Bosnia and Herzegovina

The Priority Reconstruction Program: From Emergency to Sustainability

Volume 3

Reconstruction Sector Reports

November 1996

Prepared by the European Commission,
the European Bank for Reconstruction and Development
and the Central Europe Department of the World Bank
for the Donor Information Meeting
January 9 - 10, 1997, Brussels

CURRENCY EQUIVALENT

100 RBH DINAR = 0.67US$ = 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. One year after the signature of the Dayton-Paris Peace Agreement, taking stock of the reconstruction program and its start-up is both timely and appropriate. There is significant progress to report: improvements in living conditions have been noticeable throughout 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 activities flourish in most areas. Such results have been made possible by the combination of a strong commitment of the populations to returning to normal life and of a significant level of assistance, both advisory and financial, from the donor community. Donor support has generally met the needs as assessed last year and has made Bosnia and Herzegovina's recovery program -- by any international standard of comparison -- one of the more successful attempts in the last decades to reconstruct a war-torn country.

The Vision

2. *Continued effort is necessary in 1997 and the years beyond to reconstruct social and infrastructure facilities and to revitalize the economy* in a country where unemployment still exceeds 50 percent. Assistance will also be needed to progressively rebuild institutions and to provide training to replace skilled personnel who have been killed, or refugees who have left the country. And Bosnia and Herzegovina will have to undertake market-economy reforms to fundamentally modify its legal, regulatory, private sector and financial frameworks.

3. This must be a multi-year effort for Bosnia and Herzegovina and donors alike, and while much progress has been made, expecting quick results on a large scale will lead to disappointment. Donors, Bosnian authorities, and observers should be prepared for a reconstruction process which will take some years to be completed. We are, to paraphrase Churchill, "not at the end, nor even at the beginning of the end, but at the end of the beginning."

4. Estimates of war damage range from US$20 billion to as high as US$40 billion.[1] The donor community's US$5.1 billion three- to four-year recovery program will finance at most a quarter of these damages and the US$1.8 billion pledged in 1996 (and US$700 million disbursed to date) covers only 9 percent (and 3.5 percent respectively) of the more conservative estimate of damages. Restoring the entire housing stock of Bosnia and Herzegovina to its prewar level, for example, could cost US$3 to 4 billion: yet donors provided US$270 million in 1996 and are likely to finance US$690 million over the three- to four-year period -- about a fifth of the damaged stock. Our accomplishments and expectations must thus be assessed and measured against this vast scale of damages.

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1 "Bosnia and Herzegovina : Priorities for Recovery and Growth", World Bank and European Bank for Reconstruction and Development, December 8, 1995.

5. *While donor assistance will be required for several more years, it must progressively be complemented and eventually replaced by other resources* -- including domestic savings, resources of the domestic private sector, budgetary resources from all levels of government as the economy and budgets recover, and, over the years, resources of the international private sector.

6. *To achieve this, sustainability must become the focus of the joint efforts of donors and authorities in Bosnia and Herzegovina.* 1996 was a year for implementing quick impact emergency projects and for preparing medium-term investments. Urgent repairs were mostly financed through donations, 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, donors' assistance must gradually move toward supporting sustainable investments: priorities should reflect medium-term needs, operating conditions should be defined in detail, and cost-recovery mechanisms should be designed prior to making investments.

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

8. *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 good 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 have been prepared by the State and Entity Governments, with the support of the Sectoral Task Forces (composed of representatives of the main donors), and are described in the sector reports that follow.

The Reconstruction Financing Challenge

9. *The US$5.1 billion, three- to four-year priority reconstruction program, aimed at restoring normal life and facilitating the repatriation of refugees, remains valid as an overall framework.* However, better knowledge of the present situation has led to some adjustment in strategies and to a revision of the financial estimates in some sectors. The total 1997 external financing requirement is estimated at US$1.4 billion (table 1).

10. *External financing requirements for infrastructure networks -- transport, telecommunications, electric power* -- were reduced from an initial US$1.88 billion (37 percent of the overall program) over the three- to four-year period to US$1.37 billion (27 percent). Three factors played a role here: (i) a better assessment of the current situation; (ii) a major contribution of IFOR activities, mainly in transport; and (iii) increased expectations for private sector involvement in telecommunications. Reconstruction activities in the network sectors have and should continue to focus on three areas: (i) damaged infrastructure should be restored; (ii) the policy framework should be reformed to ensure cost recovery; and (iii) appropriately

efficient operating mechanisms should be set up for those networks currently split into three independent sub-systems, to restore efficient communication and interaction between them.

- In 1996, there were significant achievements within this framework, but more remains to be done. *Transport* infrastructure was repaired, and railways lines and airports re-opened. But, much remains to be done to improve cost recovery and to reach agreement on inter-Entity matters. In *telecommunications*, efforts were impeded by persistent political difficulties which could not be resolved. *Electric power* facilities were rehabilitated, restoring regular power supply to many households, and progress was made toward cost-recovery. However, cooperation among the operating companies is still insufficient. *In 1997, significant donor assistance is required, particularly for electric power and transport.* Efforts should focus on rehabilitating damaged infrastructure and implementing economic policy reform so that rehabilitated facilities function effectively.

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

Sector	Revised 3-4 Year Program	1996 Firm Commitments	1997 Requirements / Sectoral Allocations
Agriculture	304	63	90
Education	273	82	70
Employment Generation	76	42	30
Energy	871	268	310
[District Heating and Natural Gas]	[257]	[47]	[110]
[Electric Power and Coal]	[614]	[221]	[200]
Fiscal and Social Support [1]	514	262	120
Health	425	83	90
Housing	693	273	150
Industry and Finance	612	167	180
Landmine Clearing	203	43	60
Telecommunications	173	27	60
Transport	583	163	175
Water and Waste Management	363	83	100
Subtotal		1,556	
Support to Peace Implementation		132	
Subtotal		1,688	
1996 Indicative Commitments		163	
Total [2]	**5,090**	**1,851**	**1,435**

1. Includes support for government institutions, the social fund, other social rehabilitation programs, as well as balance of payments assistance. The counterpart funds of balance of payments support can be used by the government to finance overall fiscal needs, including recurrent costs in different sectors and other reconstruction-related expenditures. The original 1996 program did not include a separate line item for fiscal/balance of payments support but the sectoral requirements did include the corresponding recurrent costs.

2. 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.

11. *The requirements for activities directly supporting community revival and return or resettlement of refugees and displaced persons -- housing, district and gas heating, water and waste management, and landmine hazard management -- remained at US$1.5 billion* (30 percent of the overall US$5.1 billion three- to four-year program). Integrated packages in these sectors are critical for the return of refugees and displaced persons. Necessary efforts consist of works and physical repairs, together with critical reforms aimed at improving management of municipal companies (water and heating). Ownership issues must also be addressed before some housing reconstruction can proceed.

- In 1996, activities were implemented in a decentralized manner (through NGOs or direct contracts with municipalities) and were, in general, successful -- although the landmine clearing sector had a slow start due to political difficulties impeding donors' efforts. In 1997, donors should ensure that preliminary steps are taken by the Entity Governments to address medium-term issues. Since decentralized implementation arrangements are likely to remain in place for the bulk of assistance, efforts should be made to ensure coordination among donors. Regional rehabilitation projects should be supported, but attention should be paid to distributing the assistance in a balanced fashion throughout the country.

12. *Financial requirements to re-start economic activities in the private sector and generate employment -- industry, financial sector development, direct employment generation, and agriculture -- increased substantially* from US$700 million over three to four years (14 percent of the overall program) to US$1 billion (19 percent). Addressing employment creation over the medium-term is essential for repatriating refugees and reintegrating displaced persons, as well as for demobilizing armies. The program is aimed at supporting the re-start of economically-viable activities and at stimulating private sector involvement and reformed banks. However, since the full-scale economic recovery will require a few years, it also includes "bridging projects" for direct employment creation in the near term.

- In 1996, activities focused on emergency measures: critical imports in agriculture, quick-start lines of credit in industry, and especially designed employment generation programs (public works, training and counseling and local initiative micro-credit projects). Donor effort should increase in 1997 and assistance should gradually move toward supporting measures which will enable successful private sector development, including encouraging foreign private investments in Bosnia and Herzegovina and banking reform. Success in this field, more than in any other, is directly linked to the commitment of the new State and Entity Governments to reform the legal and regulatory framework, restructure the banking sector, re-orient government activities and stimulate private initiative. Donors should strongly encourage Governments at all levels to proceed in that direction.

13. *Requirements for the social sectors -- education and health -- were reduced* from US$800 million (16 percent of the overall amount) to US$700 million (14 percent). Major ongoing needs include physical repairs, provision of consumables (e.g. medicines), critical inputs (e.g. school materials) and technical assistance to reform the systems and ensure their sustainability. 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 could not substitute for the Governments over the medium-term, recurrent cost financing salary support should no longer be included in the social sectors allocation.

- Support in 1996 to the social sectors was substantial, but often implemented in a very decentralized manner. Several donors continued or expanded emergency-type activities started during the war. Many channeled their funding through international NGOs and implemented projects with direct contracts with beneficiary municipalities. In 1997, efforts should be directed to improve coordination and sustainability, and donors should support the design and implementation of sectoral investment strategies and the resolution of policy issues, especially financial/budgetary sustainability.

14. *The reconstruction program includes increased fiscal support to the State and Entity Governments,* both for developing a smooth governance structure and contributing to establishing a social safety net for the neediest. Total requirements increased significantly, from US$210 million over three to four years (4 percent of the overall amount) to US$510 million (10 percent), to reflect the continued high level of need for social and budgetary support.

- Support to Government in 1996 was extensive -- most of which was received by the Federation. Continued assistance in 1997 is required to support a successful budget reform process and the development of an appropriate safety net for the medium-term.

Next Steps: Challenges for Bosnia and Herzegovina

15. *An extraordinary effort will be required of the people of Bosnia and Herzegovina and their governments in the postwar reconstruction of their country.* Significant progress has already been made. But much remains to be done. Volunteers have carried out emergency repairs of the gas networks, owners have started reconstructing their homes, public institutions have prepared and implemented large projects, private companies have been created. Initial steps have been taken in building Federation institutions, such as the tax and customs administrations; privatization teams are set up in both Entities and discussions on State-level institutions are underway. But these initiatives are still to be transformed into activities sustainable over the medium-term; and cost-recovery mechanisms have to be developed and implemented to that effect.

16. *Continued donor support will be essential for the success of the recovery effort, to ensure a lasting peace and make it possible for refugees to return.* But the military, political, and financial efforts of the international community must be accompanied by strong efforts *on the Bosnian side*, focused on ensuring economically sustainable reconstruction and development. 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, good progress on the political front and in economic reforms would make a significant difference in donors' readiness to come forward. 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 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. These sector reports will be updated for the February 1997 Donor Pledging Conference, with a list of priority investments that the donor community is invited to support.

The data shown in these reports are as reported by each donor to the European Commission - World Bank-managed data base, as of October 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.

