

Asset Management Advisory Services to Water Utilities in South-Eastern Europe

The challenge

Water utility companies are more than ever under pressure to improve their overall performance and cost efficiency, while facing the need to preserve or modernize their assets without access to funding at the same time.

The aging system makes it increasingly difficult for the water utility companies to provide the services desired by the local government units and required by the local citizens and businesses.

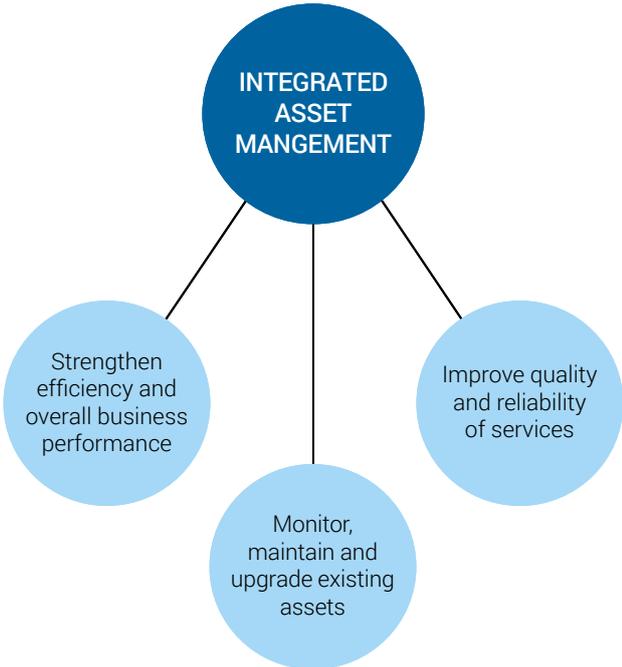
As operational and servicing costs increase with the age of fixed assets, the weaker service capacity goes hand in hand with disproportionately high operating costs.



The solution

The best way to face this challenge is the introduction of best practices in Integrated Asset Management.

These effective and proven methods allow to monitor, maintain and upgrade the existing assets systematically and cost effectively, while improving the quality and reliability of their services and strengthening their overall business performance.



The offer

The Program “Asset Management Advisory Services to Water Utilities in South-Eastern Europe” is now making these best practice methodologies available – adapted to the requirements and specific conditions of public utilities in the region.

Supported by the German Development Cooperation and in direct collaboration with Hydro-Comp Enterprises Ltd., Cyprus, a world leading provider for consultancy and software solutions for public utility management, this program provides direct technical assistance, a state-of-the art software solution and extensive capacity building for Integrated Asset Management to water utilities from Bosnia and Herzegovina, Macedonia, Montenegro and Serbia.

To support the water utility companies directly and individually according to their needs and special requirements, two expert Hubs offer their expertise and experience to accompany the participating utilities with each step along the whole Program:



UT VSI
Association for Water Technology and Sanitary Engineering of Serbia (for Macedonia, Montenegro and Serbia)



AQUASAN
Aquasan Network in Bosnia and Herzegovina (for Bosnia and Herzegovina)

The set-up

The Program provides access to an innovative package solution called EDAMS IAM software as a state-of-the-art tool for Integrated Asset Management. It is based on best practices and a tested and proven methodology that enables utilities to perform a full range of Asset Management solutions.

These solutions are systematically introduced to the participating utilities through three stages:

	AIM	MODULES	RESULTS
Silver Stage: GIS/ Network Data Management	Network Data Management constitutes a comprehensive asset register for the utility networks. It provides a geographical network database with proper functionality for the capturing, structuring, maintenance and management of all existing assets.	<ul style="list-style-type: none"> • GIS/network data management • Advanced GIS/network data management (incl. network zoning) 	<ul style="list-style-type: none"> • Systematic mapping of all assets with factual and reliable data and geographical reference • Consistent, consolidated and validated data repository allows easy network assessment and applicability of all functions to business processes
Gold Stage: Maintenance Management	Maintenance Management for the improvement of productivity and efficiency of the maintenance function and the improvement of service delivery (less breakdown time) through the implementation of proper business procedures and work flows.	<ul style="list-style-type: none"> • Maintenance management • Advanced maintenance management 	<ul style="list-style-type: none"> • Systematic condition assessment of the whole network • Integrated work-flows and business procedures • Efficient sustainment of infrastructure • Cost control for maintenance as biggest cost centre
Platinum Stage: Asset Management and Distribution, Non-Revenue-Water Management	Enable advanced Integrated Asset Management functions namely: (a) Commercial Data Management, (b) Water Quality Management, (c) Distribution/ NRW Management, (d) Rehabilitation/Maintenance Planning and (e) Business Planning.	<ul style="list-style-type: none"> • Commercial data management • Distribution/NRW management • Water quality management • Rehabilitation planning • Infrastructure planning 	<ul style="list-style-type: none"> • Maintenance and rehabilitation plans to minimize cost of asset ownership • Distribution Management and control of NRW • Network rehabilitation planning

