

Water Demand Management Policy Elements and Principles

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1. Water demand management

The Water demand management refers to all the measures aiming at increasing technical, social, economical, environmental and institutional efficiencies in all sectoral uses. Water demand management is targeting water losses reduction and uses optimization for a better satisfaction of the current and also of the future water demand (Plan Bleu 2014¹).

Water Demand Management is one of the 4 main chapters constituting the 2010 Strategy for Water in the Mediterranean, developed under the Union for the Mediterranean framework. It states that Water demand management related objectives need to:

Ensure **water saving and slow demand growth** through a more efficient allocation of water resources;

Reconsider global strategies for **water allocation** and quantify the potential gains to be achieved ;

Ensure **performant public water services** that provide access to adequate and affordable water supply and sanitation ;

Reduce and prevent water pollution, and aim at good status for all waters based on a comprehensive monitoring system ;

Set standards for efficient **agricultural practices**, and promote cropping pattern adaptation ;

Develop additional water resources volumes once demand side policies and planning options for water saving have proven to be insufficient, and set priority choices.

2. Statement/ Purpose

The WDM policy must enable the Palestinian Water Authority to ensure the sustainable and continuous use and provision of water resources for all sectors by :

- i) monitoring and assessing annually their quantitative and qualitative aspects,
- ii) proposing water allocations according to priority criteria and relevant institutional mechanisms,
- iii) enhancing the efficiency and cost recovery of water Services,
- iv) developing special mechanisms for crisis management as entrusted by the Palestinian Water law N°14 issued in 2014.

¹ UNEP-Mediterranean Action Plan Regional Activity Center

3. *Terms and Concepts*

Concepts are the basis for any activity to be referred to as part of Water Demand Management Measures. Concepts and principles are defining the normative framework for a national water demand management policy, and are contributing to a common understanding among Palestinian institutions and stakeholders. Here are the core contents of the WDM Palestinian policy elements and principles:

Hydraulic system it is the relevant scale in Palestine to calculate water balance and define related action plans. It embraces all water supply facilities and uses within its delimitation. It is the proper scale for planning investments and implementing water demand measures. Water systems in the Palestinian water strategy are strongly interconnected according to complementary water reallocation targets.

Water Allocation is considered as the planning process using regulatory tools which consists in supplying all users with water volumes according to the legal framework in order to meet the *demand*. Water allocation refers to sectoral share but also to individual water permits, which are by the Palestinian law revocable at any moment. The precarious nature of authorizations is a sensitive issue for water utilities, concerned by *restrictions* that may threaten the sustainability of the service they provide and hamper investments.

Water reallocation is defined per hydraulic system based on the results of negative water *resources balance* and in conformity with

- i) the water law which states in its Article 6 absolute priority to domestic use and
- ii) the transboundary water agreements of the territory affected.

Water reallocation consists in modifying the original volumes allocated

- between uses according to intersectoral or/and intrasectoral rules,
- between regions through water trade,
- And/or between the different types of water resources (non-conventional and conventional).

The *allocation keys* or criteria need to be defined by regulation prior to implementing uses restrictions and to be applied with no exemption to legitimate actions.

Water demand is the total amount of water needed to satisfy, without interruption, all the needs within a water system. It includes all sectoral uses (drinking, agriculture, industry, recreational, etc.), environmental needs (humid zones, water courses...) and losses through transfer and distribution facilities, but also at field level for irrigation. Water demand management measures must be implemented within a *water system*, according to *allocation* criteria, prior to developing resources and supply facilities. *Projections* for water demands must take into consideration *efficiency* levels and improvement targets.

Water efficiency = $\frac{\text{amount of water consumption}}{\text{amount of water delivered}}$ in %. The highest the efficiency is, the less water losses are. Water efficiency may be calculated as a global figure or per sector, depending on the objectives targeted. System losses must consider municipal and regional water networks and facilities. Water may be lost in the system through illegal connections to the pipeline, unmetered connections, leakage and evaporation. Efficiency rate targets per sector must be defined and monitored in water demand management action plans. In that purpose it requires *meters* at any outlet/delivery point to monitor water available and distributed.

