# Knowing your data and knowing your assets – Introducing the Asset Management Program

2021 Danube Water Conference, online

The Challenge

- One of the most important topics for water/ sanitation utilities worldwide is asset management (AM)

- Water utilities in SEE lack effective methods for AM to offer efficient services and to plan necessary investments.

- Most of utilities in SEE do not have consistent knowledge of their assets or use computerized maintenance management.

- This results in growing deterioration of assets and worsening services to clients.

- Water utilities under pressure to improve their performance and cost efficiency: as sector is increasingly regulated (in some countries) and good performance becomes prerequisite for funding.

⇨ Capacities needed for informed decision making on appropriate repair, replacement or rehabilitation and to develop a long-term funding strategy

Utilities in SEEAM Program
Systems - Use of Computerised Maintenance Management
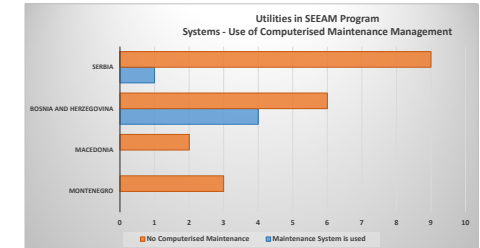
Program Objectives

The main purpose of the program is to enable Hub-Centres to provide capacity building to the participating Utilities to carry out Integrated Asset Management (AM) activities through training, support and the provision of appropriate software and best-practice methodologies.

In the case where Utilities lack the manpower resources to fully implement AM activities themselves the Hub-Centres will provide additional services to assist the Utilities in carrying out these activities.

Program Setup

Founded by

Federal Ministry for Economic Cooperation and Development

HYDRO-COMP

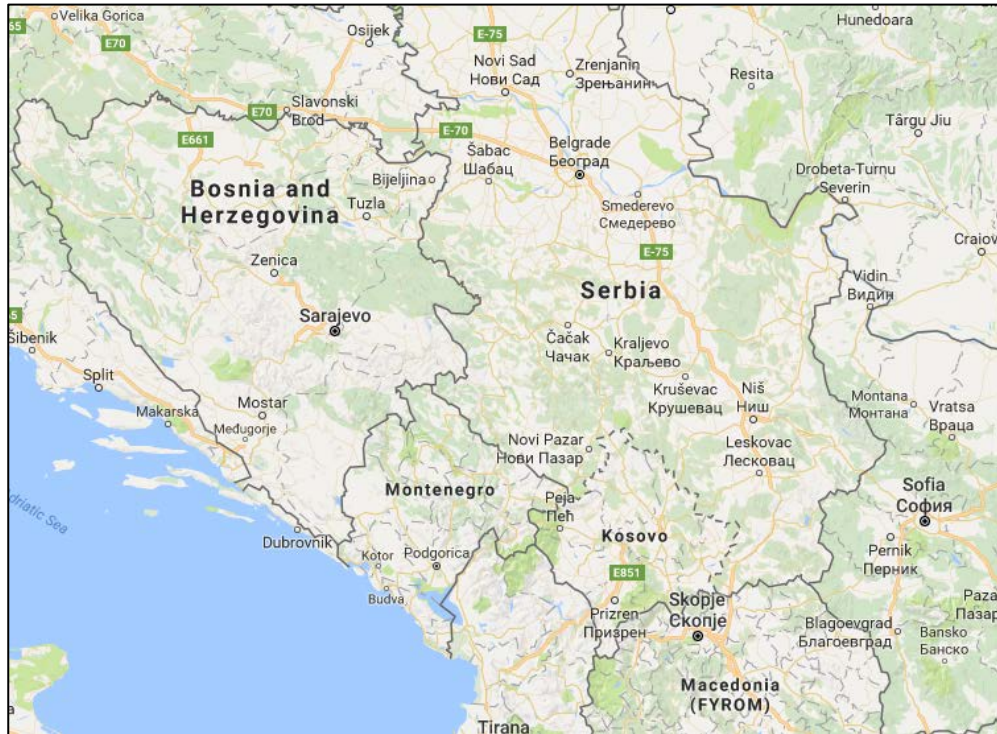**Supported by**

Danube Learning Partnership

RCDN

- **BMZ:** co-finances the program

- **GIZ:** secures that interests of public and private partners are met and assures alignment and synergies within German Development Cooperation

- **Hydro-Comp:** co-finances the program & provides technical and managerial know-how (incl. software)

- **Expert hubs: to** provide AM services to water utilities and delivery of capacity building

Implemented by

german cooperation / giz · HYDRO-COMP · IAWD · UTVSI · ASSOCIATION "AQUASAN Network in B&H" · SHUKALB · SHUKOS

Participating Utilities

Water and/or sewerage Utilities in Bosnia and Herzegovina, Macedonia, Montenegro, Serbia, Kosovo and Albania were welcomed to apply for the participation.

