

Improving the price/service ratio of Dutch water supply through benchmarking

Peter Dane

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Personal introduction

Peter Dane

- MSc in civil engineering
- over 25 year in the water industry (utilities)
- manager international benchmarking at Vewin (Association of Dutch Water Companies)
- programme manager at EBC (European Benchmarking Co-operation)
- member of IWA's SG BPA management team



Outline

- Water in the Netherlands
- Water supply characteristics
- Benchmarking activities & results – the learning curve
- Concluding remarks



1 - Water in the Netherlands

- 41.000 km², 16.7 million inhabitants
- delta of international rivers Rhine, Meuse, Scheldt, Eems
- bordering the North Sea
- half of the country below sea level
- managing water in Dutch genes for centuries



Water in the Netherlands (2)

Many actors:

- National level
 - government – national water policy
 - Rijkswaterstaat – national water agency responsible for national water infrastructure



Water in The Netherlands (3)

- Regional level
 - 12 provinces – ground water policy
 - 26 water boards – regional flood protection, surface water quality, wastewater treatment
 - 10 water companies – water supply



Water in the Netherlands (4)

- Local level
 - 421 municipalities – sewer system, municipal water systems



Water in the Netherlands (5)

- “water” managed by many actors because of history
 - pro: specialisation, at arms’ length of politics (budget)
 - con: many coordination mechanisms
- on-going discussion about efficiency of structure

2 - Water supply

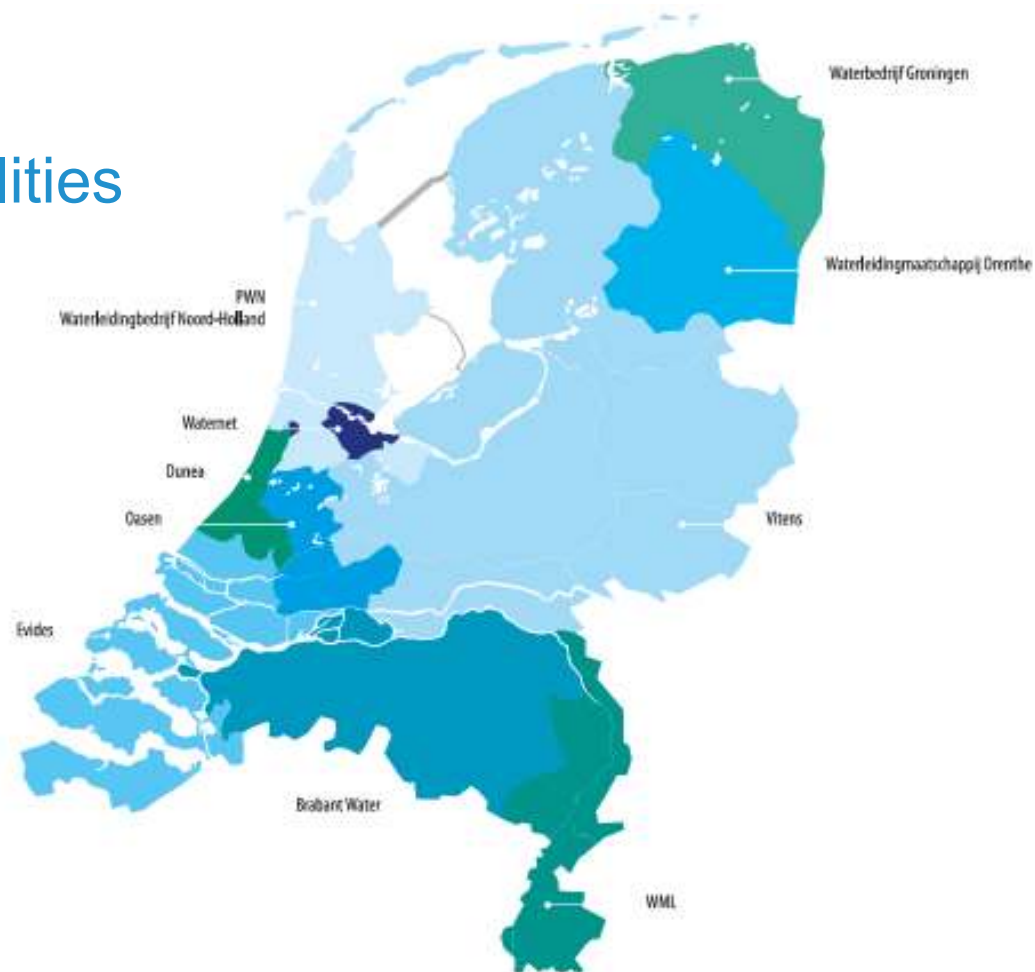
Dutch drinking water: low interest product for consumer

- good water quality, few interruptions, relatively cheap
- challenge: to sustain the service at this level and further improve it