Water demand management measures are of institutional, economic, social and technical nature. They focus on water savings (non revenue water reduction, global efficiency enhancement, resources substitution or reallocation...), change of practices/behaviors (awareness raising, participation, collective action...) and water conservation enforcement (legislation, standards). These measures need to be prioritized according to public health and general interest, cost/benefit analysis, sectoral use and social acceptance, applicability, relevance etc... For example in general, efficiency measures require lesser investment costs than reuse, but allow lesser water exploitation.

Water needs for the domestic sector is calculated based on the population growth and on the living standards. While average water per capita is expected to rise in Palestine, reducing losses at the same time can afford slowing investments in supply facilities. Water needs for agriculture are expected to take into consideration climate change scenarios in the Middle East and adaptative measures ranging from cropping pattern to water-efficient equipment and, more than any sector, to achieve legal, organizational and institutional measures as stated in the 2014 Water law Art. 48. Water needs for industry must consider water efficient and recycling processes.

Water resources cover all waters, surface, groundwater and sea, whether conventional or not. The development of non-conventional resources pertains to demand management measures, as it enables reducing the pressure on renewable fresh water. Are considered as **non-conventional water**: desalinated water (from the sea or brackish water), treated waste water, water harvest, wadis run off catching, water imports and transfers. All of them are part of the National water strategy 2013-2032.

Water balance is the gap between existing water supplies and water demand. As both water demands and supply facilities (dams' storage, water table...) fluctuate on a seasonal and daily basis, hydraulic systems scale enables to account for these variations in fluctuations. When the system fails at satisfying the demand more than 8 years out of 10, water demand management policies should be implemented in order to avoid repeated *crisis* to happen.

Projections of water resource development and of water demand through time are used to assess water balance trends, as a decision-making tool for short, middle and long terms *planning*. Based on a set of assumptions (including climate change, economic development, social acceptance, achievement rate of water demand measures...) contrasted scenarios can be built and modelled to help figuring out the most relevant options.

Planning: immediate solutions on the individual scale are not sufficient to tackle water scarcity in Palestine, therefore planning is necessary at national and regional levels, for the achievement of water scarcity management plans and for the coordination and prioritization of investments programs in predictable conditions. Planning instruments must be developed at different levels, and complemented by operational management tools at local level (municipalities, village councils).

Crisis management plan: in case of severe drought event or accidental water pollution the crisis status may have to be declared for a short time. It modifies water allocations according to specific priority uses and organizes, based on successive thresholds, regulatory limitations in percentage of volumes, timing or discharge. In addition, it may develop temporary urgent supply solutions. Indicators indexed on water resources status monitoring are required to define the start and the end of the crisis, so as the hydraulic system concerned by the crisis measures. Repeated crisis management lead to by-pass strategies from users which induce increasing private pumping capacities, strengthening water markets, and disorganization of the water

sector. Therefore, in structural imbalance water systems, water demand management must be implemented in order to avoid crisis management.

Public participation : Its “main purpose is to improve decision-making, by ensuring that decisions are soundly based on shared knowledge, experiences and scientific evidence, that decisions are influenced by the views and experience of those affected by them, that innovative and creative options are considered and that new arrangements are workable, and acceptable to the public.” (Guidance on public participation in relation to the Water Framework Directive, Final version, Dec. 2002).

4. Underpinning principles, values and philosophy of the WDM policy

Water is an inalienable good:

The Palestinian State is the sole guarantor and arbiter of water rights, whatever the resource considered, according to the basic principle recalled in the article 3 of the Decree No.(14) for the year 2014 Relating to the Water Law.

The Palestinian Authority states its water rights, including the fair right-of-access, right-of-control and right-of-use to water resources shared with other countries, in line with international law.

Water Sustainability Principle:

Decision-making on allocation and protection of water resources must take into account the needs of both present and future generations.

Water scarcity principle:

Water is a scarce resource in the Southern region of the Palestinian territory and all over the country in summertime. All water conservation measures must be taken, regardless of implementation difficulties that could be encountered. More users-oriented policies must aim at increasing water efficiency and valorization through legal, technical, economical, organizational and social aspects.

Overall management of all waters:

All abstraction points require an authorization. The central administration is delivering these permits according to the water status of the hydraulic system, on the characteristics of the project and the provisions of the legal documents on-force. Water demand management measures must be applied at the water system scale, including for transboundary ones, to all sectors and all territory concerned, considering the unicity of the hydraulic system.