TABLE OF CONTENTS

Economic and Employment Recovery and Private Sector Development

Social Sectors

Fiscal and Social Support

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

- Over 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 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 did remain operable. Moreover, the institutions, never large, were forcibly broken up and communication between them was severed.

3. Since the end of hostilities, the condition of the transport infrastructure has improved significantly. Road and railway links have been gradually restored throughout the country. Traffic on some of the main road is approaching prewar levels. The Sarajevo-Ploce railway line has been repaired. A limited number of civilian scheduled charter flights are available again 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 the restoration of the essential components of the signaling and telecommunications systems -- is expected to be completed shortly on most of the economically critical parts 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 period[1] within the overall US$5.1 billion priority reconstruction program (table 1):

- **In 1996, US$163 million was firmly committed**, leaving a significant gap of US$154 million in the first-year program requirements[2] (originally estimated at US$317 million); nevertheless, achievements in 1996 were significant (paragraphs 8 to 16);
- **In 1997, US$175 million is required** -- 15 percent of which would go to the State, 34 percent to the Federation, and 51 percent to Republika Srpska (paragraphs 17 to 25). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, about US$245 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).

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1 The original total cost of US$698 million for the program has been reduced to US$552 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 the 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	96	97	148
Roads	[173]	[44]	[36]	[93]
Road safety	[10]	[0]	[4]	[6]
Bridges	[75]	[26]	[25]	[24]
Tunnels and slips	[13]	[7]	[6]	[0]
Road equipment	[50]	[10]	[21]	[19]
Asphalt plants and quarries	[20]	[9]	[5]	[6]
Sava River ports	5	0	3	2
Railways	90	15	40	35
Civil aviation	43	24	11	8
Urban transport[a]	46	10	10	26
Mine clearing	8	3	2	3
Institution building	7	0	4	3
Technical assistance	34	12	8	14
Recurrent costs	9	3	0	6
Total	583	163[b]	175	245

[a] The allocations for 1997, 1998 and 1999 are tentative and relate mainly to buses, spare parts, and workshop equipment to cover remaining emergency needs. The estimate is subject to successful implementation of the "1,000 buses" operation managed by the Italian municipal transport agencies.

[b] In addition, extensive works were undertaken by IFOR.

7. The priority reconstruction program includes several components:

- Rehabilitate and restart the maintenance of the main road network;
- Restore the main railway lines and restart traffic;
- Complete the first phase of rehabilitation of the Sarajevo airport so that it duly fulfills the International Civil Aviation Organization (ICAO) requirements;
- Reopen the airports in Mostar and Banja Luka to regular civilian traffic;
- Rehabilitate two ports on the Sava River;
- Rehabilitate public transportation systems in the main cities; and
- Undertake related works (such as mine clearing) and provide 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 man/month of consulting services).

Box 2. IFOR 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 has undertaken an 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's work to restore strategic infrastructure has largely contributed, although indirectly, to this success (box 2). Substantial road works have also been initiated, boosting employment with local consultants designing and supervising works and local contractors back in business. Railway infrastructure is being restored throughout the country -- and operating conditions are under discussion by the Entities. Urban transport has restarted in the main cities, and Sarajevo tramways are running regularly after almost four years of virtually no service. The resumption of activities has 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	101[3]	Belgium, EBRD, EC, Italy, Japan, Kuwait, Malaysia, Netherlands, US, World Bank
Railways	16[4]	EC, France, Germany, Italy, UK, World Bank
Civil aviation	24	Austria, EBRD, EC, France, Italy
Urban transport	10	Czech Republic, EC, Korea, Norway, Spain
Technical assistance	12	Germany, Netherlands, Turkey, US, World Bank, Others
Total	163	

3 Includes US$96 million for roads and bridges, US$3 million for supply of bitumen and US$2 million for mine clearing.

4 Includes US$15 million for railways and US$1 million for mine clearing.

Roads and bridges: Bottlenecks removed

10. 70 km of roads (40 percent more than planned) will be rehabilitated by the end of the year with World Bank funding -- making it possible to use approximately 300 km of the main network. Thirteen bridges are being reconstructed, including all 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 have started with USAID financing). The EC, the Japanese Government and the World Bank have 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.[5]

Railways: Sarajevo-Ploce reopened

11. The railway line linking Sarajevo to the port of Ploce on the Adriatic Coast reopened on July 30, 1996 -- and 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. Thus, restoring an effective transport network will require not only donor financing but also a real commitment by the authorities to overcoming political difficulties which have led to a situation where, although restored, the Sarajevo to Ploce line has no regular operations. With all ongoing efforts, including those of IFOR, the North-South railway line from Ploce to Sarajevo, Tuzla, and northern Europe could be ready to function as early as March 1997.

Civil aviation: Sarajevo Airport re-opened

12. On August 15, 1996, Sarajevo airport was re-opened to limited civilian traffic, thanks to the efforts of IFOR, the French military detachment at the airport, the newly formed Sarajevo Airport Authority, and the United States (US) Government. The airport has not yet been re-opened to regular air traffic, as that 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.[6] To date, navigation aids, financed by France, have already been delivered and procurement of air traffic control equipment has been initiated, with funding from Austria (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 have helped to restore minimal public transportation in the main cities of Bosnia and Herzegovina, focusing their efforts particularly on Sarajevo. Around thirty buses and twenty minibuses, including spare parts and workshop equipment, have been delivered through both the EC Essential Aid Program and bilateral donations. Spain has

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

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

provided twenty second-hand buses and Norway ten. Italian cities are preparing a special operation called "1,000 buses".[7] And by the end of 1996, the Czech Government will have provided Sarajevo with two new tramways and much-needed spare parts.

Technical assistance: Supporting local consulting

15. Technical assistance was required mainly for project design, project management, and supervision of works. About 350 man month of technical assistance have been provided, mainly to the State and Federation Ministries of Transport.[8] Because the foreign assistance is designed to complement local capacity, not substitute for it, local consultants have been fully involved and consulting organizations strengthened.

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 -- for 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;[9]
- 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;[10]

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7 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.

8 Technical assistance was provided by:

- The Governements 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 PIUs operating costs.

9 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.

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

- 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 bring about the formation of 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 has been made in this area, and the Commission is now focusing on developing an adequate structure for operating the railway. Assistance is provided by advisers from the International Union of Railways. A Transport Law is being prepared.

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 has been emergency operations, 1997 should be the year for the donor community to support the restoration of 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 as far as possible in a financially viable way.

18. As a first step toward achieving financial sustainability for the reconstruction program, Bosnia and Herzegovina authorities should contribute on an increasing basis to the costs. In 1997, it is expected that they could finance up to 10 percent of the civil works and the full cost of the local transport of goods procured internationally.

Roads and bridges (US$97 million): Completing restoration of the primary network

19. *Road network (US$93 million).* Reconstructing all first priority bridges and tunnels and completing rehabilitation of the priority road sections will require US$93 million[11] (priorities being selected on the basis of current conditions and estimated traffic). The program includes:

- Rehabilitating 200 km of roads and 2 km of landslides (US$38 million);
- Repairing twelve bridges, including two bridges on the Sava River (US$25 million);
- Rehabilitating twenty five tunnels (US$4 million);
- Providing road and asphalt/quarry equipment for local contractors (US$21 million); and
- Supporting local road maintenance units (US$5 million).

Donors should pay particular attention to repair and reconstruction needs in Republika Srpska, where very few works have been 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.

20. *Road safety (US$4 million).* Discontinuities in road conditions, lack of road signs, and growing traffic are likely to result in high accident rates. To provide minimal road safety, US$4 million is required to: restore adequate signaling, install crash barriers on the most dangerous parts of the primary network, and enhance safety of the most dangerous road sections.

Railways (US$40 million): Upgrading to internationally acceptable standards

21. With the main railway lines to be rehabilitated by the spring of 1997, efforts need to be made to ensure that restored lines can be used (current speed limits and line capacities, axle load and traffic frequency, are low, and operation safety is a serious concern).[12] The State and Entity Governments should enter into the necessary agreements as soon as possible (box 4). Once these arrangements are reached, assistance should be provided to upgrade the restored infrastructure to internationally acceptable standards, focusing on restoring maintenance.

Priorities for donor support include:

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

12 It is expected that the following lines will be reopened: Sarajevo-Doboj, Martin Brod-Bihac and Bosanski Novi-Doboj-Tuzla-Zvornik.

- Upgrading track and restoring electrification of the economically sensitive parts of the network;
- Supplying signaling and telecommunications equipment;
- Restoring stations and marshaling yards; and
- Providing essential spare parts for rolling stock.

Box 4. Railways issue[13]

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 whole 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 reaching agreements on operating practices, track allocation and schedules, taking into account the importance of ensuring economic viability.

Civil aviation (US$11 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 the Sarajevo Airport;
- Supplying additional navigational and communications equipment to the Sarajevo, Mostar, and Banja Luka airports; and
- Providing necessary assistance and training to the civil aviation staff.

Institution building (US$4 million): Achieving a nascent sustainability

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

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

- Providing equipment and training to maintenance organizations;
- Setting up the Federation Road Directorate;
- Assisting urban transport companies in improving operations, fare collection, and cost recovery and possibly in privatizing suburban services; and
- Creating an inter-Entity planning mechanism to develop a transport strategy for the country.

Technical assistance (US$8 million): Moving toward locally managed projects

24. This component centers on providing assistance to the Bosnia and Herzegovina governmental 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 governmental authorities' implementation unit;
- Preparation of the Bosnia and Herzegovina transport master plan; 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.[14]

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[14] 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.

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.

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.[15] 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, 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. Therefore, 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.

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

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 (payment of a uniform fee to the network companies) as per contractual arrangements. Third-party access should be granted automatically.

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 telecom service 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 out of 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 (see 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 up into three separate companies, based in Sarajevo (PTT BiH), Mostar (PTT HB), and in 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 and more than 65 percent is 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. On the basis of a detailed assessment of the war damage, the three- to four-year reconstruction and development program designed in December 1995 has been updated and the 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 for expansion and modernization up to the year 2000, the priority reconstruction program endorsed by the World Bank, the European Community (EC), the European Bank for Reconstruction and Development (EBRD) and the Government of Bosnia and Herzegovina amounts to 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 and/or as contributions of the authorities in Bosnia and Herzegovina.

- **In 1996, US$27 million was firmly committed**, less than 17 percent of the original US$160 million estimated first-year needs; reconstruction activities suffered both from this shortfall in financing and from the pre-election political uncertainty (paragraphs 6 to 14);
- **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 15 to 17). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, about US$86 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 18).

Table 1. Telecom 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	20	39	61
Technical assistance	8	0	1	7
Total	173	27	60	86

4. The program includes restoring and modernizing critical parts of the existing networks, establishing a Global System for Mobile Communication (GSM) network, supporting institution building, and providing technical assistance to the Entity Ministries for Transport and Communications on legal and regulatory matters. 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 up to the year 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 (the analysis shows that 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 for stimulating their interest. However, the development of a GSM cannot substitute (and requires for satisfactory functioning) restoration of the conventional services.