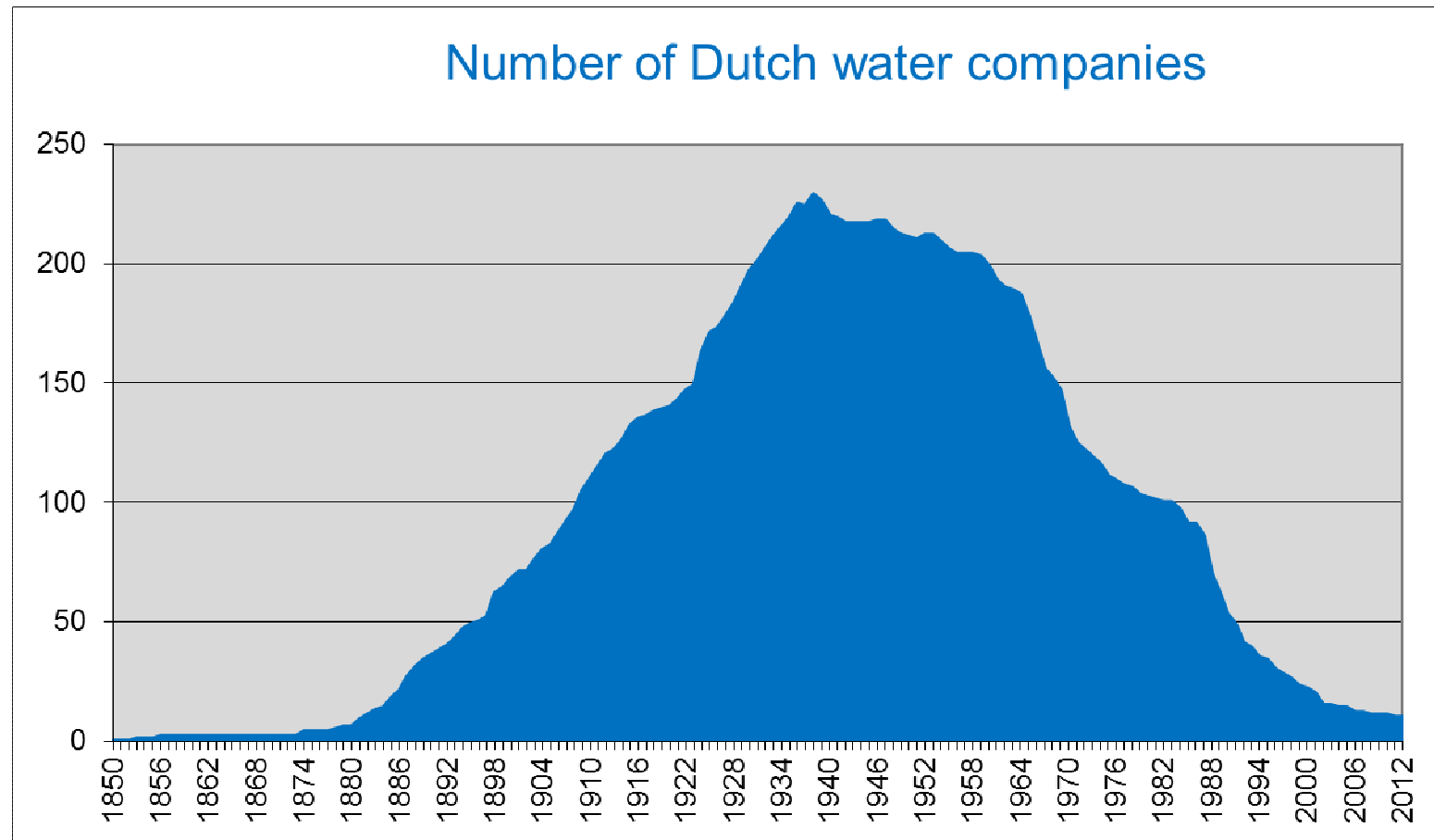


Water supply characteristics (2)

10 water supply utilities



Water supply characteristics (3)



Water supply characteristics (4)

Drinking Water Act (2011)

- mandate to 10 regional water utilities
- limited liability companies (private law), except for Amsterdam water cycle utility “Waternet”
- ownership restricted to local/regional authorities (municipalities, provinces)
- regulation at arm’s length



Water supply characteristics (4)

- mixed supervision:
 - national (focus on water quality, contingency, benchmarking)
 - decentralised utility governance by public shareholders
(investment policy, tariff setting, management, performance)
- vital infrastructure → risk-based service plans
- full cost recovery
- reasonable tariffs
- limitation to profit
- mandatory benchmarking



Water supply characteristics (5)

Operating environment: densely populated area

- water resources under pressure (groundwater – urban/agriculture, surface water - industrialised catchment area international rivers)
- underground: competition for space
- flat area, weak subsoil



