

THE BENCHMARKING AND ASSET MANAGEMENT NEXUS:

Key tools for Regulators and Decision Makers

Back to back with the Danube Water Forum, the one-day Conference “Benchmarking and Asset Management Nexus” took place on 30 June 2022 in Albania’s capital city Tirana as an invitation-only event with a limited number of seats available for national institutions like ministries and regulators; national water and municipal associations, local government and utilities in the Danube region; representatives from relevant regional associations like IAWD, NALAS and WAREG; representatives from the EU, UNECE, GIZ, SDC, the World Bank and other bilateral donors and IFIs; Young Water Professionals; academia; private companies and NGOs.

A joint event

The conference was organized jointly by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the International Association of Water Service Companies in the Danube River Catchment Area (IAWD) in cooperation with the Water Supply and Sewerage Association of Albania (SHUKALB) and Water and Wastewater Works Association of Kosovo (SHUKOS).

Benchmarking, Asset Management, and their importance

Strategic Asset Management (SAM) in the water sector aims at minimizing the total cost of owning and operating infrastructure capital assets while delivering a service level that meets customers' expectations. Its importance is huge and growing, with the water sector everywhere in the region facing the need for huge investments.

Sound SAM heavily relies on the availability of performance data and performance assessment routines, which are essential for (i) establishing objectives and targets, (ii) carrying out sound diagnoses that assess how far the organizations are from their targets and what are the infrastructures issues behind it; (iii) defining intervention priorities; (iv) comparing alternative solutions; and (v) monitoring the implementation of the solutions. Therefore, performance assessment and strategic asset management are complementing disciplines.

The conference aims to “nexus” the important topics of Benchmarking and Asset Management in the water service sector with the roles of national water regulators and governments on the national and local level.

The warmup

After an introduction by SHUKALB Project Manager Elisabeta Poci and welcoming addresses from IAWD President Walter Kling, GIZ Fund Manager Peter Wolf, SHUKALB President Petrit Tare, Sokol Xhafa, CEO of the Regional Water Company Prishtina and IWA Vice President Enrique Cabrera, the introductory keynote was held by Rita Salgado Brito, Chair of the Strategic Asset Management Group at the International Water Association IWA.

Stakes and stakeholders

Starting with a look at the social perception of urban water services and noting that the sector mostly operates below the radar of the public and most individual customers, and quite satisfactorily at that, Mr. Brito warned against complacency, because water systems are facing multiple challenges related to climate change, sustainable development goals, the transition to a circular economy and threatening imbalances in the water-energy-food nexus. She reminded the audience that efficient, effective and sustainable management needs to balance performance, risks and costs against the needs and expectations of stakeholders – including the next generations that will inherit the systems we have or create today.

Ms. Brito walked the audience through the many ways Integrated Asset Management (IAM) and Benchmarking help to meet the related challenges and objectives, concluding that IAM is about “thinking ahead, thinking across – and thinking twice”.

D-LeaP and UBP

Next, Katerina Schilling, Interim Head of the IAWD Technical Secretariat, presented an overview of the benchmarking activities of the IAWD in the Danube region, first and foremost under D-LeaP, the Danube Learning Partnership, an integrated, sustainable and effective capacity building partnership of water utility associations in the region that offers participating utilities and sector professionals a comprehensive set of learning and capacity building programs, carried by national water utility associations and the IAWD. In the frame of D-LeaP the Utility Benchmarking Program (UBP) acts as foundation program that supports utilities in assessing their performance by collecting, validating and analyzing their data, evaluating their performance by internal and external comparisons and planning performance improvement measures.

The reality on the ground

Then Oliver Nachevski, GIZ Project Manager and Vice Chair of the IWA Strategic Asset Management Group took the stage with an overview of Asset Management activities in

South-East Europe that have been ongoing since 2006, starting out with a project to strengthen the technical departments in water utilities in Serbia, moving on to establish and operate an IAWD Asset Management Regional Services Hub for selected water utilities in the Danube river basin and introduce an Asset Management program for the water and sanitation sector in South-East Europe, and investing the last five years in promoting integrated asset management for water utilities in the region and organizing the IWA International SAM Forum 2021 in Belgrade.

Mr. Nachevski assured the audience that the Asset Management will continue, aiming at closer cooperation with the national institutions like ministries and regulators, introducing the Asset Management approach and tools for sewer and wastewater treatment plants, and expanding the asset management approach to other municipal assets like solid waste, streets, buildings or public lighting.