Initially only 70 utilities participated, and applications were prioritized based on their access to capital, technical potential and willingness to participate in the initiative.

Services provided

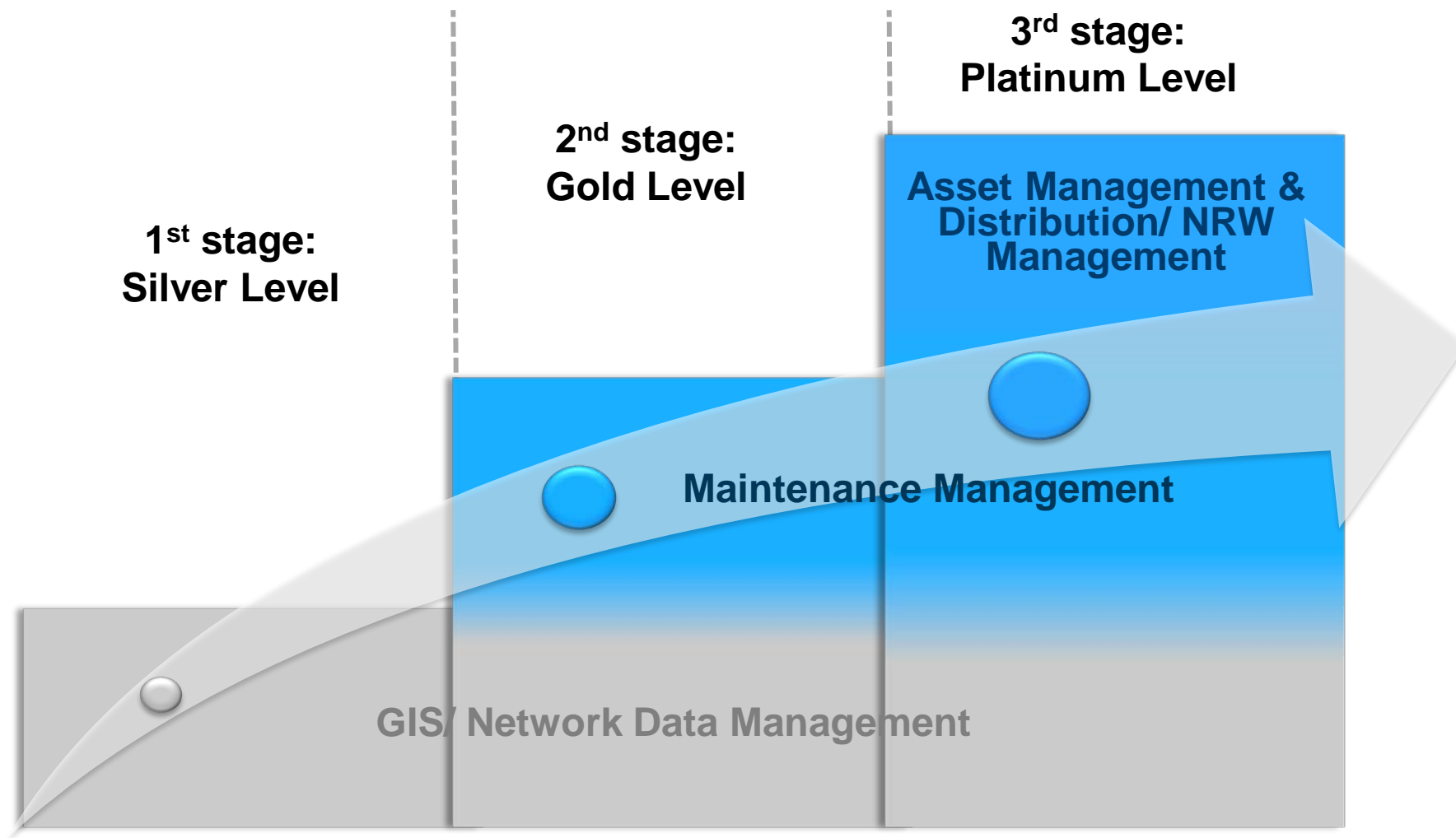**Senior staff from each participating utility will receive services that include:**

- **Workshops/Conferences:** Will be held on a regular basis presenting various aspects of the services and Asset Management (AM).