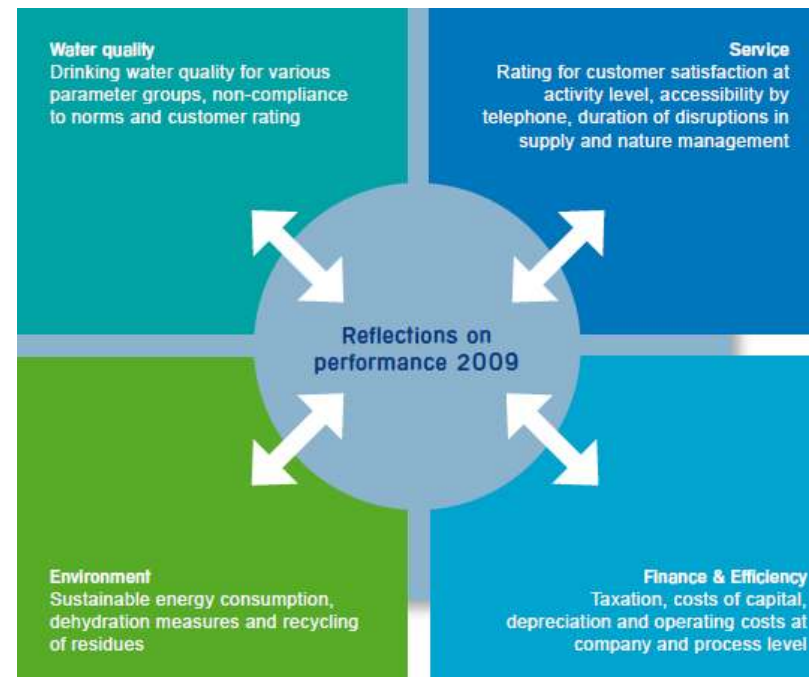
3 - Benchmarking activities & results

- National
 - late 1980's: first benchmarking efforts (regional)
 - as of 1997: voluntary, national benchmarking programme
 - initiated by national discussions on privatisation/ liberalisation of public services
 - as of 2010: mandatory



National benchmarking scheme

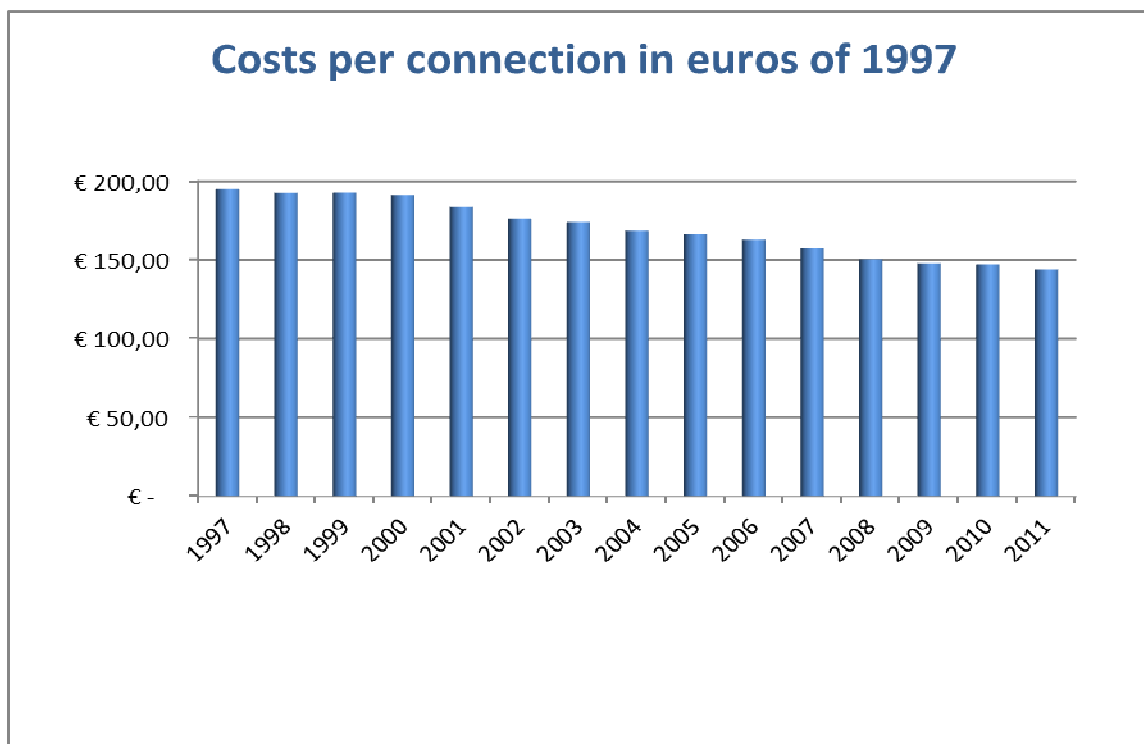
- objectives:
 - improving efficiency by learning
 - raising transparency
- 4 key performance areas:
 - water quality
 - service
 - sustainability
 - costs



National benchmarking scheme (2)

