

Bosnia and Herzegovina

The Priority Reconstruction Program: 1996 Achievements and 1997 Objectives

Prepared by the European Commission
and
the Central Europe Department of the World Bank
March 1997

CURRENCY EQUIVALENT

100 BHD DINAR = 0.59US\$ = 1 Deutsche Mark

LIST OF ACRONYMS AND ABBREVIATIONS

EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECHO	European Commission Humanitarian Office
EU	European Union
EUAM	European Union Administration of Mostar
FAO	Food and Agriculture Organization
FRY	Federal Republic of Yugoslavia
GNP	Gross National Product
GSP	Gross Social Product
GTZ	Gesellschaft fuer Technische Zusammenarbeit (Germany)
IBRD	International Bank for Reconstruction and Development
ICRC	International Committee of the Red Cross
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFIs	International Financial Institutions
IFOR	Implementation Force
IMF	International Monetary Fund
IMG	International Management Group
JCC	Joint Civilian Commission
MIGA	Multilateral Investment Guarantee Agency
NGO	Non Governmental Organization
ODA	Overseas Development Administration (UK)
OHR	Office of the High Representative
OSCE	Organization for Security and Cooperation in Europe
PIU	Project Implementation Unit
SIDA	Swedish International Development Cooperation Agency
SME	Small and medium size enterprises
UN	United Nations
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNPROFOR	United Nations Protection Force
UNSCS	United Nations Special Coordinator for Sarajevo
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

1. Almost a year and a half ago, the international community pledged US\$1.8 billion in financial assistance to support Bosnia and Herzegovina's economic recovery, and the first results were impressive, with noticeable improvements in living conditions in many areas of the country. Roads, railways, and airports have been re-opened, energy supply has become more regular, running water has reappeared in many municipalities, and housing reconstruction flourishes in many areas. These results have been made possible by the combination of a strong desire by local people for a return to normal life, and a significant level of assistance, both advisory and financial, from the donor community. Donor support in 1996 generally met the needs identified in the US\$5.1 billion priority reconstruction program and made the recovery program -- by any international standard of comparison -- one of the most successful attempts to reconstruct a war-torn country in the last few decades.

The Vision for 1997: Achieving sustainability

2. *Continued effort is necessary in 1997 and beyond to achieve sustainable recovery in both parts of the country and to alleviate unemployment, which still exceeds 50 percent.* Social and infrastructure facilities must be repaired and sustained, institutions must be developed and staff trained. And Bosnia and Herzegovina will have to undertake market-oriented economic reforms to fundamentally modify its legal and regulatory system and its private and financial sector framework. Substantial technical assistance will be required to that effect, as described in the annex of this report.

3. This will be a multi-year effort for Bosnia and Herzegovina and donors alike, and, while much progress has been made, donors, authorities in Bosnia and Herzegovina, and observers should be prepared for a reconstruction process that will take a number of years to be completed.

4. *While donor assistance will be required through the consolidation period (1997 - 98) and beyond, it must progressively be complemented and eventually replaced by other resources -- including domestic savings, domestic private sector resources, budgetary resources from all levels of government, as the economy and budgets recover, and, eventually, also by the resources of the international private sector.*

5. *To achieve this, donors and authorities in Bosnia and Herzegovina must focus their joint efforts on sustainability.* 1996 was a year for implementing quick impact emergency projects. Urgent repairs were mostly financed through grants, and little attention was paid to the conditions under which restored infrastructure would be operated or to the financing mechanisms that would ensure sustainability over the medium-term. In 1997 donor assistance must move toward supporting sustainable

investments and reforms: priorities should reflect medium-term needs, operating conditions should be defined in detail, and cost-recovery mechanisms should be designed before investments are made.

6. Sustainability, which should be both an objective of, and a pre-requisite for, donor support, is a broad theme. It covers many areas, including: (i) better maintenance of rehabilitated infrastructure, and cost-recovery through user charges, so that utilities in Bosnia and Herzegovina increasingly cover operating costs and contribute to investment costs; (ii) sustainable budgets at all levels of government so that teachers and doctors can be paid; (iii) well-governed and capable public institutions; and (iv) privatization, and structural reforms in the banking sector to create viable financial intermediaries and unleash private initiative. Sustainable policies are critical to achieving high economic growth and, eventually, creditworthiness.

7. *To promote these reforms, to move toward medium-term sustainability and to ensure that resources are appropriately directed, sound domestic policies on the Bosnian side, and effective donor coordination are critical.* Efforts must be made to ensure that donor-funded projects are consistent with overall sectoral strategies, and that donors work together to support enhanced policy environments across all sectors. Such strategies are described in the each of the following chapters for each sector.

The Reconstruction Financing Challenge

8. The US\$5.1 billion, three- to four-year priority reconstruction program, aimed at restoring normal life, supporting economic recovery, and facilitating the reintegration of refugees and displaced persons, remains valid as an overall framework. *A desirable external financing target for 1997 is US\$1.4 billion* (table 1). Five major areas of support can be distinguished: infrastructure networks; support to community revival; employment recovery and private sector development; social sectors; and support to the Governments for promoting institution building and sustainable budgeting. Within this priority reconstruction program framework, the Refugee Return Task Force, established under the Office of High Representative-chaired Economic Task Force and working closely with UNHCR, is considering developing an integrated program bringing together specific projects in each of these areas, aimed at supporting the return of refugees.

Table 1. External Financing Requirements of the Priority Reconstruction Program (US\$ million)

Sector	Revised 3-4 Year Priority Program ²	1996 Firm Commitments	1997 Requirements / Sectoral Allocations
Agriculture ¹	304	73	90
Education ¹	273	104	70
Employment Generation ¹	88	54	30
Energy	871	284	310
[District Heating and Natural Gas] ¹	[257]	[53]	[110]
[Electric Power and Coal]	[614]	[231]	[200]
Fiscal and Social Support / Balance of Payments	514	276	120
Health ¹	413	111	90
Housing ¹	693	302	150
Industry and Finance	612	192	180
Landmine Clearing ¹	203	51	60
Telecommunications	173	37	60
Transport	583	192	175
Water and Waste Management ¹	363	96	100
Subtotal		1,772	
Support to Peace Implementation		132	
Total	5,090	1,904	1,435³

1. Many donor programs in these sectors are partly or fully designed to contribute to the reintegration of refugees and displaced persons.

2. Financial estimates have been revised in some sectors as a result of improved knowledge of the current situation.

3. While not specifically earmarked, this total includes provision for the creation of a "Quick Impact Regional Fund" to support regional economic cooperation by the Office of the High Representative (Box 1).

Infrastructure Networks

9. *External financing requirements for infrastructure networks -- transport, telecommunications, electric power -- are estimated at US\$435 million for 1997. Significant donor assistance is required, particularly for electric power and transport.*

- There were significant achievements in 1996, but more remains to be done. *Transport* infrastructure was repaired and railways lines and airports have been re-opened; but significant civil works still have to be carried out. Moreover, policy reforms are required to improve cost recovery, and political compromises are needed to reach agreement on inter-Entity issues. In *telecommunications*, efforts were impeded by persistent political difficulties which could not be resolved. *Electric power* facilities were rehabilitated, regular power supply was restored to many households, and progress was made toward cost-recovery; however, a large part of the country still remains without satisfactory supply of electricity and cooperation among the operating companies is still insufficient.

- Efforts in 1997 should focus on continuing to rehabilitate damaged priority infrastructure in road, rail, power and telecommunications, and implementing economic policy reforms; these reforms should be aimed at both ensuring cost recovery and setting up efficient operating mechanisms for those networks currently still split into three independent sub-systems, to restore communication and interaction between them.

Community Revival

10. *1997 financing requirements for activities directly supporting community revival and reintegration of refugees and displaced persons -- housing, district and gas heating, water and waste management, and landmine hazard management -- are estimated at US\$420 million.* The design of integrated packages in these sectors is critical for facilitating the return of refugees and displaced persons. Necessary efforts include works and physical repairs, as well as reforms aimed at improving management of municipal companies (water and heating). Many complex ownership issues also must be addressed before full-scale housing reconstruction can proceed.

- In 1996 a large number of activities were implemented in a decentralized manner (through NGOs or direct contracts with municipalities) and were generally successful -- although the landmine clearing sector had a slow start due to political difficulties impeding donor efforts.
- In 1997 donor support is still critical. Since implementation arrangements are likely to remain decentralized for the bulk of assistance, efforts should be made to ensure coordination among donors. Regional rehabilitation projects should be supported, and attention should be paid to distributing the assistance in a balanced fashion throughout the country. Programs specifically-designed for supporting the return of refugees, including to areas such as Brcko, are being prepared by the Refugee Return Task Force under the guidance of the Office of the High Representative, within the framework of the priority reconstruction program.

Employment Recovery and Private Sector Development

11. *Financing requirements in 1997 to re-start economic activities in the private sector and generate employment -- industry, financial sector development, direct employment creation, and agriculture -- are estimated at US\$300 million.* Creating employment over the medium-term is essential for repatriating refugees and reintegrating displaced persons, as well as for demobilizing armies. Employment will be generated by supporting economically viable activities and by stimulating private sector development and reforming banks -- with more immediate "bridging projects" to create employment directly in the short-term.

- In 1996 activities focused on emergency measures: critical imports in agriculture, quick-start lines of credit in industry, and specially designed employment generation programs (public works, training and counseling and local initiative micro-credit projects). These programs were generally successful, but they could address only a small part of the unemployment problem.
- Donor efforts should be stepped up in 1997, with assistance gradually moving toward supporting measures that foster private sector development and foreign private investments in Bosnia and Herzegovina, and promoting banking reform. In parallel, direct employment programs should be used to facilitate the reintegration of refugees and displaced persons. Success in the field of employment revival and job creation, more than in any other, is directly linked to the commitment of the State and Entity Governments to reforming the legal and regulatory framework, restructuring the banking sector, re-orienting government activities and stimulating private initiative. Donors should strongly encourage Governments at all levels to proceed in that direction.

Social Sectors

12. *Requirements for the social sectors -- education and health -- in 1997 are estimated at US\$160 million.* Major needs include physical repairs, provision of equipment and supplies (such as medicines), critical inputs (such as school materials), and technical assistance to reform the systems and ensure their sustainability.

- In 1996 support to the social sectors was substantial, and several donors continued or expanded emergency-type activities started during the war. Many channeled their funding through international NGOs and implemented projects using direct contracts with beneficiary municipalities.
- In 1997 substantial financial assistance is required. Donors should support the design and implementation of sectoral investment strategies and the resolution of policy issues, especially financial and budgetary sustainability. In addition, efforts should be made to improve donor coordination. A review of the 1996 social sectors program showed that since salaries were generally paid in 1996, albeit erratically and at reduced levels, and since donors cannot substitute for the Governments over the medium-term, recurrent financing of salary support should no longer be included in the social sectors allocation.

Institutional Support

13. *The reconstruction program includes direct assistance to the State and Entity Governments, estimated at US\$120 million for 1997.* This assistance includes fiscal support for promoting good governance and setting up the corresponding institutional structures, and for establishing a social safety net for the neediest. It also includes the

provision of technical assistance to help developing appropriate policies and institutions, at the State end Entity level.

- Fiscal support in 1996 was extensive, and largely directed to the Federation. A minimum safety net was put in place with donor funding. In addition, more than US\$55 million of technical assistance was provided by a number of countries to strengthen Government institutions, mainly within the Federation, to design market-oriented policy reforms and to coordinate the overall reconstruction program.
- Continued fiscal assistance is required in 1997 to support a successful budget reform process and to develop an appropriate safety net for the medium-term. The provision of a large amount of well-targeted technical assistance will also be critical to designing the policy reforms needed to ensure the sustainability of reconstruction efforts, to setting up or strengthening the corresponding public institutions, and to supporting the establishment of the joint State institutions.

Box 1. Quick Impact Regional Fund

The Office of the High Representative (OHR) established, in the spring of 1996, three Regional Joint Civilian Commissions. These Commissions were to address implementation issues on the regional level and to cover regions both from the Federation of Bosnia and Herzegovina, and Republika Srpska. The approach adopted by the Regional Joint Civilian Commissions stressed the need to encourage and re-establish links between the Federation of Bosnia and Herzegovina and Republika Srpska on the regional level. The natural linkages between the different regions existed before the war, and this interest is to be encouraged. The regional authorities also have the first-hand knowledge of the needs, as well as of the potential, of the regions.

There are also encouraging signs of increasing willingness for cooperation in mixed communities. This interest should be backed by an appropriate instrument. This applies also to the return of refugees to mixed areas as well as to moving back to the Zone of Separation.

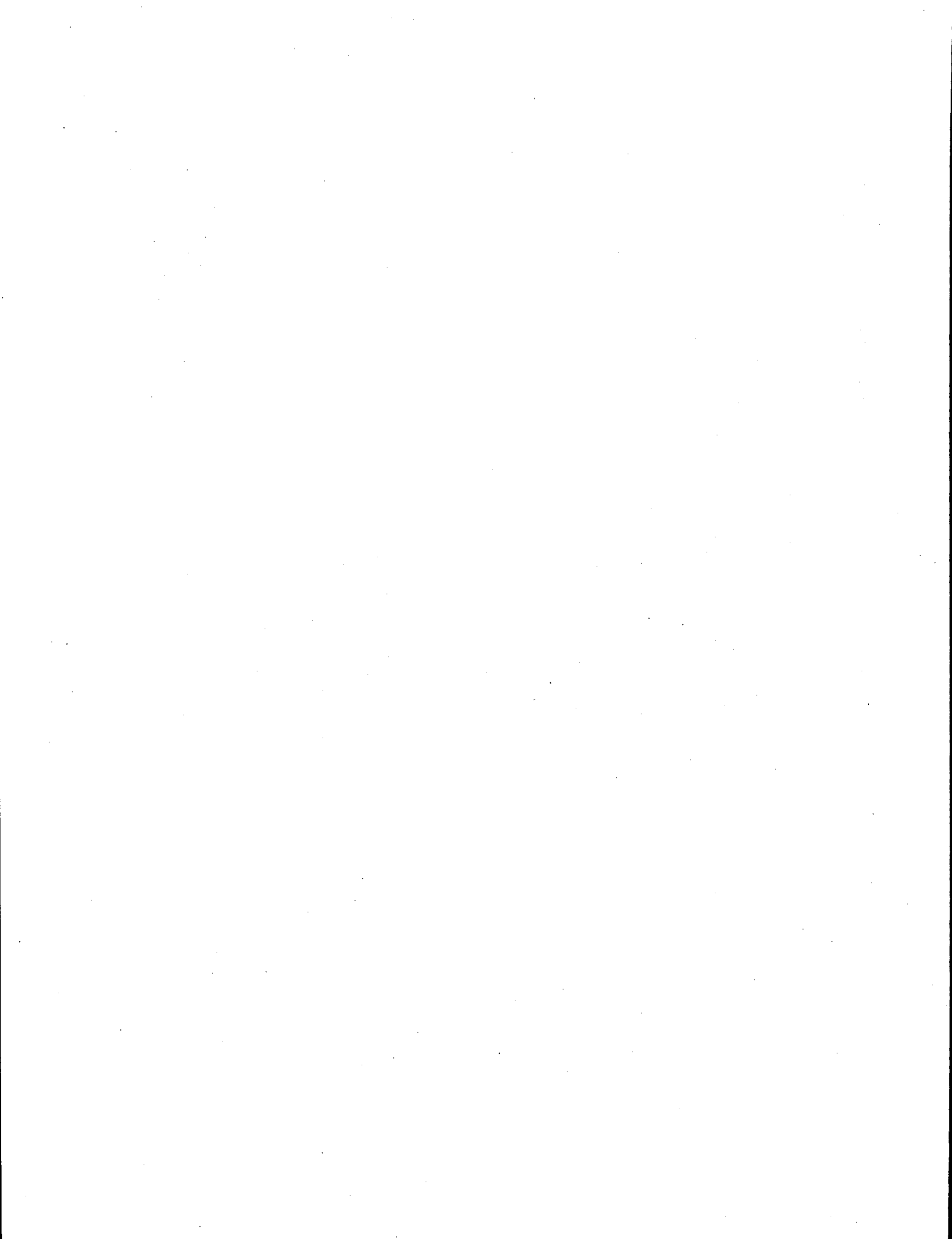
Consequently, it is proposed that a Quick Impact Regional Fund with an initial size of \$20 million be created to finance small scale projects of cross-entity character or to support mixed communities. The Fund would be multi-sectoral, and would receive proposals from cantons, regions and municipalities. The proposals should be formulated in cooperation between the applicants from the respective regions or municipalities of the two Entities or mixed municipalities. The Fund could then meet, on a short notice, the different financing needs according to locally defined priorities. The management of the Fund would be contracted to an expert agency which could be located at the OHR. The feasibility of each project would be judged according to the criteria set by the OHR.

Next Steps: Challenges for Bosnia and Herzegovina and for the Donor Community

14. *An extraordinary effort will be required of the people of Bosnia and Herzegovina and their Governments at the State and Entity levels to achieve the postwar reconstruction of their country.* Significant progress has already been made. But much remains to be done. Volunteers in Bosnia and Herzegovina have carried out emergency repairs of gas networks, owners have started reconstructing their homes, public institutions have designed and implemented large projects, and private companies have been created. Initial steps have been taken in building Federation institutions (such as the tax and customs administrations); privatization teams have been set up in both

Entities, and discussions on State-level institutions are underway. But these initiatives still have to be transformed into sustainable activities over the medium-term, cost-recovery mechanisms have to be developed and implemented, and much more has to be done in setting up adequate institutional arrangements. Thus a comprehensive policy framework must be outlined to justify continued donor support, and the allocation of resources to specific sectors. Further, compliance with the Peace Agreement by the parties, progress on the political front and in economic reforms would help encourage donors to come forward.

15. *The success of the recovery effort still depends on continued donor support and substantial foreign financial assistance is essential to ensuring a lasting peace and to making it possible for refugees to return.* Challenges for the donor community include providing sufficient assistance (including a high level of concessional funding), ensuring that support is directed to those projects that best meet the beneficiaries' needs (rather than donors' priorities), and working for an effective coordination through the Sectoral Task Forces. The success of the peace process will depend on the capacity of both donors and Bosnians to unite their efforts toward achieving these goals.



FOREWORD

The following sector reports present an update of the priority reconstruction program in each of the reconstruction sectors. Topics covered include: (i) a brief description of the background and prewar situation, consequences of the war, and regional differences; (ii) the objectives and financing needs of the three- to four-year priority reconstruction program as modified in light of 1996 experiences and assessments; (iii) an in-depth review of donor activities and accomplishments in 1996; (iv) the external financing requirements under the 1997 program, including major objectives and recommended implementation arrangements; and (v) policy issues to be addressed in the next years for the reconstruction effort to be successful and sustainable.

The data shown in these reports are as reported by each donor to the European Commission - World Bank-managed data base, as of December 1996. In particular, the firm commitments reported for 1996 are pledges which have been (i) approved by a national legislative body or multilateral board; and (ii) allocated to a specific sectoral program or project. Information gaps exist, however, and figures should be considered best estimates.

These sector reports were prepared the European Commission, the European Bank for Reconstruction and Development and the World Bank, with the valuable assistance of experts in the Sector Task Forces in Sarajevo. The authors would like to thank especially the International Management Group (IMG), the United Nations High Commissioner for Refugees (UNHCR), the UNESCO, the World Health Organization (WHO) and the many bilateral donors participating in these task forces for their helpful comments. Discussions with representatives of the Bosnian authorities also yielded many helpful insights. Nevertheless, the authors are solely responsible for any errors in the report.

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TRANSPORT

I. BACKGROUND

An adequate prewar transport system

1. Before the hostilities, the transport system in Bosnia and Herzegovina was organized to meet the needs of the former Yugoslavia. Management was centralized at the level of the Republic, and the extent and condition of the transport infrastructure were generally adequate -- with 8,600 kilometers (km) of main and regional roads; 1,030 km of railway lines (75 percent electrified); two civil airports (in Sarajevo and Mostar), and public transportation available throughout the country.

Box 1. The extent of the damage

- More than 2,000 km of the main road network in need of immediate repair;
- Seventy bridges to be reconstructed;
- All bridges connecting Bosnia and Herzegovina to Croatia destroyed;
- No infrastructure maintenance performed for four years;
- All railways lines rendered inoperable;
- Sarajevo Airport partly destroyed and closed to regular civilian traffic; and
- Public transport companies' vehicles and facilities damaged or run down.

Severe war damage

2. The hostilities caused heavy damage (box 1), with transport links leading to or near the lines of confrontation suffering the most destruction. Transport institutions lost their premises, records, staff, and funds, and many lost access to those parts of the system that remained operable. Moreover, the institutions, never large, were forcibly broken up, and communications among them were severed.

3. Since the end of hostilities, transport infrastructure conditions have improved significantly. Road and railway links have been gradually restored throughout the country. Traffic on some of the main roads is approaching prewar levels. The Sarajevo-Ploce railway line has been repaired. A limited number of civilian scheduled charter flights are available at Sarajevo Airport. And public transportation companies are resuming operations.

4. Difficulties remain, however. In the road sector more than half of the main network still needs rehabilitation, maintenance is urgently required to prevent collapse of existing infrastructure, and maintenance institutions need to be organized and equipped. In the railway sector repair of infrastructure -- including restoration of the essential components of the signaling and telecommunications systems -- is being completed on most of the network. Cooperative mechanisms still need to be established between the currently existing railway companies and organizational measures remain to be taken before

trains can run not only on small segments but on the entire network. Sarajevo airport will require extensive work to accommodate regular traffic at acceptable levels. And a considerable level of assistance to public transport systems will be needed in the years to come.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

5. Restoring an effective transport network is a precondition for economic recovery -- for restarting industry, allowing the return of refugees and displaced persons, and reviving communities. Reconstruction efforts aim to:

- Remove critical bottlenecks;
- Restart the operation of transport systems;
- Ensure the sustainable development of the transport sector; and
- Rebuild the local contracting and consulting industry.

6. In December 1995 a Transport Reconstruction Program was prepared by the Government with the support of the World Bank, the European Commission (EC), the European Bank for Reconstruction and Development (EBRD), and various donors. This program has been continually updated and remains valid. It will require US\$583 million for the three- to four-year reconstruction period¹ within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$192 million was firmly committed**, leaving a significant gap of US\$125 million in the original first-year program requirements (originally estimated at US\$317 million);² nevertheless, achievements were significant (paragraphs 8 to 16);
- **In 1997, US\$175 million is required** -- 17 percent of which would go to the State, 38 percent to the Federation, and 45 percent to Republika Srpska (paragraphs 17 to 25); and
- **In 1998 and 1999, about US\$216 million will be needed** -- and policy issues should be addressed to ensure the medium-term sustainability of the program, which will require the continued involvement of the donor community (paragraphs 26 to 29).

¹ The original total cost of US\$698 million for the program has been reduced to US\$583 million: IFOR activities -- wide-scale patching of roads, installation of many "temporary" bridges, and assistance with railway repairs -- have made it possible to address some needs; and rehabilitation of the secondary and tertiary road networks has been extended beyond the three- to four-year reconstruction period since these networks are not of major economic significance.

² However, the first year requirements had been revised to US\$163 million in view of persistent difficulties in appraising a country-wide program, and a still limited local absorptive capacity.

**Table 1. Transport Reconstruction Program External Financing Needs
(US\$ million)**

	3-4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Roads and bridges	341	118	100	123
Roads	[173]	[54] ^a	[48]	[71]
Road safety	[10]	[0]	[1]	[9]
Bridges	[75]	[26]	[37]	[12]
Tunnels and slips	[13]	[9]	[3]	[1]
Road equipment	[50]	[20]	[9]	[21]
Asphalt plants and quarries	[20]	[9]	[2]	[9]
Sava River ports	5	0	0	5
Railways	90	15	38	37
Civil aviation	43	24	12	7
Urban transport ^b	46	10	13	23
Mine clearing	8	3	2	3
Institution building	7	3	3	1
Technical assistance	34	16	7	11
Recurrent costs	9	3	0	6
Total	583	192^c	175	216

^a This amount includes commitments reported by donors as part of their "municipal infrastructure projects".

^b The allocations for 1998 and 1999 are tentative and relate mainly to buses, tramways and related spare parts, and workshop equipment to cover remaining emergency needs. The estimate is subject to successful implementation of the "1,000 buses" operation being set up by Italian municipal transport agencies.

^c In addition, extensive works were undertaken by IFOR.

7. The priority reconstruction program includes several components:

- Rehabilitating and restarting the maintenance of the main road network;
- Restoring the main railway lines and restart traffic;
- Completing the first phase of rehabilitation of Sarajevo Airport so that it duly fulfills the International Civil Aviation Organization (ICAO) requirements;
- Upgrading the airports in Mostar and Banja Luka;
- Rehabilitating two ports on the Sava River;
- Rehabilitating public transportation systems in the main cities; and
- Undertaking related works (such as mine clearing) and providing consulting services and support to institutions.

III. 1996 ACHIEVEMENTS

8. In 1996 the program's objectives were to remove bottlenecks in high-priority links, to provide equipment and assistance for maintaining critical parts of the network, and to prepare a framework for the development of Bosnia and Herzegovina's transport system. These objectives required:

- Rehabilitating about 50 km of roads and reconstructing fourteen bridges;
- Supplying construction and maintenance equipment to local contractors;
- Reopening the Federation railway network and gradually upgrading it;
- Resuming civilian and commercial flights from Sarajevo Airport;
- Delivering 100 buses to urban transport companies in the main cities; and
- Providing the necessary technical assistance and equipment for developing institutional capacity (including about 300 person months of consulting services).

Box 2. The Implementation Force/Stabilization Force (IFOR/SFOR) playing a critical role

While reconstruction *per se* is not part of its mandate, IFOR has carried out substantial repairs to restore infrastructure to the level required for its military activities. In December 1995 IFOR engineers installed the first pontoon bridge on the Sava River. Since then IFOR/SFOR has undertaken extensive patching of the main roads, installed or rehabilitated about forty bridges and pontoons, assisted with repairs that will allow large sections of railways to be reopened, and carried out works to reopen the Mostar airport to military traffic.

9. Progress in 1996 was significant, with an impressive result: the reopening of Sarajevo to some civilian air and rail transport (paragraphs 11 and 12). IFOR/SFOR's efforts to restore strategic infrastructure has largely contributed, although indirectly, to this success (box 2). Substantial road works were also initiated, with local consultants designing and supervising works and local contractors back in business. Railway infrastructure was restored throughout the country, and operating conditions are under discussion by the Entities. Urban transport restarted in the main cities, and Sarajevo tramways are running regularly after almost four years of virtually no service. The resumption of activities strengthened institutions for management, design, and supervision of works as well as for infrastructure maintenance. These results reflect the efforts of more than twenty donors in twenty subsectors (table 2).

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Roads and bridges ^a	123 ^b	Belgium, EBRD, EC, Italy, Japan, Kuwait, Malaysia, Netherlands, Spain, UK, US, World Bank
Railways	16 ^c	EC, France, Germany, Italy, UK, World Bank
Civil aviation	24	Austria, EBRD, EC, France, Italy
Urban transport	10	Czech Republic, EC, Republic of Korea, Norway, Spain
Institution building	3	EC
Technical assistance	16	EC, Germany, Netherlands, Spain, Turkey, US, World Bank, others
Total	192	

^a This amount includes commitments reported by donors as part of their "municipal infrastructure projects".

^b Includes US\$118 million for roads and bridges, US\$3 million for supply of bitumen, and US\$2 million for mine clearing.

^c Includes US\$15 million for railways and US\$1 million for mine clearing.

Roads and bridges: Bottlenecks removed

10. Some 90 km of roads were rehabilitated with World Bank funding, making it possible to use approximately 300 km of the main network. Thirteen bridges are being reconstructed (five of those were completed in 1996), including most bridges on the main road between Sarajevo and the port of Ploce and two bridges on the Sava River connecting Bosnia and Herzegovina to Croatia (contracts for the Orasje bridge will be awarded in early 1997, and works on the Brcko railway bridge started with USAID financing). The EC, the Japanese Government, and the World Bank supplied construction, maintenance, and quarry equipment, as well as asphalt plants. The EBRD approved a US\$19.9 million loan for the repair of some 300 km of roads and several bridges in both Entities.³

Railways: Main part of the network reopened

11. The railway line linking Sarajevo to the port of Ploce on the Adriatic Coast reopened on July 30, 1996. Further upgrading is expected by mid-1997. Works were carried out with parallel funding from members of the European Union. Although technical conditions would allow the operation of two pairs of trains a day at an average speed of 60 km an hour, persisting tension within the Federation has prevented the regular operation of commercial trains. In addition, IFOR/SFOR rehabilitated the East-West line (Bos. Novi/Novi Grad - Tuzla). The resumption of civilian traffic is, however, impeded by political difficulties. Thus restoring an effective transport network will require not only donor financing but also a real commitment by the authorities to overcoming political difficulties. As it stands the Sarajevo-Ploce line has no regular operations, although restored.

Civil aviation: Sarajevo Airport reopened

12. On August 15, 1996, Sarajevo Airport was reopened to limited civilian traffic, thanks to the efforts of IFOR, the French military detachment at the airport, the newly formed Sarajevo Airport

³ The loan was signed with the State and Entity Governments in December 1996.

Authority, and the United States (US) Government. The airport has not yet been reopened to regular air traffic, which will require meeting the standards set by ICAO.

13. Concurrently, a financial package of US\$12.8 million (in addition to the US\$19.9 million mentioned above) was assembled by EBRD to implement a year-long program of facility rehabilitation, including upgrading the air traffic control system and the terminal.⁴ To date, navigation aids, financed by France, have already been delivered, and procurement of air traffic control equipment with funding from Austria, has been initiated (civil and structural works will be carried out on the main runway and on the terminal building, and training will be provided to the Civil Aviation Authority).

Urban transport: Public transportation resumed

14. Many governments and local authorities in Europe helped to restore minimal public transportation in the main cities of Bosnia and Herzegovina, focusing their efforts on Sarajevo. About fifty buses and twenty minibuses, including spare parts and workshop equipment, were delivered through both the EC Essential Aid Program and bilateral donations. Spain provided twenty used buses and Norway ten. In addition, about 100 new and used buses were donated by European cities to the main urban transport companies in Bosnia and Herzegovina. Italian cities are preparing a special operation called "1,000 buses".⁵ And two new tramways with spare parts donated by the Czech Government are on their way to Sarajevo.

Technical assistance: Supporting local consulting

15. Technical assistance was required mainly for project design, project management, and supervision of works. About 350 person months of technical assistance were provided, mainly to the State and Federation Ministries of Transport.⁶ Because the foreign assistance is designed to complement local capacity, not substitute for it, local consultants have been fully involved and consulting organizations strengthened.

⁴ Aside from a US\$12.83 million EBRD loan, funds have been provided by nearly all the countries from the European Union and by the EC. Technical assistance is also being provided by the US.

⁵ This project would supply 1,000 reconditioned buses (and related spare parts) from Italian municipal transportation agencies. It will set up maintenance shops in Bosnia and Herzegovina and is expected to generate 500 to 600 local jobs.

⁶ Technical assistance was provided by:

- The Governments of Italy, the Netherlands and Turkey, the EC and USTDA for Sarajevo Airport, aviation advisory services, and training;
- Several donors, through the International Management Group (IMG), for establishment of the Program Management Adviser's office, the establishment and operation of a transport database, and project management assistance;
- The US for the preliminary studies and design of the Gorazde road; and
- The Government of the Netherlands and the World Bank for project preparation and supervision and Project Implementation Units (PIUs) operating costs.

Institutional developments: A major challenge

16. During the war separate transport organizations were established in Sarajevo, Mostar, and Republika Srpska. For example, there are now three railway companies overseeing a prewar network of about 1,080 km. All these organizations lack financial resources and qualified staff. Efforts in 1996 targeted four main issues:

- The lack of sufficient project management capacity -- implementation units were set up at the State and Federation levels to develop local capacities; a Transport Task Force was established to coordinate donor efforts in the field; and a program management adviser, funded by the EC through the International Management Group (IMG), was appointed;⁷
- The absence of a unified road authority in the Federation -- the prewar road organization was dissolved without an appropriate successor. A Federation Project Implementation Directorate was set up as a first step toward establishing a qualified authority;⁸
- The lack of cooperation among the three railway companies -- a nascent cooperation between Bosniacs and Croats emerged with the reopening of the Sarajevo-Ploce line; and
- The need to establish a proper civil aviation authority -- the Entities still have not reached agreement on forming a civil aviation authority. Agreements should also be reached to re-establish overflight air routes for air traffic (until such an agreement is made, overflight revenues will continue to flow into Serbia and Montenegro). IFOR, the Office of the High Representative, and others have worked diligently to develop ICAO-required authorities. Staffing and training needs were also identified through an EC-financed Civil Aviation Master Plan.

In parallel with these efforts, the Commission on Public Corporations was established to lead inter-Entity discussions on the operation of public infrastructure and utilities (box 3). Progress was made in this area, and the Commission is now focusing on developing an adequate structure for operating the railway. Assistance is being provided by advisers from the International Union of Railways. Finally, a transport law is being prepared.

⁷ The program management adviser also chairs the railway and road/river working groups set up by the Commission on Public Corporation and the Transport Task Force.

⁸ The situation in Republika Srpska is slightly better: a Road Directorate and a Road Fund (for maintenance) are in place, though barely operating. Still, financial and advisory assistance is critically needed.

Box 3. The Commission on Public Corporations: Planning for the long haul

The Commission on Public Corporations, set up by the Federation and the Republika Srpska in accordance with Annex 9 of the Dayton-Paris Peace Agreement, is examining, *inter alia*, institutional issues in the transport sector. The Commission is composed of five members: two representatives of the Federation, one representative of Republika Srpska, and two international members (including the chairman) appointed by the president of EBRD.

The Commission has established various working groups including groups for railway and road/river transport. These working groups were asked to identify the difficulties and shortcomings of the utility companies of the Entities, and the regulatory and other problems that need to be solved to restore adequate transportation throughout the country. The Commission has emphasized links between the Entities, rationality, and economic viability. Although a practical approach is being followed with priority given to short-term requirements, the Commission's objective is to propose solutions and structures for the long term.

IV. 1997 CHALLENGES AND FINANCING NEEDS

17. To meet 1997 challenges, US\$175 million of external financing is required. While the focus in 1996 was on emergency operations, in 1997 the donor community should focus on restoring a sustainable transport system. Two sets of issues should be addressed simultaneously: short-term physical reconstruction and maintenance operations and medium-term institutional development and sustainability. Efforts should focus on:

- Completing high-priority reconstruction projects;
- Carrying out maintenance on the most critical parts of the networks;
- Developing an efficient transport system -- coordinated within the country and internationally; and
- Taking proper organizational measures so that rail transport can be carried out efficiently, safely, and (to the extent possible) in a financially viable way.

18. The success of the reconstruction program will depend on the ability of the authorities in Bosnia and Herzegovina to ensure that rehabilitated infrastructure can be operated and maintained. In that respect, it is essential that the following steps be taken as soon as possible:

- Railway operations should be resumed to make trains running across the ethnic boundaries, over a certain continuous period of time, on a reasonable technical and commercial basis; and
- Road maintenance activities and organizational capacities should be developed; this would require the establishment of acceptable road administration structures and the guarantee that the road maintenance budget for 1997 would be the equivalent of US\$15 million in each Entity.

19. As a first step toward achieving financial sustainability for the reconstruction program, Bosnia and Herzegovina authorities should contribute to the costs on an increasing basis. As a first step, they are expected to finance 10 percent of the civil works to be implemented under a World Bank credit foreseen for approval in 1997.

Roads and bridges (US\$100 million): Completing restoration of the primary network

20. Reconstructing all first priority bridges and tunnels and completing rehabilitation of priority road sections will require US\$100 million (with priorities selected on the basis of current conditions and estimated traffic).⁹ The program includes:

- Rehabilitating about 300 km of roads, including repairs to landslides and tunnels (US\$51million);
- Repairing seventeen bridges, including four bridges on the Sava/Una Rivers (US\$37 million); and
- Providing road, asphalt, and quarry equipment for local contractors as well as road safety equipment (US\$12 million).

Donors should pay particular attention to repair and reconstruction needs in Republika Srpska, where very few works were implemented in 1996. Priority should also be given to repairing the few damaged road and bridge links that are hindering inter-Entity movements, as well as connections with neighboring countries.

Railways (US\$38 million): Upgrading to internationally acceptable standards

21. With the main railway lines now rehabilitated, efforts shall be made to ensure that restored lines can be used. The State and Entity Governments should enter into the necessary agreements as soon as possible to restart operation (box 4). Once these arrangements are made, assistance should be provided to upgrade the rehabilitated infrastructure to internationally acceptable standards (current speed limits, line capacities, axle loads and traffic frequency are low, and operation safety is a serious concern) and to restore maintenance activities.

Priorities for donor support include:

- Upgrading track and restoring electrification of the economically sensitive parts of the network;
- Supplying signaling and telecommunications equipment; and
- Providing maintenance equipment and tools.

⁹ Beyond the rehabilitation phase for the primary network, the next objective (part of the 1998-99 program) would be to reduce the backlog of maintenance on the entire road network. Achieving this objective would require intensive participation by local transport institutions.

Box 4. Railways issue¹⁰

Three railway companies now operate the 1,000 km of lines, with almost no contact among them. Although cooperation between the two Federation companies has been partly established through a Joint Board for Railways, it is still unsatisfactory.

To establish inter-Entity links and improve operating conditions, the following actions need to be taken:

- Open the network to all operating companies, with each company authorized to run trains on the entire network without changing locomotives when entering a different area. A mutually acceptable fee, primarily to recover costs set on a contractual basis, would be paid for the use of the infrastructure network; and
- Ensure satisfactory inter-Entity mechanisms or structures for addressing inter-Entity issues, particularly to decide on regulatory matters such as technical and operating standards (including safety) and to reach agreements on operating practices, track allocations and schedules, taking into account the importance of ensuring economic viability.

Civil aviation (US\$12 million): Restoring regular flights to Bosnia and Herzegovina

22. Restoring air traffic between Bosnia and Herzegovina and other countries is critical to the country's recovery. Efforts should be aimed at expanding regular commercial flights and restoring a civil aviation authority that can handle air traffic over Bosnia and Herzegovina -- a major source of revenue before the war. Priorities include:

- Upgrading civil aviation standards and ensuring countrywide coverage of airspace control;
- Completing infrastructure rehabilitation, mainly at Sarajevo Airport;
- Supplying additional navigational and communications equipment to the Sarajevo, Mostar, and Banja Luka airports; and
- Providing necessary assistance and training to civil aviation staff.

In addition, the authorities in Bosnia and Herzegovina have plans for a US\$20-30 million project to support a new air traffic control center in Bosnia and Herzegovina. However, in view of the international trend to consolidate and reduce the number of such centers, this proposal is not considered a priority.

Institution building (US\$3 million): Achieving nascent sustainability

23. The program would support the establishment and strengthening of transport management, planning, and maintenance organizations -- taking into account the transport law currently being drafted. Priority activities include:

- Providing equipment and training to maintenance organizations;
- Setting up the Federation Road Directorate;

¹⁰ The main institution-building activities are handled by the Commission on Public Corporations.

- Assisting urban transport companies in improving operations, collecting fares, and recovering costs and possibly in privatizing suburban services; and
- Undertaking a study to assess the medium-term investment needs for rehabilitating the ports on the Sava River.

Technical assistance (US\$7 million): Moving toward locally managed projects

24. This component centers on providing assistance to the Bosnia and Herzegovina authorities to prepare and implement the 1997 program. The objective should be to gradually phase out foreign assistance and increasingly involve local consulting groups in project management. In 1997 assistance is required for:

- Program management advisory services -- in 1996 the EC funded, through IMG, an international project management adviser to the State Government; this should be continued;
- Financing for the operation of the authorities' implementation unit; and
- Engineering services for project feasibility studies and design, implementation, and supervision of projects.

Implementation arrangements

25. In view of experience in 1996 (box 5), several vehicles have been designed for channeling donor assistance in 1997. The State and Entity Governments have prepared a comprehensive project for this purpose consisting of independent modules corresponding to subsectors (e.g. roads, railways) or to geographic areas. Donors are strongly encouraged to coordinate their activities within this framework. They can obtain information and assistance from three sources: the State and Entity Ministries for Transport, the program management adviser, and the Transport Task Force.¹¹

Box 5. Lessons learned from the 1996 program

- Physical repairs should be accompanied by inter-Entity agreements to operate infrastructure. In 1996 pre-election uncertainties impeded such efforts. In 1997 donors should insist on such agreements before financing substantial repairs;
- Foreign technical support has been crucial and should be maintained -- although at a lower level -- in 1997. The technical responsibilities of local authorities and consultants should be gradually increased, and
- Rehabilitation requires maintenance as well as repairs. IFOR has so far assisted in the most critical maintenance works, but this effort will end soon. Local authorities should be required to take over these responsibilities -- and supported to that effect.

¹¹ Particular attention should be paid to properly implementing mine-clearing activities (see section on landmines). Mine-clearing agencies should be involved in the definition of terms of reference and the supervision of works.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

26. To develop an efficient and sustainable transport system, coordination between Government authorities in planning, operations, and funding is crucial. In the road sector measures need to be worked out to ensure the financing of maintenance and investments. Fuel and other specific taxes should be introduced; where they are already in place but do not reflect the full cost of the use of infrastructure, they should be increased. Adequate revenues should be allocated to the authorities responsible for the roads sector in each Entity.¹² Tax rates and tax collection should also be coordinated between the Entities to avoid tax evasion. In the railways and public transportation sector tariffs should be progressively raised to ensure cost recovery -- and well-targeted mechanisms should be designed to protect low-income users.

Toward cost-effectiveness

27. The transport sector is still managed as it was in former Yugoslavia, as a publicly owned and operated system with companies monopolizing markets in their geographical areas of operation. To ensure cost-effectiveness and efficiency in the sector, restore satisfactory service delivery and improve financial viability, significant restructuring is needed -- management should be improved and staffing adjusted. Inter-Entity economies of scale should be sought. An appropriate regulatory framework should be designed as early as possible.

Sector governance

28. Instead of direct control over publicly owned enterprises, Governments should exercise indirect guidance through regulation and pricing policies. Privatization should be considered for most transport services. Reintegration of the networks is a likely by-product of the necessary reforms of the current regulatory framework and the general management practices in the transport sector. Thus the two processes should be addressed together. As long as utilities are operated by monopolistic government-owned companies, reintegration is likely to remain a highly politicized issue (separate companies have been established to demonstrate sovereignty as well as to limit interdependence). Reforming the utility sectors and cutting back on the role of public authorities are probably the best ways to ensure service trade and network reintegration on an economic basis.

29. In the railways sector investments and maintenance of the network should be separated from operations. Each operating company should be authorized to operate on the whole network on a commercial basis (with payment of a uniform fee to the network companies) as per contractual arrangements. Third-party access should be granted automatically.

¹² The EBRD will finance a road user charges study in 1997.