III. 1996 ACHIEVEMENTS

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

- The technical working group, with the assistance of an international consultant (Swedtel), prepared a comprehensive report assessing the damage, describing the current situation, and defining the immediate and medium-term needs for restoration and reconstruction of the telecom 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 telecom 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.

7. Donor commitments remained insufficient to undertake reconstruction activities on a large scale. Although needs for the first year had initially been estimated at US$150 million, only US$27 million was firmly committed -- by the European Commission, the Governments of Italy, the Netherlands, Norway, Sweden 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. By the end of October 1996, very limited progress had been achieved in establishing direct telecommunications links between the Entities.

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

	Amount	Main Donors
Emergency repairs	7.1	Sweden, UK
Reconstruction	19.6	EBRD, EC, Italy, Norway
Technical assistance	0.3	Netherlands, Sweden
Total	27.0	

Completion of Damage assessment

8. The technical working group has 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.

Finalization of a medium term reconstruction and development plan.

9. This plan maps out the evolution of the network up to the year 2000, based on the existing situation, making it possible to link the reconstruction activity with the 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. In an initial phase, efforts could concentrate 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 the long-distance traffic. However, all these recommendations are subject to further consideration and analysis in conjunction with the telecom authorities of Bosnia and Herzegovina.

Rollout of mobile telephony in some areas

10. Mobile telephony was considered an investment priority from the beginning. But because of the unclear legal framework and the differences in 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 now deploying a network in the areas of Sarajevo and Tuzla and the PTTs in Mostar and in Republika Srpska are in the process of selecting strategic partners for the provision of GSM

services. *Inter-Entity cooperation is urgently needed to reach an agreement on frequency and interconnection for 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 sector policy, telecom law, strategy, mobile licensing and mobile network configuration issues. The sector policy development was coordinated with the Office of the High Representative (through the Joint Civilian Commission), IMG, and IFOR. Working documents -- draft telecom 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 a 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 began early this year, almost exclusively on the basis of bilateral assistance. 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 major objective, connecting the two Entities through direct lines, was not met -- because of political, not technical, reasons.

Preparation for comprehensive rehabilitation initiated

13. Project preparation for the full restoration of the telecommunications network commenced at the beginning of this 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..

14. It is expected that the new, post-election Government will find a compromise solution that will permit commencement of the works on the country's main telecom highways. A large mission is planned in the next weeks to prepare and appraise a Telecom Emergency Reconstruction Project.

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

Participants will include the EBRD, the Governments of Korea (MOF and EDCF) and Sweden (SIDA), and technical and policy consultants.

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 EBRD, but much remains to be done. The new post-election authorities should, as a matter of urgency, both adopt a telecom 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 the regions and to avoid fragmentation of efforts. To that effect, donors are encouraged to use the EBRD-sponsored Telecom Emergency Reconstruction Project as a vehicle for their support.

IV. 1997 Challenges and Financing Needs

Reaching agreement on the basic framework

15. In 1996, the main successes occurred in studies and preparatory work. In 1997, donors should focus on starting physical implementation of the Telecom 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 within which it will operate. A technical assistance program designed to promote such an agreement is being offered to telecom authorities in Bosnia and Herzegovina; this program would help initiate the necessary legal and regulatory reforms for operation of the national and Entity telecom 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.

Defining and implementing the project

16. After agreement has been reached, the Telecom Emergency Reconstruction Project will be revised to take into account the proposed national network configuration. Resources for defining and appraising the project are already available. If cofinancing can be promptly secured, the first disbursements for the project could be expected during the second quarter of 1997.

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2 The Telecom 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 telecom services.

Developing necessary institutions

17. 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, this unit would be responsible for activities related to the EBRD's project and for coordination of all the donors' telecommunications projects. Local PIUs could be established at the level of each PTT (boxes 3 and 4), action that would require US$5.4 million in external financing.

Box 3. The role of the PIU

A PIU will be established to coordinate, monitor, evaluate and manage all aspects of the EBRD-sponsored Telecom 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

18. 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

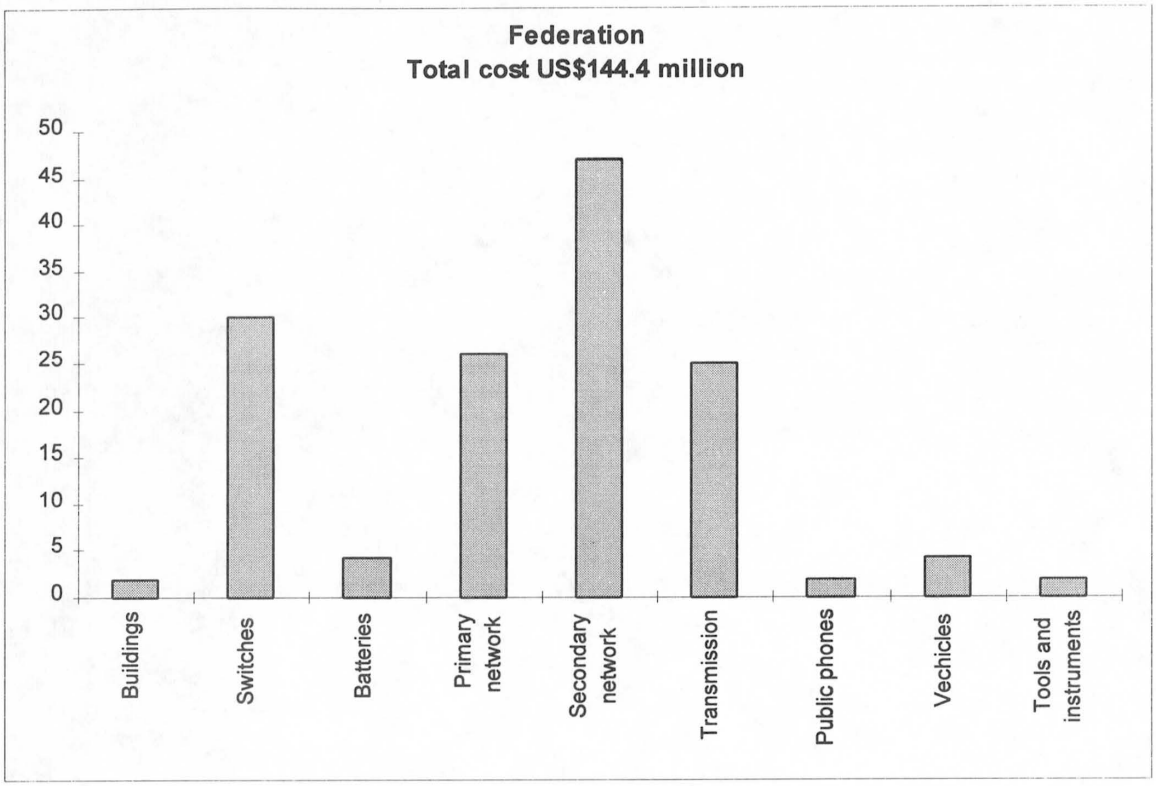
The *Institutional Development Program* (IDP) aims to assist Bosnia and Herzegovina in preparing and implementing the major reforms needed, including:

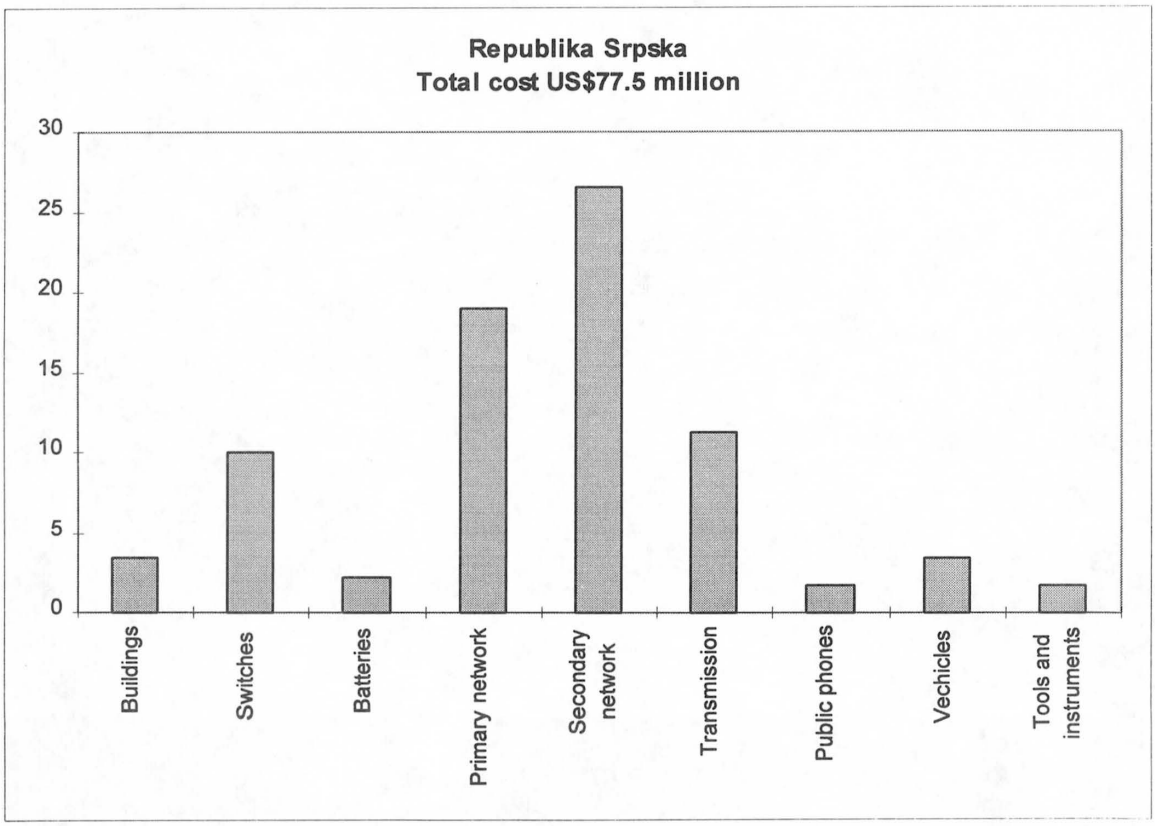
- Reconstruction of the war-torn telecom systems and introduction of modern technology;
- Transition from a government owned, centrally planned system to a privately operated network responsive to market requirements;
- Introduction of competition and limitation of monopoly for telephone services; and
- 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 consists of 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, the Bosnia and Herzegovina electric power system consisted of:

- Thirteen hydropower plants with a total capacity of 2,034 megawatts (MW) and an average output of 6,922 gigawatt hours (GWh) per year;
- Twelve brown coal and lignite fired thermal power plants with an installed capacity of 1,957 MW and an output of 10,675 GWh per year; 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, which were producing brown coal or lignite for both heating and power generation. Production was about 18 million tons of coal per year, of which 10 million tons was brown coal and 8 million tons 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 per year.

