

**POSITION PAPER** 

# **The Role of International Financial Institutions** and Donors in supporting **Asset Management Practices** in the Water and Sanitation **Sector in the Western Balkans region**

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### **Abbreviations**

ALGUs	Associations of Local Government Units
АМ	Asset Management
AMP	Asset Management Plan
APUCs	Associations of Public Utilities
AQUASAN	Aquasan Network in Bosnia and Herzegovina
BMZ	Federal Ministry of Economic Cooperation and development
BWK	Belgrade Waterworks and Sewerage
CD	Capacity Development
CMMS	Computerized Maintenance Management Systems
D-LeaP	Danube Learning Partnership
DWP	Danube Water Program
EBRD	European Bank for Reconstruction and Development
EDAMS	Engineering Design and Management Systems
EIB	European Investment Bank
EU	European Union
EWA	European Water Association
GIS	Geographic Information System
GIZ	German Agency for International Cooperation
GWSP	Global Water Security & Sanitation Partnership
НСЕ	Hydro-Comp Enterprises
IAM	Integrated Asset Management
IAWD	International Association of Water Service Companies in the Danube Region
IFI	International Financial Institution
IPA	Instrument for Pre-Accession Assistance
IWA	International Water Association











KfW	Kreditanstalt für Wiederaufbau
LESAM	Leading Edge Strategic Asset Management
LGAs	Associations of Local Governments
LGU	Local Government Unit
NALAS	Network of Associations of Local Authorities of South-East Europe
NRW	Non-Revenue Water
ORF MMS	Open Regional Fund for Southeast Europe - Modernisation of Municipal Services
PUC	Public Utility Company
RCDN	Regional Capacity Development Network
SDC	Swiss Agency for Development and Cooperation
SECO	Swiss State Secretariat for Economic Affairs
SEE	Southeast Europe
SEEAM	Asset Management Advisory Services to Water Utilities in South-Eastern Europe
SHUKALB	Water Supply and Sewerage Association of Albania
SHUKOS	Water and Wastewater Works Association of Kosovo
UMT	Utility Management Training
UN	United Nations
UTVSI	Association for Water Technology and Sanitary Engineering of Serbia
WB	World Bank
WB6	Western Balkan
WBIF	Western Balkans Investment Framework
WOP	Water Operators' Partnerships











### 1. Introduction

This position paper is prepared in the frame of the project "Supporting the delivery of Capacity Development (CD) products for Public Utility Companies (PUCs) and Local Government Units (LGUs) and creating synergies between the Danube Learning Partnership (D-LeaP) and the Regional Capacity Development Network (RCDN)" for the International Association of Water Service Companies in the Danube region (IAWD).

IAWD was established in 1993 by utilities from seven countries to promote collaborative efforts to protect water supply and quality in the Danube and its tributaries. Based in Vienna, Austria, IAWD is a not-for-profit organization that, since 2013, has partnered with the World Bank to run the Danube Water Program (DWP), supporting water utilities in the region.

The RCDN project aims to enhance the capabilities of Associations of Public Utilities (APUCs) and Local Government Units (ALGUs) in the Western Balkans. Financed by the Swiss and German governments, the project focuses on four outcomes: (1) strengthening associations, (2) providing adequate capacity development, (3) facilitating policy dialogue, and (4) offering regional services to meet the needs of water utilities.

The Danube Learning Partnership (D-LeaP) which was launched in 2017, is a regional, integrated and sustainable capacity building initiative of national water utility associations and IAWD and provides a comprehensive curriculum to the staff of water and wastewater utilities located in the Danube region. D-LeaP offers a

set of capacity building programs that are developed at regional level and delivered at national level by water utility associations and local partners (the Hubs) in national language. Among those is the D-LeaP Asset Management program, which has been implemented by four national Hubs in the region (more information under chapter 3).

An online exchange in January 2023 with the asset management hubs revealed a need for IAWD's support in advocating for regulatory changes and securing funding from donors to continue and enhance these asset management programs.

This position paper provides a summary of findings from desk research that examines the regulatory landscape of asset management in the broader Danube region and the leading EU countries. It aims to enhance the participation of LGUs and PUCs in Asset Management initiatives and to garner support from stakeholders for AM capacity development.