TELECOMMUNICATIONS

I. BACKGROUND

1. *A modern prewar telecommunications network, though with limited coverage.* By the late 1980s Bosnia and Herzegovina's telecommunications network was relatively modern, with a high degree of digitalization. But coverage was limited, with only 12 telephones for every 100 people. Several post and telecommunications (PTT) enterprises provided basic telecommunications services to approximately 750,000 subscribers under the coordination of the Community of PTT Enterprises of Bosnia and Herzegovina General Directorate. There were 6,000 international lines, including 700 direct links with countries outside the former Yugoslavia. Most international calls were routed through international telephone exchanges in Belgrade and Zagreb.

2. *Telecommunications disrupted by heavy war damage.* During the hostilities the long-distance transmission network was heavily damaged, disrupting important interurban and international communications links -- with most damage occurring near the lines of confrontation (box 1). As a result many areas now have very limited or no access to external communications links. About 215,000 subscriber lines, or 30 percent of the local network lines, are out of order. The PTT company was split into three separate companies, based in Sarajevo (PTT BH), Mostar (PTT HB), and Republika Srpska (PTT RS). The cost of restoring the sector, including rehabilitating the long-distance transmission network and procuring auxiliary equipment (public phones, vehicles, instruments), has been estimated by Swedtel, a consultant for the European Bank for Reconstruction and Development (EBRD), at US\$222 million (annex 1).

Box 1. The extent of the damage

Data on the extent of damage were collected at 483 sites throughout Bosnia and Herzegovina in August 1996 (table below). In addition, the long-distance network has suffered severe damage, with more than 65 percent reportedly destroyed.

Extent of Damage to the Telecommunications Network (in percent)

Category	Destroyed	Damaged	Intact
Buildings	11	39	50
Switches	22	23	55
Batteries	77	12	11
Transmission routes ^a	25	15	60
Primary network	7	47	46
Secondary network	11	52	37

^a. Excludes the long-distance network.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

3. Based on a detailed assessment of the war damage, the three- to four-year reconstruction and development program designed in December 1995 has been updated and total external financing needs have been revised from US\$567 million to US\$173 million. While US\$222 million would be required to fully restore the system and an additional US\$132 million would be needed to expand and modernize through 2000, the priority reconstruction program endorsed by the World Bank, the European Community (EC), the EBRD, and the Government of Bosnia and Herzegovina totals US\$173 million within the overall US\$5.1 billion priority reconstruction program (table 1). It is intended to cover only part of the total costs of restoration and rehabilitation, and presumes that the remaining funding can be obtained from the private sector or as contributions from the authorities in Bosnia and Herzegovina.

- **In 1996, US\$37 million was firmly committed**, about 23 percent of the original US\$160 million estimated first-year needs; reconstruction activities suffered both from this shortfall in financing and from pre-election political uncertainty (paragraphs 6 to 13);
- **In 1997, US\$60 million is required**, 29 percent of which would benefit the State, 48 percent the Federation, and 23 percent Republika Srpska (paragraphs 14 to 16); and
- **In 1998 and 1999, about US\$76 million will be needed** and, to ensure the recovery of the sector, financial and institutional policy issues will need to be addressed, with strong support from the donor community (paragraph 17).

**Table 1. Telecommunications Program External Financing Needs
(US\$ million)**

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Emergency repairs	45	7	20	18
Reconstruction	120	29	39	52
Technical assistance	8	1	1	6
Total	173	37	60	76

4. The reconstruction program will restore and modernize critical parts of existing networks, establish a Global System for Mobile Communication (GSM) network, support institution building, and provide technical assistance on legal and regulatory matters to the Entity Ministries for Transport and Communications. Works include:

- Repairing the long-distance network (the backbone network);
- Rehabilitating the trunk network (short-distance transmission and intercommunication network);
- Providing power supply equipment, particularly standby batteries;
- Reconstructing technical buildings and towers;
- Restoring priority local exchanges with a view to the number of subscribers and the extent of damage;

- Repairing local lines in affected areas;
- Installing a large network of public pay phones; and
- Procuring tools, instruments, and vehicles.

In some cases, new technological systems should be used rather than repairing or replacing existing systems (for example, a wireless local loop system rather than the traditional copper cable network). A detailed, prioritized list of investments has been established, as well as a Medium-Term Reconstruction and Development Plan to guide reconstruction and development activities through 2000.

5. Establishing a GSM is a high priority, and different options for an initial deployment have been studied. Technical and economic scenarios have been prepared for both a national GSM operator and three regional operators (investment in a GSM would be economically sound even with a regional approach). Since the private sector is the natural source of financing for such services, donors should focus on providing foreign investors with the necessary guarantees or lending conditions to stimulate their interest. However, the development of a GSM cannot substitute for (and requires for satisfactory functioning) restoration of conventional services.

III. 1996 ACHIEVEMENTS

6. At the end of 1995 the EBRD offered to act as the lead agency in mobilizing and coordinating the resources needed to reconstruct the telecommunications network in Bosnia and Herzegovina. In addition, under the auspices of the Office of the High Representative (OHR) and with assistance from International Management Group (IMG), the EBRD established two working groups in February 1996, that included representatives from all the relevant telecommunications authorities in Bosnia and Herzegovina:

- The technical working group, with the assistance of Swedtel, prepared a comprehensive report assessing the damage, describing the current situation, and defining the immediate and medium-term needs for restoring and reconstructing of the telecommunications sector. The report was finalized in September 1996 and made available to interested parties. Although the report is not structured as an investment plan, it contains the information needed to select and define the most urgent investment projects in fixed and mobile telephony. On the basis of this report, the cost of restoring the telecommunications system to its prewar condition was estimated at US\$222 million; and
- The policy working group provided technical assistance to the State and Entity Ministries for Transport and Communications in developing a modern legislative and regulatory system for the entire country, consistent with practices and trends in Europe and eventually integrated as per the provisions of the Dayton-Paris Peace Agreement.

To ensure proper coordination of donor efforts, the EBRD also chairs a Task Force where the main organizations involved in the telecommunications reconstruction effort, including the EC, the OHR, the IMG, USAID, and the Stabilization Force (SFOR) are represented.

7. Donor commitments remained insufficient to undertake reconstruction activities on a large scale. Although needs for the first year initially had been estimated at US\$160 million, only US\$37 million was firmly committed -- by the EC, the Soros Foundation, the Governments of Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom, and the EBRD (table 2). Other

potential donors (including the Governments of Finland, Korea, Kuwait, Spain, and Turkey) expressed interest in providing cofinancing for telecommunications but have not yet made a firm commitment. Private investors were only marginally involved, mainly because of the unclear legislative, regulatory, and political situation. The three PTT companies nevertheless undertook urgent reconstruction works, relying on their own limited resources. However, by the end of January 1997 there were still no direct telecommunications links between the Entities.

Table 2. Firm Donor Commitments in 1996
(US\$ million)

	Amount	Main Donors
Emergency repairs	7	Sweden, UK, Germany
Reconstruction	29	EBRD, EC, Italy, Norway
Technical assistance	1	Netherlands, Sweden, Switzerland, Soros Foundation
Total	37	

Damage assessment completed

8. The technical working group completed an inventory of the war damage, now available to all interested donors and investors, providing detailed information on each category of equipment at each site -- down to the level of exchanges, transmission segments, technical constructions, local networks, and power supply, and indicating the replacement costs. This information was used to define the main priorities for reconstruction in 1996 and 1997.

Medium-term reconstruction and development plan readied

9. This plan maps out the evolution of the network through 2000, based on the existing situation, making it possible to link reconstruction activities with development works. Among other things, the plan describes the current network configuration and the target network, provides a market and traffic forecast, makes several recommendations on technology, and presents a detailed proposal for institutional strengthening. During the initial phase efforts could focus on restoring local networks. For the eventual rehabilitation of a countrywide system, the study recommends developing a ring-shaped backbone network (rather than using the traditional star shape), which would create interdependence between the PTT companies by integrating all parts of the country in one national network while maintaining some autonomy in operation. In addition to the two existing international exchanges centers in Sarajevo and Posusje (near Mostar), the plan recommends establishing a third one in Bijeljina or Banja Luka (in Republika Srpska) and using three transit centers, working in pairs (Sarajevo-Tuzla, Posusje-Mostar, and Banja Luka-Bijeljina) to handle long-distance traffic. However, all these recommendations are subject to further consideration and analysis in conjunction with the telecommunications authorities of Bosnia and Herzegovina.

Mobile telephony systems deployed in some areas

10. Mobile telephony was considered an investment priority from the beginning. But because of the unclear legal framework and the differing views among the representatives of the three PTTs, no national consensus on deploying such a system could be reached. Instead, all three PTTs are independently developing regional GSM networks, following different ownership routes. PTT Sarajevo has procured

and is deploying a GSM network in Sarajevo, Tuzla, and East Mostar. The PTT in Mostar, in partnership with the Croatia post and telecommunications enterprise (HPT), has deployed a GSM system in most of the areas it serves. The PTT in Republika Srpska is in the process of selecting a strategic partner for the provision of GSM services. *Inter-Entity cooperation is urgently needed to reach an agreement on frequency and interconnection between these GSM networks.*

First phase of sector policy development completed

11. This part of the program was aimed at assisting the Entity and State Ministries for Transport and Communications in formulating policy to support effective, efficient restructuring of the telecommunications sector. It focused on strategy sector policy, telecommunications law, mobile licensing and mobile network configuration issues. The sector policy development was coordinated with the OHR (through the Joint Civilian Commission), IMG, and the Implementation Force (IFOR). Working documents -- a draft telecommunications law, sector policy statement, and GSM license -- for the Entities were developed in cooperation with the policy working group, taking into account other European experiences and with a view toward eventual integration of the networks at a State level. Progress was slow, in large part because of the reluctance of Republika Srpska to recognize any State laws or institutions before the elections. A second phase of technical assistance is now being implemented; this phase will focus on building the necessary legal framework for telecommunications at the State level.

Urgent repairs implemented

12. The reconstruction work that began last year was funded almost entirely by bilateral donors. Reconstruction activities include:

- Thirty-five thousand lines of AXE switching equipment in Sarajevo (Sweden);
- An international EWSD exchange in Sarajevo (Germany);
- Power supply equipment (United Kingdom); and
- A microwave link between Sarajevo and Hungary (Sweden).

The PTTs also initiated reconstruction projects with their own financing. But the main objective, connecting the two Entities through direct lines, was not met -- because of political, not technical, difficulties.

Preparation for comprehensive rehabilitation initiated

13. Project preparation for the full restoration of the telecommunications network commenced last year, and all the detailed technical and financial information needed to develop an investment project is now available. But there have been two main obstacles to the selection of concrete investment objectives and initiation of the project: the lack of donor support,¹ and the difficulties in getting the necessary agreement on the network development plan, especially on the configuration of the backbone network.

¹ The lack of cofinancing prevented the EBRD from using its own funds.

A compromise solution that will permit commencement of the works on the country's main telecommunications highways, is expected in the next months.

Box 2. Lessons learned

- **The State and Entity Governments must reach agreement on a legal and regulatory framework before any substantial activity can be undertaken.** This framework should be developed at the State level to comply with the provisions of the Dayton-Paris Peace Agreement. Preliminary efforts have been made by the EBRD, but much remains to be done. The new post-election authorities should, as a matter of urgency, both adopt a telecommunications law for the whole country and create a national regulatory and licensing body;² and
- **Donors should ensure coordination of their activities** in order to improve efficiency and balance across regions and to avoid fragmentation of efforts. To that effect, donors are encouraged to use the EBRD-sponsored Telecommunications Emergency Reconstruction Project as a vehicle for their support.

IV. 1997 CHALLENGES AND FINANCING NEEDS

Reaching agreement on the basic framework

14. In 1996 the main successes occurred in studies and preparatory work. In 1997 donors should focus on starting physical implementation of the EBRD's Telecommunications Emergency Reconstruction Project. But that will require the State and Entity Governments to reach an agreement on the structure of the network and on the policy framework in which it will operate. A technical assistance program designed to promote such an agreement is being offered to telecommunications authorities in Bosnia and Herzegovina; this program would help initiate the necessary legal and regulatory reforms for operation of the national and Entity telecommunications networks. Both the Governments in Bosnia and Herzegovina and the donor community should consider the signing of an appropriate agreement a precondition for any significant donor support.³ Such an agreement must include the interconnection of the PTT networks, in accordance with the conclusions of the December 1996 Peace Implementation Conference.

Defining and implementing the project

15. The preparation and appraisal of the Telecommunications Emergency Reconstruction Project is under way. A mission including representatives of the EBRD and the Governments of Korea (MOF and

² The telecommunications law should clearly define the roles and responsibilities of the State and of the Entities with regard to regulations and licensing. It should also organize the State functions for international traffic regulation. This is critical for addressing important issues such as the establishment of a national numbering system, international traffic routing, interconnection, frequency spectrum management, and tariff settlements and to prevent development of non-harmonized, high-cost systems and delays in restoring satisfactory telecommunications services.

³ After an agreement on the structure of the network and on the policy framework has been reached, the Telecommunications Emergency Reconstruction Project will be revised to take into account the proposed national network configuration.

EDCF) and Sweden (SIDA), as well as technical and policy consultants, visited Bosnia and Herzegovina in February 1997. In addition, two teams of consultants are continuing project preparation in the field. If potential agreements are reached and if cofinancing can be promptly secured, the first disbursements for the project could be expected during the third quarter of 1997. Meanwhile, the EC is providing a US\$10 million grant to construct a backbone network in Republika Srpska, to restore inter-Entity connections, and to rehabilitate local networks in priority areas in the Federation.

Developing necessary institutions

16. A Project Implementation Unit (PIU) needs to be established to coordinate all project implementation activities (planning, procurement, technical assistance, training, and the like). Assisted by foreign experts, the PIU would be responsible for activities related to the EBRD's project and for coordination of all the donors' telecommunications projects (box 3). Local PIUs could be established in each PTT, an action that would require US\$5.4 million in external financing (box 4).

Box 3. The role of the PIU

A PIU will be established to coordinate, monitor, evaluate and manage all aspects of the EBRD-sponsored Telecommunications Emergency Reconstruction Project, including physical investment and institutional development. The PIU could be made responsible for:

- Detailed project planning;
- Implementation of the main turnkey project components;
- Bidding process (preparation of technical specifications and tender documents, issuance of bidding documents, evaluation of proposals and contract negotiations for the turnkey project components);
- Contract supervision (including definition of acceptance tests);
- Coordination of procurement activities and synchronization of PTTs' activities with suppliers and contractors; and
- Project benefit monitoring and evaluation and reporting (technical and financial).

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

17. The policy working group, with the assistance of EBRD consultants, has initiated work on most of the policy, legal, and regulatory issues remaining to be resolved in the telecommunications sector and discussed them at the Entity level. There is a clear trend toward integrating legislation in line with the provisions of the Dayton-Paris Peace Agreement and the European Union recommendations. Once these recommendations are properly implemented, and after an initial reconstruction and buildup period (in, say, two years), the sector could be expected to be financially sustainable, assuming adequate management and appropriate tariff levels. To improve financial organization and management, human resource management and development, and operational and technical function, a comprehensive technical assistance package is envisaged as a part of the implementation program (box 4).

Box 4. Institutional Development Program

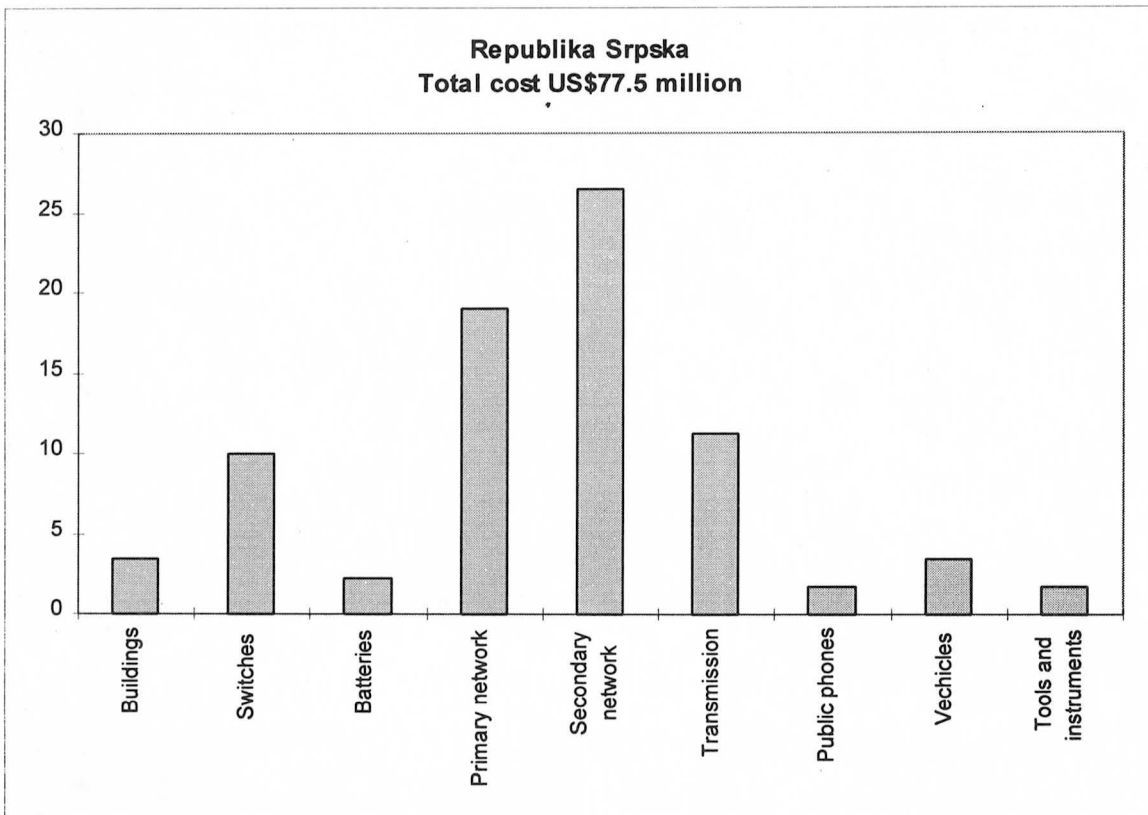
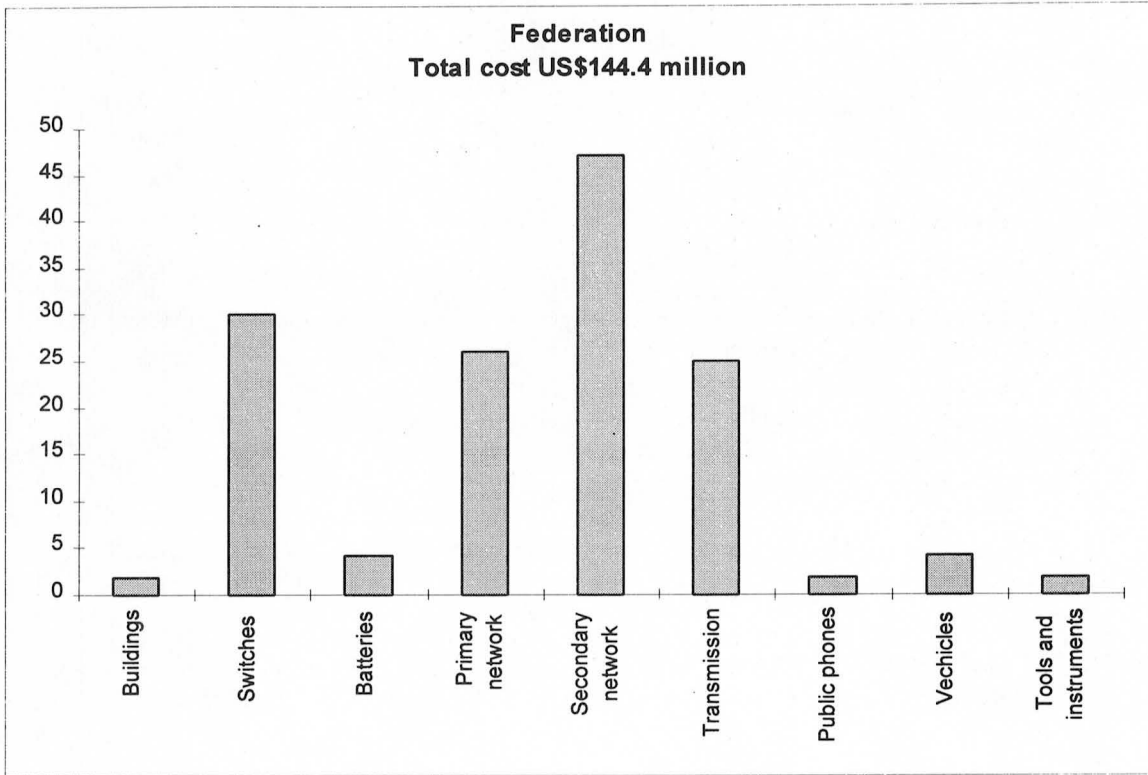
The *Institutional Development Program* (IDP) aims to assist Bosnia and Herzegovina in preparing and implementing the major reforms, including:

- Reconstruction of the war-torn telecommunications systems and introduction of modern technology;
- Transition from a government-owned, centrally planned system to a privately operated network responsive to market requirements;
- Introduction of competition and limitation of monopoly for telephone services; and
- Eventual transformation of the PTTs into joint stock companies followed by privatization.

The IDP (US\$5.4 million) includes extensive training programs, transfer of technology, know-how and hands-on skills and possibly study visits abroad. It has five main components:

- Organizational development and corporate strategy (US\$0.6 million for 32 person months, half for the Federation and half for Republika Srpska);
- Human resource management and development (US\$0.3 million for 16 person months, half for the Federation and half for Republika Srpska);
- Financial management, accounting, and auditing (US\$1.8 million for 94 person months, two-thirds for the Federation and one-third for Republika Srpska);
- Technical expertise (US\$1.1 million for 56 person months, half for the Federation and half for Republika Srpska), including network planning (30 person months), project planning (10 person months) and operations and maintenance (16 person months); and
- Project implementation (US\$1.3 million for 70 person months, half for the Federation and half for Republika Srpska).

Annex 1. Restoration costs by category (US\$ million)



ELECTRIC POWER AND COAL MINING

I. BACKGROUND

1. Before the war Bosnia and Herzegovina's electric power system consisted of:
 - Thirteen hydropower plants with a total capacity of 2,034 megawatts (MW) and an average annual output of 6,922 gigawatt hours (GWh);
 - Twelve brown coal- and lignite-fired thermal power plants with an installed capacity of 1,957 MW and an annual output of 10,675 GWh; and
 - Transmission and distribution facilities interconnected and operated at 400, 220, 110, 35, 20, 10, and 0.4 kilovolts (kV) levels, with about 5,400 kilometers (km) of transmission lines and 92,000 km of distribution lines.
2. The coal mining sector consisted of more than thirty coal mines that produced brown coal or lignite for heating and power generation. Annual production was about 18 million tons, of which 10 million tons was brown coal and 8 million tons was lignite. Within the Federation production was concentrated in the Tuzla and Zenica areas in both open-pit and underground mines. In Republika Srpska the two main mines were Ugljevik (brown coal) and Gacko (lignite), each producing about 2 million tons a year.
3. Both the power system and the coal mining sector suffered significant damage as a direct result of war activities or because of prewar and war-related lack of maintenance (boxes 1 and 2).
4. Before the war Bosnia and Herzegovina's power system was operated by Elektroprivreda Bosne i Hercegovine (EPBiH). The status of the coal mines varied from one area to another: the Gacko and Ugljevik coal mines were the only significant mines belonging to the electric power company; the mines in the Tuzla region were grouped into one state-owned holding company; and other mines were operated as independent state-owned enterprises.

Box 1. Electric power system damage

- More than half of the generating capacity was put out of operation;
- About 60 percent of the transmission network and control system was seriously damaged; and
- The distribution network was largely destroyed.

5. The power system is now de facto operated by three regional companies: EPBiH, in the Bosniac majority part of the Federation; Elektroprivreda Herceg Bosne (EPHB), in the Croat majority part of the Federation; and Elektroprivreda Republike Srpske (EPRS), in Republika Srpska. In the coal sector, to facilitate the coordination of emergency aid and control the application of scarce resources, the mines in the Federation have been grouped into two principal companies (Tuzla Coal Mines and Central Bosnia Coal Mines), that supply the important Tuzla and Kakanj thermal power plants. A third group, the

Mostar Coal Mines, is of less economic importance, both in terms of output and product end-use. No regrouping of coal mines took place in Republika Srpska.

Box 2. Coal mine situation

- Coal production dropped from 18 to 1.5 million tons, i.e., to less than 10 percent of the prewar level;
- Much of the mobile mining equipment was damaged beyond repair or taken away; and
- There was an acute lack of critical materials, such as fuel, tires, and spare parts, and therefore a severe lack of maintenance.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

6. The objectives of the reconstruction program in the electric power and coal mining sectors are:

- Restoring of service to acceptable levels;
- Restoring of output of the lowest-cost mines (which can provide the largest increase in output relative to the required investment) to levels sufficient to restart the operation of the thermal power plants at the desired capacity levels and to provide adequate fuel for industry, district heating, and households;
- Improving sector finances through increased billing and collection and a gradual phasing out of price distortions; and
- Restructuring the electric power and coal sectors.

7. The reconstruction program submitted to donors in December 1995 and April 1996 remains valid as an overall framework for the three- to four-year program. It will require US\$614 million in external support for the three- to four-year period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$231 million was firmly committed** and a large number of activities were carried out successfully (paragraphs 8 to 11);
- **In 1997, US\$200 million in external financing will be required** -- about 65 percent of which would benefit the Federation and 35 percent Republika Srpska (paragraphs 12 to 19). This includes the US\$40 million shortfall carried over from 1996; and
- **In 1998 and 1999, an estimated US\$183 million will be needed** and several policy issues should be addressed to ensure the long-term sustainability of the program (paragraphs 20 to 21).

**Table 1. Electric Power and Coal Mining Program External Financial Needs
(US\$ million)**

	3-4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Electric power				
Hydro generation	60	20	30	10
Thermal generation	60	32	15	13
Transmission lines	65	36	20	9
Transmission substations/dispatch	80	21	19	40
Distribution	191	67	65	59
Communications	6	0	3	3
Transportation	23	0	10	13
Spare parts	30	24	5	1
Engineering and technical assistance	25	10	8	7
Sub-total	540	210	175	155
Coal mining				
Equipment and spare parts	70	20	22	28
Technical assistance	4	1	3	0
Sub-total	74	21	25	28
Total	614	231	200	183

III. 1996 ACHIEVEMENTS

8. There have been many positive developments in the electric power sector since the signing of the Dayton-Paris Peace Agreement. The US\$196 million Emergency Electric Power Rehabilitation Project, financed by a large number of financiers, is being implemented and is progressing well. This Project includes most of the emergency reconstruction program for 1996 (table 2). Under the auspices of the Office of the High Representative, contacts were initiated between the electric power companies of the Federation and Republika Srpska, which led to increased sectoral cooperation. Although much remains to be done in this area, the general managers of the Federation and Republika Srpska electric power companies met to define reconstruction priorities and establish coordination and liaison mechanisms.

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Electric power	210	
Generation	[52]	Czech Republic, EC, Germany, Switzerland, UK, US, World Bank.
Transmission and distribution	[124]	Austria, Belgium, Canada, EBRD, EC, France, Germany, Italy, Norway, UK, US, World Bank.
Maintenance/operation equipment	[24]	Belgium, Japan, Netherlands, Norway, Slovenia, Switzerland, World Bank.
Technical assistance	[10]	EC, Ireland, Switzerland, World Bank, others
Coal mining	21	Czech Republic, EC, Poland, UK, US, World Bank
Total	231	

9. The amounts shown in Table 2 represent firm or indicative donor commitments through the end of December 1996 by: the Governments of Austria, Belgium, Canada, the Czech Republic, Finland, France, Germany, Ireland, Japan, the Netherlands, Norway, Switzerland, the United Kingdom (UK), the United States (US), the European Bank for Reconstruction and Development (EBRD), the European Commission (EC), the Overseas Development Agency (ODA), and the World Bank. Commitments made under the Emergency Electric Power Rehabilitation Project total US\$156 million. Commitments outside of that project amount to US\$75 million.

10. As part of the US\$156 million committed under the Emergency Electric Power Rehabilitation Project, the Swiss Government approved a commitment of about US\$7 million equivalent for financing of Units 4 and 6 and the common facilities of the Jablanica hydro power plant. The US committed funds for the rehabilitation of Units 5 and 6 of the Kakanj Cogeneration Plant as well as associated coal mines in Central Bosnia, for a total cost of about US\$23 million. This leaves a financing gap of US\$40 million in the US\$196 million Emergency Electric Power Reconstruction Project; this amount has been included under the 1997 requirements. The largest unfunded items in the Project are the Mostar hydropower plant (US\$13.5 million) and distribution components in various areas (US\$12 million).

11. The emergency electric power reconstruction program is making good progress:

- *Four major 220 kV transmission lines had been restored to service* as of September 1996, between Tuzla and Zenica, Jablanica and Mostar, Kakanj and Salakovac, and Mostar and Salakovac. These transmission lines will significantly improve the reliability of the 220 kV core transmission system. In addition, the rehabilitation of the 220kV trans-country transmission line (Trebinje - Jablanica - Jajce - Prijedor - Bihac) was near completion at the end of December 1996.
- *The Salakovac hydropower plant was in full operation at the end of December, 1996.* Two damaged turbine-generators, together with their auxiliary equipment, were entirely overhauled, re-installed, and prepared for mechanical revolving, allowing operations to resume in December 1996.
- *The Grabovica hydropower plant was recommissioned at the end of December 1996.* Rehabilitation of the damaged tailrace channel and stilling basin for the Grabovica plant is of

prime importance, since tailrace failure can cause loss of the entire output of the plant. Dredging of the tailrace channel has been completed. The recommissioning of the Salakovac and Grabovica hydropower plants has permitted since December 1996, a significant increase in the power supply capacity in the southern part of the Federation, relieving part of the expected power shortages.

- *Preparation of the rehabilitation of the Jablanica hydropower station is in full swing.* Major reconstruction is expected to start in early spring 1997.
- *Rehabilitation of three major thermal power plants (Tuzla, Kakanj, and Ugljevik) and associated coal mines has started.* The Ugljevik power plant was commissioned recently. Spare parts have been provided to keep the smaller generating units of Tuzla and Kakanj operating. Unit 6 at the Kakanj power plant was commissioned at the beginning of November 1996 and the rehabilitation of Unit 5 is under way and is expected to be completed by mid-March 1997. Procurement of the major components for the Tuzla power plant and urgent spare parts for the Tuzla coal mine are well under way. A 200 MW unit at the Tuzla power plant was commissioned at the beginning of November 1996.

Box 3. Emergency Electric Power Rehabilitation Project

The US\$196 million Emergency Electric Power Reconstruction Project focuses on:

- Reconstructing the cogeneration units of the two main thermal combined heat and power stations in the Federation -- Tuzla (1 x 100 MW) and Kakanj (2 x 110 MW); and reconstructing Ugljevik thermal power plant (1x300 MW) in Republika Srpska;
- Restoring production in the coal mines critically needed for the operation of the thermal power plants;
- Reconstructing four hydropower stations -- Jablanica (4 x 25 MW), Grabovica (2 x 57 MW), Mostar (3x25 MW), and Jajce I (2x25 MW);
- Reconstructing about 210 km of 220 kV and 110 kV transmission lines and thirty-one 220/110/35 kV and 110/35/10 kV substations; and repairing communications and system control;
- Reconstructing distribution networks in the districts of Sarajevo, Tuzla, Zenica, Mostar, Doboj, Bihac, Grahovo, Gornji Vakuf, Maglaj, Banja Luka, Bijeljina, Pale, Trebinje, Gorazde, Foca, Kopaci, Glamoc, and Jajce;
- Buying maintenance vehicles and spare parts; and
- Providing technical assistance for project engineering services and power and coal mining sector restructuring as well as tariff studies.

IV. 1997 CHALLENGES AND FINANCING NEEDS

12. The priorities of the 1997 reconstruction program are to:

- Carry out a long-term development strategy study, which the Swiss Government has offered to finance;
- Further improve the reliability, availability, and quality of supply to electricity consumers in the Federation and Republika Srpska in order to facilitate economic recovery, by: (a) rehabilitating the distribution network and transmission networks; (b) where necessary

reconnecting areas that were cut off from electricity supply; and (c) strengthening power generation capacity, necessary for domestic electricity consumption, by rehabilitating hydropower and thermal power plants where justified;

- Enhance cooperation between Entities through a joint study on the rehabilitation of the 400 kV transmission system, and encourage power exchange through system reintegration;
- Support institutional improvements in the internal organization and operation of the electric utilities and coordination between them; and
- Help develop a suitable regulatory framework and an improved electricity tariff structure.

13. To meet these objectives, financial assistance in the order of about US\$200 million will be required from the donor community for 1997. This includes about US\$40 million in unfunded project components from the Emergency Electric Power Sector Reconstruction Project and US\$160 million in new investments. About one-third of all new reconstruction investments (US\$50-60 million) would take place in Republika Srpska.

Transmission and distribution

14. While local distribution will be given highest priority, it will also be important to rebuild selected 220 and 110 kV transmission facilities (including transmission lines and substations). The Banja Luka and Bihac regions, the Neretva Valley, and the Lasva Valley are expected to be part of the priority areas. The 400 kV system is mainly for interstate transmission, rehabilitation of which should wait until a thorough study has been completed; rehabilitation could be included in the 1998-99 program.

15. Consultants are being engaged under EC financing to review investment priorities throughout the country and to prepare cost estimates and technical specifications for bidding documents. Identification of the individual components to be financed by this program will be a painstaking process, in part because of the physical dispersion of the assets as well as the fact that three Elektroprivredas are involved. Hence the results will not be available until after the Spring Donors Conference. It should be emphasized that the cost estimate for the 1997-99 electric power and coal mining program are tentative and based largely on the estimates submitted by the Elektroprivredas and the mines. Major selection criteria to determine reconstruction priorities are listed in box 4.

Generation

16. In *hydropower generation*, priority should be given to the Mostar (3x25 MW), Rama (2x80 MW), Bocac (2x55 MW), and Trebinje hydropower plants. Detailed damage assessments should be carried out before costs can be accurately estimated. For example, the Mostar hydropower station was badly damaged and the machine hall flooded; the generating units, including auxiliary equipment, have been completely submerged for the past three years and have to be lifted out for cleaning, damage inspection, and testing. In *thermal power plants and associated coal mines* priority should be given to the Gacko thermal power plant (1x300 MW) and associated coal mine. To evaluate the possibility of full-scale rehabilitation of the 300 MW unit at the Gacko plant, an in-depth review should assess the status of the turbine-generator, boiler, instrumentation and control, fuel requirements and supply, environmental impact and mitigation measures, and electrical, auxiliary, and general station equipment.

Box 4. Project selection criteria

- **Reconstruction of only previously existing facilities to supply domestic consumers, except where basic system improvements can be made at no or marginal additional cost (e.g., for environmental reasons or because it would be uneconomic to replace obsolete equipment with the same kind of equipment);**
- **No capacity expansion, except where justified by increased population and commercial activity (such as those caused by a refugee influx, etc.);**
- **Focus on investments that enhance system integration and power interchange, particular care should be taken to avoid investing in transmission facilities that could be used to create three independent electricity networks. A system study is being funded by the Swiss Government to define an optimum development strategy over a ten-year horizon; and**
- **Coal mine rehabilitation should be focused on viable mines needed to meet the requirements of the thermal power plants, production capacities in the least-cost mines (taking into account the increase in output versus investment required) should be rapidly increased to the minimum level required to provide sufficient fuel of the desired quality for the thermal power plants, in line with their rehabilitation and their expected lifetimes and load; additional coal mine rehabilitation may be required for industrial, district heating, and household consumption but could raise environmental and economic efficiency concerns; a coal sector restructuring study is needed, inter alia, to provide the necessary basis for decisions on additional investments in the coal mining sector.**

Implementation arrangements

17. Implementation of many of the components of the above program can for the most part be undertaken independently by each of the three Elektroprivredas. For interface areas, however, implementation requires a significant degree of cooperation between the three electricity companies. While this can, in principle, be done by continuing the ad-hoc arrangements that have characterized this process thus far, the establishment of a collaborative organizing framework would improve this process. In some cases, donors may not be willing to support investments unless these better collaborative arrangements are achieved.

18. A Project Implementation Unit (PIU) for power sector investments has been established within EPBiH with adequate staffing and assistance from external experts; such external assistance should be continued, with an added emphasis on support for improved project management. Similar arrangements should be made by the other two Elektroprivredas. Although the PIU or project management teams exercise control over all project-related activities, they receive support from other units of the power enterprises for procurement, technical support, legal matters, budgeting, accounting, disbursing and cost control, scheduling, manpower allocation, operational support and so on. Implementation of the subprojects is the responsibility of the local generation, transmission, and distribution entities. Replacement of transmission equipment is performed by the transmission organizations' maintenance staff on force account, who have satisfactorily handled similar works in the past. In most instances installation of major equipment is being done by suppliers on a turnkey basis, using local construction companies as much as possible.

19. In the case of projects which benefit the coal sector, the mining companies would be responsible for project implementation. For example, under the World Bank financed part of the Emergency Electric Power Rehabilitation Project, the Tuzla Mining Company has assumed sole responsibility for

procurement and implementation. In procurement matters it is assisted by an experienced foreign trade company. Within the Federation, the Ministry of Energy and Industry is to be responsible for a sector restructuring study and for ensuring close cooperation between the mining and electric power companies.

Box 5. Lessons learned

- **Prefinancing for project preparation, preferably through grants, should be more readily available**, so that reconstruction can start as soon as funding is available; the absence of such financing has impeded project preparation and implementation;
- **Timely mobilization of committed financing is crucial for rapid project implementation.** For example, since EPBiH had no access to bridge financing, a special Project Start-up Advance was provided by the World Bank. This Advance allowed contracts to be signed and work to start earlier than otherwise would have been the case;
- **Different contracting methods - such as turnkey arrangements -- should be used whenever possible** to facilitate smooth project implementation; and
- **Local labor and local suppliers should be used as much as possible**, when consistent with economy and efficiency in procurement; local contractors are capable, relatively cheap and generally can be mobilized faster for a given job, especially when the work is to be done in widely dispersed areas, than contractors from abroad; during project preparation special attention should be paid to the available implementation capacity.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

20. The main policy issues to be addressed over the short term are:

- *Electric power sector financial viability.* In 1994 and 1995 the Elektroprivredas incurred substantial losses. Furthermore, the financial difficulties faced by households and corporate consumers during the war caused bill collection rates to be very low (although collection performance improved significantly in 1995, reaching around 50 percent in the case of EPBiH). Billing and collection rates should be gradually but aggressively increased to approach 100 percent by 1998 at the latest. The financial viability of the power sector also depends on the price of coal per kWh, which should be examined in the context of the coal sector restructuring study.
- *Coal mining sector restructuring.* Some activity, although not necessarily production, is being maintained in all twenty-eight mines in the Federation, although about 70 percent of production originates from four surface mines. An assessment is needed to determine which mines are the lowest-cost and most competitive producers. Reconstruction efforts should focus on economically viable mines that are capable of providing the desired coal quality. This approach is expected to result in the concentration of production in a few large mines.
- *Coal mining staffing levels.* Before the war the coal mines employed about 26,000 workers and had a low average productivity per worker. The current staffing level is about 20,000, of which about half are actually working. Staffing should be gradually decreased so that productivity can be increased well above past and current levels.

- *Coal mining production costs.* Present production costs appear to be at or above the world market level of coal prices. Hence, costs per ton should be lowered as soon as possible through reduced staffing levels, selective mine closures, and better preventive maintenance and spare parts management.

21. The main policy issues to be addressed over the medium term are:

- *Electric power sector restructuring.* The power sector clearly falls within the jurisdiction of the Commission on Public Corporations, created by Annex 9 of the Dayton-Paris Peace Agreement. A working group created by the Commission has discussed cooperation between the Entities, and the Commission itself has started to examine the organization of the electric power sector. While the power system may be too small to enable effective competition, measures can and should be taken to introduce a sector structure that would facilitate ultimate privatization. One potential scenario is as follows:
 - First, inter-utility cooperation must be further developed so that the use of the existing infrastructure can be optimized and the rehabilitation can be planned and carried out in a coordinated manner. At the same time, laws and regulations governing the energy sector should be prepared in order to set the legal framework.
 - Second, generation should be separated from transmission and distribution and responsibility divided among several generating companies, each operating on a commercial basis. The transmission system should be operated in a coordinated fashion throughout the country to ensure the optimization of power transmission and permit effective power trading and system stabilization. Distribution enterprises would be organized on a local basis. An electricity law would be passed under which a Regulatory Authority would be set up to regulate power prices and to ensure third-party access to the transmission system. Such a law is currently being prepared, although at this stage there are at least three competing drafts.
 - Third, once the new structure is in place and is operating with reasonable autonomy, the generation and distribution companies could be partially or totally privatized.
- *Settlement of liabilities between the three existing electricity companies.* There are three *de facto* electricity companies in Bosnia and Herzegovina. While the different companies took over the assets of the prewar organization in their respective areas, they did not yet assume the corresponding part of the liabilities. This issue must be resolved.
- *Electric power tariff increases.* Over the medium term tariff levels should be raised progressively to: (i) permit adequate internal generation of funds to cover the power companies' expenditures and provide modest cash balances; (ii) provide full cost recovery as the power companies undertake further necessary efficiency-improving investments; and (iii) enhance energy conservation and efficiency.
- *Coal mines privatization.* While privatization of even the most efficient brown coal and lignite mines in Bosnia and Herzegovina is probably not an option in the near term due to lack of investor interest, the regulatory framework for private ownership should be established.

HOUSING

I. BACKGROUND

A predominantly private sector before the war

1. Before the start of hostilities, Bosnia and Herzegovina's 4.4 million people were generally well housed. With an estimated 1,295,000 housing units, each household generally had its own unit. The housing stock was of relatively high-quality construction, and about half was built after 1971. Residential infrastructure coverage was high in urban areas, although services often lagged behind in unplanned and privately developed areas in the suburbs.

2. As in many formerly socialist economies, the housing sector was a two-tier system consisting of public and private housing. In public housing -- multifamily blocks of rental apartments -- tenure bestowed many of the benefits of full ownership. Public housing accounted for only 20 percent of the total housing stock, but for more than half the housing in the largest towns of Bosnia and Herzegovina -- although only 40 percent in Sarajevo. The rest of the urban population and all of the rural population lived in private, single-family homes financed by household savings and remittances. By contrast with many of the countries in the region, most of the housing (80 percent) was privately owned, and private housing production consistently outpaced public through 1991, even in urban areas.

Box 1. The housing situation

- Over 1 million refugees in various countries;
- An estimated 1 million internally displaced persons;
- In the Federation 50 percent of the stock damaged and 6 percent destroyed;
- In Republika Srpska 24 percent of the stock damaged and 5 percent destroyed; and
- No maintenance of the stock for four years.

