

Company	SETEC Engineering GmbH Feldkirchner Strasse 50 9020 Klagenfurt AUSTRIA	
Contact	Managing Directors: Mr. Gerhard ZIMMERL, Mr. Wilhelm TISCHENDORF	
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Establishment	in 1999, succeeding to SEBA Messtechnik founded in 1966	
Legal Status	Limited Liability Company Registered at the Court of Commercial Registration, No. FN 179593h in Klagenfurt, Austria	
SETEC owns	SETEC E&C d.o.o., Belgrade, SERBIA	
Majority owner of SETEC	Dahlem beratende Ingenieure GmbH & Co. Wasserwirtschaft KG, Essen, GERMANY	

SETEC Engineering's company history dates back to 1966 when SEBA Messtechnik was founded as a company specialized in leak detection. In 1999, SEBA Messtechnik was renamed SETEC Engineering, and the employees and their collective expertise remained a valuable asset. SETEC is internationally well-renowned, its major fields of activity are steadily growing and currently comprise:

- <u>Non-Revenue Water</u> reduction measures: SETEC Engineering is very well known internationally for leak detection activities as well as for the training of water works staff.
- <u>Hydraulic modelling</u> is the basis for any state-of-the-art improvement to a water or sewerage network. In cooperation with a well-known research institute, SETEC developed the hydraulic modelling software program, NESEI[®], which is used in Austria, Germany and in many other countries worldwide.
- Due to SETEC's mother company, Dahlem, we have become a key player in the planning and implementation of sewage treatment plants and sewerage systems.
- Recently, SETEC has expanded its activities to solid waste management programs.
- Technical investments require institutional support, over the last 20 years SETEC has acquired wide-ranging expertise in the <u>institutional strengthening</u> of water utility companies, committed to economic sustainability, financial planning, human capacity building.

Over the past 20 years, SETEC Engineering has developed a comprehensive service package for CONSULTING SERVICES <u>for potable water supply and wastewater systems</u> including master planning, feasibility study, design, procurement, construction supervision and institutional strengthening of the water utilities.

SETEC Engineering - ORGANIGRAM MANAGING BOARD FINANCE & CONTROLLING Gerhard ZIMMERL Monika LIEGL Wilhelm TISCHENDORF **BUSINESS DEVELOPMENT** HYDRAULIC MODELLING CONSULTING TRADE **MAPPING / GIS** INT'L International Gerhard ZIMMERL Josef JUST Peter FEICHTNER Catherine TINSEAU **Kurt LUSCHIN** Measurement Campaign / Domestic(AT/DE) **Project Management Leak Detection** Hannes KASPURZ Water Supply & Sanitation Axel GIBELHAUSER Catherine TINSEAU Key Account Manager (AT/DE) Michael MAIER Stephan WÖLCHER GoranMIHAJLOVIC Gerhard RAMEL

SETEC Engineering - KEY DATA			
Technical disciplines	 WATER SUPPLY - rehabilitation, extension Mapping, network information systems Network analysis, field measurements Hydraulic Network model, calibration based on flow and pressure on-site measurements Non-Revenue Water evaluation, reduction measures Leak detection campaigns SOLID WASTE choice of waste treatment lines and capacity waste collection scheduling 	 WASTEWATER - rehabilitation, extension Sewer stormwater treatment plant sludge stabilization water reuse rural sanitation, EcoSan latrines site selection leachate treatment 	
Staff	26 permanent employees, including: Project Managers Hydraulic Experts (sewer & water supply) Water & Sewage (network & process) Design Eng.	Environmental, O&M Specialists Civil, Mechanical Engineers NRW Experts, Leak Detection Specialists	
	Solid Waste Specialists Financial Expert Tariff Modelling Expert, Commercial Expert Legal Expert	Mapping / GIS Experts Utility Capacity Building Expert MIS / IT Expert Institutional Expert	
Equipment	for Mapping / GIS update GPS survey equipment, GIS software for Water Balance Assessment / Calibration of the Hydraulic Model portable ultra-sonic flow meters, digital pressure loggers, water level sensor for Leak Detection water loss analysis vans, geophones, leak noise loggers, leak noise correlators, pipe detection instruments, valve spindle locators		
Software development	Hydraulic Network Simulation NESE® Software development for data exchange interfaces Cloud computing technology		
International experience	Europe – South / East Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Kosovo, Latvia, Macedonia, Romania, Serbia, Turkey Africa Algeria, Egypt, Morocco Angola, DR Congo, Ghana, Kenya, Madagascar, Malawi, Namibia, Nigeria, Tanzania, Uganda, Zambia Middle East Iraq, Jordan, Kuwait, Palestine, Saudi Arabia, Syria, Yemen South America		
	Asia Bangladesh, China, Indonesia, Philippines, Sri Lanka, Kazakhstan, Kyrgyzstan, Nepal, Tajikistan, Uzbekistan		

SETEC Engineering - SERVICES

PROJECT MANAGEMENT

- Project evaluation and implementation plan
- Selection of bidders, manpower appointment and skill matching
- Legal arrangements

ENGINEERING SUPPORT

Feasibility Studies

- Inventory and problem diagnosis
- Data collection
 - Map update, recommendations for GIS
 - field measurements water balance assessment. NRW rates
- Hydraulic modelling
 - onsite calibration measurement
 - running of scenarios
 - recommendations for sectorization, for SCADA
 - prioritization of improvement measures
- Schematic designs
- Cost estimates, Assessment of return on investment
- Investments Schedule

Design

- Reconnaissance study
- Preliminary designs and cost estimates
- Computer modelling, scenarios study
- Detailed designs: technical specifications and bill of auantities
- **Environmental Impact Assessment**

Tendering & Procurement

- Preparation of procurement plans
- Preparation of BoQ, tender documents
- Preparation of pre/post-qualifications documents for suppliers and contractors,
- Tendering and evaluation, contract negotiation

Construction Supervision

- Contract coordination, budgeting and monitoring
- On-site supervision
- Quality control, equipment commissioning and inspection

- Adherence to standards
- Contingency planning and strategic intervention
- Management of disposition funds
- Kick-off meetings, coordination between stakeholders

INSTITUTIONAL SUPPORT

Institutional Strengthening Measures

- commercial sustainability (tariff study), financial planning
- Improvement of technical and operation effectiveness
- Developing strategies for enhancing staff capabilities capacity building & training
- Launching of required new soft- and hardware means and methods
- Legal assistance to the water operator on issues related to contractual regulations (incl. EU accessions)

Implementing strategies for reducing Non-Revenue Water comprising controlled administrative losses

- Verify, update and improve customer database
- Improve commercial procedures
- Update tariff adjustment plans
- **Asset Valuation**
- Development and Application of Management Information System
- **Development and Application of Business Planning**
- **Legal Aspects**
- Performance Monitoring and Benchmarking
- Public awareness and customer relationship
- Organization and human resource development
- Elaboration and implementation of an Operation and Maintenance concept
- Elaborate and implement loan repayment procedure
- ICT solutions covering: assets and O&M management, NRW analysis, smart metering, reading, billing accounting and financial management

Project Management Support

- Project administration, establishment of Project Monitoring Unit, procedures manual
- Project Management Support: know-how transfer on project management concepts, tools and activities
- Technical Support: supervision of design, provide technical capability
- Institutional Support: training, procurement

PREPARATION of OUTPUTS

Deliverables and Special Reports; Workshops; Study tours