



giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

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

Comments and Expectations on Stage I

Presenter:

Dr. Petros Kolovopoulos



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



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Udruženje za tehnologiju vode i sanitarno inženjstvo



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Agenda

Comments and Expectations on Stage I

- ☰ Cloud – Live demonstration
- ☰ Stage I – Progression to Stage II
- ☰ Stage I – Topics to be Introduced but to be covered partially
- ☰ SEEAM Program - Utility Expectations



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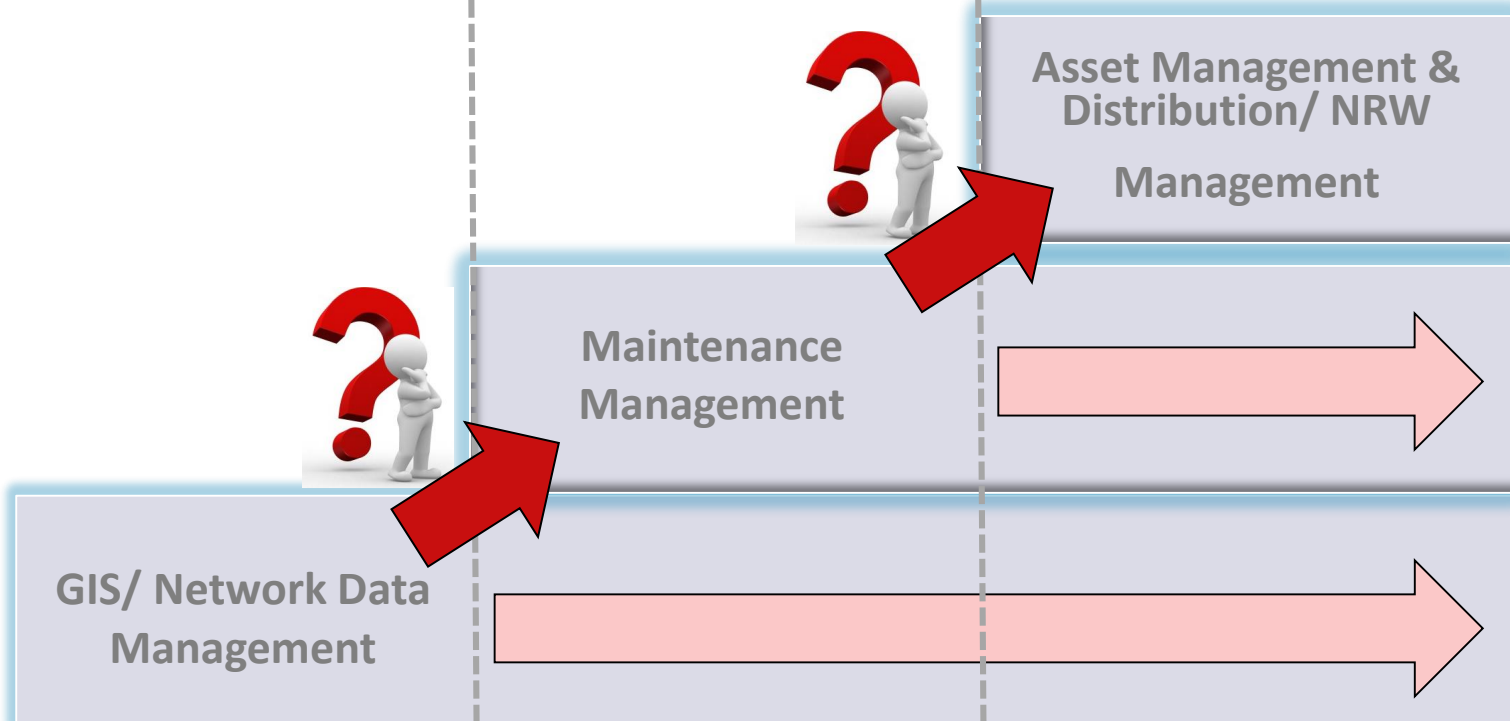
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1st stage:
Silver Level

2nd stage:
Gold Level

3rd stage:
Platinum Level





Comments and Expectations on Stage I

- ③ Stage I – Topics to be Introduced but to be covered partially
 - ③ Zoning
 - ③ Reporting Manager
 - ③ Facilities Management
 - ③ Sewer Networks (optional)

SEEAM Stage I - Zone Management



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Type	ID	Ref	Direction
Closed Valve	1615	Valve 941	
Closed Valve	1616	Valve 942	
Closed Valve	2134	Valve 1461	
Closed Valve	4972	Valve 4324	
Closed Valve	4978	Valve 4330	
Closed Valve	5004	Valve 5004	

SEEAM Stage I – Reporting Manager



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SEEAM Stage I – Facilities Management



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Components Library

Component ID	Name	Icon	Group	Standard Component
1	Battery		Electrical	✓
2	Cabling		Electrical	✓
3	General Lighting		Electrical	✓
4	Electrical Control Panel		Electrical	✓
5	Motor Control Centre (MCC)		Electrical	✓
6	Motor starting equipment		Electrical	✓
7	Overhead line		Electrical	✓
8	Protection devices		Electrical	✓
9	Switchgear		Electrical	✓
10	Substation		Electrical	✓
11	Transformer		Electrical	✓
12	CCTV		Electrical	✓

