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ANNEX IV

to the Commission Implementing Decision on the Annual Action Plan in Favour of Lebanon 2023

Action Document for "System strengthening in the field of water in Lebanon"

ANNUAL ACTION PLAN

This document constitutes the annual work programme in the sense of Article 110(2) of the Financial Regulation, and action plan in the sense of Article 23(2) of NDICI-Global Europe Regulation.

1. SYNOPSIS

1.1. Action Summary Table

1. Title	System strengthening in the field of water in Lebanon
OPSYS	Annual Action Plan in Favour of Lebanon 2023
Basic Act	OPSYS business reference: ACT-61948
	ABAC Commitment level 1 number: JAD.1166944
	Financed under the Neighbourhood, Development and International Cooperation Instrument (NDICI-Global Europe).
2. Economic and Investment Plan (EIP)	Yes
EIP Flagship	Flagship 7 – Digital transformation, research and innovation
	Flagship 9 – Green Growth and climate action
	Flagship 11 – Resource efficiency, including water and waste management and biodiversity
3. Team Europe Initiative	No
4. Beneficiary of the action	The action shall be carried out in Lebanon
5. Programming document	Multi-annual Indicative Programme for Lebanon 2021-2027 ¹
6. Link with relevant MIP(s) objectives/expected results	MIP priority 2. An inclusive and sustainable economy. Specific Objective 3: "Increased access to water and wastewater services".

C(2022)8363 final of 24/11/2022

	Expected results: "The revenues collected by Water Establishments are adequate to cover operational costs for water and wastewater"					
	PRIORITY AREAS AND SEC	TOR INFORM	ATION			
7. Priority Area(s),	DAC Code 140 - Water Supply &					
sectors	DAC Code 410 - General Enviror					
	DAC Code 151 – Government &					
8. Sustainable	Main SDG 6 - Ensure availability			water and		
Development Goals (SDGs)	sanitation for all	and sustamation	management of	water and		
	Other significant SDGs (up to 9)		_			
	- SDG 5 Gender equality and wor	-		1.1.		
	- SDG 9 Build resilient infrastruct industrialization and foster in	· •	ciusive and sustai	паоте		
	- SDG 12 Ensure sustainable cons	sumption and pro	duction patterns			
	- SDG 13 Take urgent action to co	ombat climate ch	ange and its imp	act		
	sustainably manage forests, co	- SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss				
9. DAC code(s)	14010 - Water sector policy and a	dministrative ma	anagement (60%))		
	14015 - Water resources conserva	tion (including o	lata collection) (1	10%)		
	14020 – Water supply and sanitat	ion – large syste	ms (10%)			
	15110 – Public sector policy and	administrative m	anagement (10%)		
	41010 – Environmental policy and administrative management (10%)					
10. Main Delivery Channel	Indirect Management with pillar-a 40000 - Other public entities in do					
11. Targets	☐ Migration					
	⊠ Climate					
	☐ Social inclusion and Human De	evelopment				
	□ Gender					
	☐ Biodiversity					
	⊠ Human Rights, Democracy and	d Governance				
12. Markers (from DAC form)	General policy objective	Not targeted	Significant objective	Principal objective		
	Participation development/good governance					
	Aid to environment			\boxtimes		
	Gender equality and women's and girl's empowerment					
	8 1					

Reproductive, maternal, newborn and child health			
Disaster Risk Reduction	\boxtimes		
Inclusion of persons with Disabilities			
Nutrition		\boxtimes	
RIO Convention markers	Not targeted	Significant objective	Principal objective
Biological diversity	\boxtimes		
Combat desertification	\boxtimes		
Climate change mitigation	\boxtimes		
Climate change adaptation		\boxtimes	
Policy objectives	Not targeted	Significant objective	Principal objective
EIP		\boxtimes	
EIP Flagship	YES		NO
Tags	YES		NO
transport			\boxtimes
energy			
environment, climate resilience	\boxtimes		
digital	\boxtimes		
economic development (incl. private sector, trade and macroeconomic support)			\boxtimes
human development (incl. human capital and youth)			\boxtimes
health resilience			\boxtimes
migration and mobility			
agriculture, food security and rural development			
rule of law, governance and	\boxtimes		
public administration reform other			\boxtimes
Digitalisation			\boxtimes
Tags	YES		NO
digital connectivity	\boxtimes		
digital governance	\boxtimes		

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	digital entrepreneurship			\boxtimes		
	digital skills/literacy			\boxtimes		
	digital services	\boxtimes				
	Connectivity		\boxtimes			
	Tags	YES		NO		
	digital connectivity					
	energy			\boxtimes		
	transport			\boxtimes		
	health			\boxtimes		
	education and research			\boxtimes		
	Migration					
	Reduction of Inequalities					
	COVID-19					
	BUDGET INFOR	MATION				
14. Amounts	Budget line(s) (article, item): 14.0	20110 – Souther	n Neighbourhood			
concerned	Total estimated cost: EUR 17 000	000				
	Total amount of EU budget contri	bution EUR 17 (000 000			
	The commitment of the EU's contribution to this action is expected to be complemented by other contributions from Team Europe partners. It is subject to the formal confirmation of each respective partners' meaningful contribution as early as possible.					
	In the event that the Team Europe Initiatives (TEI) and/or these contributions do not materialise, the EU action may continue outside a TEI framework.					
MANAGEMENT AND IMPLEMENTATION						
15. Implementation modalities	- Indirect management with the entities to be selected in accordance with the criteria set out in section 4.3.1. and 4.3.2					
(management mode and delivery						

1.2. Summary of the Action

The Action aims to improve the overall governance of the water sector in Lebanon through the introduction of monitoring systems for water extraction from the majority of the main sources that feed water systems throughout the country, as well as upgrading and geo-referencing all customer databases related to the four regional Water Establishments (WEs).

