Regional workshop on NRW in the Mediterranean
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NRW in Mediterranean Water Utilities:
an Overview

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Water Losses in the Mediterranean

- Water scarcity in most countries, plus impact of climate change: it is more and more unacceptable to lose water!
- Negative impact on utility’s finance: higher costs and lost revenues
- We all know that many countries show poor performance in controlling water losses, but some are doing well
- This workshop: exchange about what works, and what doesn’t...
The structure of the workshop

• Next presentation as refresher on NRW issues
• Series of case studies: will look at wide array of cases around the Mediterranean region (from 9 countries)
• Additional presentations on key issues (intermittent supply, metering...) and cases from beyond the region
• 2-hour debate on the challenge of reducing NRW in the Mediterranean
• Close with discussion on CB and partnerships
First, a few words of caution...
Word of caution 1: Ratio of Physical vs. Commercial Losses is usually a guess

* **Physical (real) losses**: water produced but not delivered (leakages…): *priority issue under water scarcity*

* **Commercial (apparent) losses**: water delivered to customer, but not billed: *impact is mostly financial…*

* Unless exercise of drawing the IWA hydraulic balance is done in full (Malta, Cyprus, Marseille), *proportion of physical vs. commercial losses is just a guess!*

* Yet these are radically different issues!
Words of caution 2: the NRW figure may mean many things

- Is consumption **metered or estimated**?
  - What if estimated billing is above consumption?

- **Intermittent supply** makes figure confusing:
  - Easy to reduce real losses by reducing hours of service!
  - When trying to reestablish 24/7, water losses increase!

- % NRW is the usual indicator to start with, but is highly insufficient to assess situation and make decisions
Spain, France and Italy

• They provide a good benchmark for large countries with numerous systems

• Still wide variations between systems: Marseille is at 15%, South Italy has intermittent supply

• Supposedly good performers, yet for France and Spain: mostly physical losses

→ is 20-22% for physical losses an acceptable figure?
Morocco (30%) and Tunisia (26%)

• Reliable data: full metering, over many years, continuous supply

• Good performers, not far from Spain and France

• Commercial losses are higher than in France or Spain → physical losses are actually comparable?

• Morocco: one dedicated session, utilities under different models, lot of progress in recent years

• Tunisia: impact of tariff freeze over many years
* Very high levels

* Not surprising when starting from acute intermittent supply, and trying to reestablish 24/7

* Algiers has 6 years of good track record, unfortunately SEAL and Suez Algiers could not join us this week due to security situation
Malta (47%)

- Good illustration why NRW % can be very misleading for certain situations
- Extreme water scarcity on the two islands
- Full IWA methodology, **leakage reduced to 15%**, based on ILI indicator it is close to optimal economical level
  ➔ **Extremely efficient with physical/real losses**
- But commercial losses 30%, under-metering with roof tanks: a political/institutional problem
Almost all water comes from no-renewable resources (desert aquifer or desalination)

- No controls over leakage
- No metering at the moment
- Only large customers were seemingly metered and billed before...
But with many unmetered customers (25%?)

Importance of intermittent supply?

Presentation from national holding
Jordan : 36 %

* Situation of acute water scarcity
* Huge effort to reduce water losses over last decade, but starting with intermittent supply
* % would be higher if 24/7
* Presentation on Amman
Water scarcity

Good performance by main water boards, application of IWA methodology

Presentation on the case of Limassol

Cyprus: 25 %
Croatia: 19%

* ???????

* Data from IBNET
Albania: 64%

- Gathering data has been problematic
- Huge losses, AND intermittent supply!
- Study on smaller cities, what has been achieved under NRW projects