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# 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.

# Strengthen efficiency and overall business performance Monitor, maintain and upgrade existing assets INTEGRATED ASSET MANGEMENT Improve quality and reliability of services

# The offer

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

This program is jointly offered by IAWD (International Association of Water Service Companies in the Danube River Catchment Area) and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) under the Danube Learning Partnership (D-LeaP), which is a regional, integrated and sustainable capacity building initiative of national water utility associations and IAWD.

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 Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro and Serbia.

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

# AQUASAN

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



# **SHUKALB**

Water Supply and Sewerage Association of Albania (for Albania)



## SHUKOS

Water and Wastewater Works Association of Kosovo (for Kosovo)



#### UTVSI

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



# 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.	GIS/network data management     Advanced GIS/network data management (incl. network zoning)	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.	Maintenance management     Advanced maintenance management	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.	Commercial data management     Distribution/NRW management     Water quality management     Rehabilitation planning     Infrastructure planning	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:



#### **Classroom Training:**

training courses will be held at the Hubs' premises on a regular basis



# Visits:

utilities are encouraged to visit the Hub in regular intervals to seek advice and assistance



# Data Conversion & IAM Systems Implementation:

the EDAMS IAM software will be provided; hosting and operation through the Cloud; existing data will be fully integrated



### Workshops/ Conferences:

will be held on a regular basis presenting various aspects of the services and IAM



#### Support:

daily remote support to utilities in the use of the software and procedures adopted



# Access to additional IAM Services:

optional, if required, at extra cost to further assist the utilities on request

	BENEFITS FOR	BENEFITS FOR		
Improved management	<ul> <li>✓ One comprehensive database for all existing assets</li> <li>✓ From reactive to proactive planning and organisation process for short-, mid- and long-term tasks</li> <li>✓ Data and evidence-based management decisions (job costs, budgeting, performance indicators)</li> <li>✓ Economic maintenance: better planning, condition and risk assessment</li> <li>✓ No more loss of knowledge due to staff fluctuation</li> <li>✓ Improved capacities of staff</li> <li>✓ Computer assisted and standardized work-flows</li> <li>✓ Integrated processes: overcoming sectorial divisions and integrated collaboration</li> </ul>	✓ 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> <li>✓ Improved customer services</li> <li>✓ Better water supply (with respect to water pressure and quality)</li> <li>✓ Faster response to maintenance problems and more effective emergency and crisis management</li> <li>✓ Allowing to expand supply coverage</li> </ul>	<ul> <li>✓ Continuity and quality of critical public services</li> <li>✓ People-oriented local government units' services</li> <li>✓ Satisfied clients – happy citizens</li> </ul>		
Financial benefit	<ul> <li>✓ Reduced operating costs</li> <li>✓ Higher revenues</li> <li>✓ Reduced personnel costs due to improved personnel equipment</li> <li>✓ Lower annual rehabilitation and maintenance costs</li> <li>✓ Better planning for future investments</li> </ul>	<ul> <li>✓ Financial asset valuation: the local government unit knows what assets with what value it owns</li> <li>✓ More favorable water prices through economic and client-friendly pricing</li> <li>✓ Price for water services with complete depreciation for asset maintenance and rehabilitation</li> </ul>		
Higher creditworthiness	<ul> <li>✓ A precise balance sheet, reports on water quality, water audit reports and more precise budgets for operating costs and necessary investment costs</li> <li>✓ Improved financial performance of the PUCs</li> </ul>	<ul> <li>✓ Attain grant and loans from international donors</li> <li>✓ Improved creditworthiness based on reliable data, efficient asset management, reliable service delivery and affordable services</li> </ul>		
Enhanced compliance and transparency	<ul> <li>✓ Data captured in standard procedures: easy reporting</li> <li>✓ Automated assessment of regulative requirements</li> </ul>	✓ Rules and regulations are more easily monitored and met		

# **Results so far**

# Silver Stage - 2017, 2018 & 2019



# Golden Stage - 2018 & 2019



# Platinum Stage A - 2019



# How to participate

All public water utilities from Albania. Bosnia and Herzegovina, Kosovo, North 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 advisory service, participating utilities will pay a membership fee of €50 per month to the Asset Management expert Hub.

Software EDAMS License	Basic contents of the package	PUCs with LESS or AROUND 10,000 population**		PUCs with MORE than 10,000 population**	
		Number of users*	2019-2021 per stage, per year	Number of users*	2019-2021 per stage, per year
Silver level	Asset register	2	1.100€	2	2.200 €
Gold level	Maintenance management	2	1.500 €	4	3.000 €
Platinum level	Planning	2	1.750 €	4	3.500 €
Cost of advisory services of the expert Hub			600€		600€

<sup>\*</sup> price of additional user at 50 € per month

# **Our partners**

These water utility companies are already participating in the project (October 2019):



Serbia

- JKP "Standard" Ada (Gold Y2)
- JKSP Aleksandrovac (Gold Y2)
- JKP "Vilin Lug" Crna Trava (Silver Y2 2)
- JKP Donji Milanovac (Platinum A Y1)
- JP "Jedinstvo" Kladovo (Platinum A Y1)
- JKP "Vodovod i kanalizacija" Kragujevac (Platinum A Y1)
- JKP "Vodovod" Leskovac (Gold Y2)
- · JP "Vodovod i kanalizacija" Loznica (Platinum A Y1)
- JP "3 septembar" Nova Varoš (Silver Y3)
- · JKP "Napredak" Sokobanja (Platinum A Y1)
- JKP "Vodokanal" Sombor (Silver Y3)
- JKSP Topola (Silver Y1 3)
- JKP "Vodovod" Zaječar (Platinum A Y1)