War damage and exodus

3. The hostilities wrought havoc in the housing sector (box 1). The damage and destruction are, however, spread unevenly through Bosnia and Herzegovina, with localities near the front lines in the Sarajevo, Bihac, and Mostar areas, and minority villages in Eastern and Central Bosnia hit particularly hard. The war damage to housing has been exacerbated by collateral damage due to weather, lack of maintenance, and deterioration of infrastructure and connections to networks. The war caused an exodus to other countries and massive population movements within Bosnia and Herzegovina and further population shifts are now occurring as some of the displaced persons and refugees seek to return to their homes. Creating the conditions for their return by addressing the constraints posed by inadequate housing, lack of proper infrastructure, and unemployment remains an overriding priority.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

4. The housing reconstruction program aims to:

- Create conditions to enable the return of refugees and the internally displaced; and
- Rapidly expand the usable housing stock for the entire population.

5. The program structure takes into account the reconstruction work that local contractors are able to undertake in the next three years and the need to front-load the reconstruction efforts and stimulate investment in the first two years of the program to improve the quality and quantity of the housing stock as rapidly as possible. It is assumed that the number of people needing direct assistance to improve their housing conditions will decline as the economy improves and incomes recover (so that households can invest in repair of their own housing). The challenge will then be to leverage household resources, supplementing scarce donor grant resources through household investment savings or possibly, later, borrowing.

6. The reconstruction program presented in December 1995 remains largely valid as an overall framework. The program will require US\$693 million in external financial support for the three- to four-year reconstruction period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$302 million was firmly committed**, 83 percent more than was targeted for housing in the first year (US\$165 million), and implementation of emergency repairs was highly successful (paragraphs 10 to 18);
- **In 1997, US\$150 million is required**,¹ 75 percent of which would benefit the Federation and 25 percent Republika Srpska (paragraphs 19 to 29); and
- **In 1998 and 1999, about US\$241 million will be needed**, and to ensure the recovery of the sector, financial and institutional policy issues will need to be addressed with strong support from the donor community (paragraphs 30 to 41).

**Table 1. Housing Program External Financial Needs
(US\$ million)**

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocations	1998-99 Requirements/ Allocations
Emergency repairs	232	191	22	19
Reconstruction	318	80	72	166
Sarajevo program	123	25	50	48
Technical assistance	20	6	6	8
Total	693	302	150	241

¹ Within this framework, programs specifically aimed at facilitating refugee returns are being contemplated by the Refugee Return Task Force (RRTF), established under the Economic Task Force (ETF).

7. The program's priority is to seek cost-effective means for rapidly increasing the number of usable units. Works are limited initially to housing that can be easily brought to a minimum habitable standard and to restoring the external structures and common elements of public housing (damages are not only war-related but also due to the lack of maintenance before and during the war). This approach has allowed the program to jump-start the process of increasing the supply and quality of housing units. To have an impact on the overall supply of units and for equity reasons, the program will need to undertake in a second phase cost-effective repairs to private units and public housing that have sustained greater damage. The program should also start addressing issues of financial and institutional sustainability and establishing a policy framework to ensure sustainable recovery of the sector.

8. The geographic distribution of the program's efforts should reflect the housing needs of the population, with priority given to those areas already identified by the United Nations High Commissioner for Refugees (UNHCR) and by the Entity Governments in conjunction with the Housing Task Force (paragraph 13). To the extent possible, housing repairs should be accompanied by infrastructure projects to ensure the viability of communities and to create adequate conditions for the return of displaced persons.

9. The program includes four activities:

- *Emergency repairs*: rapidly increasing the stock of usable housing by rehabilitating units that are less than 30 percent damaged;
- *Reconstruction*: reconstructing private and public housing units that are more than 30 percent damaged;
- *Sarajevo Program*: focusing on the Sarajevo area, where more than 50,000 units, half the stock, are damaged; and
- *Technical assistance*: providing management and implementation support and institution-building support for the design of adequate policies.

III. 1996 ACHIEVEMENTS

10. During the first year of reconstruction the priorities were to launch an emergency housing repair program that could rapidly restore damaged public and private housing and to establish appropriate implementation and coordination mechanisms. Much progress was made on both fronts. In addition, the first steps were taken toward introducing gradual rent increases to recover the costs of housing repairs.

11. The extensive damage to the stock and the urgent need to restore housing to livable conditions generated considerable donor response. For the first-year program donors committed US\$302 million for projects in different municipalities (table 2). The speed and size of the commitments reflected donors' awareness of the need to make up the shortfall in usable housing, to act quickly in the short construction period before the onset of winter, and to assist in the repatriation of refugees and resettlement of the internally displaced. The extent of the needs, combined with the priority of targeting needy households among the displaced, led most donors to emphasize emergency assistance grants for private housing during the first year.

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Emergency repairs	191	Austria, Belgium, Croatia, Czech Republic, Denmark, EC, Finland, FRY, FYROM, Germany, Ireland, Netherlands, Norway, OIC, Romania, Spain, Slovenia, UK, US, World Bank.
Reconstruction	80	Brunei, Czech Republic, Denmark, EC, Germany, Italy, Japan, Luxembourg, Saudi Arabia, Sweden, Switzerland.
Sarajevo program	25	Austria, Czech Republic, EC, Malaysia, US, World Bank.
Technical assistance	6	Austria, Canada, EC, Germany, Netherlands, Soros Foundation, World Bank
Total	302	

12. Local contractors were able to supply adequate labor and materials for repair projects. Both small and large contractors participated in these projects. The ongoing housing repair projects will generate an estimated 180,000 people months of labor. Despite the disruption in local production, the supply of building materials was not a constraint. Supplier networks were able to meet demand, with suppliers and contractors turning to imports when materials (such as glass and electrical and plumbing fixtures) were not available locally. Although it is unclear what effect the reconstruction program had in stimulating the re-establishment of local manufacturing capacity, there are signs of resumed production of such items as roof tiles and cement.

13. The pace of implementation of donor resources channeled through NGOs in 1996 was extremely uneven. With the many donors and NGOs implementing programs in the sector, the coordination of housing priorities, policies, and activities is critical to ensure the most effective use of funds. A Housing Task Force has been established to ensure coordination (box 2).

Box 2. The Housing Task Force -- improving coordination

Because many donors channeled their funds through NGOs, coordination of housing activities was extremely difficult in 1996: in most instances NGOs took the responsibility for defining the projects (eligibility criteria, extent of repairs to be undertaken, cost per unit, and selection of units and beneficiaries), and municipalities the responsibility for executing works. Coordination is most needed, however, to prevent the repetition of experiences in 1996 when, for example, local municipalities, unaware of what donors were planning, arranged for works to be contracted in houses that were already selected for repair by NGOs.

To improve coordination of housing reconstruction activities, a Housing Task Force was established. It is chaired by the International Management Group (IMG) and includes representatives of major donors and the Governments' Project Implementation Unit (PIU). The Task Force gathers information on needs and activities in the housing sector (amounts of contributions, number of units, geographic distribution), and should also play an important role in coordinating donor activities and defining priorities to ensure effective use of scarce resources. Keeping Entity and local governments informed of donor activities will be another key to success of the coordination effort.

Emergency repairs: About 24,000 units repaired before the winter

14. Emergency repairs in 1996 rehabilitated about 24,000 units, benefiting more than 95,000 people, and were in progress, as of the end of 1996, on another 23,700 units. In addition, the UNHCR established a priority list of municipalities and identified units that could eventually house an estimated 184,000 refugees and displaced persons. The bulk of the assistance was programmed for Sarajevo and its suburbs, the Neretva Canton (around Mostar), and the Tuzla region. Programming in Republika Srpska lagged behind, though projects are planned for the Anvil area.²

Box 3. Sarajevo -- much achieved, much to do

- Sarajevo has more than 42 percent of the Federation's public housing;
- More than 50 percent of Sarajevo's public housing stock has been damaged, and 3 percent completely destroyed;
- To address housing needs in Sarajevo, a housing rehabilitation program has been developed based on projects prepared by the municipality; and
- So far, 6,000 units have been rehabilitated in Sarajevo, about 12 percent of the damaged stock.

15. *Public housing.* This program component, managed by the PIU, includes repair to the external structures and common elements of public housing with joint or parallel financing by the European Union, UNHCR, the Government of the Netherlands, and the World Bank. In 1996 about 11,400 public housing units were weatherproofed before winter in the main cities of the Federation, including Sarajevo (box 3). These works will facilitate future repairs to flats and will, in some instances, lead to the creation of additional dwelling units.

16. *Private housing.* Donors channeled financing for rehabilitating private housing through NGOs, bilateral agencies or the Housing Project Implementation Unit (paragraph 17). Overall, 12,300 dwellings were rehabilitated by the end of 1996, in part in the target areas defined by the UNHCR. A program developed jointly by the UNHCR and the United Methodist Church of Relief (UMCOR) to distribute materials is expected to contribute to the repair of about 6,000 houses in the Federation and 2,600 houses in Republika Srpska. In addition, the largest bilateral program (US\$25 million) is funded by the US Agency for International Development (USAID) and implemented by NGOs. It combines housing repair with infrastructure rehabilitation and has benefited about 2,500 households.

Technical assistance: Coordinating numerous activities

17. The implementation of donor-assisted housing programs in the Federation was enhanced by the establishment of a PIU in the Ministry of Physical Planning and Environment. The PIU, assisted by technical experts funded by the German and Dutch governments, is developing and managing part of the housing reconstruction program in close collaboration with the municipalities. Since its establishment in May 1996, the PIU has attracted US\$65 million in donor funds enough to improve housing conditions for

² The Anvil area, around Mrkonjic Grad and Sipovo, was heavily damaged in fighting in September 1995, when it was conquered by the Federation. Following the Dayton-Paris Peace Agreement, this area was reattached to the territory of Republika Srpska.

about 20,000 households. The Governments of Italy, Japan (through the United Nations Development Program), and Saudi Arabia made US\$29 million available for the direct implementation of works by the PIU. Working in close coordination with the UNHCR and the Ministry of Refugees, the PIU had completed repairs to 212 private housing units and 11,200 public housing units by December 1996.

18. As a first step toward cost recovery for the external repairs to public housing, the PIU entered into agreements with municipal authorities to gradually increase rents at a rate that would at a minimum recover the cost of repairs. Decisionmaking in selecting units for repair, assessing damage, and supervising repairs was decentralized at a local level: procurement and disbursement remained centralized. This system made it possible to promote partnership between the PIU and the municipalities and "ownership" of the programs by local and national bodies, and kept the time from identification to completion of projects to an average of four to five months.

IV. 1997 CHALLENGES AND FINANCING NEEDS

19. Much progress has been made in 1996 in financing and launching emergency repair projects. But substantial needs remain to be addressed, particularly in housing reconstruction in Sarajevo and in technical assistance to build institutional and implementation capacity. In view of both donors' disbursement procedures and local implementation capacities, it is estimated that US\$150 million can be effectively allocated to the sector in 1997 -- based on the pipeline of projects that can be rapidly prepared for implementation, largely in UNHCR-identified areas.³

20. In 1997 the program aims to enable refugees and displaced persons to return or resettle while focusing on general issues such as ownership and cost recovery. Priorities include:

- Continuing the repair programs initiated in the first year, focusing on units that can be rapidly restored and on target municipalities (including Sarajevo);
- Initiating reconstruction projects to restore more heavily damaged public and private housing to minimally habitable standards in target communities and in Sarajevo;
- Strengthening implementation and programming capacity; and
- Addressing sectoral issues and the institutional and financial sustainability of reconstruction.

³ In addition, the UNHCR is seeking US\$70 million for shelter assistance.

Box 4. How housing conditions affect returning refugees

There is an important information gap on the return of refugees and on how housing conditions influence their return. In some instances, for example, houses have been repaired but are not occupied even though the "returnee" has expressed in writing a desire to do so. In other instances donors have information on the refugees but little information on their housing needs. Therefore:

- Increasing attention needs to be paid to the nature and determinants of housing demand among refugees and displaced people, to make the most effective use of scarce resources;
- Proper incentives need to be created to ensure that beneficiaries of repair programs utilize the rehabilitated units; and
- Donors can help match housing demand with supply by rehabilitating housing for refugees whose repatriation is ensured and channeling assistance through the PIU to coordinate the return of refugees with the repair of their housing.

21. To achieve these objectives it is critical that all parties coordinate their efforts to ensure that resources are used effectively. To aid resettlement, information on how housing conditions affect the decisions of displaced persons to return to their homes and their ability to do so (for example, if their homes are occupied by others, or are too severely damaged) needs to be collected and disseminated in a more systematic fashion (box 4). These efforts would allow a more efficient allocation of resources and a more demand-driven approach to designing programs and setting priorities than in 1996. Other priorities will include creating a coherent framework for establishing property rights, facilitating the reclamation of property by returning refugees and displaced persons, and establishing terms for "tenure" of occupants in property that is not their own.

Emergency repairs (US\$22 million): Ensuring minimal standards

22. The program will complete the emergency repair phase now under implementation -- undertaking repairs on an estimated 8,000 more private units. Donors should select areas for emergency repairs on the basis of the UNHCR priority list, with the approval of the Entity Ministries of Physical Planning and Environment and in coordination with the Housing Task Force. Implementation should be at the municipal level, with overall project management, supervision, and disbursement functions at the ministerial level (through the PIU).

Reconstruction (US\$72 million): Remediating heavy damage

23. Reconstruction efforts will focus on public and private units that suffered heavier damage, including structural damage to external walls, roofs, and internal walls and damage to more than 50 percent of windows and doors. Projects should benefit both private and public housing units. Projects will arrange for major repairs that are beyond the ability of occupants, such as roof repairs and major concrete works by contractors, which should be selected on a competitive basis. The projects could be implemented by the PIU and supervised by housing reconstruction units to be set up within the Entity Ministries of Physical Planning and Environment.

Sarajevo Program (US\$50 million): Addressing extensive needs

24. This component will focus on substantial needs, as identified by the Sarajevo municipality, in the public housing sector that still have not been addressed. It will weatherproof buildings by repairing roofs, windows, external walls, entrances, staircases, and damaged utilities. Repairs inside apartments will be the responsibility of owners.

Technical assistance (US\$6 million): Providing essential support

25. Technical assistance should be directed to all relevant institutions in the housing sector. The respective roles of the different levels of government have not yet been defined in either the Federation or Republika Srpska. In the Federation, Cantons are likely to receive most of the responsibilities, while the Federation Government would have a legislative and regulatory function (planning laws, issuing construction regulations, etc.). Technical assistance should not, therefore, be limited to the Federation Governments but should also be provided at the local and cantonal levels.

26. Technical assistance should be provided to support preparation, administration, and supervision of works. Municipalities and implementation agencies should be the main beneficiaries of this support. Additional support would be needed to help formulate adequate policies for guiding housing reconstruction, recovery, and development, including cost recovery and safety net measures -- and neither the Housing Task Force nor the PIUs can substitute for Entity Governments in this role. Priorities include strengthening property and collateral rights, promoting land and infrastructure development, and privatizing housing and land. Teams of experts from Bosnia and Herzegovina, drawn from the appropriate government and local institutions, should be formed and made responsible for the design of proper policies and implementation strategies, with the technical support of foreign experts.

Implementation arrangements: Focusing on local implementation

27. Donors should focus on improving coordination to ensure an effective, consistent, and equitable allocation of scarce resources. To that end, the Housing Task Force should:

- Take the lead in defining eligibility and selection criteria for target areas and beneficiaries;
- Ensure transparency and adequacy for programming resources to target areas; and
- Coordinate project implementation and effectiveness.

These actions would support a more coordinated and flexible approach based on a sound understanding of the determinants of demand and on experience with implementation strategies. The Housing Task Force has established a policy group to ensure coordination on issues of program criteria, sustainability, and cost recovery. But success depends critically on donor participation in the Task Force.

28. Implementing projects through the PIUs has proved to be effective: donors are encouraged to channel resources directly to the PIUs and local offices (which should enhance their capacities) to undertake programs and gather information at the local level.⁴ The PIUs should remain responsible for both managing implementation of certain assistance programs and coordinating the implementation of all programs. As a minimum requirement, donors should ensure close coordination with the PIUs to avoid

⁴ A PIU should be established in Republika Srpska.

duplication of effort and conflicting strategies. In designing and implementing assistance programs the PIUs will need to take into account the rapidly changing environment. Housing assistance programs should evolve as the economy recovers, local institutional capacity is restored, building materials industry capacity increases, and banks become able to handle housing reconstruction loans. These changes will reduce the need for donors to get directly involved in managing contracts for housing repair and reconstruction. The PIUs' role should expand to include monitoring the sector and developing information on factors affecting housing supply and demand in different localities. This information should be used in targeting housing assistance and programming resources to respond to changing priorities. Donors can obtain information and assistance from the Entity Ministries of Spatial Planning and the Housing Task Force.

Box 5. Lessons learned

The following lessons were learned during the first year of implementation:

- **Donor coordination is essential** to ensure consistency and coherence in program design and implementation; donors should work closely with the Housing Task Force;
- **Contracting for labor and materials has been more effective** in getting damage repaired quickly than distributing materials to people so that they can do the work themselves; this approach has been used by USAID and the World Bank, and increasingly by other large donors; while this approach does not involve the beneficiary in decisions regarding the repairs, it has been an effective means for ensuring that repairs are completed quickly during the construction season;
- **Housing repairs should be coordinated with infrastructure rehabilitation in an integrated package.** To that end, many donors have undertaken comprehensive, multisectoral municipal development projects to create appropriate conditions for the return of displaced persons and allow resumption of a normal life;
- **Care should be taken not to raise expectations that cannot be met;** in 1996 programs were made known to potential beneficiaries before donor commitments were confirmed. In several cases, commitments did not materialize; such situations could result in distrust of the donor community as a whole and potentially in social unrest; and
- **Authorities in Bosnia and Herzegovina should simplify the existing organization of the housing sector;** many institutions and offices were created during the war to implement humanitarian assistance, resulting in an overlapping of responsibilities that has made it difficult for donors to identify appropriate local partners for project preparation.

29. As mentioned above, priority should be given to identified areas where physical and social infrastructure need to be rehabilitated. The UNHCR has drawn up a list of such areas, which are targets for the return of refugees and displaced persons. Housing reconstruction projects, physical and social infrastructure projects, and employment generation activities should be coordinated to maximize the benefits of investments. This coordinated approach not only would create appropriate conditions for the return of refugees and displaced persons and a return to normal levels of activity, but also could encourage households to invest their own resources in improving their housing conditions.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

30. In the short term there is a role for Governments in managing and setting priorities for emergency housing assistance programs aimed at jump-starting the repair of war-related damage. Short-

term efforts should focus on completing this repair and handling the return of the displaced population in light of the 1996 experience (box 5). While housing needs clearly go beyond donors' and Governments' capacities, there are still many uncertainties about where households will finally reside and thus where housing shortages will be greatest. Targeted housing assistance for some population groups will probably remain necessary for some time. But such assistance programs have limited objectives and cannot assure the sustainable recovery of the housing sector over the medium term.

31. Over the medium to long term ensuring that the housing sector is able to recover and respond to demand will require attention to long-standing sectoral constraints and a transition from the supply-driven model of the past toward market-oriented policies. The Governments will need to take the lead in establishing a policy and regulatory framework that encourages private investment and development of a housing market. This work should begin as soon as possible. Though burdened by the inefficiencies of a legal and regulatory framework focused on social production, the prewar housing sector in Bosnia and Herzegovina demonstrated considerable capacity by the private sector to construct and finance housing. There is every reason to believe that the private sector can resume this role within an enabling policy and institutional framework as the economy recovers. Donors should ensure that adequate measures are taken -- since doing so will make it possible for them to reduce their support.

32. Experience with transition in the housing sectors of other countries in the region may not be fully representative of the nature and sequencing of reforms needed in Bosnia and Herzegovina. None of these countries faced the dramatic decline in the quality and quantity of housing that Bosnia and Herzegovina has as a result of the war, and thus the urgency of stimulating production and investment in the immediate term. In Bosnia and Herzegovina the challenge of overcoming war-generated shortages will remain a priority for some time, but several other issues also need to be addressed to ensure sustainable recovery of the sector.

Financial issues

33. *Introducing cost recovery.* During the first year of the reconstruction program most programs overlooked cost recovery and transparency or equity in the design of grant funding in the interest of responding rapidly to an emergency situation. Assistance has been provided without consideration of households' ability to pay, and different programs have established different ceilings and allocation criteria for grants to beneficiaries. But given the scarce resources and the enormity of the need, this approach is not sustainable over the medium term: it induces lack of efficiency in the allocation of resources as well as considerable inequities. There is a need to ensure that available resources provide the greatest benefit to the largest number of people in a transparent, equitable, and well-targeted manner. The Governments are aware of this issue and are interested in applying cost recovery principles in both private and public sector programs.

34. Introducing cost recovery for private housing would provide incentives for beneficiaries to utilize resources more effectively and involve them directly in the decisions to repair their homes. One option would be to provide a one-time grant from donor resources to supplement loans based on ability to pay. Such grants should be based on clearly defined eligibility criteria to ensure that resources reach the neediest, complement household resources, and support cost recovery. Above all, the use of grants for housing assistance should be consistent across donor programs.

35. Introducing cost recovery and more targeted subsidies would require changes in the implementation mechanisms established during the emergency period. It would also require

strengthening administrative capacity for implementing targeted assistance programs and collecting adequate information to ensure that the choice of instruments is appropriate and to monitor their impact.

36. *Rationalizing rental charges in public housing.* Enterprises and municipalities do not have the resources to maintain the system of subsidized production and maintenance of housing in Bosnia and Herzegovina. Moreover, in the past this system was neither efficient nor equitable in responding to housing demand. Over the medium term, as the economy recovers, rental rates should be raised to cover the full costs of maintenance and operations for both legal tenants and occupants in order to ensure that repairs are maintained.⁵ To avoid causing hardship for the poorest households, who may not be able to afford higher rental rates, some form of housing allowance could be considered. Rationalizing and reducing subsidies in the public housing stock would also require improving the efficiency of management and maintenance by introducing competition in contracting for these functions.

37. *Developing housing finance.* The lack of credit to finance housing has always been a constraint to the development of private sector housing. Remittances and savings have often been the only recourse for the private sector. Over the long term developing housing finance will be critical to the sector's recovery. It will depend on progress in overall reforming and strengthening the banking system, reforming the housing sector, and clarifying property rights.⁶ Until long-term financing through banks becomes available, consideration could be given to using donor resources to establish lines of credit or a revolving housing fund as a limited interim measure. This solution should be combined with measures to address long-term constraints on housing finance development, such as reforming the legal framework for collateral security, enforcing and ensuring transparent property rights, and reforming and developing the banking system and financial sector.

Institutional issues

38. *Clarifying property rights.* A clearly defined, fair, stable, and enforceable property rights system for land and housing is key to the effective development of housing markets. Perhaps the most important institutional constraint to the housing sector's recovery in the short and medium term is the complex set of disputes over property rights that have arisen as a result of the war. Households that have lost or been displaced from their homes are occupying units to which they have no legal claim as tenants or owners. A Commission for the Real Property Claims of Displaced Persons and Refugees has been established in accordance with the Dayton-Paris Peace Agreement to settle disputed claims by owners and tenants and lease and mortgage properties.⁷ While establishing mechanisms for settling claims will be a lengthy and difficult process, priority should be given to assuring that there is a clear registry of ownership and

⁵ The Emergency Housing Repair Project has begun making public housing repairs conditional on incremental increases in rents. While this is a modest step, as present rental rates still are lower than prewar rates, it has encouraged municipal authorities to increase rental rates to cover repair costs and some costs of operations and maintenance.

⁶ Progress in the development of well-functioning market-based mortgage finance systems in other countries in the region has been extremely slow. It has depended on macroeconomic conditions and on reform and developments in the financial and housing sectors, particularly those related to property rights and the enforceability of contracts. Specialized institutions to fill the void and meet financing needs have been less effective in postwar situations (such as in Lebanon) than a system of targeted direct grants to households or of credit administered through the banking system.

⁷ Funding requirements for this body are part of the 1997 UN Consolidated Appeal.

tenancy rights and claims, and to defining terms for leasing by those occupying property that is not their own. Restitution rights may complicate the resolution of property rights issues. It is critical that all these issues be addressed within a comprehensive and coherent framework to avoid conflicting strategies and delays in establishing an enforceable system of property rights.

39. *Privatizing housing.* A housing privatization law is under discussion in the Federation, but its presentation to the parliament was postponed until after the elections. The draft legislation proposes privatizing the public housing stock over a three-year period and offering rights of first refusal to legal tenants. No similar legislation has been prepared in Republika Srpska. Privatizing housing would help reduce the budgetary outlays of local governments and contribute to the development of housing markets. Experience in other countries has shown that the success of housing privatization efforts depends on accompanying reforms in tenancy rights and controlled rental charges. In the long term success also depends on a legal framework that establishes the rights and obligations of owners with regard to maintenance and management costs and clear and tradable ownership rights. Also important is to separate public housing from enterprises so as not to deter privatization in other sectors of the economy. Most housing privatizations in transition economies have been undertaken directly by municipalities after a transfer of the stock to municipal authorities, rather than through enterprises or a separate privatization agency.

40. The speed with which privatization can occur will depend initially on progress in clarifying tenancy rights and the status of occupants who are not legal tenants. Because many occupants, unable to find other accommodations, are likely to remain as "tenants," priority should be given to establishing registries of the status by legal tenants and occupants in public housing.

41. *Reforming the legal and regulatory framework.* The basic laws and regulations governing housing are oriented toward a social housing finance and production system. These laws define tenancy rights, rental charges, enterprise finance for housing, and housing standards. In the prewar period much informal but good-quality private housing was developed in contravention of existing land use and building regulations -- but at unnecessarily high cost. Reform of the legal and regulatory framework is needed to encourage private investment in rental and own housing, as well as the development of a housing market. In addition to clarifying property rights, building development standards and land use regulations will need to be eased and simplified to ensure a responsive supply of land and housing by the private sector. The legal and regulatory framework also should be reviewed to ensure that restrictive zoning constraints to developing land and infrastructure are eased.

DISTRICT HEATING AND NATURAL GAS

I. BACKGROUND

District Heating

1. In 1991 Bosnia and Herzegovina had district heating systems in most towns and cities with more than 25,000 inhabitants. These systems served a total of 120,000 customers, equivalent to 445,000 inhabitants, or 10 percent of the total population. The systems were generally run by municipally owned district heating enterprises which ensured the supply and distribution of heat. Cogeneration was provided by the combined heat and power plants in Tuzla and Kakanj, as well as by local industries such as the steel industry in Zenica. In all other cases heat was generated by local heat-only boilers.
2. All district heating enterprises, except in Zenica, were created and controlled by municipalities. Heat prices differed from one municipality to another based on the cost of inputs (primarily fuel) and on whether or not the municipality helped finance investments, debt service and other costs. Hence, in many cases district heating prices were well below economic levels, as were the prices of most fuels. The average subsidy was US\$100 per annum per consumer, compared to an average annual heating bill of about US\$370 per consumer. The war's effect on the district heating sector is summarized in box 1.

Box 1. District heating systems damage

Sarajevo: During the war Sarajevo's district heating system was badly damaged both by direct shelling and indirect damage due to corrosion and cracking of boilers, substations, pipes in the network and building internal heating installations. Lack of maintenance due to war shortages has further compounded the above problems. At the beginning of 1996, the number of flats served by district heating had gone down from 45,000 to 16,000, while the number of household gas connections had gone up from 15,000 to an estimated 89,000 (of which 64,000 remain self-made). These dangerous self-made gas connections made reconstruction of the district heating system a very high priority.

Banja Luka: The economic embargo interrupted supplies of fuel oil during the war. Before the war the city's district heating company provided heat to about 19,000 flats as well as industrial and commercial consumers. In 1995-96 only 5-6 percent of installed capacity was working during the heating season: as a result households used wood for space heating. Non-usage of most of the system has caused corrosion, freezing, and cracking, compounded by lack of maintenance and repair. Building internals (pipes, radiators, and valves) also may have incurred substantial damage due to rusting and cracking.

Other cities: Damage to the district heating systems of other cities is similar to that in either Sarajevo (e.g. Doboj) or Banja Luka (e.g. Tuzla).

Natural Gas

3. Development of the natural gas system in Bosnia and Herzegovina began in 1975. At the beginning of 1992 gas was used primarily for industrial and commercial needs along the Zvornik-Sarajevo-Zenica pipeline and for space heating in Sarajevo and Zenica. The gas supply network consisted of:

- Some 190 kilometers (km) of transmission mains (16 inch/50 bar) and offtake pipes, running from Zvornik to the Sarajevo area via Semizovac, and from Semizovac to Zenica;
- Eight large regulation stations in Sarajevo, Ilijas, Visoko, Kakanj, Zenica, and Zvornik; and
- A distribution network of 450 km with about forty smaller regulation stations.

Box 2. The natural gas situation

- Major weaknesses in the gas transmission system due to war damage and lack of maintenance;
- Huge increase in the Sarajevo network and the number of consumers, mostly through improvised installations;
- Number of normalized installations in Sarajevo has gone from 15,000 to 25,000;
- About 34,000 improvised, unsafe, and uneconomic household connections remain in Sarajevo; and
- About US\$117 million in debt to the Russian gas supply company Gazexport (January 1997).

4. Gas consumption peaked in 1990 at 610 million cubic meters, equivalent to 8 percent of total energy consumption in Bosnia and Herzegovina. In Sarajevo there were 15,000 household connections, and all the major boiler houses in the city's district heating system had been converted from coal to gas firing.

5. Gas is imported under a contract between Energopetrol (a Bosnian oil and gas company) and Gazexport (the export branch of Russia's Gazprom). Gas imports are metered at the border of Ukraine (Beregov, the contractual point of delivery of the gas) and Hungary. From there gas is transported through the Hungarian and Serbian transmission systems to Zvornik, in Republika Srpska, at the border with Serbia (where it is also metered). The gas transporting cost from Russia to Bosnia and Herzegovina through Hungary and Serbia is paid in kind (in gas) and averages about 40 percent of the contracted gas volume, much higher than is standard for such transit. This higher cost is primarily due to "penalties" being levied by Serbia. Before the war, transmission, distribution, and maintenance of the gas networks throughout the country was the responsibility of Sarajevogas, a utility company owned by the city of Sarajevo. During the war Sarajevogas split into two companies, one of which is active in the Federation (Sarajevogas) and the other one in Republika Srpska (Sarajevogas-Lukavica). The situation in the natural gas sector as a result of the war is summarized in box 2.

6. Gas has been supplied without interruption since the conclusions of the Dayton-Paris Peace Agreement, although Gazexport repeatedly threatened to interrupt supplies. Payment for gas consumption has been only partial, corresponding roughly to estimated consumption in the Federation. The number of normalized gas connections has increased from 15,000 to 25,000, and about 30,000 consumers were disconnected from the gas network in 1996 due to the successful implementation of the Emergency District Heating Reconstruction Project. In addition the number of illegal connections has dropped from 74,000 to 34,000.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

District Heating

7. The objectives of the district heating reconstruction program are to:

- Repair the district heating systems to restore urban heating services to adequate levels, particularly in the most populated cities;
- Rehabilitate building internal heating installations;
- Strengthen sector institutions and introduce a program to gradually increase cost recovery during 1996-99;
- Improve the efficiency of the district heating systems and undertake studies to determine the optimal configuration of each city's future heating system; and
- Mitigate the energy security risk associated with a single source of energy supply. By ensuring that the oil-firing capacity of the Sarajevo district heating system's boilers is operational, Bosnia and Herzegovina could potentially reduce its reliance on natural gas.

8. The district heating reconstruction program submitted to donors in December 1995 and April 1996 remains valid as an overall framework for the 1997-99 program. It will require an estimated US\$175 million in external support for the three- to four-year period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$33 million was firmly committed;** reconstruction was carried out very successfully in Sarajevo despite an exceedingly tight deadline (paragraphs 12 and 13), although a financing gap of US\$17.9 million remains to be covered to complete the financing of the ongoing Emergency District Heating Reconstruction Project;
- **In 1997, US\$65 million in external financing will be required** --- about 73 percent (US\$47.5 million) would benefit the Federation and 27 percent (US\$17.5 million) Republika Srpska (paragraphs 17 to 20); this amount includes the US\$17.9 million shortfall carried over from 1996; and
- **In 1998 and 1999, about US\$77 million will be needed** and several policy issues should be addressed to ensure the longer-term sustainability of the program (paragraphs 26 and 27).

**Table 1. District Heating Reconstruction Program External Financial Needs
(US\$ million)**

	3 - 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Heat sources	83.0	9.0	32.0	42.0
Heat distribution	30.0	7.5	11.5	11.0
Heat substations	28.0	2.5	12.5	13.0
Internal installations	14.0	7.0	3.0	4.0
Heat meters	3.0	1.5	0.5	1.0
Control equipment	5.0	0.0	2.0	3.0
Other equipment	1.5	1.5	0.0	0.0
Site preparation	1.5	0.5	1.0	0.0
Technical assistance	9.0	3.5	2.5	3.0
Total	175.0	33.0	65.0	77.0

Note: Costs include physical contingencies of 20 percent but exclude spare parts, taxes, and duties.

Natural Gas

9. The objectives of the natural gas reconstruction program are to:

- Reconfigure the gas network and restore safe service to an acceptable level;
- Ensure demand management by disconnecting illegal consumers that can be reconnected to the district heating system, introducing energy-efficient appliances, and gradually increasing cost recovery during 1996-99; and
- Strengthen sector institutions.

10. The natural gas reconstruction program submitted to donors in December 1995 and April 1996 remains valid as an overall framework for the 1997-99 program. It will require US\$82 million in external support for the three- to four-year period within the overall US\$5.1 billion priority reconstruction program (table 2).¹

- **In 1996, US\$20 million was committed;** despite a 63 percent (US\$35 million) financing gap over the US\$55 million first-year estimate, a number of activities were carried out successfully, thanks in particular to additional donations from various cities not reported here (paragraphs 14 to 16);

¹ Additional financing would be needed to meet the requirements set by the Entity Governments to: (i) develop a gas distribution system in Zvornik (Republika Srpska) for 20,000 households and (ii) restore the main pipe from Sarajevo to Zenica. These projects have, however, not been incorporated in the priority reconstruction program: in Zvornik, the proposed project is a development activity -- not rehabilitation. The restoration of the Sarajevo - Zenica main pipe would mainly benefit the steel plant in Zenica and therefore should be examined in the context of the overall restructuring of this factory.

- **In 1997, US\$45 million in external financing will be required** --- about 78 percent (US\$35 million) would benefit the Federation and 22 percent (US\$10 million) Republika Srpska (paragraphs 21 to 23). This amount includes the US\$35 million carried over from 1996; and
- **In 1998 and 1999, US\$17 million will be necessary.** This amount could, however, be reduced to take into account in-kind contributions and volunteer work (paragraph 11). Several policy issues should be addressed to ensure the long-term sustainability of the program (paragraphs 26 and 27).

11. In addition to the donor commitments reported in tables 2 and 4, several Italian cities, the city of Ankara, and the city of Sarajevo provided in-kind contributions and volunteers carried out civil works. These donations had a value estimated at about US\$10-12 million.

Table 2. Natural Gas System Reconstruction Program External Financing Needs (US\$ million)

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Engineering	5.0	1.4	3.6	0.0
Transmission	10.0	1.2	5.8	3.0
Distribution	44.0	4.9	27.1	12.0
Strategic planning, TA	1.0	0.3	0.7	0.0
Billing software and equipment	1.0	0.2	0.8	0.0
Land mine clearing	1.0	0.0	1.0	0.0
Sub-total	62.0	8.0	39.0	15.0
Payment for gas supply	20.0	12.0	6.0	2.0
Total	82.0	20.0	45.0	17.0

Note: Costs include a physical contingency of 10 percent but exclude spare parts, taxes, and duties.

III. 1996 ACHIEVEMENTS

District Heating

12. The ongoing US\$44.5 million Emergency District Heating Reconstruction Project is focused on Sarajevo but also contains a US\$0.5 million project preparation component for Banja Luka. The project cost has been increased from the original US\$40 million because repairing building internal installations will cost more than was originally estimated. Financing for the reconstruction of this sector was provided by the Governments of Denmark, Finland, Luxembourg, and the Netherlands, the European Commission (EC), and the World Bank for a total of US\$33 million (table 3). But since part of the commitments were not allocated to the Emergency District Heating Reconstruction Project, this project has a US\$17.9 million financing gap to be covered in 1997.

**Table 3. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
District Heating	33	Denmark, Finland, Luxembourg, Netherlands, EC, World Bank
Total	33	

13. The project is progressing extremely well and is expected to be completed on schedule by September 30, 1998. In the space of just six months and under a very tight deadline (the start of the 1995/96 heating season) -- and despite the technical complexity of the damaged systems -- the following major successes were achieved:

- The entire district heating system underwent an engineering survey and assessment to determine its condition and identify possible improvements;
- To ensure that priority targets would be met, reconstruction works to be undertaken were divided into a fast-track program (implemented through December 1996) and a two-year program (through September 1998);
- The two-year program has been developed to complete the ambitious scope of the project; it is aimed at reconstructing of the whole Sarajevo's district heating system with a significant increase in efficiency. Design of the two-year program is to be completed by March 1997, and implementation will start at that time;
- Approximately 45,000 flats were surveyed to determine the exact damage to building internal heating installations;
- About 32,000 flats were reconnected to the district heating system and heated by December 1996 after extensive rehabilitation of building internal heating installations; another 4,000 flats were reconnected by the end of December 1996, and the remaining flats will be reconnected progressively by September 1997;
- Most of the boilers and substations were repaired to a level sufficient to operate on base load (meeting 60-80 percent of peak heat demand) throughout the winter of 1996-97;
- About 3 kilometers (km) of network pipes were replaced; and
- A new billing and collection system, including software and hardware, was introduced, allowing billing and collection to restart in January 1997 after a five-year interruption. In addition, a database of flat owners/occupants and addresses was created.

Natural Gas

14. Gazexport's past threats to cut off the gas supply because of non-payment have made the conclusion of a reliable long-term gas supply agreement (including credible payment mechanisms) between Bosnia and Herzegovina and Gazexport a prerequisite for funding by major financiers. Despite this, significant progress was made during 1996 (table 4).

**Table 4. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Repair works and technical assistance	8	EC, Germany, Netherlands, UK, World Bank
Payment for gas supply	12	Netherlands, Turkey
Total	20	

15. The UK Overseas Development Administration (ODA), the EC, other European and Middle Eastern donors, the City of Sarajevo and citizen volunteer labor financed equipment and works valued at about US\$17 million. This resulted in the following achievements:

- About 40 percent of the engineering for the transmission and distribution system was completed;
- About 20 percent of the transmission system reconstruction was completed, including repair of the block valve, cleaning, transmission metering and regulating stations;
- Cathodic protection replacement and repair has been completed;
- Distribution system repair is about 34 percent complete. Most large consumers have had their regulating and metering facilities repaired;
- Approximately 200 km of network piping has been installed. Most of this was installed utilizing "citizen self help"; and
- About 30 percent of the measurement and regulating works for residential consumers and about 12 percent of the in-house installations (interior piping, heaters, cookers) have been completed.

16. The World Bank released US\$2 million in project start-up advance funds to help finance gas equipment for the district heating boilers and to finance the installation of regulators and meters (provided by the EC) to normalize about 3,500 illegal connections.

IV. 1997 CHALLENGES AND FINANCING NEEDS

District Heating

17. District heating challenges for 1997-98 are two-fold:

- Implementation of the two-year program developed in Sarajevo under the Emergency District Heating Reconstruction Project. Improvements are expected in all parts of the district heating system: damaged or inefficient equipment will be replaced by modern technology, the main heat load will be shifted to the most efficient heat production units, and heat production will be adjusted to heat demand by remote control;² and

² In addition, heat meters will be installed in all supplied buildings to initiate energy savings, reducing both the environmental impact and the costs of district heating.

- Reconstruction of the district heating systems in possibly up to thirty-seven priority cities throughout Bosnia and Herzegovina, of which up to thirty-four in the Federation and three in Republika Srpska (including Banja Luka and Doboј).

In 1997 commitments of about US\$65 million are required to meet the first part of the 1997-98 challenges, including US\$17.9 million to fill the financing gap of the ongoing Emergency District Heating Reconstruction Project in Sarajevo (primarily to finance the reconstruction of building internal installations).

18. Damage to district heating systems was typically caused by direct shelling and/or by indirect damage due to corrosion and cracking of boilers, substations, and pipes in the network. Lack of maintenance due to war shortages has further compounded these problems. In many cities fuel supplies were interrupted during the war. Due to non-usage of most of the system, damage has been caused by corrosion, freezing, and cracking, compounded by a lack of maintenance and repair. Building internals (pipes, radiators, valves) also may have incurred substantial damage due to rusting and cracking. In addition, a large influx of refugees in some cities warrants expansion of the district heating system.

19. In 1997 priority should be given to cities where the largest impact can be made in terms of enabling apartment dwellers to switch back to district heating, instead of using wood and coal for their space heating needs. Prime candidates (in alphabetical order) are the cities of Banja Luka, Bihac, Doboј, Mostar, Tuzla, Vitez, and Zenica. Medium-size cities for which rehabilitation has been requested are Grbavica, Gorazde, Jajce, Livno, Maglaj, Novi Travnik, Prozor-Rama, Sanski Most, and Travnik. Smaller cities for which significant funding has been requested include Banovici, Bosanska Krupa, Bosanski Petrovac, Busovaca, Cazin, Capljina, Citluk, Drvar, Glamoc, Kakanj, Kiseljak, Kladanj, Kljuc, Konjic, Kupres, Ljubuski, Lukavac, Tesanj, Tomislavgrad, Velika Kladusa, and Zepce.

20. Consultants are being engaged under EC financing to review investment priorities in each city's district heating system throughout the country and to prepare cost estimates and technical specifications for bidding documents. Identification of the individual components to be financed within this program will be a painstaking and time-consuming process, in part because of the geographical dispersion of the systems. Thus the cost of the 1997-99 district heating program is tentative and based largely on the estimates submitted by district heating enterprises. In some cases emergency reconstruction costs appear to have been significantly underestimated, while in other cases they may have been overestimated.

Natural Gas

21. The US\$45 million natural gas program consists of :

- About US\$35 million to close the financing gap for the proposed Emergency Natural Gas System Reconstruction Project, of which the World Bank would finance US\$15 million (including US\$2 million disbursed in 1996, see paragraph 16);
- US\$4 million to regularize thousands of improvised gas connections; and
- US\$6 million for payments of part of the gas supply.

No funding will be provided for the reconstruction of the Semizovac-Zenica transmission pipeline portion (US\$17 million), since this is closely linked to the future of the Zenica steelworks. Also not included is a request for an estimated US\$21 million to construction a new gas distribution network for

about 20,000 individual consumers in Zvornik, since this falls outside the scope of the emergency reconstruction program. Currently, only the district heating boilers in Zvornik receive gas.

