# I. Country and Sector Background

1. The institutional structure of Bosnia and Herzegovina (BH) dates back to the Dayton Peace Agreement (DPA) that sought to ensure peace. The decentralized state structure with a weak national government assigns most power to the two entities: the Federation of Bosnia and Herzegovina (FBH) and Republika Srpska (RS), plus the special district of Brcko. In both entities, municipalities are the key providers of essential public services, including solid waste management. Within the municipalities, Communal Service Enterprises (CSEs) are usually responsible for waste management as well as collection of fees from customers. These enterprises mainly operate as public companies. In the Federation, responsibility for waste management policy and legislation falls under the Ministry for Environment and Tourism (FMET). In addition, a number of other line ministries also play a role, including those at the Cantonal level. In the RS, the Ministry of Urbanism, Civil Engineering, and Environment (MUCE) is responsible for waste management policy and legislation.
2. Current waste collection and disposal capacities are unable to keep up with increasing waste production. Equipment for waste collection and disposal is mostly obsolete and/or poorly maintained. Significant quantities of waste are being discarded in unofficial sites such as wild dumps, roadsides, small village dumps, rivers, and mines, posing a direct risk to public health. Waste collected by municipalities is often disposed in "official" dumpsites that are generally open dumps rather than controlled landfills. Such dumping practices cause serious problems as deterioration in groundwater quality, destruction of vegetative cover, and proliferation of insects and rodents that are disease vectors. These serious public health and environmental problems are worsened by weak institutional and enforcement capacity in BH.

3. Waste collection coverage in BH is inadequate and no other service fails citizens’ quality and reliability expectations to such a great extent. Results from a recent household survey reveal that almost 1.4 million citizens lack regular waste removal services. Rural households fare even worse. Although progress under the first solid waste management project was impressive, wild dumping remains a challenge in BH. During implementation of SWMP-1, a total number of 145 wild dump sites has been cleaned and closed. With an estimated number of around 1200 wild dump sites existing in BH, this presents more than a 10 percent reduction of wild dump sites and by the end of the project, 15 percent of wild dumps sites will be closed. Nevertheless, numerous illegal dumpsites can still be found in many municipalities. These wild dumpsites contain various household, industrial, and hazardous clinical wastes and even animal carcasses. Clean-up and closure of these wild dumps remains a high priority, but requires setting up functioning sanitary landfills that provide an alternative for disposal.

4. The Government of BH recognizes the need to significantly strengthen capacities in solid waste management and had identified this as a priority in its Economic Development Strategy Global Framework (EDSGF)—the Bosnian-owned strategy replacing the donor-led Priority Reconstruction and Recovery Programs for Policy and Development Assistance after the war. The Governments’ Strategy suggested proceeding in three phases of which the ongoing SWMP supports the priority first phase (2002-2008) focusing on landfill rehabilitation; safe methods of disposal; public awareness; training of sector staff; and extending waste collection to those areas that are not currently serviced. This approach is based on a nationwide Solid Waste Management Strategy. This strategy has been funded by the European Union (EU) and was completed in 2000. It recommends a wide range of technical, institutional and financial upgrading measures over the next 15-20 years. In the short- and medium-term, the strategy emphasized the goals of universal collection coverage, the introduction of regional sanitary landfills, and the closure and rehabilitation of open dumps. In the long run, less populated regions should also join and waste would be transported to fewer but larger landfills. Recycling, composting, waste-to-energy options and introduction of clinical waste incineration are also contemplated.

5. In light of successful implementation progress, the Government had sought additional financing for the project. In addition to the original US$ 18 million, the Bank approved an amount of US$ 8 million in June 2005. The existing Bank support (US$ 26 million) for the sector will result in development of 5 international standard regional landfill facilities. The Project will close on November 30, 2009. Given the enormous funding needs to continue and finally complete implementation of the strategy, the Government has approached the Bank for continued support to the sector to expand the project to other regions.
II. Objectives

6. The project development objective of the Second Solid Waste Management Project (SWMP-2) is to improve the availability, quality, environmental soundness and financial viability of solid waste management services in participating regions. Key impacts include an improved disposal management system and enhanced coverage of formal waste management services, improved ground water quality at disposal sites, higher citizen satisfaction with waste management services and an increased cost recovery rate of participating utilities.