It further provides guidance for national regulators on AM in the Western Balkan region, where utilities face significant challenges in providing sustainable water supply and sanitation services while adhering to EU regulations.

Finally, the position paper aims at fostering closer collaboration among governmental agencies, donors, LGUs, and PUCs to address AM challenges and opportunities effectively, calling in particular the regulators to engage in supporting LGUs and PUCs with AM capacity development.











# 2. The importance of Asset Management

The water and sanitation sector are crucial for the sustainable development of the Western Balkan region. With rapid urbanization, climate change, and an increasing demand for water resources, effective asset management strategies are essential for maintaining public health, protecting the environment, and optimizing resource use. This position paper advocates for regulators in the Western Balkans to adopt legislation that mandates water utilities to establish comprehensive asset management procedures. By prioritizing AM, the region can enhance service reliability, improve water quality, promote sustainability, and ensure the efficient use of resources.

# Challenges in the Western Balkan Region:

 Aging Infrastructure: Much of the water and sanitation infrastructure in the region is outdated and in poor condition, leading to inefficiencies and frequent failures.



- **Limited Financial Resources:** Utilities often lack the financial resources to invest in infrastructure upgrades and maintenance.
- Weak Regulatory Frameworks: Many countries in the region lack comprehensive regulations requiring utilities to implement asset management practices.

• **Capacity Gaps:** Utilities may lack the technical expertise and tools needed to develop and implement effective asset management plans.

Many water utilities are struggling to provide adequate services, leading to interruptions, health risks, and environmental degradation. Additionally, climate change is projected to exacerbate water scarcity and pollution, further stressing the existing systems. Comprehensive asset management offers a strategic solution to these challenges by ensuring that utilities can effectively plan, operate, and maintain their water assets.



Asset management in the context of water utilities involves the systematic process of maintaining, upgrading, and operating physical assets, such as pipes, treatment plants, and reservoirs, to deliver sustainable services.

#### **Effective AM is characterized by:**

 Assessment and Inventory: Understanding the current state of physical assets through regular assessments, ensuring that decisionmakers are informed about the condition, performance, and lifecycle of their infrastructure.











- Stakeholder Engagement: Involving relevant stakeholders, including government authorities, consumers, and civil society, in the decision-making process to enhance transparency and build trust.
- Financial Sustainability: Estimating the total cost of asset ownership, including maintenance and replacement costs, to ensure that utilities can finance their operations sustainably.
- Risk Management: Identifying and mitigating risks associated with asset failure, including service disruptions, health hazards, and environmental impacts.
- Long-Term Planning: Developing strategies for the investment, replacement, and rehabilitation of assets based on their operational performance and service needs.

# The Benefits of Implementing Asset Management Procedures:

- Improved Service Delivery: By prioritizing asset management, utilities can reduce service interruptions, enhance water quality, and respond more effectively to consumer needs. Furthermore, utilities minimize service disruptions, such as pipe bursts or treatment plant failures, which can have severe public health and economic consequences.
- Cost Efficiency: Effective AM leads to better budgeting and investment decisions, helping utilities to optimize the lifecycle of assets, thereby saving costs in repairs, operations, and capital expenditures.
- Sustainability: AM supports the sustainable
  use of water resources, promoting approaches that minimize waste and reduce
  energy consumption. This is essential in the
  context of climate change and increasing water scarcity.

 Regulatory Compliance: As Western Balkan countries progress toward EU accession, compliance with the EU Water Framework Directive and other environmental regulations is essential. With structured asset management practices in place, utilities can more easily comply with national and EU regulations pertaining to water quality and environmental standards.



- Resilience to Climate Change: A proactive asset management approach equips utilities to better handle the impacts of climate change, ensuring infrastructure is resilient and adaptable to new challenges.
- Reducing Non-Revenue Water (NRW): High levels of NRW are a significant issue in the region, with losses often exceeding 50% due to leaks and inefficiencies. Asset management helps identify and address leaks, improving water efficiency and reducing financial losses.
- Supporting Long-Term Planning: Asset management provides a framework for longterm planning, ensuring that utilities can meet future demand and adapt to demographic and economic changes.











