



Training is an investment

Session 8.a.2: Education and training on water are not costs but investments

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International Office for Water (IOWater): A training center for investments

Capacity building for better water management



Why is training on water an investment?

- **Many investments in water sector don't meet their targets due to lack of skills (design, operation, maintenance)**
- **Huge necessity to upgrade skills in water sector**
- **Investments in training for ensuring sustainability of infrastructures**
- **Investments in training for evolutions in water utilities**



Statute and missions of IOWater

- Statute

- Non profit making organization, state approved (public utility)
- Creation of the National Training Centre : 1977
- Creation of IOWater : 1991

- Missions

- Capacity building
- Knowledge diffusion
- International promotion of know-how for better water management

National Water Training Center (NWTC)

- Professional training

- Training on catalogue and tailor-made training
- For workers and managers of urban water cycle
- Training in real conditions



- Support missions: Technical and operational support

- Construction of pedagogical platforms
- Management of water utilities and financial prospective
- Advice to municipalities and industries: audits, diagnosis
- Pedagogical engineering



Pilot plant for water treatment, France

National Water Training Center

- Training topics





Pedagogical platforms



Backflow preventers platform



Microbiology platform



Laboratory



Wastewater network platform



Hydrants



Intervention in confined spaces (CATEC®)



Ozonization



Flotation



IOWater meetings (one day)

Local meetings to discuss current topics: technical and regulatory developments, emerging issues...

Word cloud containing the following terms:

- Loi NOTRe
- Paris
- Gestion des eaux pluviales
- REDON
- Journées de l'OIEau
- Limoges
- CATECO
- Contexte réglementaire
- SMART GRID
- CLERMONT-FERRAND
- Bloug
- LYON
- TOULOUSE
- WEBINAIRE
- Gestion patrimoniale
- ECONOMIE CIRCULAIRE
- Participation interactive
- RETOURS D'EXPERIENCE
- GEMAPI
- Avignon
- Réduction des pertes en eau
- Tarif social de l'eau
- Réutilisation des eaux usées
- Gestion des réseaux d'eau
- Echanges et débats
- DAX
- Amiante
- Régionales de l'OIEau
- SBR, MBBR, BRM
- Transfert de compétences
- Valence





E-Learning

Eco Cuencas project (4 countries – South America)

Videos



Virtual reality (360°)

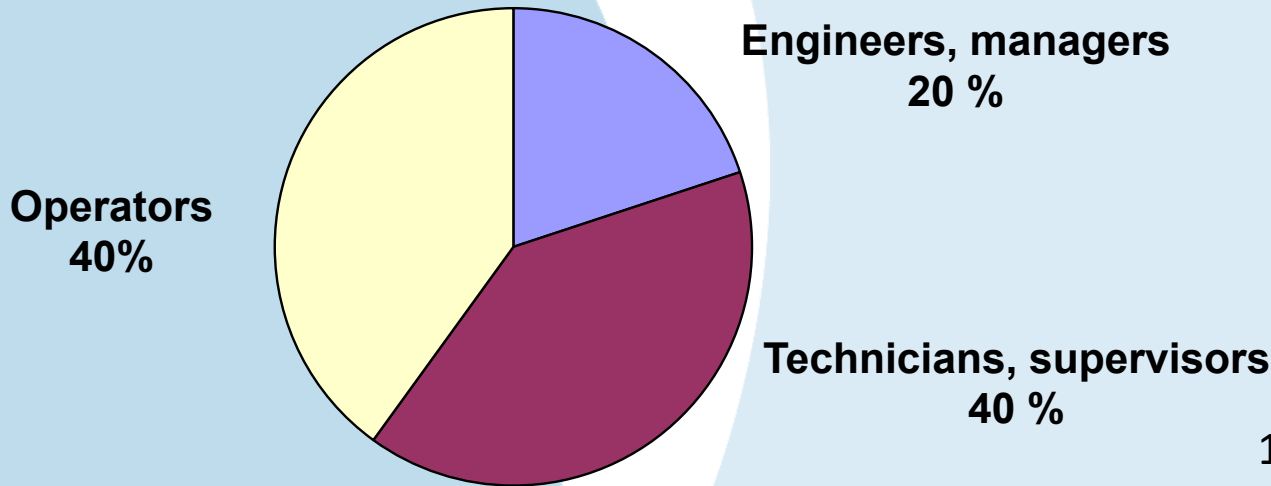




National Water Training Center

Trainees come from:

Municipalities and state	38 %
Private companies for operation	32 %
Suppliers & engineering offices	15 %
Industries	15 %





Example of benefits of training: IOWater training for leak detection

Leak detection and repair

- Training cost (1400 €/week)

