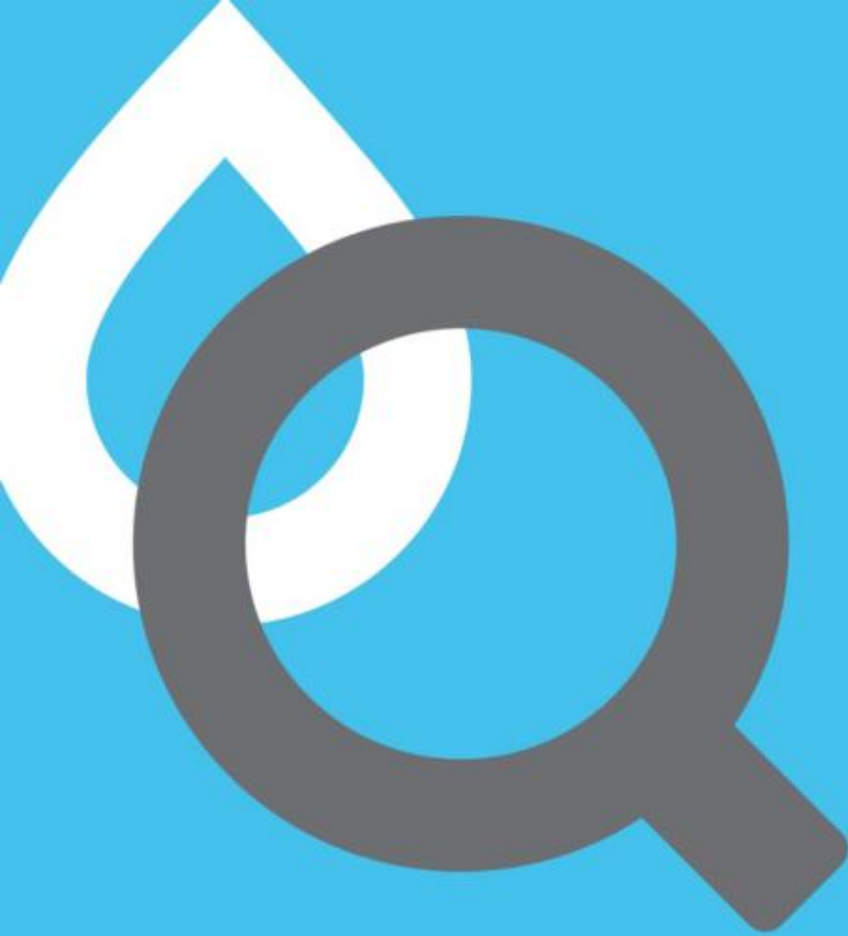




# AquaRating

## A Rating System for Water and Sanitation Utilities

Matthias Krause  
Enrique Cabrera



International  
Water Association



- ◆ What is it?
- ◆ Why?
- ◆ How is it put into practice?
- ◆ How does the rating work?
- ◆ Rating products
- ◆ Road map





What is it?

# What is it?

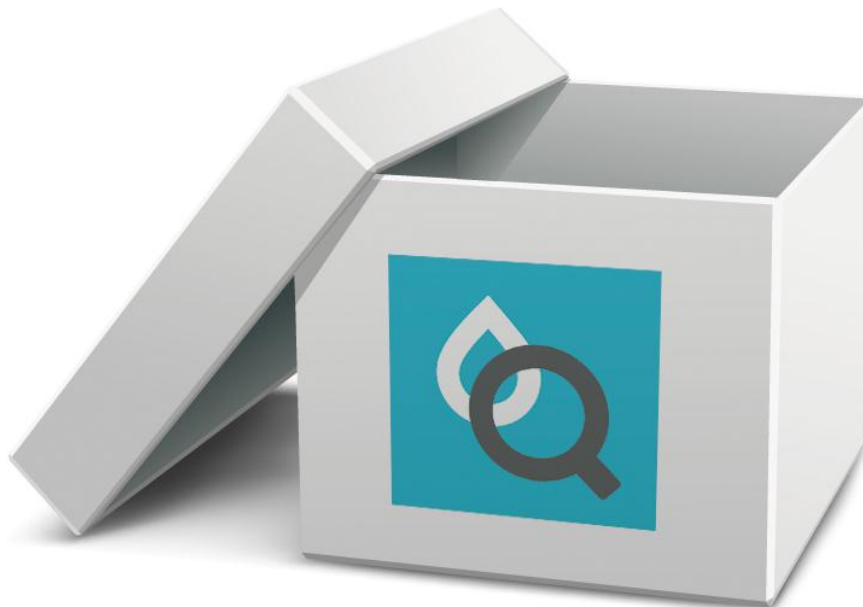
- ◆ Something new
- ◆ Rating system that evaluates WS utilities in an encompassing manner
- ◆ One global rating; sub-ratings for each of the 8 rating areas
- ◆ Guidance for good utility management practice
- ◆ Recommendations to improve