The vital importance of data

In the subsequent, very compressed panel, Ndriçim Shani, Chair of the National Regulatory Commission of the Water Regulatory Authority in Albania elaborated on the ambitious water sector reform in his country, stressing the critical importance for data and reporting that data quality is now a benchmark in Albania's tariff setting methodology.

Maja Medenica, Head of GIS and AM Department at Belgrade Waterworks and Sewer Serbian remarked that a frequently asked question she encountered is "What is more important – Benchmarking or Asset Management?" She answers that both tools are equally important, and that asset management is not possible without good, reliable, frequently updated data.

Sanja Živkovi, Secretary of the Committee for Communal and Environmental Affairs at the Union of Municipalities in Montenegro, confirmed the view that these two tools are interlinked: "One does not work without the other." She added that Asset Management cannot work without a supporting tariff policy: "If you introduce compulsory national benchmarking, regulators will reliably start to think about a reform of the sector a few years later."

Rita Salgado Brito finished the panel hinting at the motivational dimension of Asset Management. "Benchmarking shows companies not only how they perform, it shows that they are not alone, and that others have similar problems. She recommends showing Benchmarking results to the company staff: "Because they are the ones that move Asset Management forward".

A close look at SEEAM

After a coffee break, the conference turned to the results and perspectives of SEEAM, the Asset Management Advisory Services to Water Utilities in South Eastern Europe program funded by the German Federal Ministry for Economic Cooperation and

Development and advisory company Hydro Comp and carried by GIZ, the German German Corporation for International Cooperation.

GIZ Program Manager Gabriele Lames addressed the audience in a prerecorded video message, looking back on a very successful implementation phase, noting ample room for further improvement, and strongly encouraging all stakeholders to continue with capacity development and the implementation of asset management practices to ensure a continued positive development of the water sector in the six nations participating in SEEAM.

Everywhere in Albania...

Next, SHUKALB Hub Manager Arbana Kola gave an overview of the SEEAM implementation in Albanian water utilities, reporting that between March 2019 and June 2022, 18 utilities of every size serving 70% of the country's population, had joined SEEAM program, receiving staff trainings, assistance in implementation of the EDAMS software systematic data collection and processing. The program runs in three stages, starting with the basics of asset registration and data management, and proceeding from there to maintenance management and finally to commercial data management, non-revenue water improvement, infrastructure planning and other advanced tasks. The program is set to continue and will, as Ms. Lames noted in her statement, help to ensure the success of the Albanian water sector reform.

...and Kosovo

Erdonita Humolli, Hub Administrator of the Integrated Asset Management Program in Kosovo, followed up with a brief presentation on progress in her country, reporting that since the start of the program in 2020, all seven regional water companies in Kosovo have joined the program and made excellent progress in the face of serious challenges related to the COVID pandemic, limits to the available data and human resources, and management changes. Work will continue, promises Ms. Humoli, closing her presentation with an encouraging: "Let's continue building big things together!"

A look ahead

Petros Kolovopoulos, Director at Hydro-Comp Enterprises, then invited the audience to look ahead. First clearing up what he perceived to be a bit of confusion about the very nature of Asset Management: "It is not just about systems, capacity building and the likes. It actually changes the way a company operates, its everyday life. And because it is about change it's the most difficult thing. It is extremely difficult to convince a maintenance worker or superintendent who for the last 30 years has not written down anything to record his job cards, but at the end of the day, that is Asset Management - a continuous effort starting from the top management down and overcoming resistance to any kind of change and improvement – particularly when it is related to computerization. Nobody wants to change the way they are doing things."

Just the beginning

Looking at the future of SEEAM, Mr. Kolovopoulos stated clearly that even the most advanced utilities in the region would have a hard time to meet the program targets within three years and encouraged the participants to keep going: “Each step is an important prerequisite for the next step, and the process is obvious: Build a registry, so you know here your assets are. This needs a lot of work, training and capacity building. Most importantly, get the knowledge out of the long-serving engineers who know the network intimately. Get it now before they retire, and put it in the computer.

After that you can introduce proper maintenance procedure and recording. Without proper recording of complaints, job tickets, people, materials, pipes, cars you do not know what you are doing. Only then can you forward to Stage 3, addressing your actual network, zoning, meters, distribution management.”

All on board

Mr. Kolovopoulos announced that his organization will keep going: “The pricing remains the same. We want to keep up the momentum, because we all have made such an effort to get where we are now. So from 1 July we continue as before.”