Integrated Water Resources Management:

Future demand per type of resource is important not only for water supply, but also for the determination of sewerage collection networks and wastewater treatment facilities. Hence the assessment of future water demand is one decisive input for the functional design and the dimensions (and cost) of the future installations. Consideration of total and seasonal demand for treated wastewater for irrigation and the proposed distribution and location of its use considering the possibility of surface water collection and possible mixture with treated wastewater and required infrastructure.

Risk management:

The diversification of water sources and the possibility of connecting water supply networks are of utmost importance for tackling the risk of water shortage. Strategic places should be supplied so that they can be served ultimately from different independent systems.

Cost recovery:

Water facilities condition the existence and development of human activities. The services of general interest they provide are structural and permanent. The investments they represent are significant, they must be considered together with guarantying cost-recovery and

ensuring sustainable access to the water resources. These are conditions for attracting the private sector. That is the reason why the adequate tariff system for the users must be defined and the principle of cost recovery applied by the service providers, as the counterpart of water access.

Policy assessment:

Driving forces of water demand are many (socio-economic, territorial or demographic factors for drinking water, market price, land tenure or production subsidies for agriculture, energy costs, etc.), therefore coordination of sector policies is required. Joint economic and regulatory tools must be targeted in such a way that implementing water demand policy does not impede socio-economic development objectives. In order to adapt and improve action, comprehensive mechanisms for monitoring and assessing water demand measures, and more globally water policy, should be implemented.

Principle of Openness and awareness:

Information on the condition and use of water resources should be accessible to the public. Volumes abstracted and distributed must be monitored on a continuous and reliable basis. Compliance controls with regulations can lead to sanctions when infringements. The importance of the national reporting system must be emphasized for water utilities as its results agglomerated at national level can be used for accounting for the Water Authority action with respect to international donors, and for arguing with border Israeli Water Authorities.

Participatory Principle:

The implementation of water demand management measures will need additional institutional and legal development, more community-and-citizen-oriented approaches and local empowerment with increased stakeholder's participation in the decision making and easier interactions between organizations and within organizations including with their respective customer base.

Professionalization of stakeholders:

Stakeholder's users participating to decision bodies need a minimum technical background and policy understanding to contribute to constructive debates and take part to actions. In addition, water utilities deserve vocational trainings (management, and O&M) to be linked with the expected services performance increase. Standardisation of water efficient equipment and certification of avocations should contribute to give a better visibility and enhance the level of water and sanitation services.

Polluter-pays:

Water polluters should stop their pollutions and be made to pay for the damage they have produced. The fees due are proportional to the quantity and nature of the pollution.

5. Benefits/ added value of the policy

The WDM policy is expected to contribute to the Palestinian State long term planning process by establishing, at several geographical levels, sharing processes of the Palestinian full-right water resources. That must result in the optimal use of all available water resources, from both an environmental, economic and social perspective (health, revenue, jobs) and in particular in the improvements of the water services provided to customers (increased quantity per capita², hours of service, pressure, water quality), in the service coverage being expanded to include those localities that are not currently connected to the water supply network, and in the maximization of the volume of water made available for irrigation.

It is an ambitious policy in terms of the services provided to citizens and economic development, but also in terms of governance and legal and institutional framework, as it must pave the way to stronger stakeholder's involvement in water management. As a consequence of the implementation of the proper measures, the WDM policy must lead to ensuring financial sustainability of water operators and the sustainable use of these resources (voluntary limited rate of abstraction and resource protection).

On the short term, considering that only few additional water resources will become available to meet the growing demand of Palestinian citizens, farmers, tourism and industries, measures tackling non-agricultural water demand networks and agricultural demand are even more crucial, such as UFW reduction, drilling new wells and/or rehabilitating existing wells, water harvesting, desalination of brackish springs, treated wastewater reuse for irrigation, improving irrigation efficiency, evolving the crop pattern...

The implementation of a sound WDM policy and the achievement of higher water efficiency rates will benefit the Palestinian State not only for more profitable investments and more water security, but also towards the international community, to gain more credibility in the negotiations.

6. Scope

Planning and Regulatory and operational functions, so as citizens, are targeted by the WDM policy. Indeed the water supply and wastewater sector is considered both as user and as provider, since treated wastewater effluent is added to the water balance.

In addition, Regional Water Utilities and water users' associations (including farmers' associations) must be recognized as formal entities entitled to negotiate and manage shared national water rights on behalf of their members.

Finally, public awareness and participative processes are fully part of WDM measures.