3. Both the power system and the coal mining sector suffered significant damage as a direct result of war activities or due to prewar and war-related lack of maintenance (boxes 1 and 2).

4. Before the war, the Bosnia and Herzegovina 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 of the Tuzla region were grouped into one state-owned holding company; others were operated as independent state-owned enterprises.

Box 1. Electric power system damage

- More than 50 percent of the generating capacity was put out of operation;
- 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 located in the Federation area have been grouped into two principal companies (Tuzla Coal Mines and Central Bosnia Coal Mines), which 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:

- Restoration of service to acceptable levels;
- Restoration of output of the lowest-cost mines (that can provide the largest increase in overall output relative to the required investment) to minimum 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;
- Improvement of sector finances through increased billing and collection and a gradual phasing out of price distortions; and
- Restructuring of the electric power and coal sectors.

7. The reconstruction program submitted to the 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:

- **In 1996, US$221 million was firmly committed:** a large number of activities were carried out successfully (paragraphs 8 to 11);
- **For 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. A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **For 1998-1999 an estimated US$193 million will be necessary** and several policy issues should be addressed to ensure the longer term sustainability of the program (paragraphs 20 to 21).

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

	3-4 year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Electric Power				
Generation: hydro	60	20	30	10
Generation: thermal	60	32	15	13
Transmission: lines	65	34	20	11
Transmission: substations/dispatch	80	21	19	40
Distribution	191	62	65	64
Communications	6	0	3	3
Transportation	23	0	10	13
Spare parts	30	21	5	4
Engineering/ technical assistance	25	10	8	7
Sub-total	540	200	175	165
Coal Mining				
Equipment and spare parts	70	20	22	28
Technical assistance	4	1	3	0
Sub-total	74	21	25	28
Total	**614**	**221**	**200**	**193**

III. 1996 ACHIEVEMENTS

8. There have been many positive developments in the electric power sector since the signature of the Dayton-Paris Peace Agreement. The US$196 million Emergency Electric Power Reconstruction Project financed by a large number of financiers is being implemented and is progressing well. This Project constitutes most of the total emergency reconstruction program for 1996 (table 2). Under the auspices of the Office of the High Representative, contacts have been initiated between the electric power companies of the Federation and Republika Srpska, which has 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 have 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	200	
Generation	[52]	Czech Republic, EC, Germany, Switzerland, UK, US, World Bank.
Transmission/ distribution	[117]	Austria, Belgium, Canada, EBRD, EC, France, Germany, Italy, Norway, UK, US, World Bank.
Maintenance/operation equipment	[21]	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	221	

9. The amounts shown represent firm or indicative donor commitments up to September 1996 by: the Governments of Austria, Belgium, Canada, the Czech Republic, Finland, France, Germany, Ireland, Japan, the Netherlands, Norway, the United Kingdom (UK), the United States (US), the European Bank for Reconstruction and Development (EBRD), the EC, the Overseas Development Agency (ODA), and the World Bank. Commitments made under the Emergency Electric Power Reconstruction Project amount to US$156 million (including the recent US commitment of US$23 million for Kakanj and the Central Bosnia coal mines). Commitments outside of that project amount to US$65 million.

10. The Swiss Government has 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 will fund the rehabilitation of Units 5 and 6 of the Kakanj Cogeneration Plant plus associated coal mines in Central Bosnia, for a total cost of about US$23 million. This would leave 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 of the Project are currently the Mostar hydro power 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.

- **The Salakovac hydro power plant will be in full operation by end December, 1996**. Two damaged turbine-generators, together with their auxiliary equipment, were entirely overhauled and are being re-installed and prepared for the mechanical revolving. Both units will be in full operation by end December, 1996.

- **The Grabovica hydro power plant will be recommissioned by end 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. Reinforcement of the stilling basin,

retaining wall and tailrace embankment is well underway. Recommissioning of both the Salakovac and Grabovica hydro power plants by end December, 1996 would contribute towards relieving expected power shortages.

- **Preparation of the rehabilitation of the Jablanica hydro power 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, the rehabilitation of unit 5 is underway 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 underway. A 200 MW unit at the Tuzla power plant was commissioned in the beginning of November, 1996.

Box 3. Emergency Electric Power Rehabilitation Project

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

- Reconstruction of 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); reconstruction of Ugljevik thermal power plant (1x300 MW) in Republika Srpska;
- Restoration of production in the coal mines critically needed for the operation of the thermal power plants;
- Reconstruction of four hydropower stations — Jablanica (4 x 25 MW), Grabovica (2 x 57 MW), Mostar (3x25 MW) and Jajce I (2x25 MW);
- Reconstruction of about 210 km of 220 kV and 110 kV transmission lines and thirty-one 220/110/35 kV and 110/35/10 kV substations; repair of communications and system control;
- Reconstruction of 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;
- Purchase of maintenance vehicles and spare parts; and
- 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 Federation and Republika Srpska areas in order to facilitate economic recovery, through: (a) rehabilitating the distribution network and transmission networks; (b) where necessary to reconnect 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 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 within this program will be a painstaking process, in part due to the physical dispersion of the assets as well as due to the fact that three Elektroprivredas are involved. Hence, the results will not be available until after the donors conference. It should be emphasized that the cost estimate of the 1997-99 electric power and coal mining program is 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 **hydro power generation**, priority should be given to the Mostar (3x25 MW), Rama (2x80 MW) and Bocac (2x55 MW) hydro power plants. Detailed damage assessments should be carried out before costs can be accurately estimated. For example, the Mostar hydro power station was badly damaged and the machine hall flooded; the generating units, including auxiliary equipment, have been completely submerged for the last three years and have to be lifted out for cleaning, damage inspection and testing. For **thermal power plants and associated coal mines**, priority should be given to the Gacko thermal power plant (1x300 MW) and associated coal mine. In order to review and evaluate the possibility of full scale rehabilitation of the existing 300 MW unit at the Gacko plant, the status of turbine-generator, boiler, instrumentation and control, electrical and auxiliary and general station equipment, the fuel requirements and supply, and the environmental impact and mitigation measures should be reviewed in depth.

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 only 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 10-year horizon; and
- **Coal mine rehabilitation should be focused on viable mines mainly needed to meet the requirements of the thermal power plants**; production capacities in the more 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 by each of the three Elektroprivredas independently of each other. 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. While the PIU or project management teams exercise control over all project-related activities, they receive cross support from other units of the power enterprises, such as for procurement, technical support, legal matters, budgeting, accounting, disbursing and cost control, scheduling, manpower allocation and operational support. The implementation of the sub-projects are the responsibility of the local generation, transmission and distribution entities. Replacement of transmission equipment is performed by the transmission organizations' own maintenance staff on force account, who have satisfactorily handled similar works in the past. Installation of major equipment is being done in most instances by suppliers on a turn-key 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 Credit 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 the electric power companies.

Box 5. Lessons learned

- **Pre-financing 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 allowed contracts to be signed and work to start earlier than would have been the case otherwise;
- **Different contracting methods - such as turn key 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 can generally be mobilized faster for a given job, especially when the work is to be done in widely dispersed areas, than contractors coming 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 major 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, due to the financial difficulties faced by households and corporate consumers during the war, bill collection rates were 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 at the latest by 1998. 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 currently being maintained in all twenty-eight mines in the Federation, although about 70 percent of the 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 those mines that are capable of providing the desired coal quality and that are clearly economically viable. This 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 staffing level is currently about 20,000, of which about 50 percent is actually working. It should be gradually decreased so that productivity would 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, production costs per ton should be reduced as soon as possible through reduced staffing levels, selective mine closures, and better preventive maintenance and spare parts management.

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

- **Electric power sector restructuring.** The power sector is clearly among those which fall 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 would 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 there are at this stage 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 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. Coverage of residential infrastructure 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 area, 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 the 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$273 million was firmly committed**, 65 percent more than was targeted for housing in the first year (US$165 million), and implementation of emergency repairs has been highly successful this year (paragraphs 10 to 18);
- **In 1997, US$150 million is required,** 75 percent of which would benefit the Federation and 25 percent Republika Srpska (paragraphs 19 to 29). A detailed list of corresponding investments will be prepared for the Third Donors Conference to be held in early 1997; and
- **In 1998 and 1999, about US$270 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	170	22	40
Reconstruction	318	76	72	170
Sarajevo program	123	23	50	50
Technical assistance	20	4	6	10
Total	693	273	150	270

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 contributions should reflect the housing needs of the population, with priority 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 (the "integrated packages" discussed in Volume 1).

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 have been 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 has been made on both fronts. In addition, the first steps have been 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 have generated considerable donor response. For the first-year program donors committed US$273 million for projects in different municipalities (table 2). The speed and size of the commitments reflect 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, have led most donors to emphasize grants of emergency assistance for private housing during the first year.

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

	Amount	Main donors
Emergency repairs	170	Austria, Belgium, Czech Republic, EC, Finland, FYROM, Germany, Ireland, Netherlands, Norway, OIC, Romania, Spain, Slovenia, UK, US, World Bank.
Reconstruction	76	Brunei, Czech Republic, Denmark, EC, Germany, Italy, Japan, Luxembourg, Saudi Arabia, Sweden, Switzerland.
Sarajevo program	23	Austria, Czech Republic, EC, Malaysia, US, World Bank.
Technical assistance	4	Austria, Canada, EC, Germany, Netherlands, World Bank
Total	273	

12. Local contractors have been able to supply adequate labor and materials for repair projects. Both small and large contractors have participated in these projects, and their capability has been adequate. The ongoing housing repair projects will generate an estimated 180,000 man months of labor. Despite the disruption in local production, the supply of building materials has not been a constraint. Supplier networks have functioned adequately to meet demand, with suppliers and contractors turning to imports when materials were not available locally (such as glass and electrical and plumbing fixtures). Although it is unclear how much 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 has been 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

Since many donors have channeled their funds through NGOs, coordination of housing activities has been extremely difficult: in most instances NGOs take 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 the 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 14,200 units to be repaired before the winter

14. Emergency repairs in 1996 will rehabilitate about 14,200 units, benefiting more than 63,000 people. In addition, UNHCR recently 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 has been programmed for Sarajevo and its suburbs, for the Neretva Canton (around Mostar), and the Tuzla region. Programming in Republika Srpska has lagged behind, though projects are planned for the Anvil area.[1]

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.
- 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 11,200 public housing units will be 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 have channeled financing for rehabilitating private housing through NGOs, bilateral agencies or the Housing Project Implementation Unit (paragraph 17). Overall, 1,000 units have been rehabilitated so far, in part in the target areas defined by UNHCR, and a total of about 3,000 units will be repaired before the end of 1996. Projects to rehabilitate another 18,000 units are at various stages of implementation. The largest bilateral program (US$25 million) is funded by the U.S. Agency for International Development (USAID) and implemented through NGOs. It combines housing repair with infrastructure rehabilitation and is expected to benefit about 2,500 households. In addition, a program developed jointly by 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.

