Condition for success 1 – Good Governance

Synthesis report - Target 2

"Performance measurement, regulation and capacity building in the water sector"

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By 2018, all countries will have strengthened the monitoring framework for service delivery, including through the adoption of adequate performance indicators and the building of monitoring capacity both at the central and sub-national level

This report has been prepared by the CS1 Target and Solution Group 2 which is coordinated by ASTEE. It was drafted by Pierre-Alain Roche and Solène Le Fur.

Aknowledgement:

This report benefited from the inputs in particular of Gérard Payen (Aquafed), Guillem Canneva (AgroParisTech) and Bruno Tisserand (ISO) under the guidance of Aziza Akhmouch (OECD).

Outline

I. Introduction: Organization of the TSG, tasks achieved and on-going work -

Target 2 is framed as follows "By 2018, all countries will have strengthened the monitoring framework for service delivery, including through the adoption of adequate performance indicators and the building of monitoring capacity both at the central and sub-national level".

The theme has already been discussed in the previous World Water Fora. Besides, the 5th World Water Forum created the Istanbul Water Consensus, a tool for communities to enhance the improvement of their services' performance. In this context, the TSG aims to provide concrete "monitoring" solutions which will ultimately help to improve the performance of public services.

The coordination of the Target and Solution Group (TSG) is hold by Pierre-Alain Roche, president of the ASTEE (the French Scientific and Technical Association for Water and the Environment, French branch of the International Water Association (IWA) and European Water Association (EWA)). ASTEE is an association gathering all the professional stakeholders involved in the topic of the performance of public services.

The scientific secretariat of the group is led by Solène Le Fur of ASTEE. The TSG was launched in April 2011 and some 100 members from more than 35 countries are involved (see list of contributors at the end of the report). Four meetings (Manosque, June 2010; Bordeaux, October 2011; Nice, November 2011; Paris, November 2011) have been dedicated to debates, gathering more than 800 people. The material gathered by the TSG appeared rapidly so rich that ASTEE decided to produce a book in English and French summarizing issues and evidence collected. Guillem Canneva (AgroParisTech) is editing the book.

Three events directly linked to target 2 will be organized as part of the 6th WWF: a 2-hour session on the target, an official side-event organized by ONEMA and ASTEE and a side-event dedicated to the presentation of the French examples on the "Espace France".

This document provides a preliminary report on Target 2 of the condition of success "Good governance" for the 6th World Water Forum. It proposes a definition of the performance of water service delivery, takes stock of the current situation of the performance of public services and discusses implementation of the TSG.

II. Background and rationale of the target

The last publication of the OECD on water governance argues that for water supply and sanitation the current water crisis can be largely considered as a governance crisis especially for what regards the performance of water policy and management. Water management involves a range of actors, who all have a role to play in the search for innovative and efficient solutions. Many international organizations and donors (IWA, OECD, UN-Habitat, the World Bank and AFD for example) have produced tools to improve governance and performance of public water and sanitation services. A document on "good practices" (French Ministry of Health, UNECE) provides policymakers with guidance, based on concrete examples, on how to fulfill their commitments to ensure equitable access to water and sanitation. The diagnosis seems to be largely consensual and to focus primarily on regulatory framework, capacity building, the strengthening of local responsible authorities, financial tools and participatory processes. Useful governance tools to bridge identified capacity, funding, accountability and regulatory gaps include: the knowledge of the assets, the quantification though performance indicators, the use of clear contracts between authority and service providers (whether public or private), and benchmarking. Despite the diversity of solutions, the extension of indicators to all fields of sustainable development can be considered as a major contribution to improve water governance.

The 6th World Water Forum is an opportunity to share experiences, discuss solutions and innovations, and gather commitments from a large number of stakeholders. The TSG can help by proposing a structured and coordinated action plan that allows making synergies between initiatives and facilitating cross fertilization and support.

As defined for the purpose of this report, evaluating the performance of water supply and sanitation services includes four dimensions:

- Effectiveness of services, i.e. the nature of services effectively provided to the users and the level of compliance with societal and regulatory constraints.
- Efficiency of services, i.e. the optimization of the resources and means mobilized to deliver the results.
- Sustainability of services (social, economic and environmental).
- Success (effectiveness and efficiency) of the policies to achieve the expected objectives, i.e. the comparison between the objectives targeted by the responsible authority (often a local authority, or a national one) and the results actually achieved.

Rationale of the target: the lack of a common understanding on the performance of water and sanitation services

Today the situation of effective performance is a matter of concern:

- Generally, (quality, quantity and affordability) performance in the water sector (as defined in 2.3) is insufficiently measured and monitored, and is often not the subject of explicit and deliberate policies. Interesting monitoring practices exist, such as the benchmarking carried

out at national level by regulatory agencies like ERSAR in Portugal, SISPEA in France, or OFWAT in the UK, but remain marginal;

- Performance is sometimes far from what could be expected given the level of available funding;
- In addition, in many cases the funds mobilized remain insufficient to reach an acceptable level of performance – "In two-third of OECD countries surveyed, the funding gap is the main obstacle to vertical and horizontal co-ordination of water policies" (OECD, 2011);
- Information is often not made available to customers and service users;
- There is no commonly agreed definition of "performance" shared across stakeholders (authorities, operators, users of the service including those unserved, donor agencies…). The absence of common understanding of performance measurement often hinders a monitoring strategy and policy underpinned by suitable means.
- The four elements of the definition of performance are often mixed up in comparison between services leading to misinterpretation;
- Indicators dealing with only one aspect of the performance sometimes hide the lack of results in the other aspects.