- **Data Conversion & IAM Systems Implementation:** The **EDAMS-AM** software will be provided to each Utility and will be hosted and operated through the Cloud.

- **Classroom Training:** Training courses will be held at the Hub premises on a regular basis addressing all aspects of AM with different courses applying for the different stages of the program.

- **Visits:** Utilities are encouraged to visit the Hub in regular intervals to seek advice and assistance.

- **Support:** Daily Remote support to Utilities in the use of the software and procedures adopted.

- **Access to Additional Asset Management Services:** Will be provided if required optional at an extra cost to assist the Utilities with studies, such as the compilation of a Commercial Rehabilitation Plan, an Investment Plan, a Rehabilitation & Maintenance Plan and Infrastructure Plans.

Program Description
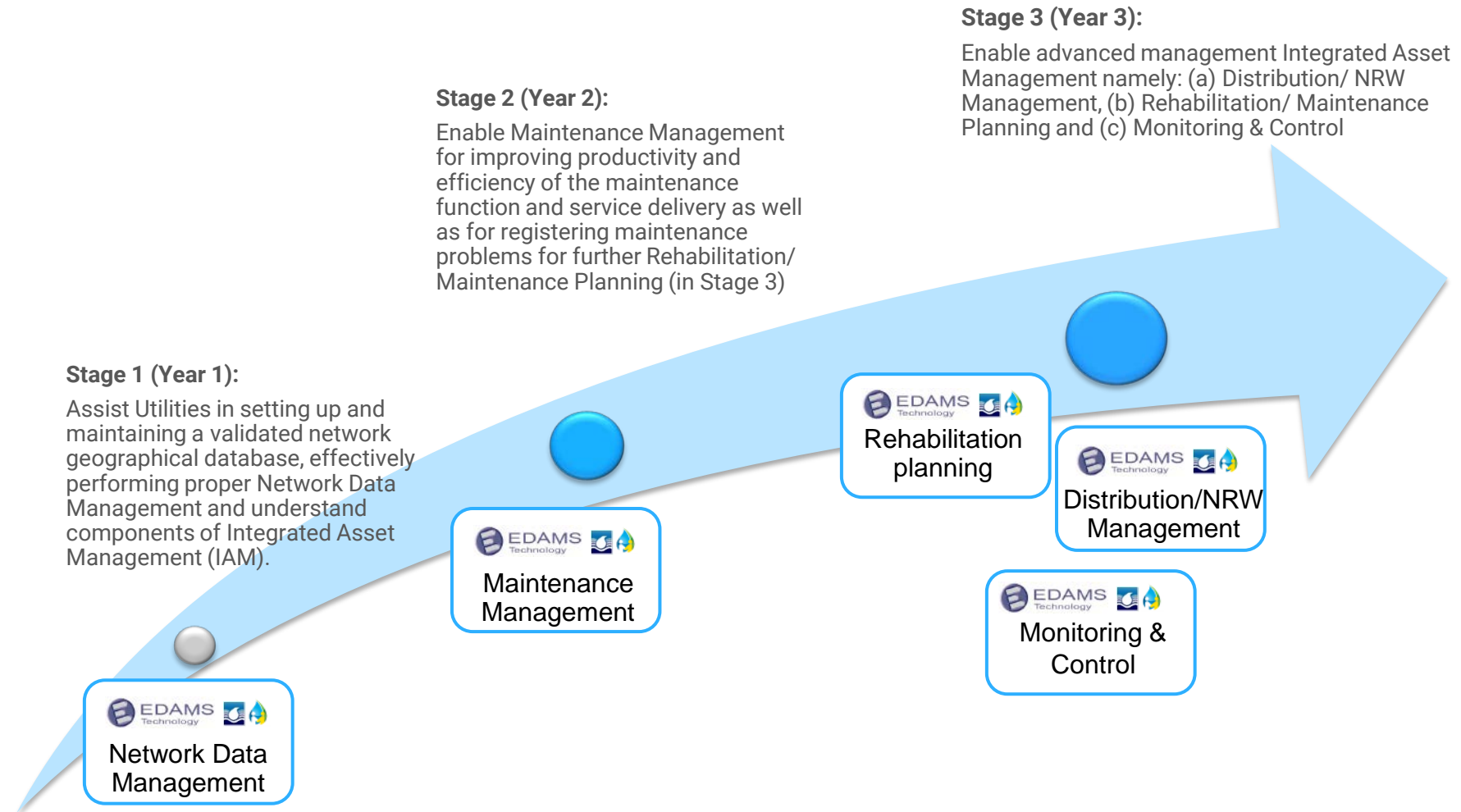## Three Stages Capacity Development

