

Partner presentation

AdSWiM | Split Water and sewerage company Ltd. |
Božidar Čapalija

Kick off meeting | Udine | 9-10 th of April 2019

About the Organisation

Name	Vodovod i kanalizacija d.o.o. Split (VIK-Split)
Name in english	Split water and sewerage company Ltd.
Legal form	Limited company (Croatian law: d.o.o.)
Municipality, Town	Split
Country of the Legal Seat	Croatia
Address	Hercegovačka 8
County	Split-Dalmatia
ZIP Code	21000
Classification of economic activity	Water collection, treatment and supply
Type of body	Public governed by public law
Annual revenue	≈ 33 mil €
Employees	450
Delivered water per annum	20 mil m ³

Main activities of the company:

Supplying drinking water

(includes collecting, water purification to health care degree and distribution through public water supply system)

Sewerage and waste water treatment

(includes wastewater collection, drainage, purification and discharge into the receiver via public sewerage system);

Maintenance of the rainwater canals in the City of Split area.

VIK-Split is a public utility company delivering water supply, wastewater services and sewage treatment.

The company performs economic activities on the market, it has government GRANTED MONOPOLY to be exclusive service provider.

Operational area covers 13 local governments – all shareholders - providing ca. 300,000 inhabitants with integrated water system services, including drinking water and wastewater collection, purification, distribution and discharge.

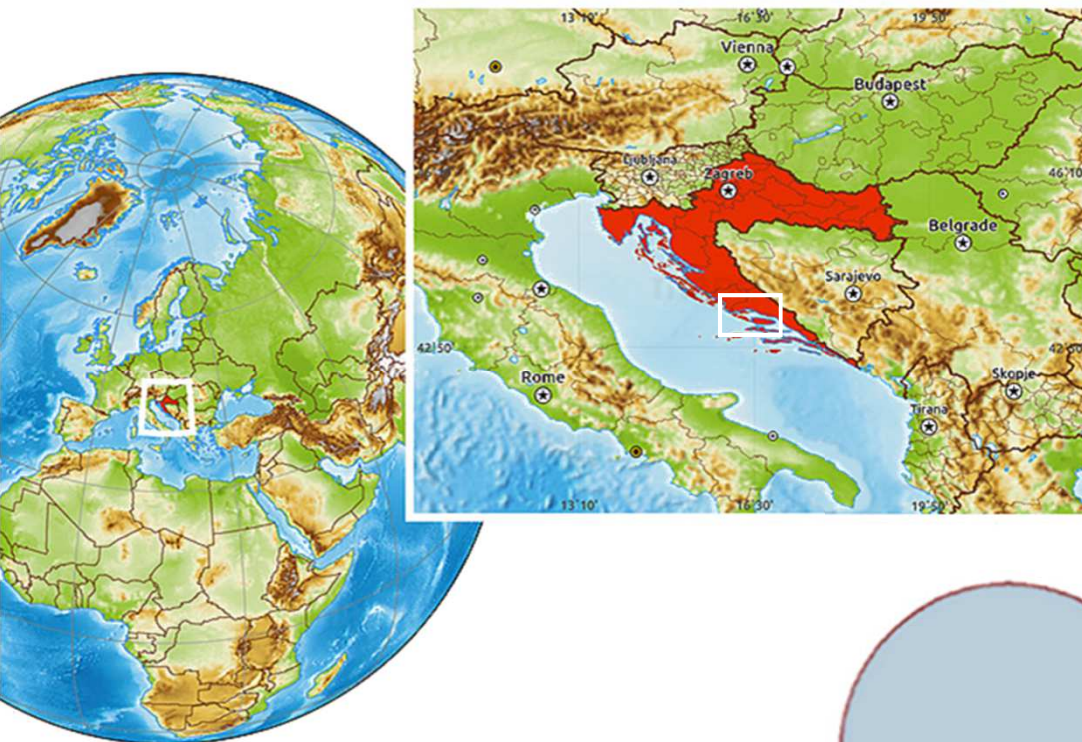
- **63,000 water connections**
- **monitoring conveyance capacity along the river Jadro just outside the city centre**
- **management of supply and distribution network of 1400 km**
- **control of 57 reservoirs and 80 pumping stations**

Company operates in 4 cities and 9 municipalities:

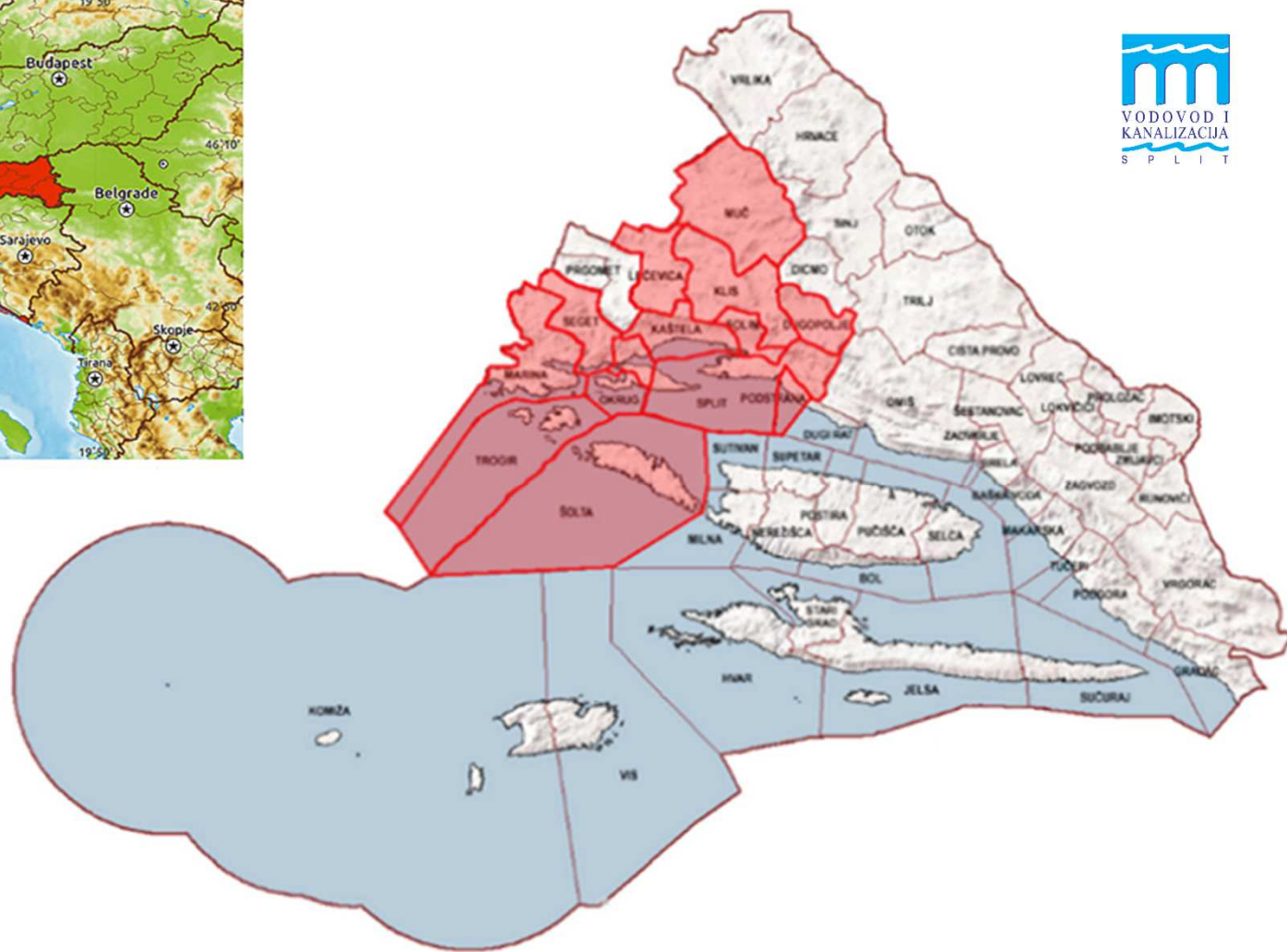
Water supply: cities Split, Solin, Kaštela and Trogir,
municipalities Podstrana, Marina, Okrug, Seget, Klis, Muć,
Dugopolje, Lećevica and Šolta.

Drainage: cities Split, Solin, Kaštela and Trogir,
municipalities Podstrana, Seget and Šolta.

63.000 connections on the operational area of 300.000 inhabitants.



Pic.1. Geolocation of Republic of Croatia and Split-dalmatia county



Pic.2. Operational area of the company in red (SD county)

GALLERY OF THE VIK-SPLIT FACILITIES



Pic.3. Spring *Jadro*



Pic.4. Waterfalls of the spring *Jadro*



Pic.5. Roman aqueduct 50 m below spring *Jadro*



Pic.6. Roman aqueduct 2.5 km below spring *Jadro*



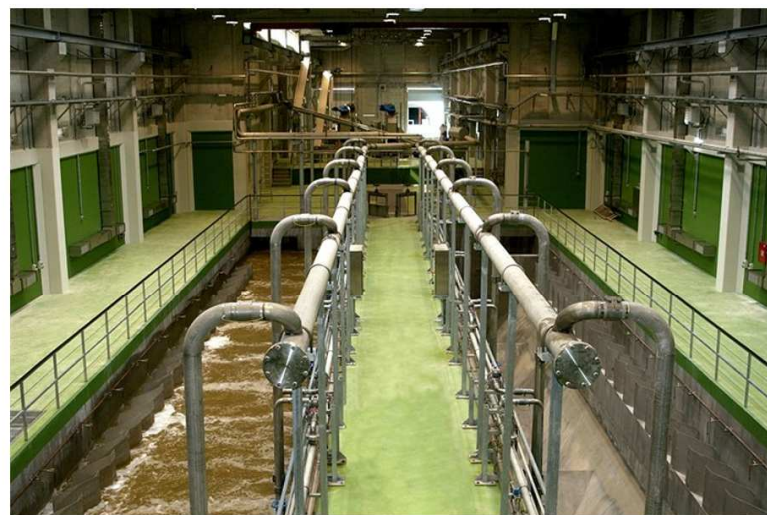
Pic.7. Water pumping station *Ravne Njive* ext.