2009 Survey

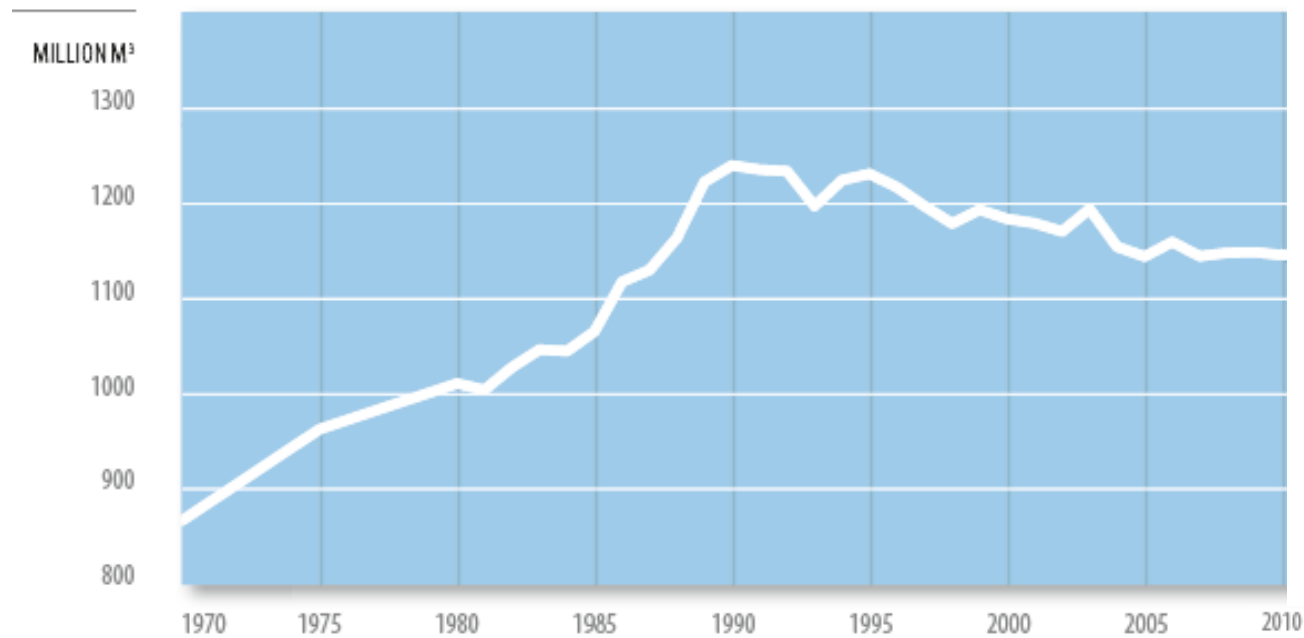
- costs: -/- 26% since 1997 (corrected for inflation)



National benchmarking scheme (3)

2012 Water Statistics

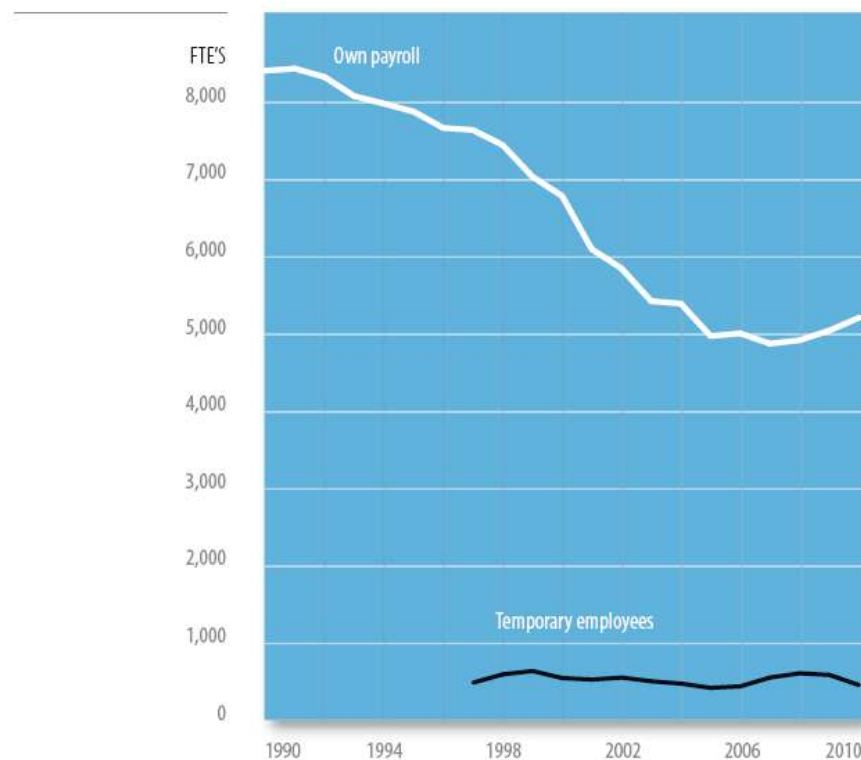
- consumption decreases since the '90's



National benchmarking scheme (4)