# What is it?

- ◆ Based on audited, reliable information
- ◆ Financially self-sufficient system with a business model similar to the ISO certification
- ◆ Designed in a way to enable general application

First implementation in Latin America and the Caribbean





Why AquaRating?

# Challenges for cities

Growth and increasing demand for WS

Discontinuity and deficient service quality

Degradation of water bodies

Climate change

Scarce financial resources



# Challenges for cities

High quality, efficient, sustainable  
WS utilities are key for

- ◆ Quality of life of citizens
- ◆ Attracting business, commerce  
and tourism
- ◆ Protecting the environment





# Tool to assess and improve

## AquaRating will

- ◆ Collect reliable information
- ◆ Assess quality, efficiency, sustainability and transparency
- ◆ Identify areas of improvement
- ◆ Stimulate learning and development



# Benefits for government & policy makers

- ◆ Assessment of WS service in comparison with an excellence standard/ with regional average ratings
- ◆ Design specific investment programs and capacity building for utilities
- ◆ Be part of community of cities that strives for high quality utility services
- ◆ Improve quality of life and business environment



# Benefits for utilities

- ◆ Reputation; Demonstration of quality improvement culture
- ◆ Easier access to staff, finance, markets
- ◆ Receive recommendations and improve practice
- ◆ Be part of a knowledge framework that stimulates learning



# Benefits for consumers

## Better services

- ◆ Quality
- ◆ Efficiency
- ◆ Sustainability
- ◆ Transparency



# Benefits for MFIs & Development Agencies

- ◆ Target finance and technical assistance according to areas of improvement
- ◆ Monitor performance over time
- ◆ Help building a community of good practice & learning





How is it put into practice?



# Process

## Participative process of system development

- ◆ Focus groups with utilities
- ◆ Seminars with MFIs and experts
- ◆ *Planned: peer review, consultations...*

- Feedback
- Legitimacy
- Technical soundness



# AquaRating Entity

**Attributes:**  
Technical competence, no  
direct interest in rating  
results, non-for-profit  
organization



Assures impartiality, broad  
acceptance by clients &  
stakeholders

Oversight Committee: MFI's,  
Provider Associations, Customer  
Associations, Academia

- Determines and awards ratings
- Defines and updates the rating system
- Provides the auditing guide
- Training and accreditation of auditors
- Operates web based system
- Produces blind reports



