

The iGPI collaborative project: moving IAM from science to industry

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Abstract

iGPI, the National Initiative for Infrastructure Asset Management (April 2012 - October 2013), is a Portuguese collaborative project led by LNEC (National Civil Engineering Laboratory, Portugal) through which 19 water utilities develop their own IAM systems and plans through a joint training and capacitation programme. Technical assistance to the participating utilities is ensured by LNEC, by a team from IST (Technical University of Lisbon) and by Addition, a software development company. The water utilities get collective as well as one-on-one support, specific training, and benefit from networking with the other utilities in a common and simultaneous process, with similar difficulties and challenges, leading to an effective sharing of solutions. The developed products, including training materials, templates and guidelines for developing strategic and tactical IAM plans, are available to the general public.

This project has greatly contributed to the establishment of reference methodologies and standards for IAM planning, demonstrated in a range of utilities of widely diverse size and context, effectively defining an accepted best practice. This paper discusses the project's format and its advantages, and goes on to describe the main outcomes, including selected cases and final products.

Keywords

Urban water services; infrastructure asset management; collaborative project; strategic planning; tactical planning.

INTRODUCTION

Portugal's public water service infrastructures in the 1970s were clearly below European average coverage levels. Significant convergence efforts undertaken in the 1980s and 1990s caused those levels to sharply rise, and towards the end of the century all populations living in urbanized areas had full access to water supply and wastewater services.

This rapid growth was not matched by adequate capital maintenance levels of the previously existing infrastructure or by sufficient capacitation investment for the majority of the utilities. Although relevant structural reforms were undertaken as full coverage neared, the deficit in infrastructure asset management (IAM) continued to deepen to the present day.