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# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 05-Apr-2017 | Report No: PIDISDSC20748



**BASIC INFORMATION**

**A. Basic Project Data**

Country Uzbekistan	Project ID P159544	Parent Project ID (if any)	Project Name Emergency Services Improvement Project (P159544)
Region EUROPE AND CENTRAL ASIA	Estimated Appraisal Date Aug 28, 2017	Estimated Board Date Nov 20, 2017	Practice Area (Lead) Health, Nutrition & Population
Lending Instrument Investment Project Financing	Borrower(s) Republic of Uzbekistan	Implementing Agency Ministry of Health	

**Proposed Development Objective(s)**

The project development objective (PDO) is to contribute to increasing the effectiveness and efficiency of the emergency medical services (EMS) system.

**Financing (in USD Million)**

Financing Source	Amount
Borrower	20.00
International Development Association (IDA)	98.00
<b>Total Project Cost</b>	<b>118.00</b>

Environmental Assessment Category B-Partial Assessment	Concept Review Decision Track I-The review did authorize the preparation to continue
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Other Decision (as needed)



## B. Introduction and Context

### Country Context

1. Uzbekistan is Central Asia's most populous country and its 31 million people, over one-third of whom are under the age of 14, comprise nearly half the region's total. With a land area of 447,000 km<sup>2</sup>, about the size of California or Spain, Uzbekistan is the only Central Asian country to border the other four Central Asian States and is one of only two double landlocked countries in the world. It also shares a short border with Afghanistan to the south.
2. Uzbekistan's government and public administration are highly centralized, with public accountability and transparency remaining as major challenges, though gradual adjustments are being made. Over the last decade, Uzbekistan's economy grew rapidly, was resilient to shocks, and lifted significant parts of the population out of poverty. According to official statistics, Uzbekistan's 8.2 percent Gross Domestic Product (GDP) growth rate over the last decade was the highest in the Europe and Central Asia Region (ECA) and one of the eight highest in the world. Per capita GNI rose from US\$2,020 in 2001 to US\$5,840 in 2014. According to official statistics, poverty declined from 27 percent to 15 percent between 2003 and 2012, although the methodology for measuring poverty needs to be brought up to international standards. There are more people residing in rural areas and poverty levels tend to be higher for rural residents and female-headed households. Analysis of national household surveys suggests that recent growth has been relatively equitably distributed.

### Sectoral and Institutional Context

3. The quality and efficiency of the health sector in Uzbekistan has substantial scope for improvement. Overall public expenditure on health appears to have a relatively low priority, with public financing equivalent to just 2.8 percent of GDP, well below the average middle-income country. Pervasive market failures (manifest in the absence of insurance markets) mean that ramping up private spending for health (currently equivalent to 2.6 percent of GDP) is unlikely. Relatively low public spending on health care, combined with high out-of-pocket (OOP) expenditures (44 percent of total health expenditures), suggests the government may need to consider increasing its health spending—and bring down the burden of the Out-of-Pocket (OOP) expenses—especially for the poor.
4. The efficiency and effectiveness of health care could be improved. Detection rates of key diseases such as hypertension and tuberculosis are low and hospitals are unnecessarily large and fragmented.<sup>1</sup> While rates of maternal mortality have been reduced, the majority of maternal deaths are due to preventable causes. Allocative efficiency could be improved by improving primary health care (PHC). If strengthened, this first stage of medical intervention could help reduce the number of people needing hospital care and shift incentives toward improving detection and introducing preventative measures, such as tobacco cessation and the introduction of statins. While the Ministry of Health (MoH) has started these reforms, much is left to be done, including integrating care pathways and strengthening the management of risk factors around cardiovascular disease.
5. From a planning perspective, health outcomes and deliverables would probably need to shift from the currently centrally planned system to a model of accountability with performance contracts and incentives. A shift toward activity and performance-based payments for health services, as opposed to block budget allocations, could result in significant savings and also improve outcomes.