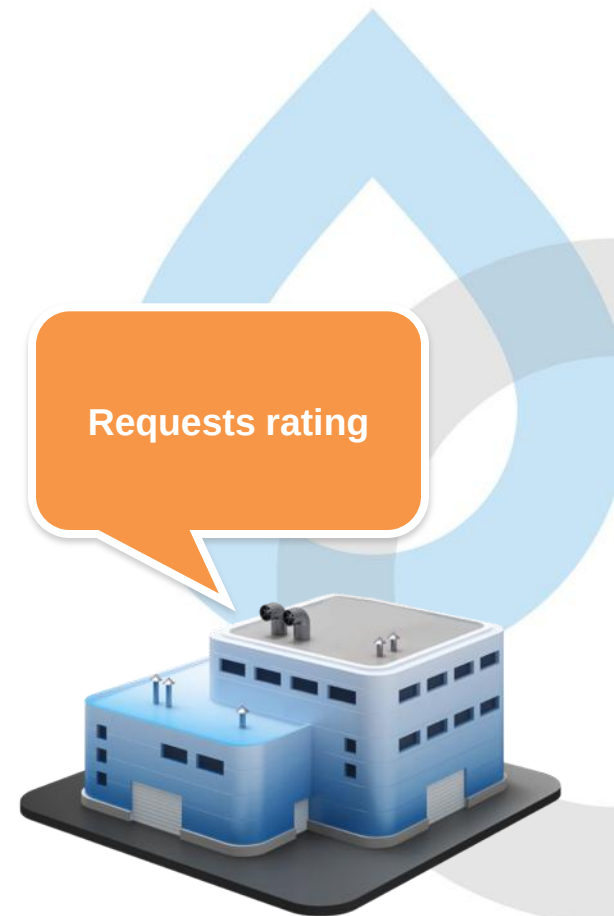
# Business Model



AquaRating Entity



Accredited Auditing Companies

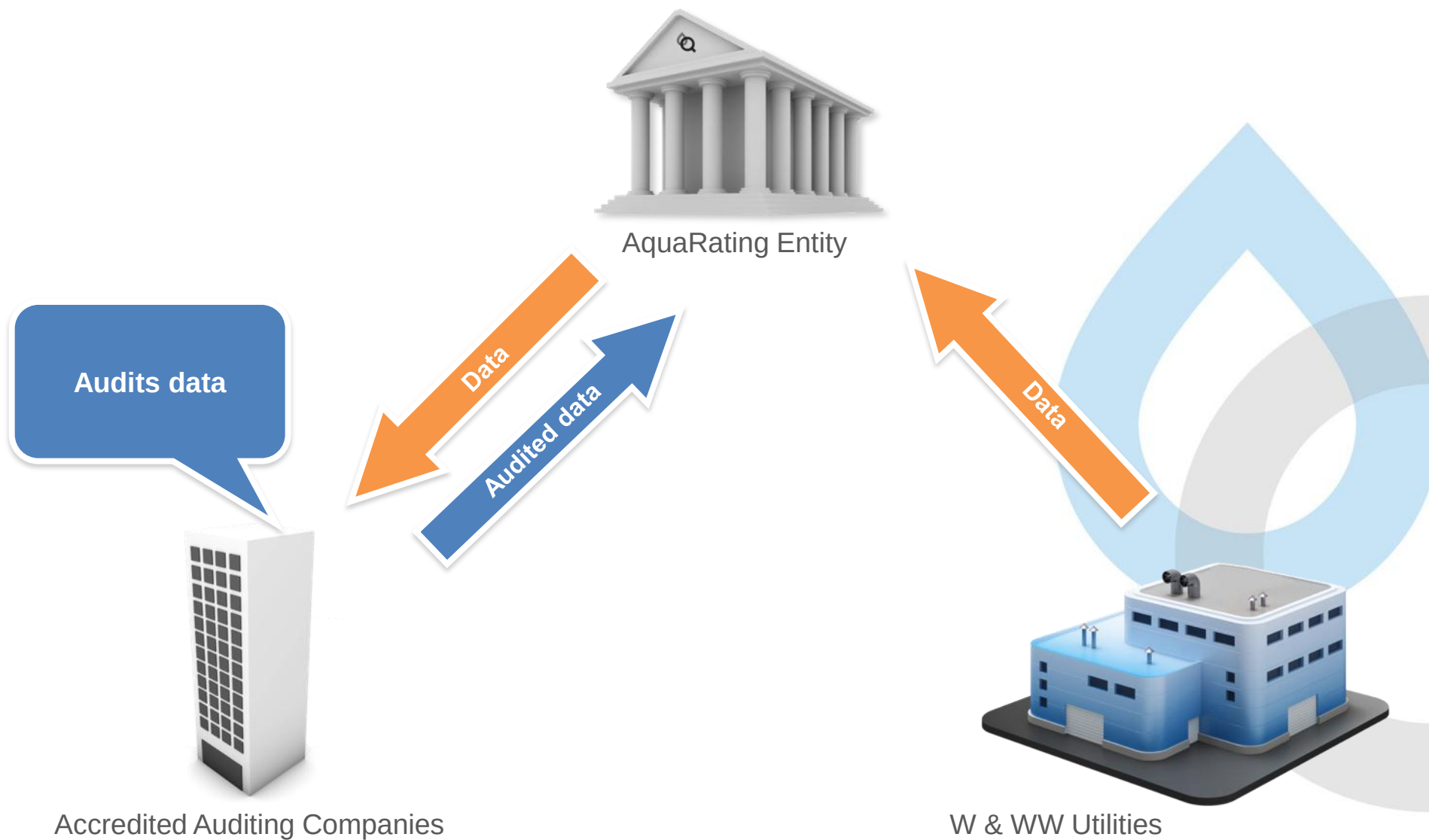


W & WW Utilities



Pays Fees

# Business Model



# Business Model



AquaRating Entity

Grants Rating  
products  
(renewable every 2  
years)

Rating



Accredited Auditing Companies



W & WW Utilities



How does the rating work?

# Three key elements

- ◆ Performance measures
- ◆ Best practices
- ◆ Quality of the information



# Performance indicators

- ◆ Traditional performance indicators (IWA, ISO 24500, etc.)
- ◆ They reflect service performance (output)
- ◆ Key: Availability of good data in most utilities
- ◆ Metrics compared to ideal performance



# Performance indicators

Daily volume of physically lost water

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pipe length or number of service  
connections





# Best practices checklists

- ◆ Comprehensive list of good practices expected from an ideal supplier
- ◆ Much easier to assess / collect than indicator data
- ◆ They reflect current management
- ◆ Proxy to future performance
- ◆ Provide improvement recommendations
- ◆ More context independent



# Best practices checklists

| Implemented practice or process                                                                                                                                                                             | Score |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| There is a procedure or utility unit specifically dedicated to the management of real losses.                                                                                                               | 1     |
| An estimating procedure for real loss volumes is in place, with standard criteria (IWA or similar) for estimating uncontrolled water components; and real loss volumes are calculated at least monthly      | 3     |
| Performance levels and reference parameters are established in order to guide practice and scope of real loss detection and reduction; appraisal and follow-up at least annually.                           | 2     |