Monitoring and quantification of water extraction at the national level will enable the sector to calculate the real cost of a cubic meter of water. This will consequently contribute to the definition of a tariff that reflects the real cost of the service. Data availability will also ensure more accountability of Water Establishments towards municipalities and citizens. Quantifying the total amount of water distributed to each municipality

will provide the basis for a more informed dialogue between citizens and their institutions. This will have positive consequences in terms of efficiency (by identifying major losses) but also in terms of reduction of costs for Water Establishments by ensuring that Municipalities will receive quantities of water comparable with the number of subscribers.

In complementarity, the activity of upgrading, cleaning and geo-referencing the customer databases of the four Water Establishments will ensure major benefits in terms of revenues for the Water Establishments. It will identify each customer's location and record it in a Geographic Information System (GIS) database and quantify the total legal demand within each municipality. This activity is also a crucial step towards the implementation of customer metering.

These activities have been considered as the most relevant in the Water Sector Recovery Plan prepared by the Ministry of Energy and Water (MoEW) in collaboration with the EU-funded Technical Assistance (ENI/2019/413-359 (EC)) in the water sector.

The Action will be implemented in coordination with the EU-funded Technical Assistance that is already working in defining standards for the sector. This will ensure coherence of the approach between the four Water Establishments and the Ministry of Energy and Water as well as with other interventions previously funded in the sector.

The Action is expected to lay the foundations for strengthening the water sector by improving the efficiency and efficacy of management of Public Water Establishments and by increasing their cost-recovery.

Some of the results of this action are expected to show before the end of the Water Sector Recovery Plan. This will contribute positively toward reaching the sector's financial self-sufficiency by 2026.

The action will contribute to several Sustainable Development Indicators (SDGs), in particular SDG 6 on clean water and sanitation. The other SDGs this actions is contributing to are: Gender equality and women empowerment (SDG 5), Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (SDG 9), Ensure sustainable consumption and production patterns (SDG 12), Take urgent action to combat climate change and its impact (SDG 13), Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (SDG 15).

The action is also aligned with the "Reform, Recovery and Reconstruction Framework (3RF)" launched by the European Union, the United Nations and the World Bank in December 2020 in response to the explosion of the Port of Beirut. The action is aligned with the European Investment Plan Flagship 11 "Resource efficiency, including water and waste management, and biodiversity", meaning that it will focus on sustainable water management.

The implementation of the Action will be accompanied by a policy dialogue with the Lebanese authorities, with the aim to ensure Government engagement in covering the possible financial gaps between service costs and revenues deriving from tariff collection. Unsatisfactory implementation of the recovery plan will imply a revision of the EU's support to the sector.

In case the selected implementing partner will be a Member State Agency, the action will be branded as Team Europe initiative in order to gain more traction in the policy dialogue with Lebanese Authorities.

1.3. Beneficiary of the action

The action shall be carried out in Lebanon, which is included in the list of ODA recipients.

2. RATIONALE

2.1. Context

Lebanon is facing an unprecedented crisis, which has led to a dramatic economic contraction, a large increase in poverty, unemployment and brain drain. In March 2020, Lebanon defaulted on its Eurobonds which was followed by a deep recession, a dramatic fall in the value of the Lebanese currency and triple digit inflation. The deteriorating economic situation has hit the public sector to an extent that it is now visibly disintegrating. Public authorities lack the necessary funds to maintain their operations and to pay their staff more than symbolic salaries. The COVID-19 pandemic and the August 2020 port of Beirut explosion have compounded the crisis, while the Russia's unprovoked and unjustified military aggression against Ukraine is exacerbating pressures on inflation and straining further food and fuel supplies. Devastating earthquakes in Türkiye and Syria multiplied the psychological impact of crises in Lebanon, adding further strains on Syrian refugees.

The crisis has had devastating effects on the country's economy and its people, resulting in a massive impoverishment of the middle classes. The public sector has been particularly hard hit with the bulk of the labour force still paid in Lebanese lira, suffering from plummeting purchasing power. Thousands of highly qualified civil servants are leaving for better paid jobs in the private sector or migrating in search of better opportunities.

The current economic crisis in Lebanon is a result of a complex set of factors, including political instability, corruption, and mismanagement of public finances. The economic contraction has resulted in a sharp increase in unemployment, poverty, and inflation, making it difficult for the government to deliver essential services and for the people to access basic necessities. In addition, the 2020 default on public debt cut Lebanon's access to financial markets. In 2021, the devaluation of the national currency against the US dollar accelerated, affecting dramatically an economy highly dependent on imports. The Central Bank and the banking sector severely restricted access to people's savings and limited cash withdrawals. Subsidies (food, gasoline, medications) were lifted abruptly. Lebanon's economy contracted by 10.5% in 2021, the highest contraction amongst 193 countries globally, and is estimated to further contract by 5.2% in 2022, with real GDP more than halved over the span of 4 years. This devastating contraction reflects the near complete destruction of an economy and a GDP shrinking to 21.8 billion USD.

Water shortages are increasing, with largely over-exploited water resources and no re-use of treated wastewater. The water supply system does not cover the entirety of the population (coverage estimated at around 80-85%), with more than half of the system having surpassed its life cycle and requiring substantial upgrades besides operation and maintenance, with technical losses estimated above 50%. Commercial losses are estimated in approximately 50% around the country. Additionally, there are nationwide concerns relating to the lack of proper wastewater treatment, with wastewater network coverage reaching only 60% of the population, while treatment, even if placed in strategic areas, only covering 32% of the total sewage produced in the country.