Technical assistance: Coordinating numerous activities

17. The implementation of donor-assisted housing programs in the Federation has been 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

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

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 which are enough to improve housing conditions for about 20,000 households. The Governments of Italy, Japan (through the UNDP), and Saudi Arabia have made US$29 million available for the direct implementation of works by the PIU. Working in close coordination with UNHCR and the Ministry of Refugees, the PIU had completed repairs to 210 private housing units and 6,900 public housing units by October 1996.

18. As a first step toward cost recovery for the external repairs to public housing, the PIU has entered into agreements with municipal authorities to gradually increase rents at a rate which would at a minimum recover the cost of repairs. Decisionmaking in selecting units for repair, assessing damage, and supervising repairs has been decentralized at a local level, procurement and disbursement remained centralized. This system has made it possible to promote partnership between the PIU and the municipalities and "ownership" of the programs by local and national bodies and also to keep 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.[2]

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. The 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.

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2 In addition, 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 of property that is not their own.

22. *Emergency repairs (US$22 million): Ensuring minimal standards.* 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 Ministry of Physical Planning and Environment and in coordination with the Task Force. Implementation should be at the municipal level, with overall project management, supervision, and disbursement functions at the ministerial level (through the PIU).

23. *Reconstruction (US$72 million): Remedying heavy damage.* 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 householders, 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.

24. *Sarajevo Program (US$50 million): Addressing extensive needs.* 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.

25. *Technical assistance (US$6 million): Providing essential support.* 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 (for planning laws, 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 Task Force nor the PIUs can substitute 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 support of foreign technical expertise.

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 effect, the 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.[3] 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 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

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3 A PIU should be established in Republika Srpska.

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 it 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.** In this view, 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 which 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; this has resulted in an overlapping of responsibilities which 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. 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. In the short term, efforts focus on completing this repair and handling the return of the displaced population in light of the 1996 experience (box 5). While housing needs go clearly 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 the 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 this will make it possible for them to reduce their support.

32. Experience with transition in the housing sectors of other countries of 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 have 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 for grants to beneficiaries and allocation criteria. 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 set so as to cover the full costs of maintenance and operations for both legal tenants and occupants in order to ensure

that repairs are maintained.[4] To avoid causing hardship for the poorest households, who may not be able to afford increased 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 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 of the banking system, reforming the housing sector, and clarifying property rights.[5] Until long-term financing through banks becomes available, consideration could be given to using donor resources to establish lines of credit or a revolving fund for housing 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 transparency in the property rights system, 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 own homes are occupying units to which they have no legal claims 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.[6] 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 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 the property 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 to offer rights of first refusal to legal

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4 The Emergency 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.

5 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.

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

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 transitional economies have been undertaken directly by the municipalities after a transfer of the stock to municipal authorities, rather than through the 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 landuse 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 constraints to developing land and infrastructure due to restrictive zoning codes are reduced.

DISTRICT HEATING AND NATURAL GAS

I. BACKGROUND

District Heating

1. In 1991, Bosnia and Herzegovina had district heating systems in most major towns and cities with a population in excess of 25,000 inhabitants. Throughout Bosnia and Herzegovina, district heating 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 the 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 other fuels. The average subsidy was US$100 per annum per consumer, compared to an average annual heat bill of about US$370 per consumer. The situation in the district heating sector as a result of the war is summarized in box 1.

Box 1. District heating systems damage

Sarajevo: During the war, the district heating system in Sarajevo was badly damaged both by direct shelling and 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 the above problems. As of 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: Due to the economic embargo, supplies of fuel oil were effectively interrupted 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. Only 5-6 percent of installed capacity was working during the 1995-96 heating season: households used wood for space heating. Due to non-usage of most of the system, damage has been caused by corrosion, freezing and cracking, compounded by lack of maintenance and repair. Building internals (pipes, radiators and valves) may also have incurred substantial damage due to rusting and cracking.

Other Cities: Damage to the district heating systems of other cities tends to be similar to either the Sarajevo prototype case (e.g. Doboj) or to the Banja Luka case (e.g. Tuzla).

Natural Gas

3. Development of the natural gas system in Bosnia and Herzegovina began in 1975. As of 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 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 fourty 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;
- The number of normalized installations in Sarajevo has gone up from 15,000 to 25,000;
- About 64,000 improvised, unsafe and uneconomic household connections remain in Sarajevo; and
- About US$120 million debt to the Russian gas supply company Gazexport (July 1996).

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

5. Gas has been 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 the 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 transport cost of the gas 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 standard for such transit. This is primarily due to the "penalties" being levied by Serbia. 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).

6. Since the Dayton-Paris Peace Agreement was concluded gas has been supplied without interruption, although Gazexport threatened repeatedly to interrupt supplies. Payment for gas consumption was only partial (28 percent of the total due by the Government of Bosnia and Herzegovina and 20 percent by the Netherlands), corresponding roughly to the actual estimated consumption in the Federation. The number of normalized gas connections increased from 15,000 to 25,000, thus

decreasing the number of illegal connections from 74,000 to 64,000. The situation in the natural gas sector as a result of the war is summarized in box 2.

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;
- Undertake master plan studies for 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 the donors in December 1995 and April 1996 remains valid as an overall framework for the 1997-99 program. It will require an estimated US$171 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$29 million has been firmly committed**: reconstruction has been carried out very successfully this year in Sarajevo despite an exceedingly tight deadline (paragraphs 12 and 13); a financing gap of about US$11 million (27 percent of the US$40 million project cost) remains to be covered;
- **In 1997, US$76 million in external financing will be required** --- about 73 percent (US$55.5 million) would benefit the Federation and 27 percent (US$20 million) Republika Srpska (paragraphs 17 to 20); this amount includes the US$11 million shortfall carried over from 1996; a list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **For 1998-99, an estimated US$66 million will be necessary** 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	80.6	7.5	37.0	36.1
Heat distribution	28.8	5.5	12.5	10.8
Heat substations	27.1	2.5	14.0	10.6
Internal installations	14.0	7.0	4.0	3.0
Heat meters	3.6	1.5	1.0	1.1
Control equipment	5.0	0.0	3.0	2.0
Other equipment	1.5	1.5	0.0	0.0
Site preparation	1.5	0.5	1.0	0.0
Technical assistance	8.9	3.5	3.0	2.4
Total	171.0	29.5	75.5	66.0

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 through disconnection of illegal consumers that can be reconnected to the district heating system, introduction of energy efficient appliances, and through gradually increased cost recovery during the period 1996-99; and
- Strengthen sector institutions.

10. The natural gas reconstruction program submitted to the donors in December 1995 and April 1996 remains valid as an overall framework for the 1997-99 program. It will require US$81 million in external support for the 3-4 year period within the overall US$5.1 billion priority reconstruction program (table 2):[1]

- **In 1996, US$17 million has been committed**: despite a 69 percent (US$38 million) financing gap over the US$55 million first-year estimate, a number of activities have been carried out successfully this year, thanks in particular to additional donations from various cities, not reported here (paragraphs 14 to 16);

[1] Additional financing would be needed to meet requirements made 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 should therefore be examined in the context of the overall restructuring of this factory.

- **In 1997, US$53 million in external financing will be required** --- about 78 percent (US$41 million) would benefit the Federation and 22 percent (US$12 million) Republika Srpska (paragraphs 21 to 23). This amount includes the US$40 million carried over from 1996. A list of corresponding investments will be prepared for the February 1997 Third Donor Conference; and

- **For 1998-99 US$10 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 25 and 26).

11. In addition to donor commitments as reported in tables 2 and 4, several italian cities, the city of Ankara and the city of Sarajevo provided in-kind contribution, and volunteers carried out civil works -- all these could be valued 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	9.8	1.2	7.1	1.5
Distribution	42.8	2.0	32.2	8.6
Strategic planning, TA	1.2	0.3	0.9	0.0
Billing software&equipment	0.7	0.2	0.5	0.0
Land mine clearing	1.1	0.0	0.8	0.3
Sub-total	60.6	5.1	45.1	10.4
Payment for gas supply	20.0	12.0	8.0	0.0
Total	80.6	17.1	53.1	10.4

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

III. 1996 ACHIEVEMENTS

District Heating

12. The ongoing US$40 million Emergency District Heating Reconstruction Project is focused on Sarajevo but also contains a US$0.5 million project preparation component for Banja Luka. Financing is provided by the Government of Finland, the European Commission, and the World Bank (table 3). Hence, the financing gap to be covered in 1997 is about US$11 million.

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

	Amount	Main Donors
District Heating	29.5	Finland, Netherlands, EC, Luxembourg, World Bank
Total	29.5	

13. The project is progressing extremely well and is expected to be completed on schedule by September 30, 1997. In the space of just five months and under a very tight deadline (the start of the 1995/96 heating season), the following major successes were achieved:

- The entire district heating system underwent an engineering survey and assessment to determine the system's condition and possibilities for system improvements;
- To ensure that priority targets would be met, reconstruction works to be undertaken were divided into a fast-track program (implemented through November 1996) and a one-year program (through September 1997);
- Approximately 45,000 flats were surveyed to determine the exact damage to the building internal heating installations;
- About 32,000 flats were reconnected to the district heating system by mid-November 1996, after extensive rehabilitation of building internal heating installations; another 4,000 flats will be reconnected by end-December 1996 and the remaining flats will be reconnected progressively through 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 3.0 km of network pipes were replaced;
- A new billing and collection system, including software and hardware, was introduced and the entire database of flat owners/occupants and addresses was updated; and
- A draft master plan has been developed for a redesigned, interconnected future district heating system; the final version is expected by March 1997 and implementation will start at that time. Based on the master plan, three separate interconnected areas would be constructed, replacing twelve previously independent networks and eliminating thirty-two highly inefficient boiler plants. This would bring the total number of independent networks down from forty-four to thirty-five and enhance energy efficiency within the system. The savings resulting from increased energy efficiency and from elimination of boiler plants that would otherwise need reconstruction would more than offset the cost of interconnection.

Natural Gas

14. Gazexport's past threats to cut off the gas supply due to non-payment have made the conclusion of a reliable long-term gas supply agreement with credible payment mechanisms between Bosnia and Herzegovina and Gazexport a prerequisite for funding by major financiers. Despite this, some 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	5.1	EC, Netherlands, UK, World Bank
Payment for gas supply	12.0	Netherlands, Turkey
Total	17.1	

15. ODA, the European Commission, other European and Middle Eastern donors, the City of Sarajevo and citizen volunteer labor financed equipment and works valued at about US$13 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, especially 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. The majority of the large consumers 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 and cookers) have been completed.

16. The World Bank recently 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 European Commission) to normalize about 3,500 illegal connections.

