

**Standard Summary Project Fiche – IPA centralised programmes**  
**(Regional / Horizontal programmes ; centralised National programmes)**

**1. Basic information**

**1.1 CRIS Number: 2007/19322**

**1.2 Title: Health Sector Reform Emergency Medical Services (EMS)**

**1.3 ELARG Statistical code: 02.28**

**1.4 Location: Serbia**

**Implementing arrangements:**

**1.5 Contracting Authority (EC) European Commission**

**1.6 Implementing Agency: N/A**

**1.7 Beneficiary (including details of project manager): The Ministry of Health**

**Financing:**

**1.8 Overall cost: Euro10 Million**

**1.9 EU contribution: Euro 10 Million**

**1.10 Final date for contracting: 3 years after the signature of the Financing Agreement**

**1.11 Final date for execution of contracts: 5 years after the signature of the Financing Agreement**

**1.12 Final date for disbursements: 6 years after the signature of the Financing Agreement**

**2. Overall Objective and Project Purpose**

**2.1 Overall Objective:**

To improve Emergency Medical Services (EMS) in Serbia as part of the overall reform of the Health system in Serbia

**2.2 Project purpose:**

To carry forward Health Sector reforms by improving the capabilities and capacities of EMS units in Serbia

**2.3 Link with AP/NPAA / EP/ SAA**

As underlined in the National Strategy of Serbia for the Accession of Serbia to the EU the strengthening of the basic functions of public health and health promotion are the main topics for EU support. Key to the advancement of health sector reform is support to a new culture of upgrading service quality, patient satisfaction and the creation of a modern, sustainable, decentralized and transparent health care system.

**2.4 Link with MIPD**

The MIPD identifies the need to continue supporting the health sector under IPA by improving the regulatory and management capabilities of health care authorities, institutions

and programmes. Administrative and operational capacities should be improved to provide quality and efficient health services, especially in conditions of limited resources. Support should be directed to continuous quality improvement of health institutions including health education reform.

## **2.5 Link with National Development Plan (where applicable)**

N/A

## **2.5 Link with national/sectoral investment plans (where applicable)**

The Annual Health Sector Operating Plan (2007) states that the reform of primary health care is high priority in the future Serbian health care system

PK 4.3.7. Purchase of new vehicles

PK 4.3.7. A1. Purchase of 80 vehicles - mobile intensive care units - 20 vehicles for the transport of haemodialysis patients.

The key principle of the National Health Reform Strategy is that every citizen, without consideration of age, sex, religion or nationality, must be provided, throughout Serbia, an equal chance of receiving the best possible skilled emergency medicine assistance.

One of the priorities in the Poverty Reduction Strategy is the reform of primary health services. Inter alia, activities shall be supported related to the revision of geographical allocation of means considering equal accessibility, validity, efficiency and quality of primary health care. The emergency services are an inherent part of primary health care.

## **3. Description of project**

### **3.1 Background and justification:**

The Serbian Government has identified reform of the health sector as a national priority. The reform process is positioned within the wider context of European integration and public administration reform. The Strategy and Action Plan for the Health Care Reform was prepared by the Ministry of Health (MoH) in early 2003 following the earlier adoption of the Health Policy of Serbia and the development of the Serbian Health Vision. This Strategy covers topics such as health financing, public health development, health care system delivery, human resources development, health information system and health management, as well as the new role of the MoH.

The EU has a successful track record of supporting health care reform in Serbia. Policy lessons to date underline the need to develop long-term strategic reform in the health sector particularly with regard to making reforms sustainable. A key lesson from the CARDS experience is to support the capacity and capabilities of health institutions with regard to service delivery. This is the absolute test of the on-going reform of the health sector.

One of the most visible parts of the health system is the emergency medical service (EMS). This sector of the health service has been subject to major changes through out Europe which have largely by-passed Serbia. The quality of this service is determined by the ability to provide immediate care in any situation to all patients, regardless of their nationality, age, sex

or location.

