C.1	Customer management	
Face-to-face training session		4 days

### OBJECTIVE:

Knowing and controlling the customers within its scope and the methods of reducing customer losses Listening to its customers in order to offer appropriate services

Remote Client Management with TV takes over - radio takes over.

### CONTENT:

Study of the structure of a Customer Department: Three models considered (pyramidal, decentralized) - Comparison and definition of services, types of global organization of a customer department

Analysis and implementation of the legal framework: the rights and duties of the water company and the customer. The subscription contract and the water and sanitation service regulations.

Retrieving and maintaining control over the customers within its perimeter.

Treatment of unbilled water: setting up an efficient customer information system, mapping delivery points, updating the information system, restoring the RFERC cycle (Collection Billing, billing, billing collection and collection litigation), setting up management tools, improving working capital, etc.

Remote meter reading - radio meter reading: The Smart Metering market in the world, remote reading of water meters, services associated with these technologies, multi-fluid, fears and objections of the solution, elements of costing, example of application of a project in an African country.

Customer service and call centre: Service provision approach (leakage insurance, products for professionals, etc.), online sale of products (rainwater harvesting, etc.) derived from the resource, setting up and analysis of a call centre.

# ACQUIRED SKILLS:

Knowing how to listen to its customers.

Know-how to structure its Customer Department according to the needs of the service and the expectations of the customers.

# RECOMMENDED READINGS:

Any reading on the theme.

Lecturer: Henri BARTHALAN – Gest'O Conseil

C.2 Understand water and sanitation needs	
Blanded leaving training assign	2 days face-to-face
Blended learning training session	1 day e-learning

### OBJECTIVE:

Understanding of issues related to access to services for all
Understanding of governance issues and the role-playing game
Knowledge of participatory techniques and facilitation of dialogue with stakeholders.
Discovery of tools and methods for diagnosing needs and solutions for access to services
Develop a draft action plan taking into account technical, socio-economic, political and institutional dimensions

### CONTENT:

Support in carrying out socio-economic diagnoses of situations Methods of identification and analysis of the motivations and practices of the service's stakeholders Analysis of the strengths/constraints that these stakeholders represent for the evolution and development of the service. Elaboration of an action plan for partnerships and communications based on the analysis carried out. Elaboration of an adapted consultation and communication strategy. The module will be structured in four stages: - analysis of problems and controversies relating to access to essential services in marginalized urban areas and/or with regard to urban dwellers excluded from conventional essential services (in a network); - work on tools for diagnosing urban situations, identifying stakeholders and characterizing the interplay of actors; - consultation practices to strengthen dialogue between stakeholders (service provider's point of view); - development of a strategy and action plan; - development of a partnership and communication action plan based on the analysis carried out.

Iterative acquisition of the tools during the training, based on concrete cases (presentations of feedback from experiences in different geographical areas / with different solutions) and through exercises and role-plays. The experience of the auditors and the reality of their problems will be discussed and integrated into the case studies: the action plan of the auditors will focus on the services and companies that employ them, which means strong upstream preparatory work on their part in terms of gathering information and defining clear contexts.

## ACQUIRED SKILLS:

Understanding of the concepts and methodologies of social engineering

### E-LEARNING:

Review of issues and major approaches to access to drinking water and sanitation services Analysis of the problem of populations excluded from essential services Critical review of key strategies for marginalized populations Using diagnostic tools in marginalized urban areas

Lecturers: Mathieu LE CORRE – GRET and Joannie LECLERC - SUEZ

C.3	C.3 Optimization and management of water losses	
Blended learning training session		2 days face-to-face
		2 days e-learning

### OBJECTIVE:

Implement a policy for their control and reduction.

Assimilate that the issue of water losses does not only concern the search for and repair of leaks, but that it is linked to all the activities of a water service.

### CONTENT:

Reducing Water Losses: Issue and Strategy, Water Balance.

Actual Losses: Diagnosis, Indicators, Methods and Tools, Action Plan, Case Studies.

Apparent Losses: Diagnosis, Indicators, Methods and Tools, Action Plan, Case Studies. Strategy, Action Plan and Change Management

# ACQUIRED SKILLS:

Understanding of the phenomenon of water losses (real or apparent) and their dynamics Understanding of the impact of the various activities of the company on the level of water losses

Establishing a diagnosis on water losses (and hydraulic balance).

Define a strategy to reduce water losses.

Establish an action plan to reduce water losses.

Monitoring the implementation of an action plan

Condition for the sustainability of the results of an action plan, change management

# E-LEARNING:

**Identify** water losses

Measure unbilled water volumes. Break them down by cause.

Deduct the corresponding financial loss.

Develop a strategy for real and apparent losses.

### RECOMMENDED READINGS:

Farley M, Trow S (2003) Losses in Water Distribution Networks, A Practitioner's Guide to Assessment, Monitoring and Control. IWA Publishing

Alegre H, Baptista JM, Cabrera Jr. E, Cubillo F, Duarte P, Merkel W, Parena R (2006) Performance Indicators for Water Supply Services (Second Edition). IWA publishing

Arregui F, Cabrera E, Cobacho R, (2006) Integrated Water Meter Management. IWA Publishing

Johnson EH (2) (2009) Management of Non-revenue and Revenue Water Data. 2nd Edition. Engineers Media. NSW Australia

IWA (2007) District Metered Areas - Guidance Notes -

IWA (2007) Leak Location and repair – Guidance Notes

Moreau (2004) Pressure Modulation, a simple tool to reduce leakage and protect water distribution network

Lecturer: Fatima CARTEADO - M&FE