22. Within this program priorities include: (i) engineering analysis and design; (ii) reconstruction and rehabilitation works on both the transmission pipeline and the distribution network (for Sarajevo the latter includes, as a major component, the normalization of illegal connections in areas not served by the district heating system and where gas heating is economically justifiable); (iii) procurement of spare parts and service vehicles; and (iv) technical assistance for project implementation and institution building.

23. Works on the transmission pipeline include repairs of: (a) the most heavily damaged parts of the pipeline; and (b) the valve, measurement, regulating, and metering stations in Butila, Hum, and Kladanj. Works on the distribution network include: (a) converting improvised connections to standard connections for consumers that can not be connected to the district heating system, and introducing energy-efficient appliances; (b) constructing distribution piping to safely expand the network; (c) measuring and regulating installation; and (d) measuring calibration and reinstalling meters for large consumers.

Implementation Arrangements

District Heating

24. In each of the cities where rehabilitation work is to be undertaken, implementation would be ensured by the municipal district heating companies. Project management units should be set up within each district heating enterprise or group of enterprises depending on size, needs, proximity, and other factors. In the case of projects funded in part by the World Bank, Project Implementation Units (PIUs) would be set up. For example, the PIU of Toplane-Sarajevo (the district heating company) consists of about twelve Toplane engineers and about eight expatriate engineers. It is responsible for overall project scheduling, coordination, procurement of goods and services, management of funds, project monitoring, and progress reporting.

Natural Gas

25. With some assistance in project engineering, management, and supervision, Sarajevogas would be able to implement the reconstruction program. The company has already a functioning PIU. Most of the needs of the 1996-97 project are in the Federation. Implementation of the works to be carried out within the Federation would be the responsibility of Sarajevogas. Cooperation with Sarajevogas-Lukavica (in Republika Srpska) will be necessary, particularly for works to be carried out on the transmission system between Zvornik and Kladanj. Cooperation between the two companies is satisfactory.

Box 3. Lessons learned

- **Strong project management is critical and must be provided for with external support.** District heating enterprises generally have weak capabilities in this area;
- **Good construction supervision, warehousing and inventory control procedures and continuous expenditure control are a must;**
- **The Government should ensure prompt release of goods by customs authorities;**
- **City governments should ensure prompt processing of construction permits, licenses, start-up approvals, and the like; and**
- **More efforts should be made by district heating enterprises to develop cost-covering tariff proposals, realistic financing plans, and improved billing and collection systems.**

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

26. The main short-term policy issues to be addressed in light of the 1996 experience (box 3) in the district heating and natural gas sectors are:

- *Cost recovery.* Because of the financial difficulties faced by consumers, billing and collection for district heating and natural gas services were suspended for household consumers throughout Bosnia and Herzegovina. These billing systems must now be restored, upgraded, and reintroduced; this task is complicated by the numerous changes in owners/occupants of dwellings and in street names. Metering, billing, and collection must be gradually but aggressively increased to ensure full cost recovery in the sector at the latest by the end of the transition period. While households may not be able to afford to pay much now, it is important that household tariffs (which currently cover only about 20 percent of economic costs) be increased as rapidly as possible during 1996-98 to cover all operating costs. Doing so would generate critically needed cash flow for the enterprises and suppress uneconomic demand (e.g. inefficient home-made appliances and leaking pipes have driven up per capita gas consumption to a level that is perhaps twice as high as it would be under normal circumstances);
- *Payment for current gas consumption.* This issue is linked to cost recovery and is of primary importance the conclusion of a sound long-term gas supply agreement with Gazexport (paragraph 14); and
- *Institution building.* A portion of technical assistance should be concentrated on training management and staff of the district heating and natural gas entities in modern utility management and operating techniques.

27. The main medium-term policy issues to be addressed in the district heating and natural gas sectors are:

- *Network reconfiguration.* Network planning studies should be launched to guide rehabilitation beyond the priority repairs and to prepare the optimal configuration of each city's future heating and natural gas system;

- *Settlement of past debts to Gazexport.* Normalization of the financial arrangements in the gas sector and determination of the share of the debt to be repaid by Republika Srpska and the Federation, respectively, for their gas consumption since 1992 will be essential; and
- *Sector restructuring.* Special attention should be paid to sector restructuring options such as breaking up Sarajevogas into a transmission company and several independent local distribution companies, and in the long run possibly privatizing selected components of the system. Since most district heating systems are too small to warrant splitting production, transmission, and distribution, there appears to be very limited scope for restructuring in the sector other than eventual privatization.



WATER AND WASTE MANAGEMENT

I. BACKGROUND

A well-functioning water, sanitation, and solid waste collection system devastated by the war

1. Before the war water and waste management services in Bosnia and Herzegovina were good, both in coverage and in quality. In urban areas piped water served 94 percent of the inhabitants and sewerage 72 percent, water production capacity kept pace with demand, and twenty-four hour service was the norm. In rural areas 35 percent of the population was connected to piped water supply systems and 10 percent to sewerage systems, a rate comparable to that in most industrial countries. Trash collection services were well managed, leaving urban areas reasonably free of litter; however, services were locally organized, using highly inefficient collection equipment with no recycling. Solid waste was disposed of in landfills, but few of the facilities were properly designed or managed to modern standards. Investment was adequate in water supply and solid waste disposal, but insufficient in wastewater collection and disposal. Thus sewerage coverage lagged well behind water supply coverage, and secondary treatment of wastewater was limited to Sarajevo and seven other medium-size cities.

2. Massive population movements during the war and high population concentrations in the parts of the country considered to be the safest intensified the effect of direct war damage, resulting in major problems in the delivery of basic water and sanitation services. Leakage losses increased, reaching up to 50 percent (compared with 30 percent before the war). In the Federation twenty-seven of the sixty-nine municipalities no longer have twenty-four hour service, and clogged sewerage and drainage systems have left areas flooded for extensive periods. In Republika Srpska war damage seems relatively minor, but all facilities have suffered from lack of maintenance. The problems have been exacerbated by the division of the country: water sources for municipalities in one Entity that originate in the other Entity are no longer functioning, largely because access is denied. The war also severely impaired the quality of solid waste services. In addition to extensive damage to collection equipment, accessibility to landfills has been severely limited by landmines and the overburdening of small urban tipping areas.

Neglect and lack of maintenance of irrigation and flood control systems

3. Infrastructure for irrigation, flood control, and drainage was not extensive in Bosnia and Herzegovina before the war. Irrigation was developed in the southern part of the country to produce Mediterranean crops. Most irrigation systems relied on piped delivery systems used primarily for conveying drinking water. Flood control works comprised river draining and levees and were limited to the main streams of the Sava, Neretva, Bosna, Sana, and Una river basins. In the Sava river basin, drainage canals were constructed to reclaim poorly drained land for development.

4. Damage to irrigation systems during the war came mainly from neglect, and rehabilitation of these systems is a relatively low priority except where required to restore drinking water service. In some areas flood control embankments were extensively damaged by the digging of trenches, the building of bunkers, the passing of heavy military vehicles, or artillery bombardments. Several drainage

pumping stations that pump water from behind the levees were military targets during the fighting and no longer function. Repair of these systems is critical to prevent future flood damage.

Disorganized institutions

5. Before the war municipalities were responsible for providing water supply, solid waste, and sanitation services in Bosnia and Herzegovina. These services were ensured by komunalcos (municipal service companies) that functioned as municipally owned joint stock companies. The Government was responsible for policy, master planning, regulation, technical support, flood control, and regional water systems construction and for providing most of the major investment financing to the municipalities. Government functions were ensured by the Ministry of Agriculture, Water Management, and Forestry through its implementing agency, Vodoprivreda Bosnia and Herzegovina (VBH), with a staff of about 350. Investment proposals were generally initiated by the komunalcos. Planning and implementation were the responsibility of the komunalcos for local projects requiring no federal funding and of the VBH for regional projects.

6. The war had a major impact on both the structure and the effectiveness of sectoral institutions. Though the division of responsibilities between the central Government and the municipalities did not change, the Federation and Republika Srpska now have independent water management enterprises -- the VBH in the Federation and Zavod za Vodoprivredu Republike Srpske (ZVRS) in Republika Srpska. In the Federation most cantons formed water management departments, though with unclear responsibilities -- a further modification of institution arrangements. Staffing was severely reduced at both the Government and municipal levels, as most qualified personnel left the country.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

7. The three- to four-year reconstruction program aims to:

- Restore water, sewerage, solid waste disposal, flood control, and irrigation systems to prewar levels; and
- Establish the proper institutional arrangements to make the improvements sustainable.

8. The program prepared in 1995 remains valid as an overall framework. It will require US\$363 million for implementation over the three- to four-year reconstruction period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$96 million was firmly committed**, leaving a financing gap of US\$44 million in the first-year program requirements (originally estimated at US\$140 million); achievements were nonetheless significant (paragraphs 10 to 16);
- **In 1997, US\$100 million is required**, 51 percent of which would benefit the Federation and 49 percent Republika Srpska (paragraphs 17 to 24); and
- **In 1998 and 1999, US\$167 million will be needed**, and issues of sector organization, investments priorities, and sanitation services upgrading should be addressed to ensure the medium-term sustainability of the reconstruction program, which will require the continued involvement of the donor community (paragraph 25).

**Table 1. Water and Waste Management Reconstruction Program
External Financial Requirements (US\$ million)**

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Federation				
Works and goods	238	87	44	107
Water supply	[188]	[77] ^a	[28]	[83]
Wastewater	[20]	[6]	[6]	[8]
Solid waste	[20]	[0]	[8]	[12]
Flood control and irrigation	[10]	[4]	[2]	[4]
Institutional strengthening	16	7	5	4
Project management	4	1	2	1
Sub-total	258	95	51	112
Republika Srpska				
Works and goods	95	0	43	52
Water supply	[52]	0	[29]	[23]
Wastewater	[20]	0	[6]	[14]
Solid waste	[15]	0	[5]	[10]
Flood control and irrigation	[8]	0	[3]	[5]
Institutional strengthening	7	1	4	2
Project management	3	0	2	1
Sub-total	105	1	49	55
Total	363	96	100	167

^a Includes commitments reported by donors as part of their "municipal infrastructure projects"

9. The priority reconstruction program includes several components:

- *Works and goods*: rehabilitation, reconstruction, and upgrading beyond prewar levels when economically justified (for example, in case of demand shifts as a result of population movements). A detailed reconstruction plan, including needs assessments and priority projects, was completed in September 1996 for the Federation. A similar plan was finalized in February 1997 for Republika Srpska;
- *Institution strengthening*: technical assistance, training, reconstruction of office facilities, and recurrent cost financing aimed at strengthening the Entity Vodoprivredas and Project Implementation Units (PIUs) to give them the capacity to manage the reconstruction program (see below) and preparing an institutional assessment of the sector and developing a long-term strategy for the sustainability of the reconstruction measures.
- *Project management*: although there is a need for recurrent cost financing for system operations, the amount budgeted is for implementation of the reconstruction program; the funds will be used mainly for institutional support of the Vodoprivredas, the new canton organizations, and the komunalcos, not for operating costs.

III. 1996 ACHIEVEMENTS

10. The objectives of the first-year program were to:

- Organize and plan the reconstruction effort for the sector; and
- Implement emergency measures.

Donors provided substantial funding to that effect (table 2).

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Water supply	77.0 ^a	Austria, Canada, EC, France, Germany, ICRC, Italy, Kuwait, Malaysia, Netherlands, Norway, Saudi Arabia, Sweden, Switzerland, UK, US, World Bank
Wastewater	6.0	Austria, EC, Luxembourg, US, World Bank
Solid waste	0.5	EC, WHO
Flood control and irrigation	4.0	US
Institutional strengthening	7.5	Netherlands, Switzerland, WHO, World Bank
Recurrent costs	1.0	Netherlands, World Bank
Total	96.0	

^a This amount includes commitments reported by donors as part of their "municipal infrastructure projects".

11. In 1996, activities concentrated mainly on emergency water works and equipment to Federation municipalities. Significant efforts were also made to reactivate and strengthen the Entity Vodoprivredas.

Rehabilitation works: Emergency waterworks and equipment supply

12. Many successful reconstruction or rehabilitation works were undertaken in 1996. Daily water service was reestablished in Sarajevo (although only for two hours a day in many areas). Materials and equipment were supplied and repairs were made in a number of municipalities.

13. Two types of implementation arrangements were used:

- Some donors implemented projects directly. The largest effort of this type is the European Commission's (EC) supply of materials and equipment to rehabilitate forty-seven Federation water and sewerage systems; the EC worked closely with the VBH to design standard equipment and material packages based on the number of customers served, but it carried out procurement and delivery of the packages directly. The Swiss Government is funding a directly implemented institution-building program in the Bihac canton, the Austrian Government is financing system upgrading projects in three municipalities, and the UK Overseas Development Administration (ODA), the U.S. Agency for International Development (USAID), the Red Cross, and the World Health Organization (WHO) are implementing their own programs (box 1); and

- Other donors including the Governments of France, Italy, Kuwait, and Saudi Arabia, and the World Bank, relied upon the Vodoprivredas (mainly VBH in the Federation) to implement their projects.

Institutional development: Reactivating the Vodoprivredas

14. The main institutional success was the reactivation of the Federation Vodoprivreda, the VBH. With forty-five employees, the VBH is implementing twenty-five projects (twelve of them high-priority emergency measures) and preparing an additional twenty-one for future implementation. The strengthening of the VBH was made possible by a grant from the Government of the Netherlands, that was used to outfit the VBH with computers, vehicles, office machines, office furniture, and instruments and to provide computer training for key staff. Similar efforts have been initiated in Republika Srpska.

15. The newly strengthened VBH assumed primary responsibility for the reconstruction program in the Federation, including setting priorities and carrying out the contracting for projects using funds under government control. Municipalities were responsible for supervising the contracts once they were awarded.

16. Another major contribution to the organization and planning of the reconstruction effort was the completion of sector needs assessments and sector emergency reconstruction and development plans for the Federation and Republika Srpska. The plans identify and prioritize water supply, wastewater, and solid waste disposal projects and identify but do not prioritize essential flood control and irrigation projects. The Federation plan includes a proposal to restructure the solid waste disposal sector at the canton level in order to increase efficiency and reduce costs. The proposal was accepted by the Government, and all proposed measures in the solid waste disposal sector are consistent with the plan.

Box 1. World Health Organization activities in drinking water quality

The World Health Organization (WHO) has been active in Bosnia and Herzegovina since 1994, working with the Entity Ministries of Health. The WHO's activities have focused on implementing a drinking water quality and surveillance program. In 1996 the WHO distributed twenty-three water quality testing kits to twelve regional public health institutes, six in the Federation and six in Republika Srpska. It also provided training to institute personnel on how to use the kits. Ten more kits are scheduled for delivery in 1997. The WHO also conducted eighteen public health engineering assessments, four in Republika Srpska and fourteen in the Federation. Finally, the WHO provided technical assistance to cities that received EC-funded trash collection vehicles, and offered training on the operation of medical waste incinerators.

IV. 1997 CHALLENGES AND FINANCING NEEDS

17. In 1997 donors should maintain the momentum of 1996 and expand their activities into Republika Srpska. In 1997, US\$100 million is needed to:

- Implement new investments within the framework of Federation and Republika Srpska priority programs;
- Strengthen institutions by preparing an institutional assessment and strategic plan for the institutional strengthening and restructuring of the sector; obtaining from each beneficiary of

the program cost recovery and system operations and maintenance plans as a first step toward sustainability and establishing a monitoring system and indicators for measuring reconstruction progress; and

- Cover minimal recurrent expenditures.

Emergency plans and physical investments identified (US\$87 million)

18. The proposed physical investments for the 1997 program are based on water and sanitation emergency reconstruction plans prepared for the Federation and Republika Srpska (see annexes 1 and 2).¹ Each plan includes a comprehensive assessment and a prioritized list of projects designed to meet the most urgent needs within the US\$258 million budget for the Federation and the US\$105 million budget for Republika Srpska for the three-to four-year reconstruction period (the plans are available from the World Bank, EC, and International Management Group). The listed measures are grouped into three categories:

- *Emergency measures* -- projects that can be implemented for less than US\$150,000, completed in less than one year, and have an immediate positive impact;
- *Reconstruction measures* -- larger projects designed to eventually restore prewar service levels; and
- *Development measures* -- designed to meet service levels in the future.

Strengthening institutions: A first step toward sustainability (US\$9 million)

19. *Institutional assessment and strategic plan.* Even before the war, water management in Bosnia and Herzegovina was highly centralized and services were heavily subsidized. The resulting investment planning and implementation were inefficient, and maintenance was poor (with a high level of unaccounted-for water). Setting up a new structure is a precondition for achieving sustainable reconstruction investments. As a first step toward restructuring the sector, the institutional situation should be assessed from the municipal level up; in particular, the role of the cantons in water management should be defined. A plan could then be drafted addressing organizational changes, personnel requirements, water management policy, privatization, and regulatory policy. The assessment and strategic plan should be completed and agreed on in 1997 for implementation beginning in 1998.

20. *Cost recovery and operations and maintenance plans.* Setting up cost recovery mechanisms is critical given the magnitude of the investments required, the need for covering operating costs, and the lack of budgetary resources. Donors should ensure that municipalities are prepared to use investments properly. Each municipality or other organization that receives donor funds should be obligated to first submit a cost recovery plan for operating and maintaining water supply, sewerage, and solid waste collection systems. The cost recovery plans should be gradual, targeting recovery of operating costs in

¹ The desired level of services were defined in consultation with the Vodoprivredas. Gaps between the actual situation and desired service levels were quantified and measures were formulated to bridge the gaps and provide the desired service levels. A multicriteria evaluation computer program, PrimaVera, was applied to set priorities. Criteria used consisted of location factors such as the refugee situation, damage to housing, the potential in the region for economic revival, and project benefits such as cost-benefit ratio and number of persons benefited.

three years and full cost recovery in five years. The plan should also explain how operational costs will be met during the first three years.

21. *Monitoring system.* To further improve donor coordination and ensure that scarce resources are directed to meet priority needs, a systematic monitoring and reporting system should be established. Reports would be distributed to all members of the water management task force (paragraph 24) and would be available to all potential donors.

Implementation arrangements

22. Donor support can be provided in three ways:

- Grants or credits to the Governments;
- Direct assistance to the benefiting municipality or canton; and
- A World Bank-administered trust fund (funds must be untied, and procurement is subject to World Bank procedures).

The Vodoprivredas in the Federation and in Republika Srpska should play an increasingly greater role in implementing projects, including preparing engineering designs and bidding documents, handling the bidding process, contracting, and administering contracts. The municipality water companies should be made responsible for supervising contracts and for approving payments to contractors.

23. Regardless of the implementation arrangements, donors should coordinate their activities with the PIUs set up in the Entity Ministries of Agriculture, Forestry, and Water Management. The PIUs act as a clearinghouse for all assistance and monitor implementation of projects. Together with the Vodoprivredas, they also decide on priorities with the assistance of the International Management Group (IMG). Donors should consult with the PIUs before allocating resources to specific projects to ensure that the works they plan to undertake are a priority and are not already being financed by another donor. During implementation donors should keep the PIUs informed on a regular basis about their activities and the progress of their projects.

24. A Water, Sanitation, and Solid Waste Task Force has been established under IMG-chairmanship to review donor activities in the sector, discuss mutual problems and concerns, and address policy issues. The Task Force, which meets about once every three months, includes representatives from the main donors in the field, from the Vodoprivredas, and from the PIUs.

Box 2. Lessons learned

- **Construction of new infrastructure should be financed only when existing facilities are properly managed.** When unaccounted-for water exceeds 25 percent (or when production per capita is above 200 liters a day) assistance should be conditional on the development of a demand management program;
- **Foreign technical assistance is required** to review project designs, bidding documents, and cost estimates prepared by local engineers and to supervise works for projects exceeding US\$5 million;
- **Project preparation should be done in time** to avoid delaying implementation and should not be considered complete until the recommendations have been incorporated into the project design and the cost estimates agreed between the reviewer and the project engineer;
- **Wastewater treatment should concentrate on primary treatment.** Secondary and tertiary treatment should be considered on a case by case basis;
- **Donor coordination is critical**, and donors should consult with the PIUs and the IMG before selecting projects, to avoid duplication of effort; and
- **Financial assistance to municipalities should be given on equal terms** to avoid the delay of projects by municipalities hoping to receive grant assistance. In the Federation the VBH has decided that all assistance should be passed on to the municipalities as soft loans (on terms to be decided after completion of the program, when the debt service requirements are known and can be allocated).

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

25. Most structural issues should be identified and addressed through the sector strategy plan, a component of the 1997 program. The recommended measures should then be implemented, including:

- Maintenance and further strengthening of existing capacities through training and technical assistance (technical assistance could take the form of twinning arrangements to emphasize financial management and commercial orientation);
- Private sector participation in, at least, providing selected services and running operations;
- Required changes in the regulatory framework; and
- Prioritization of investments, with a gradual transition from restoring basic services to enhancing service quality and upgrading sanitation and solid waste services, which are of particular concern from a public health perspective.

Annex 1. Federation Projects for the 1997 Program

Location	Project Description	Category ¹	Cost (US\$ million)
Grude, Ljubuski, Odzak, Orasje	Repair wastewater treatment plants	E	0.5
Bosanska Krupa	Rehabilitate water distribution network	R	0.5
Buzim	Construct water supply system	D	1.8
Celic	Upgrade water supply system	D	2.3
Gradacac	Construct water supply system	D	2.7
Kalesija	Construct water supply system	D	1.4
Ljubuski	Construct water supply intake	D	1.2
Sanski Most	Rehabilitate water treatment plant	R	1.4
Stolac	Develop new water source	E	0.7
Tuzla	Rehabilitate water source and water distribution system	R	3.0
Zavidovici	Rehabilitate water treatment plant and distribution system	R	1.7
Zvornik	Develop water supply system	D	1.4
Bihac	Construct landfill	D	1.4
Gorazde	Construct landfill	D	0.6
Livno	Construct landfill	D	0.6
Sanski Most	Construct landfill	D	0.6
Sarajevo	Rehabilitate water distribution networks	R	3.0
Sarajevo	Rehabilitate sewerage collection system	R	2.0
Sarajevo	Rehabilitate Alipasin Most pump station	E	0.9
Sarajevo	Rehabilitate Moscanica water source	E	0.2
Sarajevo	Rehabilitate Semizovo Vrlo water source	E	0.8
Sarajevo	Construct landfill for municipal solid waste	R	0.5
Bosnia and Herzegovina	Solid waste sector study	D	0.5
Bosnia and Herzegovina	Rehabilitate and repair flood protection embankments	E	2.0
66 municipalities	Supply equipment and implement a program to reduce unaccounted-for water	R	8.4
53 municipalities	Clean and inspect sewers	R	1.4
35 municipalities	Supply solid waste equipment	E	3.5
9 municipalities	Solid waste disposal studies and designs	D	1.0
Federation	Institutional strengthening	D	5.0
Total			51.0

¹ Categories are: E-emergency; R-rehabilitation; and D-development.

Annex 2. Republika Srpska Projects for the 1997 Program

Location	Project Description	Category ¹	Cost (US\$ million)
Banja Luka	Rehabilitate water distribution network	R	4.3
Banja Luka	Revitalize water treatment plant, low-cost water treatment	R	3.7
Banja Luka	Replace water distribution pipelines	R	1.7
Banja Luka	Rehabilitate well pumps, provide booster pumps for upper zone	R	1.5
Bijeljina	Rehabilitate water distribution network, replace transformer station	R	0.6
Bijeljina / Brcko	Construct new sanitary landfill	D	2.2
Brcko	Rehabilitate water distribution network and water production facilities	R	0.7
Derventa	Rehabilitate water distribution network	E	0.4
Doboj	Rehabilitate water distribution network	R	1.0
Gradiska	Protect wellfield	E	0.3
Kljuc / Ribnik	Reinforce distribution network	D	1.7
Knezevo	Rehabilitate water distribution network	R	0.4
Lopare	Rehabilitate water distribution network	R	0.2
Modrica	Replace sewage pump and replace water pipelines	E	0.3
Mrkonjic Grad	Rehabilitate water source facilities and water distribution network	R	0.5
Novi Grad	Rehabilitate wellfield pumping system	E	0.2
Prijedor	Rehabilitate water distribution network	R	1.1
Sipovo	Rehabilitate and expand water distribution network	R	1.2
Srp. Gradiska	Complete sewer to protect wellfield	E	0.3
Brod	Rehabilitate water distribution network and sewage pump station	R	0.7
Bileca	Rehabilitate water distribution network and water production facilities	R	0.9
Bratunac	Rehabilitate and replace water pumping equipment	E	0.1
Han Pijesak	Rehabilitate water distribution network	R	0.3
Ilidza	Construct water transmission mains	D	1.6
Kalinovic	Repair war damaged water supply and sewerage facilities	R	0.5
Nevesinje	Rehabilitate water distribution network and water production facilities	R	0.5
Sub-total			26.9

¹ Categories are: E-emergency; R-rehabilitation; and D-development.

Annex 2. Republika Srpska Projects for the 1997 Program

Location	Project Description	Category ¹	Cost (US\$ million)
Rogatica	Rehabilitate water mains, protect source Zilicina against flood	R	0.5
Sokolac	Rehabilitate water distribution network	E	0.3
Srbinje	Repair war damaged water supply facilities and rehabilitate water network	R	0.5
Trebinje	Rehabilitate waste water treatment plant	R	0.5
Trnovo	Rehabilitate waste water treatment plant and repair war damage	E	0.3
Zvornik	Rehabilitate water distribution network and water production facilities	R	0.5
Rivers	Protect residential and agricultural areas against flood	E	3.2
21 municipalities	Supply solid waste collection equipment and spare parts	E	2.7
Cantons	Supply sewer cleaning and septic tank emptying equipment	E	1.6
All municipalities	Supply of equipment / materials for operation and maintenance	E	3.3
Various municipalities	Studies for water supply, sewerage and solid waste disposal	D	1.7
Republika Srpska	Institutional strengthening	D	4.0
Total			46.0

¹ Categories are: E-emergency; R-rehabilitation; and D-development.

LANDMINE HAZARD MANAGEMENT

I. BACKGROUND

1. With more than 17,000 mine fields already identified, large areas in both Entities of Bosnia and Herzegovina are inaccessible because of the threat of mines.¹ Mine contamination is particularly severe in bands of contamination about 5 kilometers (km) wide along former confrontation lines. Unexploded ordnance remains in most places where fighting occurred. "Booby traps" pollute former areas of confrontation and regions from which ethnic minorities have been expelled. And uncertainty about the location and extent of mine fields exacerbates the problem -- since land is prevented from being used due not only to mines but also to the fear resulting from lack of information on the mine situation.

2. Clearing all mines will take years -- probably decades -- and implementation will have to rely on local capacities beside international contractors. Developing adequate local capacity is a major challenge, since mine clearing is a new sector in Bosnia and Herzegovina as it would be in most countries. All the other areas of the reconstruction program draw on structures and experienced capacities that existed prior to the war. In the case of landmines new institutions and operational organizations have to be created, staffed, trained, and equipped -- and time to address this issue is very short, since the nascent sector has to face the challenge of urgently undertaking an enormous amount of mine clearing. During the first phase of reconstruction interim implementation arrangements to carry out urgent works shall be put in place.

3. Landmine contamination threatens all aspects of Bosnia and Herzegovina's recovery. Mines were laid to prevent the use and rehabilitation of infrastructure (bridges, buildings, water wells) and reconstruction contracts cannot be implemented until mine hazards have been eradicated. Resettlement of refugees and displaced persons is slowed by the threat (real and perceived) of mines -- a threat to which these populations are particularly vulnerable since they have no easy access to reliable mine information. Community revival is often endangered by mine hazards. Thus implementation of a mine clearing program is essential to preventing delays in every aspect of reconstruction and community recovery -- and a substantial amount of assistance, both financial and advisory, is needed from the international community to support this effort.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

4. The objectives of the landmine program are to make land available for use -- both by clearing identified mine fields and systematically surveying "priority areas" to remove most of the uncertainty on

¹ As used here, the term "landmine" or "mine" includes antitank and antipersonnel landmines, unexploded ordnance (mainly shells), and "booby traps" (i.e. concealed explosive devices contrived to go off when some harmless-looking object is touched).

the mine situation -- and to prevent mine-related accidents. These activities are to be carried out to support reconstruction and resettlement objectives, and to provide assistance to communities at risk.²

5. The reconstruction program submitted in December 1995 and April 1996 to achieve these objectives remains valid. It will require US\$203 million in external financial support for the three- to four-year period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$51 million was committed**, which left a 27 percent financing gap over initial estimates of first-year needs, estimated at US\$70 million (paragraphs 7 to 16);
- **In 1997, US\$60 million of external financing is required** -- 65 percent of which would benefit the Federation and 35 percent Republika Srpska (paragraphs 17 to 27); and
- **In 1998 and 1999, some US\$92 million will be needed** -- and policy issues should be addressed to ensure medium-term sustainability of the program, which may require the continued (although substantially reduced) involvement of the donor community (paragraph 28).

**Table 1. Landmine Program External Financial Requirements
(US\$ million)**

	3-4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Institution building	21	9	8	4
Local capacity building	30	22	6	2
Mine awareness	10	2	3	5
Mine hazard assessment	4	0	1	3
Marking and clearing	138	18	42	78
Total	203	51	60	92

6. Five priority actions are to be carried out under the program:

- **Institution building:** setting up and developing local institutions at a level sufficient to conduct mine clearing operations over the medium term;
- **Local capacity building:** developing and strengthening local implementation capacities (e.g. commercial companies, NGOs, and so on);
- **Mine awareness:** reinforcing mine awareness to prevent accidents, particularly among the most vulnerable groups (returnees, children);
- **Mine hazard assessment:** conducting surveys in priority areas (particularly reconstruction sites and target resettlement areas) to reduce uncertainty and thereby shrink the areas considered inaccessible; and

² A distinction is sometimes made between "humanitarian mine-clearing", aimed at diminishing mine-related risks in everyday life, and "reconstruction mine-clearing", in support of rehabilitation projects. In Bosnia and Herzegovina the links between the various aspects of the country's recovery (reconstruction, reintegration of refugees and displaced persons, revival of communities) make it impossible to draw a clear line between various "types" of mine clearing (clearing mines to rehabilitate housing in a village to which refugees are to return is a mix of support to reconstruction and resettlement, and has a significant humanitarian impact).

- **Marking and clearing:** marking known mine fields that cannot be cleared in the very short term and carrying out urgent mine clearing wherever necessary (manually or with “dog teams”).

III. 1996 ACHIEVEMENTS

7. The aim of the 1996 program was to simultaneously (i) establish the core capacity for handling mine clearing over the next few years and (ii) conduct mine field surveys and urgent mine clearing. Through the combined efforts of bilateral and multilateral donors, the Implementation Force (IFOR), NGOs, and the governmental authorities in Bosnia and Herzegovina, progress was made on the institutional side with the establishment of mine clearing agencies (by the State and Entity Governments as well as by the United Nations), emergency mine clearing took place, and no significant infrastructure reconstruction contract was held up for mine-related reasons.

8. However, much less emergency mine clearing took place than had been expected, mainly because of the weakness of the local mine clearing sector (which was almost nonexistent at the beginning of the year). Recognizing the capacity constraints, the Mine Clearing Program submitted in December 1995 recommended a two-pronged approach: making use of international capacity for urgent mine clearing while simultaneously building local capacity. This approach was modified in practice, because of the Government's desire to maximize the use of local mine clearers from the start and to avoid the relatively high costs of using foreign companies. The development of appropriate alternative approaches (joint ventures, use of international consultants for team management and site supervision, etc.) has, however, taken time. Additional difficulties resulted from persistent disagreements between the State and Entity Governments on the sharing of responsibilities. Works started on a small scale in fall 1996.

9. The main donor commitments for mine clearing operations are shown in table 2. The achievements made possible by these contributions are described in more detail below.

Table 2. Firm Donor Commitments in 1996
(US\$ million)

	Amount	Main Donors
Institution building	9.0	EC, Japan, Sweden, US, World Bank
Local capacity building	22.0	Denmark, EC, Italy, Norway, US
Mine awareness	2.0	Canada, Denmark, Sweden
Mine hazard assessment	0.1	World Bank
Marking and clearing	18.0	Belgium, Italy, Netherlands, Sweden, World Bank
Total	51.1	

Institution building: Mine clearing agencies established

Box 1. Institutions in support of the Mine Clearing Program

Three local mine clearing agencies were established in spring 1996, one by the State Government (the Mine Protection and Removal Agency, or MPRA), and one each by the Entity Governments (the Federation and Republika Srpska Project Implementation Units, PIUs). Because this structure was ineffective, however, the sector was reorganized in late 1996 and early 1997. A National Demining Commission, including representatives from all constituent peoples, is being set up with a primarily regulatory function. For project implementation, each Entity has established a Project Implementation Unit (PIU), that works in a decentralized manner through regional offices (in Bihac, Mostar, and Tuzla for the Federation; in Banja Luka and Pale for Republika Srpska). There is not yet evidence that the difficulties encountered in 1996 (resulting from both the relative scarcity of competent and experienced local technicians and persistent political tensions) have been overcome, however.

In addition, international institutions have been:

- Promoting inter-Entity dialogue through the Mine Clearance Policy Group (dissolved following the September 1996 elections) established by the Office of the High Representative and consisting of representatives of the State and the two Entities as well as donors;
- Providing technical expertise through the United Nations-established Mine Action Center (MAC); and
- Ensuring donor coordination through the United Nations-chaired Sectoral Task Force, which provides a forum for discussing common interests, mobilizing resources, and identifying gaps as well as carrying out a policy dialogue.

10. In 1996 the authorities in Bosnia and Herzegovina and the international community set up -- and made operational -- a core institutional structure for mine-related issues (box 1), particularly for:

- Mine information management;
- Contracting, supervision of works, and quality assurance;
- Design of procedures (e.g. for prioritization or safety standards); and
- Coordination of mine clearing activities.

Local capacity building: Nearly 600 mine clearers being trained

Box 2. Military experience and civilian mine clearing

Military mine clearing is directed at "punching a hole" through a mine field during combat. Since mine fields are often protected by defensive fire, techniques are designed for speed: mines are merely pushed aside without being destroyed, and a residual level of mine pollution is considered acceptable. Clearance in support of civilian activities must be much more intensive, since no mine contamination can be tolerated after land has been declared available for use.

Military and civilian techniques are therefore different, and experience for other countries shows that military mine clearers need training to carry out civilian mine clearing. In Bosnia and Herzegovina, IFOR has warned that areas cleared by the former warring factions should not be considered safe for civilian use.

11. Because local implementation capacity is still at a nascent stage, mine clearing efforts were slow in 1996. Most of the existing mine clearing organizations lack equipment and skilled personnel -- and the military mine clearing experience of many demobilized soldiers is not readily transferable to civilian operations (box 2). Efforts in 1996 were directed toward providing training for mine clearers and site supervisors, designing employment mechanisms for newly trained specialists, and making equipment available to them:

- The United States is funding the training and employment (for one year) of about 165 mine clearers. The total cost of the operation in 1996 and 1997 amounts to US\$15 million. Training has been completed and survey and demining operations commenced in early November in the Banja Luka, Tuzla, Sarajevo, and Mostar areas; other operations are expected to commence in the Jablanica and Trebinje areas during December. The United States also established a small school for deminer and mine dog training at Brus (close to Pale, in Republika Srpska);
- The European Commission (EC) is financing a similar (US\$8 million) program for 250 mine clearers that is expected to be operational by early spring 1997; and
- Norwegian People's Aid has established, with Norwegian Government funding (US\$5 million), a training school in Srebrenik (near Tuzla) and has trained 60 mine clearers.

Mine awareness: A focus on the most vulnerable groups

12. During the war mine awareness programs were developed and implemented by both the governmental authorities and the international community. These activities continued into 1996 with a special focus on the most vulnerable groups (returnees, children). State and Entity Governments, together with local and international NGOs, have used television broadcasts and programs implemented through the Entity Ministries of Education to raise awareness of mine dangers. Through local initiatives, IFOR also has contributed to community-level mine awareness.

Mine hazard assessments: More than 17,000 mine fields identified

13. Identifying the location and the extent of minefields by collecting, validating and recording information -- from the former warring factions, as required by the Dayton-Paris Peace Agreement, or from local residents -- was a high priority in 1996. IFOR and the Stabilization Force (SFOR) made a significant contribution by identifying more than 17,000 mine fields with the assistance of the local armed forces and building on the initiatives of the United Nations Protection Force. Information has been forwarded to a centralized database established with financial support from the United States and managed by the United Nations-established Mine Action Center (MAC). The database is incomplete, however, and believed to cover only 50 to 60 percent of the total number of mine fields.

14. In parallel, an initial list of priority areas for reconstruction, recovery, and resettlement has been assembled by the Governments. Preliminary surveys (mainly compiling of existing information, such as police and civil defense reports and interviews with local authorities and residents) were conducted to define the level of mine-related risk in each of these areas. The Government issued "Risk Assessment

Certificates” based on these surveys.³ A mine clearing works program should now be designed by integrating data from the MAC-managed database with information related to the scheduling of subsequent activities on the site.

Marking and clearing: A slow start

15. Urgent mine clearing was required in 1996 for many areas -- where reconstruction was urgently needed, where refugees or displaced persons were prevented from returning by mine hazards, or where communities were at risk. Funds were made available for this purpose in the framework of the Emergency Landmine Clearing Project, designed by the State and Entity Governments with the support of the World Bank and MAC in early summer 1996, and aimed at clearing mine fields in support of reconstruction, reintegration of refugees and displaced persons as well as community recovery, and at supporting local mine clearing institutions. The main donors were Italy (US\$3.9 million), the Netherlands (US\$1.8 million), and the World Bank (US\$7.5 million). Works started slowly, however, with the first contracts awarded in October 1996 (box 3).

Box 3. Urgent mine-clearing projects under implementation

- With funding from the Emergency Landmine Clearing Project, the Government has contracted local companies to clear a number of priority areas: schools (including a school for blind children in Sarajevo), the main railway yard in Rajlovac, power lines, roads and bridges (which currently constitute critical bottlenecks in the transport system). International specialists were hired to supervise the local companies and ensure safety and effectiveness. Works were implemented between mid-October and December 1996;
- Norwegian People's Aid initiated surveys, marking, and clearing with a focus on the Tuzla area (and during winter, the Mostar area). It also cleared minefields for the reopening of a tramway line from Sarajevo to Ilidza and in support of the International Criminal Tribunal for the former Yugoslavia; and
- The mine clearers trained and equipped by the United States started surveying and clearing minefields in early November 1996 in Banja Luka, Sarajevo, Tuzla, and Mostar; during the winter, demining operations were shifted southward to focus on Jablanica, Mostar, and Trebinje areas.

16. IFOR/SFOR engineers were also engaged in clearing areas of importance for military operations (Sarajevo Airport, Mostar Airport, railways bridges, camp areas), either by using international troops or by contracting local companies. These works have often had major benefits for civilian populations and reconstruction activities. IFOR/SFOR also supervised the lifting of mines by soldiers from former warring factions: mines have been removed from about 1,600 mine fields (11 percent of the total number). However, such “lifting of mines” often does not meet civilian standards, and IFOR has repeatedly warned that the corresponding areas should not be considered fully cleared.

³ Areas are defined as “low risk”, where human activities can start immediately; “high risk”, where mine-clearing works have to be carried out first; and “unknown status” where additional surveys (with mine-detecting dogs or specific equipment) are required

IV. 1997 CHALLENGES AND FINANCING NEEDS

Overall objectives and financing requirements

17. Challenges in 1997 result from the combination of two factors: the major reconstruction effort under way requires the surveying of a large number of areas and the probable clearing of many of them; and the mine clearing sector is still nascent and capacities are limited. Thus donor support in 1997 should focus on:

- Transforming the 1996 core capacities into a developed mine clearing sector that can implement large-scale activities over the medium term; and
- Carrying out urgent works as required for implementation of the reconstruction program, for resettlement of refugees and displaced persons, and for a reduction of mine hazards at the community level -- which will require training, surveying, mine clearing, and promoting mine awareness.

18. To achieve these objectives and prevent mine-related delays in the implementation of the reconstruction and resettlement programs, financial assistance totaling US\$60 million will be required from the donor community.

Institution building (US\$8 million): Strengthening local agencies

19. Continued financial and technical assistance is needed to strengthen the Governments' mine clearing agencies. By the end of the year these institutions should have the necessary expertise, skills, and capacities to implement large-scale mine clearing activities (including developing a work program, preparing mine clearance contracts, establishing and monitoring accounting procedures, designing technical and safety standards, and ensuring the quality of the works) with limited external assistance.

20. While local agencies are being progressively strengthened, the MAC will have to play a critical role by providing the necessary technical expertise.⁴ Continued financial support (in terms of both staffing and cash) should be provided by the donor community.

21. A special effort should also be made to continue developing the mine information system within MAC by collecting additional information, checking and updating existing data, and making them widely available. Donor assistance is required not only to cover (limited) incremental operating costs but also to ensure that information collected during implementation of their projects is properly communicated to the central database. The continued operational assistance of IFOR/SFOR is critical in this regard.

Local capacity building (US\$6 million): Developing an industry

22. Developing sufficient mine clearing capacity remains important for the implementation of the 1997 reconstruction and repatriation programs. Support, both financial and technical, is required:

- **Provide training:** according to MAC's first estimate, up to 1,200 mine clearers and site supervisors should be trained in Bosnia and Herzegovina (mainly through three-week

⁴ MAC will be handed over to government authorities by the end of 1997, and much attention should be given to the transfer process, which should be smooth and gradual -- the MAC's role should be progressively reduced while the capacities of government agencies are developed.

sessions for demobilized soldiers). Donors could either provide further support to organizations that have already established training facilities (paragraph 11) or assist the Governments' agencies in setting up new training capacities to address uncovered needs; and

- **Establish employment mechanisms:** experience in other countries has shown that employment opportunities must exist in order for training programs to be effective. Thus donors that support training activities should ensure that adequate structures (such as commercially or governmentally controlled companies) will have the capacity to employ the newly trained mine clearers and that corresponding resources for mine clearing are available. In some cases, it will be needed to provide support to such organizations during the start-up phase.

23. In the absence of appropriate employment mechanisms, several donors established mine clearing capacities operating under their direct control in 1996, with a view to eventually handing them over to the Governments or to local structures once strengthened -- probably in 1997. The transfer of capacities should be carefully designed to ensure not only that the transferred capacities can be used optimally, but also that the transfer process does not weaken other components of the mine clearing sector (for example, the transfer of large capacities to public authorities could destabilize the newly established commercial sector).

