



ANNEX 1

of the Commission Decision on the Annual Action Programme 2016 (part 2) and 2017 (part 1) in favour of the Hashemite Kingdom of Jordan

Initial Action Document for the Support to the implementation of the National Solid Waste Management Strategy (NSWMS)

1. Title/basic act/ CRIS number	Support to the implementation of the National Solid Waste Management Strategy , CRIS number: ENI /2016 / 039-601 financed under the European Neighbourhood Instrument (ENI)	
2. Zone benefiting from the action/location	The Hashemite Kingdom of Jordan The action shall be carried out at the following location: Governorates of Irbid, Mafraq, Ajloun, Jerash, Amman, Madaba, Balqa, Zarqa.	
3. Programming document	Annual Action Plan 2016 / Single Support Framework 2014-2017	
4. Sector of concentration/ thematic area	Single Support Framework 2014-2014, <i>Objectives 1.2.1 Reinforcing the rule of law and equity in public services delivery</i>	DEV. Aid: YES
5. Amounts concerned	Total estimated cost: EUR 100,000,000 Total amount of European Union (EU) budget contribution EUR 100,000,000 of which EUR 40,000,000 for budget support and EUR 60,000,000 for complementary support. The contribution is for an amount of EUR 70,000,000 from the general budget of the European Union for 2016 and for an amount of EUR 30,000,000 from the general budget of the European Union for 2017, subject to the availability of appropriations following the adoption of the relevant budget.	
6. Aid modality(ies) and implementation modality(ies)	Budget Support Direct management – Budget Support: Sector Reform Contract, Indirect management with Agence Française de Développement Indirect management with Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	
7 a) DAC code(s)	14050 – Waste management / disposal	
b) Main Delivery	10000 – Public Sector Institutions	

Channel				
8. Markers (from CRIS DAC form)	General policy objective	Not targeted	Significant objective	Main objective
	Participation development/good governance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Aid to environment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Gender equality (including Women In Development)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Trade Development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Main objective
	Biological diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9. Global Public Goods and Challenges (GPGC) thematic flagships	Not relevant.		

SUMMARY

The proposed action for EUR 100,000,000 aims to support policy reform programmes undertaken by the Government of Jordan in the area of solid waste management. The action is in line with *Jordan 2025*, contributes to the European Union strategic goals of reinforcing equity in public services delivery embedded in the Single Support Framework 2014-2017 and build on the conclusions of the European Neighbourhood Policy (ENP) Review on Energy Security and Climate Action. Following the *Supporting Syria and the Region Conference* that took place in London this February, the EU has doubled the funding committed to this operation. In line with the commitments made by Jordan at the conference, care will be taken to ensure that Syrian refugees are employed alongside Jordanians within the frame of infrastructure projects that will be implemented.

Municipal solid waste management, i.e. its collection, treatment and disposal, is one of the most important services provided by local authorities and cities in Jordan. Jordan currently generates an estimated 2.7 million tons of municipal solid waste (MSW) per year, of which 5% are generated by Syrian refugees. In 2034 it is estimated to reach 5.2 million tons. Like for most ENI-South countries, organic waste (bio-waste) represents the biggest share of MSW: about 60%. The northern governorates are particularly affected by the Syrian crisis, 20% of solid waste being generated by refugees. The Government of Jordan approved its National Solid Waste Management Strategy in September 2015. The national strategy aims at shifting over 20 years from "*an old, inefficient, costly and environmentally unstable municipal solid waste management system towards a modern and integrated one that will be based on the Three R's approach (Reduce – Reuse – Recycle).*" In particular, it seeks to reduce by 75% the amount of bio-waste landfilled in 2024.

The purpose of this action is to ensure in the coming five to seven years, the safe and sanitary disposal of municipal solid waste. The specific objectives are to (i) consolidate the existing

regulatory framework to bring it in line with the objectives set in the national strategy (ii) improve the transfer and disposal management system in the Central and Northern Region (iii) improve the socio-economic well-being and health status of informal waste pickers working in dumpsites (iv) raise general awareness, understanding and knowledge about key municipal solid waste management issues amongst concerned segments of the society..

1. CONTEXT

1.1 Sector/Country/Regional context/Thematic area

Jordan is an upper-middle income country with a population of 9.53 million inhabitants¹. 42% of the population is under 15 years of age; 30% is non-Jordanians and 30% are registered as refugees². 42% of the population live in Amman. Gross domestic product (GDP) per capita increased from US\$ 1,163 in 2000 to US\$ 5,422 in 2014. Since the early 1990's, Jordan made substantial progress in terms of human development thanks to consistent levels of spending on human development like education, health, pensions and social safety nets. Jordan's HDI value for 2014 is 0.748, positioning it at 80 out of 188 countries and territories. It is above the average of 0.744 for countries in the high human development group and above the average of 0.686 for countries in the Arab States.

Jordan currently generates an estimated 2.7 million tonnes of municipal solid waste (MSW) per year, of which 5% are generated by Syrian refugees. In 2034 it is estimated to reach 5.2 million tonnes³. MSW collection coverage is estimated at 90% for urban areas (40 to 100% in ENI-South) and 70% for rural areas (30 to 100% in ENI-South). Like for most ENI-South countries, bio-waste (organic waste) represents the biggest share of MSW: about 60% are food waste, 14% paper and cardboards, 10% plastics. Hazardous and non-MSW are not segregated and continue to reach final disposal sites posing serious health risks for workers. After collection, MSW is generally transported to a transfer station, a sanitary landfill or an open dumpsite. Of the 18 final disposal sites existing in the country, only one is an engineered sanitary landfill. In Jordan, 48% of MSW is landfilled (19% in Egypt and 70% in Lebanon), 45% is openly dumped and 7% recycled⁴. Recycling is undertaken by formal and informal waste pickers at collection and disposal as there is no operational recycling facility in the country.

MSW management, i.e. its collection and transfer, is one of the most important services provided by municipalities in Jordan. The influx of Syrian refugees in the country adds additional pressure on municipalities already struggling to provide essential services to their constituents. Over-usage of assets resulted in higher maintenance costs and accelerated the depreciation of equipment. The northern governorates are particularly affected, 20% of solid waste being generated by Syrian

¹ Source: Census 2015. The population was 5.29 million in the last census of 2004.

² 2,097,333 Palestine refugees are registered with UNRWA; 672,504 are registered with UNHCR (of which 639,704 Syrians and 32,800 Iraqi).

³ No Management Information System exists at central level for registering the quantities of MSW generated in the country. MSW quantities have therefore been estimated. With regards to MSW composition, several studies conducted in the past years lead to inconclusive results. The strategy is based on three different MSW compositions depending on the urbanisation index of each Governorate.

⁴ *Country Report on the solid waste management in Jordan*, SWEEP-NET and GiZ, April 2014. *Horizon 2020 Mediterranean Report*, Joint UNEP-European Environment Agency Report, 2014.

refugees. Within the Government *Jordan Response Plan to the Syria Crisis 2016-18*, solid waste management represents 41% of the funding requested under the Chapter *Local governance and municipalities*. Following the *Supporting Syria and the Region Conference* that took place in London this February, the EU has doubled the funding committed to this operation. In line with the commitments made by Jordan at the conference, care will be taken to ensure that Syrian refugees are employed alongside Jordanians within the frame of infrastructure projects that will be implemented.

1.1.1 Public Policy Assessment and EU Policy Framework

With the Decision No. 11392/02, the Government of Jordan approved its first National Solid Waste Management Strategy in September 2015. The national strategy aims at shifting over 20 years from "an old, inefficient, costly and environmentally unstable municipal solid waste management system towards a modern and integrated one that will be based on the Three R's approach (Reduce – Reuse – Recycle)." In particular, it seeks to reduce by 75% the amount of bio-waste landfilled in 2024 (against 2014 baseline). This objective has been taken up in the Chapter Environment of the Jordan 2025, Jordan socio-economic development plan approved in 2015. The national strategy is also in line with the revised EU Waste Framework Directive 2008/98/EC which focuses on waste prevention and with the EU-Jordan Compact 2016-2020 which sets the sustainable use and management of natural resources as one of its priorities.

The national strategy was developed in 18 months with the support of national and international technical experts financed by the World Bank. The process was steered by a national technical committee composed of the Ministries of Municipal Affairs, of Environment, of Energy and of Water and Irrigation. The document is robust. It is composed of a baseline study, an analysis of possible options for the establishment of an integrated and affordable MSW management system and recommended implementation arrangements. Opportunities for public-private partnerships are also assessed. Guidance to increase public awareness and integrate informal waste-pickers in the MSW management system is also proposed. The long-term objective will be accomplished through an integrated approach involving several policy areas (see annex I) and incorporating the following principles in the regulatory framework:

- The "hierarchy of integrated SWM practices" will be applied in order of priority as follows, prevention, preparing for re-use; recycling, other recovery (e.g. energy recovery) and disposal;
- The "extended producer responsibility principle", according to which, the primary responsibility for reducing impacts of a product and its packaging lies with the producers and all entities involved in the product chain of the product (processors, importers...);
- The "polluter-pays principle", according to which, the producers or holders (current and previous) of MSW shall increase their participation in covering the costs of MSW management;
- The "proximity principle", according to which, the disposal or recovery of waste shall be undertaken in one of the nearest appropriate installations, by means of the most appropriate methods and technologies;
- The "precautionary principle", according to which, in order to avoid the threat or danger to the environment deriving from MSW, measures shall be taken even if full scientific certainty is not available.

For the period 2015-2019, two targets are pursued, i.e. to increase the coverage of MSW streets cleaning and collection services to 100% and to halve the number of uncontrolled or unlicensed disposal in operation. Three Regional MSW Management Plans are required to operationalise the NSWMS: the North and Centre plans are currently under formulation with EU support; the one for the South should be developed in 2017 with support from the Agence Française de Développement.

In 2015, the Cabinet formed the Higher Steering Committee, an inter-ministerial committee mandated with implementing and monitoring the implementation of the national strategy. Chaired by the Minister of Municipal Affairs, it is composed of the Minister of Water and Irrigation; of Planning and International Co-operation, of Environment, and of Energy and Mineral Resources.

1.1.2 Stakeholder analysis⁵

1.1.2.1 At national level

If the Ministry of Environment (MoEnv) is responsible for policy and legislation, MSW management is operated by the Ministry of Municipal Affairs (MoMA). Other important line ministries in the area of solid waste include the Ministry of Health (inspection of landfill, medical waste management), of Agriculture (agricultural waste), and of Energy and Mineral Resources (development of waste-to-energy projects). There is no conflict of responsibilities between competent authorities dealing with MSW management in Jordan. However, if the division of responsibilities is quite precise, it does not cover the whole range of MSW management activities, in particular with what relates to treatment (recycling, waste-to-energy...).

Since its establishment in 2003, MoEnv is the official entity in charge of the environment and its components. MoEnv sets waste management policy, regulates the waste sector, monitors and enforces compliance. In this context, the Ministry is oversees the disposal of all wastes types and is responsible for monitoring environmental emissions and issuing necessary permits to construct and operate various MSW management facilities. It chairs the Committee mandated to select sites for MSW landfills. MoEnv is also responsible for organising hygiene campaigns and implementing awareness programmes. The Ministry lacks financial resources to monitor compliance with and enforcement of laws and regulations.

MoMA regulates all MSW management services. It assumes supervisory role over the activities of municipalities and Joint Services Councils (see 1.1.2.2) and exerts direct technical, administrative, and financial authority over their operations. MoMA contributes to financing the investments and operations of municipalities and Joint Services Councils (JSCs) and assist in preparation and ratification of their budgets. Although solid waste management is an essential municipal service, no strategic approach had been taken until the development of the national strategy in 2014. Consequently, no dedicated Solid Waste Management Department exists within the ministry, which suffers from a lack of qualified personnel. Any improvement in the sector is closely linked to the availability of adequate funding of essential municipal

⁵ *Development of a National Strategy to Improve Municipal Solid Waste Management in the Hashemite Kingdom of Jordan*, Ministry of Municipal Affairs, 2014. *Needs Assessment Review of the Impact of the Syrian crisis on Jordan*, Ministry of Planning and International Co-operation and United Nations, November 2013. *Country Report on the solid waste management in Jordan*, SWEEP-NET and GIZ, April 2014.

functions: municipalities' expenditures represented 0.2% of GDP in 2014, its lowest level in the region.