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<sup>1</sup> ADB 2014. Uzbekistan Country Gender Assessment.



6. The emergency medical services (EMS) system appears to be functioning well. The EMS includes both pre-hospital and in-hospital services under a single operating umbrella - the Republican Scientific Center for Emergency Medical Care (RSC EMC). This organizational structure appears to be working well with clearly defined reporting relationships between the central and regional/district level institutions, while the scientific/research focus of the Republican Scientific Center of Emergency Medical Care (RSC EMC) ensures a focus on continually improving EMS service delivery.

7. In addition to the Center and its 12 regional and 172 rayon departments, facility-based emergency medical care is also provided at a variety of other institutions, including national institutions (such as the Scientific Research Institute for Traumatology and Orthopedics), hospitals that are not part of the RSC EMC system, polyclinics and health centers (SVPs). Further information on the volume of emergency cases outside of this pyramid system is essential in order to obtain a true picture of what is going on.

8. **Pre-hospital and in-hospital aspects of the RSC EMC appear to be providing services far beyond the scope of what would normally be considered emergency medical care.** For example, both the republican and regional centers have consultant physicians who are providing outpatient consultations and diagnostic services to non-urgent patients. Also, while there is triage at the level of the emergency department, efforts are still made to attend to non-urgent patients in a timely manner. At this point, it is not clear why these types of services could not be provided by polyclinics or hospital out-patient departments, many of which have the required specialists already on staff, although this may have something to do with financing arrangements for visits to RSC EMC facilities versus other types of institutions.

9. Inefficiencies exist in the delivery of pre-hospital services. Specifically, "emergency" calls make up just 56 percent of the total call volume, which is much lower than in other high-performing EMS systems. Further, only 9.2 percent of calls resulted in patients who require emergency care are being brought to a hospital, with over 90 percent being treated at the scene. On a per capita basis, there are almost 25 calls per 100 population in Uzbekistan, compared to 10-12 per 100 population in most well-functioning EMS systems. This suggests that many of the calls that are being responded to are neither emergency nor urgent calls. As such they should rather be treated by the PHC system or in polyclinics rather than the EMS system. Conversely, there are known instances in which many serious cases are not being transported to a hospital by ambulance. If emergency or urgent patients are not using the ambulance when they should and ambulances are responding to non-urgent cases, this suggests that there is scope for initiatives to encourage the proper use of ambulance services. The reasons why the ambulance is not used even for emergency cases need to be further explored in order to develop suitable strategies. In order to inform this discussion, data will be collected and presented in the PAD on the incidence of traumas and medical emergencies.

10. **Poor quality of ambulances.** The current fleet of ambulances is unsuitable in providing modern pre-hospital care. They have limited space for storing emergency equipment and is essentially used to transport patients to and from hospitals regardless of whether there is an emergency. To some extent, this challenge has already been recognized with better equipped ambulances being purchased through various means, including the ongoing World Bank Health System Improvement Project.

11. **Another challenge relates to the number of ambulances.** Most countries with a functioning EMS system have one vehicle per 25,000-35,000 population. In the United States, this even goes up to one vehicle per 50,000 people in mid-size cities. Uzbekistan currently has one vehicle per 18,300 people, with the actual standards are even lower at 1:13,000. Hence, re-orienting and re-focusing the EMS system to focus more on true emergencies and urgent cases, could involve adjusting these standards upward without any negative impact on the responsiveness to such cases.



12. An EMS system that responds primarily to emergency and urgent calls would require around 900-1200 well-equipped ambulances and respond to roughly 3.2-3.8 million calls. A high percentage of patients would be transported to the hospital and about 25 percent of these patients would eventually be admitted (compared to 9.2 percent presently).

