

1. **Family name:** KNOCHE
2. **First names:** Ralf
3. **Date of birth:** 29 November 1971
4. **Nationality:** German
5. **Civil status:** Single
6. **Education:**

<b>Institution:</b>	Technical University of Munich/Germany
<b>Date:</b>	11/1992 to 02/2000
<b>Degree(s) or Diploma(s) obtained:</b>	Civil Engineer (Dipl.-Ing. (univ.)) equivalent to Masters of Science

7. **Language skills:** (1 = worst; 5 = best)

Language	Reading	Speaking	Writing
German	Mother tongue		
English	5	5	5
Spanish	3	3	3
French	3	3	3

8. **Membership of professional bodies:** DWA

9. **Other skills:**

FIDIC, VOL, VOB, Capacity Works, full computer literacy; very good communication skills

10. **Present position:** Consultant

11. **Years within the firm:** Freelancer since 2012

12. **Key qualifications:** More than 20 years of professional experience in planning, design construction supervision and evaluation mainly in water supply, sewerage, drainage, sanitation in projects in the context of **emergency relief** and **development cooperation**: master plans, feasibility studies, proposals, planning and design, tender documents, assistance to tendering and contracting, construction supervision, commissioning, defects notification period, backstopping and evaluations. 15 years in countries abroad. Long-standing experience as Project Manager / Team Leader / Backstopper, Evaluator and Tender Agent.

13. **Specific country experience:**

Country	Date:
Bangladesh	01/2015 – 01/2016
Denmark	11/1998 – 08/1999
Georgia	05/2017
Greece	06/2016
Indonesia	11/2006, 04/2007 – 05/2007
Iran	12/2003 – 01/2004
Iraq	09/2003 – 11/2003, 03/2016
Jordan	08/2013 – 09/2013, 02/2014, 11/2014
Lebanese Republic	08/2006 – 02/2007, 02/2008 – 12/2011, 02/2012 – 03/2012, 08/2012
Liberia	06/2004, 05/2005 – 03/2007
North Macedonia	10/2018
Sierra Leone	09/2002 – 03/2007
Somalia	11/2018
South Sudan	11/2010
Sri Lanka	05/2003 – 06/2003
Spain	03/2000 – 07/2000, 11/2002 – 12/2002
Uganda	11/2016 – 08/2017, 11/2017

**14. Professional experience:**

<b>Date:</b>	01/2012 – on-going
<b>Location:</b>	Germany and abroad
<b>Company:</b>	Freelancer
<b>Position:</b>	Consultant
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Team Leader, Project Manager and Senior Expert in WASH/ infrastructural measures in humanitarian relief for the complete project chain (fact finding missions, project proposals (KfW, ADB, AA, BMZ, ECHO, EuropeAid, UNICEF, UNHCR etc.), design, tendering, supervision, commissioning, capacity development, evaluation and backstopping)</li> <li>- <u>Emergency Relief:</u> Development and realisation of emergency programmes in the following areas: water, wastewater, shelter, traffic routes, flooding, electrical energy, logistics</li> <li>- <u>Transition aid:</u> Development and realisation of rehabilitation programmes in the following areas: water, wastewater, shelter, traffic infrastructure, flooding, electrical energy, logistics</li> <li>- <u>Development cooperation:</u> Construction and management in the following areas: Urban and rural water supply, wastewater discharge, wastewater treatment, shelter and transport</li> </ul>

<b>Date:</b>	01/2012 - ongoing
<b>Location:</b>	Germany and abroad
<b>Company:</b>	Freelancer
<b>Position:</b>	WASH Expert, Lecturer
<b>Description:</b>	Conduction of training, lectures and presentation for Johanniter International Assistance, Malteser International, Caritas Switzerland, BORDA, arche noVa, Foundation St. Barbara, Konrad-Adenauer-Foundation, University for Applied Science Rüsselsheim, University for Applied Science Bremen, University Bremen, Jacobs University Bremen etc.

<b>Date:</b>	08/2014 – on-going (on request)
<b>Location:</b>	Germany and abroad
<b>Company:</b>	Freelancer: Johanniter International Assistance (JUH), Berlin
<b>Position:</b>	Technical Advisor WASH
<b>Description:</b>	<p>JUH is carrying out projects in almost 20 countries, mainly in the field of health and hygiene.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Technical advice during planning, implementation and evaluation of projects in the field of WASH</li> <li>- Support during elaboration of project proposals</li> <li>- Support of quality intensification of projects in the field of WASH</li> <li>- Development of guidance notes in the field of WASH under consideration of relevant international standards</li> <li>- Realisation of in-house training in the field of WASH</li> </ul>

