



International Network of Water Training Centres Réseau International des Centres de formations aux métiers de l'Eau

Constitutive Assembly of the Network

Paris, 19-21 November 2008

Introduction to plenary session 3, New needs for professional training and related methods

19 November 2008, 15:30 – 16:30

This time for presentation and discussion aims at dealing with the new needs regarding professional training, which can appear in water supply and sanitation utilities, and with innovative solutions allowing meeting them.

The participants are thus invited to present their experiments and the specific cases encountered by their institutions.

In exchanges preliminary to the Assembly, some points had already be raised and are presented here as an introduction to the discussions.

Training needs accompanying the development of water supply and sanitation utilities.

To ensure the service life of infrastructures and the effectiveness of services, the necessary skills regarding management, operation and maintenance, should always be reinforced and vocational training did not reach yet a sufficient level to meet these stakes and needs.

The needs for professional training are high both with regard to basic and continuing training for the already employed staff. Hundreds thousand workers should thus attend training programmes for efficient water supply and sanitation services. The goals are to offer tailor-made qualification levels, in order to upgrade knowledge and to develop professionalism, and to adapt to the modern management tools, to the client /supplier relationships, or simply to succeed in reaching the high technical standard required by jobs in water utilities to allow career development.

These “traditional” requirements concern the development of technical training programmes on topics specific to the jobs in water supply and sanitation utilities.

The technical training fields can be traditionally regrouped in three complementary and inseparable “components”:

- 1- **design and studies:** investments, planning and follow-up of work, acceptance of work;
- 2- **operation and maintenance:** production plants, networks, treatment plants,
- 3- **overall administration and organisation of the utilities:** industrial and commercial management, accountancy, human resources, relations with the users and consumers.

When new technical needs regularly appear (such as desalinisation, waste water re-use, remote management and automation), it is important to underline the **need to connect the innovations necessary for training with the needs for the development of the utilities**. These (public or private) utilities permanently need to be rationalised, to reduce their expenses while improving their impacts, especially in a context where important investments are necessary, with a water price that can follow the same curve of increase. In such a context the training organisations should support and make the changes possible.

The evolution of the companies of the sector shows some strong trends: decrease in number to manage the facilities, increasingly sophisticated tools and methods, the “soft skills” (contacts with customers, management, etc.) taking more and more importance at the lowest levels, certification of processes (quality assurance) which becomes increasingly systematic, etc.

In addition, the skills needed in water supply and sanitation utilities are also in full evolution and in the process of diversification. For instance, there are different skills required from field operators (first level maintenance and operation and contact with the customers in the broad sense), and from the supporting teams (flying doctors, special squads) who intervene upon request (sophisticated maintenance, leak detection, etc.).

The high development of communication technologies also implies changes in the “traditional aspects” of the organisation of training and courses. Thanks to new media and the Internet, basic training institutions and universities considerably increased their capacities for exchange and networking all over the world. In addition, technologies facilitating on-line training, such as Web-conferences, were very strongly developed recently.

This quick increase in communication potential also led to the development of new training solutions, such as “E - Learning” for example, which now offer solutions for distance learning with a significant use of multimedia contents and consequently allows complementarity between traditional training courses, self-training exercises and distance training courses with an “on line” trainer.

It is thus necessary that training organisations think about the best means to meet the changes in this context. For example, by offering innovative solutions integrated in a more complete and diversified offer, which will add, beside the traditional offer, a mixture of life-long training programmes, thanks to more or less autonomous training periods with validation steps, and others of formal training to supplement lacks.

These changes will require using different working methods, the Web-conferences are a solution, as well as communities of practices, but for a training centre, it is a new service to offer, with a kind of long contract with each individual for his/her continuing training, rather than specific training courses.