13. **The current ambulance dispatch system is highly fragmented with little coordination between districts and regions.** There is no screening of calls to determine whether they truly require highly specialized ambulance teams. In addition, there is no automation of the dispatch function, although an integrated information system is currently being developed. The proposed system appears to have all of the major elements needed to be effective, and follows international best practices. To date, a concept note on a proposed dispatch system has been developed by UZMedInfo, the MOH IT consulting arm, and is awaiting formal approval by the Government, the related systems architecture has been specified, and a feasibility study is underway and is expected to be completed by the end of June 2017. It is expected that the full system will cost US\$20-25 million, although roughly 70 percent of this cost (US\$14-17 million) will be required for the implementation of the digital data and voice communications system (Tetra), and the linkage of this system with other emergency services. Discussions are underway with various financiers regarding the potential funding of the system, but no decisions have yet been made.

14. **Human resources may be adequate in terms of quantity, but actual skills and abilities will need to be assessed.** Physicians appear to have a wide scope of practice, with the limiting factor being equipment, drugs and supplies. On the other hand, the scope of practice for feldshers appears to be more constrained. Given the level of training that feldshers already have, some expansion of this scope of practice may be worth exploring. Trauma care such as that required as a result of motor vehicle accidents was one area that did not appear to be well covered based on site visits. The "Damas" ambulances are too small to carry the required equipment (including spine boards, "scoop" stretcher, immobilization devices, splints, etc.), and even the larger ambulances did not have all of the necessary equipment. Even if such equipment was included in the ambulances - which would be recommended - this suggests that there may also be a need for further training in trauma care for all clinical staff. There may also be other areas that arise if an increasing focus on emergency and urgent cases is to be pursued. There are observed gender disparities based on occupation and tasks performed in the health sector in Uzbekistan. The trainings provided under the project will equally engage both male and female health professionals. This will be monitored through a gender-disaggregated project indicator.

#### Relationship to CPF

15. The proposed operation is fully aligned with the Country Partnership Framework (CPF) FY16-FY20. The CPF identifies improving public service delivery as one of the three focus areas of the new CPF, which suggests that *"significantly improved public service delivery will be essential to modernizing infrastructure and reducing spatial inequity in service delivery and, in so doing, build the human capital and provide the infrastructure services needed for growth and job creation."*

16. In the health sector, improving the efficiency of health service delivery is targeted in the CPF for World Bank Group (WBG) support. Though key health indicators have improved, more progress is required. In order to financially protect the population and reduce high out-of-pocket expenses, the Government needs to increase public expenditure on health and efficiently manage health financing. Improvement of the emergency health services system will have



broader economic consequences as well, through reductions in mortality and morbidity resulting from accidents and medical emergencies, leading to more productive employment prospects and less impoverishment due to the loss of family income. This should contribute to the Bank’s twin goals of poverty reduction and shared prosperity.

**C. Proposed Development Objective(s)**

17. The project development objective (PDO) is to contribute to increasing the effectiveness and efficiency of the emergency medical services (EMS) system.

Key Results (From PCN)

18. This proposed project will contribute to refocus the current EMS system to provide effective and efficient pre-hospital and in-hospital care to those who are critically ill and injured. Achievement of the PDO will be measured through the following key performance indicators (KPIs):

- Increase in the percentage of emergency and urgent pre-hospital calls and in-hospital visits as a percentage of total calls/visits;
- Increase in the percentage of emergency and urgent pre-hospital calls that meet the mandated response time criteria (urban and rural);
- Decrease in the total cost of the EMS system per emergency and urgent call/visit;
- Decrease in cross-county variation of EMS teams per capita;
- Improved outcomes for motor vehicle accidents treated by the pre-hospital ambulance service and in-hospital emergency receiving areas; and
- Percentage of beneficiaries satisfied with the improvements to the EMS services (disaggregated by gender).