Asset management is crucial in the water and sanitation sector for optimizing investment value, ensuring efficient and sustainable system operations, and adhering to regulations. It facilitates informed decision-making, improving service delivery, public health, and risk manage-

ment related to infrastructure and environmental issues. By implementing robust asset management strategies, utilities can address current demands and effectively prepare for future challenges in a world with growing resource limitations.











# 3. Technical Capacities in Western Balkan

Donor agencies and International Financial Institutions consistently provide support for infrastructure projects in the water and sanitation sector across the Western Balkan countries. On the other hand, national water utility and local government associations, along with regional organizations like IAWD and NALAS, play a vital role in supporting these infrastructure projects through enhancing the capabilities of water utilities and local governments in asset management.

These organizations not only facilitate the training of asset management professionals in water utilities and local governments, but they also collaborate closely with regulators to establish standards and guidelines that promote efficient asset management practices. By engaging with regulators, they help define parameters for accountability, transparency, and performance metrics, which are crucial for the long-term success of water utility operations.

This collaborative approach between donor agencies, local entities, and regulatory bodies ensures that asset management practices are not merely adopted but are also in alignment with national policies and international best practices, ultimately enhancing the effectiveness of water and sanitation services across the region.

### 3.1 International Association of Water Service Companies in the Danube Region- IAWD

In 2014, IAWD, supported by the Danube Water Program, launched a knowledge hub for Asset Management utilizing the expertise of Belgrade Water Works (BVK). Over 18 months, this initiative aided 17 water utilities in Bosnia and Herzegovina, Serbia, North Macedonia, and Montenegro in adopting effective Asset Management practices. It resulted in the creation of the Asset

Management Service Centre, which analysed management reports from participating utilities to provide comprehensive insights into asset management.

Key accomplishments included developing a GIS-based asset register, disseminating methodologies, generating management reports, assessing utility performance, and supporting system audits.

The ongoing D-LeaP AM Program, initiated in 2017 and part of the broader Danube Learning Partnership, focuses on capacity building for water and wastewater utilities in the region. It trains utility staff, helps create tailored action plans, and was previously run with GIZ from 2017 to 2022, with Hydro-Comp Enterprises as the technical partner.



Four D-LeaP AM Hubs have been established to provide expertise and assistance to participating utilities throughout the program: UTVSI – Association for Water Technology and Sanitary Engineering of Serbia (serving North Macedonia, Montenegro, and Serbia); AQUASAN – Aquasan Network in Bosnia and Herzegovina (for Bosnia and Herzegovina); SHUKALB – Water Supply and Sewerage Association of Albania (for Albania); and SHUKOS – Water and Wastewater Works Association of Kosovo (for Kosovo).

This program has delivered direct technical assistance, state-of-the-art software solutions, and











extensive capacity building in Integrated Asset Management to water utilities across Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro, and Serbia.



ASSOCIATION FOR WATER TECHNOLOGY AND SANITARY ENGINEERING

## 3.1.1 UTVSI D-LeaP AM Hub (2014 – ongoing)

Founded in 2014, the UTVSI D-LeaP AM Hub aims to improve asset management (AM) methodologies in Serbia and neighbouring countries, leveraging the expertise of the Belgrade Waterworks and Sewerage. The Hub's team comprises experienced hydro-technical and mechanical engineers with over 20 years of experience.

#### Key projects include:

- Establishing a regional AM Hub in Belgrade (2014-2015) with Austrian government support, implemented by IAWD.
- Providing business planning advisory services for water supply companies in Bosnia and Herzegovina, Montenegro, Serbia, and Albania (2015-2016), supported by GIZ and NALAS.
- Offering asset management advisory services to Southeast European water supply companies (2017-2022), backed by GIZ, HCE, IAWD, and the World Bank.
- Conducting Utility Management Training (UMT) online in 2021 and in person in 2023, supported by IAWD, the World Bank, and GWSP.
- Teaching AM practices in the Utility Governance Program (UGP) in 2025, funded by SECO and BMZ.
- Implementing a recent D-LeaP AM project in 2024 to optimize the water network for PUC Loznica by creating an asset management registry.