1.1.2.2 At regional and local level

According to the Municipalities Law of 2015, 29 functions are assigned to municipalities⁶, but in practice they play mainly a coordinating role as most services (water supply and sanitation, electricity, health, education) are provided by the central government or its agencies, which largely operate independently. Municipalities provide standard urban services, such as cleaning, spraying insecticides, street lighting, construction and maintenance of roads, slaughterhouses, markets, public parks, libraries and town planning. With regards to MSW management, municipalities are responsible to "*recycle waste, process it, destroy it and determine fees*" (article 5) and "*collect the waste from the homes and public shops, transporting it and regulating this*" (article 6).

In order to achieve economies of scale and consequently an improved level of service quality in an economically feasible manner to adjacent municipalities, municipalities may establish Joint Services Councils by virtue of the Municipalities Law and the JSCs Regulation of 2009. It is common practice that municipalities keep the responsibilities of street cleaning and solid waste collection and hand over the responsibilities of transfer/transport to JSCs. Yet out of 100 municipalities, 21 operate independently. Currently, there are 21 JSCs in Jordan, of which 18 are dealing with MSW management, operating MSW transfer stations and/or disposal sites.

Despite the clear delineation of responsibilities and mandates, JSCs have limited financial and technical resources that have caused an overall deterioration of their performance over the years. Basic attribute of SWM operations are lacking as there are no technical specifications for the supply and maintenance of equipment and for operation and maintenance of facilities, no operational guidelines for storage, transport and segregation of waste. On the organisational level, recent data show important imbalances in the distribution of personnel with some JSC treating 7.5 tonnes per day per employee against 2 tonnes in others⁷. No data is routinely collected to assess the technical and financial performance of JSCs'.

Other important stakeholders include the Greater Amman Municipality (GAM), responsible for the Greater Amman Area within the Capital of Jordan, the Aqaba Special Economic Zone Authority (ASEZA), mandated to administer the Special Economic Zone of Aqaba and the Petra Development and Tourism Region Authority (PDTRA), which administers the Petra Region. These entities have legal, financial and administrative authority, including for MSWM. In 2014, these entities represented 50% of the total MSW generated in the country. Besides, The United Nations Relief and Work Agency for Palestine refugees and the United Nations High Commissioner for Refugees are responsible for street cleaning and sweeping services in branch roads within the 13 refugees' camps they administer in the country, serving a total population of around 750,000 residents.

⁶ The analysis in this paragraph does not apply to Greater Amman Municipality; nor the Aqaba and Petra economic zones.

⁷ Data are based on the technical and financial assessment carried out during the formulation of the strategy on 15 municipalities and 14 Joint Services Council (JSCs) to assess their efficiency and productivity.

Involvement of the private sector in solid waste management, either through contracting out or public-private partnerships, is limited. Only the GAM (biogas plan, landfill gas recovery), the ASEZA (municipal cleaning), the PDTRA (municipal cleaning) and some Joint Services Councils (mainly recycling) have engaged with the private sector, mainly through sub-contracting services. Until the promulgation of the Public-Private Partnership Law in 2014 and the revised Municipalities law in 2015, the policy environment was indeed not conducive to stimulate private participation in infrastructure development.

As in most ENP-South countries, waste picking is common in Jordan. There would be around 5,000 waste pickers in the country, mostly Jordanians, either scavenging in cities or working formally and informally in dumpsites. No figure is available on the participation of children although the phenomenon is known. A fourth of waste pickers working formally on dumpsites are women. Syrians refugees have entered the value chain at different levels in search for income opportunities, leading to an increase in the number of informal recyclers and an intensifying competition. Waste pickers have low and insecure incomes, and lack legal protection, health coverage and social security. They are considered casual day workers and thus do not receive any social security coverage from their work, nor any other form of benefits other than minimal pay per working days. Informal actors range from individual waste pickers to the contractors employing daily workers in dumpsites. In between, there are itinerant scrap collectors with trolleys or trucks, small and medium scrap dealers, generalist and specialised brokers, up to semi-formal recycling plants⁸. Middlemen play an important role in controlling the flow of selling and purchasing materials from waste pickers to the final destination. Besides, there are over 200 companies registered as recycling businesses. Jordan's recycling sector faces tough competition, both internally, mainly due to the recent rise in electricity prices, and on the international markets, with raw virgin materials and imported recycled products being a viable substitute benefiting from better reputation.

1.1.3 Priority areas for support/problem analysis

The baseline report that supported the identification of policy measures provides a comprehensive overview of the issues that the Government must address to improve the effectiveness and efficiency of MSW operations in the country. They relate to the policy and regulatory environment as well as the performance of municipalities and Joint Services Councils. Below are provided an overview of the priority areas specifically tackled through this action, i.e. policy measures related to Joint Services Councils.

Lack of an appropriate regulatory framework. In Jordan MSW management is governed by various laws, regulations and instructions falling within the remit of several ministries. The Environment Protection Law (2006), the Municipalities Law (2015) and the Public Health Law (2008) addresses MSW management issues but in generic manner; they simply indicate the responsible agency for waste management, the fees that should be collected for proposed services, and the fines that should be paid in case of noncompliance with proper management of MSW. As to the secondary legislation, it relates mainly to solid waste disposal and landfill management.

⁸ *Solid Waste Value Chain Analysis in Irbid and Mafraq*, Disaster Waste Recovery for the Ministry of Municipal Affairs and UNDP Jordan, June 2015.

The most important gaps with regards the existing regulatory framework is the absence of clear direction or purpose with regards to prevention and management of MSW, the absence of legislation prohibiting the co-management of MSW with hazardous or special solid waste streams⁹, and the absence of technical specifications for the management of MSW along the chain (see appendix II). Comparing with the European legislation, it appears that a number of principles are not incorporated in the Jordanian regulatory framework, i.e. prioritising solid waste prevention, promoting the "reduce-reuse-recycle" approach, implementing the "polluter-pays principle", implementing the "extended producer responsibility approach".

Contrary to what had been envisaged, the vision and principles defined in the national strategy have not been embedded in the revision of the Environment Protection law submitted to Parliament in 2016¹⁰. Another path that had been envisaged was to issue a Waste Management Framework Law. With support from the European Union, the MoEnv has fervently worked in 2008 and 2009 to issue this law covering both municipal and hazardous wastes. The law had been approved by the then-Cabinet of Ministers but was put on hold shortly thereafter following a government's reshuffle. In broad terms, the draft promotes the "Reduce-Reuse-Recycle" approach and states Life-Cycle Analysis and the "polluter-pays principle" as key principles. Some amendments are still required as the document mainly focuses on landfilling at the expenses of other practices.

A set of recommendations are put forward in the national strategy to bring the current regulatory framework in line with the proposed policy measures. Most of these will require issuing new instructions and regulations, or amending existing ones.

Lack of proper final disposal facilities and related health concerns. The quantity of municipal waste will continue to increase in the years ahead in conjunction with population and consumption growth. The existing MSW collection system is considered to be adequate in urban centres, but services tend to be poor or non-existent in small towns and rural areas. This includes absence of source separation and recycling. Municipal and industrial solid wastes generated are mainly trucked and dumped at dumpsites. At present, there are 17 official dumpsites in Jordan; often uncontrolled (absence of fencing, ongoing fires, animals) and not properly designed (absence of proper lining, leachate collection system, landfill gas management system...) as there are no particular standards or specifications for MSW management systems in Jordan. No new landfills have been established for the last 15 years apart from the one that serves the capital Amman. Moreover, transfer stations, which role is normally to optimise the cost of collection and transport, are not sufficient in terms of number and capacity. Existing ones need robust upgrade to bring them to the standards.

There is a series of special and hazardous waste streams currently ending up in waste collectors that are not considered as MSW, whose handling should be separate, since

⁹ Such waste streams are waste from Electrical and Electronic Equipment; batteries and accumulators; components of End-of-Life Vehicles (ELVs); used tyres; construction and demolition waste; hazardous medical waste; non-MSW industrial waste, which may be hazardous or non-hazardous.

¹⁰ In broad terms, the amended Environmental Protection Law aims to increase the consequences associated with environmental violations. Thus, where the current law falls short from mentioning penalties for many acts of violation, the amended Law cover that gap or emphasises on the penalties for such violation.

they deteriorate the quality of MSW and increase the respective management risks¹¹. There is only one special site in the country designated for disposal of industrial waste. Inefficient and improper segregation of medical and municipal waste is still practiced, to varying extent, among healthcare facilities. As a result, contamination of water resources due to the generated leachate is a major issue that should not be underestimated. On open dumping grounds, foul odours and air pollution are dangerously affecting the surroundings. Rodents thriving in dumpsites are spreading pathogens in the surrounding areas. Workers are exposed to diseases and hazards.

The national strategy aims to prohibit the unsafe disposal of MSW and exclude from facilities the disposal of industrial, construction and demolition, and medical wastes. In the short-term, 50% of existing dumpsites should be closed, 20 new transfer stations and 10 new sanitary landfills constructed.

Lack of cost-recovery policies for financial sustainability. For all forms of industrial pollution (liquid, solid and atmospheric) there is no positive or negative “penalty” for the generation of pollutants. All actions currently programmed in respect to pollution clean-up or prevention are mainly supported by public budgets. Detailed financial data in this respect are difficult to obtain, but in 2013 the total cost of the MSW system was estimated at JD 51 million and the total revenues at 23.6 million. Cost recovery reached 60% in Amman and only 30% in the rest of the country. Household contribution to MSW management represents 0.11% of GDP per household, a figure that is much lower than comparable countries.

Cost recovery amongst municipalities and JSCs shows great disparity, with few achieving cost recovery while others requiring full subsidisation; most display poor performances, i.e. not being able to finance operating expenditures from revenues generated. It must be noted that the significant diversification of the indicators are not - only and exclusively - due to the variation of demographic characteristics (population, density) or waste generation which are also polarised (e.g. 50% of total MSW in country is generated in three cities). They are also due to strong variations on the level of organisation and planning, revenue generation capability and access to extra-budgetary funding sources.

If the national strategy aims to enforce the "polluter-pays principle" according to which the producers or holders (current and previous) of MSW shall increase their participation in covering the costs of MSW management, in practice full cost recovery cannot be realistically achieved in the medium-term period given the current socio-economic context. The Government opted to achieve partial cost recovery, i.e. increasing by 20% in 5 years the current cost recovery rate; through (i) increasing revenues by increasing user fees proportionally to household income and companies revenues, implementing a fee/tariff system for large producers of municipal wastes; increasing the participation of the private sector to MSW management operations (ii) reducing costs, by increasing the number of transfer stations, improving operation and maintenance of facilities and equipment.

With regards to increasing the participation of the private sector in MSW management, recommendations are put forward in the national strategy to operationalise Public-Private Partnerships (PPP). Regulations are required to identify the various types of contracts allowed (collection, transportation, transfer, material

¹¹ An estimated 4,000 ton/year of hazardous medical waste is generated throughout the country. Records for industrial waste are not available.

recovery and final disposal) and establish general conditions and guidelines for adopting PPP contracts. Moreover, the Government will still have to demonstrate that the municipal sector is attractive and that it is capable of managing such contracts. Given the poor financial performance of the sector, waste-to-energy projects are for the moment prioritised.

1.2 Other areas of assessment

1.2.1 Fundamental values

Jordan has ratified the 6 major international conventions related to protection of human rights. However, Jordan has not ratified some optional protocols, inter alia the Optional Protocol to the Convention against Torture, the 1st and 2nd Optional Protocols of the International Covenant on Civil and Political Rights, the International Labour Organisation (ILO) convention No 87, No 169, No 189, and the conventions on refugees and stateless persons. Jordan expressed reservations on a few articles of the UN Convention on Elimination of All Forms of Discrimination against Women and on the Convention of the Right of the Child. Jordan is the only country in the region that has offered a standing invitation to all UN Special Rapporteurs. Yet, the Committee on the Right of the Child has underlined important weaknesses in terms of legislation, institutions and allocation of resources that prevent the state from implementing the Convention.

Death penalty has not been abolished but a de facto moratorium was in place for eight years until December 2014 when 11 people were executed. Further 2 executions took place in February 2015. Current regional conflicts, coupled with Jordan's porous border, make the nation an ideal refuge for displaced people and an attractive destination for traffickers to recruit low-skilled workers. Jordan has welcomed millions of refugees, despite never ratifying the Refugees Convention. However, right to entry the country was refused to some refugees, including Palestinians and Iraqis living in Syria (including cases of *refoulement*).