<b>Date:</b>	01/2019 – on going
<b>Location:</b>	Germany and Ukraine
<b>Company:</b>	Freelancer: KfW
<b>Position:</b>	Tender Agent
<b>Description:</b>	<p>Municipal Infrastructure Rehabilitation in Kharkiv, Ukraine, funded by KfW (German Development Bank):</p> <p>The purpose of the project is to improve the performance and efficiency of water supply and waste water systems and to enhance the capacity of local water and sewerage utility in Kharkiv (with funds of KfW) and optionally in Chuguev and Bogodukhiv (with funds of EU).</p> <p>Furthermore, energy consumption of buildings (schools and kindergartens) in Kharkiv shall be reduced by investing in energy efficient construction technologies and replacing outdated equipment:</p> <ul style="list-style-type: none"> <li>- Design, tendering and construction of water supply and wastewater infrastructure as well as upgrade of schools and kindergartens in terms of energy efficiency</li> <li>- Institutional strengthening in both sectors</li> </ul> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Preparing tender document for consulting services</li> <li>- Conducting prequalification and preparing a “shortlist” of qualified bidders</li> <li>- Conducting the tender</li> <li>- Sequential evaluation of the tender and substantiated contract award proposal</li> <li>- Coordinating the adapted KfW standard consulting contract with the consultant</li> <li>- Conduct in the event of objections and complaints</li> </ul>

<b>Date:</b>	06/2018 – on going
<b>Location:</b>	Germany and North Macedonia
<b>Company:</b>	Freelancer: KfW
<b>Position:</b>	Tender Agent
<b>Description:</b>	<p>Water and Sewerage Programme North Macedonia, funded by KfW (German Development Bank):</p> <p>The programme focuses on the rehabilitation of urban water supply and sewerage systems at socially acceptable costs in selected medium-sized municipalities:</p> <ul style="list-style-type: none"> <li>- Design, tendering and construction of water supply and wastewater infrastructure</li> <li>- Institutional strengthening of water three water utilities</li> </ul> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Preparing tender document for consulting services</li> <li>- Conducting prequalification and preparing a “shortlist” of qualified bidders</li> <li>- Conducting the tender</li> <li>- Sequential evaluation of the tender and substantiated contract award proposal</li> <li>- Coordinating the adapted KfW standard consulting contract with the consultant</li> <li>- Conduct in the event of objections and complaints</li> </ul>

<b>Date:</b>	02/2018 – on-going
<b>Location:</b>	Germany and Uganda
<b>Company:</b>	Freelancer: BORDA Ltd., Bremen
<b>Position:</b>	Senior Consultant and Backstopping
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas:</p> <p>Final design of faecal sludge management facilities (60 m<sup>3</sup>) in Kampala, Uganda, funded by CIDI (Community Integrated Development Initiative)</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Final design of faecal sludge management facilities (sludge stabilisation reactor, drying beds, leachate treatment)</li> <li>- Elaboration of tender documents</li> <li>- Elaboration of operation and management plans</li> <li>- Project administration</li> <li>- Backstopping</li> </ul>

<b>Date:</b>	12/2018 to 02/2019
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: IMS Ingenieure
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>Rural Development Programme, Myanmar, funded by KfW (German Development Bank):</p> <p>The programme focused on the:</p> <ul style="list-style-type: none"> <li>- Set-up and / or improvement of efficient routine maintenance systems for rural roads (or other rural infrastructure systems)</li> <li>- Development and conduction of different trainings to set-up and / or improve efficient routine maintenance systems for rural roads</li> <li>- Improvements of maintenance organisation, sustainability of local routines as well as allocation of duties and responsibilities</li> </ul> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of documents for Invitation to prequalification</li> <li>- Evaluation of prequalification documents</li> <li>- Elaboration of evaluation report for prequalification</li> </ul>

<b>Date:</b>	11/2018 – 12/2018
<b>Location:</b>	Somalia
<b>Company:</b>	Freelancer: Caritas Switzerland
<b>Position:</b>	WASH Expert
<b>Description:</b>	<p>Caritas Switzerland prevents, combats and alleviates poverty worldwide in more than 30 countries. With its projects it works in the areas of food security, water, climate protection, disaster prevention and migration as well as education for children and adults. It provides emergency relief in disasters and is actively involved in reconstruction work.</p> <p>Caritas has been active in Somaliland since 1995 supporting projects in different sectors including Water, Sanitation and Hygiene (WASH), food security, skills training, Non-Formal Education for women, school construction and human rights.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Training of Trainers: Needs assessment, preparing training incl. material and conducting the training</li> <li>- Recommendation for operation &amp; maintenance of WASH components in health centres in Berbera region</li> <li>- WASH assessment in ten health centres and four communities</li> <li>- Elaboration of project options for health centres and communities incl. activities, budget estimation, personnel resources and operation &amp; maintenance recommendations</li> </ul>

<b>Date:</b>	05/2018 to 12/2018
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: IMS Ingenieure
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>Municipal Infrastructure Programme MIP V, Feasibility Study and Project Implementation for three cities, Albania, funded by KfW (German Development Bank)</p> <p>The programme focused on prioritised investments of the water and wastewater sector Master Plan in up to ten water utilities of Albania:</p> <ul style="list-style-type: none"> <li>- Elbasan: Feasibility study for water supply and sewerage networks and optional detailed design, tendering and construction supervision</li> <li>- Shkodra: Feasibility study for water supply and sewerage networks and optional detailed design, tendering and construction supervision</li> <li>- Fier, Saranda and Mallakstra or Vlora: Feasibility study for water supply and sewerage networks and optional detailed design, tendering and construction supervision</li> </ul> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Evaluation of prequalification documents</li> <li>- Elaboration of evaluation reports</li> <li>- Evaluation of technical proposals for ESIA</li> <li>- Elaboration of evaluation report for ESIA</li> </ul>

