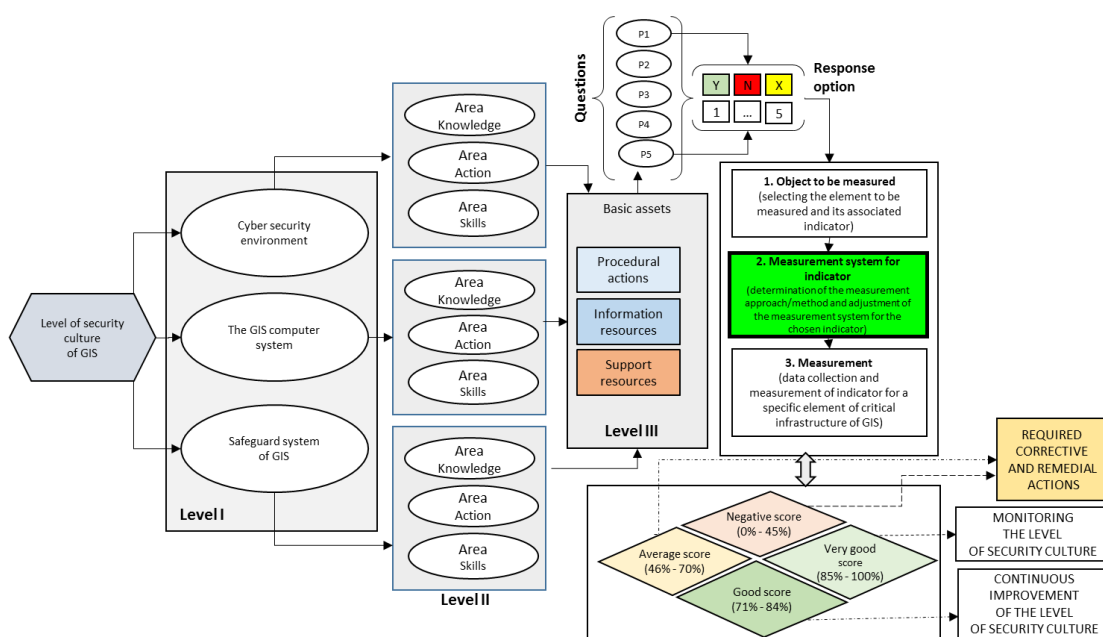
Illustration of the GIS system for cyber security

Methodology for studying the level of security culture at work

Jerzy Stanik *jerzy.stanik@wat.edu.pl*
Maciej Kiedrowicz *maciej.kiedrowicz@wat.edu.pl*