In total the number of EMS service providers in Serbia is approximately 140 units with 6,000 employees. The Emergency Medical Service (EMS) in Serbia consists of 24-hour on-duty stationary facilities and mobile units located within primary level of the national health care system. EMS exists as:

- an independent emergency medical service (Institutes in Belgrade, Nis, Novi Sad and Kragujevac )
- as part of the basic health care level of services within the primary health care centres (EMS of all towns in Serbia other than Belgrade) - through the regular work and full-time job of general medicine service or as particular unit in primary health care centre.

Medical knowledge, skills ability, team working capacities, IT systems and emergency procedures are not up to minimum EU standards. A review of the EMS system (supported by Norway) identified the need for organisational changes and the up-grading of continuous training for personnel. Furthermore the review highlighted the need to introduce standardized modern equipment meeting EU requirements to ensure adequate service delivery throughout Serbia.

A Special Working Group (SWG) was set up by the Ministry of Health tasked with the responsibility to identify the best solutions for modernising the system. In partnership with the Norwegian Red Cross, the SWG implemented the Rehabilitation of Emergency Services in Serbia project which detailed the requirements, concerning the organization, standards, procedures, educational programmes and the role of emergency medicine in the health service of the Republic of Serbia.

The regulations of conditions, organization and procedures of EMS in Serbia, worked out by SWG, contain all the standards concerning road ambulances which, adequately meet the needs of emergency medicine services in Serbia and comply with European Standards EN 1789.

The key challenges to overcome to push forward policy reform in this sector are as follows:-

- Shortage of appropriately equipped vehicles. The results of a survey carried out by SWG identified a total fleet of 999 operational ambulances
- Lack of training equipment

Building on the policy and education reform actions in this sector to date this project will support the shortfall in equipment and vehicles and provide the associated training/education to bring EMS response capability up to EU standards.

The results of this project will:

- a) Address the shortfall in logistical capability by supplying 200 modern, fully equipped, EMS vehicles.
- b) Train EMS personnel to maximise vehicle capability in responding to emergency demands

### **3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)**

The supply of the vehicles and training of EMS personnel will address a major gap in the implementation of the EMS reform strategy. The logistical reach capacity of EMS will extend to a national territorial basis.

The realization of this project will provide the more effective actions for all urgent states and conditions in pre-hospital period, in already made protocol and standards. This project with its activities and expected results (vehicles, equipment, trainings, education-human resources) will provide necessary elements for sustainability of EMS in Serbia, as the excellent basis for further development of EMS.

### **3.3 Results and measurable indicators:**

Results and measurable indicators in relation with activity 1.

1.1 Purchase of 200 emergency vehicles

1.2 Training of teams who will use the vehicles and control of vehicles

Result

1. Fully operational mobile units according to the established EU standards

Indicator

Fulfilment of standards stated in the Regulations of conditions, organization and procedures of EMS in Serbia contain all the standards concerning road ambulances which adequately meet the needs of emergency medicine services in Serbia and comply with European Standard EN 1789.

Results and measurable indicators in relation to activity 2

2.1 Training of EMS personnel

Purchase of training machines (training manikins) and equipment for educational centres e.g.: Learaldal Airway Management Trainer, Infant Airway management Trainer, Paediatric Intubation Trainer, Pneumo-thorax Trainer, Crickoid Stick Trainer, Male Multi Venous, IV Training Arm Kit, Paediatric Multi Venous, IV Training Arm Kit, Little Anne, Little Junior Baby, Anne Mega Code Kelly, AT Kelly Torso, Sim Man, Ultimate Hurt, deluxe Difficult Airway Trainer, ALS Baby, computers, video boom, as the others regional centres (EMS - Regional centres and EM Stations).

Results

1. Fully trained educational and medical staff.

2. Equipped and operational educational centres in Institutes of EMS in Belgrade, Novi Sad, Niš and Kragujevac with respect to established standards for equipment, as well as in Emergency Medical services and Emergency Medical Stations, where daily training of manual skills and teams will take place.

Indicators -

1. Fulfilment of standards stated in the Regulations of conditions, organization and procedures of EMS in Serbia contain all the standards concerning road ambulances which, adequately meet the needs of emergency medicine services in Serbia and comply with European Standard EN 1789.
2. Number of properly equipped educational centres, EM services and stations
3. Number of properly trained staff and trainers certified for further education of EMS staff.