Actors of the performance of public services

The organization of service provision is country specific – sometimes even State or region specific- making any mapping of responsibilities and actors difficult (see OECD work). However, from a general point of view, 6 types of critical actors in relation to the performance of public services can be distinguished:

- **Responsible bodies** (the authority in charge of the service), often a local authority called organizing authority or responsible authority;
- **Service providers** (public, private or mixed);
- Whenever relevant, **competent authorities** which define the overall objectives and regulations or monitor the compliance with rules and regulations for all water public services in their perimeter (e.g. a national regulator for instance).
- **Users and citizens**, who are essential stakeholders of the governance of those services;
- **Donors, banks and international financial institutions** that bring their support to the development of those services.
- **Manufacturers** and craftsmen ensuring the maintenance, upkeep and renewal of equipment.

The many dimensions of services performance

The performance of a public drinking water or sanitation service can be considered satisfactory if three conditions are met:

- Governance of the sector is good, meaning that each actors is able to fulfill its role fully and in a way that is useful for the public service, without external hindrance or obstacle, taking into account the diversity of individual situations and optimizing the overall costs, measured, for instance, in the average costs to users,
- Each actors fulfills its role efficiently in practice, meaning that its contribution to the collective effort is optimal, including its economic contribution,

- The service is delivered effectively, in line with the expectations of users, taxpayers and beneficiaries, and in compliance with societal and environmental requirements.

Then, the dimensions of services performance are:
- access to water and sanitation service of appropriate quality (quality being here a matter of service reliability as much as quality of the water provided),
- implementation of the right to water and sanitation,
- achievement of the Millennium Development Goals and of their likely successors;
- credibility and trustworthiness of responsible organizations and operators towards citizens and consumers;
- stability and sustainability of the financing of the services;
- proper management and stewardship of infrastructure assets whose capital value is significant and often comes from successive generations of costly investments;
- proper use of funds raised from users and taxpayers;
- Sustainable development in relation to socio-economic and governance issues, in addition to environmental issues.
- Public participation and public awareness

Standardization and methodologies – important bases for the performance of services

- The standardization (ISO in particular) has allowed making significant progress in the understanding of services effectiveness and promotes exchanges between stakeholders in establishing a common framework valid for all actors and in clarifying the role of each. Many studies and reports (from OECD, IWA, World Bank, and so on…) have defined methodological frameworks or provide guidance to evaluate the performance of service delivery in both developed and developing countries[1]. However, so far, these efforts have not led to the development of a consensus on some sort of international indicators at the global level allowing measuring the progress of the implementation of such procedures. A solution's form on the Solution for water platform (www.solutionsforwater.org/solutions/international-standardization-as-a-common-solution-for-improving-water-and-wastewater-services) is dedicated to the international technical committee ISO/TC224 "Service activities relating to drinking water and wastewater";
- Some countries (Australia, the United-Kingdom, Portugal, France, etc.) have defined very accurate methodological frameworks, that allowing meaningful comparisons between different services using Key Performance Indicators (KPI). Information from these sources, however, is difficult to access and many lack relevance, to address the specific needs of developing countries.

[1] As an example, the OECD *Checklist for Public Action* provides a set of core principles against which to benchmark the capacity of government to undertake fruitful partnerships with the private sector in the development and management of water infrastructure. The OECD has also produced Guidelines for Performance Based Contracts between Water Utilities and Municipalities to facilitate the development of these monitoring tools and promote a shared understanding of the methodology and the objectives.

Performance indicators in the water sector: Some OECD examples

In **Australia**, the National Water Commission's Biennial Assessment of the implementation of the *National Water Initiative* reports progress in water reform at the sub-national level.

In **the Netherlands**, each Water Board uses systems to monitor progress in water policy, such as monitoring water quality and (water) ecology, planning and monitoring of space that is set aside for water retention. The STOWA (institute of Applied Scientific Research) is leading the drive toward standardisation of monitoring systems for water quality, water quantity and ecology. The Union of Water Boards organises a benchmark of the Water Boards every two years, and the benchmark is made public in the publication *Waterpeil*.

In **Belgium**, the Flemish Environment Report (MIRA) has been published since 1994 as an Indicator, Policy Evaluation, Scenario and Forecasting report. It includes trend analysis as a basis for evaluating progress. In addition, the Co-ordination Committee on Integrated Water Policy (CIW) has developed a follow-up system on the regional level for the implementation of *Water Framework Directive* measures. This consists at present of anMS Excel or Access application containing data listing basic information (who, what, when, etc.) as well as data that follow progress (expenses, time schedule, etc.).

In **France**, the *Contrat d'objectifs État-Agences* is a national reporting tool that evaluates water agencies' policies. Moreover, the French national office for water (Onema) gathers regulatory performance indicators produced by water and sanitation services in an annual report.

In **Arizona**, **United States**, a *Water Policy Monitoring and Reporting Service* was designed for municipal water resource managers, industry executives, attorneys and those interested in keeping current with the trends influencing the price and availability of water in Arizona.

In **Portugal** since 2004, all water utilities operating under concession contracts have the quality of their services (water supply and sanitation) monitored annually through a set of 20 performance indicators. This water quality regulation will be extended to all water utilities during 2011.