III. Rationale for Bank Involvement

7. BH faces enormous funding needs to cover the entire country with a sustainable solid waste management system. Although it is not known how many landfills exactly are needed in BH, it is assumed that a total number of up to 15-20 landfills are required for a country of 4 million inhabitants. The National Solid Waste Strategy prepared by EU back in 2000 estimated a need for ca. 16 regional landfills. The first solid waste management project, including additional financing, invested USD 26 million in 6 regional landfills. SWMP-2 will invest USD 35 million in additional 6-8 regional landfills. Even though this will bring BH closer to achieve full coverage of the sector, investment needs remain huge.

8. The Government has repeatedly asked the Bank for continued support to the sector. Solid Waste Management remains a priority for the BH Government and the Bank’s ongoing support has been agreed upon in the new Country Partnership Strategy (CPS) for FY08-11. This reflects the continuous support the Solid Waste Management Project receives from the BH Government and will allow to meet the Governments demand to scale-up the operation and include additional regions into the project.

9. Due to limited available resources and huge needs for further investments in the sector, the Government and the Bank have sought additional funding for the sector from numerous bilateral and donor agencies since 2002 and from the beginning of the project the Bank has been coordinating closely with a number of donors in the sector. The solid waste strategy which is guiding investments in the sector was funded by EU in 2000. Since then, many activities have been financed in parallel by other donors. Donors are very supportive of the Bank's work in the sector and have provided substantial technical assistance. The Bank has strong partnership arrangements in technical assistance in coordination with the European Union, JICA, SIDA and USAID. Technical assistance was provided by EU, SIDA, JICA and USAID. EU financed a few technical assistance activities as well as cleaning up of one of the biggest wild dump site in the RS, Knezevo. EIB is currently preparing a municipal development project for the City of Banja Luka which will include district heating and funding to the regional landfill. As of January 2008, EIB plans to support the second phase of landfill rehabilitation with EUR 5 million and envisions up to EUR 20 million for the district heating system.

IV. Description

10. The Project approach is to rehabilitate existing landfills in line with EU standards and subsequently close wild dumps sites throughout BH. Project design is based on the successful implementation of the first Solid Waste Management (SWM) Project that supports the
Government’s strategy to establish waste management districts through cooperation of municipalities. It assists with the most urgent investments focusing on rehabilitating existing landfill sites, finding safe methods of disposal, raising public awareness, training sector staff and extending collection service. A nationwide Solid Waste Management Strategy, funded by the European Union (EU), was completed in 2000. The key recommendation of the strategy was the development of regional landfill facilities serving multiple municipalities. The Government is proceeding in three phases; the existing SWM project supports the first phase (2002-2008). In light of successful implementation progress, the Government had sought additional financing for the project. The Bank approved an amount of US$8 million in June 2005. The existing bank support (US$ 26 million) for the sector will result in development of 5 international standard regional landfill facilities. The Project will close on November 30, 2009. Given the enormous funding needs to continue and finally complete implementation of the strategy, the Government has approached the Bank for continued support to the sector to expand the project to other regions.

11. The Second Solid Waste Management Project will build upon the successful project design of SWMP-1 and will ensure continued successful implementation. However, lessons learned during implementation of SMWP-1 will be introduced. Main adjustments include i) introduction of a more flexible and performance-based mechanism for allocation of project funds; ii) amended funding mechanism for Technical Assistance and the PMU; and iii) consolidation of components by reducing the overall number from five to three.

12. The project has three components. Component A (Waste Management) invests in rehabilitation of existing disposal sites, wild dump closures, collection infrastructure, support equipment, and to a limited extent the conversion of existing small dumpsites to transfer stations. At more advanced regional landfills the component will also support upgrading processes such as sorting, recycling and gas capturing. It will also cover operational cost of regional PITs. The component includes 10 percent co-financing from the Government. Component B (Capacity Building) provides technical assistance and engineering services to participating regions and will finance institutional strengthening and capacity building activities benefiting the entity level institutions involved in solid waste management. This component supports the preparation of feasibility studies, financial, environmental and social assessments of landfill sites and provides support for bidding procedures for the investments and services provided under Component A. The Component will also finance a Public Communication Program and Environmental Monitoring. In addition it may support strategic studies for Hazardous Waste Management and Inter-state cooperation in Solid Waste Management. Component C (Project Management and Operating Cost) supports operation of the PMU and gives assistance in project implementation.

