**Monitoring of policy implementation: convergent mobile and fixed technologies as emergent enablers**

ABSTRACT

Based on the viable system model (VSM), a system viability refers to the capability of a system to exist and maintain its sustainability within an environment. In this framework, monitoring function supports the gathering of relevant information directly from the operating units and feeding them into the formal control function. In turn, the control function uses the information to produce reports for the higher level functions of intelligence and policymaking, which later utilise these information for their decision making. Given its role, monitoring function supports the viability of a system, especially in large-scale policy-based system. However, studies on the functions of a system monitoring are generally lacking, leading to the lack of understanding on how to conduct monitoring in a viable system implementation. The objectives of this study are a) to discuss the role of monitoring in a viable system framework, and b) to conceptualize the function of monitoring within a policy-based system that is enabled by technologies. To achieve these objectives, this study reviews the literature on monitoring (in relation to VSM framework), on research process in general, as well as on technology adoption. This conceptual exploration generates an emergent viable system model that can guide future researchers in conducting an action research of monitoring function implementation.

**Keyword:** VSM; Monitoring function; Biotechnology policy; Policy implementation; Qualitative research