19. Table 1 shows the results chain of linking the KPIs and expected results and impact or PDO

Table 1: Expected results and outcome indicators

Impact	Expected Results	Outcome indicators
Increased effectiveness and efficiency of the EMS system	Improved management of emergency and urgent pre-hospital calls and in-hospital visits through priority dispatch approach and effective triage	Increased percentage of emergency and urgent pre-hospital calls and in-hospital visits;
	Reduced number of non-urgent calls; modern and better equipped ambulances	Increased percentage of emergency and urgent pre-hospital calls that meet the mandated response time criteria (urban and rural);
	Increased resources to emergency and urgent cases; decreased in the number of non-urgent cases managed by EMS	Decrease in the total cost of the EMS system per emergency and urgent call/visit;
	Improved distribution of resources according to need due to effective dispatch systems across the country	Decrease in cross-county variation of EMS teams per capita;
	Improved equipment, training and focus on emergency and urgent cases ; Improved monitoring of EMS-related	Improved emergency care outcomes as evidenced by improved outcomes for motor vehicle accidents treated by the pre-hospital ambulance service and in-hospital emergency receiving



	outcomes	areas
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20. The final selection of indicators and targets for the proposed project will be fully aligned with the government strategy and the available baseline data and methodology for data collection. The development and implementation of integrated dispatch systems should also improve the quality and timely use of data for decision-making. The indicators will also reflect WB gender and citizen engagement requirements.

#### D. Concept Description

21. The proposed project builds upon the Bank’s existing engagement in the health sector in Uzbekistan as well as the evolving government priorities in the area of EMS. The government has already initiated the reform of the EMS system, though, inter alia, the development of various regulations and decrees, the preparation of a concept note for the integrated dispatch system, and the purchase of a number of functional ambulances through the ongoing World Bank project. This proposed project will support the Government of Uzbekistan in the implementation of its overall vision for effective and efficient EMS system.

22. The proposed project will target specific investments that are critical to achieve this overall vision, through a combination of “hard” and “soft” investments. The “soft” investments are critical to ensure that the larger investment in equipment and vehicles are effectively utilized. It is expected that the Government will contribute US\$20 million to the project (component/sub-components to be identified during preparation). In total, the proposed project will comprise the following three components:

23. **Component 1: Essential Vehicles and Equipment (estimated financing: US\$ 78 million).** This component will support the acquisition and distribution of modern ambulance vehicles, the essential equipment needed for those vehicles to support an increasing emphasis on pre-hospital emergency and urgent care (both trauma and medical emergencies); and essential equipment at the EMS facility level required to treat such cases when they arrive at the emergency receiving areas, both in terms of diagnosis, triage, and treatment.

24. **Component 2: EMS System Management and Quality Improvement (estimated financing: US\$16M).** This component will support a series of related interventions that are essential in re-orienting the EMS system towards the provision of high-quality emergency and urgent care. This would include:

25. *Sub-component 2.1: Regulatory and governance reforms.* A robust legal and regulatory framework is essential for realizing the vision for EMS and guiding the implementation and operation of the system. Support may also be needed in the development of protocols for both dispatchers and operational crews to guide their performance in line with the established vision for the EMS system.

26. *Sub-component 2.2: Dispatch, operational and management information systems.* This sub-component would finance the development of integrated dispatch centers in each of the 12 regions plus Tashkent. These centers would be responsible for call taking and dispatching of all ambulances within their borders, including those assigned to one of the 172 district centers or related sub-stations. The Tashkent center would also serve a central coordinating function in case of natural disasters or widespread emergency situations. The central element of these centers would be a common, integrated computer aided dispatch and communications system. The dispatch and communications system would be the core of an integrated information system to support both operational and management decision-making and facilitate ongoing monitoring and evaluation. All functions of such system are envisioned in the proposed new system



that is already in the detailed design phase (but awaiting formal government approval). The funding included assumes that most of Tetra communications system will be financed from other sources.

27. *Sub-component 2.3: Behavior Change Communication (BCC) on effective use of the EMS system.* This subcomponent will finance specific interventions, which encourage the public to utilize the EMS system primarily for emergency and urgent cases and to use alternative out-patient settings (primary health care centers and polyclinics) for non-urgent cases. These interventions would include both explaining the need to reserve the EMS system for more serious cases and highlighting the likelihood that less urgent cases will be dealt with more quickly in alternative settings. Beneficiary feedback on improvements and performances of the EMS services will be collected on regular basis and the results will inform about areas that perform well or require further improvements. Feedback provided by men and women will be tracked separately.