<b>Date:</b>	04/2018 – 10/2018
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: Malteser International, Cologne
<b>Position:</b>	WASH Expert
<b>Description:</b>	<p>Malteser International (MI) main tasks comprise emergency relief, transition aid and development cooperation. The core areas are health, WASH, nutrition and disaster preparedness.</p> <p>In the course of requirements of the World Health Organization MI had to be certified to provide health services in emergency. For this reason, a special unit was founded, the so called 'Emergency Medical Team' (EMT). The MI EMT was certified as 'Level 1' team, which qualifies to treat out-patients in case of emergency. Requirement is to set up and operate a camp, which has to be operated completely independent for 14 days. Only water and fuel are allowed to be procured at the location of operation.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of camp layout</li> <li>- Elaboration of Standard Operation Procedures (SOPs) for water and sanitation infrastructure</li> <li>- Consultancy in procurement of material</li> <li>- Assistance in execution of field exercise</li> <li>- Assistance during certification process</li> </ul>

<b>Date:</b>	05/2018 to 09/2018
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: IMS Ingenieure
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>Water Supply and Wastewater Programme VI, in Medium-Sized Municipalities, Serbia, funded by KfW (German Development Bank):</p> <p>The objective of the Programme is the environmentally and hygienically safe discharge and treatment of wastewater in selected towns at socially acceptable costs:</p> <ul style="list-style-type: none"> <li>- Preparatory engineering works: Design and planning activities</li> <li>- Institutional management support</li> </ul> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Evaluation of prequalification documents</li> <li>- Elaboration of evaluation report for prequalification</li> </ul>

<b>Date:</b>	06/2015 – 06/2018
<b>Location:</b>	Germany and abroad
<b>Company:</b>	Freelancer: BORDA Ltd., Bremen
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas.</p> <p>In 2013 BORDA Ltd. was founded as a branch of BORDA e.V. (NGO) to establish new business areas. Main task is the setup and implementation of consultancy services.</p>

<b>Date:</b>	08/2017 to 03/2018
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: PATRIP
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>PATRIP foundation promotes integration and enhance cross-border cooperation and exchange between Afghanistan and neighbouring Pakistan and Tajikistan. The PATRIP Foundation aims to help stabilize the region by supporting its economic and social development, meeting challenges in the border regions with bi-national and multi-sectoral measures.</p> <p>The objective of the project was to elaborate complete documents to ease the mandatory process for NGOs. carrying out tendering</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Examination of procurement guidelines</li> <li>- Elaboration of checklists</li> <li>- Elaboration / Update of standard documents (standard bidding documents incl. bidding forms, BOQs, general and particular specifications, contract forms, design report etc., minutes of tender opening, evaluation report for technical and financial evaluation, etc.)</li> </ul>

<b>Date:</b>	10/2017 – 12/2017
<b>Location:</b>	Germany and Uganda
<b>Company:</b>	Freelancer: Malteser International, Cologne
<b>Position:</b>	Evaluator
<b>Description:</b>	<p>Malteser International (MI) works in South Sudan and Uganda since more than 20 years mainly in the sectors health, WASH as well as Food and Nutrition Security. Particularly, during recent years, MI operates in a chronic, acute, and protracted environment with a dire situation in South Sudan after decades of war, independence and with a civil war ensuing that forced large proportions of the people to leave their homes. Besides the two million internally displaced South Sudanese (acc. to UNCHR, 31st July 2017), the population seeks refuge in neighbouring countries like Uganda, Sudan and Ethiopia. Since 2014 MI carries out cross-border projects in South Sudan and Uganda to ease the situation of the IDPs and refugees. After three years of project implementation MI wants to carry out an interim evaluation to ensure sustainable projects in future.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Preparation: Study of all documents available</li> <li>- Data collection: Field visits, discussions with donors, beneficiaries, government, UN etc.</li> <li>- Analysis and evaluation of results in dependence on OECD-DAC criteria</li> </ul>

<b>Date:</b>	05/2017 to 12/2017
<b>Location:</b>	Georgia
<b>Company:</b>	Freelancer: IMS Ingenieure
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>Rehabilitation of Municipal Infrastructure - Batumi – Phase III, Lot No. 4 -1a, Chavchavadze Street and Bagrationi Street, Georgia, funded by KfW (German Development Bank):</p> <p>Main services of this present lot are the design and the construction of two collectors and corresponding infrastructure:</p> <ul style="list-style-type: none"> <li>- Collector A: located in Chavchavadze street, 1,200 mm GRP pipes in length of approximately 376 metres</li> <li>- Collector B: located in Bagrationi street, 1,200 mm GRP pipes in length of approximately 1,200 metres</li> </ul> <p>Corresponding infrastructure, e.g. secondary sewers incl. house connections parallel to the main collectors on each side of the road, connection of secondary sewers to collector from cross-roads, extension of existing reinforced concrete pipe, inlet of pumping station (PST A) etc.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of documents for functional tendering (FIDIC Yellow Book)</li> <li>- Assistance during tendering</li> <li>- Evaluation of proposals</li> </ul>