Library Component: [Cabling]

General | Details

Name: Cabling

Group: Electrical

Details: Electrical cabling, conduits, enclosures and fittings

OK Cancel

Assets Register (Hierarchy)

Element Type Group: All

Element Type: All

type here to search element(s)

Show Filtered Elements options

Show all children elements

Show only filtered element

- Reservoir Site 1 (Reservoir Site 1)
- Reservoir Site 2 (TAY1)
- Reservoir Site 3 (TAY2)
- Reservoir Site 4 (Reservoir Site 4)
- Meter Chamber 1 (AREA 12 (FS12))
 - Meter Position 15 (Meter Position 15)
 - Bulk Meter 14 (AREA 12)
- Meter Chamber 2 (AREA 1 (FS1))
 - Meter Position 2 (Meter Position 2)
 - Bulk Meter 2 (AREA 1)
- Meter Chamber 3 (AREA 2 (FS2))
 - Meter Position 1 (Meter Position 1)
 - Bulk Meter 1 (AREA 2)
- Meter Chamber 4 (AREA 3 (FS3))
 - Meter Position 3 (Meter Position 3)
 - Bulk Meter 3 (AREA 3)
- Meter Chamber 5 (AREA 4 (FS4))
 - Meter Position 4 (Meter Position 4)

Eq...	Equals:	Com
1	15	Met
2	14	ARE

SEE AM: Optional Activities Sewer Networks



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- Sewer Node (Ctrl + N) Ctrl+N
- Sewer Chain (Ctrl + C) Ctrl+C
- Manhole Area
- Sewer (Ctrl + S) Ctrl+S
- Conduit
- Pump Line
- Manhole
- Sewer Pumpstation
- Storage Pond
- Treatment Works
- Geo Sewer Connection

Embedded the main reference classification system in Europe

European standard (EN 13508-Part 2: Conditions of drain and sewer systems outside buildings - Part 2: Visual inspection coding system).

Pipe lining material types

Code	Description
AA	Asbestos cement
AB	Bitumen
AC	Pitch fibre
AD	Reinforced concrete
AE	...
AF	...
AG	...
AH	...
AI	...
AJ	...
AK	...

Asset locations

Name	Default
in a road	<input type="checkbox"/>
in a footway beside road	<input type="checkbox"/>
in verge beside a road	<input type="checkbox"/>
in other pedestrian area	<input type="checkbox"/>
in field	<input type="checkbox"/>
on property with buildings	<input type="checkbox"/>
gardens	<input type="checkbox"/>
under a permanent building	<input type="checkbox"/>
woodland	<input type="checkbox"/>
difficult access (e.g. motorway or o...	<input type="checkbox"/>
under a waterway	<input type="checkbox"/>
unknown	<input checked="" type="checkbox"/>

3a Sewer GIS/ Network Data Management & Facility Management (Treatment Works)			
3a.1	Network Data Model	Structure for maintenance, design and analysis applications	Managers
		Data Capturing Element Libraries	
3a.2	Data Acquisition & Structuring	Connectivity Rules & engineering integrity network data field validation and discrepancy analysis	Managers
3a.3	Zoning Management	Engineering zones Discrepancies control	Managers
	Metering Management	Zone calibration Metering control	
3a.4	Advanced Sewer Management	Quality monitoring Facility Management	Managers
		Developing Hierarchical Structures	

SEE AM: Optional Activities Sewer Networks



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-  Conduit
-  Pump Line
-  Manhole
-  Sewer Pumpstation
-  Storage Pond
-  Treatment Works
-  Geo Sewer Connection
-  Gully And Connection
-  Gully
-  Isolation Structures
-  Sampling Point
-  Sewer Pump
-  Flow Measuring Point

The screenshot displays the EDAMS Network Assets Management interface. The main window shows a GIS map of a sewer network with orange lines and green nodes. A data entry dialog box for 'Manhole 8542 - chatty 3164' is open, showing the following details:

- User Ref.:** chatty 3164
- Type:** Manhole
- Importance:** Average
- GIS Key:** 8542
- Connectivity:**
 - On Node: 8550
 - D/S Chain: 8555
- Area:** (empty field)
- Construction Date:** 04/10/2009
- First Day of Use:** 04/10/2009

The dialog box includes tabs for Location, Condition Assessment, Costing, Zoning, and Editing History, and buttons for OK and Cancel.



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SEE AM Program - Utility Expectations



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A. General Expectations

- Exchange experiences with colleagues
- Receive knowledge from experts
- Obligations of Utilities in the program
- Describe Possibilities ahead of us (Where are we now and how we continue ?)



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SEE AM Program - Utility Expectations



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B. Performance & Reporting

- General Improvement of Services
- Better reporting
- Better Indicators for performance and Improvement

C. Networks & Assets

- Unify databases
- Interact with maps and receive visual info
- Better understanding of networks and weak points
- Reduce Losses (NRW)
- Smart Planning & Development (Investments)