

# EARLY WARNING SYSTEM FOR MUNICIPAL SERVICE DELIVERY PROCESSES

## Introduction

The current municipal monitoring and evaluation (M&E) system is by legislation compelled to serve as an early warning system (EWS).

However, it does not have all the components of an EWS and, as a result, cannot alert key players and stakeholders of developing problematic trends in municipal service delivery processes (Sejeng, 2013; Engela & Ajam, 2010).

## Two premises

The study is based on two premises:

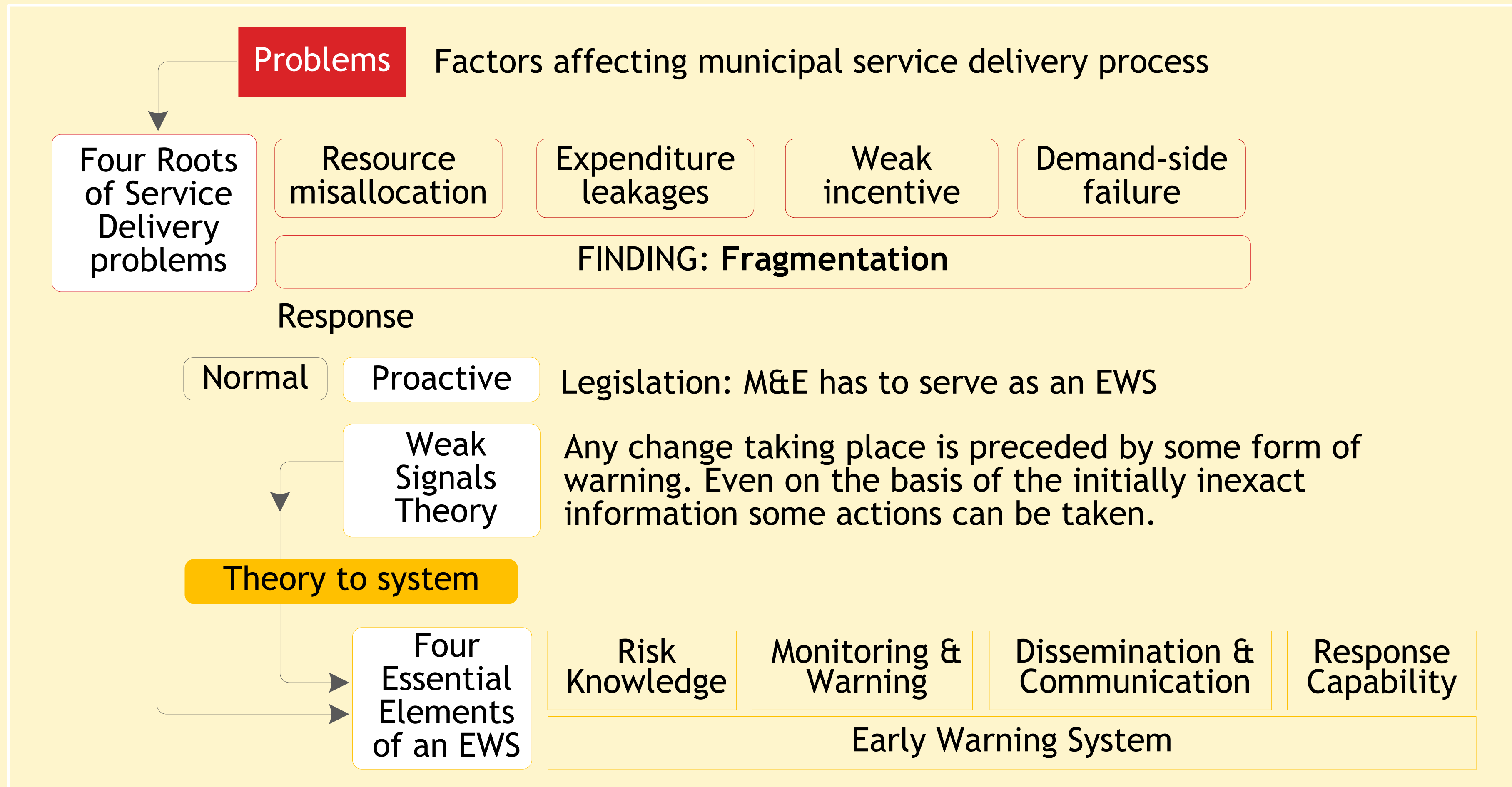
(1) the current municipal service delivery performance could be improved if the early warning signals of possible problems could be detected early and used to minimise the development of problems and maximise efficiency.

(2) the current municipal M&E systems do not serve as an EWS.

Definition: **Early Warning System (EWS)**

A detection process that alerts key players of developing problematic trends in municipal service delivery processes that can be obviated by taking the necessary corrective interventions at an early stage.