| Efficiency of different detection, localization and repairing techniques of real losses are analyzed and compared for each one of the sectors or zones in which uncontrolled water balances are determined. | 1     |
| Preventive or corrective policies of renovation, substitution, pressure management are guided by the real loss reduction analysis.                                                                          | 2     |
| Availability of references and records of water loss incidents in geographical data bases.                                                                                                                  | 2     |
| Appraisal of real losses based at least on balance contrasting and minimal night flows                                                                                                                      | 1     |
| Availability of reliability indicators for measurements of flows supplied to sectors in night minimums.                                                                                                     | 1     |
| Availability of surveillance procedures at least on a daily basis of average and minimal flow fluctuations. This is only valuable if it is done at sector level as support for loss reduction efforts.      | 1     |

# Quality of the information

- ◆ New element in the assessment
- ◆ Can only manage what is known
- ◆ Audited information!
- ◆ Improves fairness of the system



# Quality of the information

| Process and practice documentation                             | Correction factor |
|----------------------------------------------------------------|-------------------|
| 1. Practice is not documented.                                 | <b>0</b>          |
| 2. Availability of a documented procedure                      | <b>0.5</b>        |
| 3. Procedure in addition is used and applied.                  | <b>0.9</b>        |
| 4. Procedure in addition is audited at least by own department | <b>0.95</b>       |
| 5. Procedure besides being audited is in the public domain     | <b>1</b>          |





# Rating products

# The AquaRating

- ◆ Single figure 1 to 100
- ◆ Single standard worldwide.  
Potential maximum rating may change depending on size, context, etc.
- ◆ Strong message. Strong target