The Syrian crisis has increased pressure on both water supply and wastewater treatment systems. The total demand has been increasing, especially in urban areas, where approximately 80% of the Syrian refugees live. The poor performance of public water services cannot, however, be attributed to the presence of Syrian

refugees alone. The structural problems of the sector are deeply rooted and can be summarised in: i) incomplete implementation of the reform in the sector launched in 2001 with the approval of law 221; ii) structural weaknesses of the four Water Establishments (i.e. chronic lack of financial and qualified human resources, outdated managerial procedures); iii) lack of key performance indicators to properly manage and monitor the services provided and to ensure accountability toward citizens.

In addition to that, Lebanon is particularly vulnerable to climate change. Climate change has already had and will continue to have a significant impact on Lebanon's water resources. The most immediate consequences of climate change are droughts, reduced water availability, and declining water quality. Future projections suggest that these impacts will worsen in the coming decades. Adaptation priorities according to Lebanon's National Determined Contribution (NDC) include sustainable use of natural resources and developing sustainable water services.

The Action falls under the EU Lebanon Partnership Priorities 2016-2020 extended in November 2021 ² in particular objective two on revitalising the economy and fostering an inclusive and sustainable growth by focusing on sustainable investments that can secure improved access to services. The action is aligned with the Joint Communication "A renewed partnership with the Southern Neighbourhood – A New Agenda for the Mediterranean", in particular its priority "Green transition - climate change resilience, energy and environment" and with the European Investment Plan Flagship 11 "Resource efficiency, including water and waste management, and biodiversity", meaning that it will focus on sustainable water management. The action will also facilitate future public or private investments in the sector because outcomes like customers' database upgrade are crucial to calculate proper financial and economic return of future investments.

By improving water supply services, the action shall also contribute to European Green Deal objectives related to improving water use management.

The action is in line with the Multiannual Indicative Programme (MIP) European Union - Lebanon 2021-2027 and its priority areas, particularly on inclusive and sustainable economy by contributing to improve the access to water services around the country, while ensuring the protection of natural resources. The "Reform, Recovery and Reconstruction Framework (3RF)" launched by the European Union, the United Nations and the World Bank in December 2020 in response to the explosion of the Port of Beirut is also complementary to the implementation of this action.

The implementation of the Action will be accompanied by a policy dialogue with the Lebanese authorities, with the aim to ensure Government engagement in covering the possible financial gaps between service costs and revenues deriving from tariff collection up to the end of the Recovery Plan. Water Establishments are expected to apply progressive yearly adjustments of the tariff, and its indexation, to cover their financial gap (to be noted that tariffs already increased in 2022 and 2023 by approximately 30 times. These increases have unfortunately been negatively offset by the continuing depreciation of the currency). Implementation of these yearly adjustments will be verified prior to the contracting phase to ensure progress is on course.

During the lifespan of this Action, the following reform milestones are expected to be achieved: i) final approval of the National Water Strategy (process already started in 2022); ii) approval of the Decrees of the Water Code (process also started in 2022); iii) restructuring of the organigrams of the Water Establishments (ongoing process). Unsatisfactory implementation of the recovery plan will imply a revision of the EU's support to the sector.

² https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:22021D2214

2.2. Problem Analysis

Short problem analysis

The financial crisis heavily affected the capacity of Lebanese public institutions to provide water services. Water Establishments (WEs) have severe budget deficits due to the combination of several factors, including the devaluation of the fees collected in local currency, the collapse of public energy provision and the recourse to the private and more expensive fuel-based generators. These factors have been affecting WEs' capacity to provide reliable services and to retain the most highly trained staff whose salary lost most of its purchasing power. Lacking a proper publicly provided service, unregulated water trucking services have been flourishing, with related high financial costs to households, as well as health risks. Over the last three years, the continuity of minimal water and wastewater services has been guaranteed mainly through emergency funding provided by international Donors (the EU *in primis*, followed by USAID, Switzerland and Italy).

According to the Recovery Plan prepared by MoEW in early 2022, the water sector will only achieve complete cost-recovery at the end of 2026, when duly raised tariffs are expected to cover again operational costs and at the same time important structural actions to reduce operational costs of Water Establishments are put in place.

This action responds to the two highest priorities of the Recovery Plan in terms of structural investment to reduce operational costs of Water Establishments and increase their financial performance.

Water extraction and consumption are not measured in Lebanon. This translates into a fundamental absence of data on how much water is pumped and distributed, which impedes the exact quantification of operational costs, as well as of water and losses and inefficiencies in the system. Overall, this lack of information is a major hindrance to the improvement of water service delivery in Lebanon and to sustainable use of water resources.

Through the Action, the aim is to improve the overall governance of the water sector in Lebanon through the introduction of monitoring systems for water extraction from most of the main sources that feed water systems throughout the country, as well as upgrading and geo-referencing all customer databases related to the four Water Establishments (WEs).

Monitoring and quantification of water extraction at national level would finally enable the sector to calculate the real cost of extraction of a cubic meter of water, and consequently contribute to the definition of a tariff that reflects the real cost of the service, instead of the current estimation of extracted quantities, with errors in the order of 20-50%. Metering and remote control would also ensure quick identification of major losses and improved monitoring, as well as a better management of water resources overall against the current overexploitation. Moreover, it would improve the quality and quantity of data related to the availability of water resources and the possible response to the climate change aiming to decrease climate change impacts and enhance resilience. Monitoring, quantification and publication of data related to the water provided to each municipality will then facilitate accountability and dialogue between Water Establishments, Municipalities and citizens. This will result in expected positive returns in terms of subscriptions and payments.

The activity of upgrading, cleaning and geo-referencing the customer databases of the four Water Establishments would ensure major benefits in terms of revenues for the Water Establishments. This activity would be carried out in collaboration with the Water Establishments and in accordance with the methodology already defined under two previous EU-funded projects (T04.90-UNICEF and T04-27-GVC) which developed and capitalised on the methodology for collecting data on the ground.