² According to the 2013-2032 National Water and Waste water Strategy for Palestine, the quantity of water made available to each citizen is expected to be 120 liters per capita and per day in the Gaza Strip and the West Bank, instead of current respective 96 lcd and 72 lcd.

7. Policy statement / Main components of the policy

It is the Water Demand Management policy component to:

1. Define all water resources available in Palestine as the common property of the Palestinian People.
2. Define the priorities for allocating available water resources to the different types of user and ensure that absolute priority is accorded to domestic purposes over all other uses.
3. Define the allocation principles and to allocate water quantities for economic benefit (agriculture, industry, tourism, etc.) between different users based on the economic benefits to Palestine (in terms of revenue, job creation and food security) and in agreement with national development plans.
4. Have a dedicated national authority to set and review the water rights allocation at national level. These rights will be limited in volume and in time and will be allocated for well-specified purposes; to this end, all well drilling, water production and supply will be allowed only by permit or license.
5. Ensure that the allocation of limited water supplies within each specific user type and among the regions is fair; where necessary, transfers will be organized from basin to basin and region to region, under the responsibility of the bulk supply utility.
6. Organize the legal frame and mechanisms for settlement by arbitration, and, if necessary, through the courts, of any disputes that may arise from the allocation of water rights.
7. Exclude that economic development, even inadvertently, would imply unsustainable water use, or irreversible environmental damage; the regard for resources and the environment will lay the premises for economic solutions.
8. Ensure that, water consumption in the agricultural sector adjusts to ensure cost-efficiency (choice of cultivars, use of marginal-quality water and more widespread use of improved irrigation technology).
9. Provide updated performance indicators, notably as regards water utilities. A monitoring system play a key role in the process of improving the quality of services offered and provide incentives to services providers.
10. Redistribute, when crisis arises, the water allocations from areas with greater access to supply to areas with poorer access to supply.
11. Task the regulated public organizations with the provision of domestic and drinking water supply services, and of wastewater collection and disposal services.
12. Encourage the institutional restructuring of the Water Sector and involvement of the private sector in the funding, implementation, operation and maintenance of water supply and wastewater systems to improve efficiency and the performance of water sector and the transfer of technological expertise.
13. Encourage the involvement of Regional Water Utilities and formal water users' associations to ensure optimal management of shared water resources (including wells, springs and treated wastewater) used for economic purposes (irrigation).

14. Ensure the adequate involvement of all stakeholders (from a gender perspective) in water and wastewater programs & projects, to support sustainability in water resources management
15. Prioritize the optimal use of water resources, including the allocation of public funds, by encouraging efficient performances.
16. To implement financial mechanisms to guarantee water utilities viability and make water and wastewater services affordable for the poor (through cross-subsidy among water users rather than direct subsidies from central or local government).
17. Encourage water service providers to reduce the quantity of non-revenue water in order to increase the availability of scarce resources to customers and improve their operational efficiency to progressively meet national targets.
18. Develop water demand management strategies, including suitable tariff mechanisms and public awareness-raising.
19. Stipulate that the organizations responsible for the water sector produce financially and technically sound plans to meet national long-term strategic objectives and regional (within Palestine) infrastructure master planning requirements, as well as the short-term investment requirements of the water sector.

8. Management plan

The water policy definition and implementation is currently built on the distribution of responsibilities between different categories of stakeholders. PWA is the corner-stone of the national water management system.

1) The regulatory bodies:

- PWA is in charge of the overall regulation of water producers and service providers. In fact, PWA is more concerned with the domestic sector. PWA is also responsible for the establishment of Regional Water Utilities.
- The Water Sector Regulatory Council, by law its responsible to monitor the performance of water Service Providers with the aim of ensuring quality and efficiency to consumers at affordable prices.
- The Ministry of agriculture is in charge of policy and regulation of irrigation and promotion and organization of farmers' associations.
- The Ministry of local government is in charge of implementing and supporting Joint Service Councils for Water and Wastewater in coordination with PWA.

2) The regional operators:

- The West Bank Water Department. It is fully under PWA's supervision and acting on behalf of PWA for abstracting and distributing bulk water through the WB. It is expected to become the National Water Company with modified status.
- Regional water utilities, Joint service councils, Municipal water departments and WUAs are responsible for the provision of respectively water and wastewater services and irrigation, each within its specified administrative and geographical scope.