3-year program, consisting of three stages lasting 12 months each, with the idea that each utility will be able to progress from one stage to the next each year

1st stage:
Silver Level

2nd stage:
Gold Level

3rd stage:
Platinum Level

Asset Management & Distribution/ NRW Management

Maintenance Management

GIS/ Network Data Management

Three Stages Capacity Development EDAMS Software

The project introduces EDAMS software as a leading solutions of software-based management systems for public utilities.

- systematical mapping and assessment of assets in a robust geographical database

- better utilization and management of resources as prerequisite for later Maintenance Management, Asset Management and Distribution/ NRW Management.

Stage 3 (Year 3):

Enable advanced management Integrated Asset Management namely: (a) Distribution/ NRW Management, (b) Rehabilitation/ Maintenance Planning and (c) Monitoring & Control

Stage 2 (Year 2):

Enable Maintenance Management for improving productivity and efficiency of the maintenance function and service delivery as well as for registering maintenance problems for further Rehabilitation/ Maintenance Planning (in Stage 3)

Stage 1 (Year 1):

Assist Utilities in setting up and maintaining a validated network geographical database, effectively performing proper Network Data Management and understand components of Integrated Asset Management (IAM).

Rehabilitation planning

Distribution/NRW Management

Maintenance Management

Monitoring & Control

Network Data Management

SEEAM Program Description
Training Programs

No.	Stage/ Package	Training Course
1	Stage 1 - Silver package	GIS/ Network Data Management
2		Advanced GIS/ Network Data Management
3	Stage 2 - Gold package	Maintenance Management
4		Advanced Maintenance Management
5	Stage 3 - Platinum package	Commercial Data Management
6		Distribution/ NRW Management
7		Water Quality Management
8		Rehabilitation Planning
9		Infrastructure Planning

1	Stage 1: Silver Package - GIS/ Network Data Management		
1.1	Introduction to *EDAMS* Assets	Overview of the Assets system, including main features & functions and integration with other systems	All users and managers
1.2	Management Overview	Reading and interpreting management reports	Management
1.3	Introduction to GIS	• Network Asset Management philosophy & concepts • Network data models and connectivity rules • Basic system functions	Users
1.4	Basic Network Management	• System parameters & network components • Using queries wizard, reports, graphical templates & thematic mapping • Basic network management	Users
1.5	Network Data Capture	Analogue and digital data collection Network data capture, development of an asset register Data organisation, storage and structure Data Maintenance	Users

- Training courses are held at the Hub-premises on a regular basis addressing all aspects of AM with different courses applying for the different stages of the program.

- Participation costs are subsidized. Training for Public Utilities are undertaken both by the Associations as well as Hydro-Comp.

- Hydro-Comp has prepared detailed training material covering all aspects of Integrated Asset Management, through the use of the tools and procedures adopted.