IV. 1997 CHALLENGES AND FINANCING NEEDS

District Heating

17. The district heating program for 1997-98 would consist of the highest priority reconstruction requirements for the district heating systems in a large number of cities (possibly up to thirty-seven) throughout Bosnia and Herzegovina, of which up to thirty-four in the Federation and three in Republika Srpska (Banja Luka, Doboj and the Serb part of Sarajevo). For 1997, commitments of about US$75 million would be required to finance part of this program. Included in this amount is US$6.5 million necessary to remedy the financing gap of the ongoing Emergency District Heating Reconstruction Project in Sarajevo. This amount would be primarily used to finance the interconnection of twelve networks within the system and for individual heat metering

18. Damage to the district heating systems of individual cities was typically caused by direct shelling and/or 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 the above 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 and valves) may also have incurred substantial damage due to rusting and cracking. In some cities a large influx of refugees would also warrant expansion of the district heating system.

19. Within the 1997 district heating reconstruction program priority should be given to those 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, Doboj, Mostar, Tuzla, Vitez and Zenica. Medium-sized cities for which rehabilitation has been requested are Gorazde, Jajce, Livno, Maglaj, Novi Travnik, Prozor-Rama, Sanski Most, Sarajevo (Serb part), 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 the 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 due to the geographical dispersion of the systems. It should be emphasized that the cost of the 1997-1999 district heating program is tentative and based largely on the estimates submitted by the 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 would consist of : (i) about US$40 million to close the financing gap for the proposed Emergency Natural Gas System Reconstruction Project, of which the World Bank would finance an additional US$13 million (paragraph 13); and (ii) US$5 million to regularize about 3,300 improvised gas connections in the Serb part of Sarajevo. No funding has been 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 for the construction of 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 constitutes an economically justifiable option); (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 those consumers that can not be connected to the district heating system, and introducing energy efficient appliances; (b) construction of distribution piping to safely expand the network; (c) measurement and regulation installation; and (d) measurement calibration and reinstallation of 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 12 Toplane engineers and about 8 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 area. 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 those 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. In general, district heating enterprises 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, etc; and
- More efforts should be made by the 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 major 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 of both district heating and gas was 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 at this time, it is important that the household tariff levels (which currently cover only about 20 percent of economic costs) be increased as rapidly as possible during 1996-98 to cover all operating costs. This would both 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 the above and of primary importance for the natural gas sector in order to achieve the conclusion of a sound long-term gas supply agreement with Gazexport (paragraph 13); and

- **Institution building.** A portion of the technical assistance effort 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 major 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 privatization of 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 system of water, sanitation and solid waste collection 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 to 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 to facilities 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 has 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 of the 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, the 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), which 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 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 VBH for regional projects.

6. The war had a major impact both on 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 -- Vodoprivreda Bosnia and Herzegovina (VBH) in the Federation and Zavod za Vodoprivredu Republike Srpske (ZVRS) in Republika Srpska. In the Federation, most of the 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 level, as most qualified personnel left the country.

II. THE RECONSTRUCTION AND FINANCING CHALLENGE

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$83 million was firmly committed**, leaving a financing gap of US$57 million in the first-year program requirements (originally estimated at US$140 million); achievements in 1996 were nonetheless significant (paragraphs 10 to 17);
- **In 1997, US$100 million is required,** 51 percent of which would benefit the Federation, and 49 percent Republika Srpska (paragraphs 17 to 25). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, US$180 million will be needed,** and issues of sector organization, investments priorities, and sanitation services upgrading would be addressed to ensure the

medium-term sustainability of the reconstruction program, which would require a continued involvement of the donor community (paragraph 26).

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	74	44	120
Water supply	[188]	[65]	[28]	[95]
Wastewater	[20]	[5]	[6]	[9]
Solid waste	[20]	[0]	[8]	[12]
Flood control and irrigation	[10]	[4]	[2]	[4]
Institutional strengthening	16	7	5	4
Recurrent costs	4	1	2	1
Sub-total	258	82	51	125
Republika Srpska				
Works and goods [a]	95	0	44	51
Institutional strengthening	8	1	4	3
Recurrent costs	2	0	1	1
Sub-total	105	1	49	55
Total	363	83	100	180

[a] Breakdown to be added after finalization of Republika Srpska's plan.

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 is to be finalized by December 1996 for Republika Srpska;

- *Institution strengthening*: technical assistance, training, reconstruction of office facilities, and recurrent cost financing aimed at both 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.

- *Recurrent costs*: 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's program were to:

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

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

Table 2. Firm Donor Commitments in 1996

	Amount	Main Donors
Water supply	65.0	Austria, Canada, EC, France, Germany, ICRC, Italy, Kuwait, Malaysia, Netherlands, Norway, Saudi Arabia, Sweden, Switzerland, UK, US, World Bank
Wastewater	5.0	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	83.0	

11. In 1996, activities concentrated mainly on emergency water works and equipment supply to the 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 to improve the situation in a number of municipalities. An exhaustive list of the projects undertaken is reported in annex 1.

13. Two different types of implementation arrangements have been used:

- Some donors have 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 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 United Kingdom Overseas Development Administration (ODA), the United States Agency for International Development (USAID), the Red Cross, and the World Health Organization (WHO) are implementing their own programs (box 1); and

- Others have relied upon the Vodoprivredas (mainly VBH in the Federation) to implement their projects, for example, the governments of France, Italy, Kuwait and Saudi Arabia, and the World Bank.

Institution development: Reactivating the Vodoprivredas

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

15. In the Federation, the newly strengthened VBH assumed primary responsibility for the reconstruction program including setting priorities, and carrying out the contracting for projects using funds under government control. The municipalities were responsible for supervising the contracts after award.

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 projects water supply, wastewater, and solid waste disposal and identify but do not prioritize essential flood control and irrigation projects. The Federation plan includes a proposal for restructuring the solid waste disposal sector at the canton level in order to increase efficiency and reduce costs. The proposal has been accepted by the Government, and all proposed measures in the solid waste disposal sector are consistent with the plan.

Box 1. WHO 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. WHO's activities have focused on implementing a drinking water quality and surveillance program. In 1996, WHO distributed twenty-three water quality-testing kits to twelve regional public health institutes, six in the Federation and six in Republika Srpska. They also provided training to institute personnel on how to use the kits. Ten more kits are scheduled for delivery in 1997. WHO also conducted eighteen public health engineering assessments, four in Republika Srpska, and fourteen in the Federation. WHO provided technical assistance to cities that received EC-funded trash collection vehicles, and for 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. For 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 a strategic plan for the institutional strengthening and restructuring of the sector; obtaining from each beneficiary of the program cost recovery and system operation and maintenance plans as a first step toward sustatinability; and establish a monitoring system and indicators for measuring reconstruction progress; and
- Cover minimal recurrent expenditures.

Emergency plans and physical investments identified (US$88 million)

18. The proposed physical investments for the 1997 program in the Federation, which are based on the emergency plan priorities have been selected and prioritized on the basis of a comprehensive needs assessment and a systematic approach to priority setting[1] (annex 1). A similar list of projects will be completed by January 1997 for Republika Srpska. Listed measures are grouped into one of the following three categories:

- *Emergency measures,* projects that can be implemented for less that 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 sustainability of 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 operation and maintenance plans.* Setting up cost-recovery mechanisms is critical in view of the magnitude of the investments required, the need for covering the operating costs, and the lack of budgetary resources. Donors should ensure that municipalities are prepared to use the investments properly. Each municipality or other organization to receive donor funds should be obligated first to 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

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[1] First, the desired level of services were defined in consultation with the Vodoprivredas. Gaps between the actual situation and desired service level 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.

operating costs in three years and full cost recovery in five years. The plan should also detail how operational costs would 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 25) and would be available to all potential donors.

Recurrent Costs: Supporting current operations (US$3 million)

22. In the interim period, financial support is needed to cover operating expenditures of the Vodoprivedas, the new canton organizations (in the Federation), and the komunalcos. Donors should not, however, support recurrent costs for system operations.

Implementation arrangements

23. 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 contract supervision and for approving payments to contractors.

24. 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. The PIUs together with the Vodoprivredas 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 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.

25. A Water, Sanitation, and Solid Waste Task Force has been established under IMG-chairmanship to review the status of donor activities in the sector, discuss mutual problems and concerns, and address policy issues. The Task Force, which meets about once a quarter, 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 per 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 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, 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

26. Most structural issues should be identified and addressed through the sector strategy plan, which is 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;
- Changes required 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	Cost US$ million
Grude, Ljubuski, Odzak, Orasje	Repair wastewater treatment plants	0.5
Bosanska Krupa	Rehabilitate water distribution network	0.5
Buzim	Construct water supply system	1.8
Celic	Upgrade water supply system	2.3
Gradacac	Construct water supply system	2.7
Kalesija	Construct water supply system	1.4
Ljubuski	Construct water supply intake	1.2
Sanski Most	Rehabilitate water treatment plant	1.4
Stolac	Develop new water source	0.7
Tuzla	Rehabilitate water source and water distribution system	3.0
Zavidovici	Rehabilitate water treatment plant and distribution system	1.7
Zvornik	Develop water supply system	1.4
Bihac	Construct landfill	1.4
Gorazde	Construct landfill	0.6
Livno	Construct landfill	0.6
Sanski Most	Construct landfill	0.6
Sarajevo	Rehabilitate water distribution networks	3.0
Sarajevo	Rehabilitate sewerage collection system	2.0
Sarajevo	Rehabilitate Alipasin Most pump station	0.9
Sarajevo	Rehabilitate Moscanica water source	0.2
Sarajevo	Rehabilitate Semizovo Vrlo water source	0.8
Sarajevo	Construct landfill for municipal solid waste	0.5
Bosnia and Herzegovina	Solid waste sector study	0.5
Bosnia and Herzegovina	Rehabilitate and repair flood protection embankments	2.0
66 municipalities	Supply equipment and implement a program to reduce unaccounted-for water	8.4
53 municipalities	Clean and inspect sewers	1.4
35 municipalities	Supply solid waste equipment	3.5
9 municipalities	Solid waste disposal studies and designs	1.0
Total[2]		**46.0**

[2] Total amount includes US$2 million of project management costs (institutional strengthening).

LANDMINE HAZARD MANAGEMENT

I. BACKGROUND

1. With more than 15,000 mine fields already identified, large areas in both Entities of Bosnia and Herzegovina are inaccessible because of the threat of mines. Mine contamination is particularly severe in bands of contamination about 5 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;[1] 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 the lack of information on the mine situation.