Source: OECD Survey on Water Governance (2010)

- The IFIs have also set up standardized water benchmarking in many countries (e.g. Albania, Colombia, Bangladesh, Brazil, Kenya, Malawi, and Zambia). The IBNET program of the World Bank, supporting these initiatives, also generated some additional attention to the sector assessment based on IWA performance assessment tools. The IBNET dataset (www.ib-net.org) contains performance data from about 3000 utilities from more than 110 countries. However the expansion of the IBNET methodology is slower than expected mainly due to limited funding.
- The non-quality related to a lack of knowledge of the asset base, the absence of long term asset management plans,… are some well-known factors of economic losses, but do not give

rise to a general assessment allowing to measure the progress in operational terms, that is a gap.

Then, standardization and methodologies exist for part of the performance scope in both developed and developing countries, but there is no objective of global progress in their implementation. The TSG will propose, during the Forum week, to precise how to measure the maturity of the sector framework of each country and identify whether a regulatory system is implemented.

III. Target action plan and commitments for the improvement of services' performance

By 2015, making sure that 50% of countries will have set up the key elements of a sound performance evaluation/monitoring framework, including the identification of responsible actors at all levels of government

The lack of clear regulatory frameworks does not contribute to the overall clear vision for water stakeholders. Making sure that countries clearly identified environmental and economic actors for water regulation could contribute to perform services performance. (For example in Chile, the ministry responsible for Social Affairs is in charge of making services cost affordable for everybody, and not the ministry in charge of water and sanitation infrastructure. In some countries the relevant ministry for such issues is even not identified).

By 2018, making sure that regulators and other authorities responsible for implementation and compliance will clearly dedicate part of their resources to the development and implementation of adequate monitoring tools and activities

The development of service's contracts, the knowledge of the network, and the monitoring and controlling of the execution of these services' contracts by authorities require the mobilization of resources and skills that responsible bodies' organisms may not have available currently. Without the development of these skills and resources, and their availability over time, the authorities cannot have a clear vision of the performance of their services. It is therefore necessary to consider that a portion of the budget of the services must be allocated to these activities to ensure their sustainability.

These resources necessary to obtain the expected performances are not specific to the developed countries. This is rather the number of users served, and the global budget of the service, that are the determining factors to know whether these resources can be made available locally at the level of the responsible body or whether , for small units, it is necessary to share/mutualize these resources in shared supporting services structures.

The TSG calls for including in the action plan an evaluation of adequate costs to grant (a proportion of turnover of service) to exercise that control activity.

By 2018, making sure that the conditions for an appropriate and reasonable use of performance indicators are in place, i.e. an inventory of the state of assets and services has been done, the database and information collection infrastructure is in place, a set of KPI and their methodology has been agreed building on internationally recognized standards and practices, capacity and resource of responsible authorities are brought in line with the monitoring responsibilities…

The services' contracts usually contain indicators allowing to measure operators performance against targets. Significant efforts have been made either at national level by national regulators (having themselves various responsibilities depending on the country), or at the level of networks of competent authorities and responsible bodies, or at regional scale, to measure the performance of services with systems of common standardized indicators. These systems are designed as tools for dialogue and exchange allowing everyone to find their own targets for progress from a given and particular situation. They foster the development of reporting mechanisms and systems of performance monitoring predicated on standardized set of indicators. However, these initiatives are often patchy and work on different bases and methodologies. Although the literature on the subject is abundant and manuals of good practices exist, experience assessment and feedbacks are generally carried out through patchy academic works and are not organized over a long period. Moreover, the results of these indicators relating to two different services remain difficult to compare because of their constraints and their particular framework. The comparison over time of the data of a performance indicator for a specific service makes more sense and brings in more progress drive. Finally, most current databases are filled out on a voluntary and declarative basis without any resources barely dedicated to data audit and control.

The TSG suggests including in the action plan a new step of accountability by the development of systematic independent control of data provided in performance reports and in indicators benchmarking systems.

Strengthen the role of professional associations to promote the development and enhancement of performance indicators by operators - Promote the involvement of relevant stakeholders (companies and users) in the adoption and the implementation of monitoring tools (including performance indicators)

The professional associations, i.e. associations which bring together public authorities and operator at national, regional or global levels (IWA for example), are actively involved in the development of performance indicators among their members and indicator systems within different member countries. Their role is essential to both facilitate the implementation of common features of systems of indicators used, and mobilize actors in their implementation and to interpret the results.

For the establishment of a system of performance indicators, the public water service of a particular responsible authority may rely on the institutions of its own country, as well as on

national, regional or international professional associations, of which it is a member. It can also be assisted by another operator. This can be done for example through the WOP (« Water Operators Partnerships ») framework, supported by UN-Habitat, which aims to foster partnerships between operators faced with similar contexts. The objectives of a particular WOP may include the creation and implementation of tools required to produce local performance indicators. The professional associations (especially IWA and its national affiliates) are involved in the design of definitions, as well as the implementation of systems of indicator, and in the development of these partnerships. They provide valuable support in this field through their network. To enable this support, the creation of sustainable resources with the support of international donor agencies is deemed necessary. Performance indicators developed should also include the equitable access dimension

OECD, IFIs and ISO for example, would have a role to play in the development of fora/interfaces for the exchange of information and of good practices, especially in the development and implementation of monitoring tools here, including through the set up of network of regulators.

The TSG suggests promoting professional associations both at the global, regional, and national level to support the adaptation and use of performance indicators. The action plan should encourage institutions and professional associations that promote partnerships between operators to include in the development of these partnerships performance indicators of public service taking account the indicators to assess the performance of the partnerships themselves.