Figure 1: Conceptual and theoretical framework



## Purpose of the study

is, thus, to develop a M&E system that is incorporated with an Early Warning System (EWS) so that it can capacitate municipalities to receive advance information about potential problems, and will enable them to implement the necessary corrective interventions.

## Methodology

A qualitative approach and a case-study methodology were used. Data were collected through observation, interviews and document study. Twenty five people were interviewed, three site observations were undertaken, and key pertinent documents and reports were analysed.

The unit of analysis is the City of Johannesburg (CoJ) and three municipal entities, i.e. City Power, Johannesburg Water and Pikitup.

Three theories are used as a theoretical framework: Ansoff's "weak signals theory" (1975; 1979); the "four roots of service delivery problems" (Devarajan & Reinikka, 2004); and "four essential elements of an EWS" (UNISDR, 2005) (Figure 1).

## Questions

(1) To what extent does the weak signals theory contribute to the effectiveness of an M&E system by integrating its approach into an early warning system?

(2) To what extent does the current M&E system of municipalities have the characteristics of an early warning system?

(3) How can the current M&E system of municipalities be modified and upgraded to integrate the components and characteristics of early warning system in it?

## Findings

It would be hard to apply the Weak Signals Theory to an early warning system for a municipal service delivery process. However, the rational of the theory can still be applied.

There is no consolidated risk knowledge data-base. There are signals, and people who detect and understand the signals. There is monitoring but no warning or communication. And no action is taken. The response capability has not been developed yet, systematically.

The existing municipal M&E frameworks have to include an extra section, articulating the direction and guide-lines of how to integrate the EWS components into the framework, and also the budget for this. Also the EWS activities have to be allocated (see Figure 2, 3 and 4 as a sample of EWS model, system and planning).

Figure 2: An early warning phenomenon in an environment of municipal service delivery process