Program Participation/Results
Silver Stage – 2017, 2018, 2019 & 2020

SEEAM RESULTS

AUGUST 2020

WATER UTILITIES

122

PARTICIPANTS

260

WORK HOURS ON CLOUD

>24.500

KM NETWORK IN EDAMS NDM

>16.000

SEE AM

POPULATION COVERED IN MIO

>6.5

TRAININGS AND LECTURES IN DAYS/HOURS

90d/720h

FIELD VISITS

>250

PREPARED A3 PCSs OF FIELD MAPS

>27.000
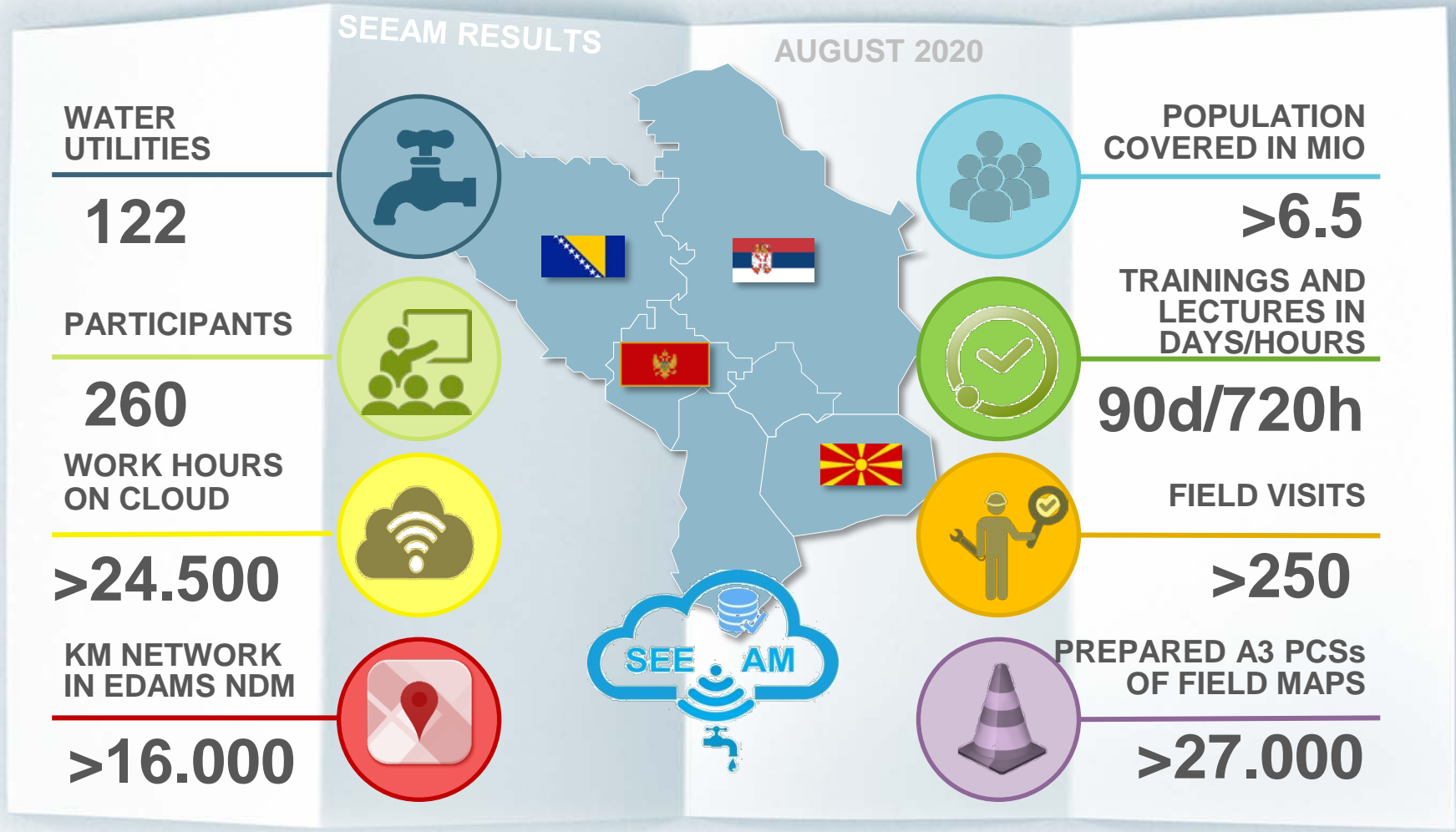
Program Participation/Results
Conferences/Workshops

...eljina December 2018

Online Platinum B training July 2020

Training Prishtina July 2020 respecting the COVID-19 measures

Program Benefits

The implementation of AM results in substantial benefits to the Utilities in terms of Financial Benefits, improved Service Delivery and improved Conformity to regulation & transparency.

- **Financial benefits** will be realised through Increased Revenues, Reduction of Operating costs, less annual rehabilitation and maintenance costs and a considerable reduction in future Capital costs.

- **Improved service delivery** will be achieved through better Customer services, better water delivery (in terms of both Pressures and Quality), quicker response to maintenance problems and more effective Emergency & Crisis Management.

- **Conformity to regulation & transparency** will be achieved through the production of a more accurate Balance sheet, Water Quality reporting, Water Audit reporting and more accurate budgets on Operational Costs and Capital Cost requirements.

Thank you

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International Association of Water Service Companies in the Danube River Catchment Area

IAWD

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