28. *Sub-component 2.4: Training and skills improvement.* This sub-component will develop a training needs analysis and develop training strategies to ensure that staff have the skills needed to operate in a predominantly emergency/urgent care environment. The trainings will address gender disparities identified in the health sector and ensure equal participation of male and female health professionals. Feedback on the quality of trainings will be collected.

While a well-established network of continuous medical education already exists within the EMS system, the funds under this sub-component would help facilitate the rapid dissemination of diagnostic and intervention skills as determined by the needs assessment.

29. *Sub-component 2.5: Quality monitoring and analytics.* The new dispatch, operational and management information systems will generate substantial amounts of real-time data. This sub-component will finance specific capacity building and analytical tools to fully exploit EMS-related data and make it readily available for both operational and senior management.

30. **Component 3: Project management (estimated financing: US\$ 4 million).** This component will finance the costs associated with day-to-day project management including the costs of running the Central Project Implementation Bureau (CPIB). The CPIB will be in charge of managing the fiduciary aspects and the monitoring and evaluation of the proposed operation.

31. These components will be further developed during project preparation. Three local and three international consultants have already been hired to conduct detailed background analysis, including (i) mapping of existing EMS facilities and development of national master plan for EMS facilities, (ii) analysis of the equipment and ambulances and proposal on upgrading the RSCMC and its regional centers with modern medical and diagnostic equipment, and (iii) analysis of the management and financing of EMS and proposal on its improvement. It is expected that all of these studies will be finished by early May, 2017.

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## SAFEGUARDS

### A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)





The project will be implemented in the capital city of Tashkent in the Republican Scientific Center for Emergency Medical Care (RSCEMC) and its branches in 12 regions of Uzbekistan. Interventions will affect existing facilities. No new construction, acquisition of new buildings or land is expected.

**B. Borrower’s Institutional Capacity for Safeguard Policies**

The Central Project Implementation Bureau (CPIB) under the Uzbekistan Ministry of Health has a long history of managing the implementation of the World Bank projects. The recent currently on-going project is P113349 Health System Improvement Project (HSIP) which was rated satisfactory in terms of environmental safeguards according to the recent ISRs. HSIP has hired an environmental consultant who developed a project Environmental Management Plan and is currently monitoring its implementation. It is expected that the new project will follow similar provisions.

**C. Environmental and Social Safeguards Specialists on the Team**

Ekaterina Romanova, Rustam Arstanov

**D. Policies that might apply**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The proposed project will include the rehabilitation of a limited number of hospitals in Tashkent and 12 other cities, to establish a proper layout for integrated emergency departments in those facilities. Though these works are not going to be financed by the proceeds of the World Bank Loan, they can be deemed as activities associated with the World Bank financing. The rehabilitation of these facilities would entail environmental and health and safety risks - albeit limited and manageable - due to the associated dust and noise of the construction, the disposal of construction and medical waste and the risks associated with the handling of the waste during operation (municipal, hazardous, etc.). In addition, the project will include the provision of the new equipment and vehicles and disposal of old equipment and vehicles might also entail certain environmental impacts. The team will closely work with the Borrower during the project preparation to define the scale and quantities of the equipment to be utilized.
Natural Habitats OP/BP 4.04	No	No natural habitats will be involved
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/BP 4.11	No	No civil works will be conducted in the or in the vicinity of the physical cultural recourses



Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	No	The policy is not triggered, as no temporary or permanent land acquisition, restriction of access or economic impact is foreseen. The scope of civil works will be limited and will occur in the existing medical facilities and within the current floor plans. However, the screening procedure for civil works will ensure that no acquisition of land is foreseen.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

**E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

Jul 03, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

3 July, 2017

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**APPROVAL**

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