<b>Date:</b>	11/2016 – 08/2017
<b>Location:</b>	Germany and Uganda
<b>Company:</b>	Freelancer: BORDA Ltd., Bremen
<b>Position:</b>	Senior Consultant and Backstopping
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas:</p> <p>Technical and financial proposal for engineering design of faecal sludge management facilities in Apac and Oyam districts, in Northern Uganda, funded by German Agency for International cooperation (GIZ).</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Final design of faecal sludge management facilities (drying beds, settler, horizontal filters, maturation pond, piping)</li> <li>- Elaboration of tender documents</li> <li>- Elaboration of operation and management plans</li> <li>- Project administration</li> <li>- Backstopping</li> </ul>

<b>Date:</b>	10/2016 – 07/2017
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: BORDA Ltd., Bremen
<b>Position:</b>	Senior Consultant and Backstopping
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas:</p> <p>Investment Action Plan for wastewater treatment in peri-urban areas of Phnom Penh, funded by Global Green Growth Institute (GGGI).</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of technical and financial proposal</li> <li>- Pre-Feasibility study and implementation plan of wastewater treatment plants (DEWATS)</li> <li>- Project administration</li> <li>- Backstopping</li> </ul>

<b>Date:</b>	01/2008 – 10/2016
<b>Location:</b>	Germany and abroad
<b>Company:</b>	Honorary Post: Engineers without Borders Germany
<b>Position:</b>	Chairman and Project Coordinator
<b>Description:</b>	<p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Strategic development of the organisation</li> <li>- Backstopping and coordination activities for all kind of projects</li> <li>- Development and teaching of different kind of workshops (Preparation of experts for projects abroad, project management in developing projects, sustainability and evaluation etc.)</li> <li>- Preparation of proposals for different funding agencies (BMZ, UNICEF, EuropeAid, etc.)</li> </ul>

<b>Date:</b>	06/2016
<b>Location:</b>	Greece
<b>Company:</b>	Freelancer: CARE Germany-Luxemburg e.V., Bonn
<b>Position:</b>	Technical Advisor WASH, Assessment
<b>Description:</b>	<p>CARE Germany-Luxemburg is carrying out projects in almost 40 countries, mainly in the field of humanitarian assistance.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- In depth analysis/assessment on the WASH situation in pre-selected formal and informal camps in Greece</li> <li>- Link in with existing WASH cluster and relevant authorities in Thessaloniki</li> <li>- Elaboration of recommendations for WASH in Emergencies activities in visited sites, with the specific inclusion of gender- sensitive and/or gender –transformative activities</li> <li>- Assessment of local partner's capacity of WASH understanding and ability in programme design and implementation and recommendations for capacity building</li> <li>- Provision of recommendations for WASH interventions and approach and refinement of existing response strategy on the WASH component</li> <li>- Provision of specific recommendations on WASH interventions to be used in ECHO-Proposal</li> </ul>

<b>Date:</b>	03/2016
<b>Location:</b>	Iraq
<b>Company:</b>	Freelancer: Johanniter International Assistance (JUH), Berlin
<b>Position:</b>	Technical Advisor WASH, Assessment
<b>Description:</b>	<p>JUH is carrying out projects in almost 20 countries, mainly in the field of health and hygiene.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Meeting of relevant stakeholders (Government, UN-organisations, international and local NGOs) incl. recommendation for cooperation</li> <li>- Elaboration of report of fact-finding mission incl. resolution minutes</li> <li>- Definition of next steps for the case of project implementation</li> <li>- Elaboration of project proposals for pilot project and follow-up projects</li> </ul>

<b>Date:</b>	01/2016 – 03/2016
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: German WASH Network (GWN), Berlin
<b>Position:</b>	Senior Consultant
<b>Description:</b>	<p>GWN was founded by German non-governmental organisations in 2011. The members are German non-profit organisations, which focus on development co-operation or humanitarian emergency relief and rehabilitation and are actively engaged in the WASH sector. The objectives of GWN are to strengthen the entire German WASH-sector and to contribute to implement the human right to water and basic sanitary services.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration and realisation of survey for member mapping to meet the expectations of member organisations</li> <li>- Elaboration of a concept note for a UNICEF standby staff agreement</li> </ul>

<b>Date:</b>	11/2015 – 02/2016
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: Bremen Overseas Research and Development Association, BORDA e.V., Bremen
<b>Position:</b>	Expert Advisor WASH
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Development of a basic and advanced workshop in the field of “off-site sanitation”</li> <li>- Teaching of different sessions</li> </ul>

<b>Date:</b>	01/2015 – 04/2016
<b>Location:</b>	Germany/Bangladesh
<b>Company:</b>	Freelancer: BORDA Ltd., Bremen
<b>Position:</b>	Programme Manager and Backstopping
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas.</p> <p>Main task was the Project Management and backstopping of the feasibility study “Sanitation Action Plan and Technology Demonstration(s) for 30 Pourashavas”, funded by Asian Development Bank (ADB).</p>