# The AquaRating



# The AquaRating. Partial ratings

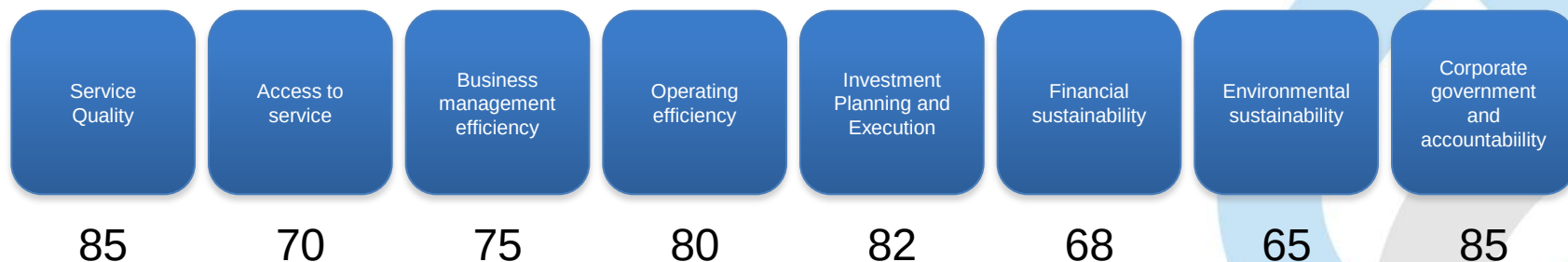


- ◆ One additional rating per area (8 partial ratings)
- ◆ Quick overview of potential improvement areas
- ◆ Avoid a simplistic message (more comprehensive assessment)





# The AquaRating. Partial ratings



# Comprehensive report

- ◆ Provides detailed information about how all ratings were obtained
- ◆ Useful document for utilities but also other stakeholders (regulators, local government)