2012 Water Statistics

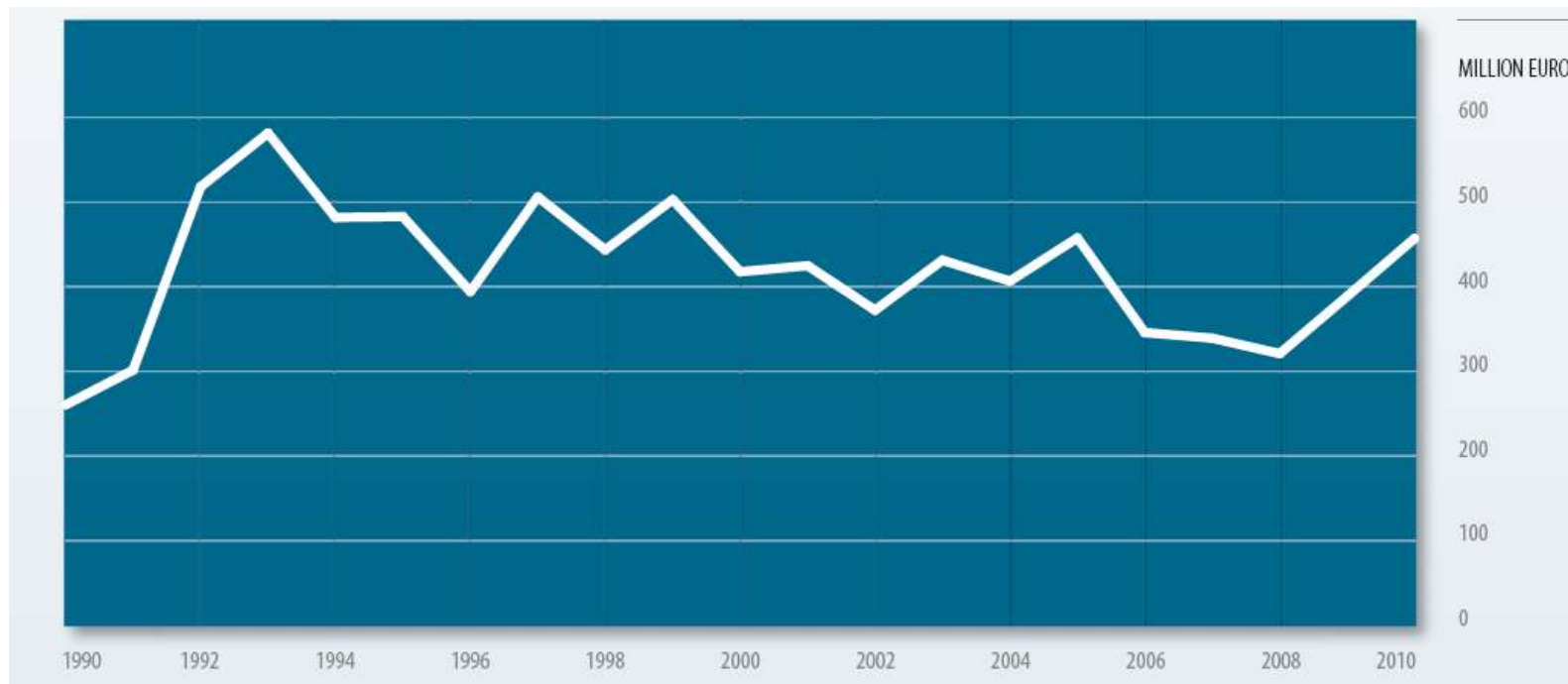
- number of staff decreased sharply



National benchmarking scheme (5)

2012 Water Statistics

- stable investment level



Benchmarking activities & results (2)

Lessons learned

- improving the service \neq cost reduction!
- Dutch success factors:
 - continuous investments in the service
 - scale of supply (regional operating companies)
 - regulation at arm's length
 - active professional networks for knowledge exchange
 - benchmarking for continuous improvement
- improving the service never ends!

Benchmarking activities & results (3)

Next step on the learning curve: *international benchmarking*

- 2007>: Dutch water utilities participate in voluntary, international benchmarking programme of EBC
- focus on performance assessment and -improvement by learning from international best practices





Benchmarking European water services

performance improvement by learning
from international best practices

INTERNATIONAL SEARCH FOR BEST PRACTICES IN MANAGEMENT AND OPERATIONS



European Benchmarking Co-operation:

- initiative of national water associations and several utilities from DK, FIN, NL, N, S (2005)
- mission: to facilitate water utilities in the continuous process of improving performance and transparency
 - by offering a web based, international benchmarking programme for water services and
 - providing a platform to learn from best practices in management and operations from peer utilities



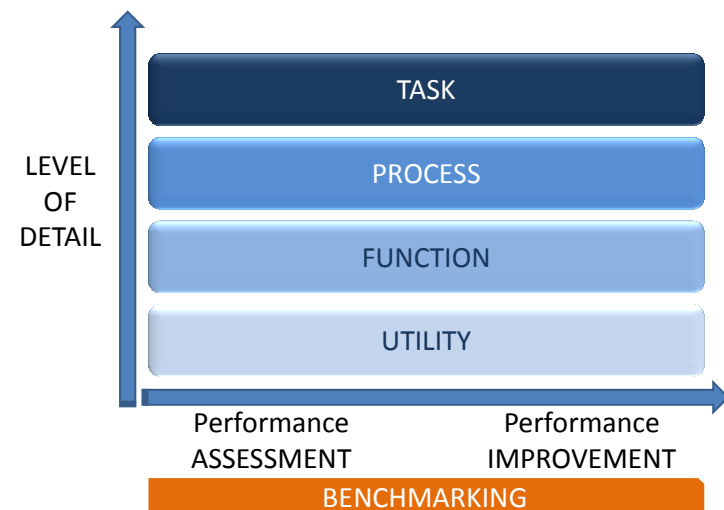
Characteristics

- not-for-profit utility improvement programme - by the water industry, for the water industry
- governed by four national water associations, coordinated by Vewin (Association of Dutch Water Companies)
- focus on European water utilities, but open to all interested utilities
- partners with national associations/regional partners
- fully supported by  International Water Association

What is benchmarking?

