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

The challenge
Water Utilities are more than ever under pressure to improve their overall performance and cost efficiency. At the same time, they face significant challenges to preserve or modernize their assets, and access to funding proves more and more difficult.

Over time, the system ages and deteriorates. It becomes increasingly difficult for the water utilities, to provide the services desired by the municipality and required by the local citizens and businesses. -

Even more: Operational and servicing costs increase with the age of fixed assets. A water company is thus confronted with ever weaker service capacity and at the same time disproportionately high costs that it is unable or barely able to cover.

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.

This improves the efficiency of utility companies and enables them to maintain or improve the quality of their utility services. A utility company is thus able to maintain the required service level for a longer period of time and at a lower cost.

What we 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, Serbia, Macedonia and Montenegro.

To support the Public Utilities directly and individually according to their needs and special requirements, two expert hubs offer their expertise and experience and accompany the participating utilities with each step along the whole project:

- UTVSI Association for Water Technology and Sanitary Engineering for Serbia, Macedonia and Montenegro
- AQUASAN Network in Bosnia and Herzegovina for Bosnia and Herzegovina

This Program is part of the Danube Learning Partnership D-Leap, a regional, integrated and sustainable capacity building initiative of national water utility associations and IAWD, the International Association of Water Supply Companies in the Danube River Catchment Area.

Running from January 2017 to November 2019, interested Public Utilities can still join and are welcomed to contact one of the project partners anytime for more information.
Our services

Integrated Asset Management methods are provided through an innovative package solution. The project gives access to EDAMS IAM software as a state-of-the-art solution for Integrated Asset Management. This software 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:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Aim</th>
<th>Modules</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td><strong>Silver Stage:</strong> GIS/Network Data Management</td>
<td>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.</td>
<td>• GIS/network data management  • Advanced GIS/network data management  • Network Zoning</td>
<td>• 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</td>
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<td><strong>Gold Stage:</strong> Maintenance Management</td>
<td>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.</td>
<td>• Maintenance management  • Advanced maintenance management</td>
<td>• 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</td>
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<tr>
<td><strong>Platinum Stage:</strong> Asset Management and Distribution, Non-Revenue-Water Management</td>
<td>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</td>
<td>• Commercial data management  • Distribution/NRW management  • Water quality management  • Rehabilitation planning  • Infrastructure planning</td>
<td>• Maintenance and rehabilitation plans to minimize cost of asset ownership  • Distribution Management &amp; Control of NRW  • Network rehabilitation planning</td>
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</table>

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 Hub-premises on a regular basis addressing all aspects of IAM through the different stages of the program.
2. **Data Conversion & IAM Systems Implementation:** The EDAMS IAM software will be provided to each Utility and will be hosted and operated 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:** Will be provided if required optional at an extra cost to further assist the Utilities on request.
### Your benefits

<table>
<thead>
<tr>
<th>Benefits for public utilities</th>
<th>Benefits for municipalities</th>
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<tbody>
<tr>
<td><strong>Improved management</strong></td>
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<tr>
<td>- One comprehensive database for all existing assets</td>
<td>- Improved steering through executive assessment of status and development of public utility and its services</td>
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<td>- From reactive to proactive planning and organisation process for short-, mid- and long-term tasks</td>
<td>- Informed and strategic decision making</td>
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<td>- Data and evidence-based management decisions (job costs; budgeting, performance indicators)</td>
<td>- improved cooperation and coordination between PUCs and LGUs as the owners of the municipal assets</td>
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<td>- Economic maintenance: better planning, Condition and risk assessment</td>
<td>- sustainable development of public service provider</td>
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<td>- No more loss of knowledge due to staff fluctuation</td>
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<td>- Computer assisted and standardized work-flows</td>
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<td>- Integrated processes: Overcoming sectorial divisions and integrated collaboration</td>
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<td><strong>Better services</strong></td>
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<td>- Improved customer services</td>
<td>- continuity and quality of critical public services</td>
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<td>- better water supply (with respect to water pressure and quality)</td>
<td>- people-oriented municipal services</td>
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<td>- faster response to maintenance problems and more effective emergency and crisis management</td>
<td>- satisfied clients – happy citizens</td>
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<td>- allowing to expand supply coverage</td>
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<tr>
<td><strong>Financial benefit</strong></td>
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<tr>
<td>- reduced operating costs</td>
<td>- financial asset valuation: The municipality knows what assets with what value it owns</td>
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<td>- higher revenues</td>
<td>- more favourable water prices through economic and client-friendly pricing</td>
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<td>- reduced personnel costs due to improved personnel equipment</td>
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<td>- lower annual rehabilitation and maintenance costs</td>
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<td>- better planning for future investments</td>
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<td><strong>Higher creditworthiness</strong></td>
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<tr>
<td>- A precise balance sheet, reports on water quality, water audit reports and more precise budgets for operating costs and necessary investment costs;</td>
<td>- attain grant and loans from international donors</td>
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<td>- Improved financial performance of the PUCs determined by means of.</td>
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<tr>
<td><strong>Enhanced compliance and transparency</strong></td>
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<td>- Data captured in standard procedures: easy reporting</td>
<td>- rules and regulations are more easily monitored and met</td>
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<td>- Automated assessment of regulative requirements</td>
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Results so far

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

How to participate

All public water utilities from Bosnia and Herzegovina, Serbia, Macedonia and Montenegro can participate in this program. The trainings and capacity development for Public water utilities is fully covered by the program. (This includes the transport and accommodation for workshops and training.)