The information in the Water Establishments' customers' databases is mostly outdated and not reliable. It has been estimated that the error margin is above 25% of the total available information. In addition, lack of georeferenced information has negative implications in terms subscribers' identification, leaving the Water Establishments too dependent on the single operators of the area. This entails evident risk of irregularities and illicit. Unreliable customers' information implies that the total demand is not well defined and that it is very difficult to take corrective action against illegal connections.

<u>Identification of main stakeholders and corresponding institutional and/or organisational issues (mandates, potential roles, and capacities) to be covered by the action.</u>

Main	Mandate	Potential role	Capacities
stakeholders			•
- MoEW (Ministry of Energy and Water)	 In charge of overviewing and regulating the sector and monitoring its performance. In charge of defining the strategy for water and wastewater sector. In charge of ensuring data collection and analysis about the use of water resources in Lebanon 	 Definition of a multi-year strategy for reaching financial balance for the Water Establishments within the next 5 years (water and wastewater); Approval of tariff revisions; Approval of national strategy and crisis response plan; To coordinate and bring additional donors to fund the sector crisis response plan To promote a national plan for reducing illegal connections in the Water sector (a similar plan has been launched for the energy sector) 	 Limited capacity due to the lack of staff. Supported in technical and planning activities by the EU-AFD Technical Assistance that is contributing to the implementation of the national strategy;
- Regional WEs (Water Establishments)	 First beneficiary of the intervention In charge of provision of water and wastewater services (law 221-2001). 	 In charge of collecting data about water extraction and evaluating the performance of the service In charge of invoicing and collecting the tariffs for water and wastewater In charge of reducing illegal connections In charge of proposing revision of the tariffs to MoEW. In charge of improving performance of their service and reduction of NRW (Non-Revenue Water) 	 Limited capacity due to lack of modern managerial procedures and adequate staff High knowledge of current situation of units of production; High knowledge about location of existing customers Capable of identifying illegal connections through field activities of their staff but limited capacity in enforcing disconnections unless politically supported
- Government of Lebanon	 In charge of national policies In charge of allocating budget for the sector 	 Can sustain politically campaigns for legality in the water sector to reduce illegal connections Can allow payments of water tariff at an indexed price (on the model of what happened with telecommunications or electricity sectors) 	- It will only have the capacity to ensure its role if the current political impasse is resolved.

Main	Mandate	Potential role	Capacities
stakeholders			
- EU-AFD Technical Assistance team	- In charge for supporting reform of the sector (contract until 2025)	 Restructuring of Water Departments in WEs; Definition of procedures for data collection, analysis and publication for data sources monitoring Validation of procedures for customer database cleaning and geo-referencing at Water Establishment and field level; Monitoring of the implementation of the Sector Recovery Plan; Defining strategies for tariff revision to be submitted for approval to MoEW and WEs; Supporting the coordination of the sector to ensure complementarity with other actions; Identification of political priorities to be raised by the sector 	High capacity to mobilise various levels of expertise Already working at the centre of the sector and key for promoting reforms;
- International Donors Community	- Partners for ensuring stability of the country and continuity of the services during multiple crisis	 Higher political leverage toward GoL for reforms; Ensuring the application of new standards for upgrading customer DB and monitoring sources on every new project that they will fund 	- Large capacity to ensure application of standards and follow-up in whatever fund will be allocated in the sector in the future.
- Lebanese Municipalities	- Beneficiary of the intervention	 Municipalities should be sensitised to promote collaboration and payment of water and wastewater public services from citizens. They are the local authority capable to enforce payment for fees and capable of removing illegal connections Data provided through real time sources monitoring will ensure accountability in terms of quantity of service received by Municipalities and will promote dialogue with Water Establishments 	- Key actor to dialogue with Water Establishments to defend the right of the citizens for a reliable public service and to promote citizens' payment of tariffs. All this would contribute to ensuring the long term sustainability of the service.
- Lebanese citizens	- Final beneficiary of the intervention	Lebanese citizens should be encouraged to pay water and wastewater tariffs to ensure sustainability of the services.	- Capacity of payment of citizens during financial crisis will be assessed to ensure that these could be affordable for the majority of the citizens. Public water services are traditionally much cheaper than privately provided ones. If minimal public services can be guaranteed then the total cost for households is expected to decrease even increasing the tariff.

Main	Mandate	Potential role	Capacities
stakeholders			
- CSOs active in water and accountability sectors.	- Representatives of citizens in several platform demanding public accountability of public institutions	- Civil society organisations are present on several platforms (3RF in primis) requesting more accountability of public sector toward citizens. They will be empowered by the data produced and published by this action and potentially develop further analysis.	- Capacity of outreaching of these organisations is growing in the Country Centres of research and Universities in particular will benefit from the availability of this data and enabled to elaborate analysis of service distribution and possible inequalities.

2.3. Lessons Learned

The Action builds on the experience of a number of EU- and donor-funded projects implemented in the last 10 years, and on the recent findings of the Water Establishments performance assessment completed as part of the Technical Assistance funded by EU and implemented by AFD. Indeed, this Action represents the scaling up at national level of findings and experiences accumulated by the above-mentioned pilot projects.

Water sources metering is a common practice for water distribution operators all around the world. This is paramount for measuring operators' performance, but also to monitoring the total water extraction. In Lebanon, measuring the performance of public operators in the sector was never a priority, with negative repercussions in terms of operations' management as well as accountability toward citizens.