Jordan has ratified the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW), but has entered reservations to the articles 9, paragraph 2 and 16. The 2011 revised Constitution did not include 'gender' as a ground of discrimination. There has been no follow-up in 2015 to the recommendations of the UN Committee on the Elimination of Discrimination against Women, and the major issues on women's rights remain the same (honour crimes, children of women married to foreigners and single mothers cannot obtain the Jordanian citizenship). Despite a good literacy rate, and a presence of female students in higher education equivalent to male, women's engagement in the local workforce stands at around 14%, one of the world's lowest. Jordan has worsened its ranking in the Gender Gap Index over the last 7 years and deteriorated further in 2015 to the 140th position, out of 145 countries mainly due to poor economic participation.

Public institutions have been established to monitor human rights and are rather active in their area of specialisation (National Center for Human Rights; Ombudsman Office; Jordanian National Commission for Women). Some of them lack adequate human, technical and financial resources. In follow-up of the 2013 Universal Periodic Review, Jordan formed a technical committee to draft a national plan for human rights, including the need of reviewing national legislation to bring it in line with international agreements and human rights conventions. The plan was supposed to be finalised by end 2014; it remains to be finalised. In June, authorities announced that they would produce a guidebook entitled "Know your Rights" to raise public awareness about rights as citizens.

In 2015, Jordan acted upon some key recommendations contained in previous ENP progress reports, most notably by adopting the law on political parties and on decentralisation. Other key recommendations made previously remain however valid. In line with the commitments agreed in the ENP Action Plan, Jordan should pursue the reforms process and enforce the laws adopted without following a strategy of selective implementation. Jordan's commitment to fundamental values remains valid. However several risks of deterioration of the human rights situation were identified in the latest update of the Risk Management Framework carried out in February 2016, i.e. freedom of media and expression, freedom of association, space for civil society, death penalty and refugees. These had already been raised at the last Human Rights Sub-Committee of March 2015.

1.1.1 *Macroeconomic policy*

The Delegation's assessment of macroeconomic policies was updated in May 2016 and concluded that the Government of Jordan pursues a credible and relevant stability-oriented macroeconomic policy in the present circumstances, aiming at maintaining fiscal and economic stability. The analysis was based on the latest macroeconomic data, the positive International Monetary Fund (IMF) conclusion of the Stand-By Arrangement in August 2015, and the continued interest of the government to conclude a new programme with the IMF. Jordan's economy has been on a path of recovery since the economic downturn of 2009. The economy grew by 2.4% in 2015 and IMF forecasts economic growth to reach between 2.5% to 3% in 2016. The economy remains relatively resilient despite the regional turmoil but it is growing at a slower rate than originally forecasted and has shown worrying negative trends, notably an increase of public debt, a steady increase of the unemployment rates, and a decrease of foreign direct investment (FDI). Annual FDI inflows fell 36.6% in 2015 and unemployment increased to 14.6% in the first quarter of 2016. Lower investments contributed to the reduced growth rate, yet lower FDI inflows are largely attributed to external factors namely regional instability and declining investment from the Gulf countries. In addition, Jordan continues to face challenges in its achievement of a stable fiscal environment. Public finances achieved improvements up to middle of 2015 but several targets were missed during the remainder of the year, including higher deficit than foreseen. Total debt continued to rise due to an increase in the debt of the national electricity and water companies at a time when the debt of the central government declined. The government took measures to address the mentioned challenges. Steps were taken to reduce fuel subsidies by eliminating government subsidies on fuel for cars since 2012 accompanied by targeted cash transfers, and by gradually eliminating electricity and water subsidies thereby raising prices to consumers.

As regards the high energy generation costs following the disruption of natural gas supply from Egypt, the cost-recovery strategy for NEPCO (national electricity company) has been successful as NEPCO is currently operating at cost recovery. This was achieved by: the increases in electricity tariffs in 2014 and 2015, the start of operations of the LNG (liquefied natural gas) plant in 2015 and lower international oil prices. However, vulnerabilities remain as, should international oil prices increase (above 60USD per barrel), NEPCO would no longer be operating at cost recovery level. Public debt remains high at 91.7% of GDP (gross debt) by the end of 2015 and will be a target of the new programme with the IMF. The Ministry of Finance argues that overall the growth rate of public debt is decelerating; in 2012 debt was increasing by 20% while in 2015 debt increased by some 11.2%. Moreover, debt was expected to peak in 2015 and then gradually decline when alternative energy sources

start operating, to reach about 70% in 2020. The figures remain consistent with that scenario. Moreover, the government has been substituting domestic debt with cheaper foreign debt and a new debt strategy is being formulated. As regards regional political instability with the additional cost to the government due to the hosting of an increasing number of Syrian refugees, those are being mitigated by the National Resilience Plan 2014-2016 and Jordan Response Plan 2016-2018 which includes priority responses to mitigate the impact of the Syrian crisis on Jordan and on host communities.

Domestic revenue mobilisation has remained stable since 2011. Although the results of domestic revenue mobilisation in 2014 was a better reflection of government efforts than in 2015, they remained within the IMF's medium term scenario (2013-2107) which forecast domestic revenue to remain at about 21.9% of GDP. In both 2014 and 2015 domestic revenues in percent of GDP exceeded the 21.9% IMF scenario; they were 23.7% of GDP in 2014 and 22.2% of GDP in 2015. Nonetheless, the fiscal position remains vulnerable and the high amount of grants (JD 886 million were received as grants, amounting to 13% of total revenue and 3.3% of GDP in 2015) went a long way to help stabilise public finances in recent years, as mostly grants covered the additional losses of the national electricity company. Faced with increasingly limited public resources and multiple challenges, the government is aware that a new programme with the IMF is essential. A new programme is regarded as necessary to anchor government commitments to reforms, to increase confidence in the economy and to bridge the balance of payments gap and encourage donor support in this endeavour.

The government has demonstrated commitment to the macroeconomic policy targets agreed with the IMF under the Stand-by Arrangement (SBA) from mid-2012 to mid-2015, which concluded positively. The IMF assessments of 2015 concluded that the authorities have been implementing strong macroeconomic policies to reduce external and fiscal imbalances, despite the adverse external environment. Further government efforts are also called upon in a number of areas such as increasing taxes to the highest earners, reduce tax exemptions and conduct cost-benefit analysis prior to providing tax exemptions, and further address tax evasion. In addition, the government continues to demonstrate interest to commit to quantifiable targets in a new IMF programme under discussion. Following three years of fiscal discipline policies which were part of a Stand-By Arrangement with the IMF, there is a general consensus that growth promoting policies are needed and essential to spur economic growth in the coming years. Thus a number of structural reforms particularly for improving the investment climate, labour market reforms and governance are currently under discussion to be targeted in the programme with the IMF over the coming years.

Policies are in the right direction to support macroeconomic stability. The 2016 budget targets are appropriate, with a foreseen deficit reduction by around 0.9% from 2015 in addition to efforts to reduce the growth rate of debt. The monetary stance remains a strong point and has been stable in recent years, with a rebound in foreign currency reserves. The peg of the Jordanian dinar to the US dollar has anchored inflation expectations and provided a measure of fiscal stability.

1.2.3 Public Financial Management (PFM)

Jordan has an integrated and well-functioning Public Financial Management (PFM) system that has been strengthened over the last years through the on-going reform process. Several achievements were supported through budget support and other

modalities. The PFM annual monitoring report completed in November 2015 reviewed progress in PFM reform implementation and concluded that Jordan continues to fulfil the public financial management reform eligibility criterion for budget support. The Government of Jordan continues to make sound progress in the implementation of its PFM reform programme. The implementation of the programme - Comprehensive Reform Strategy of Public Financial Management 2014-2017 - to improve and reform public finance management is positive with several reforms already completed or well advanced in their implementation with donor support. Progress in the past year was noted in: additional improvements to budget analysis during budget preparation; improvements to tax collections and tax audit quality, continued rolling out of the Government Financial Management Information System to additional budget entities, progress on addressing government arrears and on preparing commitment controls, progress on the certification for internal control units. Weaknesses persist in: adopting a revised new legislative basis to enhance the independence of the Supreme Audit Institutions is yet to be approved by Parliament, confusion remains between the concepts of internal control and internal audit, the number of Supreme Audit Institution recommendations to government continues to increase, and the Ombudsman has appeared less active and it is not yet certain whether it will be merged with the Anti-Corruption Commission. The Public Expenditure and Financial Accountability (PEFA) assessment of 2011 which compared progress since the first PEFA in 2007 also noted that the overall change trended in a positive direction during the four-year period. A new PEFA is foreseen to take place in the summer of 2016 following the recently revised PEFA methodology.

1.2.4 Transparency and oversight of the budget

Jordan meets this criterion and has gone well beyond the basic eligibility criteria in this area. As per the EU Budget Support Guidelines of September 2012, the entry point for the fourth eligibility criteria – transparency and oversight of the budget – has been met as the Government of the Hashemite Kingdom of Jordan has published the enacted budget of the past budget cycle (2015/2016) within the respective fiscal year, and that the draft budget for 2016 was published on the internet for wider public reference and use before the end of 2015. Jordan has improved budget transparency and oversight significantly in previous years and continues to uphold its performance. The Open Budget Survey of 2015 places Jordan first among Arab countries. Moreover, Jordan's Open Budget Index score of 55 is well above the world average of 45 and reflects the significant improvement in budget transparency over previous years. In 2015 satisfactory progress with regard to the public availability of accessible, timely, comprehensive, and sound budgetary information was maintained. Nonetheless, weaknesses persist in: the government not producing a mid-year report on budget implementation, not formalising the process through which the public engages in the budget process. Furthermore, in order to enhance oversight of the budget it is recommended to enhance the Supreme Audit Institution's independence through new legislation, which has not yet passed Parliament.

2. RISKS AND ASSUMPTIONS

As per the Risk Management Framework updated in 2016, the overall average risk levels remain moderate, and somewhat stabilised from the previous assessment. Some external ones have been mitigated since the previous assessment e.g. with high level of foreign reserves. Specific areas of substantial risks prevail. Some are internal ones to Jordan which could be influenced through consistent political and policy

dialogue, well targeted assistance and using efficiently all the tools EU has at its disposal. As assessed by the World Bank, public policy management in Jordan is overall poorly performing. Policy design suffers from (i) weak adherence to a comprehensive reform plan (ii) a general public perception that past policies have failed – which implies a poor selection of policies (and /or weak implementation); (iii) the limited consultation in the policy design process. Policy implementation is further constrained by (i) blurred ministerial mandates and insufficient co-ordination among ministries; (ii) frequent changes in government and ministerial leadership (iii) discretion in implementation (iv) to some extent weak technical capacity.

Yet, some positive changes have been noticed since 2013. First and foremost, government reshuffles are less frequent than in the past ensuring more continuity in policy implementation. Prime Minister Abdullah Ensour has been in office from October 2012 until May 2016. Secondly, ensuring that the Jordan 2025 yields results is high on the agenda of His Majesty the King. The Prime Ministry, through its Delivery Unit, has been entrusted with the monitoring and evaluation of the plan, which is operationalised through three-year Executive Programmes. The Ministry of Municipal Affairs seems to follow through. A number of important decisions have been taken since the approval of the national strategy. In June 2016, fees charged to households for waste collection were increased substantially¹². Some other important measures are under discussion, i.e. the creation of a Solid Waste Management Department and the restructuring of Joint Services Councils.

The risks closely related to the implementation of the proposed programme are:

Risks	Risk level (H/M/L)	Mitigating measures
<i>Sector governance, policies and institutions</i>		
Funding allocated to the sector does not reach a sufficient critical mass	High	(a) The action will focus on the centre and north regions and specific targets will be set in the corresponding Regional Plan. (b) Sufficient level of expenditure will be set as general condition. (c) Frontloading investment set for medium-term will result in better cost per unit.
Lack of sustained political will to commit to financial sustainability of infrastructures; cost-recovery issues and difficulties in enforcing fee charges or tariff increases	Moderate	Inclusion of an appropriate tax and fee system encouraging the reduction of waste production and generating additional fund, i.e. redistribution of charge in portion with household incomes and enterprises revenues, initial implementation of fee/tariff system for large producers.
<i>Investments-specific risks</i>		
Lack of implementation capacity resulting in delays in project implementation	Moderate	Establishment of an autonomous Programme Management Unit building on the experience of the Ministry of Water and Irrigation.
Difficulty in securing sites for the transfer stations and landfill because of environmental or social concerns of potentially	Moderate	Extensions of existing sites will be prioritised. Governorate consultations will be launched with local decision-makers and citizens.