	IMPLEMENTATION OF THE TARGET **Expected results & Indicators of Success**	**PRACTICAL STEPS** **Activities to be done/**	**RESPONSIBLE PARTIES**		**ESTIMATED BUDGET** **(1k€, 10k€, 100k€, 1m€, 1b€) & potential sources of funding**
			Lead institution	**Main partners**	
April 2011	Gathering of the voluntary partners	Creation of the TSG	ASTEE	OECD	
June 7 to 10, 2011	Congress of the ASTEE in Manosque (France) with the global theme of the "Performance of public services". This Congress was an occasion for the TSG to hold a meeting, in particular on the TSG book which will be published for the Forum.	- Presentations about the performance during the congress - Discuss on the TSG book which will be published for the Forum - Pursue the call for gathering information on most promising solutions	ASTEE	AFD, ONEMA, OECD	20k€
October 5 and 6, 2011	Organization of an international conference in Bordeaux (France) on "performance of water supply and sanitation utilities: management and local governance" followed by a TSG meeting.	- Discuss on the key messages and the commitments of the group. - Discuss on the TSG book which will be published for the Forum	ASTEE	IWA, OECD, CUB	
October 26, 2011	OECD meeting "improving water governance: towards the creation of the networks of leaders"	Create a platform of key stakeholders seeking to support the implementation of the good governance targets	OECD		

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			Lead institution	**Main partners**	
November 17 and 18, 2011	TSG meeting in Nice (France).	Discuss on the key messages and the commitments of the group.	ASTEE		
November 29, 2011	French conference on the performance of water and sanitation public services at Pollutec Horizons, Parc des expositions de Paris-Villepinte (France), from 13:45 to 14:30 at the Energy Efficiency Forum.	Discuss on the key messages and the commitments of the group. Communicate on the 6th World Water Forum	ASTEE	CFE, Local authority process	
November 30, 2011	Production of a draft report	It has to be sent to "Good Governance" coordinator, with a copy to the listed TSG members.	ASTEE	OECD	
December 12, 2011	TSG book Preparation of the 2 side-events on governance and performance of public services (Forum and PFE).	- Gathering all the articles of the publication "Improving performance of water and sanitation public services" - Translate them before the 6th of January, for a distribution at the 6th World Water Forum. -	ASTEE	ONEMA , PFE	

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			Lead institution	**Main partners**	
January, 2012	Production of the final TSG report Preparation of the session Preparation of the 2 side-events on performance of public services (Forum and Espace France PFE).	It has to be sent to "Good Governance" coordinator, with a copy to the listed TSG members, to be presented at the Marseilles' Forum.	ASTEE	OECD, ONEMA, AFD	
February, 2012		Sending all the elements for the session to the "Good governance" coordinator.	ASTEE	OECD	
March 2012	Launching of the documents "No one left behind: Good practices to ensure equitable access to water and sanitation in the pan-European region"			French Ministry of health, UNECE	
March 14, 2012	Presentation of the gathered solutions. Discussion on the action plan and commitments.	Session of the TSG.CS1.A2 at the 6th World Water Forum	ASTEE	OECD AFD ONEMA	
March 15, 2012	Presentation of the French SISPEA observatory	Official side-event during the 6th World Water Forum week	ONEMA	ASTEE	

	IMPLEMENTATION OF THE TARGET **Expected results & Indicators of Success**	**PRACTICAL STEPS** **Activities to be done/**	**RESPONSIBLE PARTIES**		**ESTIMATED BUDGET** **(1k€, 10k€, 100k€, 1m€, 1b€) & potential sources of funding**
			Lead institution	**Main partners**	
March 15, 2012	Presentation of French solutions	Side-event	ASTEE	PFE, ONEMA, FNCCR, SEDIF, CG92, SIAAP and Nice	
October, 2012	Presentation of the TSG work	Presentation for the EDILE meeting (Nantes – France)	ASTEE		
June 4 to 7, 2013	Meeting to present the TSG progress and definition of the next steps (development of SISPEA; stage of improvement of the performance of public services worldwide; feedbacks …).	Congress of the ASTEE in Nantes (France).	ASTEE		
October, 2013	TSG meeting	International conference "Efficient 2013" in Paris (France).	IWA	ASTEE	
2015 – 7th World Water Forum	Presentation of the TSG progress/results				

Table 1: Methodology and time schedule of the TSG-CS1-A2

IV. Solutions

The TSG.CS1.2 has included in its report solutions related to its theme that have been directly transmitted to the target coordinator before January 25, 2012 (date of report rendering) and/or apparent on the Forum solutions platform before the 25th of January, 2012. Geographical balance sought to be respected, but a slight predominance of French solutions could be noticed. Finally, in addition to local and national solutions, the TSG tried to gather some international perspectives.

Clearly identify the role of responsible bodies and of public services' operators and generalize the establishment of service contracts setting out clear objectives and available resources provided by the responsible bodies

Case 1: A first step of this work already exists; it has indeed been conducted by the OECD for OECD countries. The "Water Governance in OECD countries: a multi-level approach" report issued in November 2011 presents an analysis of the allocation of roles and responsibilities in water policy in 17 countries leading to an "institutional mapping" through 17 detailed forms.