To date, only very few water pumping stations have been equipped for source water metering and remote data connection (SCADA): some stations in the Bekaa region, through an initiative funded by the Swiss Development Cooperation; and one in the Beirut-Mount Lebanon area, which was autonomously funded by the responsible Water Establishment itself. Both initiatives have been very important, but were never scaled up at regional level, hence their impact has so far been limited. Scaling up will allow the definition of new procedures for collecting data, monitoring and reporting the whole production and operation of the Water Establishments in real time. The standardisation of data collection procedures will entail the possibility to produce national reports about total water extraction, as well as to measure the level of service provided by Water Establishment to each Municipality on a regular basis. This has been considered as the most efficient way to promote accountability toward citizens and facilitate a dialogue between Water Establishments and Municipalities in terms of responsibility for delivering services, ensuring fee payment and collection, and fighting against illegal connections.

In 2023, the EU-AFD Technical Assistance has focused on defining national standards for implementation of source monitoring ensuring full compatibility with informatics systems currently in use at Water Establishments.

Implementing metering at source is also one of the main recommendations of the recent Evaluation of EUTF outcomes: "Support the production of data concerning the identification, monitoring and use of water at the local level, i.e. the availability, production, distribution, and the water use, should be enhanced".

The activity of customer database cleaning and geo-referencing is another crucial activity for improving Water Establishments operational management. Internationally, it is considered as the low hanging fruit in terms of recovering financial deficits for Water Utilities. Several experiences in the sector have been conducted under

two previous EU-MADAD funded projects (T04.90-UNICEF and T04-27-GVC) which developed and capitalised on the methodology for collecting data on the ground. The experience has shown that in order to deliver results, this kind of activity should be launched at field level and that the Water Establishments' approval of the cleaning process should be ensured. A certain percentage of the entries (estimated between 10 and 15%) in the current Customer Database of Water Establishments has proven to be outdated (mainly because of inactive or past subscribers that were never removed). The only way to verify and update the databases is a detailed field work conducted together with Water Establishments operators, them being the only reliable source of information (e.g. many entries in the current database do not contain accurate info about location of the subscriber). The informatics portal that has been developed by UNICEF project will ensure that the field process is effective and transparent.

The EU-AFD Technical Assistance is expected to validate the methodology and ensuring replication at national scale.

The lessons learned suggest that this activity should be complemented with a national Government-led campaign against illegal connections.

3. DESCRIPTION OF THE ACTION

3.1. Objectives and Expected Outputs

The Overall Objective/Impact of this action is to:

1. Ensure the sustainable provision of water services by Lebanon's public sector, while mitigating the effects of climate change on water resources

The Specific Objective (Outcomes) of this action is to:

1. Improve the performance and accountability of public water service providers in Lebanon

The **Outputs** to be delivered by this action contributing to the corresponding Specific Objectives (Outcomes) are:

- 1.1 Daily level of supply provided to each scheme in Lebanon is measured consistently and published by Regional Water Establishments and the Ministry of Energy and Water
- 1.2 Customer Databases of water and wastewater services are updated

3.2. Indicative Activities

Output 1 - Daily level of supply provided to each scheme in Lebanon is measured consistently and published

- Sources of water for all the schemes in Lebanon are digitally registered;
- Water meters are equipped in the majority of the Lebanese stations (wells, springs);
- Centres for collecting remote data and analysis (SCADA) are equipped in each RWE and alimented by solar energy;
- WEs Staff capability in managing data centres and repairing meter is improved;
- Total water production and new related set of KPIs for the WEs are compiled and regularly published;
- National data about the use of water resources is compiled, centralised at MoEW and regularly published.

Output 2 – Customer Databases of water and wastewater services are updated;

• Customer databases for all the four Water Establishments are updated and geo-referenced;

- Illegal connections are identified and mapped;
- Total demand of subscribers in Lebanon is clearly quantified.

The commitment of the EU's contribution to this action, is expected to be complemented by other contributions from EU Member States or financial institutions. It is subject to the formal confirmation of each respective member's meaningful contribution as early as possible. In the event that a Team Europe Initiatives (TEI) and/or these contributions do not materialise, the EU action may continue outside a TEI framework.

3.3. Mainstreaming

Environmental Protection, Climate Change and Biodiversity

Outcomes of the Environmental Impact Assessment (EIA) screening

The EIA screening classified the action as Category C (no need for further assessment). In terms of infrastructure, the project will simply install meters at sources. All other interventions are related to improvement to operational procedures and governance. No need of any environmental assessment.

Outcome of the Climate Risk Assessment (CRA) screening

The CRA screening concluded that this action is no or low risk (no need for further assessment). In terms of infrastructure, the project will simply install meters at sources. All other interventions are related to improvement to operational procedures and governance. No risks for climate.

Gender equality and empowerment of women and girls

As per OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that gender equality and empowerment of women will be addressed among the specific objectives and will be mainstreamed in the Action. The Action will promote meaningful and active participation of women in planning and decision making namely in the implementation of this action and in the implementation of the 3RF agenda to ensure an inclusive recovery process. It will cover the needs, interests, and priorities of both women and men to support gender sensitive policies and engagement of women in the governance process.

National data and statistics reveal clear and wide qualitative gender gaps across the Lebanese public administration. In the public sector, while women make up 45% of all public administration positions, they account for only 21% of grade 1 positions. Several studies highlighted the legal barriers and the challenging gender norms that prohibit women's advancement in public spheres. Even though there has been some progress as a result of civil society organisations campaigns over the years, women's equal participation across different sectors and mainly in public administration has yet to be achieved.

The partner that will implement this action will be encouraged to **respect a gender balance rule**. It should ensure that the recruitment of staff employed within this action promotes, as much as possible, gender balance.