<b>Date:</b>	09/2014 – 04/2015
<b>Location:</b>	Germany/Iraq, Autonomous Region of Kurdistan
<b>Company:</b>	Freelancer: Bremen Overseas Research and Development Association, BORDA e.V., Bremen
<b>Position:</b>	Programme Manager and Backstopping
<b>Description:</b>	<p>BORDA is carrying out projects in 25 countries, mainly in the field of sanitation and biogas.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Project Management and backstopping of projects in Northern Iraq (funded by BMZ and Free Hanseatic City of Bremen)</li> <li>- Development of new projects and elaboration of new project proposals</li> <li>- Further development of project processes in the field of emergency relief</li> <li>- Coordination with other organisations</li> </ul>



<b>Date:</b>	12/2014
<b>Location:</b>	Hashemite Kingdom of Jordan
<b>Company:</b>	Freelancer: GITEC Consult GmbH, Cologne
<b>Position:</b>	Consultant
<b>Description:</b>	<p>Water Supply for Syrian Refugees Phase III (wastewater), in Mafraq and Manshiet Bani Hassan, Jordan, funded by KfW (German Development Bank):  The objective of the Project was to improve the sewage collection within the city of Mafraq and Manshiet Bani Hassan, especially in areas experiencing a high influx of Syrian refugees.</p> <ul style="list-style-type: none"> <li>- Wastewater collection system with a total estimated length of 97 km</li> <li>- Construction of approximately 950 manholes</li> </ul> <p>Construction of two sewage pumping stations</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of technical proposal for Consulting Services for Design and Construction Supervision</li> </ul>

<b>Date:</b>	05/2014
<b>Location:</b>	Republic of the Philippines
<b>Company:</b>	Freelancer: GITEC Consult GmbH, Cologne
<b>Position:</b>	Consultant
<b>Description:</b>	<p>Consulting Services for the implementation of Yolanda Reconstruction Program, Philippines, funded by KfW (German Development Bank):  Main objective of the proposed programme was the reconstruction of social infrastructure (i.e. water supply, schools, hospitals, roads/bridges on municipality level, sanitation, drainage, flood control, municipality buildings, ports etc.):</p> <ul style="list-style-type: none"> <li>- Needs assessment including prioritisation of sector and region</li> <li>- Selection of projects</li> <li>- Final design including BoQ</li> <li>- Elaboration of tender documents</li> <li>- Assistance during tendering</li> </ul> <p>Construction supervision</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of technical proposal</li> </ul>

<b>Date:</b>	03/2014
<b>Location:</b>	Hashemite Kingdom of Jordan
<b>Company:</b>	Freelancer: GITEC Consult GmbH, Cologne
<b>Position:</b>	Consultant
<b>Description:</b>	<p>Support to wastewater services in Jordanian communities hosting Syrian refugees in Irbid region, Jordan, funded by KfW (German Development Bank):  The main objective of this project is to improve the sanitary conditions and thus the environment of the targeted areas, by closing the septic tanks and by constructing a sewer network for centralised treatment of the wastewater:</p> <ol style="list-style-type: none"> <li>1. Beit Ras <ul style="list-style-type: none"> <li>- Construction of wastewater collection system (incl. house connections) with a total estimated length of 65 km</li> <li>- Construction of approximately 1,100 manholes</li> <li>- Construction six lifting stations</li> <li>- Construction one main pumping / lifting station</li> </ul> </li> <li>2. Densification Greater Irbid Municipality <ul style="list-style-type: none"> <li>- Assessment and update of sewer network</li> <li>- Final design of new sewer networks including house connections incl. BoQ</li> <li>- Elaboration of tender documents</li> <li>- Assistance during tendering</li> <li>- Construction supervision</li> </ul> </li> <li>3. Procurement of Equipment <ul style="list-style-type: none"> <li>- Jetting-suction truck</li> <li>- Backhoe loader, Jack hammer</li> <li>- Mobile Workshop</li> </ul> <p>Sewer plugs etc.</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of technical proposal</li> </ul> </li> </ol>

<b>Date:</b>	02/2014
<b>Location:</b>	Hashemite Kingdom of Jordan
<b>Company:</b>	Freelancer: Johanniter International Assistance (JUH), Berlin
<b>Position:</b>	Consultant for WASH and Shelter
<b>Description:</b>	<p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Evaluation of completed projects: Definition of quality standards, visit of shelters, cost comparison and development of evaluation tool</li> <li>- Assessment for follow-up projects: Check of existing documents and comparison of requirements of donor, development of assessment tool, technical assessment</li> <li>- Consultancy: Conclusion and comparison of different technical specifications applied, development and realisation of workshop, concept for follow-up projects under consideration of lessons learned</li> </ul>