V. Financing

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<td>International Development...</td>
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VI. Implementation

13. The project will be implemented during FY 2009-2013 under the overall responsibility of the Ministry for Environment and Tourism (FMET) in the Federation and the Ministry of Urbanism, Civil Engineering, and Environment (MUCE) in the RS. A Project Management Unit (PMU) has been established in the Federation for implementation, including procurement and financial management aspects, of the whole project. The PMU is responsible for overall project management and reports to the Federal Ministry for Environment and Tourism (FMET) in the Federation and the Ministry of Urbanism, Civil Engineering, and Environment (MUCE) in RS. The PMU has overall responsibility for implementation in both entities the Federation and the RS, including procurement and financial management actions. This is a unique structure with one PMU established at the Entity level implementing the project for both entities and is widely seen as a success. Such an arrangement facilitates cooperation between both entities, increases efficiency and reduces costs. In the regions, Project Implementing Teams (PITs) are located in each Utility managing the landfill site. PITs carry out procurement and financial work. Once completed, PITs’ work is reviewed by the PMU to ensure that all Bank guidelines have been followed; then submitted to the Bank for either review or clearance. The PITs consist of a Procurement Officer and Accountant besides other technical staff. The PMU manage the implementation of the project and the PITs work closely with the PMU.

14. This arrangement is working very well and SWMP-2 will follow the structure of the ongoing project. PMU organizes procurement training for PITs and is available to PIT staff for consultations on preparing tender documentation. Similarly, PMU organizes regular training on financial management and disbursement for financial staff from PITs. Also, PMU is available to PIT financial staff for consultation on all financial issues and financial reporting. An additional Procurement Officer and Accountant will be hired to ensure continued successful implementation of both Projects.

VII. Sustainability

15. Long-term sustainability of SWM was a central feature in designing the project. SWMP-1 has achieved a great deal in setting up inter-municipal solid waste companies aimed at economic efficiency and financial viability. All regions participating in SWMP-1 have made very good experience with the inter-municipal set up so far. Inter-municipal boards function very well and municipalities cooperate smoothly with each other. Four of the six regional companies established under SWMP-1 have prepared cost recovery programs; two utilities do already cover their operational expenses. The collection rate in the project region has improved significantly. During project preparation, the collection rate was as low as 40 percent. Today, 70 percent of the population pays regularly for solid waste collection.

16. The project design ensures that only regions that are willing and ready to operate under sustainable conditions become eligible to participate in the project. Selection criteria have been defined accordingly. However, the sustainability of the project will largely depend on: (a) successfully operating the multi-municipal landfill sites on an autonomous and commercial basis, with full support from all levels of Government; (b) achieving financial viability by gradually increasing revenues to cover adequate operating and maintenance expenditures, the debt service, and a portion of investments; and (c) the long-term impact of the technical assistance component
on the efficiency and operations of the sector. It will be critical for the project to educate consumers on the importance of paying for services received and to target funding to least-cost investments only. Public communication campaigns to be financed under Component B of the project will address this issue.

VIII. Lessons Learned from Past Operations in the Country/Sector

17. Main improvement under SWMP-2 will be the introduction of a more flexible and performance based approach towards fund allocation. Under SWMP-1 delays in progress in some regions has slowed down implementation at other sites that could advance faster. This was also reflected in slow disbursement at the beginning of the project. As a result it was agreed that fund allocation for participating regions in SWMP-2 will follow the principle of flexibility and performance, based on simple and objective criteria outlined below. The Government has presented a list with regions eligible under these criteria and initial fund allocation takes place according to this list. However, in order to avoid delays in project implementation, funds may be reallocated during the course of the project (flexibility). Reallocation of funds will follow simple rules based on demonstrated implementation progress in the participating regions (performance).