Vs

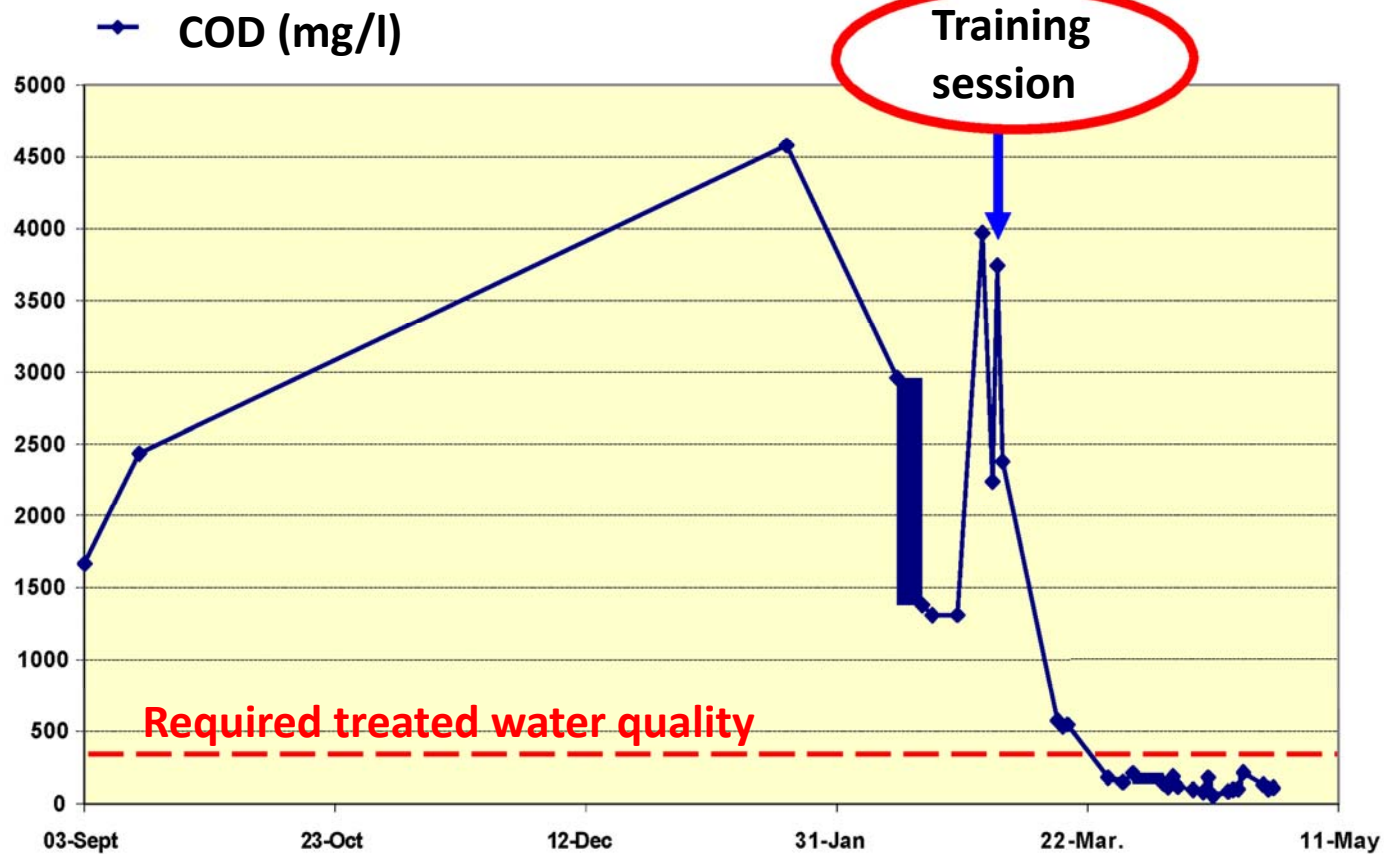
Intervention cost on network (1000 €)

- Positive return on investment, if 1 training session is more efficient than the cost of 2 interventions
- Finding and limitation of big leaks more rapidly
- Correct intervention and then no further malfunctions as a consequence of a bad intervention



Example of benefits of training: IOWater training for wastewater treatment

Wastewater treatment upgrading





Example of benefits of training: IOWater training for wastewater treatment

Wastewater treatment upgrading

- Modifying of operation tasks has allowed to reduce the operation cost of 50 000 Euros / year for a training session of 6 500 Euros (4 days):
 - Energy consumption
 - Reagents consumption
 - Treated water quality
 - Sludge quality and quantity
 - Compliance with standards
 - Staff motivation
 - ...





Example of benefits of training:
IOWater training for a technician

Testimony of a technician

Following the training I followed at IOWater, the satisfaction of my hierarchical superiors led me to take on more responsibility, i.e. social promotion.

(a technician of ODYSSI, Martinique)





FINANCING SOURCES FOR WATER TRAINING

Financing sources possibilities

- Financing by % of infrastructure investments
- Financing by water sector administration (State)
- Financing by water utilities budget
- Financing by vocational training fund (general)
- Financing by vocational training fund (water)

CONCLUSION

Water Training Centers like NWTC of IOWater must provide training on technical aspects but must also be directed towards customers' interests, which will see an investment in training if :

- They save money in their day-to-day functioning
- They have a more motivated staff
- They assure environment protection
- They assure sustainable operation
- ...





CONCLUSION

NWTC of IOWater provides a variety of adaptable and flexible training solutions which can be tailor-made to suit your special needs and improve your efficiency and your investments.





Welcome to IOWater:
www.iowater.org

ANY QUESTIONS?

Thank you for your attention.



Office
International
de l'Eau