<b>Date:</b>	08/2013 – 09/2013
<b>Location:</b>	Hashemite Kingdom of Jordan
<b>Company:</b>	Freelancer: Technisches Hilfswerk (THW, German Federal Agency for Technical Relief) on behalf of UNICEF and UNHCR
<b>Position:</b>	Technical Team Leader
<b>Description:</b>	<p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Design and implementation of water supply and sanitation facilities in a new refugee camp in Azraq for Syrian refugees</li> <li>- Design of sewage collection systems in existing refugee camp in Za'atary</li> </ul>

<b>Date:</b>	06/2012 – 08/2013
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer: WE-Consult Ltd., Duesseldorf
<b>Position:</b>	Site Supervisor
<b>Description:</b>	<p><u>Scope of works:</u></p> <p>Expansion and upgrading of the wastewater treatment plant Isselburg (Borken county) from 14,000 population equivalents to 20,000 population equivalents with special emphasis on energy optimisation</p>

<b>Date:</b>	08/2012
<b>Location:</b>	Lebanese Republic/Germany
<b>Company:</b>	Freelancer: Technisches Hilfswerk (THW, German Federal Agency for Technical Relief) on behalf of the German Foreign Office (Auswärtiges Amt, Stab Humanitäre Hilfe)
<b>Position:</b>	Team Leader
<b>Description:</b>	<p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Needs assessment for all German humanitarian organisations with regard to the Syrian refugee situation in the Lebanese Republic</li> <li>- Evaluation of Security and Evacuation Plan of German embassy</li> </ul>

<b>Date:</b>	02/2012 – 03/2012
<b>Location:</b>	Lebanese Republic/Germany
<b>Company:</b>	Freelancer: Technisches Hilfswerk (THW, German Federal Agency for Technical Relief) on behalf of German Foreign Office (Auswärtiges Amt, Stab Humanitäre Hilfe)
<b>Position:</b>	Team Leader
<b>Description:</b>	Needs assessment for all German humanitarian organisations with regard to the Syrian refugee situation in the Lebanese Republic

<b>Date:</b>	01/2008 – 12/2011
<b>Location:</b>	Germany
<b>Company:</b>	GITEC Consult GmbH, Cologne
<b>Position:</b>	Backstopper, Project Manager
<b>Description:</b>	<p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Backstopping and coordination activities for all kind of projects in the field of water and sanitation</li> <li>- Preparation of proposals for different investment and development banks (KfW, World Bank, EIB etc.)</li> </ul>

<b>Date:</b>	05/2009 – 12/2011
<b>Location:</b>	Lebanese Republic
<b>Company:</b>	GITEC Consult GmbH, Cologne
<b>Position:</b>	Team Leader/Project Manager
<b>Description:</b>	<p>Emergency Measures: Rehabilitation of water and wastewater systems in North Lebanon (PHASE III), funded by KfW (German Development Bank):</p> <ul style="list-style-type: none"> <li>- Preparation of design, technical specifications, bill of quantities and tender documents for 132 km secondary sewer systems</li> <li>- Preparation of design, technical specifications, bill of quantities and tender documents for 16 km of coastal main collector for sewage (partly pressurised) incl. pumping stations for wastewater</li> <li>- Preparation of tender documents for sucker trucks</li> <li>- Implementation of 100 km of secondary sewer systems</li> <li>- Implementation of 16 km of coastal main collector for sewage (partly pressurised) incl. pumping stations for wastewater</li> <li>- Capacity development for operation and maintenance of sewer networks</li> </ul> <p>Procurement of two sucker trucks</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of design, technical specifications, bill of quantities and contract documents</li> <li>- Preparation of complete tender documents</li> <li>- Execution of complete tender procedures</li> <li>- Contracting supplies and implementation measures</li> <li>- Supervision of supplies and works</li> <li>- Definition of indicators for monitoring and evaluation</li> <li>- Management of Disposition Fund</li> </ul>

<b>Date:</b>	11/2010
<b>Location:</b>	South Sudan
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Technical Team Leader
<b>Description:</b>	Needs assessment and project proposal on behalf of German Foreign Office (Auswärtiges Amt) with regard to housing infrastructure for the UN peace keeping mission UNMIS

<b>Date:</b>	05/2010
<b>Location:</b>	Lebanese Republic
<b>Company:</b>	GITEC Consult GmbH, Cologne
<b>Position:</b>	Senior Project Manager
<b>Description:</b>	<p>Jeita Spring Protection Project, Lebanon, funded by KfW (German Development Bank):</p> <p>The objective is to safeguard the quality of the groundwater from Jeita spring so that the supply of the population of Beirut with hygienically sound drinking water can be ensured by implementation of sewerage network, interceptors, trunk main and a wastewater treatment plant:</p> <ul style="list-style-type: none"> <li>- Preparation of a regional sewerage plan for Jeita spring catchment area</li> <li>- Preparation of final design and tender documents</li> <li>- Assistance to in tendering and contracting</li> <li>- Site supervision of works</li> </ul> <p>Assistance during liability period</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of technical and financial proposal</li> </ul>