18. In order to participate in SWMP-2 regions will need to meet eligibility criteria for a) Technical Assistance (Longlist) and b) Investment Funding (Shortlist). These criteria for sub-project eligibility have been agreed upon to ensure effective implementation and economic efficiency of regional sanitary landfills. In addition, the performance approach introduced to the project will allow for reallocation of funds. If implementation at individual sites does not advance as foreseen at the beginning of the project, funds would be returned to the Ministry of Finance and become available for re-allocation based on the eligibility criteria at project entry.

19. SWMP-2 will also apply an adjusted approach towards closure of wild dumps. As a result of the implementation progress of SWMP-1 an increasing amount of solid waste is managed at regional sanitary landfills. For a growing number of municipalities this opens up the opportunity to close existing wild dump sites under their responsibility. Under SWMP-1, requests for funding from individual municipalities have not been considered. However, given the high cost of wild dump closures the project will accept funding requests for closure of wild dumps in individual municipalities participating in SWMP-2, provided they (a) are member of the inter-municipal board of a regional solid waste utility, and (b) solid waste originally disposed at the wild dump site is managed at a regional sanitary landfill. Funds should be borrowed by the regional utility. Agreements between the utility and the municipality have to be established bilaterally.

IX. Safeguard Policies (including public consultation)

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20. The interventions envisaged under the project trigger the Banks’ Environmental Assessment Safeguard Policy OP 4.01. The project has been identified as category B project. To comply with the OP 4.01 policy the Borrower has prepared an Environmental Framework (EF), an environmental screening and assessment instrument, since the final selection of landfills for rehabilitation will take place during the course of the project. The EF serves as a tool to ensure that the proposed investments implemented through the Project comply with the existing environmental protection laws, regulations and standards in BH as well as with the World Bank’s Operation Policies and Practices. The Environmental Management Plan (EMP) for Mostar landfill, as a representative EMP, was prepared by the Borrower to comply with the Bank’s criteria on environmental assessment. The EA for Mostar landfill has been approved by the Bank during the first SWMP. All mentioned documents were publicly disclosed and discussed.

21. The project will not cause any large scale or irreversible impacts. The project is expected to have positive environmental benefits by improving collection, transfer and disposal of solid waste and reducing wild dumping, i.e. will reduce environmental degradation related to inadequate solid waste management. As with operation of any landfill, potential negative impacts include pollution of air and soil. These impacts are associated with a) construction/rehabilitation of landfills, b) collection, transfer and storage, c) management of leachate and gas emissions, d) operation of landfill, and e) decommissioning of landfill. To mitigate environmental impacts, the Borrower will prepare and implement EIA with the EMP for each selected landfill, including for transfer stations and closure of wild dumps, where applicable. All these documents will be publicly disclosed and discussed before commencing construction works as defined in the Environmental Framework. The Borrower will use the best technical practices (EU landfill directive) for landfill rehabilitation.

22. The Borrower has developed an Environmental Framework to serve as the basis for preparation of site-specific EAs/EMPs when the investment sites are identified. The framework follows national requirements and standards for EIA while making provisions for compliance with World Bank requirements. The Environmental Impact Assessment legislation in the country has been amended in 2006 and is fully in line with the EU EIA directive. All investments to be financed under component A of the second SWMP will prepare EIAs in line with the new legislation as determined in the EF. The Borrower will also develop and enforce Environmental Management Plans for individual sites included in the project to mitigate identified risks related to the rehabilitation and raise contractor awareness of environmental issues. EIAs and EMPs prepared under the second SWMP will be approved by the Bank on a no-objection base. As the project is a repeater of the existing project, institutional capacity to implement safeguard policies already exists. Through this project, the capacity of the implementing agencies, utilities, will be further strengthened especially related to environmental quality monitoring, which should be based on the recommendations from the National Solid Waste Management Strategy and the EU

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas
Landfill Directive, which include following parameters to be monitored: leachate quality on site, groundwater quality, surface water quality, soil quality, gas emissions from the suite, incinerator emissions, weight and composition of waste, construction activities, after decommissioning monitoring. The project will also support training on a variety of solid waste management issues including monitoring and regulation which will improve capacity to enforce safeguards policies. The project also supports preparation of social assessments in the areas in which landfills are to be upgraded.

X. List of Factual Technical Documents

23. Please contact the Project Managing Team at fmobnova@bih.net.ba for all latest technical documents.

XI. Contact point

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