¹² Households are charged a flat fee according to the population size of the municipality. The fee was increased from JD 8-24 per year to JD 20-36; an annual increase of 3% will be applied.

affected communities

Land acquisition: ascertaining land titles and ensuring resources are available for purchasing.

Moderate

Ministry of Municipal Affairs will be required to produce a verification of land titles by a local reputed law firm. Financial transfers will be executed against the availability of resources in the Ministry of Municipal Affairs budget.

Environmental risks

Moderate

New landfills will be constructed under the direct supervision of the delegated entity, which will ensure due diligence. The existing regulation on environment impact assessment will be amended to integrate international standards.

Assumptions

- The National Committee established for monitoring the implementation of the national strategy meets regularly and focusses on its core mandate.
 - The three Regional MSW Management Plans are approved by the end of 2017.
 - Coverage of MSW street-cleaning and collection services reaches 100% by the end of the action.
 - No substantial increase in the number of refugees (Iraqis, Syrians)
-

3. LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES

3.1 Lessons learnt¹³

A review of the European Union experience provides useful insights. In addition to a genuine sense of urgency to act amongst policy-makers, the European Environment Agency notes that the Landfill Directive's success was based on two core factors. First, its combination of long-term and intermediate targets has provided a good framework for countries to landfill less biodegradable municipal waste. Setting targets helped to measure progress and keep attention on core issues. Second, the directive's flexibility allowed Member States to try out alternative policies and adjust measures to match national and regional realities. More specifically, diverting waste from landfill has relied on combinations of policies aimed at households, waste companies and producers. Closing landfills was an important driver for adopting new waste treatment options. If composting is to play a role in diverting waste from landfill then a well-functioning market for compost is needed. Economic instruments can play a significant role in diverting waste from landfill if they are designed in such a way that they regulate the behaviour of households, waste companies and producers effectively. These elements have been incorporated in the national strategy and progress in this respect shall be reviewed through regular policy dialogue.

With regards to the budget support modality, the EC evaluation notes that the long-term commitment to budget support and strong alignment between donors are critical success factors. This operation will be implemented in close co-operation with the Agence Française de Développement over a period of 6 years. As to reforms led by the Ministry of Municipal Affairs, the World Bank concluded that "*addressing several diverse and complex themes in a limited capacity environment plants several seeds of reform but can limit the depth of success of each theme. Starting the process of reform with a simple project with limited but clear objectives could lead to better performance.*" Subsequently, choice has been made to focus the action on transfer and disposal and not on solid waste collection.

Finally, the inception period of the on-going EU solid waste management project (see 3.2) demonstrated the need to reinforce capacities of the Ministry of Municipal Affairs: given the budget under consideration for infrastructure, establishing a

¹³ *Diverting waste from landfill: effectiveness of waste management policies in the European Union*, European Environment Agency, 2009. *Managing municipal waste: a review of achievements in 32 European countries*, European Environment Agency, 2013. *Evaluation of the European Union's Co-operation with the Hashemite Kingdom of Jordan – Country Level Evaluation*, European Commission, 2015. *Regional and Local Development Programme – Implementation Completion and Results report*, World Bank, 2015.

Project Management Unit is perceived as the most appropriate modality to expedite procurement (see 5.9).

3.2 Complementarity, synergy and donor co-ordination

Agence Française de Développement (AFD) is currently designing a package of interventions targeting the municipal sector. Regarding municipal solid waste, the Government has agreed in principle to secure a concessional loan for the construction and rehabilitation of transfer stations and landfills. From July 2016, the agency will provide an 18-month resident technical assistance to the Ministry of Municipal Affairs to support the implementation of the national strategy. AFD is also exploring the possibility to finance the regional plan for the South through a technical assistance facility managed jointly with the Government. Finally, AFD is considering a budget support operation to the municipal sector that could contribute to fast track critical reforms in the area of municipal finances.

In the northern governorates that host large number of Syrian refugees, several interventions targeting municipalities are on-going. The EUR 10 million project *Solid Waste Management in Jordanian communities hosting Syrian refugees* (ENPI/2013/026-494 and ENI/2014/037-559) aims at reinforcing the capacities of the three largest cities in solid waste collection and constructing one cell in Al-Ekaider, one of the largest dumpsite of the country. For this latter, close co-ordination is ensured with UNDP, which is constructing a second cell with financial assistance from Canada. The EUR 46 million World Bank *Emergency Services and Social Resilience Program (ESSRP)* is a three-year pool fund ending this year. Funded with grants from the World Bank, United Kingdom (UK), Canada, Switzerland, Sweden and the Government of Jordan, ESSRP aims at assisting municipalities addressing the immediate service delivery impacts of Syrian refugees' inflows, including solid waste, and strengthen their capacity to support local economic development. With a grant from Germany, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) is strengthening the capacities of municipalities in the operation and maintenance of equipment.

The on-going *Renewable Energy and Efficiency Programme* (ENI/2015/037-735) foresees the installation of a treatment facility for electricity production within the Greater Amman Municipality (indirect management with the European Bank for Reconstruction and Development (EBRD). Moreover, EBRD agreed in 2015 to provide a US\$ 13 million soft loan to Amman to upgrade the capacities of the landfill serving the capital. Germany, through KfW, will also provide a soft loan to the capital of up to EUR 25 million and 2 million grant for “accompanying measures” for recovery interventions (currently defined). A large scale pilot project on separation and collection in selected areas of the city is also being considered.

As for most sectors, aid co-ordination in this field remains in its infancy; donors meet on an ad hoc basis to collect and share information. It has been the case recently with USAID and Japan that are considering supporting the sector. The Delegation continues to reach out to donors and international financing institutions active in the sector, not only to develop synergies but also to ensure that their actions are in line with the national strategy. A working group will be established once the framework for the present action is agreed with the Government.

3.3. Cross-cutting issues

The action will have obvious positive environmental impacts and benefits. A key aspect of the intervention will be to develop a proper set of regulations aiming at

prohibiting the unsafe disposal of municipal solid waste and avoid the co-management of MSW with hazardous wastes. The adverse environmental impacts which can be mitigated through these measures are associated with the potential contamination of surface and groundwater from leachate generated by the decomposition of municipal waste, the release of odours, the attraction of wild animals, generation of traffic and aesthetics. In addition, the infrastructure component aims at reducing random dumping and burning of waste to a minimum. On the long term, better waste management should also lead to cut greenhouse gas emissions through the steady reduction of methane emissions from landfills.

Key cross-cutting issues mainly include gender and child labour. As noted above a limited number of women and children are working as waste pickers on dumpsites. Specific actions will be designed to improve the working conditions of women and steadily prevent the employment of children on dumpsites. Besides, the closing of uncontrolled dumpsites will result in the loss of income for informal waste pickers operating there. Integration activities will be developed through in-depth consultations and discussion of option for their reinsertion will take place.

4. DESCRIPTION OF THE ACTION

4.1 Objectives/results

The overall objective of the action is to improve overall health, environmental conditions and quality of life of population by developing environmentally and financial sustainable systems for solid waste management. Its purpose is to ensure in the coming five to seven years, the efficient, safe and sanitary disposal of municipal solid waste in the country. The specific objectives are to:

- SO1: consolidate the existing regulatory framework to bring it in line with the objectives set in the national strategy;
- SO2: improve the transfer and disposal management system in the Central and Northern Regions;
- SO3: improve the socio-economic well-being and health status of waste pickers working in dumpsites;
- SO4: raise general awareness, understanding and knowledge about key municipal solid waste management issues amongst concerned segments of the society.

The key outputs / results are presented below

- For SO1: objectives and principles of the national strategy incorporated in the regulatory framework through new and amended regulations and instructions;
- For SO2: increased capacities for safe and sanitary disposal, improved cost recovery for solid waste disposal, improved institutional set-up of local and regional levels, a national monitoring system is established.
- For SO3: the health status of informal waste pickers is assessed as well as their access to education and social services; actions to address child labour are implemented; if assessed feasible, local association / cooperative are formed.
- For SO 4: a national audience research is conducted; three small-scale pilots in the 3 regions are implemented; a national action plan is developed.

Implementation of SO2 will include labour-intensive works programme through the closing of small dumpsites and the piloting of material recovery schemes.

4.2 Main activities

Within the national strategy, policy measures shall be implemented through a phased way. Initial interventions (2015-2019) will focus on resolving existing acute issues, while preparatory actions will be undertaken to pave the way for medium-term interventions. Operational costs will increase compared with the current situation; required capital cost will be partially or totally funded through public funds and development assistance. In the medium term (2020-2024), interventions will complement short-term ones and evolve towards set targets for materials recovery or other recovery (e.g. energy recovery). New facilities will be properly selected, built and efficiently operated in order to achieve self-financing in the greatest possible extent, adding the lowest possible burden on the Government or Jordanian citizens. On the long-term (2025-2034), interventions will focus on achieving a state-of-the-art level of MSW management and bringing Jordan in line with European and international standards.

The proposed action is fully in line with this approach, aiming at incrementally improving solid waste facilities and reinforcing in parallel the legal and regulatory framework and strengthening monitoring capacities. In year 1, 2 and 3, priority will be given to strengthening the regulatory framework, restructuring service areas for Joint Services Councils; strengthening the capacities of the Ministry of Environment, the Ministry of Municipal Affairs and Joint Services Councils, developing solid waste management plans for municipalities and undertaking feasibility assessments and design of new transfer stations and sanitary landfills. In year 3 and 4, activities will mainly aim at constructing new transfer stations and sanitary landfills and establishing the National Information System. In years 4, 5 and 6, construction of new facilities will continue and the rehabilitation and closing of dumpsites will be initiated.

Implementation modalities have been defined taking into consideration the absorption capacities of the Ministry of Municipal Affairs. Funding to the municipal sector, both public and donors' funding¹⁴, has increased sharply in the last three years as a result of the Syria crisis and is likely to increase further as municipalities are perceived as key actors for addressing the impact of Syrian refugees on host communities.

4.2.1 Budget support

Budget support in the form of a Sector Reform Contract is proposed for achieving the first specific objective and part of the second specific objective. As identified in the national strategy, several institutional gaps will need to be tackled incrementally by the Ministry of Environment (MoEnv) and the Ministry of Municipal Affairs (MoMA) through the appropriate design, validation and implementation of new sets of legislation. Several of these will have to be enforced during the first half of the action to improve the performance of MSW management operations (see appendix II). With regards to enforcing the principles embedded in the national strategy, the promulgation of a Waste Management Framework Law appears today the most appropriate course of action.

The restructuring of the Joint Services Councils through the merging of the existing 21 structures into 9 (including Greater Amman Municipality) is a key aspect of the

¹⁴ Transfers from the central budget to municipalities will increase from JD 70 million. in average for the past 5 years to JD 117 million per year for 2016-2018.

national strategy that aims at increasing the overall efficiency of the MSW management system. One of the first activities should be to formulate unified budget template and accounting rules. Another important activity is to support them in institutionalising the operation and maintenance of collection equipment, building on and extending current projects. Together with measures aiming at reducing costs of operations and increasing revenues, this re-organisation should occur sufficiently early in the process to contribute to the 20% increase in cost recovery targeted in the national strategy.

Moreover, MoMA will be directly responsible for the closure and post-closure of existing dumpsites (capping, gas extraction, leachates treatment, maintenance) and illegal random dumpsites. A methodology based on environmental risks of each disposal site should be developed to prioritise the facilities that must be first closed. As foreseen in the national strategy 9 out of the 17 dumpsites should be closed between 2015-2019¹⁵ and 8 between 2020-2024. Illegal disposal sites will be identified in the Regional MSW Management Plans.

Finally, MoEnv and MoMA, in close co-operation with the Department of Statistics, will be directly responsible to establish a National Information System for monitoring the operational and environment performance of the sector¹⁶. Delineations of responsibilities will have to be defined first. Improving the regularity of inspection and supervision of existing and new dumpsites by the MoEnv will be required.