Over 11 years, the Hub has supported 51 public utility companies across four countries, benefiting over 2.7 million users and managing a 15,333 km network, with 12,266 km digitized. The Hub also conducted 35 training sessions, training 155 participants under the guidance of 7 trainers (6 male and 1 female).



## 3.1.2 AQUASAN D-LeaP AM Hub (2017 – ongoing)

The Aquasan D-LeaP AM Hub, established in 2017, helps water utilities in Bosnia and Herzegovina integrate Asset Management methodologies. Over eight years, it has supported 19 public utility companies, serving around 500,000 users across 4,800 kilometres, with 80% of operations digitized.

The Hub has conducted 26 training sessions with 175 participants led by 11 trainers. In May 2024, it held a training in Sarajevo under the DWP Program on Integrated Asset Management, with 25 participants from 8 PUCs and 7 local government units, focusing on enhancing collaboration and improving management of communal water infrastructure.



### 3.1.3 SHUKALB D-LeaP AM Hub (2019 – ongoing)

SHUKALB has over 20 years of experience in asset management within Albania's water sector, emphasizing strategic foundations and sustainable strategies. Since 2008, it has advanced











practices through 11 training sessions and an asset management project that engaged 271 professionals nationwide. The inaugural training occurred in Tirana in 2008, with additional sessions conducted through 2020 to foster knowledge sharing.

From 2019 to 2022, SHUKALB, with support from GIZ-ORF, IAWD, and HCE, implemented the SEEAM project, involving 21 water utilities and benefiting over 2.7 million users. This project included 12 specialized training sessions for 91 staff members and utilized EDAMS software for practical digital asset management experience. The network now spans 5,165 km, with 85% digitized.

In 2024, SHUKALB collaborated with the National Water Regulatory Authority and IAWD to launch an Asset Management Program under the D-LeaP framework, featuring three interactive workshops for six water utilities and 12 utility staff.



## 3.1.4 SHUKOS D-LeaP AM Hub (2019 – ongoing)

In 2019, the SHUKOS D-LeaP AM Hub was established in Kosovo under the SEEAM project to enhance asset management for water supply companies using the EDAMS IAM system. Despite the project's end in 2022, seven Regional Water Companies extended contracts with Hydro-Comp Enterprises to continue using EDAMS. Challenges in adopting EDAMS for maintenance led SHUKOS, with D-LeaP support, to provide additional training and workshops. The hub has aided seven Regional Public Utility Companies, impacting over 1.7 million users and digitizing 60% of the 5,270 km network. Throughout its operation, SHUKOS held 10 training sessions with 35 participants, led by 5 trained instructors.



#### 3.1.5 Network of Associations of Local Authorities of South-East Europe – NALAS

The NALAS Task Force on Solid Waste & Water Management has developed a robust training program for local governments in the Western Balkans, focusing on asset management (AM) methodology to improve water management efficiency and sustainability. This initiative equips local authorities with necessary skills to assess and maintain infrastructure, enhancing decision-making and service delivery, ultimately benefiting environmental and public health.

From 2013 to 2016, NALAS executed a GIZ-funded project that led to the creation of an e-Learning course, "Introduction to Asset Management in the Water Sector," offered annually since 2018 and updated in 2022, with plans for a 2025 session and an advanced version to follow. The course, targeting local government decision-makers and utility company personnel, includes six modules on key asset management topics. It is delivered online with interactive elements and is available in English, Serbian, Albanian, and Macedonian.

# 3.2 International outreach of AM projects/initiatives

The activities related to Asset Management projects and initiatives in the Western Balkans were showcased at various events centred on water and sanitation. The accomplishments of water utility associations and communal utilities in the Western Balkans in implementing asset man-











agement methodology in the last ten years elevate the region's standing on the international stage.