Throughout all stages, the utilities are supported individually with tailored advice and comprehensive capacity development measures through the following services:

- 1 Classroom Training:** training courses will be held at the Hubs' premises on a regular basis
- 2 Data Conversion & IAM Systems Implementation:** the EDAMS IAM software will be provided; hosting and operation through the Cloud; existing data will be fully integrated
- 3 Support:** daily remote support to utilities in the use of the software and procedures adopted
- 4 Visits:** utilities are encouraged to visit the Hub in regular intervals to seek advice and assistance
- 5 Workshops/ Conferences:** will be held on a regular basis presenting various aspects of the services and IAM
- 6 Access to additional IAM Services:** optional, if required, at extra cost to further assist the utilities on request

	 BENEFITS FOR WATER UTILITY COMPANIES	 BENEFITS FOR LOCAL GOVERNMENT UNITS
Improved management	<ul style="list-style-type: none"> ✓ One comprehensive database for all existing assets ✓ From reactive to proactive planning and organisation process for short-, mid- and long-term tasks ✓ Data and evidence-based management decisions (job costs, budgeting, performance indicators) ✓ Economic maintenance: better planning, condition and risk assessment ✓ No more loss of knowledge due to staff fluctuation ✓ Improved capacities of staff ✓ Computer assisted and standardized work-flows ✓ Integrated processes: overcoming sectorial divisions and integrated collaboration 	<ul style="list-style-type: none"> ✓ Identification and registering of the existing assets managed by PUCs ✓ Improved steering through executive assessment of status and development of public utility and its services ✓ Improved value estimation for calculation of asset depreciation ✓ Informed and improved strategic decision making ✓ Improved cooperation and coordination between PUCs and LGUs as the owners of the local government units' assets ✓ Sustainable development of public service provider
Better services	<ul style="list-style-type: none"> ✓ Improved customer services ✓ Better water supply (with respect to water pressure and quality) ✓ Faster response to maintenance problems and more effective emergency and crisis management ✓ Allowing to expand supply coverage 	<ul style="list-style-type: none"> ✓ Continuity and quality of critical public services ✓ People-oriented local government units' services ✓ Satisfied clients – happy citizens
Financial benefit	<ul style="list-style-type: none"> ✓ Reduced operating costs ✓ Higher revenues ✓ Reduced personnel costs due to improved personnel equipment ✓ Lower annual rehabilitation and maintenance costs ✓ Better planning for future investments 	<ul style="list-style-type: none"> ✓ Financial asset valuation: the local government unit knows what assets with what value it owns ✓ More favorable water prices through economic and client-friendly pricing ✓ Price for water services with complete depreciation for asset maintenance and rehabilitation
Higher creditworthiness	<ul style="list-style-type: none"> ✓ A precise balance sheet, reports on water quality, water audit reports and more precise budgets for operating costs and necessary investment costs ✓ Improved financial performance of the PUCs 	<ul style="list-style-type: none"> ✓ Attain grant and loans from international donors ✓ Improved creditworthiness based on reliable data, efficient asset management, reliable service delivery and affordable services
Enhanced compliance and transparency	<ul style="list-style-type: none"> ✓ Data captured in standard procedures: easy reporting ✓ Automated assessment of regulative requirements 	<ul style="list-style-type: none"> ✓ Rules and regulations are more easily monitored and met

Results so far

With one stage already successfully concluded, a lot has been achieved (January 2018)



How to participate

All public water utilities from Bosnia and Herzegovina, Macedonia, Montenegro and Serbia can participate in this Program.

The trainings and capacity development for water utility companies are fully covered by the Program (including the transport and accommodation for workshops and trainings).

Participating utilities will only pay for the use of the software a reduced annual software fee.

For the support, participating utilities pay membership fee of €50 per month to the Asset Management expert Hub.