4.2.2 Complementary support

Complementary support will contribute to the implementation of the four specific objectives. The major part of the assistance will consist in the construction of new sanitary landfills and transfer stations. Technical assistance will be provided to assist the Ministry of Environment (MoEnv) and the Ministry of Municipal Affairs (MoMA) in the implementation of the programme. Additional support will be provided to address informal waste picking and public awareness. Implementation will be delegated to two delegated bodies, one being responsible for SO1 and SO2 and one for SO3 and SO4 (see 5.4).

SO1: Consolidate the existing regulatory framework to bring it in line with the objectives set in the national strategy

Considering the importance of its regulatory mandate, technical assistance will be provided to MoEnv in performing its duty of approving site selection, screening, classification of the environmental risks, public hearing, follow-up of consultants, Environmental Impact Assessment approval and monitoring of environmental performance. This would also include the set-up of norms and standards regarding the upgrading of existing sites (closure, gas management, leachates treatment, etc.). Support will be provided to MoMA to implement measures related to cost recovery (budget and accounting systems and private sector participation) and the

¹⁵ The rehabilitation of Al Ekaider dumpsite will be managed through the indirect management component as new cells will be constructed in parallel to the closure (see SO2).

¹⁶ Through the second phase of the regional programme *Increased collaboration with EEA and further implementation of Shared Environmental Information System in 5 ENP countries*, the European Environment Agency envisages from 2017 onwards to continue providing technical assistance to the Ministry of Environment and the Bureau of Statistics with a view to improve the collection of waste-related data.

restructuring of JSCs. The technical assistance will also assist in clarifying the role of both ministries to avoid overlapping and fast-track approval procedures.

SO2: Improve the transfer and disposal management system in the Central and Northern Regions

Activities will include the construction of new transfer stations and landfills, technical assistance to central and local authorities, pilot projects on sorting/recycling practices and complementary studies. With regards to infrastructure, it is important to recall that the exact list of facilities will be defined based on the two Regional MSW Management Plans that are currently formulated. These plans, which will have to be approved by the Higher Steering Committee, further detail the national strategy at the adequate operational level (area based-approach). This includes the precise identification and costing of sites to be closed, rehabilitated or new sites/extensions to be built in a phased approach (following an implementation time plan) in order to (i) achieve economies of scale (ii) ensure the continuity and regularity of coherent areas of service provided to citizens and (iii) minimise environmental hazards. Yet, the Al Ekaider dumpsite located in the north will be rehabilitated and extended in priority given environmental hazards and the pressure exerted by Syrian refugees; its rehabilitation and extension has been roughly estimated at JD 20 million. (EUR 25 million). As envisaged by the Government, the participation of the private sector to this operation will be explored.

Building the capacities of the Ministry of Environment and of the Ministry of Municipal Affairs in relation to the budget support component will be critical. Strengthening the capacities of municipalities and Joint Services Councils (JSCs) will be equally important. JSCs have the most important role in the management of facilities and need to be strengthened with regards to operation and maintenance of equipment, optimisation of schemes to minimise operational costs, management of transfer stations and landfills, financial management, ... Municipalities play a nodal role with regards to tariff policy and fees collection, public health, quality control of cleaning and collection, etc. If required, support may be provided to develop municipal SWM plans.

Improvement in sorting/recycling practices should be pursued on an incremental basis, setting realistic targets (beginning with paper, cardboard, metal, plastic and glass) and starting from promotion of recycling at pilot scale (building upon the existing limited initiatives). A clear and practical strategy should be designed, adapted to a progressive and sustainable awareness raising campaign towards citizens (see SO4). In the first stage, initiatives currently planned by other donors like pilot composting units (waste from farms and vegetables markets) should be documented to analyse the potential and prerequisites for further duplication.

Finally, in-depth analytical and preparatory studies need to be carried out to tackle the main issues related to the sector to ensure its sustainability: financial scheme, private sector participation, co-management of hazardous and medical wastes, and development of compost market.

SO3: Improve the socio-economic well-being and health status of waste pickers operating in dumpsite

To ensure the integration of the informal sector into the national strategy an integrated approach must be developed. After a baseline and assessment study on informal sector integration a concept will be developed taking into consideration different groups of informal recyclers, men and women working in the informal

sector and their different needs. The concept of informal sector integration will go into a consultation process to ensure the acceptance of all stakeholders on the measures to be taken. After agreeing on the informal sector integration concept activities to raise the awareness of the concept will be undertaken. The relevant staff of the JSCs will be trained on the implementation of the integrated strategy.

In a second stage, an approach to formalise working relationships between JSCs and contractors / informal waste pickers will be developed and support to JSCs will be provided accordingly. Activities to raise the awareness of waste pickers on health and occupational safety as well as social rights will be implemented. In this respect, the feasibility of establishing waste pickers cooperatives will be assessed; alternatively, support would be provided through local associations or community-based organisations.

SO4: Raise general awareness, understanding and knowledge about key municipal solid waste management issues amongst concerned segments of the society

Within the national strategy, a public awareness and education programme is recommended to be implemented over four phases: Zero Phase: Audience Research (short-term period); Phase I: Design Phase (short-term period); Phase II: Implementation Phase (mid-term period); Phase III: Nationwide Phase (long-term period). The first two phases will be implemented during the course of this action. During the zero phase, a National Audience Research is recommended to be conducted for a better understanding of current knowledge, attitudes and practices of key audiences, as well as pinpoint obstacles and barriers that need to be reduced and incentives that need to be provided in order for them to adopt positive MSW management behaviours. Potential issues will be littering, hygiene in public spaces, payment of fees, material segregation and recovery, behaviours regarding special and hazardous streams. The objective of Phase I (3 years) is to design a comprehensive public awareness and education programme. It will be done using participatory approaches that stress broad-based involvement from all sectors of Jordanian society, thus ensuring local buy-in, support, and participation during the implementation. Based on the design, a set of pilot projects are recommended to be implemented at small-scale (villages, neighbourhoods).

4.3 Intervention logic

The effectiveness of MSW management in Jordan is today at stake. The influx of Syrian refugees, the increase of MSW generation rates, the impact of dumping municipal and hazardous wastes in non-engineered landfills, as well as the absence of proper practices for MSW collection and disposal are key challenges that must be addressed immediately. These issues represent a measurable threat to public health and environmental quality in the Kingdom and require national attention. Coincidentally, these issues are tackled by *Jordan 2025*, Jordan ten-year socio-economic development plan. Waste management is taken up in the Chapter *Environment*, covering 2 of the 5 key performance indicators defined for this Chapter. Proposed objectives are in line with the vision set in the national strategy, in particular through seeking to ensure "the safe disposal of solid waste disposed in landfills", increase "the quantities of treated and re-used solid waste" and increase "private sector participation in solid waste management system and recycling". Moreover, the Chapter also recommends "developing an integrated system for the management of hazardous and medical waste according to international standards".

Of the eleven policy measures identified in the national strategy (see 1.2), the action will contribute to those related to solid waste transfer and disposal:

- Policy measure 3: Long-term MSW management at local, regional and national levels;
- Policy measure 4: Avoidance of co-management of MSW with hazardous or special streams;
- Policy measure 6: Improvement of cost recovery of the MSW management system;
- Policy measure 7: Improvement of the institutional set-up of local, regional and national authorities;
- Policy measure 9: Improvement of monitoring mechanisms in terms of operational and environmental performance;
- Policy measure 10: Updating the MSW management related legislative framework.

It is important to note that some actions foreseen to be implemented in the medium-term period will be implemented within the frame of this action as they are considered critical for the efficiency and sustainability of the action, i.e. avoidance of co-management of MSW with hazardous or special streams, improvement of monitoring mechanisms and the restructuring of Joint Services Councils.

Concerted efforts by all segments of society, i.e. Government, Parliament, private sector, civil society and citizens, will be required to increase buy-in of the national strategy. Policy dialogue will the Government and the Parliament shall aim to ensure that adequate financial resources are allocated to its implementation. Given the cost of the proposed policy measures, participation of the private sector to the financing of the national strategy is indispensable. On the short-term waste-to-energy projects represent incredible opportunities. Yet, if the *Public-Private Partnership law* approved in 2014 is an important step, dialogue at this level will be essential to identify financial and non-financial triggers necessary to operationalise these partnerships in the municipal sector. Finally dialogue with civil society will also be essential to raising public awareness on the various issues at stake, especially with regards to littering and hygiene in public spaces.

Given the volatility of the crisis context, it is not possible to predict for the coming three years neither the public financing that the Ministry of Municipal Affairs will be able to secure for the national strategy nor the funding that donors will allocate to this sector. To overcome this difficulty, a waste catchment area approach will be adopted whereby all rehabilitation and construction required for a given Joint Services Council shall be covered through available funding. Moreover, it will be important to revise towards the end of 2017 the implementation timeframe of the national strategy once the three Regional MSW Management Plans are available.

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a financing agreement with the partner country, referred to in Article 184(2)(b) of Regulation (EU, Euratom) No 966/2012.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4.2 will be carried out and the corresponding contracts and agreements implemented, is 72 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's authorising officer responsible by amending this decision and the relevant contracts and agreements; such amendments to this decision constitute technical amendments in the sense of point (i) of Article 2(3)(c) of Regulation (EU) No 236/2014.

5.3 Implementation of the budget support component

5.3.1 Rationale for the amounts allocated to budget support

A Strategic Investments and Expenditures Plan is currently developed for 2017-2019. This plan will be finalised for the whole country in 2017. Indeed the overall budget for transfer and disposal, including operations and maintenance costs, can be budgeted with sufficient accuracy only on the basis of the Regional MSW Management Plans (see 4.2.2, SO2). This Framework will have to be updated every year during the second quarter to inform the preparation of the Ministry Municipal Affairs' budget.

Projections for capital expenditures are already available: investments required for closing half of the existing dumpsites, rehabilitating existing transfer stations, and constructing new transfer stations and sanitary landfills was estimated at JD 238 million (EUR 295 million) for 2018-2020. In 2016, the budget allocated to Joint Services Councils for capital expenditures as well as operation & maintenance amounted to JD 13 million (EUR 16 million). Even with donors support and revenues from gas extraction, estimated at JD 20 million (EUR 25 million) for 2020, the gap is substantial.

The amount allocated for budget support component is therefore set at EUR 40,000,000. This amount is based on the assumption that the Ministry of Municipal Affairs will be directly responsible for the closure of half of the existing dumpsites (excluding Al Ekaider), whose cost is estimated at JD 36,600,000 million (EUR 45 million).

5.3.2 Criteria for disbursement of budget support

- a) The general conditions for disbursement of all tranches are as follows:
 - Satisfactory progress in the implementation of the National Solid Waste Management Strategy and continued credibility and relevance thereof; In Year 2, the implementation arrangements and the economic and financial analysis provided in the national strategy should be adjusted to take into consideration the Regional Plans under development.
 - Implementation of a credible stability-oriented macroeconomic policy;
 - Satisfactory progress in the implementation of 'the Comprehensive Reform of Jordan's Public Finance Management 2014-2017;
 - Satisfactory progress with regard to the public availability of timely, comprehensive and sound budgetary information.
- b) The specific conditions for disbursement that may be used for variable tranches pertains to the various policy measures identified in the national strategy (see appendix III). Indicators will evolve with time to mirror the 3 main phases of the operation (see 4.2):
 - Policy measure 3: Long-term MSW management at local, regional and national levels: *Controlled treatment or disposal, Quantity of municipal solid waste disposed in sanitary landfills, Cease of operation of uncontrolled or illegal dumpsites;*

- Policy measure 4: Avoidance of co-management of MSW with hazardous or special streams: *Enhanced regulatory framework.*
- Policy measure 6: Improvement of cost recovery of the MSW management system: *Cost recovery rate of Joint Services Councils, Productivity of Joint Services Councils, Budgetary and accounting systems for Joint Services Councils, Annual budget allocated to Joint Services Council for operation and maintenance (OPEX), Revenues generated by Joint Services Council.*
- Policy measure 7: Improvement of the institutional set-up of local, regional and national authorities: *Regional MSW management plans, Municipal MSW management plans, Joint Services Councils Plans, Number of Joint Services Councils.*
- Policy measure 9: Improvement of monitoring mechanisms in terms of operational and environmental performance: *Availability and quality of solid waste management data, Number of missions to monitor environmental performance of dumpsites, Degree of monitoring and verification of environmental controls*
- Policy measure 10: Updating the MSW management related legislative framework: see appendix III. In year 3, specific attention will be put on the enforcement of the Reduce-Reuse-Recycle approach, either through amending the Environment Protection law or issuing a fully-fledge Waste Management Framework Law.