He was then joined by panelists Florian Demi, Director of the Economic and Support Services Directorate at AKUM, Water Policy Advisor Baton Begolli and Sokol Xhafa Acting Chief Executive Officer at Regional Water Company Prishtina for a lively discussion on the benefits and also obstacles of implementing asset management, with the panel agreeing on its crucial importance, its many benefits, and also on the importance to get all stakeholders on board and to retain the staff that may look at greener pastures after successfully improving qualifications during a capacity building program.

Collect – verify - present

The afternoon’s first session treated the way “From Benchmarking to Performance Improvement and Back”, with Aleksandar Krstić, IAWD’s Utility Benchmarking Program Coordinator for the Danube region presenting an overview of the water sector performance in the Danube region.

The Utility Benchmarking Program, a foundation program of the Danube Learning Partnership, supports utilities in performance assessment and performance improvement. The program is organized in Hubs to provide information exchange in local languages. Its main activities are data collection, data verification, benchmarking report delivery and information exchange in workshops and study tours.

Mr. Kristic showed examples for visualizing and comparing key performance indicators in the water utility performance index and encouraged utilities not yet in the program to enter the ongoing UBP cycle, joining the national or sub-regional hubs of Albania &

Kosovo, Bulgaria and Ukraine, and also the regional Danube Hub to access a crucial tool to measure, compare and improve their operational and financial performance.

Knocks on doors

Session chair Walter Kling thanked Mr. Krstic for his presentation, repeating the invitation to join the UBP with the hint that “you will be prepared when the regulators knock on your door and ask for your data.”

That said, he handed the stage to Milos Petrovic, Head of the Water Department at the Energy and Water Regulatory Agency of Montenegro for an overview of five years of benchmarking regulation in Montenegro. In 2016, Montenegro passed the Law on Utility Services, regulating water supply and urban wastewater management and establishing an Energy and Water Regulatory Agency.

Aware that Benchmarking is far up on the list of the most efficient and simplest methods for achieving best business practices for its ability to motivate improvements by simulating market conditions in regulated markets, and finding, on the other hand, that basic data in sufficient quality were unavailable in many utilities, the Agency's Water Service Department in 2018 issued a rulebook on benchmarking, compiled in cooperation with benchmarking experts, and under consultation with utility operators.

Mr. Petrovic notes that data collection for Montenegro's first annual benchmarking report in October 2019 was a bit of a bumpy ride: "Data collecting was not easy process for the operators themselves, nor for the Agency. A certain number of operators did not keep records of the requested data, and it took time for them to get used to the existence of a new entity in their business with the role of a regulator. On the other hand, the special challenges of the Agency were reflected in the creation of habits among operators to respond to the obligations prescribed by the Rulebook on Benchmarking - the requests of the Agency, as well as the control of the submitted data."

Mr. Petrovic then went on to outline the Agency's benchmarking process that involves compulsory monthly data collecting, quarterly submitting, in-depth data verification and the issuing of a yearly benchmarking report in October. He stressed the importance of verification, reminding the audience that “poor data quality hands everybody the accurate sum of inaccurate data”.

Researching reality

Next to take the stage was IAWD Project Manager Emilija Milunovic, reporting on Research on Utility Benchmarking Reports for Local Government Units in Bosnia and Herzegovina and Serbia.

Reacting to a frequently reported lack of cooperation between local governments and utility companies, the research idea was originally developed in Subotica in the frame of

the Danube Hub Benchmarking workshop, but delayed due to the Covid-19 pandemic. The research looked at the current data collection and reporting practices, and presented options for condensed reporting to local government units, which would involve boiling down the usual size of reports for utility company use by a factor five, adding a one-page executive summary for decision makers, and including performance improvement planning that sets a target value for each single KPI. Four Utilities and their local governments in Serbia, and six in Bosnia and Herzegovina took part in this pilot research program that ended on 23 June 2022 with a final workshop in Belgrade.

Trust – not won, but hard-earned

The following panel saw Albana Jani, Director of the Department for Coordination, Analysis and Information at ACUM, Agron Haxhimali, Executive Director Association of Albanian Municipalities, Adelina Farrici, Executive Director of the Association for Local Autonomy, and Nadire Vitija, Management and Financial Expert-Trainer at Shukos, referencing the practices and perspectives of their organizations, with the main takeaways being that while it may take considerable efforts to get utilities on board at the start of benchmarking programs, and while years may pass before really trustworthy data become available from every participant, the collecting, analyzing, verifying and comparing of data is the crucial sound basis for improving everything from performance to infrastructural assets and on to dialogues with governments, regulators and other stakeholders.