Mine awareness (US\$3 million): Preparing for the medium term

24. To prevent accidents in the years -- and possibly decades -- to come, awareness of mine-related risks has to be continuously reinforced within the population. Financial support should be provided to the Governments and to experienced NGOs to both continue projects currently under implementation (such as broadcasting and distributing "mine-awareness comics") and initiate new activities (mainly at the community level), with a special focus on the most vulnerable groups (children, displaced persons and refugees). Assistance should not be limited to short-term activities and should focus on developing the medium-term capacities that are required to address this issue beyond the three- to four-year reconstruction program.

Surveying, marking, and clearing (US\$43 million): Surveying and clearing priority areas, and marking known mine fields

25. Information is still insufficient to clarify the mine risk (real and perceived) in all areas. Because mine clearing is a very slow process, it should be limited to areas where the presence of mines impedes critical activities or where communities are exposed to an unacceptable level of risk. A two-pronged strategy is proposed:

- **Priority areas for reconstruction, community recovery, or resettlement should be systematically surveyed prior to starting implementation of any activity.** Once the likelihood of mine fields within these areas has been assessed, a decision should be made on whether development activity can proceed or mine clearing is required (should that be the case, clearing should be undertaken as soon as possible); and
- **Identified mine fields should be surveyed** to locate exactly the outer edge of the mine fields and, in the case of isolated mines, to remove these mines. The use of mine dogs or of mechanical equipment should be considered for that purpose.

Implementing mine clearing operations: A multi-pronged approach

26. In 1996 donors carried out mine clearing works through two main sets of implementation arrangements:

- **Awarding contracts to local commercial companies** through a competitive bidding process; the State and Entity Governments support this "competitive contracting approach" (in Croatia, the Government's initial investigations indicate that this is the most cost-effective option); and the World Bank-supported Emergency Landmine Clearing Project provides a useful vehicle for that purpose; and
- **Funding local or international NGOs** operating under direct donor supervision; this approach was used successfully in 1996, mainly by Norwegian People's Aid for mine clearing in support of reconstruction projects and humanitarian activities.

Box 4. Technical standards

While designing implementation mechanisms, donors should ensure that adequate technical standards are respected. Three points should be given particular attention:

- **Training standards should be harmonized and validated**, MAC could play a leading role in this regard by assessing the quality of the curriculum and possibly by awarding certificates to newly trained mine clearers;
- **Mechanisms should be designed to systematically ensure the safety and effectiveness** of mine clearing operations; doing so will require continued foreign technical assistance in 1997 -- through joint ventures, international supervision of works carried out by local companies, or international management for donor-controlled teams; and
- **Independent quality control should be carried out systematically** after clearing to ensure the absence of residual mine pollution.; cleared areas should be considered ready for subsequent use only after a formal certificate has been issued by government mine clearing agencies.

In parallel, several actors in the field have proposed alternative implementation methods:

- **Establishing a transitional mine-clearance capability**, initially under the control of MAC, and eventually transferred to local authorities; this effort would be supported by qualified foreign specialists to instruct, manage, and supervise mine-clearance teams;⁵ such an approach has been developed successfully by the United Nations in a number of countries (such as Cambodia); and
- **Establishing operational teams under the control of government authorities**; under this scheme donor efforts would be limited to providing training and equipment, possibly to the armies; Governments -- State, Entities, or Cantons -- would be responsible for carrying out works effectively; the U.S. Government has announced its commitment to train and equip 150 soldiers in each of the three armies for this purpose.

⁵ International staff could be either provided by donors as in-kind contributions or recruited by the United Nations if no other employment mechanism can be put in place rapidly.

Since mine clearing is a new activity in Bosnia and Herzegovina, following a multipronged approach in 1997 should minimize the risks associated with the program. The outcome should be reviewed at the end of the year to take stock of progress and best advise the donor community on further financing. Subject to the availability of necessary resources, different arrangements would then be developed simultaneously and in a coordinated way.

27. Additional recommendations can be made in view of the experience gained in 1996 (box 5):

- **Mine clearing activities in support of infrastructure reconstruction projects should be funded as part of the corresponding sectoral programs**, to ensure adequate financing and smooth implementation -- donors should be ready to allocate part of their sectoral infrastructure contributions to required mine clearing activities. The sectoral PIUs would be responsible for defining detailed mine clearing requirements as well as for overall implementation; they should, however, delegate the contracting and supervision of mine clearing to the Government mine clearing agencies;
- **The governmental mine clearing agencies established at the Entity levels should be made fully responsible for implementing all mine clearing activities not directly related to sectoral programs** (training, mine awareness, mine clearing in support of communities at risk and so on); and
- **Coordination of donor activities in the field is essential** to ensure that activities complement one another and to avoid overlapping or inconsistencies (such as the use of incompatible equipment), as well as to ensure that funds are spent in support of Governments' priority programs; all donors should support the UN-led Sectoral Task Force in its efforts to maximize the value and impact of foreign funding.

Box 5. Lessons learned in 1996

- **Use of dogs and mechanical equipment could be the most cost-effective technical solution.** According to preliminary information, most mine fields seem to contain only a small number of isolated mines. The use of mine-sensing dogs or mechanical equipment (such as remote-controlled mini-flails or rollers) would make it possible to rapidly locate the isolated mines -- and to remove them immediately. Donors should give consideration to this solution, which may be best to ensure both rapid clearance and cost-effectiveness;
- **Local mine clearing capacity is still too weak to undertake all the activities that have to be carried out in 1997.** Local organizations, whether commercial companies or NGOs, lack equipment and experienced staff. Significant training is needed to develop and strengthen capacities as quickly as possible. Foreign expertise will still be needed in 1997 to ensure effective implementation of works and to minimize the risk of accidents;
- **Assessing mine hazards on reconstruction sites prior to the beginning of the works reduces costs and risks.** Because the exact location and extent of mine fields are not known, contractors implementing reconstruction projects may err by being too cautious (thus increasing reconstruction costs), or by not being cautious enough (thus exposing their staff to unnecessary risks). Conducting preliminary surveys to assess the level of risk has proved effective in reducing risks and costs. This approach ought to be generalized for all reconstruction, resettlement, and recovery activities; and
- **Information must be centrally managed.** Clearing mines without reporting the exact location and extent of the cleared areas is almost useless, since fear and uncertainty remain. To reduce risks and prevent accidents, detailed information must be made broadly available to all potential beneficiaries (local inhabitants, contractors, returnees, authorities, etc.). The central database set up by MAC is a first step toward a centralized information system for collecting, verifying, and disseminating information, and the continued cooperation of all donors involved in the sector is crucial.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

28. Substantial resources will be needed in the years, and possibly in the decades, to come to progressively reduce mine-related risks. Financial support from the international community, while necessary in the short-term, cannot substitute in the medium term for locally generated resources, and Governments will have to design adequate mechanisms to mobilize the necessary funds:

- Mine clearing in support of technical sectors (mainly construction and rehabilitation of various kinds of infrastructure and facilities) should increasingly be funded through each sector's income (e.g. through fuel or vehicle taxes for the road sector or electric power company revenues for the power sector); and
- For activities with no prospect of generating revenue (such as mine clearing of community areas), donor funding is likely to remain necessary for some time to come. Donors should be prepared to extend their contribution over the three- to four-year reconstruction program (as has been the practice in most other mine-polluted countries), but Governments will need to contribute to the costs on an increasing basis.

INDUSTRY AND FINANCE

I. BACKGROUND

Before the war, an important sector on its way to a market economy

1. Before the war Bosnia and Herzegovina had considerable industrial activity, natural resources, capital stock, and technical and commercial human skills. Industry contributed about half of gross national product (GNP) and nearly half of nonagricultural employment. There were about a dozen large conglomerates, generally export oriented, and about a thousand small and medium-size firms supplying local markets. Production ranged from intermediate industrial products to consumer goods. Companies were managed according to "market socialism" and "self-management" principles. Enterprises were "socially owned": assets were owned by the society at large (there was no state property), and workers councils ran the companies. In principle, key decisions were made by workers; in practice, decisionmaking was delegated to managers formally selected by workers councils and tacitly approved by the political system. Although there was some competition in product markets, competition and mobility in the labor and financial markets were restricted. Commercial banks were the only source of institutional capital, and bank credit was the only form of financing for enterprises. Banks were owned and controlled by large companies, which used them to obtain financing on favorable terms.

2. Yugoslavia initiated structural reforms in 1988-89 to improve the legal and regulatory framework for private enterprises and to restructure socially owned companies. After independence in 1991 Bosnia and Herzegovina prepared further reforms, but the outbreak of war prevented any significant progress. Since 1992 three legal frameworks have been developed in parallel. The Bosniac-majority part of the Federation and Republika Srpska established centralized systems of control (primarily for military reasons): socially owned assets were nationalized and new management boards were appointed. The Croat-majority part of the Federation made some progress toward privatization and authorized companies to develop joint ventures and similar types of private business arrangements, although the authorities reserved the right to appoint enterprise management.

Opportunities for revival despite the impact of the war

3. Today industrial sector is a shadow of its former self. The war severely set back industrial development, not only because of the extensive physical destruction but also because of the disruption of trade links (particularly within the former Yugoslavia) and the legal confusion it created. The industrial sector operates at just 10 to 30 percent of its capacity, and the unemployment rate outside of agriculture is devastatingly high, at around 50 percent in the Federation and more than 60 percent in Republika Srpska. Contraction of output has been uneven throughout the country:

- The Bosniac-majority part of the Federation suffered the heaviest physical capacity damage, with production currently at 15 to 20 percent of its prewar level;
- Republika Srpska suffered less extensive physical damage, but industry was severely affected by the economic embargo; production is currently at 8 to 10 percent of its prewar level; and

- The Croat-majority part of the Federation maintained production and trade throughout the war, although at a reduced level; it also has a larger number of private enterprises, liberal foreign investment policies, and strong links to foreign countries.

4. The banking sector also suffered from the war. Foreign currency assets were frozen at the beginning of the war, which created deep distrust of banks. The banking system is largely devoid of funds, and enterprises lack critical cash resources. Large amounts of nonperforming loans in the banks' assets, extensive foreign exchange deposit liabilities, and the virtual extinction through hyperinflation of the real deposit base in local currency have undermined the ability of banks to extend credit, generate income, and help restore confidence in the banking system. Household deposits are negligible, commercial and public sector deposits are low, and only a limited amount of short-term credit is extended -- which is insufficient to finance the investments needed to revive the economy. In addition, accounting standards need to be improved to reflect balance sheet values and income and loss streams; there are currently no suitable loan classification standards and loan loss provisioning requirements, and the regulatory framework is insufficient for developing a market-based banking sector.

5. There is, however, real potential for revitalizing the industrial sector despite the overall bleak picture (box 1). Box 2, later in the text, presents the preliminary results of a survey conducted to assess the importance of various factors as impediments to business revival.

Box 1. Encouraging signs of revival

Several indicators of a revival of the industrial sector have been observed:

- The authorities have demonstrated their commitment to a market economy, and the prewar trend of increasing private sector activity has been maintained throughout the country: the private sector provides two-thirds of employment and represents nearly 60 percent of the current book value of enterprises, especially in commerce and transport services; although most prewar conglomerates remain idle, private enterprises and some smaller socially owned enterprises have become quite active, especially in commerce and transport services;
- Although destruction and looting have been extensive in some areas, only a small portion of the overall industrial capacity has been damaged, and some regions have been almost completely spared (Banja Luka and southern Herzegovina, for example);
- Despite somewhat outdated technology and lack of maintenance throughout the war, many plants are still relatively well equipped, with serviceable machinery capable of producing and marketing quality products;
- Management and technical structures have been relatively well preserved since managers and senior technicians were exempt from military duty;
- Operating costs are generally competitive as a result of low wages;
- Foreign industrial partners have expressed interest in establishing trade and investment links (subject to political stability); and
- Albeit small and often short on funds, the recently established private banks are beginning to extend credit to industries.

II. RECONSTRUCTION AND FINANCING CHALLENGES

6. The primary aim of the industry and finance recovery program is to stimulate sustainable growth and employment by:

- Facilitating private sector involvement and preventing the re-emergence of direct government involvement in industrial production and transactions;
- Developing small and medium-size economic activities -- an effective way of creating long-term employment opportunities;
- Focusing assistance on competitive enterprises or commercially viable parts of larger enterprises;
- Improving operational efficiency, resource allocation, and output quality through targeted investment projects;
- Helping enterprises to restore trade links with foreign partners; and
- Facilitating expansion of financial intermediation and enhancement of the saving-investment process.

7. The overall framework and priorities submitted in December 1995 and April 1996 remain valid. A series of investment projects prepared to rehabilitate the industrial sector will require US\$612 million in external financing within the overall US\$5.1 billion priority reconstruction program (table 1) -- a substantial increase from the initial assessment(US\$400 million) for the three- to four-year program:

- **In 1996, US\$192 million was firmly committed**, substantially more than the initial estimate of first-year needs (US\$120 million), and several activities were successfully carried out (paragraphs 11 to 18);
- **In 1997, US\$180 million in external financing is required**, 62 percent of which would benefit the Federation and 38 percent Republika Srpska (paragraphs 19 to 31); and
- **In 1998 and 1999, some US\$240 million will be necessary**. Private capital, both domestic and foreign, is expected to gradually replace donor assistance, but several policy issues will need to be addressed first (paragraph 32).

**Table 1. Industrial Recovery Program External Financial Requirements
(US\$ million)**

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Lines of credit	293	115	80	98
Political risk guarantees	135	11	65	59
Technical assistance	60	33	10	17
Equity funds	118	27	25	66
Critical inputs and equipment	6	6	0	0
Total	612	192	180	240

8. The program includes four main elements:

- *Debt financing schemes* to provide short- and medium-term financing for small and medium-scale private sector activities, mainly through lines of credit and through targeted programs for microenterprises that lack access to formal banking institutions;

- *Guarantee schemes* to provide coverage against noncommercial risks for foreign business partners and to support the revival of trade with foreign partners (especially for viable parts of large industrial enterprises);
- *Targeted technical assistance* to support small and medium-size enterprise development, enterprise restructuring and privatization, and financial sector development, and also to provide access to modern technology; and
- *Equity financing schemes* to provide longer-term foreign financing to domestic firms, to facilitate the development of joint ventures, and to strengthen the capital base and operations of suitable private banks.

Specific projects have been designed for each component. The International Financial Institutions mainly the World Bank, the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD) have prepared projects that can be used as vehicles to channel donor resources. In addition, several donors (including the Governments of Indonesia, Japan, Malaysia, Sweden, and Switzerland) have provided critical inputs and equipment as emergency assistance to selected enterprises.

Policy environment: Reform programs for private and financial sector development

9. In-depth reforms are needed to stimulate recovery, maintain its pace, and ensure its sustainability beyond the initial reconstruction period. Changes in policies should be aimed at developing a market economy, promoting private sector development, and building an open and integrated economy within a reasonably short period. Reforms should be initiated at early stage of the reconstruction period. The transition has been difficult in many Central European countries, and will be even more so in Bosnia and Herzegovina, where reforms, reconstruction, and development of governmental structures have to be carried out simultaneously. Generating the right industrial strategies and regulatory regime, building a consensus on the required reforms, and strengthening commitment for their implementation is urgent. Donor assistance will be needed to facilitate the transition and assist Bosnia and Herzegovina's authorities in designing and implementing the necessary reforms, with an emphasis on:

- Building a new legal and institutional framework within a substantially smaller and more efficient public sector, with functioning market mechanisms to allocate of resources and distribute income and improved conditions for foreign investment;
- Pursuing crucial reforms in trade, tax, and labor regulations to minimize barriers to internal and external trade and to enhance the mobility of finance and labor;
- Clarifying and implementing new fiscal arrangements between the State and the Entities; and
- Adopting uniform foreign trade and customs tariff policies.

The International Monetary Fund (IMF), the European Commission (EC), and the World Bank, in cooperation with several multilateral and bilateral agencies, are preparing programs to address these issues. Implementation will start in the next few months and should help create an appropriate environment for restructuring enterprises and banks, stimulating private sector-led growth, and encouraging critically needed foreign investments. These developments will complement and facilitate implementation of the industrial recovery program.

Box 2. The enterprise survey: Entrepreneurs' concerns

In August and September 1996 the World Bank surveyed 175 industrial, services, and commercial enterprises in Bosnia and Herzegovina (150 firms in the Federation and 25 in Republika Srpska) in order to better understand their situation and the constraints they face. Public, private, and mixed ownership firms were included. The survey found that:

Future operation and growth:

- In both Entities financing problems and taxes and tax administration are viewed as major obstacles; political uncertainty, threat of renewed fighting, economic policy uncertainty, customs and trade regulations, infrastructure problems, and cost and availability of equipment are seen as moderately constraining; and
- In Republika Srpska, after several years of embargo, enterprises perceive the lack of access to equipment and raw material as a critical constraint. Macroeconomic stability and inflation are also seen as major obstacles.

Priorities for reform:

- In the Federation, the highest priorities are accorded to unification of Federation laws and policies, completion of the peace process, reduction of tax rates, and completion of infrastructure repairs; these are followed by completion of elections, improvement of property ownership laws, privatization of large state-owned enterprises, and stabilization of laws; and
- In Republika Srpska, reduction of tax rates and repair of infrastructure come first, followed by reforms in tax administration, import tariffs, and the financial sector (bank privatization and reform of the payment system).

Finance: The main constraints are:

- Lack of access to finance (at any price): only 15 percent of firms in the Federation had received a bank loan in the past two years;
- High interest rates and payment problems, particularly in Republika Srpska; and
- Definition of collateral: mortgage on property is the dominant form of collateral in the Federation, but it is not related to enterprise ownership of land (implying that personal property is being used to obtain credit).

Taxes and regulation: Key constraints are:

- High taxes (especially high payroll taxes) in both Entities;
- Tax administration, customs duties, and import and foreign exchange regulations in Republika Srpska; and
- Government regulations in the Federation: more than a fifth of enterprises report that they are inhibited from engaging in some kind of business activity by regulations (ranging from ownership regulations and lack of privatization to labor, tax, and trade regulations).

Infrastructure: Key constraints are:

- Poor road conditions and lack of railway transport; and
- Unreliable power supply and voltage fluctuations: firms report closing 45 days a year due to power failures in Republika Srpska, and 28 days a year in the Federation (particularly in Sarajevo and Bihac).

Purchases and sales: : There is an obvious trade deficit, especially in the Federation: Federation firms import 60 percent of inputs and export only 3 percent of production; Republika Srpska firms import 69 percent of inputs and export 53 percent of production (mostly to Serbia-Montenegro and Western Europe). Key constraints are:

- In both Entities, a lack of short-term financing -- while insufficient or unstable demand is seen only as a moderate obstacle; and
- In Republika Srpska, firms report difficulties with payment by customers, lack of export contacts, unreliability of input supply, high levels of foreign competition (and difficulties with public sector clients: late payments, need for "connections", and intense competition).

Donor support programs

10. The recovery program should be seen as a several-year strategy, with priorities gradually changing from emergency support to longer-term assistance:

- Substantial financial resources were required in 1996 to jump-start industrial activities -- which could benefit from growth opportunities generated by the large-scale aid effort. Programs focused on lines of credit and technical assistance. Tangible results were achieved as a result of sizable net resource transfers to Bosnia and Herzegovina;
- Donor assistance should increase and peak in 1997. Activities pursued in 1996 should be continued, and new programs should be initiated to help prepare and implement in-depth policy reforms (while providing critical assistance for enterprises' operations and development). Focus should progressively shift from "simple" lines of credit to new financing schemes, including: an "enhanced" line of credit aimed at promoting banking sector reform, microcredit schemes, and projects aimed at encouraging foreign private sector involvement (e.g. equity funds, political risk guarantees, etc.);
- At the same time, an adequate regulatory framework should be put in place to stimulate recovery, to maintain its pace, and ensure its sustainability beyond the three- to four-year reconstruction program, when donor resources will no longer be available. A recovery and reform strategy aimed at the economically viable parts of the prewar conglomerates with the objective of restarting and eventually privatizing them should be designed to attract domestic and foreign investors (box 3). Simultaneously, reforms should be implemented to liberalize the economic system and address the issue of social ownership (and enterprise governance) as a precondition (and efficient incentive) for large-scale investments; and
- After 1997 external financing requirements will decrease and should focus on completing implementation of existing projects. Donor assistance could be gradually replaced by local financing sources and non debt-creating investments from the foreign private sector -- conditional on continued recovery, implementation of reforms, and economic and political stability.

Box 3. Handling prewar conglomerates

The prewar conglomerates were especially hard hit by the war. Most have been split between the Entities, their industrial facilities have been damaged, and their management methods are inappropriate in the new market economy. Experience in other Central European countries shows that these enterprises are unlikely to be viable in a market economy. Restarting them in the present situation is neither possible nor desirable. Extending credit is inappropriate since their viability is doubtful, but support is needed to design a comprehensive restructuring and privatization strategy, with a view to adapting their structures to the new market environment in preparation for their eventual privatization.

The challenge for these conglomerates is to restart economically viable enterprises or parts of enterprises, and eventually to privatize them. Salvageable and commercially viable activities, (i.e. activities for which foreign partners and markets can be quickly found), should be identified -- and only those activities should be restarted. This will pave the way for stimulating foreign investors' interest and for facilitating privatization. Since this approach requires a way of thinking entirely different from the prewar mentality, targeted technical assistance in the form of diagnostic studies and match-making activities will be essential in helping managers adopt this new approach.

III. 1996 ACHIEVEMENTS

11. Notable progress was made in 1996 in carrying out the ambitious reconstruction program, thanks to the complementary efforts of the donor community and government authorities. Donors committed US\$192 million to the recovery of industry and industrial finance. Commitments for lines of credit

(more than US\$110 million in the Federation) and for technical assistance (US\$33 million) exceeded the estimated first-year requirements, while equity funds, introduced late in the year, remain underfunded. Only 38 percent of commitments were disbursed, however. The main contributions are shown in table 2.

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Lines of credit	115	Italy, Kuwait, Netherlands, Saudi Arabia, USAID, World Bank
Political risk guarantees	11	Germany, Netherlands, Sweden, World Bank
Technical assistance	33	Egypt, Finland, Germany, Netherlands, Poland, USAID, World Bank
Equity funds	27	EBRD, Italy, IFC, USAID
Critical inputs and equipment	6	Indonesia, Japan, Malaysia, Sweden, Switzerland
Total	192	

Lines of credit: More than US\$110 million committed in the Federation

12. Strong donor support to small and medium-size enterprises had tangible results in reviving economic activity (particularly commerce), facilitating enterprise development, improving productivity, and generating employment. Several lines of credit were established in the Federation to jump-start commercially viable companies, especially small and medium-size private enterprises, and to promote the development of a true private sector. In addition, US\$115 million was committed by donors and US\$56 million disbursed to small and medium-size enterprises engaged in numerous activities including agroprocessing, light manufacturing, and services (box 4). These programs gave enterprises access to cash, that was critically needed for working capital and to rehabilitate equipment: lines of credit were almost the only source of cash for enterprises in 1996.

- The Governments of Italy and the Netherlands and the World Bank cofinanced a US\$23 million line of credit for small and medium-size enterprises implemented by the State Ministry of Finance, with technical assistance from the Government of Germany. Of the 188 credit applications that were processed, 80 approved, 34 rejected, and 54 are under review. Some US\$13.3 million was disbursed;
- The Governments of Kuwait and Saudi Arabia established similar credit lines, for a total of US\$25 million; however, no disbursement took place in 1996; and
- The US Agency for International Development (USAID) established a US\$60 million line of credit for small businesses, with an initial focus on the Tuzla area. The project was directly implemented by a group of US bankers in coordination with the National Bank of Bosnia and Herzegovina; two-thirds of the total amount (US\$40 million) was disbursed.

Box 4. Implementing lines of credit

USAID has established a credit management unit, staffed by US bankers, under the sponsorship of the National Bank of Bosnia and Herzegovina. Credit is provided for commercially viable projects submitted by small and medium-size enterprises, with an initial focus on the Tuzla area. Loans cannot exceed DM 1 million (approximately US\$700,000). Licensed Bosnian commercial banks, acting as agents, extend the loans (which have a maturity of three years and annual interest rates of 7-8 percent) and are paid a fixed fee for their services. USAID bears the credit risk. Repayments of interest and principal will be recycled back into the program, establishing a revolving fund for further lending to Bosnian firms.

The credit line cofinanced by the Governments of Italy, and the Netherlands and the World Bank is implemented by the Credit Lines Section (CLS) of the Project Coordination Unit (PCU) established within the State Ministry of Finance. Banks submit credit applications to the CLS for approval. The CLS assesses applications based on specific guidelines aimed at ensuring projects' creditworthiness; these guidelines cover enterprise activity (agroprocessing, manufacturing, and services that enhance industrial productivity), ownership (privately owned or in the process of privatization), loan size (maximum DM 300,000), loan maturity (two years maximum), and purpose of loan (working capital, or small investment capital to expand facilities or operating capacity). After the loan is approved by the CLS, the borrower signs a credit agreement with the bank (to define lending and repayment terms and conditions), and the funds are disbursed. The credit risk is borne by the bank, not the CLS or the PCU. Banks borrow from the PCU at DM LIBOR minus 3 percent and lend to enterprises at DM LIBOR plus 4 percent. Repaid principal will be added back to the program along with interest paid by the banks to the PCU. Banks will retain the interest income earned on the loans to cover their costs and strengthen their capital base.

Political risk guarantees and equity funds: Involving the private sector

13. In late 1996 assistance focused on preparing projects to attract financing from foreign private sources as soon as the situation allows for it.¹ These projects will help make the recovery sustainable by gradually decreasing dependency on donor funds. Both Entity Governments, with the support of the EBRD, the IFC, and the World Bank, have designed schemes to promote foreign private involvement through long-term investments (equity funds) and short- to medium-term transactions (guarantees). Firm commitments to these projects have been made by the EBRD, the Governments of Germany, Italy, the Netherlands, and Sweden and by USAID, IFC, and the World Bank. These projects are described in more detail in paragraphs 25 to 27 and 30 to 31.

14. The EBRD is proposing to take equity stakes in four or five private banks in the two Entities; EBRD would then use its representation on the supervisory boards and organize twinning programs with Western banks to strengthen banks' capacities. The objective is to enable these banks, whose capital and skills base is rather thin, to play an active role in supporting the emerging private sector and lay the foundations for healthy market-based financial sector growth (including the equity component and the technical assistance for project preparation and implementation). The estimated financial requirements amount to US\$3.4 million per bank on average. Technical assistance and, in some cases, part of the equity contribution are being financed with bilateral grants. Preparatory steps have been taken with four banks in the Federation so far, with funding from the European Union, the Government of the Netherlands, and the UK Know-How Fund. Two investments are expected to be approved by early 1997. This project will be closely coordinated with the World Bank's planned bank restructuring program.

¹ Guarantee schemes against noncommercial risk could not have been initiated before the elections.

Technical assistance: Improving conditions for private sector growth

15. A number of critical reforms were to be made to improve the environment for private sector development. In addition, assistance was required to restore normal operating conditions and financing mechanisms for enterprises and banks. Commitments were larger than expected, with more than US\$30 million committed and partly disbursed, including US\$26 million from USAID, to support enterprises and banks, as well as the overall reform process. However, only a small part of donor commitments (about a fourth) was disbursed in 1996.

16. There was some financial sector reform in the Federation and some improvement in the banking system, notably the recent establishment of the Federation Banking Agency.² Republika Srpska lags behind but is committed to following a similar reform program. Still, major legislative and regulatory reforms remain on the agenda for both Entities.

17. Technical assistance was designed to foster private sector activities by developing a commercially viable banking system and improving the internal efficiency of enterprises.

- Along with the lines of credit, USAID provided technical assistance to develop credit risk evaluation skills within banks (US\$14.8 million) and to help enterprises prepare business plans, define development strategies, and apply for credit (US\$5 million). The World Bank provided similar services, although on a smaller scale; and
- The Governments of Egypt, Finland, Germany, Indonesia, Japan, Malaysia, the Netherlands, Poland, Sweden, and Switzerland committed US\$13 million to improving the performance and productivity of small and medium-size enterprises (including developing marketing and management skills for dealing with foreign buyers, suppliers, and competitors, as well as providing critical inputs and equipment). US\$8 million was disbursed.

18. The Governments of the Netherlands and Switzerland, USAID, the World Bank,³ and others provided technical assistance to the authorities in Bosnia and Herzegovina to address macroeconomic issues such as privatization, bank reform, and enterprise reform policies.

- *Privatization.* Support was provided to develop a privatization program and to draft privatization laws. The World Bank organized seminars on privatization (inside and outside Bosnia and Herzegovina), highlighting other countries' experiences. USAID provided direct assistance in establishing the Federation Privatization Agency and in implementing transactions (an international consulting group was contracted to provide training and assistance). Discussions were held with the Government of Republika Srpska to initiate a similar process;
- *Bank reform.* Support was directed at strengthening bank policies, procedures, and management. In-depth working sessions were organized to disseminate the experience of other countries. USAID provided a significant part of this assistance (US\$4.8 million),

² Encouragement was given by the World Bank: its first adjustment operation in the Federation, the Transition Assistance Credit, included conditionality related to the drafting of the Federation Privatization Agency Law, and to the adoption of the Federation Banking Agency Law.

³ The Government of the Netherlands provided US\$1 million for privatization implementation, and the Government of Switzerland provided US\$1 million to support the operational expenses of the recently established Federation Banking Agency, under the World Bank Emergency Recovery Project.

including support to start up operations of the newly created Federation Banking Agency and assistance in developing and implementing prudential banking regulations; and

- *Enterprise reform.* Noticeable progress was achieved in designing strategies for preparing enterprises for privatization, and a comprehensive review of the legal and regulatory framework was initiated.

Box 5. Lessons from the 1996 program

- **Donor support should be more evenly distributed throughout the country.** In 1996 investments were concentrated in a few areas in the Federation, mainly Sarajevo and Tuzla, reflecting donor priorities rather than economic considerations. No support was provided to Republika Srpska;
- **Foreign companies have shown more interest in investing than expected, and their involvement should be supported;**
- **Technical assistance and training have helped considerably in improving credit guidelines, strengthening bank capabilities in credit assessment, and assisting enterprises in preparing business plans; and**
- **Donor support should be balanced over a wide range of activities: lines of credit received disproportionate support in 1996.**

IV. 1997 CHALLENGES AND FINANCING NEEDS

19. In 1996 donors focused on jump-starting economic activity through lines of credit and related technical assistance. Support is now needed to continue stimulating the recovery process, to maintain its pace, and to ensure its sustainability. This will require longer-term investments and involvement of foreign business. In light of the 1996 experience (box 5) donor assistance should be increased and gradually shift from lines of credit, which received much of the support in 1996, to the other components of the program: guarantee schemes are essential for restoring commercial links and restarting viable activities; equity funds are the first long-term non-debt financing schemes. In Republika Srpska lines of credit should be developed, since no such assistance was received in 1996 and there is a need to make up for lost time. Donor coordination and policy consistency will be increasingly important to ensure a balance of support across regions and activities.

20. To meet 1997 targets, US\$180 million of external financing is required. Donors should pay particular attention to coordinating their efforts to ensure an adequate balance of support across programs and regions. Efforts should aim to:

- Assist recovery of the banking sector through well-targeted lines of credit;
- Restore commercial links with foreign partners through political risk guarantee schemes;
- Support continued reform through technical assistance; and
- Promote foreign investments through venture capital funds (as a first nondebt long-term financing scheme).

Several programs and initiatives prepared by the IMF, the EC, and the World Bank for implementation in 1997 aim at providing incentives for strong private sector involvement by implementing the most crucial reforms in trade, tax and expenditures policies, and administration.

Lines of credit (US\$80 million): Restructuring the banking system and providing resources to banks for onlending

21. While donor support to industry finance in 1996 occurred largely outside the domestic banking sector, in 1997 donors must pay greater attention to establishing a viable domestic banking sector so that finance can be sustained over the long-term, *with an increasing share of resources mobilized domestically*. Thus donor support needs to focus on:

- Restructuring and privatizing banks and developing government's regulatory and supervisory capacity for the banking sector;
- Providing required resources to industry, such as lines of credit, through banks that have clear plans for restructuring and privatization and that are showing significant improvement in their portfolio management; and
- Specific microcredit programs to support micro and small enterprises that have trouble obtaining small amounts of working capital from the formal banking sector.

22. *Banking sector reform.* Major reforms are urgently needed in the banking sector to develop its intermediation capacity in line with the requirements of a market-oriented economy. Reforms are needed to:

- Clarify ownership and clearly define the governance structure of banks;
- Clean up and improve the financial conditions of banks; and
- Improve managerial capacity in savings mobilization and lending practices.

Furthermore, new banking legislation needs to be adopted throughout the country to provide a consistent and modern framework for banking, and prudential regulation and supervisory standards need to be introduced. Institutions for bank supervision need to be established (in Republika Srpska) and strengthened (in both Entities). This process will require intensive technical assistance to both individual banks and to the authorities.

23. *Lines of credit.* As the economy recovers, demand for working capital is growing rapidly. But domestic savings are still low and resources are hard to mobilize, even for banks with better prospects for growth. Donor provision of lines of credit to qualified banks would substantially strengthen the domestic banking sector while delivering needed funds for industrial revival. An estimated US\$70 million will be required to support continued industrial recovery in both Entities in the 1997 program. Within this program, there is a need to pay special attention to the funding requirements in Republika Srpska, since enterprises in Republika Srpska had no access to donor-financed lines of credit in 1996.

24. *Microcredit program.* Micro and small enterprises in Bosnia and Herzegovina often have trouble obtaining working capital because they have no access to the formal banking sector. Experience in other Central European countries shows that these enterprises can often generate employment opportunities beyond the family circle, and that their development impact on the poorest segments of the society is significant. A "Local Initiatives Project" has been developed with the support of the World Bank to provide credit and technical assistance to groups currently relying heavily on social assistance -- widowed refugees, the unemployed, and new microenterprises. In addition, a large group of donors

including the EBRD, the EC, the Internationale Projekt Consult (IPC),⁴ several private firms, and the World Bank has agreed to sponsor a complementary project, the establishment of the Bosnia Micro-Credit Bank. This new institution, to be operated as a commercial bank with a capital of US\$2 million, would extend small loans (less than US\$20,000 and averaging US\$10,000) to micro and small enterprises that were hurt by the war and that have no access to the formal banking sector. The loans, which would be extended on commercial terms, would be used mainly to finance working capital. Since the shareholders share a common commercial orientation, the initial capitalization of the project has been designed to make the Micro-Credit Bank sustainable (and profitable) quickly, so that its impact will be maximized. Services will be progressively extended to all regions of Bosnia and Herzegovina.

Political risk guarantees (US\$65 million): Restoring links with foreign business partners

25. Restoring industrial capacities in Bosnia and Herzegovina will require the re-establishment of links with foreign business partners, whether investors, suppliers, or buyers. International companies have shown a strong interest in restarting commercial operations with companies in Bosnia and Herzegovina, based largely on the companies' past performance and on prewar relations. Several international companies have already identified deals that they would like to make. But political uncertainty, threat of renewed hostilities, and lack of confidence in the new government structures hold them back. Two main schemes have been designed to encourage foreign entrepreneurs to enter into business relationships with companies from Bosnia and Herzegovina, and donor assistance is required to get them started. One is political risk guarantees for short-term business transactions, the other is noncommercial risk guarantees for long-term investments.

Box 6. How the political risk guarantee facility will work

A survey more than hundred foreign enterprises that have sent representatives to Bosnia and Herzegovina since the signing of the Dayton-Paris Peace Agreement indicates that effective political risk coverage would increase foreign investment in Bosnia and Herzegovina. Such coverage would enable viable parts of former conglomerates and other enterprises to restart activities on purely commercial terms which should have a strong impact on employment and production.

The political risk guarantee facility will cover noncommercial risks, including renewed hostilities and misgovernance (such as retroactive taxation or license withdrawal). The Investment Guarantee Agency (IGA), an independent corporation established by the Government and headquartered in Sarajevo, will issue political risk guarantees for foreign firms or banks providing credit for short-term transactions (less than three years). Applications for guarantees could also be submitted through contact points in Banja Luka and Mostar. Fees (set initially at 3 percent a year) and interest on the funds held in trust would be used initially to finance operating expenditures and later to increase the available guarantee facility. The IGA has hired a foreign agent bank to provide a letter of credit to accompany the guarantee. Donor contributions would be disbursed to the agent bank against the issuance of guarantees. The agent bank would hold the funds in trust to backstop its letter of credit. The guarantee facility will be operated for an initial three-year period.⁵

⁴ The IPC, a German consulting firm specialized in microfinance, will provide a cash contribution and be responsible for staff training, introduction of management information systems, and overall project management.

⁵ The funds made available under the World Bank credit and not used for paying claims would be spent after the guarantee has expired to finance critical imports for industry.

26. *Political risk guarantees.* The political risk guarantee facility will require US\$35 million in cofinancing to encourage foreign investors, input suppliers, trading companies, and financial institutions to provide financing for short- and medium-term transactions with industrial enterprises in Bosnia and Herzegovina.⁶ This project was prepared by the State and both Entity Governments with the World Bank's support to provide guarantees against noncommercial risks (mainly renewed hostilities and misgovernance). In view of the special nature of this project (funds are disbursed only if a guarantee is called), donor contributions could be made either in cash or in promissory notes to backstop the guarantees (box 6).

27. *Insuring equity in the longer term.* Interest in longer-term investments is expected to pick up once short-term business transactions resume. For such longer-term (equity) investments, a parallel guarantee system for noncommercial risk should be established to cover such risks as renewed hostilities, civil disturbance, expropriation, breach of contract, and nonconvertibility of local currency for sound investment projects contributing to employment generation, technology transfer, and export generation. The Multilateral Investment Guarantee Agency (MIGA) has designed a Sponsorship Trust Fund for that purpose.⁷ The Trust Fund's capital base is expected to be set initially at US\$30 million, including cash contributions and promissory notes. The Fund will be liquidated on a date agreed on by the sponsors -- or when its capital base is exhausted as a consequence of claims.

Technical assistance (US\$10 million): Helping to restructure conglomerates and banks

28. A comprehensive restructuring and privatization strategy is needed to revitalize the prewar conglomerates and to endow them with appropriate and competitive structures (box 3). Technical assistance is required to assist in this process -- including diagnostic studies, definition of detailed measures to be undertaken, assistance for implementation of these measures, and match-making with foreign partners. USAID, the United Nations Industrial Development Organization (UNIDO), the IFC, and the World Bank are working on this issue.

29. Technical assistance is also required to restructure the banking sector. To be successful, this effort should be linked to the strengthening of bank lines of credit. Reforms should focus on:

- *Improving the legal and institutional environment* by establishing a viable and harmonized legal and regulatory framework and corresponding enforcement capacity;
- *Establishing Entity-level institutions in support of bank restructuring and privatization* to handle unrecoverable assets (an Asset Liquidation Fund) and frozen foreign exchange deposits (a Settlement Agency), with the overall objective of facilitating the workout of bank problems, accelerating privatization, and providing compensation to household depositors; and
- *Developing and implementing a bank restructuring and privatization program.*

Technical Assistance requirements are summarized in the Annex to this report (pages 157 to 160).

⁶ While indications are that the transactions to be covered could exceed US\$100 million, the initial target has been fixed at US\$50 million. The Governments of Germany, the Netherlands, and Sweden have already committed US\$1.3 million and the World Bank has approved a US\$10 million credit on concessional terms.

⁷ The Fund will be administrated by MIGA on behalf of the sponsors. Investor claims will be evaluated in accordance with MIGA guidelines.

Equity funds (US\$25 million): Promoting long-term investment

30. The EBRD is developing a Bosnia and Herzegovina Reconstruction Equity Fund. This US\$35 million fund, cofinanced by the EBRD and the EC, will provide equity and quasi-equity capital to selected small and medium-size enterprises with a view toward participating in corporate governance and providing management support. The Government of Italy will provide a US\$7.5 million grant to meet operating costs during the early years of operation. The fund will be managed by a private firm with direct equity investment management experience (competitively selected by the EBRD); investments will range from US\$35,000 to US\$3.5 million and will consist of minority equity stakes combined with debt or quasi-equity instruments. The fund will initially focus on private enterprises with a successful prewar record of operations, that need capital to restart; later, once those firms have been privatized, it will support former government-owned enterprises (box 7 shows the result of a survey undertaken during the preparation of the fund).

31. The EBRD and the IFC are cosponsoring a venture capital fund initially estimated at US\$20 million.⁸ The fund will finance the creation, modernization, expansion, and restructuring of small and medium-size enterprises, and will be directed at private companies and public enterprises that are being privatized, whether local firms or joint ventures. Initial investments are likely to remain small (generally between US\$50,000 and US\$250,000) and targeted at companies that produce goods and services necessary for the reconstruction effort. The fund will be allowed to take majority ownership positions in firms. Larger investments may be considered at a later stage. The fund will be dissolved after ten years (with a possible two-year extension to liquidate its portfolio).

Box 7. EBRD small- and medium-size enterprise survey

Bosnia and Herzegovina contains only a small number of Small- and Medium-size Enterprises (SMEs). To prepare its Reconstruction Equity Fund, the EBRD undertook a survey, that showed that:

- SMEs generally suffered less from the war than large enterprises did. Most have high-quality and dynamic management, with clear operational objectives, and should be able to adjust to the postwar environment;
- Physical assets are old and technology is often outdated, especially in the government-owned companies. Companies tend to over value assets when approaching equity investors;
- Financial statements need to be revised according to international accounting standards; assets are often overvalued, and financial clarity is lacking (reflecting also "black market" or "parallel" activities);
- SMEs' indebtedness is generally limited: most have been started or restarted mainly through self-financing;
- Markets within the former Yugoslavia need to be re-opened and commercial ties with Western Europe re-established. There are still physical and financial obstacles to obtaining raw materials and selling products;
- There is a general lack of confidence in the enforcement of legal regulations, particularly in local banks; and
- As a result of their legal status, Government-owned enterprises confront particular obstacles: access to finance is difficult, since pledging assets to access debt or equity finance is restricted; assets evaluation is improper (which makes equity financing difficult); and returning employees must be reemployed, regardless of whether there is work for them.

⁸ The fund will be managed by Horizonte, an asset management company based in Vienna, Austria.

V. STRUCTURAL AND POLICY ISSUES IN THE YEARS AHEAD

32. Reaching consensus on the reforms required to revive the industrial sector has been difficult. Decisionmakers in Bosnia and Herzegovina should not be misguided by postwar difficulties (particularly the need to generate employment rapidly): although special conditions may create a temptation to revert to centralized, government-controlled industry, only the strong involvement of the private sector will help ensure a sustainable revival of the sector -- which will require comprehensive reforms of the existing economic framework. Governments should limit their role to creating conditions for the private sector to develop: maintaining a sound macroeconomic environment, establishing an appropriate legal and regulatory framework that promotes the smooth functioning of free markets and facilitates domestic and foreign investments, and providing essential public goods and social services. Such principles should now be transformed into well-targeted and properly enforced regulations, and Government authorities should initiate the reform process as soon as possible to implement the major policy changes in 1997. Donor support in this endeavor is essential, both in providing financial and advisory assistance and in ensuring that funds are targeted and channeled in appropriate ways to promote the needed reforms. Box 8 identifies key areas requiring attention.