The chosen performance targets and indicators to be used for disbursements will apply for the duration of the programme. However, in duly justified circumstances, the Ministry of Planning and International Co-operation may submit a request to the Commission for the targets and indicators to be changed. The changes agreed to the targets and indicators may be authorised.

In case of a significant deterioration of fundamental values, budget support disbursements may be formally suspended, temporarily suspended, reduced or cancelled, in accordance with the relevant provisions of the financing agreement.

5.3.3 Budget support details

Being the national strategy in its early stages of implementation, it is envisaged to divide the budget support component into 6 tranches. An indicative disbursement timetable is given below:

Year	2017	2018	2019	2020	2021	2023	Total
Quarter	Q3	Q3	Q3	Q3	Q3	Q4	
<i>Type of Tranche</i>							
Base Tranches	7						7,000,000
Variable Tranches		5	10	5	5	8	33,000,000
Total	7	5	10	5	5	8	40,000,000

Budget support is provided as direct untargeted budget support to the national Treasury. The crediting of the euro transfers disbursed into Jordanian Dinars will be undertaken at the appropriate exchange rates in line with the relevant provisions of the financing agreement.

5.4 Implementation modalities for complementary support of budget support

5.4.1 Indirect management with Agence Française de Développement

A part of this action may be implemented in indirect management with Agence Française de Développement (AFD) in accordance with Article 58(1)(c) of

Regulation (EU, Euratom) No 966/2012. This implementation entails the construction of new facilities and the provision of technical assistance to the Ministries of Municipal Affairs and of Environment with a view to achieve the first and second specific objectives. This implementation is justified because of AFD's experience with co-managing infrastructure programmes with the Ministry of Municipal Affairs and its technical expertise in the area of solid waste management.

The entrusted entity would carry out the following budget-implementation tasks: support to the implementation of the first and second specific objective, i.e. provide technical and financial resources to the Project Management Unit (see 5.7) and supervise its operations; award of contracts and payments for the provision of services; perform due diligence on works (legal, technical, financial, environmental and social) and supplies (technical and financial) contracts awarded by the Project Management Unit; supervise the construction of facilities.

If negotiations with the above-mentioned entrusted entity fail, that part of this action may be implemented in indirect management with KfW Development Bank (KfW). The implementation by this alternative entrusted entity would be justified because of KfW's experience with co-managing infrastructure programmes with the Ministry of Water and Irrigation and its recent involvement in solid waste management with the Greater Amman Municipality.

The alternative entrusted entity would carry out the following budget-implementation tasks: provide technical and financial resources to the Project Management Unit (see 5.7) and supervise its operations; award of contracts and payments for the provision of services; perform due diligence on works (legal, technical, financial, environmental and social) and supplies (technical and financial) contracts awarded by the Project Management Unit; supervise the construction of facilities.

5.4.2 *Indirect management with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH*

A part of this action may be implemented in indirect management with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in accordance with Article 58(1)(c) of Regulation (EU, Euratom) No 966/2012. This implementation entails technical assistance to beneficiaries and award of contracts for the provision of services and supplies. This implementation is justified because of GIZ experience in solid waste management in Jordan and its regional and international expertise with the informal waste sector.

The entrusted entity would carry out the following budget-implementation tasks: direct implementation of the third and fourth specific objectives, i.e. provision of technical assistance to the Ministry of Municipal Affairs and award of contracts for the provision of services and supplies.

If negotiations with the above-mentioned entrusted entity fail, that part of this action may be implemented in indirect management with the AFD agreed with this proposal given their limited experience with informal waste picking and the complexity of the matter. The implementation by this alternative entrusted entity would be justified because AFD's will be responsible for the implementation of other complementary measures.

The alternative entrusted entity would carry out the following budget-implementation tasks related to the third and fourth specific objectives: provision of technical assistance to the Ministry of Municipal Affairs and the Programme Management

Unit in implementing the Resettlement Action Plans, award of contracts for the provision of services and supplies.

5.4.3 Procurement (direct management)

Subject in generic terms, if possible	Type (works, supplies, services)	Indicative number of contracts	Indicative trimester of launch of the procedure
Technical assistance (monitoring of budget support)	Services	1	Year 1, Q1
Visibility support	Services	1	Year 1

5.5 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission's authorising officer responsible may extend the geographical eligibility in accordance with Article 9(2)(b) of Regulation (EU) No 236/2014 on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

5.6 Indicative budget

	EU contribution 2016 (EUR)	EU contribution 2017 (EUR)	Indicative third party contribution (EUR)
0.- Budget support Sector Reform Contract	10,000,000	30,000,000	0
5.4. – Complementary support composed of :	59,350,000		
5.4.1 – Indirect management with AFD	55,300,000		0
5.4.2 – Indirect management with GIZ	3,500,000		0
5.4.3 – Technical assistance	550,000		0
5.9 – Evaluation and audit	150,000		N.A.
Visibility	500,000		N.A.
Totals	70,000,000	30,000,000	0

5.7 Organisational set-up and responsibilities

The Ministry of Planning and International Co-operation (MoPIC) is the signatory of the Financing Agreement and the project supervisor, with overall responsibility for

co-ordination with the EC and stakeholders involved. It is also responsible for facilitating the monitoring and appraisal missions to be conducted in the framework of this programme. MoPIC may assign a staff/team to work on managing/monitoring/facilitating this programme.

A Programme Steering Committee (SC) will be formed and will meet at least three times a year to endorse strategic orientations, oversee programme execution, and facilitate implementation of the activities. The SC will be chaired by the MoPIC and its composition will mirror the Higher Steering Committee established under the authority of the Minister of Municipal Affairs to monitor the implementation of the national strategy. It will therefore include representatives from the Minister of Municipal Affairs, of Environment, of Water and the M. Irrigation, of Energy and Mineral Resources. The Ministry of Finance and the EU Delegation will be represented as well. Its composition will also reflect the variety of stakeholders in the programme. AFD and GIZ will attend as observers. Representatives from the private sector and civil society organisations may also attend when relevant.

The SC will monitor the overall implementation of the project, review project progress, co-ordinate the different results areas and guide the actions to the successful achievement of the project objectives. It approves the reports and work plans. It will also help co-ordinate between all Jordanian institutions and groups likely to be involved in the project. The SC discussions will feed into the policy dialogue. The National Technical Committee established by the Minister of Municipal Affairs in 2015 to support the Higher Steering Committee in fulfilling its mandate will feed into the work of the SC. It is composed of representatives of MoMA, MoEnv, MoPIC, the mayor of a municipality category A and the director of a Joint Service Council.

MoMA and MoEnv within their respective mandate set forth by law will be directly responsible for its implementation. MoMA will be the anchor of the programme for the infrastructure component, during the design and construction phases, while MoEnv, will be responsible for implementing required regulatory changes and exercise functions for which it is already mandated (environmental approval, licensing, and pollution prevention).

The Ministry of Municipal Affairs is considering establishing a Programme Management Unit operating under the direct authority of the NTC and composed of seconded (included from MoEnv) and contracted staff. The capacities of the ministry have been indeed overstretched in recent years as a result of the influx of Syrian refugees in the country and the sharp increase of financial assistance to municipalities. For the past 10 years, such arrangement has proved to be very effective in the water and irrigation sector to absorb funding allocated to the sector. To this end, the unit should be delegated sufficient administrative and financial autonomy.

5.8 Performance 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 results (outputs and direct outcomes) as measured by corresponding indicators, using as

reference the logframe matrix (for project modality) or the list of result indicators (for budget support). The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Ministry of Planning and International Co-operation (MoPIC) is entrusted with monitoring the implementation of the budget support component. Support has been provided during the formulation phase to develop a monitoring framework, including recommendations for process, output and outcome indicators. Methodologies of measurement and baselines will be finalised before the signature of the Financing Agreement. The approval of such a framework by the Programme Steering Committee is one of the indicators set for disbursing the first base tranche.

Reviews of the implementation of the national strategy shall take place every year, with the first one planned in 2017. A team of independent consultants recruited directly by the Commission (or recruited by the responsible agent contracted by the Commission for implementing such reviews) will perform monitoring and evaluations related to the disbursement of funds. The Programme Management Unit will be instrumental in providing inputs to the process. MoPIC will continue to be responsible for documenting policy dialogue taking place within the framework of the Programme Steering Committee and relevant donor co-ordination meetings. The programme will be subject to the Commission's Results Oriented Monitoring (ROM).

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).

5.9 Evaluation

Having regard to the importance and nature of the action, a final evaluation will be carried out for this action or its components via independent consultants contracted by the Commission. The final evaluation will be carried out for accountability and learning purposes at various levels (including for policy revision).

The Commission shall inform the implementing partner at least 2 months in advance of the dates foreseen for the evaluation 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. 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.

Indicatively, one contract for a maximum amount of EUR 150,000 for evaluation services (for both the mid-term and the final evaluation) shall be concluded under a framework contract in the second or third quarter of the third year of implementation.

5.10 Audit

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 audits or expenditure verification assignments for one or several contracts or agreements. Indicatively, one contract for audit services shall be concluded under a framework contract in the fourth year of implementation.

5.11 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU. This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation and supported with the budget indicated in section 5.6 above. This will ensure adequate visibility of the Budget Support Component.

Moreover, an ad hoc communication strategy and the related specific activities will be developed and implemented by the AFD for the entirety of the action, in order to ensure visibility of their activities funded under this action. To this extent an amount of EUR 300.000 has been granted. The strategy will be submitted for the approval of the EU delegation and the beneficiary ministry at the first meeting of the Steering Committee. Depending on the evolution of the situation on the ground, visibility activities might need to be scaled down in order to allow a successful implementation of the project activities. The EU may check the visibility component of the actions through field visits and will increase visibility when it is appropriate.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements. The Communication and Visibility Manual for European Union External Action shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

APPENDIX I – POLICY MEASURES DEFINED IN THE NATIONAL SOLID WASTE MANAGEMENT STRATEGY

#	Policy	Measures		
		Short-term Period (2015-2019)	Mid-term Period (2020-2024)	Long-term Period (2025-2034)
1	Serving the emergency MSWM needs of Jordanian societies due to the refugees' influx from the neighbouring countries	<ul style="list-style-type: none"> • Purchase by the Municipalities - or acquisition through donations - of appropriate street-cleaning, collection and transport equipment, irrespectively of the process of approval of the Local (Municipal) MSWM Plans, provided that such acquisitions will be appropriately documented and approved by the MoMA. • Purchase by the Municipalities or JSCs - or acquisition through donations - of appropriate dumping equipment, irrespectively of the process of approval of the Local (Municipal) MSWM Plans or the JSC Operational MSWM Programs, provided that such acquisitions will be appropriately documented and approved by the MoMA. • Site selection (where applicable: for new facilities), maturing, construction and operation of the following: <ul style="list-style-type: none"> - transfer stations (upgrade of existing and creation of new ones); and - short-term cell(s) of landfills (including LFG utilization where financially viable). • Construction of rehabilitation works of 50% of the dumpsites, depending on the availability of funds and classification of environmental risk. 	N/A	N/A
2	Provision of safe MSWM services to the entire (100%) permanent and temporary population of Jordan	N/A	<ul style="list-style-type: none"> • Expansion of street-cleaning and collection services to the whole country. • Purchase by the Municipalities - or acquisition through donations - of appropriate street-cleaning, collection and transport equipment for the achievement of the target of servicing the entire (100%) population of the country, based on the approved Local (Municipal) MSWM Plans. 	N/A
3	Long-term MSWM in local, regional and national level	<ul style="list-style-type: none"> • All the emergency MSWM measures mentioned above. • Maturing and construction of the mid-term cell(s) of landfills (including LFG utilization where financially viable). • Post-closure activities (maintenance, LFG extraction, leachate treatment, etc.) of the rehabilitated dumpsites. 	<ul style="list-style-type: none"> • Maturing and construction of the following: <ul style="list-style-type: none"> - "clean MRFs" for pre-segregated recyclables; - composting units for pre-segregated biowaste; - MBTs ("dirty" MRF and anaerobic digestion units) for mixed MSW; and - long-term cell(s) of landfills (including LFG utilization where financially viable). • Operation and maintenance of the following: <ul style="list-style-type: none"> - transfer stations; and - mid-term cell(s) of landfills (including LFG utilization where financially viable). • Rehabilitation of the short-term cell(s) of landfills. • Maturing and construction of rehabilitation works of the remaining 50% of the dumpsites (target: 100%), depending on the availability of funds and classification of environmental risk. • Post-closure activities (maintenance, LFG extraction, leachate treatment, etc.) of the following: <ul style="list-style-type: none"> - short-term cell(s) of landfills; and - rehabilitated dumpsites. 	<ul style="list-style-type: none"> • Set-up of separate collection systems for recyclables (<i>in pilot-scale during the first five years</i>). • Set-up of separate collection systems for biowaste (<i>in pilot-scale during the first five years</i>). • Operation and maintenance of the following: <ul style="list-style-type: none"> - transfer stations; - "clean MRFs" for pre-segregated recyclables (<i>in pilot-scale during the first five years - 25% of final capacity</i>); - composting units for pre-segregated biowaste (<i>in pilot-scale during the first five years - 25% of final capacity</i>); - MBTs ("dirty" MRF and anaerobic digestion units) for mixed MSW (<i>in pilot-scale during the first five years - 25% of final capacity</i>); and - long-term cell(s) of landfills (including LFG utilization where financially viable). • Rehabilitation of the mid-term cell(s) of landfills. • Post-closure activities (maintenance, LFG extraction, leachate treatment, etc.) of the following: <ul style="list-style-type: none"> - short- and mid-term cells of landfills; and - rehabilitated dumpsites.