Moderator Walter Kling summed up the key issue in his closing remarks, noting that the availability of data and the trust in their quality are all-important and in the end the responsibility of the utilities, but that on the other hand utilities need competent staff that can collect and deliver data in a proper form. “In the long run, nobody will be able to get around this issue, because mayors, governments and regulators will want the data. Building trust between local authorities and utilities is essential for the water sector. I invite you to make use of the available capacity building programs offered under D-LeaP.”

All about the money

The final session of the Nexus dealt with Benchmarking and Asset Management as Foundation for Sustainable Infrastructure Investment. Hosts Katerina Schilling and Elisabeta Poci led 90 minutes devoted to case studies about how these tools can be used to tap into funds.

Sokol Xhafa, Acting CEO of the Regional Water Company Prishtina, first treated the importance of Integrated Asset Management for water companies. While the identification of all assets and their registration in a data base owned and managed by utility may represent a daunting task, it is the basis of every attempt to improve efficiency.

Tools of the trade

Integrated asset management helps utilities on planning and improving operation and maintenance, proactive measures, and the services they deliver. On the financial side, it supports the calculation of real depreciation costs and the evaluation of assets. It helps in risk analysis, safety planning, and the identification of critical spots in the infrastructure, allowing for proactive maintenance.

Mr. Xhafa then turned to the EDAMS Maintenance Management System its benefits and the ways it differs from traditional systems. EDAMS MMS is a dedicated platform to plan and control daily tasks and demands for the operation and maintenance of water systems. Maintenance activities are planned and processed in such a way as to harmonize different functions of the system, including human resources, storage, inventory and support services.

In general, Mr. Xhafa stated, integrated asset management prolongs the working life time of assets and the security of assets. Running a proper asset registry and presenting business plans based on reliable statistics together with measurably improved financial performance also helps enormously when utilities have to discuss financial matters, be it with tariff regulators, investors, banks or shareholders. Which may even help a utility to get a new office building.

They are the champions

Next on the stage was Ivana Torbica, Investment, Development and Project Engineer at the Gradiška water and wastewater utility. Her company started into benchmarking in 2014, first with the International Benchmarking Network IBNET, moving to the DANUBIS platform in 2017 and joining the Utility Benchmarking Program in 2019. As main rewards for the effort Ms. Torbica names the immediate availability, accuracy and clearness of all data relevant to the company's business activities, the opportunity to view the business from multiple angles, and the helpful exchanges and comparisons in the benchmarking network.

In 2017, Gradiška entered into asset management as well, with support from D-LeaP and NALAS. Starting from more or less zero, a partly unrecorded network, obsolete cadastral maps no GIS or leak detection equipment and increasing problems with sewer blockages the company took a short five years to manage a complete turnaround and even won SEEAM Championship honors. Today, this utility runs a complete GIS-based asset register of the whole water and sewerage network, dedicated GIS and Leak Detection Teams and an ongoing staff education and training program. Non-revenue water has been reduced from 57% to 41%, and numerous maintenance and improvement projects are ongoing or have been successfully completed, including a smart metering pilot project.

The cheapest way to improve performance

“Establishing Asset Management and Benchmarking will give you reliable data and reports, all data available in one place, better decision-making, better investment planning, better investment maintenance, better cooperation between sectors in the company, in short: improved system management and efficiency without investing significant financial resources”, said Ms. Torbica, pointing to the possibilities of modeling in comprehensive technical and financial management, including enterprise valuation models, investment planning for data improvement, maintenance, commercial recovery and loss reduction, and financial planning based on solid performance indicators, cost design and income for an extended period.

The regular updates

The two speakers were then joined by Hajrije Morina, Director of the Water Services Regulatory Authority in Kosovo and Eduart Rumani, National Programme Officer at Swiss Embassy in Albania for a compact panel that first explored what it takes to encourage utilities to use Benchmarking and Asset Management, with Sokol Xhafa summing up the answers bluntly: “If you want to cheat yourself, go without any reporting and pretend that you are working. But if you want to do something for yourself and your company, understand that it takes more than just benchmarking and asset management, we need total engagement and holistic management, and we have to update ourselves on a regular basis like we update our cellphone apps.”

Keeping the people to keep going

The panel then moved on to the necessary capacity building and human resources in general, concluding that while the programs available under D-LeaP and RCDN should also be deployed as technical assistance in investment projects, the development has reached a point where the sector should turn to employing and retaining the talent that has already been through the various programs and modules: We need proactive engagement from the utilities,” said Mr. Rumani. “Give proper incentives and show people that there is indeed a bright future in the sector.”

At this point the clock had run out. “We spent the last five months preparing this event,” said host Katerina Schilling in her farewell statement. “And it is over so fast. Thank you, Tirana, for another great event!”