Case 2: Maharashtra is the 1st state in India to setup a water regulatory authority through an act in 2005. Authority issued 1st bulk water tariff order for various categories of users in May 2011. This was preceded by a transparent public consultation process, preparation of tariff criteria. The preparation of tariff proposal by service provider was followed by issue of tariff order by Authority in May 2011. Authority has put responsibility on service provider for improving water use efficiency and reduction in transmission losses. The authority will monitor the performance of service provider.

http://www.solutionsforwater.org/solutions/maharashtra-water-resources-regulatory-authority-a-case-study-of-regulatory-mechanism-in-india

Case 3 (selected for the session): The signature of a 5,5-year management contract between the public operator SEAAL (Société des Eaux et de l'Assainissement d'Alger) and the private company Suez Environnement leads to an improvement from 2006 and 2010 of 16 percent to 100 percent of the Algiers' population which can benefit from continuous water supply. The contract consisted in clear objectives like to reach technical performance corresponding to international Standard on water and wastewater, and to transfer managerial and operational know-how from Suez Environnement to Algiers.

http://www.solutionsforwater.org/solutions/an-innovative-public-private-partnership-for-improving-drastically-within-5-5-years-the-provision-of-algiers-water-and-wastewater-services-to-the-3-2-million-inhabitants-of-the-metropolitan-area

Case 4: In March 2000, the Municipality of Bucharest delegated responsibility for management of its water and wastewater systems to Apa Nova, a subsidiary of the international water operator Veolia Water. The delegation was by way of a 25-year concession contract in which the municipal objectives for water and wastewater services to be achieved appear. The Bucharest concession contract also sets out the rules governing the relationship between the private party and the municipality, with an economic regulator supervising tariff rules and a technical regulator monitoring the achievement of the performance indicators. Today the performance of these services has significantly improved (water losses have been reduced by 150M m^3 in 10 years for example) and will continue in accordance with the defined objectives.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 5 (selected for the session): The Nantes urban community (France), Nantes Métropole, an inter-municipality structure which brings together 24 municipalities is responsible for the public water and sanitation utility, as well as the management of rainwater and the preservation of the aquatic environment. In spite of a blend of management modes, that is the coexistence of public and private services providers on the same territory leading to different contracts and tariffs, Nantes Métropole has introduced contracts of agreed objectives and resources, a framework specifying: the stakes, the role of each stakeholders and the demands of Nantes Métropole ; the schedule of requirements of the public operator, including, where appropriate, the specific missions of this operator; the commitment over time to performance with indicators. These different contracts have identical objectives within the territory, according to a principle of equity, with the same tariff for water.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Build capacity for performance assessment at all levels

Case 1 (selected for the session): In order to assist the operators and managers of water and sanitations utilities and services in the implementation of performance evaluation and benchmarking systems, the IWA has published three manuals. The IWA manuals include a full system of performance indicators which might be used either as such together with other elements, or simplified through to the selection of part of these elements, in order to meet the specific needs of the users. The main purpose of these manuals is to provide guidelines for the elaboration of a management tool, based on the use of performance indicators, and usable by a broad scope of stakeholders or managers, in the water supply and sanitation services utilities. The benchmarking manual is an operator guide explaining the "why" and "how" of benchmarking.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 2 (selected for the session): The IBNET program of the World Bank started from small tests of performance data collection in a few developing countries working with utilities, their authorities, associations of water utilities, ministries and other important stakeholders. This built knowledge base supported institutionalizing a sound water monitoring systems in Albania, Brazil, Moldova, and a few other countries where water sector monitoring became a key sector development tool used by the governments for the sector transformation.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 3 (selected for the session): In order to improve the performance of water and sanitation public services in France, ONEMA, a scientific and technical public body working on water and aquatic issues, a national regulator too, is currently developing this solution setting up a performance monitoring system called SISPEA which started in 2009. Its role is to gather all the data and performance indicators from local authorities or from their operators to compare them and point out areas for improvement. Hence an annual consolidated national report on water and sanitation services performance is produced.

http://www.solutionsforwater.org/solutions/improvement-of-services-performance-thanks-to-a-national-watchdog-example-of-sispea-in-france

Case 4: In 2009, the FNCCR initiated a comparative analysis approach with the support of proactive communities. 31 communities took part in the first session of the drinking water utilities analysis. Twenty-six of them took part again in 2010 and another 20 joined in.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 5 (selected for the session): Water Operators' Partnerships (WOPs) are peer-support arrangements between two or more water or sanitation operators, carried out on a not-for-profit basis in the objective of strengthening their capacity. The Secretariat of the Global Water Operators' Partnerships Alliance (GWOPA), a global mechanism to scale up WOPs, hosted by UN-HABITAT is driven by an international Steering Committee and supported by a global network of partners and members. Amongst the GWOPA's activities, the one listed below could provide solutions to this target:

- facilitation of WOPs in the aim of capacity development of water and sanitation utilities,
- training, and
- networking of utilities, brokering of partnerships and sharing of good practices through electronic platforms.

On top of that, WOPs themselves are the solutions for cost effective and efficient capacity development of utility which should be following the assessment of utilities performance. In this process, other tools such as "Operators/WOPs profiles" and "Resources" can support the utilities' efforts to be engaged in the WOPs by providing case studies, good practices and lessons learned and brokering partnerships.