The achieved results were presented at the following international events:

- IWA Strategic Asset Management Specialist Group Leading Edge Strategic Asset Management (LESAM) conferences – 2014 in Lisbon, 2017 in Trondheim, 2019 in Vancouver, 2022 in Bordeaux, 2025 Cyprus
- IWA International Strategic Asset Management Forum Belgrade 2021
- IWA International Conference on Rethinking Treatment with Asset Management back-toback with 5th International Conference on Water Economics, Statistics and Finance – Porto 2021
- Danube Water Conference Bucharest 2013, Vienna 2014, 2015, 2016, 2017, 2018, 2019, 2021, 2023, 2025
- Danube Water Forum virtual 2020, Tirana 2022, Brasov 2024
- Benchmarking and Asset Management NEX-US Conference – Tirana 2022

- National conferences and forums
  - Water Forum organized annually by UT-VSI in Belgrade
  - Balkans Joint Conference organized annually by SHUKALB and SHUKOS in Tirana/Prishtina
  - Aquasan Network Conference organized annually by Aquasan in Sarajevo
  - Jahorina Conference organized annually by UTVSI and Association of Water Companies of Republika Srpska)
  - ADKOM Conference organized annually by ADKOM in Skopje/Ohrid
  - Montenegro Water Conference organized annually by Association of Water and Sewerage Companies of Montenegro in Budva and Podgorica
- European Water Association (EWA) webinar on Water Utility Asset Management in Europe – online 2020
- UN-Habitat's Global Water Operators' Partnerships Alliance Global WOPs Congress, Asset Management Session – online 2021
- GIZ Community of Practice webinar Integrated Asset Management in the water and wastewater sector online 2022











### 4. Donors/IFIs in Western Balkan

In the Western Balkans (WB6), water and sanitation projects are often supported by a combination of active donors and International Financial Institutions (IFIs). These entities provide funding, technical assistance, and expertise to improve water infrastructure, sanitation services, and overall water resource management in the region.

Below is an overview of active donors and IFIs involved in these projects in the WB6:

# Active International Financial Institutions (IFIs)



The World Bank: provides loans and grants for large-scale water and sanitation infrastructure projects. Focus areas include wastewater treatment, water supply systems, and flood management. The World Bank, in partnership with the IAWD, launched the Danube Water Program (DWP) with €17 million in funding from the Austrian Government (2013–2025). The DWP is a Technical Assistance program aiming at boosting water security, enhancing sector policies, strengthening institutional capacities, and improving water service efficiency in the Danube region.



**European Investment Bank (EIB):** EIB provides long-term financing for water and sanitation projects, often in collaboration with the EU. Focus areas include wastewater treatment plants

and water supply networks. The EIB supports water and sanitation projects through loans and grants, focusing on infrastructure development and environmental protection.



KfW Development Bank: KfW funds water and sanitation projects, often in partnership with national governments and local municipalities. One of the most successful projects with focus on asset management is from 2006, when KfW awarded a three-year contract to a consortium of Berlinwasser Holding GmbH, Fideco (Belgrade), and Hydro-Comp Enterprises (Cyprus) to strengthen four Serbian water companies: Belgrade, Novi Sad, Kragujevac, and Niš. HCE implemented the EDAMS system for integrated asset management, with significant modifications tailored to SEE operational conditions.



### European Bank

for Reconstruction and Development

**European Bank for Reconstruction and Development (EBRD):** EBRD invests in water and sanitation infrastructure, particularly in urban areas, and promotes private sector involvement. The EBRD often requires utilities to adopt asset management plans as part of their investment programs. The EBRD also provides technical assistance to improve utility management and operational efficiency. The EBRD finances water and sanitation projects, emphasizing sustainable development and investments in modernizing municipal services.











# Western Balkans WBIF

Western Balkans Investment Framework (WBIF): WBIF coordinates investments in the environment sector, focusing on water supply and wastewater treatment for municipalities. It has funded 34 projects worth €1.9 billion, providing €113 million in grants and €800 million in loans. Objectives include improving water supply and sanitation, enhancing resource management, rehabilitating treatment plants, promoting transboundary cooperation, and ensuring compliance with EU standards. Proper asset management is typically required for project support.

