From knowledge and capacity development to performance improvement in water supply: the importance of competence integration and use

Annex

Box 1. Technical competences at organizational level.

- Plans to assess the quality and quantity of water sources systematically
- Protection strategy for water source areas
- Extension plans for water abstraction
- Policy for the construction of facilities (production and distribution)
- Plans for the extension-replacement of facilities (production, distribution)
- Schedules for water sampling
- Schedules for water quality test
- Record keeping on water quality
- Operation plans for production facilities
- Preventive maintenance plans for production facilities
- Corrective maintenance programme for production facilities
- Database for reservoirs levels
- Record keeping on operation and maintenance of production facilities
- Preventive maintenance plan for the distribution network
- Corrective maintenance programme for the distribution network
- Schedules for leak/burst repairs
- Programme for flushing water mains and cleaning reservoirs
- Record keeping on operation and maintenance of distribution network
- Preventive maintenance plans for meters
- Corrective maintenance programme for meters
- Schedules for meter replacement
- Record keeping on operation and maintenance of water meters
- Asset management (replacement) plan/policy
- Energy optimization strategy
- Chemical optimization strategy
- Mapping of water infrastructure
- Meter calibration programme
Box 2. Technical competences at individual level.

- Basic water quality testing
- Methods to estimate water demand
- Methods to measure the capacity of water sources
- Design of infrastructure (production and distribution) systems
- Construction of infrastructure (production and distribution) systems
- Techniques for meter management
- Techniques for leak detection
- Procedures for water balance
- Operation and maintenance of network
- Operation and maintenance of facilities
- Network mapping
- Basic plant operations
- Asset management
- Basic project management (planning, monitoring and evaluation, financial management, leadership, etc.)
- Information technology
- Teamwork
- Networking
- Communication
- Problem solving