Some utilities are currently providing services (CMWU, JWU, WSSA), still this category of regional operators is not yet fully operational.

3) The private sector :

This third category of stakeholders is playing an active role in the local water management and deserves attention:

- The private well owners who sale water to individuals, municipalities or even to WBWD in case of water scarcity, according to legal agreements (strongly represented in the Northern region);
- The tankers who provide regular water for drinking in some places or even to industries based on private contracts (strongly represented in the Southern region and the Jordan Valley).

9. *Implementation method*

- **The WDM policy should be closely coordinated with the transboundary water resources strategy.**

At national level, the purpose of reallocation processes should be to adjust the water demand to the total resource available in order to avoid crisis management. Groundwater is the major source of water in Palestine. Long term resource available is therefore subject to hypothesis strongly related to the transboundary water resource strategy and not only to hydrogeological models and climate change.

- **It is highly recommended to assess annually the water allocation.**
This includes the differences between all water inflow and outflow components per hydraulic system. This activity will not only enhance the management of all water resources and identify any other new potential resources, but it will also allow the definition of the utilization priorities of water resources for each sector, considering water resources for agriculture together with domestic and industry.
- **A comprehensive monitoring system integrated into the decision process** at the relevant geographical scale and **a data reporting system** being part of the national policy assessment.
- **The planning process at sub-national level rely upon regional action plans** featuring specific objectives, investment programs, institutional frame, etc... They identify priority zones according to the nature of problems (structural imbalance, quality decrease...) and develop rehabilitation programs of applied measures on a 5 year-long-period.
- **Real planning instruments at subnational levels, endowed with regulatory status**, can help setting the minimal requirements applicable to any institution and giving more consistency between the different implementation plans. Inside these limits, regional operators should be entrusted with more responsibilities to achieve their objectives, as long as they match national orientation.
- Water utilities play indeed a very significant role in implementing projects with international funds, notably through decentralized cooperation. More interconnected regions and bulk supplier require a **higher level of cooperation between institutions and users** to be more organized and qualified to take part to decisions and to improve water allocation among communities. Public consultation will be part of the process as well.
- **A specific mechanism for reallocating water from the agricultural sector**, or among well owners for irrigation.
The specific regulation for Water Users Association under development by PWA in relation with the Ministry of Agriculture must lead to the emergence of collective organizations with internal rules for implementing the water regulation and of official farmers representatives to participate to the negotiations.
- **A legal status for crisis management.**
Crisis can happen at different geographical scales and severity stage. In case of severe climatic or accidental event the crisis status may have to be declared for a temporary period time. It modifies water allocations according to specific priority uses and organizes, based on successive thresholds, regulatory limitations in percentage of volumes, timing or discharge. In structural imbalance water systems, water demand management must be implemented in order to avoid crisis management.
- **Drought Plans** (or whatever plans targeted at decreasing water abstractions) **at local scale** should be designed to anticipate, rather than decide in emergency, the

measures (definition and implementation of restrictions on each use, depending on the degree of the depletion of water resources) to manage such episodes. In the specific case of temporary restrictions wells under the Municipalities operation and private wells for agriculture should also be part of the national device in order to avoid speculation. Wells located on the Israeli side abstracting in the same aquifer as well for equity reasons.

10. Infrastructure

Infrastructure needed related to WDM measures are resource monitoring devices such as piezometers stations, ground water mathematic models, GIS and National water information system, covered conveyors and pressurized water channels compatible with water efficient irrigation equipment, water meters and remote transmission, remote management

11. Constrains

PWA and service providers face a number of 1 constraints linked to the Israeli occupation (difficulties and restrictions accessing land and water resources, abnormal delays and difficulties importing equipment, etc.), especially in Area C, which impede WDM policy implementation.

At national scale, the legal and institutional frameworks need to be completed, notably to give Regional Water Utilities and Water users associations a relevant status, to define planning processes involving village councils or municipalities, to settle sub-national committees entitled to take measures applicable on the ground, to define specific crisis resolution mechanisms, or to develop the mechanisms necessary to encourage the farmers to use the treated wastewater in agriculture.

However these conditions should be considered as constraints to be removed on the way.

