AWARE-P: a collaborative, system-based IAM planning software

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ABSTRACT

The AWARE-P project aims to promote the application of integrated and risk-based approaches to the rehabilitation of urban water supply and wastewater drainage systems. Central to the project is the development of an open-source software system based on a set of tools and models which assist in the analyses and decision support involved in the planning process for sustainable infrastructural asset management.

The AWARE-P software system brings together onto a common platform the infrastructural geo- referenced data that describe the physical water supply or sewerage systems, as well as a variety of data originating in the several information systems that exist in the water utility corporate environment, such as maintenance and work orders data, billing and costs databases, or network analysis models. Building on those, it makes available an organized set of user-configurable assessment algorithms related to performance, cost and risk, which are used to evaluate alternative system configurations or planning solutions, against current and projected or hypothetical scenarios.

This paper presents the software's objectives and features, describes the context and vision that led to its inception and details the main design requirements and technology options.



Keywords: software, open-source, planning, asset management, urban water system

Software platform: visualization of network performance assessed from simulation model results