Human Rights

The proposed action is fully aligned to the existing EU human rights strategies and action plans. Human rights concerns are mainstreamed throughout the action and will be taken into consideration in the finalisation of the activities to be drawn up during implementation stage. The action has been designed following a "rights-based

"and "leave-no-one behind" approach. It promotes equal participation of all segments of the population in the decision-making at various levels. Consultations with civil society actors were organised as part of the definition of the sector priorities and their recommendations are duly reflected in the design of the action. The action documents promote the human rights of **ensuring access to water** (recognized by UN in 2010). The duty-bearer are the public Water Establishments and they are reinforced in their capacity to provide the public service to citizens and Syrian Refugee population.

Disability

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as **D0**.

Democracy

The action is actively promoting the empowerment of government, civil society and citizens and increase their participation in decision-making at local and national level mainly under the 3RF reform process.

The action will ensure that Municipalities and citizens will be empowered with access to reliable data about quantities of water extracted and distributed per day in each Municipality in Lebanon. These indicators will be important to monitor performances of public authorities and improve their accountability toward citizens.

Conflict sensitivity, peace and resilience

The action is tackling several aspects of fragility of the sector and of the state. It is aiming at facilitating long term reforms for sustainability of the sector in a very fragile economic and political context. The strengths and weaknesses of each actor have been assessed and discussed and a strategy for the recovery of the sector has been prepared and endorsed by the Ministry. This project constitutes an important part of this recovery plan.

Disaster Risk Reduction

The action will respond to following priorities of Sendai framework:

- 1) Understanding disaster risk by ensuring methodical data collection that will enable Lebanon to understand its use of water resources for domestic consumption.
- 2) Strengthening disaster risk governance to manage disaster risk by reinforcing national capacities to manage the water sector and prioritise operations to avoid environmental disaster risks.

3.4. Risks and Assumptions

Category	Risks	Likelih ood (High/ Mediu m/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
1-External environment	Political stalemate and social tensions resulting in an overall deterioration of the situation, including security	High	High	The EU Delegation continuously monitors the overall situation in the country and follows-up to address risk, including security. Project execution will be contingent upon the possibility to operate under the prevailing conditions.
1-External environment	Lack of political commitment to undertake	High	Medium	A sector recovery plan has been prepared by the MoEW and presented to the Council of Ministers in May 2022.

1-External environment	reforms or support the action Limited inter-institutional cooperation	Medium	Medium	The activities foreseen under this action are part of the same plan. Publication of information about the sector should reduce the risk of non-fulfilment by GoL. The Head of Cooperation of several donors' institutions will soon establish a new coordination table complementing an existing technical coordination. This higher level of coordination will guarantee more political pressure on the Government toward the achievement of reforms. Government support for the campaign to reduce illegal connections will be particularly important. Maintain high-level dialogue and correspondence with authorities on several levels, EU and partner representatives to call for reform. A water sector political group has been recently created to put pressure on the Government toward achievement of reforms.
1-External environment	Collapse of the financial and economic system, including increasing inflation and further devaluation of the Lebanese pound	High	Low	Almost all the activities related to this action will be contracted and disbursed in USD. The data centres that will be installed at WEs and MoEW will be alimented with solar energy to minimise impact of energy and financial crisis on the actors in charge of their operation and guarantee continuity of the service. In terms of cost-recovery for the Water Establishments, in order to reduce the impact of the devaluation, the value of the fee for water is expected to be calculated on a yearly basis in relation to the USD/LBP exchange rate. The EU Delegation, in close coordination with the UN/RC already coordinates on macro-economic mitigation measures, including dollarization of aid in an effort to continue to ensure the smooth running of aid programmes in Lebanon.
2-to planning, processes and systems	Availability of energy	High	Low	All the devices that will be installed with this intervention will be equipped with solar panels. This is particularly important for the data centre that should work on a 24h basis. The metering at the sources is expected to work only when pumping is happening (the source of energy for the pumping equipment will ensure energy for the metering device)
2-to planning, processes and systems	Standardisation of the intervention	Low	High	It is paramount that all the devices installed will be compatible with existing SCADA devices already installed and with the ERP (information systems) already in place in each WE. This work will be guaranteed before and during the implementation of the action by the Technical Assistance project funded by EU and implemented by AFD
3-to people and the organisation	Knowledge of customers	Medium	Medium	WEs staff will be involved in the customer Database (DB) activity to identify current customers. Some of the information is with operators now retired, These people will be contacted and incentivised to participate to the activity in line with Water Establishments policies.

4-to legality and	Citizens data access and	Low	Low	The project will support in collecting geographic
regularity	management			data about WEs 'customers. In certain localities of
aspects				the country during previous pilot projects,
				implementing partners found several obstacles in
				terms of accessing data and use geo-referencing
				devices. Experience has been accumulated by
				Water Establishments in how to deal with similar
				circumstances and it will be applied during the
				implementation of this actions.
5-	Misperception of the	Mediu	Medium	Strong efforts by implementing partners under the
Communication	nature of the EU	m		guidance of the EU Delegation to ensure accurate
and information	intervention in relation to			transparent and communication on the action.
	customer DB update			

External Assumptions

The main assumption on which this Action is based, is the authorities' concrete implementation of the Water Sector Recovery Plan.

The context in Lebanon will continue to be politically and economically unstable, but this is not expected to have major operational constraints for the implementation of the activities indicated in this action, unless the situation will become unstable in terms of security. It is expected that technical constraints that are currently affecting the water sector will largely continue, mainly relating to the limited supply of electricity by the state provider as well as the Water Establishment's limited financial and human resources. While the action documents funded under Special Measures addressing response to the Syria crisis will ensure complementary support for Water Establishments to guarantee continuity of their services, the impact of other technical constraints will be mitigated through specific measures as described in the Risks and Assumptions table above.