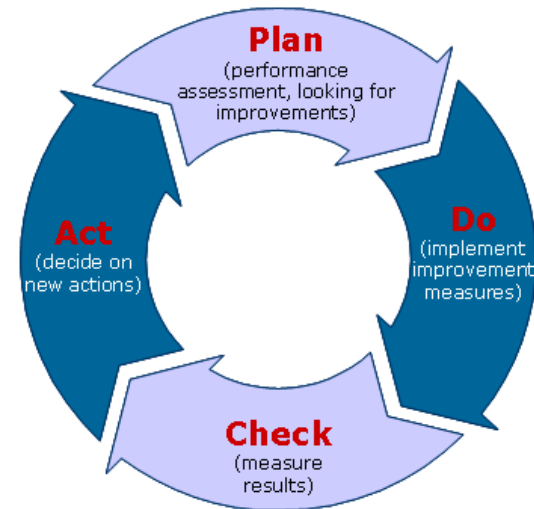
IWA's Task Group on Benchmarking:

- “benchmarking is a tool for performance improvement through systematic search and adaptation of leading practices”
- 2 consecutive steps:
 - performance assessment
 - performance improvement



What is benchmarking? (2)

- not a single action!
 - management tool for **continuous improvement**
 - preferably embedded in annual business planning cycle



Why should you benchmark?

Advantages of benchmarking for *utilities*:

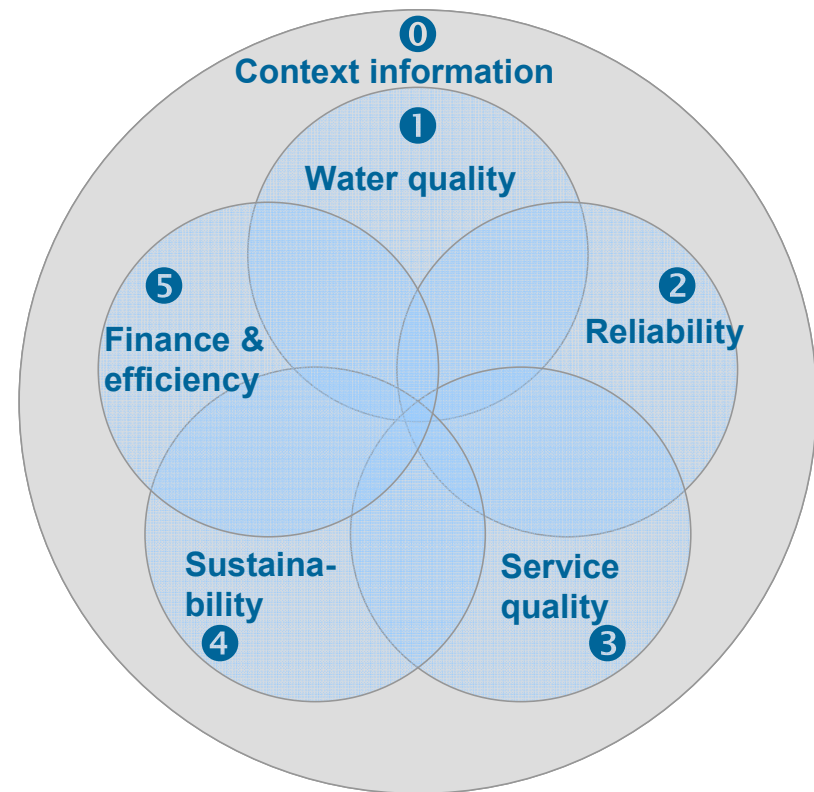
- getting to know your utility in another way
- connecting to a reference group to compare yourself with
- opportunities for networking, identifying best practices, innovative solutions
- showing stakeholders your drive for improvement

For *governments/EU*:

- stimulates compliance with national standards
- accelerates reaching EU-objectives

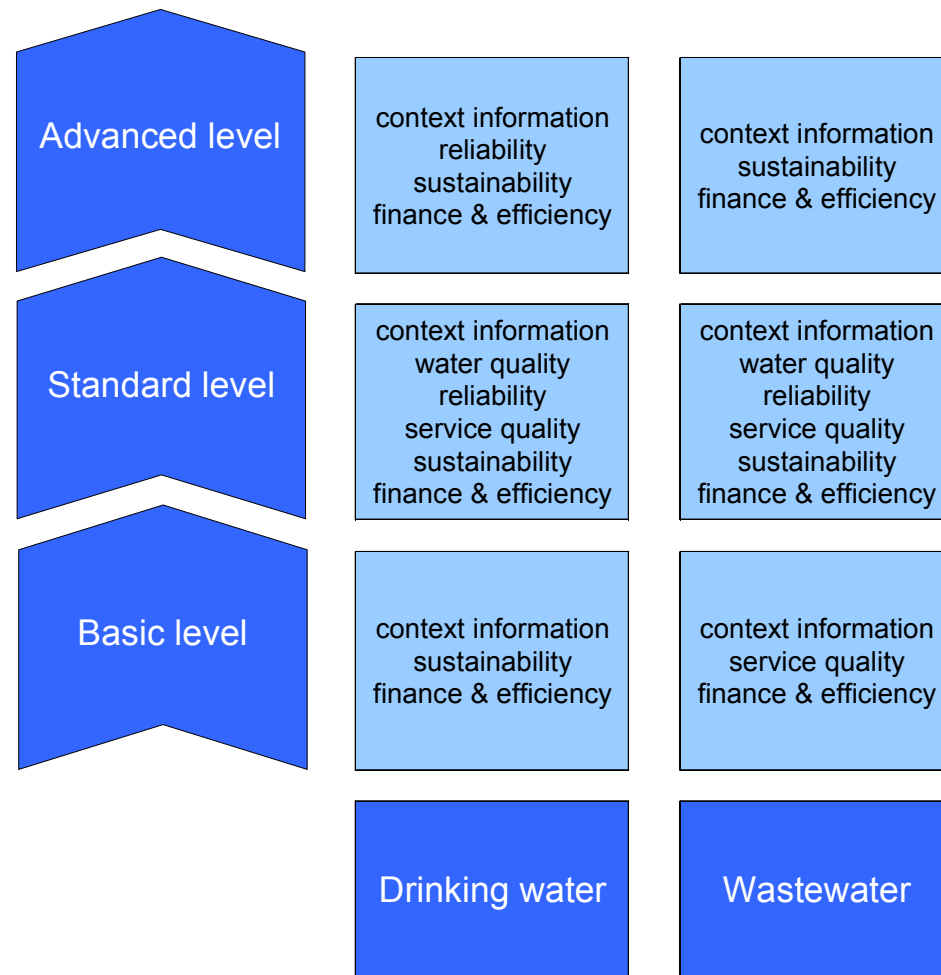
Performance assessment – areas to analyse