<b>Date:</b>	03/2010
<b>Location:</b>	Hashemite Kingdom of Jordan
<b>Company:</b>	GITEC Consult GmbH, Cologne
<b>Position:</b>	Senior Project Manager
<b>Description:</b>	<p>Reuse of treated wastewater for irrigation purposes the Northern Jordan Valley, Jordan, funded by KfW (German Development Bank):</p> <p>The objective is to ensure a cost-efficient and hygienically secure water supply of drinking water to the population and to selectively improve wastewater collection and reuse.</p> <ul style="list-style-type: none"> <li>- Preparation of Final Design and Tender documents</li> <li>- Assistance to in tendering and contracting</li> <li>- Site supervision of works</li> </ul> <p>Assistance during liability period</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Elaboration of technical and financial proposal</li> </ul>

<b>Date:</b>	02/2008 – 03/2009
<b>Location:</b>	Lebanese Republic
<b>Company:</b>	GITEC Consult GmbH, Cologne
<b>Position:</b>	Team Leader/Project Manager
<b>Description:</b>	<p>Emergency Measures: Rehabilitation of drinking water and sewerages systems in South Lebanon (PHASE II), funded by KfW (German Development Bank):</p> <ul style="list-style-type: none"> <li>- Implementation of 20 km of water supply (replacement of water pipes, rehabilitation and modernisation of pump stations, equip of pump stations with chlorination units)</li> <li>- Implementation of power supply (equip pump stations with public power supply and backup generators)</li> <li>- Implementation of 40 km of sewerage and drainage (storm water and sewer pipe supply and installation, sewer repair and construction)</li> <li>- Capacity development for operation and maintenance of sewer networks</li> </ul> <p>Procurement of maintenance equipment (workshop pick-ups, tools and equipment, PE pipes and welding machine)</p> <p><u>Scope of works:</u></p> <ul style="list-style-type: none"> <li>- Identification of rehabilitation measures to be implemented during Phase II</li> <li>- Elaboration of design, technical specifications, bill of quantities and contract documents</li> <li>- Preparation of complete tender documents</li> <li>- Execution of complete tender procedures</li> <li>- Contracting supplies and implementation measures</li> <li>- Supervision of supplies and works</li> <li>- Definition of indicators for monitoring and evaluation</li> <li>- Management of Disposition Fund</li> </ul>

<b>Date:</b>	09/2002 – 11/2007
<b>Location:</b>	Germany
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Backstopper, Project Manager
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Backstopping and coordination activities for all kind of projects (completely responsible for administration and operation of projects)</li> <li>- Preparation of proposals for different funds (KfW, German Foreign Office, BMZ, ECHO, different UN-organisations, etc.)</li> <li>- Development and teaching of different kind of workshops (Building of refugee camps, preparation of Head of Missions for projects abroad, preparation of engineers for projects abroad, project management in developing projects)</li> </ul>

<b>Date:</b>	04/2007 – 05/2007
<b>Location:</b>	Indonesia
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Project proposal: planning, acquisition, proposal/costs projection of water supply systems for 6,000 beneficiaries, 26 km of new water supply system (HDPE/PVC/steel) and public tapping in cooperation with PDAM (local water authorities), UN HABITAT and UNICEF</li> <li>- Evaluation of implemented water supply systems for 40,000 beneficiaries, 52 km new water supply system (HDPE, steel) and 80 public tapping stations in cooperation with PDAM, UN HABITAT and UNICEF, funded by ECHO</li> </ul>

<b>Date:</b>	01/2006 – 03/2007
<b>Location:</b>	Sierra Leone
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager
<b>Description:</b>	Planning, acquisition, proposal/costs projection as well as setup and operation/administration (incl. staffing, budget, tendering, reporting and evaluation) of technical training workshop (water supply, mechanics, electrics), funded by GTZ/KfW/German Federal Ministry for economic cooperation and development (BMZ)

<b>Date:</b>	08/2006 – 02/2007
<b>Location:</b>	Lebanese Republic
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager/Assessment Leader
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Technical advisor of official fact-finding mission of German government's delegation of German Foreign Office</li> <li>- Planning, acquisition, proposal/costs projection, tendering and implementation of 30 chlorine dosing systems for 150,000 beneficiaries in cooperation with Southern Lebanon Water Establishment (SLWE), funded by German Federal Ministry for the Environment, Nature conservation and Nuclear Safety (BMU)</li> <li>- Planning, acquisition, proposal/costs projection, tendering and implementation of concrete water tanks for 14,000 beneficiaries in cooperation with Southern Lebanon Water Establishment (SLWE), funded by ECHO</li> <li>- Planning, acquisition, proposal/costs projection and operation of water analysis laboratory including training of local staff in cooperation with Southern Lebanon Water Establishment (SLWE), funded by UNICEF</li> <li>- Feasibility study about water supply systems in Southern Lebanon incl. acquisition, proposals/costs projection for 150,000 beneficiaries</li> <li>- Implementation of 8,000 house connections (40,000 beneficiaries) in cooperation with Southern Lebanon Water Establishment (SLWE), funded by German Foreign Office</li> </ul>

<b>Date:</b>	11/2006
<b>Location:</b>	Indonesia
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager
<b>Description:</b>	Feasibility study about acquisition/implementation of new water supply systems incl. public tapping and acquisition of projects incl. proposals and costs projection in cooperation with PDAM (local water authorities) and UNICEF