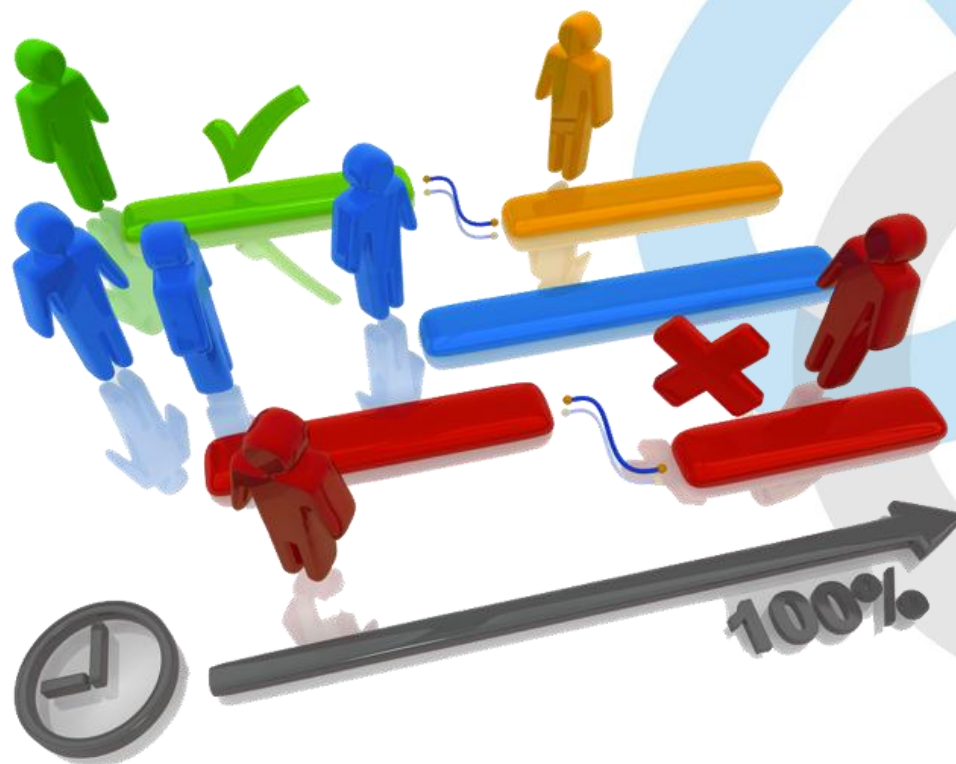
# Improvement recommendations





# Road map

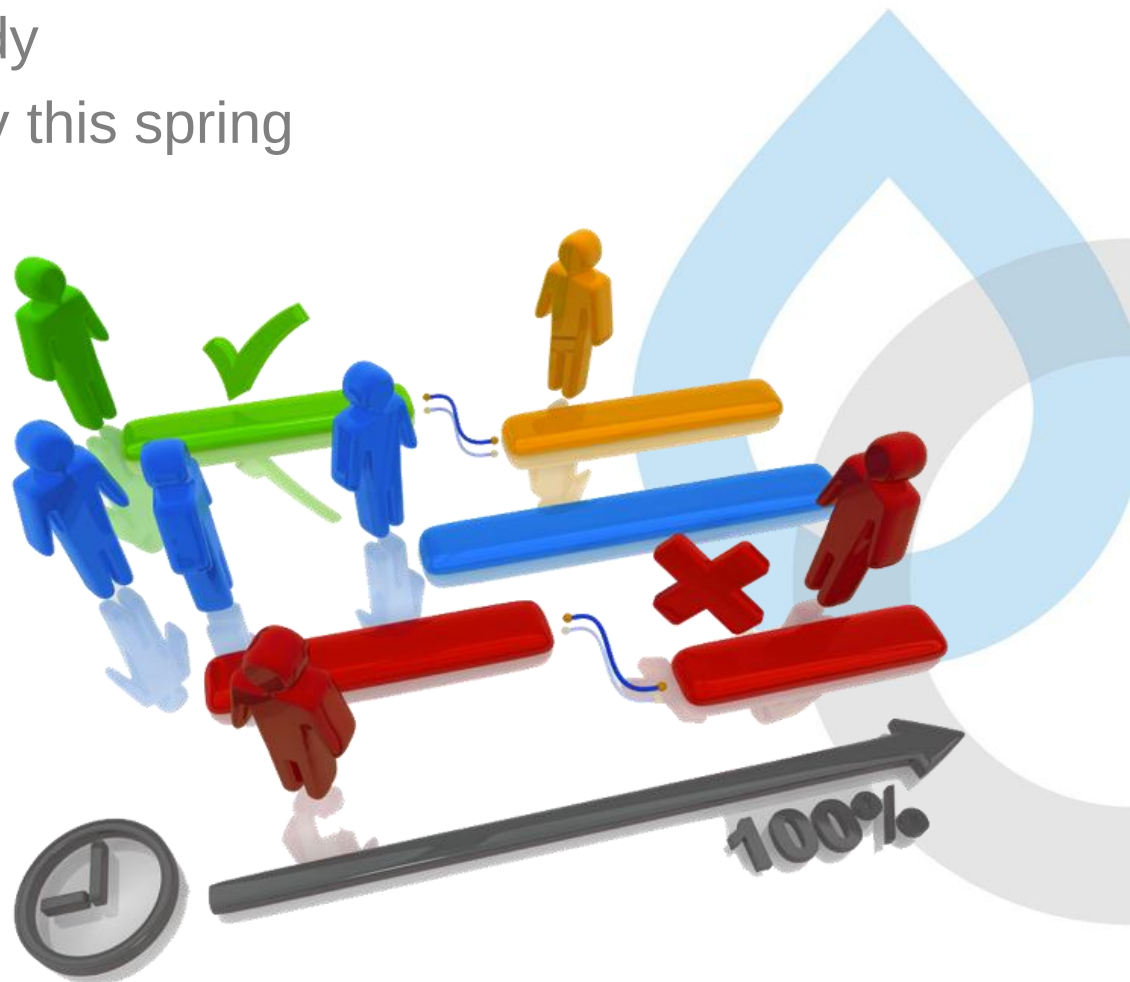
# Roadmap



# Roadmap

First full version of the system near completion

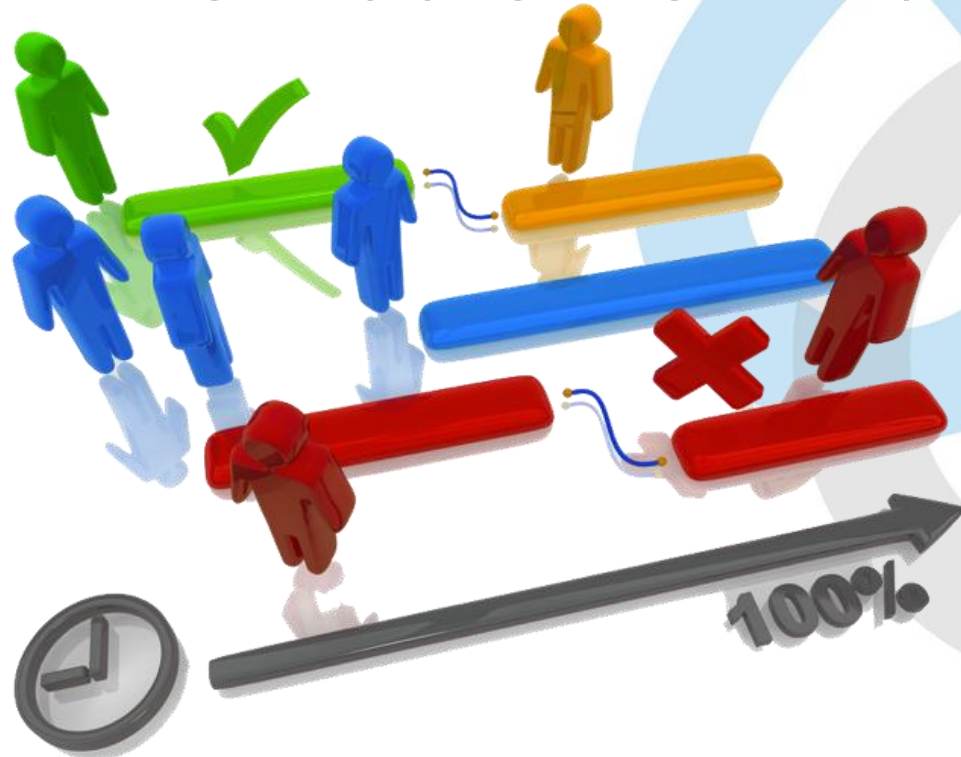
- ◆ Over 100 assessment elements, 300 pages
- ◆ Online web service ready
- ◆ First version to be ready this spring