## Active Donors in Western Balkan in the Water and Sanitation Sector



Federal Ministry for Economic Cooperation and Development (BMZ): BMZ, through the GIZ project Open Regional Fund for Southeast Europe – Modernisation of Municipal Services, is implementing several Asset Management projects, including: (1) Asset management for water and sanitation in South-East Europe (2013–2016); (2) Asset Management Advisory Services to Water Utilities in SEE – SEEAM (2017–2022); (3) Regional Capacity Development Network (RCDN) for Water and Sanitation Services (2017–2028, co-funded by SECO).

These initiatives have strengthened integrated asset management capacities in SEE, with over 110 utility companies applying improved IAM practices. More than 4 million residents have

benefited from enhanced water services, including better water quality, pressure, reliability, and customer service.

Further documents were created, including the Training Curriculum for Introduction to IAM CD delivery aimed at LGU decision makers, senior and mid-level managers of PUCs, line ministries, and regulatory bodies, as well as the Training Curriculum for Training of Trainers for the Introductory IAM CD Delivery.



**European Union (EU):** The EU is one of the largest donors in the Western Balkans, providing funding through instruments like the Instrument for Pre-Accession Assistance (IPA) and WBIF. Focus areas include improving water supply, wastewater treatment, and aligning with EU environmental standards (e.g., the Water Framework Directive).



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation (SDC) / Swiss State Secretariat for Economic Affairs (SECO): SDC supports water and sanitation projects, particularly in rural areas, to ensure access to clean water and sustainable sanitation systems. They supported water sector reforms and asset management initiatives in the region, particularly in Albania and North Macedonia. These projects aim to improve water management, ensure sustainable access to clean water, and enhance sanitation services.









Key Focus Areas of the Donors/IFIs in Water and Sanitation Projects in Western Balkan:

- Infrastructure Development: Building and rehabilitating water supply networks, wastewater treatment plants, and sewage systems.
- Compliance with EU Standards: Aligning water management practices with EU environmental and water directives.
- Capacity Building and training: Strengthening the technical and managerial capabilities of local authorities and water utilities. Many projects financed by IFIs (i.e. EBRD, KfW) include training and technical assistance to utility staff on asset management principles, tools, and practices. A best example of a regional approach, is the D-LeaP program, implemented by IAWD in the frame of the Danube Water Program.
- Asset Management Planning: Donors and IFIs have supported the development of asset management plans (AMPs) for water utilities. These plans help utilities prioritize investments, optimize maintenance, and extend the lifespan of assets. For example, in Serbia, the World Bank has supported the development of AMPs for several water utilities.
- Climate Resilience: Addressing the impacts of climate change on water resources and infrastructure.
- Rural Access: Expanding access to clean water and sanitation in rural and underserved areas.
- Introduction of Asset Management Software: Donors have supported the adoption of computerized maintenance management systems (CMMS) and geographic information systems (GIS) to improve asset tracking and

- management. For instance, in Bosnia and Herzegovina, the EU has funded the introduction of GIS for water infrastructure mapping.
- Regional Cooperation and Knowledge Sharing: Initiatives such as the Danube Water Program (supported by the World Bank and IAWD) have facilitated regional cooperation and knowledge sharing on asset management best practices.

### **Western Balkans Water Sector Chal**lenges of the Water Utilities:

- Limited financial resources and reliance on donor funding.
- Fragmented institutional frameworks and weak regulatory oversight.
- High levels of non-revenue water and inefficient operations.
- Political and administrative complexities in the region.
- Lack of cooperation between asset owners (local authorities in most cases) and operators (water utilities).

The Western Balkans region benefits from the support of multiple donors and IFIs in addressing its water and sanitation challenges. These efforts are critical for improving public health, environmental sustainability, and economic development. However, sustained investment, better governance, and regional cooperation are essential to achieve long-term results.











# 5. Call to Action: Recommendations for Donors and IFIs







The Right Money, on the Right Asset, at the Right Time!

RIGHT MONEY RIGHT ASSET RIGHT TIME

### **Understanding the Winning Trio**

#### The Right Money:

- Clear Project Financing: Access to adequate financial resources is fundamental for developing and maintaining infrastructure in the water and sanitation sector. This includes a mix of public finance, private investment, grants, and innovative financing solutions.
- Cost-Effectiveness: Investment decisions should prioritize cost-effective solutions that maximize returns and ensure sustainability. Utilizing financial instruments such as bonds, public-private partnerships, or green financing can enhance capital flow.
- Affordability: Ensuring that financing solutions are affordable for all stakeholders, especially underserved communities, is vital. This may involve subsidy programs, tiered pricing structures, or flexible payment plans.