	DURATION	PARTICIPATION AND SOFTWARE PER MONTH	MEMBERSHIP TO EXPERT HUB PER MONTH	TOTAL CONTRIBUTION
Silver level	11 months	200.- EUR	50.- EUR	2.750.- EUR
Gold level	10 months	300.- EUR	50.- EUR	3.500.- EUR
Platinum level	10 months	350.- EUR	50.- EUR	4.000.- EUR

Our partners

These water utility companies are already participating in the project (January 2018):



Serbia

Arandelovac – JKP “Bukulja” Arandelovac
 Gornji Milanovac – JKP Gornji Milanovac
 Inđija – JKP “Vodovod i kanalizacija” Inđija
 Kladovo – JP “Jedinstvo” Kladovo
 Kragujevac – JKP “Vodovod i kanalizacija” Kragujevac
 Kruševac – JKP “Vodovod” Kruševac
 Loznica – JP “Vodovod i kanalizacija” Loznica
 Majdanpek – JKP Donji Milanovac
 Negotin – JP za komunalne delatnosti “Badnjevo” Negotin
 Sokobanja – JKP “Napredak” Sokobanja
 Subotica – JKP “Vodovod i kanalizacija” Subotica
 Svilajnac – KJP “Morava” Svilajnac
 Topola – JKSP Topola
 Zaječar – JKP “Vodovod” Zaječar



Macedonia

Probištip – JKP “Nikola Karev” Probištip
 Resen – JKP “Proleter” Resen



Montenegro

Berane – JP “Vodovod i kanalizacija” Berane
 Cetinje – DOO “Vodovod i kanalizacija – Cetinje”
 Kotor – “Vodovod i kanalizacija Kotor” d.o.o.
 Budva – Regionalni vodovod Crnogorsko primorje Budva
 Budva – “Vodovod i kanalizacija” d.o.o. Budva



Bosnia and Herzegovina

Bihać – JP “Vodovod” d.o.o. Bihać
 Gračanica – JKP “Vodovod i kanalizacija” d.o.o. Gračanica
 Gradiška – KP “Vodovod” a.d. Gradiška
 Hadžići – JKP “Komunalac” d.o.o. Hadžići
 Ključ – JP “Ukus” d.o.o. Ključ
 Novi Travnik – JP “Vilenica-Vodovod” d.o.o. Novi Travnik
 Sanski Most – JKP “Vodovod i Kanalizacija” d.o.o. Sanski Most
 Srebrenik – JP “Vodovod i kanalizacija” d.d. Srebrenik
 Trebinje – JP “Vodovod” a.d. Trebinje

Experiences of participating utilities

"We realized, that this project offers possibilities also for detecting the illegal plugs and water losses as well as making subsequent zoning. Planning and maintenance, which are of crucial importance for the control of the usage of supplies for removal of defects of the water supply system. Simply it allows for an easier management of the water supply company."



Mr. Vuk Todorović – General Manager
"Vodovod i Kanalizacija", Berane,
Montenegro

More: <https://www.youtube.com/watch?v=5Q8fCHdURHs>

"We receive huge support for the project and its implementation by the team members, who are available at all time. In case we encounter a problem, we can freely address it with them and we have their full support. This will help us to do better planning in the future, in terms how to upgrade the system, as well as to plan for new investments."



Ms. Sofija Poguberović – Head of Water
Quality Control, JKP "Vodovod i
kanalizacija" Indija, Serbia

More: <https://www.youtube.com/watch?v=VkeRcJAc2IA>

"Cetinje, a small company located in Montenegro, has a huge water loss of 80%. As a part of the Asset Management Program, we aim at repairing these losses and narrowing them down to some normal limits. In the phase of data entry, we managed to locate a big part of the network, which we haven't repaired and used so far. By this very activity we managed to reduce the losses by 10%."



Mr. Nikola Pejaković – GIS Expert, DOO
"Vodovod i kanalizacija" Cetinje,
Montenegro

More: <https://www.youtube.com/watch?v=VkeRcJAc2IA>

"We see huge benefits in terms of organization of the daily operations, in terms of the network maintenance, preparation of hydraulic models, and other favorable conveniences offered by the Program."



Mr. Marko Paunovic – General Manager,
JKP "Vodovod" Zaječar, Serbia

More: <https://www.youtube.com/watch?v=5Q8fCHdURHs>

More experiences at GIZ ORF MMS
YouTube channel: www.youtube.com/channel/UCa9VEZ7zu-tCj5S8JS2lhUg



Hubs



AQUASAN, Aquasan Network in Bosnia and Herzegovina (for Bosnia and Herzegovina)



UTVSI, Association for Water Technology and Sanitary Engineering of Serbia (for Macedonia, Montenegro and Serbia)

Technical Partner



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GAIN hands-on, practical
experience on asset
management

LEARN from other
practitioners in the sector

BE UP TO DATE on the
latest trends in the sector

BENEFIT from regional and
global experiences from
other utilities and experts