### **3.4 Activities:**

#### **Activity 1**

The supply of 200 modern EMS vehicles based on the needs analysis of the EMS reform strategy. Training for the EMS personnel and training equipment (e.g. mannequins) to effectively use and maintain the vehicles should constitute part of the supply contract.

#### **Activity 2**

Technical Assistance to EMS staff in EU standard paramedic services. This training will include direct training to EMS staff as well as Training Trainers in order that EMS centres have the in-house capability to instruct new staff. The training will be directed to maximising the service quality of EMS in utilising the extended logistical capability afforded by the supply 200 vehicles.

The Activities will be carried out through a supply contract (two lots) and one service contract

### **3.5 Conditionality and sequencing:**

This project is subject to the full implementation of phase one of the on-going project “Reform of the Emergency Service in Serbia being implemented with the support of the Norwegian Red Cross. (See Memorandum of Understanding and project documentation attached)

Support under this fiche is conditional upon the successful launch of phase two of this reform project which includes the following actions:-

- the reconstruction of the ambulance dispatch centres in all the emergency medicine units of the Republic of Serbia on the basis of the relevant data collected in the first stage of the Project (improving radio communications, the introduction of call recorders, the introduction of the uniform information system etc)
- Resourcing the educational centres at Emergency Medicine Institutes and fitting out the training centres in other emergency medicine units in the Republic of Serbia
- Sourcing adequate national/other funding for the further education of all the employees in emergency medicine service and all the requiring preparations as per the Regulations of conditions, organization and procedures of emergency medicine service in Serbia
- Preparing and distributing a Guide to Emergency Medicine in Serbia

The government of Serbia and the Ministry of Health in particular is committed to the full maintenance of all vehicles and associated equipment supplied throughout their operational lifetime.

### 3.6 Lessons learned

In 2001, the MoH and the MIER (former Ministry of International Economic Relations, its Development and Assistance Coordination Unit now part of the Ministry of Finance) applied to the Norwegian Ministry of Foreign Affairs (MFA) for assistance in upgrading the Emergency Medical Center in the Capitol of Serbia. After an MoU between the above mentioned ministries was signed, the project was implemented by the Norwegian Red Cross, and has included on-site assessment, refurbishing of the building, restructuring of the heating system, donation in medical, communicational and computer equipment, uniforms, ambulances, mass disaster truck and training of medical staff connected to the training center in Basic Life Support (later BLS), Advanced Life Support (later ALS) and usage of the equipment, maintenance and management. Special attention was given to upgrading of non-medical personnel regarding BLS, with the aim of making ambulance drivers capable of assisting to medical staff in field. Training was performed by Norwegian staff accompanied by professional translators.

In 2003, based on the assessment by Norwegian Red Cross (later Norcross), the project was spread to 4 more cities, with basically unchanged system of assessment, donation plus staff training and education. At the same time follow up project aimed at Belgrade Emergency Medical Center was going on.

Through assessment of the emergency services condition and constant dialogue with the MoH the need for further development and standardization was recognized; Norcross among others took the responsibility for developing medical software and starting the process of implementing the Medical Index.

In 2003, after MoH assessment, 7 more cities were targeted as new beneficiaries of 2004's project. Following the same strategy of combined training and donation, new features such as Medical software and patient journal were introduced, and special attention was given to signing of MoU between MoH and Laerdal Medical in Norway on usage of Medical INDEX for emergency situations, which is to be used as guidelines in emergency medical services. At the same time a follow-up project was going on, targeted at Belgrade EMS and 4 cities services.

Based on field research and reports given by the cities included in the project, the impact of the project was immediate and recognized by the municipality population. Once poorly, if at all equipped, services (the result of country's stagnation and lack of financial means) were capable of reaching patients in short time with fully equipped ambulances and trained staff.

Previous projects directed at emergency services in Serbia have been successful, and have thus created a net of 12 EMS functioning close to European standards. In order to follow the development and spread it to the rest of the country, the MoH has undertaken actions in providing new ambulances to 120 EMS, but limited financial means were impeding the full equipping and training of those EMS.