#### On the Right Asset:

 Identifying Key Assets: The right asset in this context refers to the infrastructure and technology necessary to deliver quality water and sanitation services. This could range from treatment plants and distribution net-

- works to community toilets and waste management systems.
- Asset Lifecycle Management: It's not enough to merely invest in the right assets; managing them throughout their lifecycle – including design, construction, operation, maintenance, and decommissioning – ensures they serve their purpose efficiently.
- Data-Driven Decision Making: Employing data analytics can help in determining which assets require investment, upgrades, or replacement. Effective asset management involves monitoring performance metrics to guide decisions and allocate resources effectively.

#### At the Right Time:

- Timing of Investments: Timing can significantly influence the success of asset investments. This implies understanding demand cycles, seasonal variations in water usage, and the urgency of infrastructure development.
- Proactive Maintenance and Upgrading: Waiting for systems to fail can lead to crises.
   A proactive approach to maintenance, rather











than reactive repairs, maximizes the lifespan and efficiency of assets.

Regulatory and Policy Considerations:
 Being aware of regulatory changes or emerging technologies can provide opportunities to invest at advantageous times, ensuring compliance and leveraging innovations.

Implications for the Water and Sanitation Sector:

- Sustainability and Resilience: Effective asset management ensures that water and sanitation services can adapt to climate change and population growth. Investments should be directed towards sustainable practices, renewable technologies, and resilient infrastructure that can withstand environmental stress.
- Public Health Benefits: Reliable access to clean water and sanitation directly impacts public health. When the right funds are allocated to essential assets at the appropriate times, it leads to better health outcomes, reduced disease burden, and enhanced quality of life for communities.
- Equity and Inclusion: The right approach to asset management can address inequalities in access to water and sanitation services. Ensuring investments reach underserved populations fosters social equity and inclusive development.
- Economic Growth: Properly managed water and sanitation assets support broader economic growth. They enhance productivity, attract investment, and create jobs, contributing to overall community development.

In the water and sanitation sector, achieving the "winning trio" – the right money, on the right asset, at the right time – is crucial for creating a robust, efficient, and sustainable framework that can meet current and future challenges. By prioritizing strategic investments, leveraging data for decision-making, and adopting a proac-

tive management approach, stakeholders can ensure that water and sanitation services are not just adequate, but exemplary, paving the way for healthier communities and equitable development.

Investors, donors, and IFIs have a pivotal role to play in advocating for and supporting the establishment of Asset Management programs in water utilities across the Western Balkans. Here are key actions that can be taken:

**Request Mandatory Comprehensive and** Transparent Inventory of Assets owned by a Water Utility: a prerequisite for financial support from donors and international financial institutions based on several key fac-(1) *Transparency:* An asset registry provides a clear and detailed account of the water utility's physical and financial resources. By documenting all assets, including land, infrastructure, equipment, and technology, stakeholders can assess the utility's value and operational capacity. (2) Accountability: Having a formal registry allows for better accountability in the use and maintenance of these assets - assurance that funds will be used effectively, and a wellmaintained registry helps ensure that assets are properly managed. (3) Funding Prerequisite: This requirement ensures that the utility has a clear understanding of its assets and liabilities, fostering better financial and operational planning. (4) Compliance with Standards: An asset registry may also help utilities comply with accounting standards and regulatory frameworks, which can be crucial for securing international funding. Requiring an asset registry for water utilities as a condition for donors or IFIs support underscores the commitment to transparency, efficient resource management, and longterm sustainability. It serves as a foundational tool that not only strengthens the operational framework of the utility but also enhances its credibility and capability to attract necessary funding.