# Roadmap

## Field test (Spring – Autumn 2012)

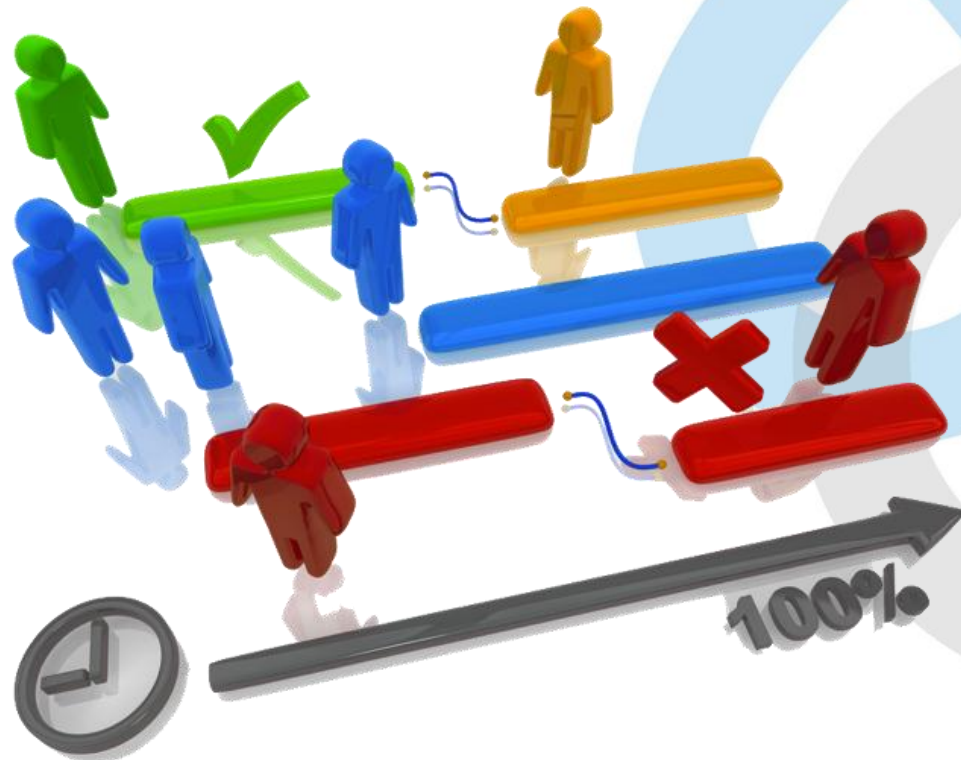
- ◆ System trial involving Latin American utilities (probably also some cases from other regions)
- ◆ Fine tuning of the system (weights, system definitions, software)
- ◆ Establishment of the AquaRating Entity (Beginning of 2013)