Case 6: In a range of developing countries (Mali, Nigeria, Chad,…) a part of the responsible body budget is allocated to the monitoring activity (from 0.03 to 0.09€/m^3), which is 5 to 10 percent of the water cost. The communities paying for this activity benefit from support and advice to optimize the operating costs of water services. The solution adopted by all countries in order not to exceed 10% of the cost of water is to pool several small towns, within a same region, to mobilize the same monitoring provider.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 7: The French Water Agencies today provide financial assistance in the form of results-based bonuses or subsidies in return for actions or work performed that contribute to the balanced management of water resources and aquatic environments. Within this framework, when a system is put in place to prevent the degradation of water quality, a bonus is paid out to the public or private facility owner or its representative. The bonus calculation is based on the quantity of household pollution that is prevented from entering or eliminated from the natural environment. The bonus may be modulated to take into account compliance with specifications imposed by a water police department. The average annual budget allocated to waste water treatment bonuses by the Rhône Mediterranean and Corsica Agency for the 2007-2011 period amounts to €90m.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 8: The Department of Water Affair's (DWA) of South Africa has overseen the use of Municipal Strategic Self Assessments (MuSSA) to survey and guide the overall "business health" of the water services function. The MuSSA survey determines the Business Health (Vulnerability) of 16 key service performance areas/ business attributes at a strategic/high level through the asking of 5 "essence" questions per each key functional business attribute. The Vulnerability scores per each of the 16 business attribute are tallied into percentages and presented in a "Spider-Diagram" type dashboard thereby providing a vulnerability snap shot view of the overall water and sanitation business. In order to rank the relative vulnerability of different municipalities, a single score or municipal Vulnerability Index is also generated. The MuSSA vulnerability outputs are then used to prioritize support to address and alleviate both specific areas of vulnerability and overall vulnerability.

http://www.solutionsforwater.org/solutions/harnessing-a-water-services-vulnerability-assessment-tool-for-supporting-good-governance-and-performance

Case 9: The General Council of the Herald (France) has set up a computer database compiling information from the monitoring stations from departmental networks set up in partnership with the responsible organisms: local, state services, Water Agency. Currently, the base of the Centre County Water Environment contains more than 19 million data that correspond to measured values. The General Council counted a dozen applications used internally by the services to meet their needs, produce results and documents intended for partners, and produce indicators that are available on a collaborative workspace.

http://www.solutionsforwater.org/solutions/gouvernance-pour-la-valorisation-et-le-partage-des-connaissances-sur-l%e2%80%99eau-exemple-d%e2%80%99une-autorite-locale-le-departement-de-l%e2%80%99herault-france

Case 10: Identification of indicators that are relevant and applicable was the main objective of the INBO and ANBO (Africa) project. The project also include the publication of an handbook which aim is to assist technical experts and representatives of basin organizations in their use of the Governance and Technical Indicators developed and applied in the context of the project. It provides information on the role of the indicators, a glossary of the governance and technical indicators. The Handbook also proposes instructions on how to gather and analyse indicator data and how to provide reports on the indicators, as well as how to use them for communication with stakeholders.

http://www.solutionsforwater.org/solutions/handbook-for-integrated-water-resources-management-in-transboundary-basins-of-rivers-lakes-and-aquifers-2

Case 11: In the Ashanti Region of Ghana, under the KfW funded Rural Water Supply Program Phase IV, a performance assessment mechanism was designed and instituted to measure the performance of WATSAN Committees. The tool is known as the WATSAN Performance Assessment Tool (PAT) and intended to serve as a means of measuring the performance of WATSAN Committees and their beneficiary communities during and after project interventions have ended.

http://www.solutionsforwater.org/solutions/monitoring-of-water-and-sanitation-committees-using-a-performance-assessment-tool

Case 12: A recent Government of India initiative to develop Service Level Benchmarks has created some interest among utilities. It is in this context that the CEPT University is implementing an action research project for the development of Performance Assessment Systems (PAS) for urban water and sanitation in India. The project is implemented in more than 400 cities in two states (Gujarat and Maharashtra) in India. In both these states, water and sanitation services are provided by municipal governments.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 13: The Real Time Decision Support Systems have been developed to promote efficient use of water resources, protect the source of water from failing, provide protection against water related risks and empower users to participate in water resources management through providing accurate and timely information. The RTSOS CENTRE is being developed to support the implementation of Real Time Decision Support Systems in South Africa. These solutions, if implemented effectively, can reduce wastage associated with operational inefficiencies. As a proof of concept, one of the existing Real Time DSS's (Developed to assist in operating the Orange-Fish-Sundays transfer scheme, which is one of the largest transfer schemes in South Africa) has been included into the RTSOS CENTRE.

http://www.solutionsforwater.org/solutions/real-time-system-operational-support-centre-rtsos-centre

Case 14: A project plans to help the Palestinian Water Authority (PWA) in running its regulatory business on the service provider in Gaza by enhancing an effective management interface between PWA and the service providers in Gaza and the West Bank in the future. This will be achieved by implementing a capacity building program for PWA to carry out its regulatory and oversight functions through improvements in management procedures and systems, training measures, communications etc. In parallel, the Coastal Municipal Water Utility (CMWU) institutional and human resources capacity will be enhanced to cope with its role as a service provider satisfying the requirements of regulation. In addition to the capacity building, the management interface shall be enhanced by creating the methodology of performance measurements through a designed procedure and routine of reporting. The provision of service shall be monitored by performance indicators taking in account the economic, environmental and technical aspects of the service.

http://www.solutionsforwater.org/solutions/management-interface-between-regulators-and-service-providers-through-enhancing-performance-indicators

Develop the reasonable use of performance indicators for competent authorities, responsible bodies and all actors involved

Case 1: The General Council of Hauts-de-Seine (France) implemented a monthly report gathering indicators to improve the performance of its service. Each month, some indicators are calculated by the operator. Thus, a monthly report of activity can be produced in which are informed, in the form of charts, tables and maps:

- indicators of the month and increment since the beginning of the year,
- a perspective overview with the previous year,
- the volumes corresponding to the objectives set in the service contract

Most of the indicators have to be commented to give accurate or elements of analysis of the figures. Thanks to these figures, the local authority is able to point out areas for improving its service.