#	Policy	Measures		
		Short-term Period (2015-2019)	Mid-term Period (2020-2024)	Long-term Period (2025-2034)
4	Avoidance of co-management of MSW with hazardous or special streams currently ending up in the city containers	N/A	<ul style="list-style-type: none"> • Issuance of relevant legislative framework – general provisions (see below). 	<ul style="list-style-type: none"> • Issuance of relevant legislative framework – specific provisions (targets, management provisions, technical specifications, monitoring, penalties, etc.) for: <ul style="list-style-type: none"> - Hazardous waste (medical, industrial, etc.); - C&D waste; and - Special SW streams (WEEE, batteries and accumulators, ELVs, etc.). • Issuance of relevant strategic framework for each waste type (see also below). • Establishment and operation of “<i>product stewardship initiatives</i>” (integrated SWM systems for specific waste types). These initiatives should include indicatively: <ul style="list-style-type: none"> - Set-up of separate collection systems per waste type; - Construction and operation of appropriate treatment facilities; and - Construction and operation of appropriate disposal facilities, if different from the MSW ones. <i>It is recommended that no more than two product stewardship initiatives are initiated in every 5-years period.</i> • Integration of the management of hazardous and special waste in the national Management Information System (MIS) for recording and monitoring the activities of the MSWM sector (see also below). • Implementation of public awareness and education campaigns for specific hazardous or special SW streams, or combined with MSW (see also below).
5	Mitigation of informal waste-picking of MSW through integration of informal sector into the MSWM system	N/A	<ul style="list-style-type: none"> • Issuance of a regulation for defining the process and specifications for the integration of waste-pickers in the new MSWM system, as well as their responsibilities and licensing (see also below). • Issuance of technical specifications and instructions for safe operation of waste-pickers, including health, occupational safety and environment issues. • Technical assistance to the waste-pickers to establish cooperative(s). • Provision of incentives to waste-pickers to participate in the cooperative(s) (integration in the social security program, health insurance, financial incentives, etc.). • Pilot operation of the cooperative(s). 	<ul style="list-style-type: none"> • Full-scale operation of the waste-pickers’ cooperative(s) all over the Kingdom, which should be obligatory and connected with a national waste-pickers registry. • Provision of incentives for hiring informal waste-pickers in the new MSWM facilities. • Allowing middlemen to undertake the operation of new MSWM facilities under the PPP framework.

#	Policy	Measures		
		Short-term Period (2015-2019)	Mid-term Period (2020-2024)	Long-term Period (2025-2034)
6	Improvement of <u>cost recovery</u> of the MSWM system in Jordan, including the establishment of partnerships between the <u>public and the private sectors</u>	<ul style="list-style-type: none"> Measures to improve budgetary and accounting systems for MSWM: <ul style="list-style-type: none"> - Application of Full Cost Accounting (FCA) method to all levels of MSW Management (Municipalities, JSCs, MoMA). Partial Cost Recovery: <ul style="list-style-type: none"> - Increase 25% of current charge. - Increase 25% of taxes transferred by the GoJ to the Municipalities. - Re-distribution of charge in portion with Household income and Enterprise revenue. Rationalize the MSWM operations - Increase Efficiency <ul style="list-style-type: none"> - Local (Municipal) MSWM Plans, according to specifications that should be prepared and institutionalized / imposed by the Ministry; - Re-organization of collection service areas, new zoning design, improvement of routing plans, urban / rural areas; - Renew vehicles and equipment. Utilization of other revenue generating sources: <ul style="list-style-type: none"> - tipping fees from individuals, private establishments, and waste haulers at transfer, treatment, and disposal facilities; and Completion by the electricity company of the registration of households that are connected to other's households counters. Private sector involvement: <ul style="list-style-type: none"> - Provide increased Return of Equity (RoE) in order to make the PPP approach attractive to the private sector. 	<ul style="list-style-type: none"> Utilization of other revenue generating sources <ul style="list-style-type: none"> - revenues from sale of avoided or reduced emissions (e.g., methane expressed as carbon dioxide equivalent GHG). Private sector involvement: <ul style="list-style-type: none"> - Provide increased Return of Equity (RoE) in order to make the PPP approach attractive to the private sector. 	<ul style="list-style-type: none"> Using of public funds, long-term loans, municipal bonds against future -revenue generating- treatment plants etc. for Cross Subsidization of the gap. Allocation of a share from tourist visas revenue to the Municipalities' budgets, in portion to the number of visitors per Municipality; Staged implementation of Fee/Tariff system -in Large Producers of municipal waste <ul style="list-style-type: none"> - Initial implementation of Fee/Tariff system (1st stage) in Industries, Malls, Markets; - Volume-based Fee/Tariff system is recommended as the lower cost and of less administrative changes; Utilization of other revenue generating sources <ul style="list-style-type: none"> - New revenue generation from sales of MSW treatment products (recyclables, refined compost, energy), after starting up of new plants - Enhance market building for the materials (RDF, compost); - imposition of penalties for littering, clandestine dumping and other solid waste infractions; - license fees from collectors/haulers of special categories of solid waste (e.g., construction/demolition debris, medical waste, bulky waste); - share of gross revenues from collectors/haulers having a franchise (i.e., zonal monopoly) for waste collection. Private sector involvement: <ul style="list-style-type: none"> - Provide increased Return of Equity (RoE) in order to make the PPP approach attractive to the private sector.
7	Improvement of the <u>institutional set-up</u> of local, regional and national authorities in relation with MSWM	N/A	<ul style="list-style-type: none"> Clear definition of roles and responsibilities related to MSWM through the national-level legislative framework (see also below) Creation of a dedicated MSWM department in MoMA to guide, support, assist and supervise Municipalities and the JSCs. Restructuring of JSCs to improve efficiency of the sector. Increasing decentralized responsibilities of Municipalities and JSCs in MSWM. Establishment of a MSWM Public Awareness & Education Program Unit in MoMA or CVDB to monitor and assist the implementation of the Public Awareness and Education program (see below). Establishment of cooperative(s) of informal waste-picking and recycling sector with view to ensure safe operation. 	<ul style="list-style-type: none"> Empowering the administrative capacity of national (ministries) and local authorities (Municipalities) on MSWM through: <ul style="list-style-type: none"> - creation of an inter-ministerial MSWM Board to regulate the sector; and - establishment of dedicated SWM departments to all Municipalities or other concerned institutions (or assignment of related responsibilities to dedicated staff of the "environmental" departments). Assignment of responsibilities to the aforementioned departments to monitor and implement the MSWM Public Awareness & Education Program (see below) in local level. Establishment of product stewardship initiatives for: <ul style="list-style-type: none"> - Hazardous waste (medical, industrial, etc.); - C&D waste; and - Special SW streams (WEEE, batteries and accumulators, ELVs, etc. – no more than two initiatives per 5-years' period).
8	Motivation of the public to participate in safe MSWM practices by increasing <u>public awareness and education</u> in MSWM related issues	<ul style="list-style-type: none"> Initiation of the preliminary phases of the Public Awareness and Education program: <ul style="list-style-type: none"> - audience research; - design of the program; and - pilot testing and adjustment. 	<ul style="list-style-type: none"> Implementation Phase of the Public Awareness and Education program – in one Major City of each one geographical regions (depending on the availability of funds and projects): <ul style="list-style-type: none"> - Mass Media Awareness Campaign; - Partnerships, Alliances & Private-Public Partnerships; - Voluntary Learning & Capacity Building; - Mobilizing Schools, Teachers & Students; - Recruitment & Mentoring of Community Champions & Leaders; - Events that Showcase Successful International Campaigns & Intervention; and - Monitoring & Evaluation. 	<ul style="list-style-type: none"> Nationwide Phase of the Public Awareness & Education Program (depending on the availability of funds and projects); Integration of the management of selected hazardous or special waste in the Public Awareness & Education Program.

#	Policy	Measures		
		Short-term Period (2015-2019)	Mid-term Period (2020-2024)	Long-term Period (2025-2034)
9	Improvement of monitoring mechanisms for MSWM in terms of operational and environmental performance	<ul style="list-style-type: none"> • Environmental monitoring of the rehabilitated dumpsites. 	<ul style="list-style-type: none"> • Establishment of a national Management Information System (MIS) for recording and monitoring the activities of the SWM sector. Optional application of the system. • Environmental monitoring of: <ul style="list-style-type: none"> - rehabilitated dumpsites; and - rehabilitated cells of the short-term period. 	<ul style="list-style-type: none"> • Application of the MIS for recording and monitoring the activities of the SWM sector (obligatory). • Environmental monitoring of: <ul style="list-style-type: none"> - rehabilitated dumpsites; - rehabilitated cells of the short- and mid-term periods; and - all other operative MSWM facilities. • Integration of the management of selected hazardous or special waste in the MIS.
10	Updating the MSWM related legislative framework in Jordan	<ul style="list-style-type: none"> • Issuance of a regulation or instruction for defining the procedure to prepare and conduct SWM Plans in National, Regional and Local level (including tables of contents, responsibilities, deadlines, reviewing periods, etc.). • Issuance of a risk assessment methodology for dumpsites, with view to prioritize their rehabilitation in national level. • Issuance of technical specifications for short-term MSWM facilities (transfer stations and landfills). • Issuance of technical specifications for safe closure, rehabilitation and after-care of uncontrolled dumpsites. 	<ul style="list-style-type: none"> • Issuance/updating of national legislation on SWM, including references on the following issues concerning MSWM: <ul style="list-style-type: none"> - Definitions, scope, priorities, basic policy principles. - Avoidance of co-management of MSW with hazardous or special SW streams. - Prohibition of unsafe disposal of SW / promotion of environmentally sound disposal sites for both non-hazardous and hazardous SW. - Definition of waste types that should be excluded from SW disposal facilities. - Defining the responsibilities of all concerned public authorities with regards to the whole SWM chain. - Setting the legislative background for restructuring of JSCs and for empowering the administrative capacity of national and local authorities in terms of MSWM. - Setting targets for: <ul style="list-style-type: none"> o coverage of street-cleaning and collection services; o sorting-at-source of recyclables and biowaste; o recycling and recovery of MSW, with specific provisions for packaging waste; and o reduction of biowaste ending-up to landfills. - Defining the framework for transboundary importing/exporting hazardous and non-hazardous SW. - Establishment of a List of Waste types (Waste Catalogue) for classification, management, recording and monitoring of SW. - Establishment of classification index for disposal and recovery SWM activities. - Setting of specific penalties for violation of the SWM legislation. • Issuance of guidelines for: <ul style="list-style-type: none"> - Declassification of by-products as waste. - Safe management of hazardous and special waste streams. • Issuance of technical specifications for: <ul style="list-style-type: none"> - street-cleaning, temporary storage, collection and transportation; and - recycling / materials recovery (including MRFs, composting facilities, anaerobic digestion facilities). • Issuance of a regulation for defining the process and specifications for the integration of waste-pickers in the new MSWM system, as well as their responsibilities and licensing. • Issuance of technical specifications and instructions for safe operation of waste-pickers, including health, occupational safety and environment issues. 	<ul style="list-style-type: none"> • Issuance of national legislation to regulate integrated management of hazardous or special waste streams currently ending up in the city containers (see above). • Issuance of appropriate legislative framework for the establishment and operation of "product stewardship initiatives" (integrated SWM systems for specific waste types). • Enforcement of the use and implementation of the national MIS for recording and monitoring the SWM sector.

