Prospective on Utility Financing

Waste Water Collection and Treatment Project
Bihac, B&H

2017 Danube Water Conference, 17.-19. 5. 2017
## Waste Water Collection and Treatment Project Bihać

<table>
<thead>
<tr>
<th>Project duration:</th>
<th>2007 – 2018</th>
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<tbody>
<tr>
<td>Two Components:</td>
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<td></td>
<td>• Sewage and storm water network 53 km</td>
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<td></td>
<td>• Construction of WWTP - 55 000 PE</td>
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<td></td>
<td>• Budget: 25.6 mil. €</td>
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<td>Employer:</td>
<td>City of Bihac</td>
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<td>Financing:</td>
<td>KfW, IPA, National FI and the City of Bihac</td>
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<tr>
<td>Designer/Consultant/Engineer:</td>
<td>Joint Venture “Fichtner WT – Una Consulting”</td>
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Reconstruction and Upgrade of WWTP Sarajevo

Project duration: 2012 – 2016

Key data:
• WWTP 600 000 PE
• Budget: 26 mil. €

Employer: PUC „VIK“ Sarajevo
Financing: Word Bank (IBRD), IPA, Canton Sarajevo
Designer/Consultant/Engineer: JV „Holinger-Una Consulting“
Contractor: JV „Unioninvest-Passavant“
# Construction of Waste Water Collection and Treatment System

**Mostar**

**Project duration:** 2009 – 2017

**Employer:** City of Mostar PUC

**Key data:**
- **WWTP 100 000 PE**
- **Budget: 60 mil. €**

**Financing:** Word Bank (GEF), IPA, SIDA, F&BH and City of Mostar

**Designers/Consultants:**
- Consortium GWCC i ZZV
- JV „Holinger-Una Consulting“

**Contractor:** „Actor“
2. Lessons Learned

- Adopted legislation in line with EU requirements (e.g. Urban Waste Water Directive) puts very high requirements in front of PUC and LGU („from 0 to 100%” treatment in a very short period).

- Infrastructure projects are complex in financial and organizational way, so PUCs and LGUs need support.

- Duration of the project is long, up to 10 years, key phases often underestimated (e.g. issuing of permits, expropriation, construction works).

- Planning of the complete project budget is not adequate, often accompanying costs not foreseen (expropriation, underground installations which need to be relocated and replaced, asphalting of roads, administration fee, etc.).
2. Lessons Learned

- PUC need to be actively involved in all phases of project planning and preparation (including development of technical documentation).

- Selection of consultant is very important, engagement of local one at the beginning is of essence (national legislation requirements, issuing permits, awareness of all contextual challenges),

- Very important issue for sustainability of the investment is selection of adequate level of decentralization for sewage system, including selection of appropriate treatment technology (affordable) – criteria for selection, engagement in design process,

- Local funds often misused, need for establishing separate account, strict control, proof from LGU for their contribution (bank guaranty, secured funds ...)
2. Lessons Learned

- Sustainability of investments is jeopardized – not only investment but also O&M cost are high for waste water collection and treatment.

- The structure of the invoice for water services will change for citizens in B&H, i.e the price will increase/change.

- There is need to assess the “space” for change of tariffs and own capacities and technologies that will not jeopardize financial and operational sustainability of the PUC.

- PUCs are frustrated with the new investments
  Why?
  LGUs make loan arrangements, preferably for new infrastructure (not interested in reconstruction of existing) but “forget” to adjust the tariffs and provide subsides to enable repay of loan and smooth O&M.
3. Recommendations

- Not avoid the obligations of B&H in the EU integrations but **protect** own citizens from high bills for water service.

- **Select adequate technologies** that will not jeopardize financial and operational sustainability of the PUC

- **Use potentials of savings during planning and design** (decentralization, small treatment plants, realistic water consumptions for design) – learn form others!
3. Recommendations

Find the right combination of centralised/decentralised solution!

Cost of sewage network construction: 60 – 80 % of total costs!
3. Recommendations

- Assess the „space” for change of tariffs and evaluate the own capacities of PUC, e.g.:  
  - Full cost covering tariffs (operational costs, depreciation & amortization, investment from own or other sources, including interest),
  - Dividing costs by cost centres, separating water supply, waste water, waste water treatment and administration/general costs.
  - Enhance performance (NRW, energy efficiency, asset management etc.).

- Need for regulatory frameworks including the tariff methodology for price calculation that will, together with planning, enhance operational and financial efficiency.
3. Recommendations

- **Responsibility for sustainability is with the LGU**, it can not be fully delegated to the PUC (willingness to charge!!!!)

- Clear distinguish of rights and obligations, roles and responsibilities between the operator (PUC) and contracting authority (LGU) – *Public Service Agreements (PSA)*,

- **Careful selection of performance indicators for PSA and monitoring** (no approval for change of price if no indication of improvement in performance – Performance Based Contract).

- **Strengthening of PUC will enhance the credibility, autonomy and reduce the political influence** (e.g. overemployment, selection of priorities for investment).
3. Recommendations

- Ensure transparency and quality of services of the PUC to enhance willingness to pay,

- Take into consideration the affordability (but not misuses it), e.g. UNDP MEG Project in B&H, 31 municipality (average. 10.5 Euro/month for 15 m3, potential for increase).

- Involve citizens/clients in all phases of the projects planning and implementation.

- Enhance capacities of PUCs and LGUs to be able to work on necessary changes:
  - To implement measures for improvement of the PUC performance,
  - For preparation and implementation of infrastructure project (recognizing the own limitations for financial investment).
To create golden triangle of partnerships to advance development

THE LOCAL AUTHORITY (THE COLLECTIVITY) organizes the service and sets the water tariff.

THE SERVICE PROVIDER (Public or Private) manages the Service.

THE SERVICE USERS (THE CONSUMERS) (domestic & industrial) are benefiting of the Service.

ADMINISTRATION OF THE TERRITORY
- Information Discussion

GOOD GOVERNANCE PRINCIPLES & QUALITY OF SERVICES
- Assess
- Requests / Claims

SERVICE
- Provides the Service Billing & Information
- Payment
- Informs and Reports

ASSETS MANAGEMENT
- Tariffs, Steering Board, Directors
  Requirements Monitoring
THANK YOU FOR ATTENTION!

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