Based on the received results of the Enquiry list sent to all EMSs in Serbia in 2006, as well as on the comparative analysis of the data received from the Questionnaire from 2003, Special Working Group of Emergency Medicine (later SWGEM) has concluded that it is necessary to procure at least 200 ambulance cars that would be equipped with medical equipment for taking care of all urgent conditions in the field. The data used during the passing of that

conclusion primarily pertains to the relation of the number of teams in every EMS as compared to the number of inhabitants covered by that EMS, the territory area and the average number of interventions on the annual level. It is assumed that with 200 new ambulance cars work efficiency shall be significantly increased in over 65 EMSs in Serbia.

### **3.7 Linked activities**

“Rehabilitation of emergency services in Serbia” is an ongoing project financed and supervised by the Norwegian Government. At the moment, the first phase of the project is finished with results as expected by Special Working Group of Emergency Medicine (later SWGEM) - Recommendations for Reform of the EMS System in Serbia, issued by the MoH in March 2007, supports the above stated (see Annex 1). Subsequent activities include evaluation of these results by the donor and an approval for the second phase of the project.

In 2002, the EUROPEAN COMMISSION HUMANITARIAN AID OFFICE donated 20 reanimobiles (mobile intensive care units) to the Serbian EMS.

In 2004, the Serbian Government provided 41 ambulance vehicles for the transport of haemodialysis patients, 103 ambulance vehicles and 5 (mobile intensive care units) to the EMS.

From 2000-2005 there were many donors of vehicles in the healthcare system, but very few emergency ambulance cars.

Purchasing of 20 ambulance vehicles for the transport of haemodialysis patients is also planned by National Investment Plan (Ministry of Finance)

In 2006 the Canadian International Development Agency (CIDA) began supporting the implementation of the “PHC Policy Project in Balkans”. A project implemented by the Canadian Society for International Health and the Queens University from Canada is another very important ongoing project. Considering very close links between primary healthcare and emergency medical services – the pre-hospital health care, this project will bring basic and uniform strategic approaches to every structure of the primary health care sector. It includes functional analysis of ten pilot Primary Health centres (Dom Zdravlja), and according to the results, the project is aiming to create the National Strategy for the Reform of the Primary Health Care Sector. These outputs, together with the outputs of the first phase of Norwegian project are an excellent basis for further activities requested by this project.

#### 4. Indicative Budget (amounts in million €)

	TOTAL COST	SOURCES OF FUNDING										
		EU CONTRIBUTION				NATIONAL PUBLIC CONTRIBUTION					PRIVATE	
Activities		Total	% *	IB	INV	Total	% *	Central	Regional	IFIs	Total	% *
Activity 1												
contract 1.1	9	9	100		100							
contract 1.2												
Activity 2												
contract 2.1	1	1	100	1								
contract 2.2												
<b>TOTAL</b>	<b>10</b>	<b>10</b>	<b>100</b>									
* expressed in % of the Total Cost												

#### 5. Indicative Implementation Schedule (periods broken down per quarter) <sup>1</sup>

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1	T+Q1	T+Q3	T+Q7
Contract 1.2	T+Q2	T+Q2	T+Q7

All projects should in principle be ready for tendering in the 1<sup>ST</sup> Quarter following the signature of the FA.

#### 6. Cross cutting issues (where applicable)

Development Policy Joint Statement by the Council and the European Commission of 10 November 2000 establishes that a number of Cross-cutting Issues shall be mainstreamed into EC development co-operation and assistance.

Cross-cutting issues will be addressed in the project so as to comply with the best EU standards and practice in that area and in a way which demonstrates how they will be dealt with within the project's framework, its activities and outputs.

Cross-cutting issues will be addressed in a proactive manner, and will present a specific component of projects (at all levels of projects' development, starting from the project identification stage). Synergies between the projects and the objectives of will be identified and developed. Also, the projects' objectives and activities need to be screened in order to ensure they won't impact negatively on gender equality, minorities' inclusion and environment.