3.5. Intervention Logic

The underlying intervention logic for this action is that:

By measuring in real time the extractions from a large part of the water sources in the country (OUTPUT 1), the Ministry and the Water Establishments will finally have reliable data about the total water production for domestic use within the country. These data will enable Water Establishments to calculate the <u>real cost of production for a cubic meter of water.</u>

By knowing the position and the identity of the customers subscribing to water services (OUTPUT 2), it will be possible to quantify <u>the total legal demand</u> in the country.

Knowledge of total legal demand combined with total water production data will enable the Water Establishments to <u>calculate the tariff for a cubic meter of water</u>. This will be the basis for proper cost recovery and infrastructure maintenance/renewal. Operationally, knowledge of the cost of production of a cubic meter of water will enable the transition from the current flat to a volumetric tariff.

With the activities related to the customer database (output 2) it will also be possible to <u>identify the illegal connections</u> to the network. In Lebanon the percentage of illegal connections is estimated between forty and sixty percent (depending on the region). For water utilities willing to improve efficiency and cost-recovery, their disconnection is imperative.

Municipalities have a crucial role in fighting illegal connections. Experience shows that municipalities are the only institutional actors capable of enforcing the law in their area. It is not only necessary to have data, but

also to <u>enhance collaboration with Water Establishments</u> (see below the activity related to dialogue and accountability) and gain political support from the government to be able to achieve this objective. The Ministry is expected to provide this support through a national campaign against illegal subscriptions. A similar initiative has recently been launched in the electric sector. The Ministry's engagement can be considered encouraging.

Regular <u>publication of information</u> about daily quantities of water extracted and delivered to each Municipal Water scheme (OUTPUT 1) coupled with updated information of the total legal demand in each Municipality (OUTPUT 2), will define a more <u>informed dialogue</u> between Water Establishments, Municipalities and citizens. This dialogue is the basis for promoting effective collaboration between the parties based on real data and principles of mutual accountability.

The combined effects of fighting illegal connections and defining better management policies for water production and pricing will reduce the financial deficit of Water Establishments. The impact of these measures by the end of the project will be quantified and will be included in the data for measuring the progresses of the National Sector Recovery Plan.

In addition to this, the knowledge of total water production (OUTPUT 1) will allow proper monitoring of water resources extraction and adequate response to changing water availability. This is critical for <u>defining more informed strategies for water allocation</u> in the country and to <u>contrast climate change</u> effects on national water resources.

3.6. Indicative Logical Framework Matrix

Results	Results chain: Indicators		Baselines	Targets	Sources of data	Assumptions
	Main expected results	[it least one indicator per expected result	(values and years)	(values and years)		
Impact 1	1. Ensure the sustainable provision of water services by Lebanon's public sector, while mitigating the effects of climate change on water resources	 Tools for proper monitoring and management of water resources are in place Reduction of regional NRW indicators as per recovery plan 	1 NA 2 - estimated >60%	1 >70% of domestic water consumption is measured and monitored 2 - contribution of at least 10% in national NRW	 Reports of Water Establishments. Project reports Sector reports at MoEW including update Recovery Plan 	Not applicable
Outcome 1	Improve the performance and accountability of public water service providers in Lebanon	 1.1 % accuracy of knowledge of national daily water production for domestic use 1.2 % accuracy of knowledge of national daily legal demand 1.3 % accuracy calculation real cost of production of m3 of water in Lebanon 	NA - very low NA - very low NA - very low	> 80% > 90% > 90%.80	Reports of Water Establishments.Project reportsSector reports at MoEW	- Prices in the market remains stable in USD currency
Output 1	Daily level of supply provided to each scheme in Lebanon is measured consistently and published	 1.1.1 # of sources monitored 1.1.2 % of flow from national sources monitored 1.1.3 # reports about total production published at Regional 1.1.4 # reports about total production published at National level 	NA – very low NA – very low NA NA	>500 >70% >10 >3	Reports of Water Establishments.Project reports	- Political situation is stable in the Country and a Government is in place

		1.1.5 Staff employed/supported by the project should respect a gender balance					
Output 2	Customer Databases to water and wastewater services are updated	1.3.1 1.3.2 1.3.3	% of Municipalities with cleaned customer DB % of total subscribers cleaned and geo-referenced at National level # of combined interventions between WEs and Municipalities for disconnecting illegal connections	approx 0,2% (previous EU projects) approx. 1%(previous EU projects) N.a.	1.2.1 > 80% >80% >100	Reports of Water Establishments.WEs registries	- Political situation is stable in the Country and a Government is in place

4. IMPLEMENTATION ARRANGEMENTS

4.1. Financing Agreement

In order to implement this action, it is envisaged to conclude a financing agreement with the Government of Lebanon.

4.2. Indicative Implementation Period

The indicative operational implementation period of this action, during which the activities described in section 3 will be carried out and the corresponding contracts and agreements implemented, is 60 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer in duly justified cases.

4.3. Implementation Modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures³.

4.3.1. Indirect Management with a pillar-assessed entity

A part of this action may be implemented in indirect management with a pillar assessed entity, which will be selected by the Commission's services using the following criteria:

- Previous experience in projects for institutional and governance support in the water sector;
- Previous experience in projects for reduction of Non-Revenue Water.
- Capacity to mobilise international experts

The implementation by this entity entails activities aiming at achieving Outcome 1 of this Action.

4.3.2. Indirect Management with a pillar-assessed entity

A part of this action may be implemented in indirect management with a pillar assessed entity, which will be selected by the Commission's services using the following criteria:

- Previous experience in projects for institutional and governance support in the water sector;
- Previous experience in activities related to customer data management
- Capacity to mobilise international experts

The implementation by this entity entails activities aiming at achieving Outcome 2 of this Action.