<b>Date:</b>	06/2005
<b>Location:</b>	Sierra Leone
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager
<b>Description:</b>	Fact finding mission for setup and operation of a technical training workshop (water supply, mechanics, electrics) in cooperation with GTZ/KfW/ German Federal Ministry for economic cooperation and development (BMZ)

<b>Date:</b>	05/2005 – 03/2007
<b>Location:</b>	Liberia
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager/Backstopper
<b>Description:</b>	Planning, acquisition, proposal/costs projection as well as setup and operation/administration (incl. staffing, budget, tendering, reporting and evaluation) of generator workshop within UNMIL, funded by German Foreign Office

<b>Date:</b>	06/2004
<b>Location:</b>	Liberia
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Team Leader
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Feasibility study for projects within urban water supply of Monrovia (1,000,000 beneficiaries)</li> <li>- Water supply within UN peace keeping mission UNMIL</li> </ul>

<b>Date:</b>	12/2003 – 01/2004
<b>Location:</b>	Iran
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Assessment and implementation of search and rescue unit, mobile water purification plants incl. operation of water analysis laboratory and rehabilitation of water supply system after earthquake (150,000 beneficiaries), funded by German Foreign Office</li> <li>- Leader of fact finding mission for follow-up projects incl. elaboration of technical and financial proposal</li> </ul>

<b>Date:</b>	09/2003 – 11/2003
<b>Location:</b>	Iraq
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Technical Team Leader
<b>Description:</b>	Tendering for equipment of water- and wastewater laboratory, water treatment plant and water distribution system for the city of Baghdad (5,000,000 beneficiaries) in cooperation with local water authorities and German Foreign Office

<b>Date:</b>	05/2003 – 06/2003
<b>Location:</b>	Sri Lanka
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Team Leader
<b>Description:</b>	<ul style="list-style-type: none"> <li>- Technical leader of assessment and implementation of mobile water purification plants incl. operation of water analysis laboratory and rehabilitation of wells after floods (100,000 beneficiaries) in cooperation with SEWALANKA (local NGO) and German Foreign Office</li> <li>- Leader of evaluation for follow-up projects incl. elaboration of technical and financial proposal</li> </ul>

<b>Date:</b>	11/2002 – 12/2002
<b>Location:</b>	Spain
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Team Leader
<b>Description:</b>	Technical Leader of assessment and implementation of cleaning the environment after oil pollution in cooperation with German Foreign Office

<b>Date:</b>	09/2002 – 12/2005
<b>Location:</b>	Sierra Leone
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Project Manager/Backstopper
<b>Description:</b>	Operation/administration (incl. staffing, budget, tendering, reporting and evaluation) of generator workshop within UN peace keeping mission UNAMSIL in cooperation with German Foreign Office (intermittent assignment)

<b>Date:</b>	01/2003
<b>Location:</b>	Sierra Leone
<b>Company:</b>	Technisches Hilfswerk (THW, German Federal Agency for Technical Relief)
<b>Position:</b>	Team Leader
<b>Description:</b>	Feasibility study for setup of water distribution in cooperation with UNHCR for a refugee camp/town for 16,000 beneficiaries

<b>Date:</b>	04/2002 – 08/2002
<b>Location:</b>	Germany
<b>Company:</b>	Freelancer
<b>Position:</b>	Project Manager
<b>Description:</b>	CORVETTE (EU-traffic project): <ul style="list-style-type: none"> <li>- Leader of the sub-project 'Cross-border Traffic Management Plans' with mainly operative tasks</li> <li>- Leader of the sub-project 'Traffic Management' with mainly administrative tasks</li> </ul>

<b>Date:</b>	10/2000 – 03/2002
<b>Location:</b>	Germany
<b>Company:</b>	Technical University of Munich, Department for Traffic Engineering
<b>Position:</b>	Project Manager
<b>Description:</b>	CORVETTE (EU-traffic project): <ul style="list-style-type: none"> <li>- Leader of the sub-project 'Cross-border Traffic Management Plans' with mainly operative tasks</li> <li>- Leader of the sub-project 'Traffic Management' with mainly administrative tasks</li> <li>- Supervision of masters projects</li> </ul>

<b>Date:</b>	11/1998 – 08/1999
<b>Location:</b>	Denmark
<b>Company:</b>	Technical University of Denmark
<b>Position:</b>	Post Graduate
<b>Description:</b>	Experimental Masters thesis in the field of biological wastewater treatment (in English language): Investigation of a control strategy supporting the denitrification and considering the biological phosphorus removal process (BPR) in times of disturbances of high loads of NH <sub>4</sub> -N. The experiments were carried out in an alternating pilot-plant, receiving municipal wastewater, which was operated with the BIODENIPHO process

<b>Date:</b>	11/1995 – 12/1998
<b>Location:</b>	Germany
<b>Company:</b>	Technical University of Munich, Faculty of Water- and Waste Disposal
<b>Position:</b>	Scientific Assistant
<b>Description:</b>	Supervision of wastewater treatment plants incl. evaluation of results and recommendations for treatment improvement