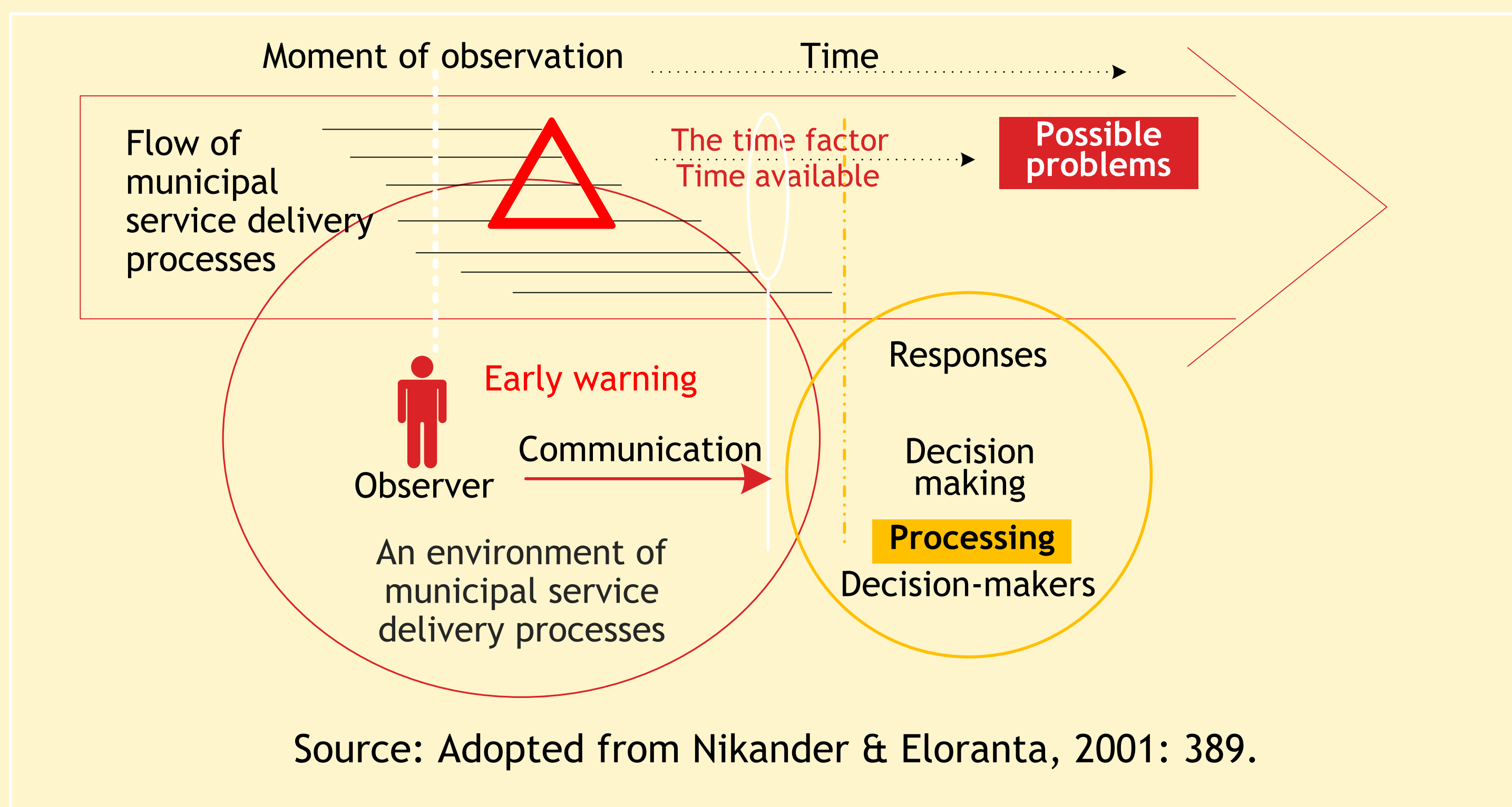


Figure 3: The sub-periods of time available between early warning and full impact of problem



## Discussion

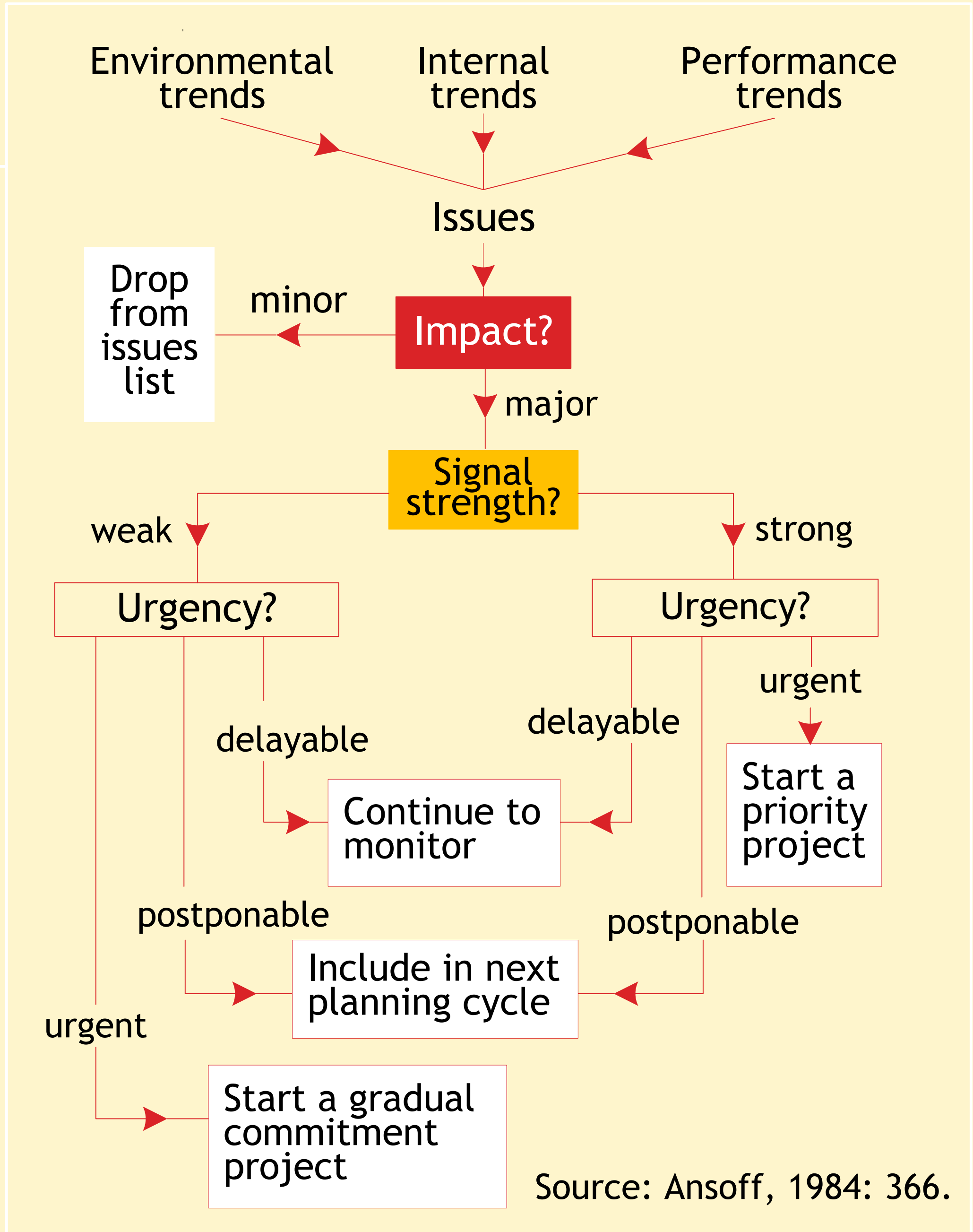
Early warning signals exist and are noticed by some officials and staff but no mechanism or budget exists to enable the use of that knowledge.