APPENDIX II – MAJOR GAPS IN THE CURRENT SOLID WASTE MANAGEMENT LEGISLATION IN JORDAN (NATIONAL STRATEGY, BASELINE REPORT)

#	Gaps
1	Priority to SW prevention and management, promoting the “reduce-reuse-recycle” (Three R’s) approach
2	Setting of SWM priorities: prevention → preparing for re-use → recycling → other recovery (e.g. energy recovery) → landfilling allowing the implementation of lower priority practices only when the higher priority ones have been stressed or are deemed as not feasible
3	Implementation of the “polluter-pays principle” in SWM
4	Avoidance of co-management of MSW with hazardous (e.g. medical, industrial, etc.) or special SW streams (e.g. WEEE, waste batteries and accumulators, ELVs, used tires, C&D, etc.)
5	Prohibition of unsafe disposal of SW / promotion of environmentally sound disposal sites for both non-hazardous and hazardous SW
6	Implementation of the “extended producer responsibility” approach
7	Exclusion from the SW disposal facilities of the following: liquid waste, flammable waste, explosive or oxidizing waste, medical or infectious clinical waste, used tires (with certain exceptions), C&D, any other type of waste which does not meet specific acceptance criteria
8	Establishment of a national recording and monitoring system for SW and enforcement of its use and implementation
9	Setting of specific penalties for violation of the SWM legislation
10	Setting the procedure to prepare and conduct SWM Plans in National, Regional and/or Local level
11	Setting responsibilities of all concerned public authorities with regards to the whole SWM chain, including SWM recycling and other recovery (e.g. WtE) that is not described anywhere in the current legislative framework
12	Setting targets for the enforcement of source separation of the basic MSW streams (paper, metal, plastic and glass), as well as for biowaste
13	Setting targets for recycling and recovery of MSW
14	Setting targets for prohibition of biowaste disposal in landfills
15	Setting targets for recycling and recovery of C&D waste, including backfilling
16	Setting targets for recycling and recovery of special SW streams, i.e. for WEEE, waste batteries and accumulators, ELVs, etc.
17	Setting guidelines for declassification of by-products as waste
18	Setting guidelines for safe management of hazardous and special waste streams
19	Setting the framework for importing/exporting hazardous and non-hazardous SW from/to abroad
20	Enlightening of the private sector involvement potential in SWM and encouraging partnerships through incentives, etc.
21	Issuing of technical specifications for any possible option of MSWM: street cleaning, temporary storage, collection, transportation, transfer, recycling / materials recovery (including composting, etc.), other recovery (e.g. energy recovery), and disposal
22	Issuing of technical specifications for safe closure, rehabilitation and after-care of uncontrolled dumpsites
23	Issuing of technical specifications for management of hazardous and special waste streams (e.g. WEEE, waste batteries and accumulators, ELVs, C&D, etc.)
24	Establishment of a List of Waste (Waste Catalogue) for easier classification, management, recording and monitoring of SW
25	Establishment of classification index for disposal and recovery SWM activities

APPENDIX III – INDICATIVE LIST OF RESULT INDICATORS (FOR BUDGET SUPPORT)

The inputs, the expected direct and induced outputs and all the indicators, targets and baselines included in the list of result indicators are indicative and may be updated during the implementation of the action without an amendment to the financing decision. The table with the indicative list of result indicators will evolve during the lifetime of the action: new columns will be added for intermediary targets (milestones), when it is relevant and for reporting purpose on the achievement of results as measured by indicators. Note also that indicators should be disaggregated by sex whenever relevant.

	Results chain	Indicators ¹⁷	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification
Overall objective: Impact	To improve overall health, environmental; conditions and quality of life of population by developing environmentally and financial sustainable systems for solid waste management	Waste collection coverage ¹⁸	- 90% (urban) and 70% (rural)	- 100% in both urban and rural areas (Year 6)	Department of Statistics, National Monitoring System
		Discharge of leachate into groundwater at the landfill site (for existing dumpsites and new landfills)	- Tbd in Y2	- Decrease tbd in Y2 (Y6)	MoEnv, JSC records
		Cost recovery rate of the MSWM system (excluding Amman) ¹⁹	- 30% (2014)	- 36% (Y6)	MoMA
Specific objective(s): Outcome(s)	To ensure in the coming five to seven years, the efficient, safe and sanitary disposal of municipal solid waste in the country.	Controlled treatment or disposal ^{*20}	- 0%	- 50% (Y4), 75-84% (Y6)	MoMA, Records from Joint Services Council
		Quantity of wastes landfilled by employees of a given Joint Services Council	- 2-8 tonnes per day per employee per JSC	- Tbd in year 3 (Y5)	Programme Management Unit
		Cost recovery rate of Joint Services Councils (serving north and centre regions)	- Tbd in 2017	- Increase of 20% (Y6)	Programme management Unit

¹⁷ For indicators marked with a *, see 'Wasteaware' Benchmark Indicators for Integrated Sustainable Waste Management in Cities, Waste Management, 2014.

¹⁸ Percentage of households that receive a reliable waste collection service

¹⁹ Percentage of the full operating costs covered by the total revenues granted for and generated by solid waste management operations (i.e. collection, transfer and disposal).

²⁰ Percentage of the total municipal solid waste destined for treatment or disposal in a state-of-the-art, engineered facility or a 'controlled' treatment or disposal site. The 'numerator' in this calculation is the total waste that is dealt with in a 'controlled' facility. The 'denominator' is the total solid waste destined for treatment or disposal - that is the total waste generated less waste recycled or reused.

Induced outputs	Objectives and principles of the national strategy incorporated in new and revised regulations and instructions (SO1)	Degree to which laws and/or other legal instruments enables both the public and private sectors to deliver solid waste management services on a stable basis.*	- See hereafter	- Y2	Official gazette
	Increased capacities for safe and sanitary disposal (SO2)	Quantity of MSW landfilled in sanitary landfills (excluding Amman)	- 0 (2016)	- 3,018 thousands tonne per year (Y6)	Department of Statistics, National Monitoring System
		Number of uncontrolled or illegal dumpsites closed	- 17 disposal sites (2016) - # of illegal dumpsites tbd in year 1	- 8 disposal sites remaining (Y6) - 0 illegal dumpsites (Y3)	MoMA, Records from Joint Services Council
	Improved cost recovery for solid waste disposal (SO2)	Budgetary and accounting systems applied by Joint Services Councils	- Cash flow accounting (2016)	- Full Cost accounting (Y3)	MoMA, JSC Annual Financial Report
		Annual transfers to Joint Services Council for operation and maintenance (OPEX)	- JD 13 million (2016)	- At least 50% of the total OPEX as determined in the Regional Plan	MoMA
		Revenues generated by Joint Services Councils (excluding transfer from central budget)	- Tbd in year 2	- Increase tbd in year 3 (Y5)	MoMA, Records from Joint Services Council
	Improved institutional set-up of local, regional and national levels (SO2)	Number of regional MSW management plans completed by MoMA according to standards	- 3 (2017)	- Timeframe and budget revised (Y4)	MoMA
		Number of municipal MSW management plans completed by municipalities according to standards	- 0 (2016)	- 12 for municipalities of cat. A (Y2); XX for cat. B (Y5)	MoMA
		Joint Services Councils Plans, completed by JSCs according to standards (including monitoring and evaluation systems to track costs and performance)	- 0 (2016)	- 9 (Y3)	MoMA, JSC Annual Financial Report

		Number of Joint Services Councils (including Amman)	- 21 (2016)	- 9 (Y2)	MoMA
	A National Monitoring System is established (SO2)	Availability and quality of solid waste management data* ²¹	- European Environment Agency reports (2015)	- EEA recommendations (Y1).	Department of Statistics, MoEnv and MoMA
		Degree of monitoring and verification of environmental controls (existing dumpsites and new landfills) ^{22*}	- Tbd in year 2	- Increase tbd in year 2 (Y3, Y5)	MoEnv, Annual Reports

Required legislation

- Policy measure 3: Long-term MSW management at local, regional and national levels:
 - *Risk assessment methodology for closing old dumpsites, with a view to prioritise their rehabilitation at national level;*
 - *Technical specifications for safe closure, rehabilitation and aftercare of uncontrolled dumpsites*
 - *Technical specifications for transfer stations, landfills and closure/post-closure of old dumpsites*
 - *Revision of the regulation (37) of 2005 on "environmental impact assessments";*
 - *Revision of the regulation (27) of 2005 on "the management of solid waste";*
 - *Revision of the "instruction for the management of solid waste management" of 2006.*
- Policy measure 4: Avoidance of co-management of MSW with hazardous or special streams currently ending up in city containers
 - *Revision of the "instruction for hazardous waste management and handling" of 2003;*
 - *Revision of the regulation (24) of 2005 on the "management, transportation and handling of harmful and hazardous substances";*
- Policy measure 6: Improvement of cost recovery of the MSW management system including the establishment of partnerships between the public and the private sectors
 - *Standard procedures to implement Full Cost Accounting method for municipalities and Joint Services Councils;*

²¹ Components of such an MIS should include regular measurement of waste generation; waste composition; quantities collected, recycled, treated and disposed.

²² Includes the existence and regular implementation of: robust environmental permitting/ licensing procedures; regular record keeping, monitoring and verification carried out by the facility itself; as well as monitoring, inspection and verification by an independent regulatory body.

- *Mandatory application of partial cost recovery measures (increase of current charge, re-distribution of charge in portion of household income and companies revenues);*
- *Mandatory application of volume-based fee-tariff measures.*
- Policy measure 7: Improvement of institutional set-up of local, regional and national authorities:
 - *Procedures to prepare and conduct SW management plans in regional and local level (including tables of contents, responsibilities, deadlines, reviewing periods, etc.);*
 - *Joint Services Councils re-organisation plans;*
- Policy measure 9: Improvement of monitoring mechanisms in terms of operational and environmental performance;
 - *Establishment of a national recording and monitoring system for SW and enforcement of its use and implementation*

APPENDIX - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY)

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action, no amendment being required to the financing decision. When it is not possible to determine the outputs of an action at formulation stage, intermediary outcomes should be presented and the outputs defined during inception of the overall programme and its components. The indicative logframe matrix will evolve during the lifetime of the action: new lines will be added for including the activities as well as new columns for intermediary targets (milestones) for the output and outcome indicators whenever it is relevant for monitoring and reporting purposes. Note also that indicators should be disaggregated by sex whenever relevant.

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: Impact	To improve overall health, environmental; conditions and quality of life of population by developing environmentally and financial sustainable systems for solid waste management	Median income of participating waste pickers	JD 11-15 per working day (2014)	Increase tbd by delegated entity	GIZ report	
		Number of waste pickers suffering from infectious and gastrointestinal disorder	To be determined by delegated entity	Decrease tbd by delegated entity	GIZ report	WP willingness to seek medical advice
		Appearance of waste collection point (presence of accumulated waste around collection containers)	Tbd by delegated entity	Decrease tbd by delegated entity	GIZ report	Municipalities sufficiently equipped
Specific objective(s): Outcome(s)	SO3: Improved socio-economic well-being and health status of waste pickers working in dumpsites targeted by the action	Number of waste pickers reinserted in formal activities (disaggregated by gender)	0 (2016)	Increase tbd by delegated entity	GIZ report	
		Number of waste pickers sustaining injuries and cuts (disaggregated by gender)	Tbd by delegated entity	Decrease tbd by delegated entity	GIZ report	WP use protection equipment and follow safety procedures
	SO4: Improved awareness and education of households and major producers of wastes in pilot areas	Percentage of population aware of the solid waste separation pilot programme	Tbd by delegated entity	Increase tbd by delegated entity	GIZ report	
		Degree of littering in municipal areas	To be determined by delegated entity	Improvement tbd by the delegated entity	GIZ report	Municipalities sufficiently equipped