Pic.8. Water pumping station *Ravne Njive* int.



Pic.9. Wastewater treatment plant *STUPE* ext.



Pic.10. Wastewater treatment plant *STUPE* int.

PROJECT OVERALL OBJECTIVE

„To improve the BW quality as well as the ecological level of the marine and coastal ecosystem”

SPECIFIC OBJECTIVE 1

Improve the environmental quality condition of the Adriatic sea by managed use of treated WW

SPECIFIC OBJECTIVE 2

Biological parameters, analytical devices, innovative treatments to protect the bodies of water

SPECIFIC OBJECTIVE 3

Settle and share models of DP management, present regulations efficiency assessment

Expertise linked with AdSWiM goals:

SO1

**Wastewater
management
know-how**

SO2

**Operative laboratory
with equipment at
disposal**

SO3

**Educated and
motivated staff with
cross-sectional
knowledge**

Activities in AdSWiM project

WP 3 Harmonization of the knowledges, project areas modelling and mapping, activities planning

- **Act 3.2** Modelling and mapping of the project areas
- **Act 3.3** Selection of sampling points/analysis with plan of experimental activities

WP 4 Innovative solutions in analytical, microbiological controls and to treat urban wastewaters

- **Act 4.6** IAMD_Results analysis

WP 5 Technologies and strategies for managing DPs guide lines definition and crossborders strategies

- **Act 5.1** Investigation on the cross-borders DPs technologies, management strategies, transfer of knowledges
- **Act 5.2** WWT process innovation and test of the optimized AdSWiM solutions
- **Act 5.3** Joint and shared cross-borders strategies of WWT plant management and legislative action proposals

Equipment available

1. **UV / VIS spectrophotometer** (for ammonium, nitrate, nitrite, phosphorus)
2. **RFID Technology Spectrophotometer** (KPC Determination)
3. **IR spectrometer, FT-IR** (determination of total oil and fat, total hydrocarbons)
4. **Thermoregulator** with a temperature range of 40 - 170 C (KPK)
5. **Dryer with fan**
6. **Cooling Incubator** at 20 C (BPK5)
7. **Filter set** (determination of suspended matter)
8. **PH meter** (pH determination)
9. **Conductometer** (determination of electrical conductivity)
10. **Buchi system** (determination of nitrogen by Kjeldah)

Wastewater laboratory



Measurements - determination of:

1. PH
2. Electrical conductivity
3. Suspended solids - Method by filtration through glass fibre filters
4. Chemical oxygen demand indeks (ST-COD) - Small-scale sealed-tube method
5. Biochemical oxygen demand after 5 days (BOD5) - Part 1: Dilution and seeding method with allylthiourea addition
6. Dissolved oxygen - Iodometric method
7. Chloride - Silver nitrate titration with chromate indicator (Mohr s method)
8. Ammonium - Manual spectrometric method
9. Nitrate - Part 3: Spectrometric method using sulfosalicylic acid
10. Nitrite - Molecular absorption spectrometric method
11. Kjeldahl nitrogen - Method after mineralization with selenium
12. Total phosphorus - Ammonium molybdate spectrometric method
13. Total oil and grease (lipophilic substances)- Method infrared spectroscopy
14. Total hydrocarbons - Method infrared spectroscopy

SAMPLING AND TESTING of WW quality is carried out by a licensed laboratory of the **INSTITUTE OF PUBLIC HEALTH** of Split Dalmatian County, in accordance with the water permits for the discharge of waste, partly purified water from the public drainage system into the natural receiver, **IN SEVEN CONTROL POINTS.**

Team

1. **Boris Bulović**, EU funding specialist, **Project Manager**
2. **Sanja Kljaković**, Financial and economic affairs specialist, **Project Coordinator & Communications – administrative**
3. **Božidar Čapalija**, Assistant director of technical sector for water supply, **Technical Coordinator – technical**
4. **Sanja Brčić**, Assistant of head of accounting department, **Financial Manager – administrative**
5. **Snježana Farac**, Head of the waste water laboratory, **Team member – technical**
6. **Benegdita Kapitanović**, Salary calculator, **Team member – administrative**
7. **Matea Dulčić**, Liquidator of accounting documents, **Team member – administrative**
8. **Ivan Jurišić**, Assistant of head of accounting department, **Team member – administrative**
9. **Vedran Spain**, Assistant of head of procurement department, **Team member – administrative**


Organisation name

Split water and sewerage company Ltd.


Contact person

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