http://www.solutionsforwater.org/solutions/the-monthly-activity-report-a-tool-to-improve-services-performance

Case 2: Since 2008, Vivaqua (Belgium) has developed a balanced scorecard (BSC) gathering 38 performance indicators classified in 4 categories: funding results, customer satisfaction, internal

processes, and innovation and learning abilities of the organism. This BSC presents several advantages: benefit of an overview, allow benchmarking, and be used as a communication tool…

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 3: The benchmarking of water services, in which Eau de Paris (France) is based on a battery of international indicators produced by the International Water Association (IWA), which lends greater credibility to the definitions of the indicators used, providing a reliable base for comparison. Eau de Paris was the first French water company to participate in this benchmarking effort. It did so to compare itself with other companies of a similar size in terms of service population. The first phase involves the compiling of the data (more than one hundred different data items) required for calculating the indicators. Once this compilation is complete, an initial evaluation is performed. It serves to identify changes in the water service compared to previous years and highlights the strengths and weaknesses of the service. The indicators used include context indicators and performance indicators. Eau de Paris has participated in VEWIN benchmarking since the 2006 annual report.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 4: It is through the delegate's compensation as paid by the SEDIF (France) that performance targets, both technical and financial, will be measured. A technical performance assessment, for which a delegate is either paid or penalized as an incentive to maintain a very high level of service quality, is conducted on a set of 136 indicators broken down into four categories : user services (17 indicators), technical management (43 indicators), sustainable development (24 indicators), and water quality (52 indicators). Financial performance is measured through the delegate's economic outturn (the share of operating balance) and through the restraint of current expenditures (which provides an incentive on limiting operating expenses).

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 5 (selected for the session): In September 2002, the city of Shanghai entrusted Veolia Water with the management of water services in the Pudong district. In order to better assess network performance and to ensure a good quality and a sufficient quantity of water, Veolia Water installed in particular 400 electromagnetic flowmeters and sensors, and used GIS. Within just a few years, the efficiency of the Pudong distribution network increased by 10%, on a like-for-like basis.

More information in the book published for the 6th World Water Forum (ASTEE, 2012).

Case 6: Small scale rural water supply network management software is developing to facilitate the daily work for water supply private operators in Burkina Faso. Relevant management indicators will be generated, monthly operating accounts will be created, figures and tables will be done for completion of operating and performance reports to local authorities. This tool will be connected to a web platform to become a real tool for decision support. This is Vergnet Hydro which initiates the project on its own financial resources. The beta version will be shown to the

national water authorities in Burkina Faso and will be tested with Faso Hydo, a local subsidiary of Vergnet Hydro, in charge of operating 7 water piped systems in the Sahel Region (Program PAR).

http://www.solutionsforwater.org/solutions/monitoring-software-for-small-scale-rural-water-piped-networks-private-operators

Enhance the sharing of knowledge and skills – Supporting training approaches

Case 1: WIKTI (Water International Knowledge Transfer Initiative) is a tailored and innovative solution for transferring Suez-Environnement knowledge and improving the performance of its Business Units (BU) in the fields of drinking water and wastewater. Its implementation is based on three phases: assessment, deployment, and measurement. This methodology, standardized and ISO 9001 certified, is applicable to all kinds of BU. It has been developed in the framework of the management contract of Algiers in 2006 and is also used for the management contract of Jeddah since 2008.
http://www.solutionsforwater.org/solutions/wikti-a-network-of-people-for-know-how-transfer-and-performance-improvement

Case 2 (selected for the session): Whilst effective action has already been taken in terms of infrastructure development and rehabilitation, as well as of peer to peer learning and benchmarking, utility managers and decision makers in developing countries still lack access to adequate training courses that are internationally recognized. In 2008, the Chair "AgroParisTech-Suez Environnement Eau Pour Tous" was created, together with a one-year International Executive Master-OpT (IEM-OpT). The IEM-OpT is currently a training program, designed for future leaders of drinking water and sanitation services operating in partnership with the authorities in charge of these services; work-based, with periods on the job alternating with periods at the graduate institute.

http://www.solutionsforwater.org/solutions/international-executive-master-water-for-all-eau-pour-tous-opt-in-water-utility-management-3

Case 3: Caen-la-Mer is the first French urban community that used tools from the INDIGAU project in 2008. INDIGAU is a decision-support system which brings to wastewater utilities the security of an optimal pipeline renewal strategy. INDIGAU is the result of 3 years of R&D, in partnership with a leading research unit from INSA Lyon engineering school. It is now a fully functional commercial solution with a unique concept: the Club indigau, a G2C-INSA-Public Utility tripolar partnership. INDIGAU is available in SAAS mode if the utility wants to be the end-user, or through consulting services from G2C environnement.

http://www.solutionsforwater.org/solutions/indigau-decision-support-system-for-optimized-sewer-pipeline-rehabilitation-planning

Case 4: SIROCO is a decision-support system which brings to water utilities the security of an optimal pipeline replacement strategy to maintain asset service levels (targeting critical pipelines;

improving and maintaining network performance; controlling capital investments on the long run). SIROCO works with multi-objective optimization principle taking into account: Network efficiency, Service continuity, Hydraulic reliability, Road traffic flow, OPEX and CAPEX. SIROCO is the result of 3 years of R&D, in partnership with a major French research institute. It has had several years of further improvement. SIROCO is available in SAAS mode if the utility wants to be the end-user, or through consulting services from G2C environnement.

http://www.solutionsforwater.org/solutions/siroco-decision-support-system-for-optimized-water-pipeline-rehabilitation-planning