Box 8. Priorities for reform

- *Liberalization of the economic system and policies.* Restrictive regulations that limit the potential for rapid economic recovery should be liberalized: trade barriers should be removed, labor regulations made more flexible, and tax burdens diminished (particularly payroll taxes, which are now about 100 percent of net salaries);
- *Creation of a legal framework to facilitate private sector activities.* Property rights over physical, legal, and intellectual assets should be established; rights and obligations in private transactions (contract law) clarified; and specialized laws on corporations, bankruptcy, competition, banking, and investment developed. Such measures are critical for the private sector to progressively substitute for donor assistance in the reconstruction of Bosnia and Herzegovina;
- *Development of measures to attract foreign investors.* Strong foreign involvement -- from buyers, suppliers, and investors -- is needed in to resume industrial activity in Bosnia and Herzegovina. The Governments should design specific measures to attract potential investors and avoid measures that would be perceived as disincentives;
- *Financial sector reform.* To improve financial intermediation, savings mobilization, and investment financing within the private sector, efforts should focus on restructuring banks, establishing strong regulatory and supervisory frameworks, harmonizing policies and systems across Entities (ideally with inter-Entity institutions), and eventually privatizing banks. Two institutions should be established: an Asset Liquidation Agency, to take over banks' bad assets and try to maximize recovery in a short period, and a Settlement Agency, to handle frozen foreign exchange deposits and other liabilities (such as wage and pension arrears) in exchange for issuance of privatization certificates. The privatization program should propose several scenarios for each bank: investment by strategic investors, mergers with other banks, liquidation, or a combination of these measures; and
- *Rapid privatization of enterprises.* The property rights issue should be resolved, and privatization laws should be passed. Special attention should be given to the large conglomerates. The reform strategy should avoid undue fragmentation of industrial structures, particularly in the Federation, where privatization is to be handled by the cantons.

EMPLOYMENT GENERATION AND LABOR MARKET DEVELOPMENT

I. BACKGROUND

Unemployment was increasing even before the war

1. Unemployment is one of the most pressing postwar issues that Bosnia and Herzegovina faces. Even before the war unemployment was becoming a serious problem in Bosnia and Herzegovina, as it was in the neighboring Yugoslav republics. The economy began to deteriorate in the 1980s, and by 1991 an estimated 27 percent of the 1.3 million of the non agricultural labor force was unemployed. This problem was partly rooted in the economic transition beginning throughout the region. Before the war enterprise restructuring was already leading to changes in labor demand that were resulting in rising unemployment. Labor policies and institutions, however, were not responding to these changes in the economy, leading to a widening divergence between labor supply and demand.

The war has left a majority of the labor force jobless

2. The virtual collapse of the economy during the war means that unemployment today is nearly twice that of 1991. Though there are no reliable data, estimates put unemployment at 50 to 60 percent of the current labor force of about 1.1 million. There is also significant underemployment, as many who once had formal sector jobs now rely on informal sector activities and agriculture to make a living.

Lack of job opportunities impedes successful demobilization and the return of refugees

3. Of particular concern are the job prospects for the people most directly affected by the war -- demobilized soldiers, internally displaced persons, war widows, and returning refugees. About 425,000 soldiers have been or are being demobilized (245,000 in the Federation and 180,000 in Republika Srpska), many of them with lower than average educational and professional qualifications that are unsuited to the changing economic environment. More than 13,000 people, most of them former soldiers, have permanent physical disabilities from war injuries (including 5,000 people who lost limbs) that prevent them from resuming their former occupations. Without appropriate assistance, many demobilized soldiers could end up among the long-term structurally unemployed requiring long-term income support.

4. People displaced during the war and unable to return to their homes and previous jobs face particular difficulties reintegrating with the labor market, as do the widows of soldiers killed during the war. Unexpectedly made heads of households, these women are forced to find employment to support their families yet often lack appropriate qualifications to do so.

5. The return and reinsertion into the labor market of refugees also represents a major challenge that needs to be addressed with sensitivity. More than one million refugees, representing a potentially significant portion of the labor force, still reside outside Bosnia and Herzegovina. Many of those who left the country to escape the war possess important skills that are needed for the immediate

reconstruction process as well as for longer-term economic development. There is, however, a national consensus that those who fled during the war should not be given preferential treatment for employment to encourage their return. The issue takes on added delicacy in light of the country's 50 to 60 percent unemployment rate. A further complication is that half the refugees who fled abroad are from areas in which they would be a minority if they were to return. Nevertheless, employment opportunities are a vital component of the preconditions needed to encourage refugees to return.

6. There is no doubt that unemployment is an overwhelming economic and social problem for Bosnia and Herzegovina. Continued lack of employment opportunities could undermine economic and social reintegration and contribute to a resurgence of social tensions. But investment in the reconstruction and recovery program alone will not ensure sustained growth in employment and earnings. Cross-country evidence clearly indicates that economic growth alone is not sufficient to create employment. The structure of the labor market is fundamental to employment growth. Thus there is a need for active measures to ensure that the labor force is suitably skilled to meet the demands of the labor market and that labor policies and institutions are designed to ensure labor force mobility.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

7. Employment generation is an overriding objective of the Priority Reconstruction and Recovery Program and a cross-cutting issue that needs to be integrated with all sectoral investment strategies. Reconstruction and recovery activities are generating considerable employment, especially in housing and infrastructure reconstruction and in industry. An estimated 250,000 jobs were created at the peak of the 1996 Reconstruction Program. But further efforts are needed to maximize the employment impact of the Reconstruction Program and to ensure that labor market policies are in place to guard against long-term structural unemployment. Hence the need for an active employment program that:

- In the short term (1996-97), focuses on employment creation schemes, particularly for the most vulnerable groups, and on maximizing the employment creation potential of reconstruction projects. Work also needs to begin immediately on reforming labor market policies.
- In the medium to long term, turns toward the structural issues underlying unemployment toward institutional and policy reform to ensure a well-functioning labor market and investments in training and enterprise promotion to help the unemployed find permanent jobs in a market economy. Unless these issues are addressed head-on, they are likely to disrupt the transition to a more market-oriented economy.

8. The Employment Generation Program focuses on investments that have job creation as their primary objective. It also highlights the structural and policy issues that need to be addressed to ensure a well-functioning labor market. In concept and scope, the overall employment generation program submitted in April 1996 remains unchanged. Implementation will require US\$88 million in external support for the three- to four-year reconstruction period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$54 million was firmly committed**, representing 72 percent of the original US\$75 million in estimated needs (paragraphs 11 to 20);

- In 1997, US\$30 million of external financing is required,¹ with a greater share of the resources going to Republika Srpska to make up for the lack of investment in Republika Srpska during 1996 (paragraphs 21 to 28); and
- In 1998 and 1999, US\$4 million in investment will be needed, and policy issues will need to be increasingly addressed to ensure the sustainability of employment (paragraphs 29 to 32).

**Table 1. Employment Generation Program External Financial Needs
(US\$ million)**

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Public employment	37.2	19.1	17.1	1.0
Microenterprise development	25.9	18.7	5.2	2.0
Employment counseling	4.3	3.1	1.2	0.0
Training	14.0	7.1	5.9	1.0
Institution building	6.6	6.0	0.6	0.0
Total	88.0	54.0	30.0	4.0

9. The Employment Generation Program has five main areas of investment:
- *Public employment*: provision of rapid, short-term employment opportunities;
 - *Microenterprise development*: promotion of self-employment and microentrepreneurship through increased access to credit and related business training;
 - *Employment counseling*: provision of counseling and placement services, particularly for demobilized soldiers and refugees wishing to return;
 - *Training*: retraining and education to help workers to gain the skills needed for a more market-oriented economy; and
 - *Institution building*: provision of demand-driven services to the unemployed.
10. Policy reforms are critical for these investments to have the desired employment impact. Employment generation in Bosnia and Herzegovina is still impeded by restrictive labor laws that artificially drive up the real cost of labor. If measures are not taken in the short term, high rates of unemployment are likely to persist.

III. 1996 ACHIEVEMENTS

11. The primary objective of the Employment Generation Program in 1996 was to create rapid employment opportunities for people made jobless by the war and to implement other active employment programs (job placement, retraining, microenterprise development) while building the institutional

¹ Within this framework, programs specifically aimed at facilitating refugee returns are being contemplated by the Refugee Return Task Force (RRTF), established under the Economic Task Force (ETF).

capacity through which to finance such programs and to provide employment and training services. The main 1996 donor commitments to employment generation activities are shown in table 2.

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Public employment	19.1	EC, Netherlands, Norway, UNDP, US, World Bank, others
Microenterprise development	18.7	EC, Italy, Netherlands, Turkey, UNHCR, US, World Bank, others
Employment counseling	3.1	World Bank, others
Education and training	7.1	Austria, Netherlands, World Bank, others
Institution building	6.0	EC, Netherlands, World Bank, others
Total	54.0	

Public employment: 10,000 months of employment created through public works schemes

Box 1. Employment and Training Foundations support local public works schemes.

In July 1996, Employment and Training Foundations (ETF) were established as umbrella agencies to provide financing to local initiatives in employment and training.

One of the first projects they implemented is the *Public Works and Employment Project*, supported by several donors, including the World Bank. The ETFs provide financing for public works projects identified by municipalities up to a maximum cost of US\$100,000 each, with a minimum labor content of 50 percent. Typical projects include the clean up of war damage, minor road repair, cleaning of surface draining systems, repairs to water supply systems, and reforestation projects. Such projects are a productive way of providing the unemployed with an opportunity to earn an income during this period of high unemployment and can easily be targeted to areas of particularly high unemployment and refugee return.

12. Good progress was made on implementing public employment schemes in 1996. The Governments of the Netherlands and Norway, and the World Bank financed a Public Works and Employment Project implemented through Employment and Training Foundations (ETF) established in the Federation and in Republika Srpska (box 1). By the end of 1996 the ETFs had contracted an estimated US\$6 million in public works projects, creating more than 10,000 months of work (or 3,000 temporary jobs based on an average project implementation period of three months). Several bilateral donors, notably the United Kingdom (UK) and the United States (US), also allocated funds for small, quick-impact rehabilitation projects that sought to create jobs rapidly in their areas of military command. The Implementation Force (IFOR) troops played a central role in identifying and supervising these projects. By the end of October 1996, US\$15 million had been committed to such projects in the Federation and Republika Srpska, and about 600 projects had been approved.² During 1996 the International Labor Office (ILO) also carried out preparatory work for a prospective Emergency

² These amounts channeled through IFOR are not reported in table 2. The U.K. Government provided about US\$10 million in financing to such schemes in Multinational Division South West and the U.S. Government US\$5 million in Multinational Division North East.

Employment Program, based on the creation of "unemployment companies", a model that has worked successfully in eastern Germany.

Microenterprise development: From dependence on humanitarian assistance to economic independence

13. During 1996 microenterprises and other income-generating activities received growing attention as a means of helping people move from unemployment and dependency on humanitarian assistance to active employment and economic independence. Since Bosnia and Herzegovina has little experience with microenterprise financing, the Government of the Netherlands funded, through the World Bank, a pilot Local Initiatives Project (microcredit) in Tuzla in February 1996 with three NGOs -- BOSPO (a local NGO), International Rescue Committee, and World Vision.³ Loans up to a maximum of DM 10,000 were provided to displaced women, demobilized soldiers, and other rural and urban would-be microentrepreneurs. World Vision also provided business management training to potential microentrepreneurs. Activities financed included trade, services, small-scale production, and agriculture. In August 1996 with financial support from the United Nations High Commissioner for Refugees (UNHCR), the pilot program was expanded to Bihac, Gorazde, Mostar, and Sarajevo. By the end of 1996, about 350 loans (averaging US\$2,000) had been disbursed, sustaining about 300 jobs and creating about 330 new jobs (a good job creation ratio compared with microcredit programs in other industrialized countries). The pilot phase demonstrated a high demand for such small amounts of credit (DM 10,000 and less) and showed that NGOs can reach the target population and manage microcredit programs that achieve high repayment rates (90 to 100 percent) provided sufficient technical assistance and training are provided. The Local Initiatives Project, which became operational in December 1996 under the management of the ETFs, aims to rapidly scale up the pilot microcredit efforts started in 1996. As well as providing financing for microcredit programs managed by NGOs, this project is financing considerable technical assistance and training to help build the capacity of these organizations in developing financially sustainable microfinance operations over the long term.

14. In September 1996 the U.S. Government launched the Bosnian Women's Initiative, a US\$5 million fund, administered by the UNHCR and run by NGOs. This initiative supports income-generating skills and training programs for returning refugee, displaced, and other war-affected women. Projects financed include tailoring and hairdressing workshops for women as well as microcredit schemes targeted to women. Close collaboration is needed between the Bosnian Women's Initiative and the Local Initiatives Project to ensure a common policy framework on credit delivery and a common institution-building approach to microenterprise development.

15. In October 1996 the ILO began work on the local economic development component of the Program for Rehabilitation and Sustainable Social Development (PROGRESS), financed by the United Nations Office of Project Services (UNOPS), the United Nations Development Program (UNDP), and the Government of Italy. This component includes a small-scale microcredit program in three municipalities in the Una-Sana canton (Bihac) and Banja Luka region. The UNDP also started a

³ This represented the pilot phase of a full-scale US\$18 million Local Initiatives Project that was approved by the World Bank in December 1996. The Local Initiatives Project complements an International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD) project to set up a microenterprise bank by targeting a "pre-entrepreneurial" class of borrower at the lowest end of the microenterprise spectrum (see the "Industry and Finance" sector report). The IFC/EBRD-sponsored microcredit bank would support existing micro and small businesses at the higher end of the spectrum.

program to set up enterprise assistance bureaus in Bihac, Central Bosnia, and Mostar, beginning with Bihac in October 1996. These bureaus provide business development services for enterprises of all sizes, including microenterprises, with an initial focus on providing information on how to access available financial and technical assistance.

Employment counseling and job-finding services: Matching job seekers with job vacancies

16. In September 1996 employment counseling and job-finding services started, with primary attention to demobilized soldiers and refugees wishing to return. In October the Federation ETF signed its first contract with an NGO, the International Catholic Migration Commission, to provide counseling and job-finding services for demobilized soldiers. An additional four contracts were signed by February 1997, reaching a total of 443 people. A briefing campaign was initiated recently, and it is expected that many NGOs will prepare new proposals in the near future. The International Organization for Migration took the lead in trying to match refugees with job opportunities in Bosnia and Herzegovina and in providing assistance for them to return. The lack of job opportunities represented a major constraint to the return of refugees on any large scale in 1996.

17. Job-finding services require sufficient information on the labor market - who are the unemployed, where are they, what skills do they have, where and what types of job opportunities are available? Work started in September 1996 on examining labor market information systems and discussing improvements to the current system of Employment Institutes and municipal employment offices in the Federation and Republika Srpska. Under the Demobilization and Reintegration Project, the World Bank committed US\$1.5 million to upgrading, broadening, and automating the labor market information systems operated by municipal employment services, including ensuring that good data are available on job vacancies and on those seeking employment. The US Department of Labor is providing technical assistance in this effort. In October 1996 it organized a study tour to employment bureaus in Ireland, Poland and the United States for key management and technical staff from the Employment Institutes and the ETFs of both the Federation and Republika Srpska. Agreement was reached on a common framework for the Labor Market Information network for both Entities, as well as common operating systems. A working group from Republika Srpska and Federation employment services made an inventory of necessary and available equipment. Procurement of the corresponding equipment (including automation hardware and software) was initiated with the assistance of consultants from the U.S. Department of Labor. The ILO also sent a technical specialist to examine issues related to labor market information during 1996. The ILO is coordinating closely with the U.S. Department of Labor to ensure that a coherent and unified labor market information system emerges.

Education and training: Getting ready for jobs in a restructured economy

18. Training and skills upgrading will be essential to ensure that the unemployed have the skills needed to qualify for jobs in a changing economy. With the collapse of the prewar socially owned industrial sector, many prewar jobs no longer exist. The industrial sector needs to be restructured to compete in a market economy, and the demand for labor will shift accordingly. To find jobs, many of the unemployed will need to upgrade their skills. Through the ETFs, the World Bank is providing financing to local service providers (enterprises, NGOs, private and public training institutions) to provide on-the-job and other skills training, particularly for demobilized soldiers. One hundred and thirty-two service contracts for skills training programs were signed through mid-February 1997, and an

additional twenty proposals to provide training services are now being appraised. The contracts signed, as well as the ones presently under review, should provide training for more than 7,000 people.

Institution building: Channeling resources and integrating employment services

19. Two important institutional initiatives took place in 1996. The first was to establish ETFs in the Federation and in Republika Srpska to channel grant financing to public, nongovernment, or private institutions for employment and training activities. The ETFs are governed by boards of directors made up of ministry representatives of both Governments (including the Ministries of Finance, Social Policy and Refugees, and Physical Planning) and nongovernment entities (including the Chamber of Commerce, Employment Institutes, and trade unions). The Federation ETF was fully operational by July 1996, and the Republika Srpska ETF by October 1996. By the end of 1996 the ETFs had acquired significant capacity to channel donor financing for local initiatives related to public employment schemes, microenterprise development, and job counseling and training. Technical assistance is being provided to the ETFs by the U.S. Department of Labor and by several international experts in microcredit.

20. The second initiative explored ways to strengthen and improve the Employment Institutes, with donor support from the ILO and the World Bank. The Federation has, de facto, two Employment Institutes, one in Sarajevo and one in Mostar, which operate virtually independently. To be effective in providing job listings and job search assistance and to encourage movement of labor throughout the Federation, these institutes and their information systems and services need to be better integrated.

IV. 1997 CHALLENGES AND FINANCING NEEDS

21. Two areas should receive primary attention in 1997. One is to scale up and increase the impact of employment generation programs. The return of refugees is likely to increase in 1997, and efforts will be needed to improve mechanisms to help refugees find employment and reintegrate with the job market. The second is to broaden and deepen the labor market development agenda to address the structural and policy issues underlying unemployment in Bosnia and Herzegovina. *These activities will require an estimated US\$30 million in financing from the donor community (table 1).*

Public employment (US\$17.1 million): Continuing employment for the most vulnerable

22. High unemployment is likely to continue in 1997, and in the short term public employment schemes will remain an important means of providing jobs for the unemployed, particularly for the most vulnerable, least skilled workers. In 1997 the ETFs aim to implement up to US\$17 million in public works and employment projects prepared by municipalities and local communities, creating at least 40,000 months of work. Particular attention will be paid to getting projects under way in Republika Srpska and to setting up employment creation schemes in areas where refugees are expected to return and in more remote, marginal areas. Additional donor cofinancing is urgently needed since funds available from 1996 commitments are expected to be fully contracted by April 1997.

23. The ILO is also seeking financing for an Emergency Employment Program for 1997 that would help establish private employment companies, with services concentrated on demobilized soldiers and war invalids. Staff would be recruited from the ranks of the unemployed, particularly among former employees of large state-owned enterprises. The project would finance the wages of the workers, who would be employed immediately and paid by the employment companies, which would seek contracts

for projects in areas such as infrastructure rehabilitation, repair of war damage, industrial renewal schemes, environmental projects, and the like.

24. Because it will take time for the economy to recover and for permanent employment to reach desirable levels, every effort should be made to maximize employment during the three to four years of the Reconstruction Program by emphasizing the employment creation impact of other investments under the Reconstruction Program. This can be done, for example, by using employment-intensive methods instead of capital-intensive methods where that makes economic sense. Preparing trenches for water pipes and other network systems is one area in which manual labor could be more economic than machines.

***Microenterprise and microfinance development and self-employment (US\$5.2 million):
Building sustainable financing mechanisms***

25. In 1997 the objective for microenterprise development is to deepen and broaden business training and other financial and related services available to people wishing to become self-employed or to start up microenterprises. One such effort is the Local Initiatives Project, which began full-scale operations in December 1996 under the management of the ETFs (paragraph 13) and aims to significantly increase the scale and impact of microcredit programs. The project provides credit and business services to people from economically disadvantaged groups who want to start income-generating activities and microenterprises. Loan funds are managed at the local level by contracted NGOs, mainly from Bosnia and Herzegovina, selected for their potential to develop microcredit programs of a large enough scale and reach to become financially sustainable over the medium to long term; the NGOs will receive substantial technical assistance and training to achieve this goal. Attention also needs to be focused on the legal and regulatory framework for microenterprises and for nonbank financial institutions to create an environment that encourages microenterprise growth and the development of institutions that can serve their financial needs.

Employment counseling and job-finding services (US\$ 1.2 million): Stepping up the pace

26. Because of the economic collapse brought on by the war, many highly skilled people from Bosnia and Herzegovina are unable to find work. Such people require active assistance in finding employment. Areas in need of continuing improvement in 1997 and beyond include employment services (job placement and related counseling services) through both public and private service providers, and intensive job-seeking assistance for displaced workers, particularly for those with higher-level skills (including refugees outside the country). A system is needed for consolidating available job information and circulating it effectively to refugees in asylum countries, so that they can compete for employment on an equal basis. The International Organization for Migration has formed a working group under the auspices of the ILO-led Task Force on Employment and Training to address these issues in coordination with other organizations, ministries in Bosnia and Herzegovina, and asylum country governments.

Education and training (US\$5.9 million): Learning the skills for a competitive market economy

27. A stronger focus on vocational and skills training (both on-the-job training and institutional training) is needed in 1997 to identify the skill requirements of employers, so that training programs can respond to market demand and achieve high job placement rates. All programs must meet the criteria of

being demand driven and cost effective. Nearly US\$6 million in new commitments is required to implement education and training activities on a significant scale. Areas in need of attention include strengthening training institutes, developing new training courses, training trainers, and making managers and technicians more aware of modern management techniques and new technologies. Modern broadcast media are one avenue for heightening awareness and providing on-air training. Other countries have used the broadcast media to present open university-type programs, debates, documentaries, 'soaps', and other programming to convey economic reform and other messages to the public. These types of initiatives should be encouraged and developed during 1997.

Institution building (US\$0.6 million): Getting labor markets to function efficiently

28. A major challenge in 1997 will be to get labor market and employment services in Bosnia and Herzegovina to function efficiently. The State Government also wants to integrate the labor markets to the extent possible. Today labor markets function separately in the Federation and Republika Srpska and, within the Federation, in Bosniac- and Croat-majority areas. This separation is reflected in institutional arrangements: one Employment Institute based in Sarajevo deals with the Bosniac-majority part of the Federation, one in Mostar deals with the Croat-majority part, and one in Republika Srpska deals with that area. Each institute has local employment offices that are supposed to collect labor market information and provide job placement and counseling services. Many of these local offices were damaged during the war and are barely functioning, particularly in the Bosniac part of the Federation. Some linkages were established between these institutes during 1996, and they need to be encouraged in 1997 to facilitate increased labor mobility throughout the territory of Bosnia and Herzegovina and to enhance labor market information systems and employment services. The ETFs will also need continued financial and technical assistance to play an increasingly significant role in implementing and financing effective employment-related activities.

Box 2. Lessons from the 1996 program

- **Public works schemes are useful for providing temporary employment and income to the unemployed, but ultimately the focus must be on creating permanent jobs;**
- **Better information on job opportunities is required for the unemployed both inside and outside the country; and**
- **Substantial labor policy reforms are the basis of sustainable growth in employment.**

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

29. The sustainability of employment creation is a major issue in Bosnia and Herzegovina. Many of the jobs created to date are temporary public works jobs or jobs related to reconstruction and will come to an end once the donor-financed reconstruction effort is completed. To encourage sustained growth in employment and create permanent job opportunities, in light of the 1996 experience (box 2), the challenge for the future is to ensure an open labor market and the right skills mix in the labor force.

Labor policy reform to respond to the needs of a market economy

30. Government authorities and the Employment Institutes in both the Federation and Republika Srpska recognize that labor codes and other labor-related legislation do not meet the needs of a market

economy. Current laws and regulations tend to reflect a paternalistic attitude toward worker protection, which restricts employment growth and labor mobility. Areas in particular need of reform include:

- *Extremely high payroll taxes.* Wage taxes, including social charges, stand at more than 50 percent of gross salary. By comparison, the average for most OECD countries is 18 percent and for Eastern and Central European countries is 30 percent. Bosnia and Herzegovina's high rates are likely to be a major constraint to the expansion of employment.
- *Restrictive work practices and contracts* that limit the flexibility of employment relationships. Employment contracts in Bosnia and Herzegovina are a holdover from the former Yugoslavia, where employees typically were guaranteed lifetime employment with generous leave time and extensive protection against dismissal. In a market economy private employers are likely to avoid legal labor contracts, as they have in other transition economies, because of their restrictiveness. Workers in Bosnia and Herzegovina will find this avoidance of legal contracts acceptable because of high unemployment rates and currently low wage levels. With a growing informal labor market, tax avoidance will spread and minimum standards of worker protection will not be upheld. Hence the need for reform.
- *Arbitrarily set minimum wages and wage schedules.* By law, wage scales are still officially set in both the Federation and Republika Srpska. However, with private sector growth, these wage levels are increasingly being ignored, and employers are setting wages based on market conditions. In addition, official minimum wages are set on a monthly basis. A system needs to be put in place to ensure that the minimum wage is set at an affordable level and is not subject to such frequent change.
- *Restrictions on hiring unemployed workers and on the listing of job vacancies.* In the former Yugoslavia the employment bureau was the only source of job listings for unemployed workers. Under current laws that system is still in effect. In OECD countries, even those with effective government-operated labor exchanges, private employment services and the listing of job vacancies in newspapers account for a substantial number of job placements. If employment is to recover quickly in Bosnia and Herzegovina, the development of a variety of job placement avenues needs to be supported by legislation.
- *Restrictions on labor-management relations.* A single tripartite labor contract between unions, employers, and government has traditionally been part of the regulatory framework. But in a market economy union officials can no longer count on a completely unionized work force. To the extent that the tripartite agreement contains provisions that are not acceptable to small and private employers, nonunion employment is likely to expand. Focused discussions among unions, employers, and government will be essential to ensure that all interests are taken into consideration during the process of privatization.

31. All these areas are being addressed by several international organizations, including the ILO and the World Bank, in the context of the overall macroeconomic discussions and government policymaking currently under way.

Income support measures to ease the transition for the most vulnerable

32. The unemployed in Bosnia and Herzegovina face the double hardship of finding a job in a postwar environment after four years of unemployment and of adapting to a changing job market in which their skills may no longer match market demand. Their hardship is intensified by the fact that

currently virtually no unemployment benefits are being paid. Income support measures are needed to reduce the hardship faced by the unemployed: unemployment benefits need to be reintroduced, but they must be at a financially sustainable level and narrowly targeted. Particular attention needs to be given to temporary income support for demobilized soldiers, displaced workers, war invalids, and other vulnerable groups.



AGRICULTURE

I. BACKGROUND

An essential sector before the war

1. Agriculture has always played a central role in Bosnia and Herzegovina's economy, providing full- or part-time employment to some 40 percent of the population. But because prewar productivity was low -- particularly on the 540,000 small private farms that owned 94 percent of the land -- the sector accounted for just 14 percent of Gross Social Product (GSP) in the late 1980s. Just before the war, between one-third and one-half of the country's basic food requirements had to be imported, mainly from other parts of the former Yugoslavia. Moreover, production varies substantially throughout the country: livestock (dairy and meat) predominates in the hilly and mountainous central and western parts of the Federation, horticulture plays an important role in the Mediterranean climate of the south, and wheat and grains grow along the northern fertile plains of the Sava river -- generating a wheat surplus in Republika Srpska while the Federation remains dependent on wheat and flour imports.

2. Bosnia and Herzegovina's forests, which cover about half of the country's land area, provided substantial and high-quality wood materials to industry before the war. Forestry and wood-based industries accounted for more than 10 percent of GSP and generated some US\$200 million in net export income. Forestry production is equally important in both Entities.

A sector devastated by war

3. The war had a devastating effect on agriculture, forestry, and food production (box 1). As a result, by the end of the war nearly 80 percent of the population depended on imported donor food aid, valued at US\$20 million a month.

Box 1. An overview of the damage

- In 1995 wheat, maize, and potato outputs were at 60-70 percent of 1990 levels;
- Fruit production has dropped by more than half;
- As much as 70 percent of farm equipment and 60 percent of livestock has been lost;
- Farm buildings and irrigation systems equipment were destroyed;
- Forest harvesting equipment was heavily damaged;
- High-value orchards and vineyards were destroyed directly or through neglect during the war;
- Food marketing systems were disrupted; and
- Some 15 percent of farm land and 20 percent of forests became inaccessible because of minefields.

4. Agriculture and food production have rebounded significantly since the end of hostilities. During 1996 many farmers were able to return to their fields and to resume production at a subsistence level. Village-based markets have reappeared, indicating surplus production. Still, significant challenges -- making sufficient agricultural assets available to farmers and revitalizing agriculture and forestry based on market principles -- must be addressed by the Entity Governments. Considerable support, both financial and advisory, is required from the international donor community.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

5. The reconstruction program for agriculture, food production, and forestry is aimed at redeveloping sustainable, private sector-led agriculture and forestry sectors. Achieving this goal would diminish Bosnia and Herzegovina's food dependency, stimulate rural employment, increase farm income, eventually generate export revenues, and create favorable conditions for the return of refugees.

6. The overall framework designed to meet these objectives, submitted in December 1995 and April 1996, remains valid. It will require US\$304 million in external financial support over a three- to four-year period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$73 million was firmly committed;** despite a financing gap of 25 percent (the first-year program was initially estimated at US\$97 million), a number of successful activities have been carried out (paragraphs 8 to 16);
- **In 1997, US\$90 million of external financing is required --** 52 percent of which should go to the Federation and 48 percent to Republika Srpska (paragraphs 17 to 29); and
- **In 1998 and 1999, some US\$141 million will be needed --** and a multitude of structural and policy issues should be addressed to ensure the competitiveness and sustainability of agriculture and forestry activities (paragraphs 30 to 35).

**Table 1. Agriculture Program External Financial Needs
(US\$ million)**

	3- 4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Imported seasonal farm inputs	20	11	5	4
Livestock and farm equipment	89	46	25	18
Seed multiplication development	7	4	3	0
Fruit trees and vineyards rehabilitation	30	0	10	20
Forestry rehabilitation	40	0	25	15
Rural financial markets development	20	0	5	15
Rural industries and services	40	0	0	40
Farmer support services development	30	9	7	14
Agricultural policy development/Tech. Asst.	7	0	3	4
Incremental recurrent costs	21	3	7	11
Total	304	73	90	141

7. The priority reconstruction program includes several components:

- Ensuring the availability of (mainly imported) critical inputs and equipment, including key seasonal inputs, farm equipment and livestock, and seeds;
- Rehabilitating critical sectors with potential for export, including high-value orchards and vineyards, forestry activities, and wood processing;
- Redeveloping support services, including rural financial markets (to provide farmers and agroindustries with financing solutions for both working capital and investments), rural industries and services, and farmer support services (including minimum extension and veterinary services); and
- Supporting institutional development, including assistance to authorities in formulating agriculture policies and technical assistance for program preparation and implementation.

In parallel, a number of policy issues (trade and price policies, property rights, privatization) should be addressed to ensure the sustainability of the recovery effort.

III. 1996 ACHIEVEMENTS

8. In 1996 donor assistance to agriculture focused on emergency projects with immediate impacts and high rates of return -- preparing a gradual transition from ad hoc assistance, typically provided by nongovernmental organizations (NGOs), toward economic recovery financed by bilateral and multilateral donors. Efforts focused on providing key inputs and equipment (through soft loans or grants) to farmers in order to:

- Sharply increase domestic food production and decrease dependency on donor food aid (box 2);
- Facilitate the return of displaced or refugee farmers to their land and reintegrate forest workers;
- Support subsistence agriculture to meet the minimal needs of the rural population;
- Increase the use of farm land and return war-damaged farms to production; and
- Ensure donor coordination to avoid duplication of efforts and waste of scarce resources.

9. The combined efforts of bilateral and multilateral donors, NGOs, and the authorities in Bosnia and Herzegovina led to a high degree of success in implementing the 1996 agriculture program. Of a total 1996 program of US\$97 million, some US\$73 million was firmly committed by thirteen donor countries and agencies (table 2) -- leaving a financing gap of US\$24 million (about 25 percent).

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
Imported seasonal farm inputs	10.5	EC, Germany, Islamic Development Bank
Livestock and farm equipment	46.0	IFAD, EC, Japan, Norway, Saudi Arabia, Slovakia, Slovenia, Switzerland, World Bank
Seed multiplication development	4.0	Japan, Norway, Switzerland
Fruit trees and vineyards rehabilitation	0.3	Norway
Farmer support services development	9.0	Germany, Japan, Sweden
Incremental recurrent costs	3.0	EC, IFAD, Netherlands, World Bank
Total	72.8	

Note: No commitments were made for: forestry rehabilitation, rural financial markets development, rural industries and services, and agricultural policy development/technical assistance.

Box 2. Reviewing and reducing food aid deliveries

During the war large amounts of food aid were imported and distributed in Bosnia and Herzegovina, mainly through United Nations agencies. Since the food situation improved substantially once hostilities ended -- thanks to increased domestic agricultural production and improved freedom of movement -- the World Food Program, in conjunction with the United Nations High Commissioner for Refugees (UNCHR) and the Food and Agriculture Organization (FAO), reassessed food aid needs in April 1996. Their recommendations included:

- Reducing monthly food aid deliveries from 24,000 to 19,000 metric tons, and eventually to 11,000 tons - which would free up an estimated US\$100 million a year in donor funds that could potentially be used for reconstruction;
- Cutting imported food aid commodities from six to four; and
- Reducing the number of recipients from 2,400,000 to eventually 600,000, with continued and intensified efforts for the most vulnerable (including the elderly, female-headed households, displaced persons, the disabled, etc.).

As a result of these recommendations, food aid was significantly reduced in 1996. By 1998 less than 20 percent of the population will depend on donor-supplied food aid -- compared with nearly 80 percent during the war.

Import and distribution of inputs: Requirements have been met

10. *Seasonal farm inputs and seed multiplication.* In 1996 the Food and Agriculture Organization (FAO), other donors (table 2), and NGOs supplied some US\$10.5 million of seeds, fertilizers, and pesticides. About 70 percent of this assistance benefited the Federation -- where minimum emergency requirements, as estimated by the FAO, were adequately met for many inputs -- and 30 percent Republika Srpska. The balance of input requirements was procured by farmers on a commercial basis.

11. *Livestock.* The International Fund for Agricultural Development (IFAD) provided US\$6.3 million to the Federation for the import of 3,900 pregnant heifers and 1,700 goats. Parallel financing

(US\$1 million) was provided by the Government of Saudi Arabia for the purchase of an additional 700 heifers. The IFAD-funded animals were distributed to farmers between September and November 1996 on a credit basis (beneficiaries were selected by municipalities based on an agreed list of criteria developed from comprehensive surveys). Various NGOs -- including the United Methodist Church Organization Relief, Action Internationale Contre la Faim, and Mercy International -- have also implemented a number of livestock programs in both Entities, including the supply of heifers, goats, chickens, and rabbits.

12. *Farm equipment.* Financing was provided by the European Commission (US\$5.8 million for 1,300 small tractors in the Federation) and the World Bank (US\$20 million for import to the Federation of 2,700 tractors and tractor implements and 14 combine harvesters). By the end of 1996 nearly all of this machinery had been imported, and delivery to Federation farmers (on a credit basis) is scheduled for completion by March 1997. NGOs such as Intervenir carried out additional programs aimed at supplying agricultural hand tools to farmers.

Rehabilitation of fruit trees, vineyards, and forestry: Preparing future financing

13. While financial assistance focused on the provision of critical inputs, programs were also prepared to rehabilitate orchards, vineyards, and forestry as potential vehicles for future donor financing. The FAO identified a US\$10-15 million project aimed at replacing damaged high-value fruit trees and vineyards. The Government of Norway established a program in Tuzla to revitalize orchards. The two Entity Governments (with FAO and World Bank support) drafted a US\$25-35 million forestry rehabilitation program that would benefit both the Federation and Republika Srpska, for which financial support by the European Commission (EC) and the World Bank is expected.

Redeveloping support services: A good start

14. *Rural financial markets development and rural industries and services.* The EC committed US\$1 million to support the dairy industry. The agriculture sector also benefited from projects implemented as part of the industry and industrial finance reconstruction effort. From a credit line funded by the Governments of the Netherlands and Italy, and the World Bank, loans totaling about US\$5 million were allocated to small and medium-size enterprises in the agroprocessing sector (shown as part of the industrial sector and not reflected in agriculture sector totals). Credit lines opened under the U.S.-financed "Bosnia and Herzegovina Reconstruction Finance Facility" were also partly disbursed in the agriculture and forestry sectors (these amounts are reported in the "Industry and Finance" section).

15. *Farmer support services development.* The Government of Germany provided US\$2.6 million to repair and re-equip forty veterinary stations in the Federation; deliveries of drugs and diagnostic equipment were largely completed. The EC committed an additional US\$0.3 million for a veterinary support program in Banja Luka. The FAO identified a US\$31 million agricultural services development program.

Support to institutions: Government counterparts established

16. *Agricultural policy development, implementation support, and recurrent costs financing.* The 1996 agriculture reconstruction program limited expenditures for technical assistance and institutional development to the minimum required for rapid and successful program implementation. Although no significant funding was made available to support agricultural policy and strategy and strengthen

institutions, resources were provided by the IFAD, the Government of the Netherlands, and the World Bank to establish a Project Implementation Unit (PIU) within the Federation Ministry for Agriculture, Water Works, and Forestry. Four regional project implementation units were also set up in Tuzla, Zenica, Bihac, and Mostar. These units have contributed significantly to the rapid implementation of agriculture and forestry project activities.

IV. 1997 CHALLENGES AND FINANCING NEEDS

17. Some US\$90 million in external financing is needed to meet 1997's challenges. A continued effort is required to reduce Bosnia and Herzegovina's food dependency and to generate revenues and rural employment (farming will play a key role as a rural employment buffer until other economic sectors and major industries recover), and will provide job opportunities for returning refugees.

Box 3. 1997 objectives

- Raising farm and food production;
- Reducing donor-financed food aid imports and starting to monetize food aid (revenues could be used for sectoral programs);
- Resuming production of wood material for reconstruction and export-oriented wood industries;
- Helping labor-intensive small farms raise productivity;
- Developing new extension and rural financial services;
- Restructuring veterinary services;
- Targeting high-value, export-oriented fruit and vegetable producers;
- Preparing an agricultural strategy for the Federation and Republika Srpska;
- Reviewing sector policies (such as price and trade policy, land ownership, agricultural markets, and State farmland and asset privatization);
- Clarifying responsibilities and funding of the different levels of government (Entities versus Cantons and regions); and
- Strengthening donor coordination and policy development capacity in both Entities.

18. Continued donor assistance is needed for import of critical inputs. However, donor activities should shift from emergency operations to sustainable activities (box 3). Particular attention should be paid to preparing for the transition from subsistence farming to a competitive, market-based, privately owned agriculture and food processing sector. Thus assistance is needed for activities aimed at increasing the efficiency of private agriculture -- and in particular for developing key farmer support services, building up farmer extension and research, and helping the Governments to address essential policy issues.

Critical imports (US\$33 million): A declining effort, with a focus on Republika Srpska

19. *Imported seasonal farm inputs (US\$5 million).* Donor support should be gradually phased out over the next years as the farm sector recovers, farm purchasing power increases, input markets improve, and business links between the Entities and with neighboring countries are restored. In the interim

period, however, the FAO will continue to provide support by assessing farm input requirements (by region and by type of input), preparing appeals to donors, and organizing procurement and distribution of inputs, in many cases with the assistance of NGOs and municipalities.

20. *Seed multiplication (US\$3 million)*. As part of this effort, the FAO will prepare additional seed multiplication initiatives for donor financing.

21. *Livestock and farm equipment (US\$25 million)*. In 1996 most donor activities focused on the Federation; during 1997 significant efforts should be made to expand assistance to Republika Srpska. Priority lists of livestock and equipment (mainly cattle and small farm tractors) are being developed by the Government of Republika Srpska, with IFAD and World Bank assistance.

Fruit trees and vineyards rehabilitation (US\$10 million): Reviving essential export sectors

22. Some US\$10 million is initially required to begin implementing the FAO-designed project proposal, prepared in 1996, aimed at rehabilitating high-value fruit trees and vineyards. Funds will either be used for procurement by the Government or onlent through commercial banks to farmers (who would select and procure the most appropriate plants on a commercial basis).¹ Expected benefits from this project include rural employment generation, soil improvement, substitution of high-quality domestic fruits and vegetables for imports, and eventually exports of wine and fresh fruits to neighboring countries.

¹ The project would aim to achieve full cost recovery from beneficiaries, at commercial interest rates, but with maturities adjusted to the long payback periods of replacement plants.

Forestry rehabilitation (US\$25 million): Tripling wood harvesting capacity

Box 4. The 1997 Forestry Rehabilitation Project

The project is intended to raise Bosnia and Herzegovina's wood harvesting capacity from its current level of 10 percent to about 35 percent of the prewar Annual Allowable Cut. It has two components:

- Rehabilitation of wood harvesting capacity in forest areas managed by selected State Forest Enterprises (Sumarstvos in the Federation, Sumsko Gazdinstvos in Republika Srpska), including provision of equipment -- against credit and supply arrangements -- for harvesting, transport, road maintenance, and forest surveillance;² and
- Support to sustainable forest management, including forest management planning, forest inspection, forest rehabilitation, and development of protected areas.

Implementation will be ensured by PIUs to be established in the Entity Ministries for Agriculture, Water Works, and Forestry. The PIUs will be in charge of bulk procurement, while regional units at the Canton and municipal levels will be responsible for distribution. Technical specifications have been prepared, and procurement has been initiated for the World Bank-financed portion (US\$7 million) of the project. Financial support by the EC is expected, while further cofinancing is being sought from other donors.

23. Up to US\$25 million is required to implement the Forestry Rehabilitation Project, designed in 1996 by the Entities Governments with World Bank support (box 4). Several benefits are expected: increasing wood production; reviving the wood processing, furniture making, and construction materials industries; generating employment in rural areas; and possibly generating export revenues -- since Bosnia and Herzegovina was a major exporter of wood products before the war.

Rural financial markets development (US\$5 million): On the road to sustainability

24. Lack of access to seasonal credit is becoming a major constraint for the recovering private farm sector (box 5). Given the problems faced by banks, formal commercial lending is unlikely to be available to farmers in the years to come. To address farmers' needs, a US\$5 million rural finance pilot program, combined with a technical assistance component, should be initiated during 1997.³ In parallel, the establishment of a land bank, which would purchase land from retiring farmers and rent it to others wishing to expand, could be considered. Such an institution could prove attractive to long-term investors (such as pension funds), which typically hold a portion of their assets in real estate.