³ <u>EU Sanctions Map.</u> Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

4.3.3. Changes from indirect to direct management (and vice versa) mode due to exceptional circumstances

If the implementation modality described in 4.3.1 cannot be implemented due to circumstances outside of the Commission's control, the alternative implementation modality is a grant in direct management:

- (a) The purpose of the grants will correspond to the description of Output 1.
- (b) Type of applicants targeted will be Non-governmental organisations (NGOs)

If the implementation modality described in 4.3.2 cannot be implemented due to circumstances outside of the Commission's control, the alternative implementation modality is a grant in direct management:

- (a) The purpose of the grants will correspond to the description of Output 2
- (b) Type of applicants targeted will be Non-governmental organisations (NGOs)

4.4. Indicative Budget

Indicative Budget components	EU contribution (amount in EUR)
Implementation modalities – cf. section 4.3	
Outcome 1: Improve the performance and accountability of public water service providers in Lebanon	14 200 000
Indirect management with Pillar Assessed Entity - cf. section 4.3.1.	14 200 000
Outcome 2: Customer Databases to water and wastewater services are updated	2 500 000
Indirect management with Pillar Assessed Entity - cf. section 4.3.2.	2 500 000
Evaluation – cf. section 5.2 Audit – cf. section 5.3	300 000
Strategic communication and Public diplomacy – cf. section 6	N/A
Contingencies	N/A
Total	17 000 000

4.5. Organisational Set-up and Responsibilities

A steering committee for the implementation of the action will be established at the time of definition of this action and will remain in charge for the whole duration of the implementation of the action.

<u>The steering committee</u> will meet at least on a quarterly basis and it is composed by the following stakeholders:

- Implementing partner;
- EUD;
- MoEW (Ministry of Energy and Water)
- WEs (Water Establishments)

A <u>monitoring committee</u> will be established between EU and the implementing partner and will meet regularly for the follow-up of the activities (at least on a quarterly basis)

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in the above governance structures set up for governing the implementation of the action.

4.6. Pre-conditions

The following pre-conditions apply to both components (outcome 1 and 2) and need to be fulfilled before signature of contribution agreement with the implementing partners:

- the water and wastewater tariffs of Water Establishments are indexed to a national inflation index to protect them against devaluation of the Lebanese Pound;
- the National Strategy for the water and wastewater sector has been approved;
- at least 8 decrees of the Water Code have been approved;
- the Ministry of Energy and Water launches a public campaign to cut illegal connections in the water sector.

These conditions will also be mentioned in the Financing Agreement that will be signed with the Government of Lebanon before the signature of the contribution agreement with the implementing partner.

5. PERFORMANCE MEASUREMENT

5.1. Monitoring and Reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its Outputs and contribution to the achievement of its Outcomes, and if possible at the time of reporting, contribution to the achievement of its Impacts, as measured by corresponding indicators, using as reference the logframe matrix.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Arrangements for monitoring and reporting, including roles and responsibilities for data collection, analysis and monitoring:

- As part of the activities of the project, a set ok Key Performance Indicators will be established at the beginning of the project. The data related to these indicators will be collected, analysed and part of it published.

- The data compiled by the partner will be shared on a quarterly basis with the EUD in Lebanon and presented by the partner to the quarterly sector coordination meeting at Ministry of Energy and Water.
- A ROM monitoring evaluation will be launched after the first year of implementation of the project to verify compliance and adequateness of the implementation strategy and to help re-orienting activities in case of changes in the sector context.

5.2. Evaluation

Having regard to the nature of the action, a mid-term evaluation will be carried out for this action or its components via the implementing partner.

It will be carried out for learning purposes, in particular with respect to ensure that the experience cumulated in supporting operations of Water Establishments is capitalised. The evaluation will also assess the main performance indicators of the sector in relation to those presented in the Recovery Plan to quantify progresses.

The Commission shall form a Reference Group (RG) composed by representatives from the main stakeholders at both EU and national (representatives from the government, from civil society organisations (private sector, NGOs, etc.), etc.) levels. If deemed necessary, other donors will be invited to join. The Commission shall inform the implementing partner at least one month in advance of the dates envisaged for the evaluation exercise and missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders following the best practice of evaluation dissemination. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Evaluation services may be contracted under a framework contract.

5.3. Audit and Verifications

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audit or verification assignments for one or several contracts or agreements.

6. STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

All entities implementing EU-funded external actions have the contractual obligation to inform the relevant audiences of the Union's support for their work by displaying the EU emblem and a short funding statement as appropriate on all communication materials related to the actions concerned. To that end they must comply with the instructions given in the 2022 guidance document <u>Communicating and raising EU visibility:</u> <u>Guidance for external actions</u> (or any successor document).

This obligation will apply equally, regardless of whether the actions concerned are implemented by the Commission, the partner country, service providers, grant beneficiaries or entrusted or delegated entities such

as UN agencies, international financial institutions and agencies of EU Member States. In each case, a reference to the relevant contractual obligations must be included in the respective financing agreement, procurement and grant contracts, and delegation agreements.

For the purpose of enhancing the visibility of the EU and its contribution to this action, the Commission may sign or enter into joint declarations or statements, as part of its prerogative of budget implementation and to safeguard the financial interests of the Union. Visibility and communication measures should also promote transparency and accountability on the use of funds. Effectiveness of communication activities on awareness about the action and its objectives as well as on EU funding of the action should be measured.

Implementing partners shall keep the Commission and the EU Delegation fully informed of the planning and implementation of specific visibility and communication activities before the implementation. Implementing partners will ensure adequate visibility of EU financing and will report on visibility and communication actions as well as the results of the overall action to the relevant monitoring committees.

For communication on Team Europe Initiatives, the EU and its Member States can rely on the specific guidance on the Team Europe visual identity.

Any actions related to the communication and visibility will be coordinated with the strategic communication actions of the EU Delegation, to ensure coherence of narrative and message, as well as horizontal strategic communication.