Case 5: Local water governance is widely engaged with investment decisions, procurement, tariff setting, asset management and distributional aspects. The International Summer School on regulation of local public services is designed to offer a 2-week "full immersion" on these topics and it is addressed to undergraduate students at their last year, graduate students and officials from the Public Administration (municipalities, counties, regional bodies) and regulatory agencies. Theoretical lessons, sectorial and national case studies, working groups and study visits are proposed. Water and sewerage services are widely covered in the program. The Summer School takes place in Torino (Italy) every year in September.

www.fondazioneambiente.org/iss

Case 6: The LORENET project, coordinated by Fondazione per l'Ambiente and supported by the Chamber of commerce of Torino, was initiated in 2010, with the aim of establishing an international network of researchers, decision-makers, research and education institutions, enterprises, and other stakeholders, on the issue of regulation of local public services, included water and sewerage services. Within LORENET Fondazione per l'Ambiente is now leading the collection of contributions from different Country experts to build a comparative table on economic regulation of water and sewerage services. The peculiarity of this research is the specific focus on local aspects of service management and regulation.

www.fondazioneambiente.org/lorenet

Case 7: Launched in Abu Dhabi in July 2008, the Arab Water Academy (AWA) is a regional center of excellence for executive education and capacity development in water. The focus of the Academy is on strengthening the knowledge and skills of the Middle East and North Africa's decision-makers to address and manage effectively the region's water challenges. The topics covered by the AWA learning programs included water governance, water diplomacy, water demand management, non-conventional water resources management, utility reform, private sector participation in water, and climate change and sustainable land-water management.

http://www.solutionsforwater.org/solutions/the-arab-water-academy-regional-center-of-excellence-for-human-and-institutional-capacity-development-in-the-arab-water-sector

V. Recommendations for follow-up

Governance principles that could contribute to improve performances

- **Clearly identify the role of responsible bodies and of public services' operators and generalize the establishment of service contracts setting out objectives and available resources provided by the responsible bodies**

Irrespective of the fact that services are organized at local, regional or national level, a clear distinction has to be made between the role of responsible bodies and that of operators acting on their behalf (public or private); this separation enables a clear statement of political objectives as well as the means that the public authorities intend to allocate to the water and sanitation services.

Regardless of the operator's status, the contract between a responsible body and its operator is the tool that enables to clearly set out this relationship, to clarify the goals expected by the authority and to specify the set of indicators to be monitored by the authority as part of the control of the proper delivery of the service: it is one of the two key-tools of the performance.

- **The setting of clear objectives by the responsible body**

The responsible body is in charge of delivering access to good quality public services to users. It is also accountable forward citizens. It is therefore paramount for it to clarify the objectives of its policy regarding water and sanitation services, as well as the financial resources to be allocated going through a proper planning of the management of those services. This allows to meet the expectation of transparency forward citizens and users, as well as to enable to give clear instructions to operators and to set the reference point against which to measure the actual implementation of the policy targeted (one of the three components of the performance's definition).
Planning for the management of water and sanitation services by the responsible authority is the other key-tool of the performance (especially for asset management). It is the prerequisite for the establishment of a contract between the authority and the operator.
Performance measurement in the water sector should also take into account the achievement of equitable access to water and sanitation for all, and in all geographical sectors.

Foster the adoption of relevant capacity building and monitoring mechanisms (including performance indicators) to strengthen and evaluate water policies

The report highlights various tools to enhance the capacity building of responsible authorities including citizen participation and the definition of a budget to devote to the monitoring activity. These tools have proven their effectiveness, therefore it is important to support and develop them. Moreover, the use of suitable performance indicators along with context indicators through scorecards filled regularly is an important mechanism for monitoring the performance of water and sanitation public services.

Create, update and harmonize water information systems and databases for sharing water data across basin, and (local, national and international) administrative frontiers

Water information systems and databases are essential tools to improve the performance of water and sanitation public services through the principle of benchmarking. But to be effective, these information systems must exist and be updated with reliable data, which is the responsibility of the responsible authority. Then the bodies in charge of these databases have to harmonize these systems to make usable the result of benchmarking.

VI. Conclusion

The ASTEE and the OECD have identified performance measurement, regulation and capacity building in the water sector as a key target for all services' stakeholders. Indeed, improving the quality and efficiency of public water and sanitation services is a goal shared by local authorities, water professionals and the citizens.

Optimum service performance depends on a combination of technical, economic, organizational and environmental performance. That is why, achieving this target requires both good governance principles and solid tools adoption:

- Clearly identify the role of responsible bodies and of public services' operators (to be distinct) and generalize the establishment of service contracts setting out objectives and available resources provided by the responsible bodies;
- The setting of clear and achievable objectives by the responsible body;
- Foster the adoption of relevant capacity building and monitoring mechanisms (including performance indicators);
- Create, update and harmonize water information systems and databases for sharing water data across basin, and local, national and international administrative frontiers.

A book published by the ASTEE for the 6th World Water Forum gathers around forty articles written by key actors and structures of the performance issues. These contributions detail some of the TSG-CS1-2 solutions.

However, progressing towards the objectives above require the commitment of all kinds of institutions: national and local authorities, operators, but also IFIs, who play a major role in setting up projects management standards as they own the money, and researchers and universities who can help to identify and improve tools/methodologies allowing to improve services performance.

As a conclusion, we call all those actors to take part of the international working group steering by the ASTEE and to help the TSG to achieve its commitments thanks to concrete actions.

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