2. Clearing all mines will take years -- probably decades -- and implementation will have to rely primarily on local capacities because of the high cost of clearing mines through international contracts. Developing adequate local capacity is however a major challenge, since mine-clearing is a new sector in Bosnia and Herzegovina as it would be in most countries: while in all other areas of the reconstruction program, structures and experienced capacities already 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 is a bottleneck for all aspects of Bosnia and Herzegovina's recovery. Mines were laid to prevent the use and the rehabilitation of infrastructure (e.g. bridges, buildings, water wells) and reconstruction contracts cannot be implemented until mine hazards have been eradicated. Resettlement of refugees and displaced persons is slowed down by the threat (real and perceived) of mines -- to which these populations are particularly vulnerable since they have no simple access to reliable mine information. Community revival is often endangered by mine hazards. For the authorities in Bosnia and Herzegovina, the implementation of a mine-clearing program is therefore a priority to prevent 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 -- by both clearing identified mine fields and systematically surveying "priority areas" to remove most of the uncertainty on

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1 For the remainder of this text, the term "landmine" or "mine" will include anti-tank and anti-personnel 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 overall reconstruction program designed to reach these objectives as submitted in December 1995 and April 1996 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:

- **In 1996, US$43 million was committed**; despite a 38 percent financing gap over initial estimates of the first-year needs (US$70 million), a number of activities have been carried out successfully this year (paragraph 7 to 17);
- **In 1997, US$60 million of external financing is required** -- 65 percent of which would benefit the Federation and 35 percent Republika Srpska (paragraph 18 to 28). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, some US$100 million will be necessary** -- and policy issues should be addressed to ensure medium-term sustainability of the program, which may require a continued -- although substantially reduced -- involvement of the donor community (paragraph 29).

Table 1 below shows a breakdown of these amounts by activity.

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	1	3	6
Mine hazard assessment	4	0	1	3
Marking and clearing	138	11	42	85
Total	203	43	60	100

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

- **Institution building:** setting up and developing local institutions, at a sufficient level to conduct mine-clearing operations effectively over the medium-term;
- **Local capacity building:** developing and strengthening local implementation capacities (e.g. commercial companies, NGOs);

[2] A distinction has sometimes been 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).

- **Mine awareness:** reinforcing mine awareness to prevent accidents, particularly among the most vulnerable groups (e.g. 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
- **Marking and clearing:** marking known mine fields, that cannot be cleared in the very short term, and carrying out urgent mine-clearing, wherever necessary.[3]

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 years and (ii) conduct mine fields surveys and urgent mine-clearing. Through the combined efforts of bilateral and multilateral donors, 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, while 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 non-existent at the beginning of the year). Recognizing the capacity constraints, the Mine-Clearing Program submitted in December 1995 recommended a two-pronged approach, i.e. 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 associated with the use of foreign companies. The development of appropriate alternative approaches (e.g. joint ventures, use of international consultancies 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	EC, Japan, Sweden, US, World Bank
Local capacity building	22	Denmark, EC, Italy, Norway, US
Mine awareness	1	Denmark, Sweden
Mine hazard assessment	0.1	World Bank
Marking and clearing	11	Belgium, Canada, Italy, Netherlands, Sweden, World Bank
Total	43	

3 Clearing mines is an extremely slow process and should be reserved for critical situations. Speed depends on the nature of the area to be cleared (vegetation, ground, topography, etc.) and on the techniques used, and planning figure for manual clearing with probes ranges from 2 to 10 square meters an hour for 2 persons, i.e. circa 1.4 to 7 square kilometer for 1,000 persons during a year (weather conditions in Bosnia and Herzegovina make it impossible to clear mines from December to March).

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, MPRA), and one each by the Entity Governments (Federation and Republika Srpska Project Implementation Units, PIUs). Thanks to strong efforts at all levels, these agencies became fully operational by late summer of 1996, despite the relative scarcity of competent and experienced local technicians. Difficulties remain, however, resulting mainly from the political situation and the remaining tensions between the various communities in the country -- many of these will hopefully be resolved in the post-election context.[4]

In addition, international institutions were engaged in:

- Promoting inter-Entity dialogue, through the Mine Clearance Policy Group (MCPG), established by the Office of the High Representative (OHR) and consisting of representatives of the State and the two Entities as well as donors,[5]
- Providing technical expertise, through the United Nations-established Mine Action Center (MAC); and
- Ensuring donor coordination, through the United Nations-chaired Sectoral Task Force (STF), which provides a forum for discussing common interest matters, mobilizing resources and identifying gaps as well as carrying out a policy dialogue.

10. 1996 has been the year for the authorities in Bosnia and Herzegovina as well as for the international community to set up -- and to make operational -- a core institutional structure for mine-related issues (box 1), and 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.

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4 The Dayton-Paris Peace Agreement did not specify the respective roles of the State and the Entities in the field of mine-clearing. The Republika Srpska Government has therefore refused to recognize the State-established mine-clearing agency, while the State Government is attempting to use it as the leading mine-clearing institution in Bosnia and Herzegovina. Representatives of the Croat-majority part of the Federation have expressed concerns similar to those of the Republika Srpska Government. While temporary arrangements are currently in place, a medium-term acceptable solution is still to be designed.

5 The Mine-Clearance Policy Group was dissolved following the elections.

Local capacity building: Close to 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 covered 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 in 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 throughout 1996. Most of the existing mine-clearing organizations lack equipment and skilled personnel -- 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 (US) 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 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 US 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 program for 250 mine-clearers expected to be operational by early spring 1997 (US$8 million); and

- The Norwegian People's Aid (NPA) has established, with Norwegian Government funding (US$5 million), a training school in Srebrenik, near Tuzla, and has trained 60 mine-clearers.

These programs are expected to meet between a third and a half of the required capacity for 1997.

Mine awareness: A focus on the most vulnerable groups

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

Mine hazard assessments: More than 15,000 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 made a significant contribution by identifying 15,407 mine fields, with the assistance of the local armed forces and building on the initiatives of UNPROFOR. Information has been forwarded to a centralized data base, established with the financial support of the United States and currently managed by the United Nations-established Mine Action Center (MAC). The database is however incomplete and believed to encompass to date 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 under the Government's responsibility. Preliminary surveys (mainly compilation 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 for each of these areas. Based on these surveys, the Government issued "Risk Assessment Certificates".[6] A mine-clearing works program can now be designed by integrating data from the MAC-managed data base with information related to the scheduling of subsequent activities on the site.

Marking and clearing: A slow start

15. While marking minefields was not planned to start before 1997 (since mine fields had to be identified and surveyed first), urgent mine-clearing was required for many areas -- where reconstruction was urgently needed, where refugees or displaced persons were prevented from returning by mine hazard, or where communities are 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 the 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), while interest was indicated by Belgium (US$0.9 million), Canada (US$0.8 million) and several other donors. First contracts have been awarded in various parts of the Federation, while activities in Republika Srpska should start by spring 1997 (box 3).

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6 Three categories of area are defined: "low risk" areas, where human activities can start immediately; "high risk" areas, 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 to complete available information.

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. Implementation started mid-October 1996 and works are to be completed before winter;
- The Norwegian People's Aid (NPA) initiated surveys, marking and clearing with a focus on the Tuzla area. NPA 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 (ICTY); and
- The mine-clearers trained and equipped by the US started to survey and clear minefields in early November 1996 in Banja Luka, Sarajevo, Tuzla and Mostar regions; during the winter months, demining operations will be shifted southward to focus on the Jablanica, Mostar and Trebinje areas.

16. IFOR engineers have also been engaged in clearing areas of importance for military operations (e.g. 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 has also supervised the lifting of mines by soldiers from the 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.

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 underway 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 hazard at the community level -- which will require training, surveying, mine clearing and promotion of mine-awareness.

18. To achieve these objectives and prevent mine-related delays in the implementation of the reconstruction and resettlement programs, financial assistance of some US$60 million will be required from the donor community -- and part of this support is particularly urgent (e.g. funding for training programs which have to be conducted from January through April 1997, for strengthening the local capacity before spring).

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. To reach and maintain the required level of effectiveness, the State and the Entity Governments will also have to clarify the respective roles of the three agencies.[7]

20. While the local agencies are being progressively strengthened, the United Nations-managed MAC will have to play a critical role by providing the necessary technical expertise.[8] Continued financial support (in terms of both staffing and cash) should be provided by the donor community. In October 1996, the United Nations (UN) submitted a comprehensive budget for that purpose to the international community[9] (in addition to providing technical support, the MAC plans to establish mine-clearing teams, initially working under its supervision until ultimate employment mechanisms have been determined).

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

Local capacity building (US$6 million): Developing an industry and removing a bottleneck

22. Insufficient mine-clearing capacity remains a potential bottleneck for the implementation of the 1997 reconstruction and repatriation programs. Significant support, both financial and technical, is urgently required to develop the mine-clearing sector, i.e.:

- **Providing training:** according to the MAC's first estimate, up to 1,200 mine-clearers and site supervisors should be trained by spring 1997 (mainly through three-week sessions for

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7 Currently, the State-level MPRA has a largely technical role while the Entity-level PIUs are responsible for implementation of some donor-funded projects. Adjustments are however necessary to avoid overlapping of authority -- and should be made on the basis of economic considerations, in the post-election context. To reduce cost and increase safety, the State agency (once it is recognized by all relevant authorities) should be responsible for, inter alia, setting up and enforcing appropriate technical standards, formulating policy, coordinating aid, and ensuring inter-Entity prioritization. To ensure effectiveness, the setting of priorities should remain the responsibility of the Entities.

8 The MAC is planned to be handed over to the governmental authorities within a year and much attention should be given to the transfer process, which should be smooth and gradual -- the role of the MAC should be reduced progressively while the capacities of the governmental agencies are developed.

9 The cost estimate underlying the UN's appeal, for a total of US$38.9 million, is consistent with the estimates of the EC and World Bank. Apparent differences result from two factors: (i) the UN plan covers the period January - September 1997, while this report outlines requirements for the whole year 1997; and (ii) the UN expects significant in-kind contributions (mainly international staff) in addition to the indicated amount.

demobilized soldiers); donors could either provide further support to those organizations that have already established training facilities (e.g. NPA or the US demining coordination center) or assist the Governments' agencies in setting up new training capacities to address uncovered needs;[10] and

- **Establishing employment mechanisms:** Experience in other countries has shown that employment opportunities must exist in order for training programs to be effective. Therefore, donors who support training activities should ensure that adequate structures (such as commercial 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 in 1996 mine-clearing capacities operating under their direct control, with a view to eventually hand 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 handed-over capacities can be used in an optimal way, but also that the transfer process does not result in weakening other components of the mine-clearing sector (for example, the hand-over of large capacities to public authorities could destabilize the newly-established commercial sector).

Mine awareness (US$3 million): Preparing the medium-term.

24. To prevent accidents in the years -- and possibly in the decades -- to come, awareness of the 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 (e.g. broadcasting, distribution of "mine-awareness comics") and initiate new activities (mainly at the community level), with a special focus on the most vulnerable groups (e.g. children, displaced persons and refugees). Assistance should however not be limited to short-term activities and should focus on developing the medium-term capacities which are required to address this issue beyond the three- to four-year reconstruction program.

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**; the MAC should play a leading role in that respect by assessing the quality of the curriculum and possibly by delivering certificates to the newly-trained mine-clearers;
- **Mechanisms should be designed to systematically ensure the safety and effectiveness** of mine-clearing operations; this 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 systematically carried out** 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 governmental mine-clearing agencies.

[10] The MAC is proposing to establish a central training facility in the Mostar area to train deminers during the winter.