12. Effectiveness

The Palestinian State is well advanced in establishing the legal frame, water policy documents and strategies development taking into consideration water demand, as the following recent and valuable references attest:

- ✓ The 2014Palestinian Water law N°14
- ✓ The National Water and Wastewater Policy and Strategy for Palestine 2013-2032
- ✓ The strategic water resources and transmission plan (2014).
- ✓ The Water sector reform Plan 2014-2016.
- ✓ The Water Master Plan for the Southern West Bank. Final. (2012).
- ✓ Strategy for Non-Revenue Water Reduction.
- ✓ Strategy for Sustainable Financing of the Water Sector (2015).
- ✓ The transboundary water resources strategy 2013.

- ✓ The West Bank emergency water preparedness strategy accompanying document to the action plan (TPAP I, 2012).
- ✓ Mitigation and adaptation measures for climate change in Palestine (Final) 212.

Therefore the recommended effective date for the start of implementation of the WDM policy is a continuation of the work being done so far.

13. Approval

The WDM policy shall be set by the Palestinian Water Authority, approved by the Cabinet of Ministers and signed by the Prime Minister.

In accordance with the principles set above, the discussion with and the participation of the main stakeholders representatives to the development of the document is required. It is a guaranty for higher social acceptance.

14. Performance indicators

In order to be able to follow up the achievement of the policy targets, a set of indicators shall be established and calculated on a regular basis. These indicators shall provide quantitative information related to the achievement of the actions (results indicators), but also of the implementation process (means indicators). They necessarily need to be analyzed and commented taken into consideration the context and the system of constraints.

The initial assessment of the situation according to this set of indicators is recommended. Priority shall then be given to the collection of the data required for the calculation of these indicators. The KPI of water service providers provide part of the information needed. These indicators may be pulled out of the following list established based on the Palestinian policy documents and on the international community standards. All indicators should be “SMART” (Specific Measurable Achievable Relevant and Time-bound). Indicators are also expected to be compliant with international standards in order to be comparable with neighbouring countries.

Target	Indicators as mentioned in the water strategy 2032	Alternative Indicators
Increase the quantity of water delivered to customers	Volume of water available per person (lcd)	Total water demand and sectoral water demand (Mm3)
	water available for industry, expressed as a % of domestic WS	
	UFW (%)	Water efficiency index per sector (domestic, industry, irrigation)
	Water produced through various sources : groundwater (Mm3/year), desalination (Mm3/year), import (Mm3/year)	Share of water distributed according to its source (import/desalination/renewable groundwater/Treated waste water/other) Exploitation index of renewable water resources (%) Non-sustainable water production index (%)
Improve the quality and reliability of the service	number of un-served communities number of working house connections % of serviced customers % of customers benefiting 24h service volume of storage expressed in hours of supply	Share of population with access to an improved water source Share of population with access to an improved sanitation system (total, urban, rural)
		Share of WWTP whose treatment level is not appropriate to water reuse purpose Share of industrial wastewater treated on site
Reduce inequalities among regions and localities	water available per person (lcd): minimal average per governorate range of tariff	Share of population with access to an improved water source Share of population with access to an improved sanitation system (per region) Number and average duration of water crises outbreak per region
maximize the volume of water made available for irrigation.	water made available to farmers (Mm3/year)	Water added value (ILS/m3) Water productivity (kg/m3) Percentage of treated waste water reused for agriculture Surface equipped with modern irrigation systems Share of water for agriculture reallocated
Ensure financial sustainability of water operators	% of autonomous water utilities % of metered connections working ratio = Costs / operating revenue collection efficiency	Share of water delivery points equipped with meters. Annual number of village councils gathered into shared water and sanitation services
Strengthen the foundations of good governance and the legal and institutional framework	<i>New Water Law enacted, implemented PWA restructured, functional, capacities developed Water Regulatory Council established, functional, capacities developed National Water Company established, functional, capacities developed JSCs/Regional Water Utilities established, functional, developed IWRM effectively implemented at sub-national level Relevant water regulations approved, enforced</i>	<i>Number of regional Water Utilities established Number of water users associations established Number of stakeholders meetings as part of the planning process per region Dedicated National Authority to water allocation created</i>

Indicators *in italic* are means indicators.

15. Review program

Considering that the national Water demand and Water balance are estimated and projected on five-year periods until 2032 (2012/2017, 2017/2022, 2022/2027, 2027/ 2032), and that Water Master plans are also being implemented on a 5-year-period, the WDM policy should be reviewed every five or six years, in order to take into consideration prospective figures update and results assessment.