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.

<table>
<thead>
<tr>
<th>Duration</th>
<th>Participation and Software per month</th>
<th>Membership to expert hub per month</th>
<th>Total contribution per stage</th>
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</thead>
<tbody>
<tr>
<td>Silver level</td>
<td>11 months</td>
<td>200. - EUR</td>
<td>50. - EUR</td>
</tr>
<tr>
<td>Gold level</td>
<td>10 months</td>
<td>300. - EUR</td>
<td>50. - EUR</td>
</tr>
<tr>
<td>Platinum level</td>
<td>10 months</td>
<td>350. - EUR</td>
<td>50. - EUR</td>
</tr>
</tbody>
</table>

Contact

Interested Public Utilities can still join and are welcomed to contact one of the project partners anytime for more information.

UTVSI
Association for Water Technology and Sanitary Engineering
for Serbia, Macedonia and Montenegro
Email: amhub@utvsi.com
Tel: +381 (0)11 244 22 28

AQUASAN
Network in Bosnia and Herzegovina
for Bosnia and Herzegovina
Email: info@aquasanbih.ba
Tel: +387 (0)37 228 268

More Information under [http://edams.com/SEEAM/](http://edams.com/SEEAM/) or [https://www.youtube.com/channel/UCa9VEZ7zu-tCj5SJS2fhUg](https://www.youtube.com/channel/UCa9VEZ7zu-tCj5SJS2fhUg)
Our partners

These Public water utilities are already participating in the project (January 2018):

- Arandelovac JKP “Bukulja” Arandelovac
- Gornji Milanovac JKP Gornji Milanovac
- Indija JKP “Vodovod i kanalizacija” Indija
- 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
- Probištip JKP “Nikola Karev” Probištip
- Resen JKP “Proleter” Resen
- 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
- 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
- Vitez JKP “VITKOM” d.o.o. Vitez
Experiences

“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 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

“This project is of significant importance for us and we will strengthen our operations by our team acquiring significant knowledge and also improve in the preparations for reconstruction and replacement of the system via planned action in that sense.”
Mr. Jasmin Mulabdić – Technical Manager “Vodovod i Kanalizacija”, Gračanica, BiH
More: https://www.youtube.com/watch?v=5Q8fCHdURHs

“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=VkeRcJAc2lA

“This system allowed us to speed up the efficiency and expediency of our field workers. By this we eliminated a huge number of defects, and thus decreased the loss of water in the system.”
Mr. Zoran Đivač – Administrator for GIS, JP “Vodovod i kanalizacija” Loznica, Serbia
More: https://www.youtube.com/watch?v=VkeRcJAc2lA

“We can accurately plan for reconstructions, decide whether it would pay off to invest in certain networks, whether things need to be replaced, whether the networks need to be connected to parts in a certain direction.”
Ms. Agi Tukač – GIS Engineer, JKP “Vodovod i kanalizacija” Subotica, Serbia
Source: https://www.youtube.com/watch?v=VkeRcJAc2lA

“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=VkeRcJAc2lA

“Local Self-government, that is the elected representatives, the mayor and the Councils should be able to make public policies for the improvement of services for the citizens based on the data produced by the technical level.”
Mr. Boris Ivanovski – Project Manager, NALAS, Skopje, Macedonia
More: https://www.youtube.com/watch?v=xwr4OA1jQoA

“Upon involvement in the project we had a chance to also see our own benefit from it related to how we perform our work now. The existing activities were done on several different software in different systems, and here we have them all in one place.”
Mr. Saša Pavlović – Technical Selector for Design and Development, JKP “Bukulja” Aranđelovac, Serbia
More: https://www.youtube.com/watch?v=VkeRcJAc2lA

“Our public utility company ‘Proletor’ from Resen was in huge need of a project of this kind. Firstly, due to the fact, that we do not have high-level structured know-how and published training process. Secondly due to losses within the water system, bad management, insufficient collection of data and insufficient development visions. This is the kind of project, that made the above evident.”
Mr. Ljupčo Arsovski – General Manager, JKP “Proletor” Resen, Macedonia
More: https://www.youtube.com/watch?v=VkeRcJAc2lA

“Already at the very beginning we perceived certain benefits. And one of the main benefits was the very simplicity of implementation and adjustment of the existing data.”
Mr. Ivan Špadijer – Technical Manager, Regionalni vodovod Crnogorsko primorje, Budva, Montenegro
Source: https://www.youtube.com/watch?v=VkeRcJAc2lA

“We see huge benefits in terms of organization of the daily operations, in terms of the network maintenance, preparation of hydraulic models, and other favourable conveniences offered by the Program.”
Mr. Marko Paunović – General Manager, JKP “Vodovod” Zajecar, Serbia
More: https://www.youtube.com/watch?v=5QHChbURHs

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Offene Sarajevo
Zmaja od Bosne 7-7a
Importanne Centar 03/IV
T: +387 33 957 500
F: +387 33 957 501
BosnienHerzegovina@giz.de
www.giz.de

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