- context information
- key performance areas
 - water quality
 - reliability
 - service quality
 - sustainability
 - finance & efficiency



Performance assessment – different participation levels

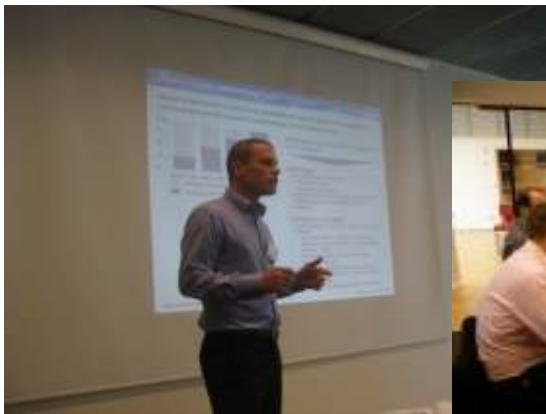
- 3-level model to choose at:
 - basic
 - standard
 - advanced



EBC's benchmarking programme (4)

Project preparation

- defining objectives, composing team, preparing documents, methodology, tools, planning...
- recruiting participants (invitations, registration)
- orientation & training (kick-off)



EBC's benchmarking programme (5)

Data collection, analysis & validation

- good data quality: essential for confidence in results!
- how to arrange this?
 - clear definitions
 - confidence grading
 - data analysis & validation
 - results workshop

The image displays a screenshot of the EBC benchmarking results interface and a photograph of a workshop. The screenshot shows a table with columns for ID, Question, Answer, and Grade. The table lists various questions related to drinking water production and distribution, with answers and corresponding grades (stars) provided. The photograph shows two people sitting at a table, working on a laptop, likely during a results workshop.

ID	Question	Answer	Grade
62	CI-008 Type of system		☆☆☆☆
66	CI-014 Supply area (km2)	2,500.89	☆☆☆☆
350	CI-EBC-001 Responsible for service connection	yes	☆☆☆☆
63	CI 002 Type of activity	Water supply and other (electricity, gas, etc.)	☆☆☆☆
64	CI-003 Type of assets ownership	Public	☆☆☆☆
65	CI-004 Type of operations	Mixed	☆☆☆☆
75	A-007 Exported drinking water (m3)		☆☆☆☆
76	ZA-007 Imported drinking water (m3)		☆☆☆☆

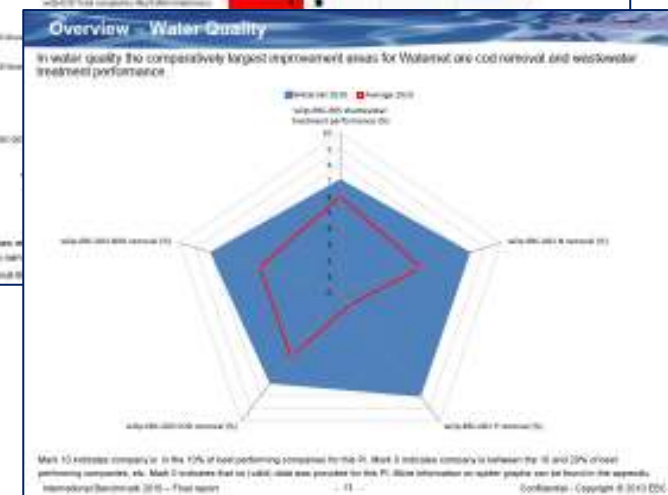
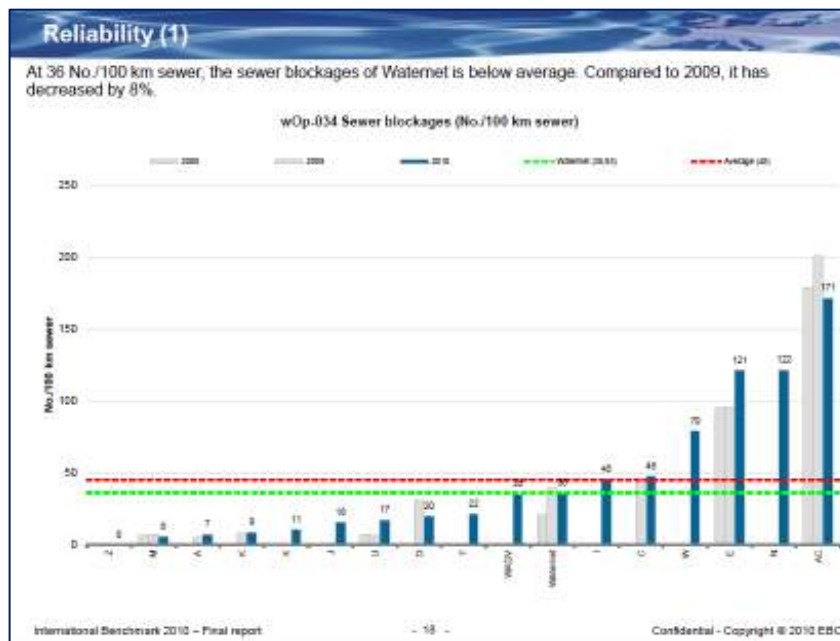
European Benchmarking Co-operation
International Water Benchmark
Methodology Part II:
Reference guide
Version 5.1
April 2011