² Harvesting and transport equipment for commercial purposes (such as chain saws, skidders, logging tractors, and trucks for log transport) will be ceded to State Forest Enterprises and private operators against in kind credit and supply arrangements with five-year terms and at near-commercial interest rates. Road maintenance and forest nursery equipment will be provided to the State and Forest Enterprises on similar loan terms. Credit will be repaid through local credit institutions.

³ The rural finance pilot program could be carried out within the framework of the World Bank-supported Local Initiatives Project, which is being implemented. Through local NGOs, loans (currently limited to US\$7,000 per beneficiary) would be extended to small businesses throughout Bosnia and Herzegovina under the supervision of a newly established nonprofit Employment and Training Foundation.

Box 5. The challenges of rural financial intermediation

Beyond the rural microlending program proposed for 1997, the specific challenges of enabling rural financial intermediation must be addressed. In all countries rural financial intermediation efforts confront a number of difficulties (high unit transaction costs to lenders of small farm loans, seasonality of demand for farm credit, high risks of agricultural lending due to variable weather, perishable outputs, and volatile product prices, etc.). Additional obstacles result from the specific postwar context in Bosnia and Herzegovina, including:

- The scarcity of domestic savings and financial resources;
- A poor legal framework for securing loan repayment (although out-of-court settlements, based on promissory notes signed by the borrower, are likely to remain common practice);
- The absence of track records of farming performance for many returning refugees and displaced farmers;
- The lack of experience within existing banks in lending to private farmers (before the war most farm inputs were supplied by socially owned agrocombinats to farmers against supplier credit arrangements); and
- The need for overall financial sector reforms (strengthening of bank regulation and supervision, need for bank restructuring and privatization).

In exploring farm credit programs in 1998 and beyond, donors should pay attention to the pricing of loans, which should reflect the full cost of resource mobilization and program administration. Rural financial intermediation should be developed in the context of overall banking sector reform (see the "Industry and Finance" section).

Farmer support services development (US\$7 million): Helping to increase productivity

25. Major productivity gains would result from the modernization of agricultural technology in Bosnia and Herzegovina, which currently lags far behind Slovenia and Croatia. Adequate farmer support services are urgently needed, and it should be possible to ensure their suitability to a market-economy, since there is no structure inherited from the socialist period. In 1997, US\$7 million is required, including:

- Re-equipment of agricultural and forestry research and veterinary institutes in Sarajevo, Banja Luka, and Mostar;
- Institutional support to set up Entity-wide agricultural extension service networks,⁴ including required initial equipment, staff training, and technical assistance; and
- Establishment of an agricultural market information system and database accessible to farmers, agroindustries, researchers, and donors.

⁴ A newly created public agricultural and forestry extension service could constitute the initial advisory network for small farmers and private forest owners in Bosnia and Herzegovina -- but attention should be paid to ensuring that this system remains demand driven, possibly through the involvement of municipalities. Donor support is required to finance local diagnostic surveys, training programs for extension officers, mass media activities, and on-farm demonstration programs. In parallel, private advisory services should be established -- possibly starting with private advisers to farmer associations.

The return on investment in such a program will be high, since many farmers will already have at their disposal imported high-quality livestock and modern farm equipment as a result of the 1996 activities.

Agricultural policy development and aid coordination (US\$3 million): Filling institutional gaps

26. Both Entity Ministries of Agriculture, Water Works, and Forestry are still insufficiently staffed (the Republika Srpska ministry was created during the war) and lack adequate budgetary resources. External assistance is required to develop policies and strengthen institutions, with an emphasis on remedying existing institutional gaps in both ministries (box 6). To the extent possible, inter-Entity institutional capabilities should be developed to lower costs, expand geographical coverage, and benefit from increased sources of information and experience.⁵

Box 6. Size and functions of government

In the years to come, public expenditures on agriculture will need to be kept low and the role of the government should be limited to enabling the development of a private farm and forestry sector. Competition and private sector involvement should be introduced for, among other things, clinical veterinary and artificial insemination services, seed multiplication, farm inputs distribution, and possibly agricultural extension and applied research. However, to adequately strengthen Governments' structures, specialized units should be set up in the Entity ministries for:

- **Policy formulation**, to design a road map for necessary reforms in foreign trade, prices and taxation, land ownership and land market development, rural credit, enterprise and state farm privatization, agricultural and food markets, and farm technology;
- **Market information systems and agriculture statistics**, to gather information required for decisionmakers (including data on prices and marketed quantities for key commodities, the extent of the farming resource base, cropping patterns and livestock holdings, etc.). During the current post-emergency phase the international organizations, mainly the FAO, are carrying out agricultural production assessments, but Entity Governments should take the lead as soon as possible;
- **Epidemiological control**, to strengthen and better coordinate responsibilities for disease identification and eradication programs; and
- **Forestry regulation and forest inspection**.

Ministries should also monitor and record donor activities, identify financing gaps, carry out short-term investment planning and resource allocation, compile and disseminate project information, and ensure complementarity of donor efforts.

27. Required activities in policy development for 1997 include:

- Preparing an agricultural strategy and investment plan for both Entities;
- Assessing the environmental impact of agriculture, agroindustries, and forestry;
- Supporting the development of budgets and organizational structures for both ministries; and

⁵ The outbreak of foot and mouth disease in the Former Yugoslav Republic of Macedonia in August 1996 demonstrated the need to strengthen agriculture communication channels and cooperation mechanisms between the Entities.

- Providing corresponding support to canton agricultural administrations in the Federation.

Incremental recurrent costs (US\$7 million): A gradual handover to the governments

28. Continued external financing is required in 1997 for incremental recurrent expenditures, such as project management staff and other operating costs. However, with the gradual economic recovery in both Entities, Governments can be expected to cover some of these costs with their own budgetary resources. Incremental recurrent costs should be financed by donors on a declining basis, while cost recovery through user fees and taxes should be gradually introduced. By the end of 1997 donor financing for the incremental recurrent expenditures of agriculture projects should not exceed 50 percent of actual expenditures. By the end of 1998 donors should aim to reduce this percentage to 25 percent of recurrent expenditures.

Recommended implementation arrangements

29. In 1996 donors relied heavily on international agencies -- mainly the FAO, UNHCR, and various NGOs -- to implement their programs. The involvement of these organizations is expected to continue in 1997. However, in light of the 1996 experience (box 7), implementation responsibility should be shifted gradually toward the Entity Governments through the Project Implementation Units established in the Federation (and the four regional project units located at the Canton level in Bihac, Tuzla, Zenica, and Mostar) and being established in Republika Srpska. With the improvement of the local financial sector and banking system, donor funding for farm investments should increasingly be channeled through domestic financial intermediaries that can extend loans to farmers who would then be in charge of their own procurement -- so that Governments can abandon their implementing role and focus on establishing an enabling environment for the sector.

Box 7. Lessons learned in 1996

- Donors should seek to work with and through the Entity ministries when implementing agriculture programs. The central and regional PIUs are readily available to channel donor funds to the intended beneficiaries in the agricultural community; some efforts have been duplicated when donor plans were developed without the knowledge of government agencies.
- Donor-financed farm equipment or livestock should be provided to farmers on a credit basis, rather than as donations, to maximize the likelihood that the items provided are best used by the beneficiaries. Donors should follow consistent cost recovery policies in this area;
- Donors should coordinate their programs through the Agriculture and Food Task Force in Sarajevo to avoid duplication or contradiction of efforts (the Agriculture and Food Task Force, comprising representatives of the Government and major donors, began meeting in April 1996 under World Bank chairmanship; the FAO also convenes frequent coordination meetings with NGOs focusing on emergency farm inputs); and
- Key policy issues should be addressed and institutional capacities strengthened to ensure the sustainability of the donor effort. Additional donor grant funding for technical assistance and recurrent costs is needed to support the Entity authorities.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

30. To ensure that the efforts undertaken by donors and local authorities are sustainable, a number of policy issues should be addressed. Although complete resolution of these issues will require several years of effort, first steps should be taken as early as possible.

Budgetary support and cost recovery

31. Agricultural subsidies of any kind (for example, transfer payments to state-owned agroprocessing enterprises and state farms, agricultural loans at low interest rates, and free provision of public services) should in principle be avoided. Once the first few years of reconstruction have ended, beneficiaries must be charged the full cost for loans and public utilities. Substantial investments (such as the replacement of fruit trees and vineyards or restocking of large-scale animal reproduction centers) should not be implemented without full cost recovery from farmers and enterprises that benefit from them. And remaining price controls (e.g. for timber) should be abolished.

Privatization of government-owned assets

32. An important effort should be made to ensure rapid privatization of government-owned assets, including:

- The assets of state farms and agrocombinats;⁶
- Noncore activities in state forest enterprises -- including wood transport and harvesting and activities that have little to do with forest management; and
- State-owned enterprises in food processing and agrotrade.

Both Entity Governments are committed to such a privatization process. In the Federation substantial discussions have already been held between the Government and the Cantons to contemplate options for agricultural development. While the reforms should be conducted within the overall privatization framework, donors could consider providing additional support to both Entities through an agriculture sector adjustment project.⁷

Property rights and land market development

33. Large population movements took place during the war and will continue to take place in the months and years to come. Property rights are obviously a complex issue. The Dayton-Paris Peace Agreement established a Commission for Real Property Claims of Displaced Persons and Refugees to register claims, particularly those related to farm assets, land, and other real property. The Commission's work will be key since budgetary funds for compensation are not likely to be available, and other solutions (possibly exchanges) for addressing rights to land and farm assets will have to be

⁶ Before the war these organizations dominated the sector - - even though most agricultural land was owned by small private farms - - and many of them are still in operation, particularly in Republika Srpska. Their land, buildings, livestock, equipment, and other holdings should be privatized as soon as possible.

⁷ The cost of this operation has not been included in the three- to four-year reconstruction program financing requirements.

developed between the new residents and farmers. Meanwhile, temporary user rights may have to be issued to the current occupants of the land if such a law is to be productively used. Speed in processing contested land user rights is essential to allow for the development of a land market in Bosnia and Herzegovina (a precondition for part-time farmers to give up their land holdings and for consolidating the currently fragmented structure of agricultural land).

Other issues

34. Several other issues should be addressed to ensure that the reconstruction effort is sustainable, including ensuring the environmental sustainability of agriculture and forestry redevelopment, promoting the establishment of farmers associations (which has proven to be an effective way to reduce procurement costs and disseminate best practices), and developing agricultural markets that respond to the needs of the sector.

Resolving policy issues: A precondition for a sustainable development

35. Addressing policy issues -- cost recovery, privatization of governments' assets, property rights and landmarket development -- is critical for the future development of agriculture and forestry in Bosnia and Herzegovina. Donors should strongly urge the Entity Governments to make rapid progress on this matter. Decisive governments' action in resolving these issues should significantly influence the amount and timing of donor assistance to the sector.

EDUCATION

I. BACKGROUND

Functioning system before the war

1. Prior to the start of hostilities, Bosnia-Herzegovina had a well-developed education system, financed by public expenditures accounting for about 6 percent of GDP. Despite the disruptions caused by the dissolution of the former Federal Republic of Yugoslavia, virtually all children completed the eight-year primary cycle; most also completed a four-year secondary cycle. As elsewhere in the region, the preponderance of secondary education was offered in the form of narrowly specialized vocational education programs, oriented to the needs of industry. Higher education was offered through four universities comprising forty-six institutes and faculties. Higher education enrollments emphasized science and engineering.

Damaged infrastructure and a reduced teaching force

2. All aspects of education were severely disrupted by the war. Many teachers were drafted into military service, killed, displaced, or took refuge in other countries. Approximately 70 percent of schools were damaged, destroyed, or requisitioned for military uses. Many schools were rendered useless by losses of windows, furniture, and educational materials. Budgetary resources to pay teachers and provide textbooks and other educational materials dried up completely in many parts of the country.

3. The situation differed substantially among regions, however. The Bosniac-majority part of the Federation suffered the most damage, both to its facilities and its teaching force; budgetary resources were critically lacking, and salaries were not regularly paid. The situation in the Croat-majority part of the Federation is somewhat better: damage was more limited, and operational expenditures were more adequately covered through assistance provided by Croatia. In Republika Srpska the education system was seriously affected by the international embargo and hyperinflation, which drastically reduced budgetary resources and availability of materials despite substantial support provided by the Federal Republic of Yugoslavia; physical damage to schools was significant but less extensive than in the Federation.

4. Despite these difficulties, the extraordinary efforts of parents, local governments, and aid agencies ensured that most children continued their education throughout the war, though in a very disrupted form. Because the school year was abbreviated and educational inputs -- teachers, classrooms, and educational materials -- were lacking or improvised, the quality of education was far below prewar standards. Where there was heavy fighting, instruction was halted for almost a year. Where classes managed to continue, the school year was shortened to less than half its normal duration. To accommodate students displaced from destroyed schools and the influx of displaced persons in some areas, most schools now function in two or three shifts of 3 1/2 hours each. With the collapse of public transport, children in rural areas and even in city suburbs have difficulties reaching school. Many teachers are wartime volunteers and lack pedagogical training. Although the issue is now under study in the Federation by the Ministry of Education, no clear policy has been established on whether returning

teachers will be able to recover their former teaching positions, or if the volunteer teachers will be given the opportunity to keep their jobs if they obtain the pedagogical training required of a normal teacher.

5. Since the signature of the Dayton-Paris Peace Agreement, much progress has been made and classes have resumed in most parts of the country on a reasonably regular basis. Still, serious problems remain. Education facilities need substantial repairs. Educational materials, reading materials, and basic furniture are scarce. Even in schools that have been "repaired" by the bilateral donors and nongovernmental organizations (NGOs), electricity, heating, and/or water are often lacking -- making the facility unfunctional for parts of the year. Education programs at all levels need to be revamped, and the teaching force of war-time volunteers needs to be professionalized. Finally, salaries have to be restored to levels that attract a qualified teaching force.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

The priority reconstruction program

6. To address the needs in the education sector, a priority education reconstruction program was developed jointly by the Government and various donors, and presented to donors at meetings hosted by the European Commission (EC) and the World Bank in December 1995 and April 1996. Indicative estimates were included for reconstruction needs in Republika Srpska, for which little concrete information was then available. Setting reconstruction priorities inevitably involves difficult choices among the many urgent and legitimate needs throughout the education system. Because available resources are so limited, these choices involve tradeoffs between the highest priority needs and needs that can appropriately be deferred to a later stage in the reconstruction process.

7. The priority program was designed to address only the most urgent requirements for restoring minimal operations in the sector in a coherent fashion, starting with those investments that could have an immediate impact and benefit the largest possible number of schoolchildren. The program focuses on:

- Ensuring that all classrooms are at least minimally supplied with textbooks and educational materials for students and teachers;
- Reconstructing lightly damaged primary and general secondary schools to make them functional quickly;
- Upgrading teaching skills;
- Providing remedial education for young people whose education suffered during the war; and
- Strengthening capacities for education administration at all levels.

The priority program does not include essential and well justified reconstruction activities that would be more appropriately addressed at the next stage of the reconstruction effort -- either because they will take longer to implement, or because they require policy decisions not yet made. On that limited basis, total

foreign financing needs for priority education *investments* in the first three to four years of the reconstruction program are then estimated at about US\$180 million.¹

8. Updated damage estimates and better data on the situation in Republika Srpska have increased somewhat the overall foreign financing requirements for education reconstruction. The current estimate is that the priority education reconstruction program will require US\$273 million in external investment support for the three- to four-year period within the overall US\$5.1 billion priority reconstruction program (table 1).

- In 1996, US\$104 million was firmly committed, 44 percent more than the initial first-year estimate (US\$72 million); about 45 percent of this amount was disbursed (paragraphs 9 to 15);
- In 1997, US\$70 million is required, of which about US\$25 million is for Republika Srpska (paragraphs 16 to 27); and
- In 1998 and 1999, a further US\$99 million is required, along with a concerted effort to address sector reform and sustainability issues (paragraphs 28 to 33).

**Table 1. Education Program External Financial Needs
(US\$ million)**

	3-4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
School reconstruction	221	87 ^a	58	76
Educational materials	25	6	6	13
Student recovery	11	1	2	8
Teacher training	7	4	2	1
Institution building	9	6	2	1
Total	273	104	70	99

^a Includes commitments reported by donors as part of their "municipal infrastructure projects" and the reconstruction of universities and related recurrent costs.

III. 1996 ACHIEVEMENTS

Donor inputs

9. Tracking and tabulating overall achievements in the education sector in 1996 is difficult for several reasons. Information on donor activities in Republika Srpska is still very sketchy. The education sector received assistance from the humanitarian and reconstruction assistance programs of many donors,

¹ In addition, requirements for initial budget support for very modest teachers' salaries and school operating requirements for communities that lack resources for these needs are estimated at US\$50 million during the three- to four-year reconstruction period. Not all of the 1,100 schools and 30,000 teachers in the system require support; some communities have the resources to provide at least minimal support for these needs. But many communities do not yet have such resources. For these communities, temporary budget support is crucial to help fill the gap until local revenues begin to recover. Because the donor community has demonstrated no willingness in 1996 to provide significant funds for recurrent budget support, this category receives no further consideration here. However, continued operation of the education system will require budget support for recurrent expenditures for teachers and schools in communities without financial resources (see the section on "Fiscal and Social Support").

and the distinction is not always clear in the information provided, especially when humanitarian assistance involves compensation for teachers. Implementation often took place in a decentralized manner directly with individual schools or municipalities. This is particularly true of resources channeled through NGOs. In such cases the authorities in Bosnia and Herzegovina at the Entity or (in the Federation) canton level were often not informed of donor activities. Such separately concluded financing arrangements, while producing quick results on the ground, may have generated inconsistencies among reconstruction activities. They also cannot ensure that donor financing is directed to the most urgent needs as defined in the priority reconstruction program.

10. These caveats notwithstanding, table 2 summarizes available information on firm commitments to the sector for 1996. The bulk of donor assistance was allocated to school rehabilitation, benefiting 31 pre-primary schools, 307 primary schools, 36 secondary schools, and 2 tertiary institutions in both Entities. A total of US\$104 million was firmly committed to education activities in 1996. This amount is shown in table 1 as committed entirely for the priority program. But to the extent that these commitments were for less urgent activities that may be more appropriate for a later stage of the reconstruction program, the 1996 commitments for priority investments would be less than the amounts shown in column two of table 1, and the unmet needs were greater than shown in columns three and four.

11. To obtain badly needed improvement in donor coordination in the education sector, the Education Sector Task Force in Sarajevo is intensifying its work. Led by the United Nations Educational, Scientific and Cultural Organization, the Task Force comprises representatives of the Ministries of Education in both Entities -- thus far, the Ministry of Education in Republika Srpska has not yet participated -- the European Commission (EC), the United Nations High Commissioner for Refugees (UNHCR), the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the World Bank, and bilateral donors and key NGOs represented in Sarajevo. Toward the end of 1996 the Task Force started to develop a more accurate consolidated picture of pledges, firm commitments, contract values under implementation, and disbursements in the several components of the program, based on a database of individual contracts at the school level. This effort will continue in 1997.

**Table 2. Firm Donor Commitments in 1996
(US\$ million)**

	Amount	Main Donors
School reconstruction	87 ^a	Albania, Austria, EC, Finland, Greece, ISDB, Luxembourg, Netherlands, Norway, Saudi Arabia, Slovenia, Switzerland, UNDP, US, World Bank
Educational materials	6	EC, Malaysia, Norway, UNICEF, World Bank
Student recovery	1	Austria, Malaysia, UNICEF
Teacher training	4	EC, Indonesia, Luxembourg, Norway, Slovenia, Switzerland, UNICEF
Institution building	6	US, World Bank, various European countries
Total	104	

^a Includes commitments reported by donors as part of their "municipal infrastructure projects" and the reconstruction of universities and related recurrent costs.

The Emergency Education Reconstruction Program

12. *The program's content.* The largest and most fully documented set of financed reconstruction activities in the priority program are those included in the Emergency Education Reconstruction

Program, which is being implemented by the Federation Ministry of Education and being prepared by the Republika Srpska Ministry of Education. The program comprises: a) the refurbishment of ninety-one large primary schools throughout the Federation and the construction of five new primary schools in areas with no alternative school capacity, b) the provision of selected books and educational materials to schools in the Federation, c) strengthening of education implementation capacity at the Federation and canton levels, and d) preparation of similar reconstruction activities for education programs in Republika Srpska.

13. The program was designed to meet only the most urgent needs for education reconstruction. Two objectives that guided the design of the program were, first, to improve the educational situation of as many schoolchildren as possible with the very limited resources available and, second, to do so quickly -- preferably by the start of the 1996-97 school year. Those principles led to the program's focus on primary education. They also led to the compressed implementation period for the program -- eighteen months in duration, with most work done in the first six months. Within the Federation program activities are apportioned roughly according to population -- with about two-thirds of project expenditures occurring in Bosniac-majority cantons and one-third in Croat-majority cantons.

14. The total cost of the program is estimated at US\$32.8 million, of which \$10 million is provided by the World Bank -- half in the form of a grant (approved in May 1996) and half as a credit (approved in June 1996). Even before this financing was approved, project implementation was initiated in the spring of 1996 with support from the Government of the Netherlands.

15. *Good implementation progress.* There was considerable progress in implementation of the Emergency Education Reconstruction Program in the Federation. Preparation of program activities for Republika Srpska is under way; implementation is expected to start soon.

- *School reconstruction and rehabilitation.* Damage assessments were completed for all the schools that are to be refurbished under the program. Of the US\$10 million financing initially provided by the World Bank, more than 90 percent was committed; more than US\$5 million was disbursed. Contracts were signed and rehabilitation is under way for twenty-eight primary schools -- twelve in Croat-majority cantons and sixteen in Bosniac-majority cantons. Other donor financing is supporting the rehabilitation of twenty-two schools located in Bosniac-majority cantons. Another twenty schools are ready for tendering for rehabilitation; only the necessary donor financing is lacking. Architectural designs were completed for the remaining sixteen schools to be constructed or refurbished under the program. Work cannot proceed until additional donor financing is provided, however. With financing from the UNDP, preparation of designs for the five new schools to be constructed under the program -- all in Bosniac-majority cantons -- is under way. Two of these new schools are being financed by NGOs. Financing for the three other new schools is being sought;
- *Educational materials.* Contracts were signed for US\$1.5 million of educational materials and twenty textbook titles to be provided under the first donor commitments. Additional titles are being procured with financing provided by the Soros Foundation and the Government of Germany. An additional twenty-four textbook and supplementary reader titles are ready for tendering; again, only the necessary financing is lacking. This material will go to schools in Bosniac-majority areas since education officials in the Croat-majority areas of the Federation and Republika Srpska prefer to get these supplies from Croatia and the Federal Republic of Yugoslavia, respectively; and

- *Institutional development.* On the institutional development front, a Program Coordination Unit (PCU) was established in the Federation Ministry of Education and is overseeing implementation of all aspects of the Emergency Education Reconstruction Program. This coordination is working well for activities being implemented by the Ministry, but coordination with reconstruction activities implemented by other levels of government has been hampered by the PCU's lack of information and jurisdiction over these activities. This process is now working better, based upon shared information between the PCU and the implementing agencies. But full articulation between the Ministry-implemented program and other reconstruction activities will continue to require special attention. More generally, there is a serious need for better coordination among education authorities at various levels of government. Clarifying the roles of these bodies (paragraphs 28 to 30) should improve coordination.

Box 1. Lessons learned in 1996

The first year of education recovery has provided valuable lessons -- both for the country and for donors:

- **Operating in a policy vacuum is difficult;** uncertainty about government roles is hampering the restoration of teacher salaries in certain parts of the country, which is itself a fundamental threat to education in the future; it is also delaying key decisions on needed reforms in orientation, structure, management, and financing of secondary and higher education;
- **Evenhandedness in addressing education recovery needs throughout the country is critical;** the education recovery effort must be perceived as fair by all parties; among other things this will require more detailed documentation of damages to educational facilities throughout the country -- a priority activity for the next stage of the reconstruction effort;
- **Better communication and coordination among donors and among different levels of government is essential** within the Federation and between the Entities; for that reason mechanisms to strengthen internal exchanges among all parties deserve priority attention by donors and by government authorities;
- **Reconstruction in many areas cannot proceed effectively in the absence of progress in addressing key policy issues in the sector;** moving ahead on reconstruction in secondary and higher education will require decisions soon on the goals and content of these programs; and
- **Finally, it will take time before the parties to the conflict are ready to see education play as full a role as it might in promoting reconciliation;** although there are some promising initiatives in reconciliation and tolerance education, these are isolated ventures at the moment. Continuing sensitivities on the language issue suggest that progress will be slow and uneven.

IV. 1997 CHALLENGES AND FINANCING NEEDS

16. The key challenge for implementation of the priority program for education reconstruction is to mobilize additional resources to fill the large financing gap required to carry out the priority education reconstruction program, to be implemented in light of the 1996 experience (box 1). An immediate need is to secure financing for the large unfinanced portion of the Emergency Education Reconstruction Program, and to extend its coverage in Republika Srpska.

17. Beyond these priority efforts to jump-start the primary school system, however, there are very extensive financing needs for all of the activities listed in table 1, for which donor financing is urgently needed. These needs are described in the following paragraphs.

School reconstruction (US\$58 million)

18. The Emergency Education Reconstruction Program, when fully funded, will rehabilitate or reconstruct one-eighth of the primary schools in the Federation, including most of the largest primary schools. The program deliberately focuses on lightly damaged schools, however, because these schools could most quickly be made fully functional. The many (often smaller) primary schools that suffered more extensive damage are not included; nor are damaged primary schools in Republika Srpska or damaged educational institutions above the primary level in either Entity. There is as yet no systematic plan to repair and reconstruct these educational facilities, although a few establishments have undoubtedly received ad hoc support from donors.

19. Beyond the schools covered under the Emergency Education Reconstruction Program, the main priorities are to repair and reconstruct: a) more heavily damaged primary schools, b) lightly damaged general secondary schools, and c) carefully selected higher education and vocational training facilities throughout the country. The Federation Ministry of Education has developed a list of schools in the first two categories, to serve as the basis for donor financing commitments. Similar lists will be prepared in Republika Srpska. For reconstruction of facilities at the post-primary level, it will be important to avoid expensive reconstruction and re-equipping of curricular streams whose relevance in the new market economy is questionable. Although reconstruction efforts to date have focused on the Federation, school reconstruction in the future will need to redress the balance by paying special attention to the needs in Republika Srpska.

Educational materials (US\$6 million)

20. The Emergency Education Reconstruction Program is starting to provide textbooks to primary schools in the Federation. But there is an urgent need for donor assistance to enlarge this effort to cover carefully selected other textbooks and additional materials such as supplementary readers in primary schools, and to extend the provision of textbooks (particularly in science, math, and foreign languages), readers, and educational equipment to other levels of education. There is also a need to improve the pedagogic content of textbooks, and especially to reduce the number of required titles. In all of this, donor efforts should give priority to curricular material of common acceptability to all groups in the country, which may require devoting a larger portion of the overall effort to supplementary reading materials.

Student recovery (US\$2 million)

21. Most students missed significant amounts of schooling during the war. Those that have been displaced from their homes have been even more seriously affected. Many children from rural areas, especially girls, worked for their families and did not regularly attend school. Many displaced children as well as others affected by the war have fallen behind in basic skills such as reading and math. As the economy recovers around them, this cohort will tend to bear an educational handicap throughout their lives. As these young people enter the labor force, their educational deprivation will make them less able to contribute to -- and to benefit from -- postwar recovery. Remedial education programs are needed to help these students catch up to their peers. For students who will already have left the school system,

nonformal programs are needed to provide an opportunity to catch up in missed skills that are relevant to labor market demand.

22. Psychologically traumatized and mentally retarded children also have vast needs. In the past children with handicaps were usually segregated from other children. The Government intends to provide better and more cost-effective care for these children by educating them, to the extent possible, in regular schools. Early diagnosis and treatment is essential to the success of this strategy. A proposal for a program to provide such care has been developed by the Government with the support of an international foundation. Implementation of this and other aspects of the student recovery program await donor financing.

Teacher training (US\$2 million)

23. Bosnia and Herzegovina lost most of its qualified teachers during the war, and much of its pre-service and in-service teacher training capacity. Teacher training needs to be revived and modernized, both to upgrade the skills of unqualified teachers and to introduce a more modern pedagogy throughout the education system. A well-coordinated initiative is currently under way with the participation and funding of UNICEF, the U.S. Agency for International Development (USAID), the Soros Foundation, the United States Information Agency, and the World Bank to help the Federation Ministry of Education modernize teacher training programs. The Ministry of Education, in cooperation with the University of Pittsburgh, is working closely with educators from each of the ten Federation cantons to develop new teacher education programs and to prepare a plan for renewing the teacher training infrastructure. Findings and recommendations of this work, in the areas of programs, teaching methodology, finance, legislation, structure, and management of teacher training, will be presented in May 1997. Donor financing will be needed to implement these recommendations.

Institution building (US\$2 million)

24. There are major needs to strengthen capacity at the local level for routine education administration, and at the central level to set educational standards, provide quality control and pedagogical support, and carry out other professional leadership functions that are appropriate in a decentralized education system. This will require not only clarifying the roles of education authorities at various levels of the system (paragraphs 28 to 30), but also vastly improving communication and coordination among them. Training and equipment are needed to make this happen, as well as to introduce the program changes that are necessary to ensure sustainability (paragraphs 31 to 33).

25. In summary, in 1997, there is urgent need beyond the Emergency Education Reconstruction Program to work with the Federation and Republika Srpska Governments to develop a much broader yet coherent and carefully targeted program for continued rehabilitation and development of the education sector. This effort would extend the support provided thus far for rehabilitating, reconstructing, refurbishing and re-equipping primary schools, covering more heavily damaged schools which require more extensive repairs than were possible under the accelerated implementation schedule of the emergency program. If still necessary, it might also support demining of schoolyards and adjacent terrain.

26. This broader education recovery effort should also support repairs to educational facilities and support for educational programs at other levels -- including preschool, secondary and higher education. As in primary education, selectivity will be necessary in order to focus donor efforts on the highest

priority areas for reconstruction. The first criterion for selecting education recovery actions should be to provide support for children or young people whose education suffered directly as a result of the war, through remedial education programs and programs for traumatized children (paragraphs 21 and 22). Another selection criterion should be the extent to which proposed actions address sustainability and reform needs, as summarized in the following section. For example, textbook investments for secondary level should be considered for support to the extent that they permit the delivery of improved curricula, designed to address excessive subject matter specialization and fragmentation, especially in vocational and technical schools. Higher education investments should be considered to the extent that they promote the objectives of efficiency and system integration.

27. To achieve this broader coverage the program will require significant donor financing. An urgent priority is to develop the program into prioritized, modular elements from which donors can select for financing. Moving into implementation of this expanded education recovery program as quickly as possible, and in a manner which addresses the most urgent needs first, will require intensive work with the Government to identify priorities: for reconstruction of specific facilities, for provision of specific book titles and educational materials, for development of specific remedial programs, etc. Once priorities are established, work will need to be launched immediately to prepare designs for schools to be reconstructed, to prepare manuscripts for printing, and to develop new programs. Donor assistance will continue to be crucial for supporting these preparatory activities for education recovery, as it has been in the past.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

Roles of education authorities need to be clarified

28. The most important structural issue that needs to be resolved in the education sector involves the role of different levels of government in financing and delivering education at various levels. With the dissolution of the former Yugoslavia, Bosnia and Herzegovina needs to establish an effective education system from the structures and programs that it inherited from the former Federal Republic of Yugoslavia. Education administration in the former Yugoslavia was quite decentralized, but the war has seriously affected the resources and capacity of government at all levels to plan and provide education. Resolution of this issue is particularly crucial to the resumption of teacher salaries.

29. According to the 1994 Federation Constitution, cantons are responsible for delivering education, but cantons may delegate this responsibility upward to the Federation or downward to communities. In the short term this policy is impractical because most cantons lack the capacity to manage education delivery, and all cantons lack the budgetary resources to do so. More fundamentally, the small size of some cantons is inconsistent with efficient management of some education functions. In higher education, for example, cantonal universities would be too small to capture economies of scale and allow for program diversity. Efficient administration may also call for particular functions such as curriculum development, educational materials development, and quality control being carried out at the Federation or State levels. Given the sizable differences in income among cantons, there is also likely to be a need for some intercantonal transfers to provide for education of at least minimally acceptable quality in the poorest cantons.

30. Although the unitary structure of government in Republika Srpska presents fewer decentralization issues, there are nonetheless similar issues to be resolved involving the roles and responsibilities of local education authorities relative to central authorities.

Teacher qualifications need to be improved

31. A related policy question that is crucial to the sustainability of the education reconstruction program is how to retain qualified teachers in the system, how to upgrade the skills of unqualified teachers, and how to convince teachers who have left to return to the profession. The Federation's Ministry of Education has collected data on teachers and their qualifications in primary education, and is studying secondary education teacher needs. The Ministry estimates that about 8,000 teachers lack formal qualifications. In addition, the Federation Ministry of Education has maintained contact with many of the former teachers who are now engaged in "temporary" other work in Bosnia and Herzegovina, are performing military service, or are refugees in other countries -- many of whom are currently working as teachers. The Ministry estimates that as many as 4,000 teachers are abroad and could potentially return to Bosnia and Herzegovina to teach. Essential to managing and supporting this process of rebuilding a strong, qualified teaching force will be specific decisions on:

- Resumption and level of teacher compensation;
- Incentives to attract qualified teachers to return to teaching; and
- The process for raising the qualifications of unqualified teachers.

The content of education programs needs to change

32. There are needs for content change at all levels of the education system to promote postwar reconciliation among the parties to the former conflict. At the secondary level -- especially in vocational and technical programs -- a significant reform of structure and content is also needed to reorient education to the requirements of a modern market economy and post-communist society. At the same time, secondary vocational education could play a major role in providing qualifications to those who dropped out of school or were otherwise deprived of access to secondary education during the war. Rather than rebuilding all the secondary vocational and technical schools that were destroyed or damaged during the war, reconstruction should take the form of developing practical, "second chance" or remedial education programs for students and young adults. These programs should stress adequate preparation in general subjects while starting the process of developing vocational and technical education programs that embody a more modern curriculum than was in use before the war. This effort should start by reinforcing general academic studies in secondary education and orienting more students to general education. The science and math content of vocational education should be strengthened. Vocational education should be developed for broad occupational families, rather than for narrow occupations. More generally, pedagogy should be modernized to emphasize to the synthesis and application of facts rather than the simple mastery of facts. And there should be more emphasis on self-directed learning and teamwork learning rather than passive absorption of material provided by the teachers or textbooks. Application of these changes has far-reaching implications for new teacher training programs and new educational materials, including school libraries. Over time there is also a need to modify the content of social studies and other courses to explain recent political developments in the region in a way that encourages reconciliation among the parties of the former conflict, and the return to a common language.

A need for change in higher education administration and finance

33. To offer higher education programs of high quality and diversity, a number of changes are needed in the administration and financing of higher education. Because it is not possible to maintain high-quality programs in multiple, small, free-standing universities, there is a need to move toward an integrated higher education system with critical mass in particular fields and open access to specialized programs in different parts of the country. Doing so will require harmonization of program and admission requirements, reciprocity agreements across faculties, and consolidation of some small programs and facilities to a more economical scale. To contain the budgetary cost of higher education, student fees should be introduced and needs-based and merit-based fellowships developed. Finally, to ensure the market relevance of program offerings in higher education, budgetary resources should be allocated to programs based on student demand and efficiency of past use of budget resources.

HEALTH

I. BACKGROUND

Systemic problems before the war

1. Despite significant improvements during the 1970s and 1980s, prewar health indicators in Bosnia and Herzegovina reflected a mixed picture: for some indicators the country was one of the most advanced in Central Europe, while for others it lagged behind. A supply-dominated, centrally planned had resulted in the proliferation of large hospitals and a heavy reliance on specialized polyclinics. Relatively little attention was paid to primary health care or family practice. The use of resources was far from optimal, with health expenditures totaling around 6.5 percent of GDP (about US\$150 per capita per year in 1991), a relatively high amount in Central Europe.¹

The war has taken a heavy toll

2. The health status of the population deteriorated severely during the war (box 1). Damage to health infrastructure has been unevenly distributed throughout the country, however, and reconstruction efforts must take these differences into account. For example, failure to maintain medical equipment, though significant in both Entities, seems to have been more severe in Republika Srpska than in the Federation (which received significant international assistance), whereas direct war-related physical damages are heavier and more widespread in the Federation.

Box 1. The extent of the damage

- More than 200,000 people wounded (including 50,000 children);
- More than 13,000 people with permanent physical disabilities (including 5,000 people who lost limbs);
- A two- to-fivefold increase in the number of people with communicable diseases;
- A dramatic rise in infant mortality and premature deaths (doubled in some areas);
- Some 35 to 50 percent of health infrastructure damaged or destroyed;
- About 35 percent of hospital bed capacity lost;
- Critical shortages of essential drugs and supplies; and
- A 50 percent decrease in the number of active health personnel.

3. After the unified health and health financing system collapsed at the beginning of the war, three systems emerged: two in the Federation and one in Republika Srpska. At the end of hostilities the Dayton-Paris Peace Agreement assigned the responsibility for the health sector to the Entity level. Regional differences remain: Republika Srpska has a unified, though weak, system with no significant

¹ Source: World Bank estimate. Authorities in Bosnia and Herzegovina use a prewar health expenditure per capita figure of US\$245. Regardless of the exact figure, Bosnia and Herzegovina's health expenditures were high.

difficulty between the Government and the municipalities; in the Federation tension between the two constituent peoples and an unclear delineation of authority and responsibilities between the Government and the Cantons have resulted in persistent difficulties, still not resolved.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

4. The rehabilitation strategy for the health sector is based on three principles:

- The sector must continue functioning on an emergency basis while it recovers and prepares for the transition to a modern and efficient system;
- Scarce resources should be optimally used to ensure the sustainability of health services; and
- A balance must be struck between modern primary health care services and high-quality, streamlined hospital services; the unwieldy prewar system should not be rebuilt.

5. The overall reconstruction program presented to donors in December 1995 and April 1996 remains valid. It will require US\$413 million (down from the original estimate of US\$540 million)² in external financial support for the three- to four-year reconstruction period within the overall US\$5.1 billion priority reconstruction program (table 1):

- **In 1996, US\$111 million was firmly committed;** despite a financing gap of nearly 23 percent (the first-year program was initially estimated at US\$145 million), a number of activities were carried out successfully (paragraphs 7 to 17);
- **In 1997, US\$90 million in external financing is required,** including US\$70 million in investments, 65 percent of it for the Federation and 35 percent for Republika Srpska (paragraphs 18 to 26);
- **In 1998 and 1999, some US\$212 million will be needed,** and policy issues should be addressed to ensure the program's sustainability over the medium term (paragraphs 27 to 30).

² The estimate was revised downward for two reasons. First, massive support for health personnel salaries was initially foreseen; given the current salary structure within the country (and the reluctance of the donor community to finance such costs), this amount has been substantially reduced. Second, the 1996 experience shows that cost estimates for program management can be cut substantially, since management costs are often funded as part of each project, and the use of local capacity reduces the need for external management assistance.

**Table 1. Health Program External Financial Needs
(US\$ million)**

	3-4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Public health interventions	16	9	4	3
Reconstruction and rehabilitation	277	66	54	157
Rehabilitation of War Victims	30	26	3	1
Budget support for recurrent expenditures	76	5	22	49
Sector reforms	8	3	4	1
Program management	6	2	3	1
Total	413	111	90	212

6. The program has been defined by the Entity Governments with the assistance of the World Health Organization (WHO) and the World Bank (box 2). The immediate objectives of the program are to:

- Prevent and control epidemics and communicable diseases through priority public health interventions;
- Reconstruct and rehabilitate priority health infrastructure, including civil works and equipment to restore key outpatient and hospital facilities;
- Rehabilitate war victims by addressing both physical disability and psychological trauma;
- Define a human resources development strategy;
- Support recurrent expenditures, including salaries for health sector staff and purchases of essential generic drugs and supplies; this support would be phased out over a three-year period as the Entity Governments take over financing responsibility; and
- Support the first stages of sector reform, to render the sector more cost-effective and fiscally sustainable.

Box 2. Reconstruction strategies

With the assistance of the World Health Organization (WHO) and the World Bank, the Entity Governments have defined overall health rehabilitation programs, including priorities, required reforms, and health strategies. The *Federation Health Program*³ outlines both the short-term reconstruction needs and the medium-term structure and functions of the health sector. The *Strategy of Health Development for Republika Srpska by the Year 2000*⁴ outlines the guiding principles for the development of the health system and indicates the means of achieving short- to medium-term objectives.

Donors should support a two-sided approach:

- Emergency support is still needed for medical institutions, to ensure delivery of the most essential health care services; and
- Investments are required. The Entity Governments have designed a useful framework to facilitate these, with three comprehensive and sustainable investment programs: War Victims Rehabilitation, Essential Hospital Services, and Basic Health Services (including Primary Health Care and Public Health Services). Each program includes independent and complementary modules to combine effectiveness and flexibility. Donors can select modules according to their financial inputs, technical expertise, or geographical preferences.

III. 1996 ACHIEVEMENTS

7. Efforts in 1996 focused on preventing further deterioration of the overall health situation by providing emergency assistance to the health sector (mainly through the direct provision of essential goods and services). Additional assistance was provided to initiate the physical and functional rehabilitation of the health care delivery system in the context of both Entities' sectoral development strategies.

8. A number of activities were carried out through the combined efforts of the two Entity Governments and the international community. Some US\$111 million in external financing was firmly committed out of an estimated US\$145 million for the first-year program (table 2).⁵ The main achievements are described below, although the decentralized nature of the sector and the large number of actors make it difficult to draw a comprehensive picture.

³ *Federation Health Program. Health Reform and Reconstruction Program of the Federation of Bosnia and Herzegovina.* Federation Ministry of Health. January 1996.

⁴ *Strategy of Health Development for Republika Srpska by the Year 2000.* Republika Srpska Ministry of Health. 1996.

⁵ Several bilateral donors also provided support through humanitarian programs and budget lines that may not have been reported to the donor database.

Table 2. Firm Donor Commitments in 1996
(US\$ million)

	Amount	Main Donors
Public health interventions	9	Belgium, Canada, Spain, Switzerland, UNICEF, UK, SIDA
Reconstruction and rehabilitation	66	EC, Italy, Japan, Denmark, SIDA, UK, UNICEF, USAID, World Bank
Rehabilitation of war victims	26	Canada, Council of Europe Social Development Fund, EC, Iceland, ICRC, Italy, Netherlands, SIDA, Soros Foundation, UK, UNDP, UNHCR, World Bank
Budget support for recurrent expenditures	5	EC, Denmark, Italy, ICRC, UK
Program management	3	WHO, ⁶ World Bank
Sector reforms	2	EC, Italy, SIDA, UNICEF, UK, WHO, World Bank
Total	111	

Public health interventions

9. Public health interventions in both Entities focused on preventive medicine, with particular attention to the most vulnerable groups (displaced persons, children). These decentralized activities (for a total commitments of US\$9 million) were supported or carried out by a number of agencies and Governments, among them the WHO, the United Nations Children's Fund (UNICEF), the U.K. Red Cross, the U.K. Government, the Swedish International Development Agency (SIDA), and Action Internationale Contre la Faim.