- JKP "Usluga" Berovo (Silver Y3)
- JKP "Bregalnica" Delčevo (Silver Y3)
- JKPD "Komunalec" Gevgelija (Gold Y2)
- North Macedonia
  - KJP "Vodovod" Kočani (Silver Y3 / Gold Y2)
  - JKP "Vodovod" Kumanovo (Silver Y3)
  - JKP "Komunalec" Pehčevo (Silver Y3)
  - JKP "Nikola Karev" Probištip (Platinum A Y1)
  - JKP "Plavaja" Radoviš (Silver Y3)
  - JKP "Proleter" Resen (Silver Y3 / Gold Y2)
  - JKP "Komunalec" Strumica (Silver Y3)



Montenegro

- JP "Vodovod i kanalizacija" Berane (Silver Y1 3)
- Regionalni vodovod Budva (Gold Y1 2)
- "Vodovod i kanalizacija" d.o.o. Budva (Platinum A Y1)
- DOO "Vodovod i kanalizacija" Cetinje (Platinum A Y1) "Vodovod i kanalizacija" Danilovgrad (Silver Y3)
- DOO "Komunalne djelatnosti" Gusinje (Silver Y3)
- DOO "Vodovod i kanalizacija" Herceg Novi (Gold Y2)
- "Vodovod i kanalizacija" Kotor (Platinum A Y1)
- DOO "Komunalne dielatnosti" Play (Silver Y3)
- · DOO "Vodovod i kanalizacija" Rožaje (Silver Y3)



Herzegovina

- "Vodovod i kanalizacija" Bijeljina (Silver Y3)
- JKP "Komunalac" Busovača (Gold Y2)
- JKP "Vodovod i kanalizacija" Gračanica (Platinum A Y1)
- KP "Vodovod" a.d. Gradiška (Platinum A Y1)
- KP "Babos" Kotor Varoš (Gold Y2)
- KP "Budućnost" AD Laktaši (Gold Y2)
- JP "Komunalno" Neum (Silver Y2 2)
- KP "Vodovod" AD Prnjavor (Gold Y2)
- "Vodovod i Kanalizacija" Sanski Most (Platinum A Y1)
- "Vodovod i kanalizacija" d.d. Srebrenik (Platinum A Y1)
- PKD "Rad" AD Teslić (Silver Y2 2)
- JP "Vodovod" a.d. Trebinje (Platinum A Y1)
- "Vodovod i kanalizacija" Velika Kladuša (Gold Y2)



Albania

- Berat Water Supply and Sewerage Utility (Silver Y1)
- Cërrik Water Supply and Sewerage Utility (Silver Y1)
- Durrës Water Supply and Sewerage Utility (Silver Y1)
- Elbasan Water Supply and Sewerage Utility (Silver Y1)
- Gramsh Water Supply and Sewerage Utility (Silver Y1)
- Himarë Water Supply and Sewerage Utility (Silver Y1)
- Kavajë Water Supply and Sewerage Utility (Silver Y1)
- Korçë Water Supply and Sewerage Utility (Silver Y1)
- Pegin Water Supply and Sewerage Utility (Silver Y1)
- Përmet Water Supply and Sewerage Utility (Silver Y1)
- Vlorë Water Supply and Sewerage Utility (Silver Y1)
- Sarandë Water Supply and Sewerage Utility (Silver Y1)
- Shkodër Water Supply and Sewerage Utility (Silver Y1)



- RWC "Hidromorava" Gjilan (Silver Y1)
- RWC "Mitrovica" Mitrovica (Silver Y1)
- RWC "Prishtina" Prishtina (Silver Y1)



<sup>\*\*</sup> for PUCs with more than 100.000 population and Regional Water Companies from Kosovo, quotation is provided upon request

# **Experiences of participating utilities**

"We, as local self-government units, are here together with the managers of the public utility companies to discuss the opportunities and potential benefits, to get involved in the project and develop this GIS (Georeferencing Integration System) structure, i.e. the underground water supply and sewerage infrastructure."



**Mr. Goran Trajkovski** – Mayor Municipality of Delčevo, North Macedonia

More: www.youtube.com/watch?v=1y0-a20PbPQ&t=144s

"Asset Management is very important pillar of the reform that Albania is implementing in the water sector and sanitation. We are very trustful that with this project utilities will have a very important tool that will allow them to know what they have in the "house" i.e. in the utility and will have knowledge not only about the assets they administer, but also they will have a plan how to manage those assets and make more efficient business plan and investment plan."



Ms. Lindita Sotiri – Director, Program development Directorate on Water Supply, Sewerage and Waste Infrastructure, Albania

More: www.youtube.com/watch?v=5jWkRdnmuQE

"We believe that AM program will enable us to strengthen the stability of the company and offer better selfsustainable services. Regional water utility of Prishtina has the necessary professional resources and engineers who are capable to implement the project and we shall succeed in it."



**Mr. Ilir Abdullahu** – Director, Regional PUC Prishtina, Kosovo

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

"In 318 hours, the period within which we have been connected to the Programme, we have managed to enter 118 km of water supply network, which is one of the better achievements and gives us strength and inspiration to continue in the same pace."



Ms. Vanja Kuzmanović – JKP "Vodovod", Leskovac, Serbia

More: https://www.youtube.com/watch?v=-uGoFcCbMVE



More experiences at GIZ ORF MMS YouTube channel:

www.youtube.com/channel/UCGqMt81zg6kMV8A3FHSuHSg

#### 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)



**SHUKALB**, Water Supply and Sewerage Association of Albania



**SHUKOS**, Water and Wastewater Works Association of Kosovo

#### **Technical Partner**



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