Most of the municipal problems are due to FRAGMENTATION in the areas of structure, systems, planning and resource utilisation. Thus, all of the systems and structure, especially those related to planning 'noise' need to be consolidated.

Training and education programmes need to be tailored to the needs and tasks of staff.

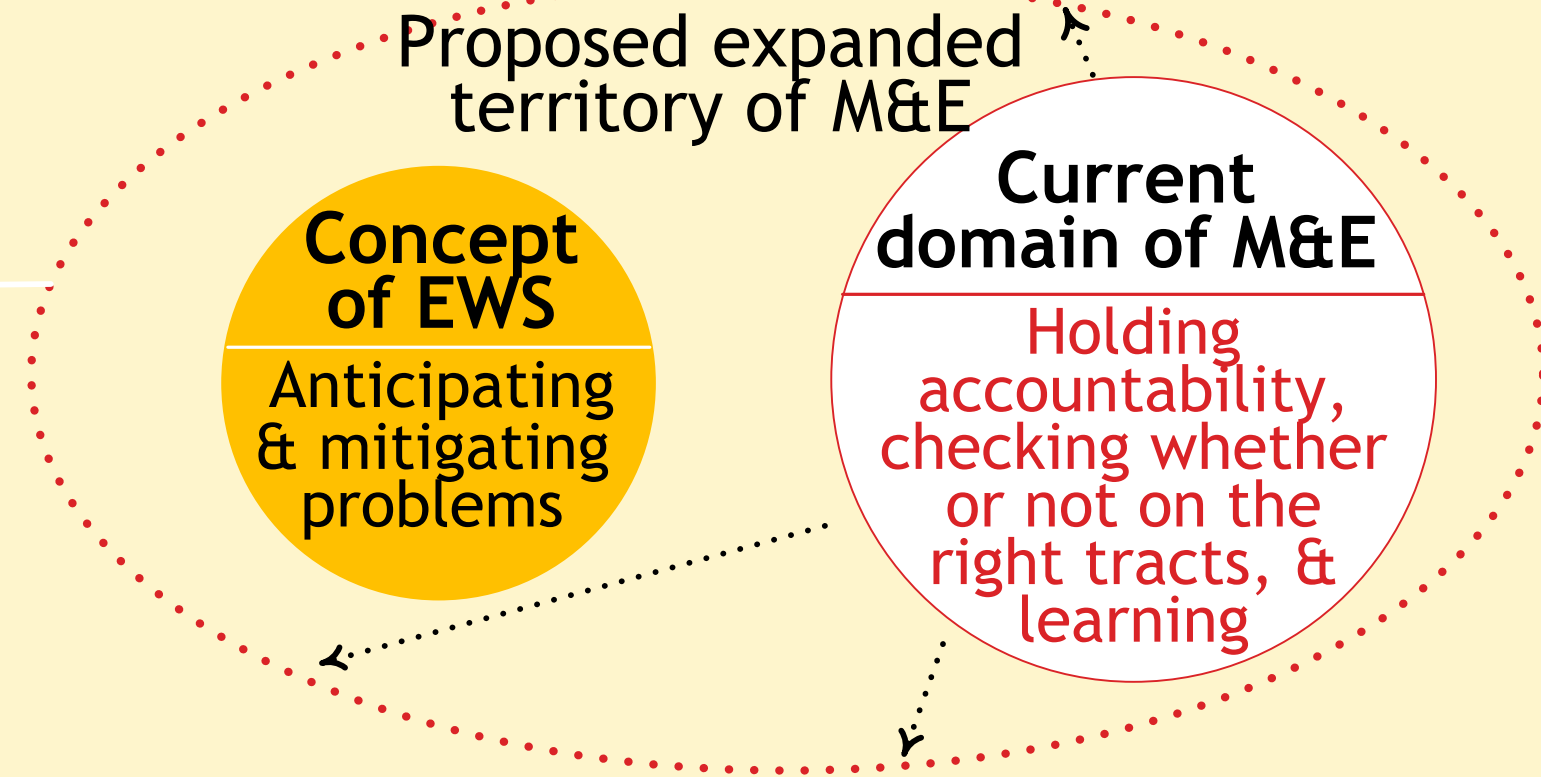
There is a need for a more competently drafted legislation that requires an M&E system to serve as an EWS, with clear and explicit guidelines.

Figure 4: Weak Signals Strategic Issue Management decision



## A Take Home Message

The M&E concept and framework need to be re-designed to encompass and build-in the concept of the Early Warning System.



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