# Roadmap

## Launching of AquaRating

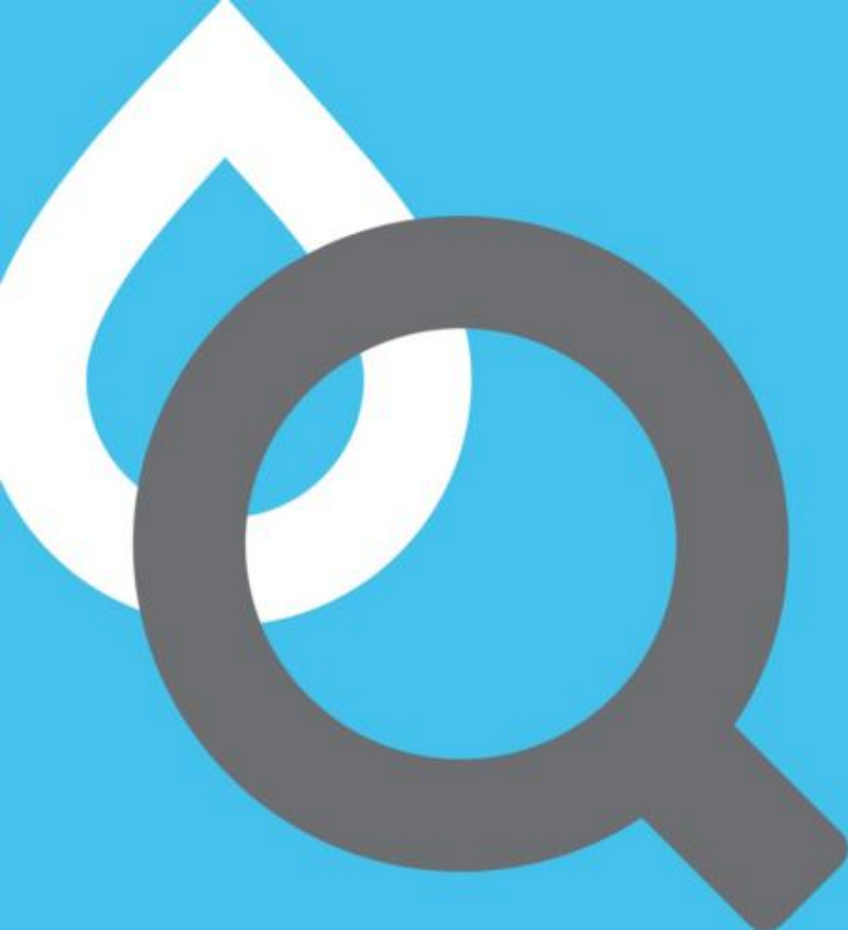
- ◆ Technical: IWA Specialist Conference on Benchmarking and Performance Assessment (Medellín, Colombia – Spring 2013)
- ◆ Institutional: To be determined





**thank  
you**





International  
Water Association