Finally, the beneficiary will make sure its objectives, policies and interventions have a positive impact on and are in line with the main principles of gender equality, minorities' inclusion and environment.

<sup>1</sup> [where T=the date of the signature of the FA and xQ equals the number (x) of quarters (Q) following T].



## **6.1 Equal Opportunity**

During the implementation of the project there will be no discrimination on grounds of race, sex, sexual orientation, mother tongue, religion, political or other opinion, national or social origin, birth or other status. Equal opportunities for women, men, vulnerable groups and minorities will be ensured during the implementation of the project. Serbian laws and regulations concerning equal opportunities for women, men, vulnerable groups and minorities will strictly be followed.

A major part of EU support to date for reform in the Serbian Health System has been the emphasis on identifying local health priorities and the provision of services. Women have traditionally been major providers of health services but with less control over strategic decision making and resource allocation. This inequality has to be addressed and the project will ensure that female professional medical staff will be afforded equal opportunities to be employed in the expanded EMS and specifically in managerial positions.

## **6.2 Environment**

Purchase of new ambulance cars will contribute to reduction of present air pollution caused by outdated ambulance cars.

## **6.3 Minorities**

This project will benefit all groups of citizens, including those belonging to national minorities. Access to adequate health care will be improved by providing ambulance cars to areas populated by national minorities, Roma, and other underprivileged groups.

## ANNEX I: Logical framework matrix in standard format

LOGFRAME PLANNING MATRIX for Project Fiche		Programme name and number <b>Health Sector Reform Emergency Medical Services (EMS)</b>	
		Contracting period expires 5 years after the signature of the Financing Agreement	Disbursement period: expires 6 years after the signature of the Financing Agreement
		Total budget: <b>10 M</b>	IPA budget: <b>10 M</b>
<b>Overall objective</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	
To improve Emergency Medical Services (EMS) in Serbia as part of the overall reform of the Health system in Serbia	Reduced number of adverse events and accidents reported through the routine reporting system in health institution network, improved coverage with health services of vulnerable population groups;	Routine data collected through the IPH network, the HIF network and Republican statistical Office of Serbia; Project documents and Reports; Current legislation in Serbia	
<b>Project purpose</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
To carry forward Health Sector reforms by improving the capabilities and capacities of EMS units in Serbia	Consumer satisfaction with health care services; Quality Indicators as defined by the Ministry of Health;	Routine data collected through the IPH network, the HIF network and Republican statistical Office of Serbia; Project documents and Reports; Current legislation in Serbia	Continuing Government commitment and support for cooperation between all stakeholders;  Legislation in place
<b>Results</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
1. Fully operational mobile units according to the established standards 2.2 Fully trained educational and medical staff 2.1 Fully equipped and operational educational centres in Institutes of EMS in Belgrade, Novi Sad, Niš and Kragujevac regarding established standards for equipment, and in Emergency Medical services and Emergency Medical Stations too.	1. Fulfilment of standards stated in the Regulations of conditions, organization and procedures of EMS in Serbia, contain all the standards concerning road ambulances which, adequately meet the needs of emergency medicine services in Serbia and comply with European Standards EN 1789.  2.1 Number of properly trained staff and trainers certified for further education of EMS staff.  2.2 Number of properly equipped educational centres, EM services and stations	Regulations of conditions, organization and procedures of EMS in Serbia, which, adequately meet the needs of emergency medicine services in Serbia and comply with European Standards EN 1789. (1,2,1,2,2)	Results of the First phase of project „Reform of EMS in Serbia” in place  Human resources within EMS institutions other users and relevant stakeholders competence enough to carry on with stated activities and tasks
<b>Activities</b>	<b>Means</b>	<b>Costs</b>	<b>Assumptions</b>
1. Supply of 200 modern EMS vehicles and Paramedic Training Equipment 1.2 Training of teams who will use vehicles and control of vehicles	1 Service Contract 1 Supplies Contract	10 Million Euros	All of the above stated

**ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project**

<b>Contracted</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
Contract 1.1			9.0								
Contract 1.2		1.0									
Contract 1.3											
Contract 1.4											
.....											
<b>Cumulated</b>		<b>1.0</b>	<b>10.0</b>								
<b>Disbursed</b>											
Contract 1.1			5,400,000		2,700,000			900,000			
Contract 1.2		600,000	80,000	80,000	80,000	80,000	80,000	100,000			
Contract 1.3											
Contract 1.4											
.....											
<b>Cumulated</b>		<b>600,000</b>	<b>6,080,000</b>	<b>6,160,000</b>	<b>8,940,000</b>	<b>9,020,000</b>	<b>9,100,000</b>	<b>10,000,000</b>			

## **ANNEX III**

### **Description of Institutional Framework**

The Ministry of Health is in charge of implementation and monitoring of this project. The work, mandate and authorisations of the Ministry are regulated by the Law on Ministries (adopted on May 15, 2007 (Official Gazette of Republic of Serbia no. 48/07) – i.e. Article 21.

The Ministry consists of the following sectors:

- Sector for organisation of health service
- Sector for health insurance
- Sector for international relations
- Sector for health policy
- Sector for public health

## **ANNEX IV**

### **Reference to laws, regulations and strategic documents:**

#### **Reference list of relevant laws and regulations in the health sector**

##### *General:*

- Constitution of the Republic of Serbia
- Law for the Implementation of the Constitution of the Republic of Serbia
- National Strategy for Serbia and Montenegro's Accession to the European Union
- Action Plan for the Implementation of the European Partnership
- Poverty Reduction Strategy Paper

Three key systemic Laws: Health Insurance Law, Health Care Law, the Law on Chambers;

Regulations of conditions, organization and procedures of EMS in Serbia,

Protocol on Mass Casualty Disasters,

Strategy and Action Plan for Health Care Reform

Health Policy of Serbia

Serbian Health Vision

Decision on content and scope of health care

#### **Reference to AP /NPAA / EP / SAA**

AP for EP: 3.1.15, 5.1.7

As underlined in the National Strategy of Serbia for the Accession of Serbia to the EU the strengthening of the basic functions of public health and health promotion are the main topics for EU support. Key to the advancement of health sector reform is support to a new culture of upgrading service quality, patient satisfaction and the creation of a modern, sustainable, decentralized and transparent health care system.

## Reference to MIPD

### 2.2.2 Socio-economic Requirements

This sub-component also deals with issues and sectors related to health

#### 2.2.2.2 Main priorities and objectives

- Improve regulatory and management capabilities of health financing institutions and health care authorities, institutions and programmes; increase access and inclusion of vulnerable groups into the health care system; support inter-ministerial fight against drug abuse, and HIV/AIDS. Improve preventive health services with an emphasis on screenings; adapt the curriculum of the Schools of Medicine to promote mutual recognition of health professional qualifications. Take into account the existing legislation for further revision (i.e. Health Care Law, Health Insurance Law and the Law on Chambers).

#### 2.2.2.4 Programmes to be implemented in pursuit of these objectives

- Support implementation of continuous quality improvement of health institutions and health education reform.

## Reference to National Development Plan

N/A

### Reference to national / sectoral investment plans

The Annual Operating Plan 2007 states that the reform of primary health care is a high priority in the future Serbian health care system

#### *PK 4.3.7. Purchase of new vehicles*

- **PK 4.3.7. A1.** Purchase of 80 vehicles - mobile intensive care units - reanimobils and 20 vehicles for transport of haemodialysis patients

## ANNEX V

### Details per EU funded contract (\*) where applicable:

For *TA contracts*: account of tasks expected from the contractor

Educational programme for drivers should consist of:

- education for using medical and other equipment in vehicles, because the drivers are a necessary part of the team for field interventions in emergencies
- introducing specific motor characteristics and basic measures in case of damage
- driving models in different traffic and weather conditions.
- drivers should attend the trainings established by the Regulations of conditions, organization and procedures of EMS in Serbia,

The heads of car parks should attend parts of the education, as well as all of the employees in charge of car servicing, so as to be acquainted with the technical characteristics of vehicles and the producers' recommendations on the daily usage and car reparation.