Logo: INTERNATIONAL ORGANISATION FOR STANDARDIZATION AND CERTIFICATION

EBC's benchmarking programme (6)

Draft reporting

- to check data/results
- to identify performance gaps



EBC's benchmarking programme (7)

Benchmarking workshop

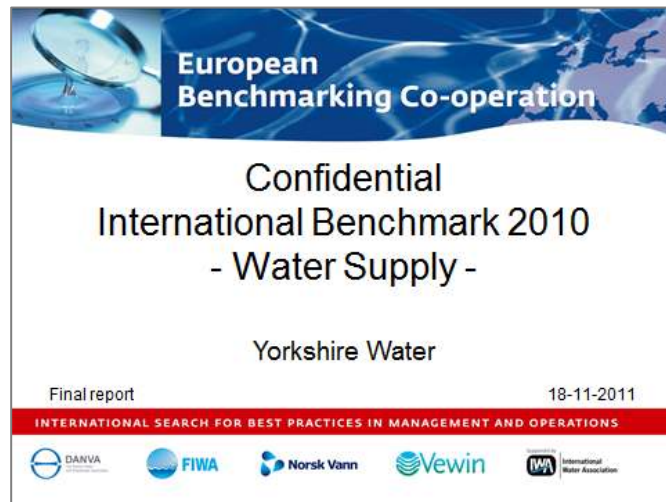
- most essential part of the benchmarking exercise
- discussing (draft) results (data check, understanding PI's)
- special topics (exchanging knowledge)
- exchanging best practices (presentations by peer utilities)
- site visits, networking



EBC's benchmarking programme (11)

Final reporting

- confidential, individual utility information



EBC's benchmarking programme (12)

Public reporting

- to show (anonymous) key results of benchmarking exercise
- for stakeholder communication & encouraging utilities to participate

Figure 6: Total cost by sales coverage ratio ()

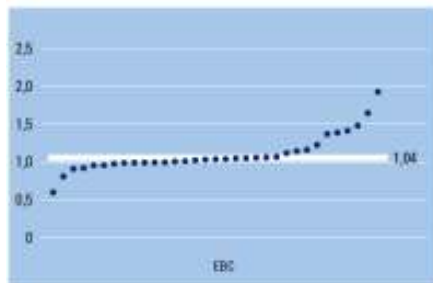
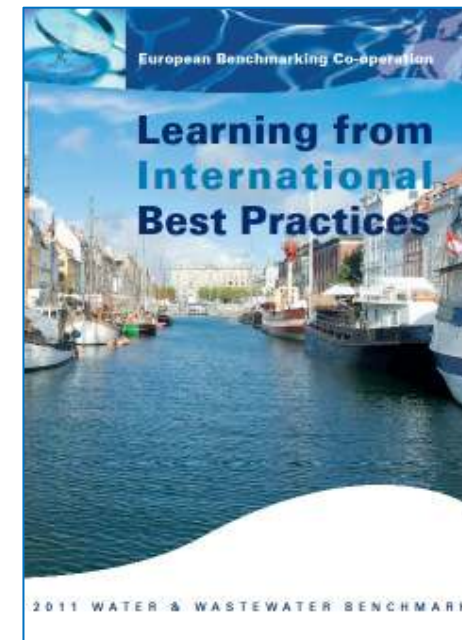
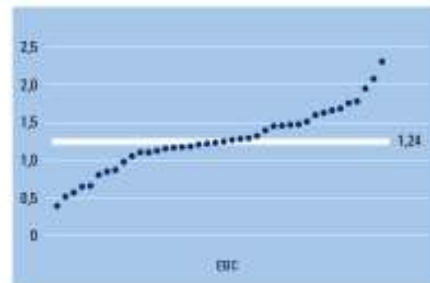


Figure 7: Average water charges for direct consumption (€/m³)



EBC's benchmarking programme (13)



- 94 different utilities participated since 2007
- 2012: 50 utilities from 19 countries

To conclude

- benchmarking is not an easy job!
- successful benchmarking/utility improvement requires:
 - alignment with strategic utility objectives
 - commitment of senior management
 - involvement of utility staff
 - good data quality
 - stable situation
 - sufficient resources
- Dutch case: benchmarking efforts pay off – but results take time!

To conclude (2)

- benchmarking globally recognised as a powerful management tool for performance improvement
- sense of urgency: political discussions on modernisation of the water sector
- still many utilities do not benefit from benchmarking
- Vewin/EBC open to cooperate!