- Incorporate AM Requirements into Funding Criteria: Future capital infrastructure projects funded by donors and IFIs should mandate the inclusion of AM programs as a prerequisite for funding. This approach will ensure that utilities develop the necessary capacity and frameworks to manage their assets effectively.
- Provide Technical Assistance and Training: Many utilities lack the expertise to implement AM programs effectively. Therefore, donors and IFIs should invest in capacity-building initiatives (such as D-LeaP), offering training and technical support to help utilities develop and apply AM principles.
- Pilot Projects and Best Practices: Fund pilot projects that demonstrate the benefits of AM, such as reduced operational costs, improved service delivery, and enhanced resilience. Share best practices and case studies from other regions to inspire and guide utilities in the Western Balkans.
- Support Development of Data Management Systems: Encourage utilities to adopt modern data management systems that enable accurate asset inventories, performance tracking, and predictive maintenance planning.
- Facilitate Knowledge Sharing: Establishing platforms for knowledge sharing among utilities in the region and internationally can promote best practices in AM. This can include workshops, online resources, and collaboration with successful case studies.
- Encourage Multi-Stakeholder Collaboration: Facilitate dialogue between utilities, government agencies, academia, and the private sector. This collaboration can drive innovation and investment in AM strategies that benefit both the public good and economic development.

- Support Policy Development: Encourage governments to create favourable policy environments that support the implementation of AM practices. This could include legislation that promotes transparency, accountability, and sustainable management of water resources.
- Create a Funding Mechanism for AM Initiatives: Establish dedicated funding streams focused exclusively on the development and implementation of AM programs within water utilities.
- Promote Regional Collaboration: Facilitate knowledge-sharing and best practices among utilities in the region, building on the existing network created by IAWD.
- Incentivize Performance: Link funding to measurable improvements in asset management practices and utility performance.

Establishing robust Asset Management programs in water utilities is crucial for enhancing operational efficiency, service delivery, and sustainability in the Western Balkans. By prioritizing AM in funding criteria, providing technical assistance, and fostering collaborative efforts, donors and IFIs can help transform the region's water utilities into well-managed entities that contribute effectively to the socio-economic development of their communities. This approach not only ensures return on investment for international aid but also supports the overarching goals of the European integration of the Western Balkans.

In the context of advancing asset management (AM) practices in the region, it is essential to recognize the historical engagement of national water associations alongside the International Association of Water Service Companies in the Danube Region (IAWD). These organizations have been instrumental in building a foundation of knowledge and expertise that can be effectively leveraged, emphasizing that we are not starting from scratch. The existing mechanism











in place, known as D-LeaP, provides comprehensive training for staff members while simultaneously strengthening national associations. It fosters regional collaboration through Hub meetings and enhances coordination efforts through IAWD. It is crucial for stakeholders to understand that our approach does not rely on

traditional technical assistance methods, such as engaging external consultants. Instead, we aim to utilize this established framework to enhance our collective efforts and promote sustainable development in AM practices across the region.

We urge international donors and financial institutions to recognize the pivotal role of Asset Management in shaping the future of water services in the Western Balkans. Through commitment and support, we can create a more resilient and sustainable water sector for generations to come.

### 6. Stakeholder Map

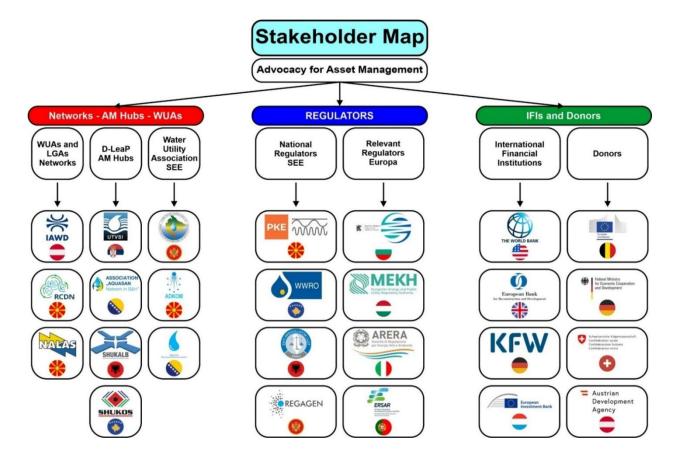


Figure 1 – Stakeholder Map











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