Reconstruction and rehabilitation: Urgent repairs and planning

10. Urgent repairs and the re-equipment of health facilities received commitments totaling US\$66 million. Efforts focused on:

- Hospitals in both Entities, with financing mainly from the European Commission Humanitarian Office (ECHO), the U.K. Overseas Development Administration (ODA) and the United States Agency for International Development (USAID); and
- Dispensaries (*ambulanta* and *dom zdravlja*), with the support of ECHO, SIDA, UNICEF, and the Governments of Denmark, Italy, Japan and the United Kingdom.

These projects are being implemented to a large extent by the International Management Group (IMG) and by nongovernmental organizations (NGOs).

11. In parallel, the Entity Ministries of Health, with the support of international organizations, designed a series of priority investment programs in the health sector. By translating strategies into concrete projects, these programs are an important step in the reconstruction process. They aim to provide a rational and cost-effective framework for donor involvement and thereby to reduce the risk of uncoordinated and ultimately unsustainable investments:

⁶ WHO extra-budgetary resources.

- Preparation of an Essential Hospital Services Program was completed (including support for sectorwide finance reform) in both the Federation and Republika Srpska;
- Preparation began for a rehabilitation and restructuring plan for a Basic Health Services Program (including Primary Health Care and Public Health) initiated by the Entity Ministries of Health with WHO support; and
- UNICEF initiated pilot projects for the Primary Health Care Project in eleven *ambulant*s in Sarajevo to test new approaches to health care planning and care giving.

Rehabilitation of war victims: A comprehensive program under implementation

12. With the support of the WHO, the Canadian International Development Agency (CIDA), and the World Bank, the Federation Government designed a comprehensive US\$30 million program to address the war-related physical and psycho-social rehabilitation needs of the population. Launched in June 1996, the program is establishing community care centers throughout the country, strengthening orthopedic and reconstructive surgical departments, and developing the production of prostheses. Efforts include the reconstruction of facilities (US\$5.5 million) and the supply of drugs and medical supplies (US\$3.5 million) and equipment (US\$10 million). Three-quarters of the required amount was committed by the Council of Europe's Social Development Fund, the Governments of Canada, Iceland, and Italy, the WHO, the United Nations Development Program (UNDP) and the World Bank; ECHO also has contributed by financing in-kind support (drugs and supplies) through NGOs.

13. A number of NGOs also implemented decentralized projects, with funding from ECHO, ODA, SIDA, and the Governments of Italy and the Netherlands. However, it was often difficult to coordinate these decentralized initiatives with activities undertaken as part of the Government-designed program. In Republika Srpska, which has not yet developed a comprehensive program, NGOs and international agencies such as the International Committee of the Red Cross (ICRC), the United Nations High Commissioner for Refugees (UNHCR), ECHO (through Medecins Sans Frontieres), and the WHO provided services and supplies for rehabilitation activities.

Budget support for operating expenditures: Drugs and medical supplies first

14. Support for recurrent expenditures focused heavily on essential drugs and medical supplies directly procured and distributed by donors on a decentralized basis through NGOs. ECHO and ODA were the main financiers. In addition, a number of donors included support for recurrent expenditures (drugs and supplies) in larger support programs aimed at physical rehabilitation and repairs of facilities. No significant support was provided health workers' salaries.

Program management: Substantial involvement of the Entity Ministries of Health

15. The Federation Ministry of Health took substantial responsibilities for preparing and supporting the implementation of program activities. Initially, specialized working groups were established to prepare the three priority investment projects (War Victims Rehabilitation, Essential Hospital Services, and Basic Health Services). The War Victims Rehabilitation Working Group was later transformed into a professional advisory team in support of the Project Implementation Unit (PIU). A similar development is expected for the other working groups. Although more limited in scope, a similar approach was followed in Republika Srpska, where the Ministry of Health also expressed a strong willingness to undertake the required activities.

16. To ensure donor coordination, a Task Force on Health and the Social Safety Net, chaired by the WHO, was established in Sarajevo in May 1996. Through this framework the main actors in the health sector met regularly to exchange information, discuss strategies, and prepare a compendium of the needs and priorities in the health sector.

Sector reforms: A productive dialogue initiated

17. In 1996 sector reform activities focused on initiating dialogue between the Entity Governments and international organizations such as the WHO and the World Bank and on preparing for health reform and reconstruction.⁷ Policy issues were often addressed as part of the preparation for priority investment projects. Three main areas were identified:

- *Structure and organization of the health care delivery system.* Discussions were held during preparation of the Essential Hospital Services Rehabilitation Program; accordingly, this program calls for the rehabilitation of a streamlined health system (a marked departure from the pre-war model based on large hospital infrastructure), with hospital capacity reduced by 30 percent from the prewar level, and for incentives to improve the quality and efficiency of health care;
- *Health financing mechanisms.* The underlying principles for the Federation's future health financing system (universal access, efficiency, cost-containment and sustainability) were agreed on during negotiations of a World Bank-funded Transition Assistance Credit and preparation of the Essential Hospital Services Program;⁸ the Republika Srpska Ministry for Health is developing a similar approach; and
- *Sector governance.* Discussions on the roles and responsibilities of various levels of government (State, Entity, Cantons/regions) were held between the Federation Government and the Cantons, and between the Republika Srpska Government and regional and municipal health planners, with the support of the WHO; progress was slowed by the widespread political uncertainty during the pre-election and the immediate post-election period and by the persistent disagreements on budgetary flows among the various levels of government.

IV. 1997 CHALLENGES AND FINANCING NEEDS

18. Some US\$90 million in external financing is required for 1997. While support is still needed for emergency activities, assistance should increasingly be directed to the development of a sustainable health system, and donor contributions should be directed to the investment projects prepared by the Entity Governments. The 1997 program aims to:

- Restructure basic health services, with a focus on public health interventions and primary care services at the local (*ambulanta* and *dom zdravlja*) level;
- Restore essential secondary-level hospital services;
- Provide continuing support to the physical and psycho-social rehabilitation of war victims;

⁷ Efforts were impaired by the understaffing of the Ministries of Health and the subsequent limited availability of qualified personnel.

⁸ Substantial technical assistance was provided by the U.K. Government through the Know-How Fund.

- Ensure the short-term functioning of the health care system by providing consumables and medical supplies (in support of primary and secondary health care networks);
- Initiate health sector reform to ensure the financial sustainability and effectiveness of the health care system; and
- Undertake a program for human resources development, including training and retraining of health workers.

Public health interventions (US\$4 million)

19. Public health interventions in 1997 will build on the gains of 1996 and broaden the scope of activities to preempt future epidemics of avoidable chronic diseases. Activities will focus on:

- Continuing disease prevention and health promotion activities through immunization, tuberculosis control, rabies control, water purification and testing, toxic waste management, and nutrition monitoring and promotion;
- Strengthening the functions of public health institutes in both Entities to ensure appropriate surveillance, database management, disease notification, and planning of public health interventions; and
- Developing medium-term programs for the prevention and control of chronic diseases, particularly lung cancer and heart disease.

Reconstruction and rehabilitation (US\$54 million): Restoring essential services

20. Reconstruction and rehabilitation of health services are the primary focus of 1997 activities, building on the programs prepared in 1996 as a vehicle for implementing donor contributions:

- The Essential Hospital Services Program focuses on addressing the most urgent needs in the hospital subsector⁹ and on initiating health financing reform. The program consists of several modules, the completion of which would result in fully functional service delivery units: physical repairs, provision of equipment and supplies, improvement of clinical skills, and provision of technical assistance in support of health finance reform. The total financing required over a three-year period is estimated at US\$192 million (US\$122 million for the Federation and US\$70 million for Republika Srpska). By mid-February 1997 Program donors included the Governments of Italy and the United Kingdom, and the World Bank¹⁰ - with part of the costs borne by the Entity Governments. The Governments of Canada, Greece, Iceland, Luxembourg, and Spain also expressed interests in supporting this program.
- The Basic Health Services (Primary Health Care and Public Health) Program aims to develop primary health care and public health services as the basis of the new health care system (box 3). Priority will be given to renovating and equipping of *ambulantas*,

⁹ In the Federation the program includes eight Canton-level hospitals (Zenica, Livno, Bihac, Travnik, Jajce, Orasje, Gorazde, and Sarajevo State Hospital), and parts (secondary-level services) of three clinical centers (Mostar, Tuzla, and Sarajevo Kosevo Hospital). In Republika Srpska it includes eight regional hospitals (Priedor, Gradiska, Dobo, Bijeljina, Pale/Kasindol/Sokolac, Trebinje, Brcko, and Zvornik) and part of the Banja Luka Clinical Center.

¹⁰ A World Bank US\$15 million credit on concessional terms was approved on December 14, 1996.

particularly those participating in family medicine retraining, and to renovating and equipping portions of polyclinics (*dom zdravljias*) that could support dispensaries (*ambulantias*), such as centralized laboratory and x-ray facilities.¹¹ Ongoing preparatory work for these programs should be completed by both Ministries of Health in the first quarter of 1997.

Box 3. Service delivery capacity

Reconstruction efforts should be adjusted to meet the needs of the population in Bosnia and Herzegovina. Donor investments should avoid the wholesale reconstruction and rehabilitation of polyclinic (*dom zdravljias*), emphasizing instead primary care delivered through family doctors based in dispensaries (*ambulantias*). Restoration of hospital services should focus on most essential secondary-level care.

Rehabilitation of war victims (US\$3 million): A community-based approach

21. In 1997 efforts for war victims should be directed toward implementing the remaining commitments from 1996. The emphasis should be on increasing the availability of services to war victims through community-based rehabilitation centers providing physical and psycho-social rehabilitation, acute psychiatry services, and access to orthopedic and reconstructive surgery. The production and fitting of prostheses will receive special attention.

Support for recurrent expenditures (US\$22 million): Meeting shortfalls and strengthening coordination

22. Budgetary resources for the operating costs of health facilities will most likely remain insufficient in 1997. Effective rehabilitation of the sector and efficient use of repaired facilities require a minimal level of operating resources, particularly in terms of medical supplies, spare parts, and consumables. Temporary assistance is still required to help cover these operating costs, until government and health insurance resources increase enough to insure self-sustainability. Donor assistance is not designed to substitute for local resources but to complement them on a decreasing basis over a short interim period.

23. An adequate supply of essential drugs and medical supplies is particularly critical. Donors are likely to continue provide such goods "in kind" and to implement projects in a decentralized manner. In 1996 expired or unnecessary pharmaceuticals and supplies were delivered to a number of health facilities, and efforts should be made to prevent such a situation in 1997. Emphasis should be placed on strengthening coordination mechanisms by systematically involving Government agencies in the quantitative and qualitative definition of needs and allocation of supplies.

¹¹ The Program would also include undergraduate educational reforms at faculties of medicine (starting in the 1996-97 academic year) aimed at introducing family medicine principles, ambulatory care experience, supportive seminars, and tutorials. Analogous reforms would be introduced in nursing education to facilitate team development. A strategy for credentialing family physicians should also be developed.

Sector reform (US\$4 million): Improving sustainability with management and administrative reforms

24. Management capacities at the Entity, canton, and municipal levels are crucial for ensuring the success and long-term efficiency of planned investments. Substantial donor support is required to build capacity and prepare a number of reforms -- from designing financing mechanisms to establishing management and information systems (box 4).

Box 4. Immediate reforms required

- Restructuring primary health care and primary care financing mechanisms;¹²
- Developing a slimmer, more cost-effective hospital sector with adequate payment mechanisms;
- Developing new administrative and financing mechanisms to ensure that low-income cantons and municipalities can provide universal access to a basic package of services (in terms of either covered health services or threshold levels of average expenditure per person);
- Establishing a consistent system for monitoring indicators (such as access to care, quality of care, health status and health outcomes for each local area);
- Ensuring coordinated information and management for hospitals, primary care providers, and insurance institutions;
- Designing management systems (including operating systems and associated hardware and software) for new insurance arrangements;
- Regulating cantonal and municipal health systems (with a view to limiting overall spending and achieving economies of scale);
- Addressing inter-Entity and cross-cantonal issues such as referrals and portability of access to health services; and
- Developing a comprehensive human resource development strategy, including retraining and reorienting primary health care staff toward family medicine.

Program management (US\$3 million): Strengthening donor coordination

25. Continued support, both financial and advisory, is required to strengthen project management. Assistance should be directed to the PIUs established within the Entity Ministries of Health. Now that the emergency activities of 1996 are largely in place, donors should increasingly involve the Entity Ministries of Health in implementing their projects. PIUs for each sector should eventually be given full implementation responsibility -- with foreign technical assistance as needed -- in coordination with all relevant authorities.

26. While the Sectoral Task Force on Health and the Social Safety Net will continue to provide a forum for setting priorities among the Entity Ministries of Health and donor agencies, the Ministries should progressively assume responsibility for mobilizing resources and coordinating assistance from the

¹² The Government of the United Kingdom, through the Know-How Fund, has decided to support key finance reforms in both Entities through a technical assistance program estimated at US\$1.5 million. This initiative, which will affect the entire health sector, is part of the Essential Hospital Services Program (for both Entities), designed by the Government with the support of the World Bank.

donor community. A first step in this direction was the establishment of an executive office and a coordinator of external assistance within the Federation Ministry of Health to oversee these functions.

Box 5. Lessons learned in 1996

Two major lessons can be drawn from the first year of implementation:

- The investment programs designed by the Entity Governments are an appropriate framework for maximizing the effectiveness of donor contributions. They facilitate both donor coordination and fund raising, and
- Substantial sector restructuring and reform are required to ensure the sustainability of efforts to date. Foreign support to both Ministries of Health will be necessary to ensure the transition from postwar emergency to sectoral development, within resource constraints.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

27. Even before the war, the health sector suffered systemic problems. Health sector recovery will therefore require much more than external financing assistance. Major policy reforms are needed to ensure the financial sustainability of reconstruction efforts, to promote cost-effectiveness, and to involve the private sector in activities so far dominated by the Governments. Because the changes required are so extensive, reforms should be accompanied by measures to protect the most economically vulnerable groups, especially in the early stages of postwar recovery, to help ensure the acceptability and feasibility of the reforms. Donor support, both financial and advisory, is required for an intense startup phase in 1997 that includes policy analysis, limited scope surveys, and local and external training with a view to the experience gained in 1996 (box 5). Continued support will be needed for implementation over a period of several years. Some of the most important policy issues are discussed below.

Sector governance

28. Sector governance in both Entities should be clarified, and responsibilities and corresponding resources clearly shared. Particular attention should be paid to revenue generation and expenditure patterns, responsibility sharing among the various levels of authority (Entities, Cantons in the Federation, municipalities), and private sector involvement. Governance issues are particularly critical in the Federation where the health system is split between the Croat-majority and the Bosniac-majority areas. In addition, the Federation's Constitution gives important health sector responsibilities to the cantons. In developing this sector at the cantonal level, steps should be taken to ensure that a fragmented and inefficient system of health financing and delivery does not emerge.

Box 6. The reformed health financing system in the Federation

The planned reform in the Federation is based on a three-tiered system:

- The first tier corresponds to a Federation-specified package of uniform basic services across the Federation. It would be funded through a Federation Health Fund, financed from payroll taxes and limited transfers from the Federation budget;
- The second tier corresponds to a Canton-specified supplementary package of health care services, also financed by a mandatory payroll tax; and
- The third tier corresponds to a voluntary private insurance, financed by private premiums, that covers enhanced care and services not covered by the first two tiers.

Compulsory insurance will be managed and administered at the cantonal level, following Federation guidelines -- including uniform reporting requirements for all Cantons (on service utilization, health revenue and expenditure patterns, standard indicators of health sector inputs, outcomes and management, and so on).

Sector financing

29. The Federation's health financing system is largely demonetized and urgently needs reform. Most health workers are paid insufficient salaries. The Federation Government should proceed with implementation of the recently decided health financing reform (box 6). Reforms should also focus on potential economies of scale.

30. Similar steps are under way in Republika Srpska, where substantial effort will be required. Health care is currently financed through a Public Health Fund, that collects and distributes funds through regional branches that in turn pay health institutions. Prices are set by the Fund and are not based on actual costs. Payments to health institutions are insufficient to cover even the minimal needs of the health care system. In its *Strategy of Health Development for Republika Srpska by the Year 2000*, the Ministry of Health has identified potential reforms. Although a step in the right direction, the proposed set of measures is still insufficient to resolve current difficulties and remains vague on a number of critical questions (financial projections, governance and regulatory mechanisms, and so on).¹³ The Ministry of Health is currently working, with the support of the WHO, on a detailed set of measures to implement reforms -- and donor assistance will be required.

¹³ The proposed reform is based on the establishment of a two-tier financing system: (i) compulsory insurance, financed through payroll taxes paid by the employer and the employee and administered by the Public Health Fund, would cover the entire population; and (ii) optional private insurance. Prices would be determined by the Public Health Fund. Republika Srpska's Government would pay for services for economically vulnerable groups (which have not yet been clearly defined).

FISCAL AND SOCIAL SUPPORT

I. BACKGROUND

Building a new system of governance

1. The conflict in Bosnia and Herzegovina caused the country's prewar government to disintegrate. The new institutional framework laid out in the Dayton-Paris Peace Agreement implies substantial changes to the legislative and policymaking institutions. At the State level, the ministries and institutions responsible for functions designated to the State must be set up, including Ministries of Finance (with a foreign debt management unit), Foreign Trade and Communications, and Justice, as well as the Central Bank. The startup cost of these efforts will be significant, both to attract well-qualified individuals, and to provide adequate facilities for these institutions to function.

2. Ministries and institutions also need to be set up or strengthened at the Federation level, including line and sector ministries, tax and customs administrations, the payments bureau, and the bank supervision agency. Cantonal administrative structures also need to be set up or strengthened to develop capacities for governance, including budget preparation and execution. Republika Srpska needs to strengthen institutions, establish a bank supervision agency, and develop capacities for budget preparation and execution, as well as for treasury functions, auditing, and financial control. Customs and tax administrations need to be modernized and harmonized between the Entities.

Protecting the most vulnerable groups

3. In addition to building new government institutions, a major challenge for the authorities is to protect the most vulnerable members of society. About 400,000 elderly or disabled persons depend on pension benefits to survive, and the number of orphans reached 14,000 during the conflict. In addition, at least 7,000 disabled depend on government support for survival and reintegration into economic activity. Finally, a number of households need minimum cash support during the transition back into employment, especially when the head of the household is sick or a single parent.

Limited fiscal resources

4. The Governments have extremely limited fiscal capacity to address these needs. Tax revenues shrank dramatically as economic activity slowed and wage payments fell to a minimum during the war. By 1995, for example, the base for sales tax had fallen to perhaps one-quarter of its prewar level, as had GDP. Payroll taxes have also plummeted, since both employment and wage levels are a fraction of their prewar levels. Furthermore, Bosnia and Herzegovina's prewar fiscal and tax collection system has collapsed. In its place three separate fiscal systems developed, with divergent tax policies and separate administrations. To the extent that tax revenues are collected, they are kept by different fiscal authorities. As the economy recovers and new tax systems are established in the Entities, revenue is expected to recover. This will take time, however, and in the interim period resources have to be found to help cover key spending requirements and ensure minimal provision of social protection.

II. THE RECONSTRUCTION AND FINANCING CHALLENGES

5. The strategy of donor assistance in this area is to restore, within a limited period (three to four years), the government's capacity to efficiently raise revenue, and to strengthen institutions to cover all necessary public expenditures on a sustainable basis. During the transition financial assistance should be provided to help develop and strengthen institutional capacity and to provide minimal social protection to the most vulnerable groups.

6. Achieving these objectives will require an estimated US\$514 million in external financing support for the three- to four-year program within the overall US\$5.1 billion priority reconstruction program (table 1). The program submitted in December 1995 remains valid; it includes support to government institution-building (US\$122 million), protection, on a supplementary basis, of the most vulnerable groups during the transition (US\$99 million), and general fiscal support to the government budget (US\$293 million) to cover counterpart costs associated with donor-financed reconstruction programs, recurrent social expenditures in health and education, and liquidity needed for ongoing external obligations. Of the total requirement:

- In 1996, US\$276 million was firmly committed, substantially more than the initial estimate of first-year needs (US\$75 million), and several activities were successfully carried out (paragraphs 7 to 12);
- In 1997, US\$120 million in external financing is required for the State, the Federation, and Republika Srpska (paragraphs 13 to 17); and
- In 1998 and 1999, some US\$118 million will be necessary. The need for support to government institutions and social protection will fall after 1997, while general fiscal support will still be required (paragraphs 18 to 21).

**Table 1. Fiscal and Social Support Program External Financing Needs
(US\$ million)**

	3-4 Year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Support for key government institutions	122	69	20	33
Support for social expenditures	99	59	20	20
General fiscal support	293	148	80	65
Total	514	276	120	118

III. 1996 ACHIEVEMENTS

7. In 1996 assistance focused on supporting Government institutions (primarily at the Federation level, and to a lesser extent at the State level) on supporting vulnerable groups in the Federation, and on general fiscal support. Of the US\$276 million committed for these purposes in 1996, US\$69 million was allocated to institution building, US\$59 million to support for vulnerable groups, and US\$148 million to general fiscal support. By January 1997, some US\$210 million had been disbursed.

Support to government institutions

8. In 1996 support to State and Federation governments amounted to US\$69 million, including:

- A US\$17.4 million Building Repair Fund to rehabilitate buildings and office space for key government institutions, financed by the Governments of Japan and the Netherlands, and the European Commission (EC);
- Technical assistance of US\$46.6 million to provide office equipment (such as furniture and computers, and vehicles), advisory services, and training to key State and Federation institutions. Funds came from the Governments of Japan, Luxembourg, the Netherlands, Switzerland, the EC, the U.S. Agency for International Development (USAID), the U.S. Treasury, the German Agency for Technical Cooperation (GTZ), the U.K. Overseas Development Administration (ODA), and the World Bank; and
- A US\$5 million Wage Fund to provide salary supplements to staff in the core State and Federation government institutions (financed by the Governments of the Netherlands and Switzerland, and the World Bank, under the Emergency Recovery Project; table 2).

9. With these resources and the funds provided for the general fiscal support, donors directly supported more than ten Government institutions, including:

- *Federation Customs Administration* (US\$11.6 million from the EC, USAID and others);
- *Federation Tax Administration* (US\$1.8 million from the U.S. Treasury and others);
- *Federation Payments Bureau* (US\$0.4 million from the World Bank's Transition Assistance Credit);
- *Federation Banking Supervision Agency* (US\$2.7 million from the Government of Switzerland, USAID, and others);
- *Federation Privatization Agency* (about US\$1.5 million from USAID and the World Bank's Transition Assistance Credit);
- *Cantonal privatization agencies* (about US\$6.0 million from the World Bank's Transition Assistance Credit);
- *Public finance control institutions*, including *financial police* and a *procurement monitoring and auditing unit* (about US\$2.0 million from the Government of the Netherlands and the World Bank's Transition Assistance Credit); and
- *Cantonal budget offices* (US\$2.0 million from USAID and others).

Table 2. Firm Donor Commitments in 1996
(US\$ million)

	Amount	Main donors
Support for key government institutions	69	Austria, EC, Germany, Iceland, Indonesia, Ireland, Japan, Luxembourg, Netherlands, Switzerland, Turkey, UK, US, World Bank
Support for social expenditures	59	Austria, Canada, EC, Ireland, Italy, Netherlands, Sweden, Switzerland, UNICEF, World Bank,
Other fiscal support	148	Japan, Netherlands, and the World Bank
Total	276	

Support to social safety net

10. In 1996 donors committed US\$59 million to support vulnerable groups through two different types of programs: (i) *transitory emergency relief* to ensure that minimum consumption needs and living standards were met (cash benefits to the poorest households to complement food aid programs, emergency repairs and provision of equipment to institutions for children and the mentally ill, pension support for the elderly), (ii) *programs designed to bring lasting improvements* in living standards (mobility aids, health care assistance, professional training and employment services for the disabled and the blind, foster parents and small villages for orphans).

11. In the Federation, the following programs received assistance:

- Emergency cash benefits for the poorest households from the Governments of Canada, Italy, the Netherlands, and Sweden, and the World Bank's Emergency Recovery Credit;
- Emergency repairs for institutions for children and the mentally ill from the Government of Switzerland, the World Bank, and other donors;
- Mobility and other equipment for the disabled, from the World Bank; other donors (Austria, EC) provided similar support through nongovernmental organizations;
- Microprojects for the retraining of the disabled and blind, from the Governments of Austria, and Ireland, the World Bank and other donors;
- Foster parents for children without parental care, from UNICEF, the World Bank and individual donors; and
- From the general fiscal support (see below) the Federation government established a Federation Pension Agency and a Federation Health Insurance Agency to develop and implement reforms in these areas.

General fiscal support

12. In addition to the institution building and social safety net programs, the Federation and State Government budgets received firm commitments for US\$148 million in fiscal support in 1996 (including counterpart funding to donor reconstruction assistance for US\$38 million from the Government of Japan, a US\$20 million grant from the Government of the Netherlands, and a US\$90 million World Bank Transition Assistance Credit). These resources supported:

- Recurrent government expenditures, including coverage for part of public sector employee (such as teachers and doctors) costs;
- The social safety net, including pension and health programs;
- Government institutions, including those mentioned above;
- External debt service; and
- Economic recovery, including critical imports for industrial sectors and a line of credit for small and medium-size enterprises.

IV. 1997 CHALLENGES AND FINANCING NEEDS

13. About US\$120 million in external financing will be needed in 1997 for fiscal support. Assistance to government institutions should focus on establishing key State institutions, on further strengthening Federation institutions, and on establishing and strengthening institutions in Republika Srpska. Required assistance includes advisory services and training, office equipment (computers, vehicles, furniture, communications equipment), and, equally important, buildings and office space. Technical assistance requirements are summarized in the Annex to this report (pages 157 to 160). Social assistance needs will progressively decline in 1997 to reflect the economic recovery that started in 1996. Nevertheless, there are still significant gaps between the need to protect vulnerable groups and the revenues that can possibly be generated by the domestic economy. Thus social safety net assistance in 1997 should continue to focus on pension and pension reform and on programs for the most vulnerable groups. Assistance also needs to be delivered to the entire country. Finally, general fiscal support will be needed to cover the country's financial and other obligations.

Support to government institutions (US\$20 million)

14. Technical assistance will be needed to help establish new agencies, rationalize current institutional structures, train government workers for their new role in a market economy, furnish institutions with equipment needed to modernize, strengthen auditing and financial capacities, and the like.

15. In addition, office space should be provided, with particular attention paid to the needs of the new State Government. A general investment facility of about US\$20 million will be established to rehabilitate, rebuild, and repair existing government buildings for use by State, Entity, and local governments. The facility will focus on basic repairs that bring buildings and offices up to minimal standards, maximizing the impact of available resources -- as did the 1996 Building Repairs Fund. Areas and institutions that need support in 1997 are listed below (costs are reflected in table 1; projects are included in box 1):

Developing State Institutions

- A new independent Central Bank needs to be created at the earliest possible date to act as the sole agency for monetary policy and currency issuance in Bosnia and Herzegovina (about US\$2 million);
- A new external debt management system, with units at the State and Entity levels, needs to be created to: (a) prepare and negotiate loan agreements and monitor the use and repayment of government debt; (b) develop and implement an external debt recording system; and (c) formulate proposals for debt strategy and policy (about US\$1 million);
- A new trade policy department needs to be established to set trade policy and initiate reform. This department will: (a) establish a common external trade structure for both Entities; (b) enact a new foreign trade law; and (c) negotiate membership in the World Trade Organization (WTO) and agreements on trade liberalization with other trading partners (about US\$1 million); and
- The overall State judiciary system needs to be strengthened and coordinated with the Entity jurisdictions (at least US\$1 million).

Developing Entity Institutions

- Both Entities' customs administrations need to modernize their border facilities with neighboring countries. Moreover, the procedures used by the Entities' customs administrations need to be coordinated to the greatest extent possible to avoid customs evasion. Harmonized methods and coordinated training programs also need to be developed (about US\$3.5 million for both Entities, without taking into account construction of any large border facilities);
- The Entities' tax administrations, particularly that of the Federation, require major support to become fully operational and further develop. Both Entities require a major rationalization of their tax administrations – staffing, structure, and functions together with modernization of procedures and facilities (about US\$4 million for both Entities);
- Banking supervision agencies require further strengthening (Federation) or need to be established (Republika Srpska) to provide a uniform legal, regulatory, and institutional framework for bank licensing, regulation, and supervision throughout Bosnia and Herzegovina. This effort is a precondition for the development of a sound financial system (US\$2 million for both Entities);
- Auditing and budget control should be strengthened to build confidence and trust in the Government at all levels (US\$2 million for both Entities);
- Budget preparation and execution at the Entity and local levels should be improved and made transparent. Major assistance is also needed to develop the treasury functions of the Entities (about US\$2 million for the State, both Entities, and local governments); and
- Basic data for economic management need to be improved, including population and migration statistics, household surveys on income, consumption, unemployment, and cost of living data (about US\$1 million for both Entities).

Box 1. Projects to reform public finances for 1997

Projects costing a total of US\$135 million will be implemented in 1997 and 1998 to strengthen *public finances* and to improve State and the Entities *Government services*. Donor support for these projects will be key to achieving the desired reforms.

The first set of projects aims to support the establishment and/or the reform of key public finance institutions and policies at the State and Entity levels. Supported reforms includes:

- Developing fiscal federalism, with assignment of tax and spending responsibilities (e.g. determination of the responsibilities of the various levels of government for the delivery of education, health care, and the like) and definition of financial transfer mechanisms between the State, Entities, and local governments. Specific attention will be paid to the current status of the cantons in the Federation (and to the way services could be delivered where cantons have yet to be developed).
- Establishing external borrowing arrangements, including setting up a debt reporting, monitoring, and management system at the State level with Entity counterpart agencies; and establishing a mechanism to facilitate Entity transfers to the State budget for debt service payments to International Financial Institutions, with agreements on principles, processes, and remedies for noncompliance.
- Unifying trade policy across the Entities, with a view to implementing a liberalized and transparent trade framework.
- Harmonizing tax policies and rates across the Entities, including custom duties, income, and sale taxes.
- Reviewing the public sector, with a focus on: (i) identifying the areas where expenditures should be reduced, whether to balance expenditures with potential revenues or to allow for private sector development; and (ii) defining how defense and social expenditures can be brought into the budget structure; and
- Reforming the public pension system.

A second set of projects aims to support improved public management at the State, Entities, and local government levels, including:

- Modernizing tax administration, with an emphasis on rationalizing structures, functions, and procedures, developing cross-Entity coordination mechanisms, establishing registries of taxpayers, and training in tax assessment and compliance methods;
- Improving public expenditure management, with an emphasis on preparing and executing budgets (with improved transparency in the budgeting process), including support for the management of extrabudgetary funds (mainly pensions) and for external debt management;
- Developing public finance management control to strengthen internal and external auditing and control;
- Establishing statistics and economic data support, including the design of simple household surveys to monitor changes in unemployment and income levels and implementation of an actuarial model for calculating the cash flows of the pension system.

Assistance to provide a minimal social safety net (US\$20 million)

16. In 1997 some US\$20 million is needed to provide financial and institutional support to maintain minimum pension and social protection for the most vulnerable groups in both Entities. In particular, about US\$12 million will be needed as supplementary financing to provide a minimum monthly pension for all pensioners in the two Entities. This amount includes institutional support to develop a new

pension system that is affordable and that offers an adequate floor of coverage. In addition, resources are needed to support microprojects for the disabled (including retraining and employment programs and provision of mobility, hearing, and vision aids). Resources will also be required to support continuation of the Government foster parents program, as well as pilot programs to motivate family members to provide basic assistance to the mentally ill or the disabled (about US\$8 million for both Entities).

General fiscal support (US\$80 million)

17. Additional fiscal support of US\$80 million will be needed to cover the budgetary needs of the State and Entities, particularly in providing domestic counterpart funding for the donor-financed reconstruction program, in supporting recurrent expenditures for education and health, and in helping to provide liquidity for ongoing external obligations.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

18. Underlying these institution-building efforts and social safety net provisions are two objectives: providing sustainable government finances and readjusting the role of the public sector to support private sector development. Major reforms will be needed to establish a new, efficient government finance system capable of achieving these objectives. Sustainability can be achieved by: (a) establishing new fiscal arrangements between State, Entities, and local governments; (b) introducing new tax policies and a modernized revenue collection system to raise domestic resources efficiently; (c) cutting government spending; and (d) improving management of public outlays, including better targeting of social spending. Public sector restructuring should occur at the same time that new institutions are established and overall government spending rationalized.

Establishing a new system of intergovernmental fiscal relations

19. A new system of government finance should be set up, based on the outline in the Dayton-Paris Peace Agreement, to clearly assign responsibilities and allocate revenues to different levels of government. According to the agreement, two-thirds of the State budget should be financed by the Federation and one-third by Republika Srpska. However, the specific means by which the Entities will raise the money and transfer funds to the State have not yet been determined. At the Entity level an asymmetric fiscal system is envisaged: decentralized in the Federation (mostly at the canton level) and centralized in Republika Srpska. In the Federation decisions for assigning responsibilities, and sources of revenue have not yet been made although they are critical at this stage. To a lesser extent this is also an issue in Republika Srpska.

Efficiently raising revenue

20. Efficiently raising revenue will require well-defined tax policies as well as significant improvements in the revenue collection administration. Tax policies should focus on harmonizing and reducing tax rates and on defining tax bases that support private sector development by setting incentives for compliance:

- *Payroll contributions.* The current high payroll taxes undermine tax collection, motivate evasion, and introduce perverse effects to the labor market. Furthermore, these rates vary

greatly across the country. Tax and contribution rates on payrolls should be reduced and harmonized across Entities;

- *Customs tariffs.* Import duties differ between the Entities, and are excessively high in Republika Srpska. Customs duties should be reduced and made uniform for all of Bosnia and Herzegovina; import quotas, export controls, and other trade restrictions should be phased out;
- *Corporate and personal income taxes.* These taxes are not yet important in Bosnia and Herzegovina, but their importance will increase as the economy moves toward a market-oriented system. Major reform will be needed to introduce modern tax codes in these areas on a harmonized basis for the entire country; and
- *Tax and customs administrations.* Major overhaul will be required to rationalize tax and customs administrative structures in both Entities, to make them compatible, to modernize assessment and enforcement, and to improve procedures and hardware and train staff.

Reducing the size of the public sector and improving management of public spending

21. Public spending accounted for the bulk of Bosnia and Herzegovina's economy in 1995, even as significant arrears accrued. Private sector development would be facilitated by cutting public spending and taxes as a share of GDP.

- *Cutting spending.* Major cuts are needed in certain areas of public expenditure, including defense, subsidies, and entitlement programs. Avoiding the buildup of large administrative structures is also crucial to controlling expenditures. Public employment in government institutions should be rationalized, in line with economic recovery and in coordination with retraining and employment generation programs;
- *Improving expenditure management.* The public sector's share of the economy also needs to be reduced by developing a more systematic, less ad hoc approach to budgeting. Budget preparation and execution need to be modernized to increase accountability and transparency. Some expenditures, such as public investment, require developing an institutional mechanism for evaluating alternatives; and
- *Setting sustainable wage and pension levels.* Wage and pensions should be established at levels that are sustainable over the medium-term. This requires setting them in accordance with the Government's capacity to generate revenue.

ANNEX

TECHNICAL ASSISTANCE IN SUPPORT OF MACRO-ECONOMIC POLICY REFORMS

1. To ensure the success and the sustainability of the reconstruction effort, major policy reforms are required from the Governments of Bosnia and Herzegovina and of both Entities. New institutions have to be set up, developed and strengthened and a full legal and regulatory framework has to be put in place. At the same time, measures need to be taken to ensure the transition from the pre-war socialist system to a market economy. The transition has been difficult in many Central European countries, and will be even more so in Bosnia and Herzegovina, where the reform, reconstruction, and development of governmental structures have to be carried out simultaneously. Generating the right strategies and regulatory regime, building a consensus on the required reforms, and strengthening commitment for their implementation is urgent. Substantial technical assistance is required to help the authorities in Bosnia and Herzegovina design and implement the necessary policy measures.

2. The most critical reforms are those aimed at establishing and developing the necessary joint institutions, privatizing and restructuring banks and enterprises and designing and implementing a budget reform. Such reforms should reflect the need to balance public expenditures and potential revenues, to reduce the role of the public sector and allow private sector development. Technical assistance includes provision of expert advice for the design of appropriate regulations, direct assistance in establishing or strengthening key institutions, training of civil servants, and the like.

1996 Achievements

3. In 1996, the donor community committed about US\$55 million in advisory services and training, and an additional US\$20 million in equipment and provision of office space (primarily in the Federation), in support of : (i) fiscal policy and institutions (e.g. support for the creation of Federation tax and customs policies and administration, improvement of public revenue and expenditure management); (ii) development of an appropriate regulatory framework for privatization and private sector development (e.g. banking regulation, establishment of the Federation Banking Supervision Agency, enterprise and banking privatization in the Federation); and (iii) provision of support services for enterprises (e.g. business support services, mainly directed towards small and medium enterprises and support to industrial restructuring).

Overall 1997 Requirements

4. About US\$30 million will be required for 1997. Technical assistance programs and financial requirements are described in more detail in several of the sectoral chapters in this report. This annex aims to summarize the various technical assistance components and to list the areas where support from the donor community is required.

Developing Joint Institutions

5. Technical assistance is required to establish and develop key macroeconomic institutions (see page 151), and in particular:

- a new Central Bank, which will act as the sole agency for monetary policy and currency issuance in Bosnia and Herzegovina;
- an external debt management system, with units at the State and Entity levels, to: (a) prepare and negotiate loan agreements and monitor the use and repayment of government debt; (b) develop and implement an external debt recording system; and (c) formulate proposals for debt strategy and policy; and
- other joint institutions as mandated by the Dayton-Paris Peace Agreement.

Fiscal Policy

6. Authorities in Bosnia and Herzegovina will require technical assistance to develop an appropriate fiscal policy, aimed at ensuring that all levels of government obtain the revenues necessary for effective operation while limiting taxes to a sustainable level which will not impede growth (see page 152). Technical assistance is needed in particular to help:

- develop fiscal federalism, including the assignment of tax and spending responsibilities (e.g. determination of the responsibilities of the various levels of government for the delivery of education, health care, and the like) and the definition of financial transfer mechanisms between the State, Entities, and local governments;
- support the Entities' tax administrations, in order to render them fully operational and further develop them; this includes modernization of procedures and rationalization of staffing, structure, and functions; and
- modernize tax administration, with an emphasis on rationalizing structures, functions, and procedures, developing cross-Entity coordination mechanisms, establishing registries of taxpayers, and training in tax assessment and compliance methods.

Public Expenditure Management

7. Technical assistance is necessary to improve public expenditure management, with an emphasis on budget preparation and execution (with improved transparency in the budgeting process), including support for the management of both extrabudgetary funds (mainly pensions) and external debt (see page 152). Assistance is needed in particular to:

- ensure adequate and transparent budget preparation and execution at the Entity and local levels;
- organize basic data collection for economic management, e.g. population and migration statistics, household surveys on income, consumption, unemployment, and cost of living;
- develop the treasury functions of the Entities; and
- strengthen audit and budget control.

Private Sector Development and Development of a Regulatory Framework

8. To ensure the most needed economic growth through private sector development, the regulatory environment for private sector development should be adjusted (see page 95). Technical assistance is particularly required to support the authorities in Bosnia and Herzegovina in:

- liberalizing restrictive regulations which limit the potential for rapid economic recovery, including trade barriers, labor regulations, and tax -- particularly payroll taxes, which are now about 100 percent of net salaries;
- establishing a legal framework (or clarification of an existing one) to facilitate private sector activities, particularly with regard to property rights (over physical, legal, and intellectual assets), and laws on contracts, corporations, bankruptcy, competition, banking, and investment;
- reducing the size and improving the effectiveness of the public sector; and
- developing measures to attract foreign investors.

Support to Privatization

9. To promote private sector involvement and increase the perspectives for growth, technical assistance is needed in support of rapid and effective privatization programs, which will require designing and passing privatization laws at the Entity level (see pages 93 and 95). Special attention should be given to providing the technical assistance required for:

- privatizing the large conglomerates; this includes diagnostic studies, definition of detailed measures to be undertaken, assistance for implementation of these measures, and match-making with foreign partners; and
- supporting small and medium-size enterprise development, enterprise restructuring and privatization, and improving knowledge of and access to modern technology.

Financial Sector Reform

10. To improve financial intermediation, savings mobilization, and investment financing within the private sector, technical assistance efforts should focus on reforming the financial sector (see pages 93 and 152), including:

- clarifying the ownership and governance structure of banks, and restructuring and eventually privatizing them;
- improve banks' managerial capacity in savings mobilization and lending practices;
- establishing both an Asset Liquidation Agency, to take over banks' bad assets and try to maximize recovery in a short period, and a Settlement Agency, to handle frozen foreign exchange deposits and other liabilities (such as wage and pension arrears) in exchange for issuance of privatization certificates; and

- establishing strong regulatory and supervisory frameworks, introducing prudential regulation and supervisory standards, setting up (in Republika Srpska) and strengthening (in both Entities) institutions for bank supervision.

Trade Policy

11. To re-start economic activities, barriers to internal and external trade should be minimized (see pages 151 and 152). Technical assistance will therefore be required to:

- develop, at the State level, a trade policy department to set trade policy and initiate reform, and particularly to: (a) establish a common external trade structure for both Entities; (b) enact a new foreign trade law; and (c) negotiate membership in the World Trade Organization (WTO) and agreements on trade liberalization with other trading partners; and
- harmonize the Entities' customs administrations methods and training programs, to improve coordination and avoid customs evasion.

Safety Net

12. Since continued support will be needed during the next years for the poorest households, a major technical assistance effort should be made in designing a sustainable safety net, with a particular attention to developing a new pension system that both is affordable and offers an adequate minimal coverage, and to developing programs for other vulnerable populations (see page 153).

IMPLEMENTATION ARRANGEMENTS

13. Implementing technical assistance requires careful donor coordination: (i) sufficient untied resources should be available to fill-in areas not covered by tied resources; (ii) local ownership of the technical assistance should be encouraged; and (iii) technical assistance flows should complement national economic policies -- a principle that was not always followed in 1996.

14. Technical assistance could take different forms, including:

- seconding of foreign experts to appropriate institutions for helping designing policies;
- organizing of training programs for governments officials; and
- developing of twinning programs with foreign public administrations.

Specific programs should be discussed with the relevant authorities, as described in the corresponding sector chapters.