Surveying, marking, and clearing (US$43 million):[11] *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 those areas where the presence of mines constitutes a bottleneck to 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 purposes should be systematically surveyed prior to starting implementation of any activity**; once the likelihood of the existence of mine fields within the considered areas has been assessed, a decision should be made as to whether development activity can proceed or mine-clearing is required (should this be the case, clearing should be undertaken as soon as possible); and
- **Identified mine fields should be marked**, whether the corresponding areas are considered priorities or not, pending the eventual removal of mines, to prevent accidents and reduce risks to local inhabitants.

Implementing mine-clearing operations: A multi-pronged approach

26. Donors in 1996 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 are supporting this "competitive contracting approach" (in Croatia, Government's initial investigations indicate that this is the most cost-effective option); 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 NPA for mine-clearing in support of reconstruction projects and humanitarian activities.

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

- **Establishing a transitional mine-clearance capability,** initially under the control of the MAC, and eventually handed over to local authorities; it would be reinforced by qualified foreign specialists to instruct, manage, and supervise mine-clearance teams;[12] this option has been developed successfully by the UN in a number of countries (e.g. Cambodia); and
- **Establishing operational teams under the control of governmental authorities**; under this scheme, donor efforts would be limited to providing training and equipment, possibly to the armies; the Governments -- State, Entities, or Cantons -- would be responsible for carrying out works effectively.

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11 Preliminary steps have been made to establish a detailed list of projects. Such a list will be formalized after the appointment of the new State and Entity Governments.

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

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

27. Additional recommendations can be made in view of the past year's experience:

- **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 the 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 State and Entity levels should be made fully responsible for implementing** all mine-clearing activities not directly related to sectoral programs (e.g. training, mine awareness, mine-clearing in support of communities at risk); and

- **Coordination of donor activities in the field is essential to ensure complementarity** of the activities and avoid overlapping or inconsistencies (such as the use of non-compatible equipment), as well as to ensure that funds are spent in support of the Governments' priority program; 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

- **Insufficient capacity could constitute a bottleneck in 1997**. The local mine-clearing capacity is still too weak to undertake all activities that have to be carried out in 1997. Local organizations, whether commercial companies or NGOs, lack both experienced staff and equipment. Significant training is necessary 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. It could be made available through the establishment of joint-ventures, through the secondment of qualified staff to the UN, or through support programs aimed at providing technical advice and supervision for local organizations;

- **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 careful enough (and exposing their staff to unnecessary risks). Conducting preliminary surveys to assess the level of risk has proved effective in reducing risks and costs. This ought to be generalized for all reconstruction, resettlement and recovery activities; and

- **Information has to 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 to prevent accidents, detailed information has to be made broadly available to all potential beneficiaries (local inhabitants, contractors, returnees, authorities, etc.). The central data base set up by the 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 critical.

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 the 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 the 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, electric power company revenues for the power sector); and
- For activities with no prospect of revenue generation (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 the 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. The industrial sector today 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 over 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 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 all 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, a 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 the majority of 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 proportion 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 good 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 of 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-sized 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 have been prepared to rehabilitate the industry sector. US$612 million in external financial support will be required for implementation within the overall US$5.1 billion priority reconstruction program (table 1) -- a substantial increase from the initial assessment for the three- to four-year program (US$400 million):

- **In 1996, US$167 million was firmly committed**, substantially more than the initial estimate of first-year need (US$120 million), and several activities were successfully carried out this year (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). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, some US$265 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 Financal Requirements (US$ million)

	3- 4-year Program	1996 Firm Commitments	1997 Requirements/ Allocation	1998-99 Requirements/ Allocation
Lines of credit	293	103	80	110
Political risk guarantee	135	0	65	70
Technical assistance	60	30	10	20
Equity funds	118	28	25	65
Critical inputs and equipment	6	6	0	0
Total	612	167	180	265

8. The program includes four main elements:

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

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

Policy environment: Reform programs for private and financial sector development

9. To stimulate the recovery process, maintain its pace, and ensure its sustainability beyond the initial reconstruction period, in-depth reforms are needed (box 3). 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 of time. The reform process should be initiated at the 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 authorities in designing and implementing the necessary reforms, with a particular emphasis on:

- Building a new legal and institutional framework with a substantially smaller and more efficient public sector, functioning market mechanisms for allocation of resources and income distribution 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 months and should help to create an appropriate environment for restructuring enterprises and banks, stimulating private sector-led growth and

encouraging critically needed foreign investments. This will complement and facilitate the implementation of the industry recovery program.

Box 2. The enterprise survey: entrepreneurs' concerns

In August and September 1996, the World Bank undertook a survey of enterprises in Bosnia and Herzegovina in order to better understand their situation and the constraints they face. A total of 175 industrial, services and commercial firms were interviewed (150 firms in the Federation and 25 in Republika Srpska). Public, private, and mixed ownership firms were included. Preliminary findings show:

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 Sprska, 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 reported having 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: over a fifth of interviewed 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 significant net resources transfers to Bosnia and Herzegovina;

- In this perspective, 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.); and

- At the same time, an adequate regulatory framework should be put in place for stimulating recovery, maintaining its pace and ensuring its sustainability beyond the three- to four-year reconstruction program when donor resources are no longer available. A recovery and reform strategy for the pre-war conglomerates should be designed to guide both domestic and foreign investors -- it should be aimed at the economically viable parts of the conglomerates (box 3) with the objective of re-starting and eventually privatizing them. Simultaneously, reforms should be implemented to liberalize the economic system and address the issue of social ownership (and enterprises' governance), as a precondition (and efficient incentive) for large-scale investments;

- Beyond 1997, external financing requirements will decrease and should focus on completing implementation of the existing projects. Donor assistance could be gradually replaced by both 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 of them 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 their viability in a market economy is doubtful. Re-starting 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 re-start 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 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 governmental authorities. Donors committed US$162 million to recovery of industry and industrial finance. Commitments for lines of credit (more than US$100 million in the Federation) and for technical assistance (US$30 million) exceeded the estimated first-year requirements, while guarantee schemes and equity funds, introduced late in the year, remain underfunded. Only 25 percent of commitments have been disbursed, however. The major contributions are shown in table 2 (annex for a detailed breakdown).

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

	Amount	Main Donors
Lines of credit	103	Italy, Kuwait, Netherlands, Saudi Arabia, USAID, World Bank
Political risk guarantee	0	
Technical assistance	30	Egypt, Finland, Germany, Indonesia, Japan, Malaysia, USAID, World Bank
Equity funds	28	EBRD, Italy, IFC, USAID
Critical inputs and equipment	6	Indonesia, Japan, Malaysia, Sweden, Switzerland
Total	167	

Lines of credit: Over US$100 million committed in the Federation

12. Strong donor support to small and medium-size enterprises has 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$103 million was committed by donors and US$35 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, which was critically needed for working capital and to rehabilitate equipment: lines of credit were almost the only sources of cash resources 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 by the German Government; to date, 141 credit applications have been processed: 53 approved, 22 rejected, and 66 are under review; some US$7.5 million has already been disbursed;

- The Governments of Kuwait and Saudi Arabia established similar credit lines, for a total of US$20 million; however, no disbursement has taken place yet; and

- The United States 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) has already been disbursed.

Box 4. Implementing lines of credit

USAID has established a credit management unit, staffed by United States (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 and are paid a fixed fee, with a maturity of three years and annual interest rates of 7-8 percent, 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. 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 by 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. Later in the year, 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 to make the recovery sustainable by gradually decreasing dependency on donor funds. Both Entity Governments, with the support of the European Bank for Reconstruction and Development (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 Governments of Italy, Malaysia, and Switzerland 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. EBRD is planning to take equity stakes in four to five private banks in the two Entities; EBRD would then use its representation in the supervisory boards and organize twinning programs with Western banks to strengthen banks' capacities. Banks with currently a thin capital and skills base could play an active role in supporting the emerging private sector. US$3.4 million per bank (on average) would be required, including an equity component, project preparation costs, and technical assistance for implementation. Technical assistance and, in some cases, part of the equity contribution will be financed by bilateral grant funds. Preparatory steps have been made 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. One operation is expected to be approved by the end of 1996 -- a second is likely to follow early 1997. This project is complementary to the World Bank's planned "enhanced lines of credit" (paragraph 23) and implementation of the two projects will be coordinated.

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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 in restoring normal operating conditions and financing mechanisms for both enterprises and banks. Commitments have been larger than expected, with more than US$30 million committed and partly disbursed, including US$23 million from USAID, to support enterprises and banks, as well as the overall reform process. However, only a relatively small part of donor commitments (less than a fourth) were disbursed in 1996.

16. There has been 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 currently lags behind but is committed to following a similar program of reform. Still, major legislative and regulatory reforms remain on the agenda for both Entities.

17. Technical assistance has aimed at fostering 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 the banks (US$10 million) and to help enterprises in preparing business plans, defining development strategies, and applying for credit (US$5 million). The World Bank provided similar services, although on a smaller scale; and

- The Governments of Germany, Indonesia, Japan, and Malaysia have committed US$6.7 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). However, only US$1 million has been disbursed.

18. USAID, the World Bank,[3] and others provided technical assistance to the authorities in Bosnia and Herzegovina for addressing 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 of Bosnia and Herzegovina), highlighting other countries' experiences with privatization. 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). Recently, discussions were held with the Government of the 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), including support to starting up operations of the newly created Federation Banking Agency and assistance in developing and implementing prudential banking regulations; and

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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 World Bank provided US$1 million for privatization implementation (80 percent disbursed) and US$1 million earmarked to support the operational expenses of the recently established Federation Banking Agency (FBA), as part of its Emergency Recovery Project.

- *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 therefore 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 re-starting 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. In view of experience in 1996, 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, aimed at providing incentives for strong private sector involvement, by implementing the most crucial reforms in trade regime, and tax and expenditures policies and administration.

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

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

- Restructuring and privatization of banks along with the development of government's regulatory and supervisory capacity for the banking sector;
- Provision of required resources to industry, such as lines of credit, through those banks which have clear plans for restructuring and privatization, and which are showing significant improvement in their portfolio management; and
- Specific micro-credit programs to support those micro and small enterprises that have difficulties in 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 financial conditions of the banks; and
- Improve managerial capacity in saving 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 the 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. However, domestic savings are still low and resources are hard to mobilize, even for those banks with better prospects for growth. Donor provision of lines of credit to those qualified banks would substantially strengthen the domestic banking sector, while at the same time also deliver needed funds for industrial revival. An estimated total of 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 the Republika Srpska, as enterprises in the 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 difficulty obtaining working capital since 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 a combination of credit and technical assistance to groups currently relying heavily on social assistance -- widowed women refugees, unemployed, new microenterprises. In addition, a large group of donors has agreed to sponsor a complementary project, the establishment of the Bosnia Micro-

Credit Bank, including the EBRD, the EC, the Internationale Projekt Consult (IPC),[4] several private firms, and the World Bank. This new institution, to be operated as a commercial bank with a capital of US$2 million, would extend small loans (under 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 level of 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. *Political risk guarantees*. 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 they would like to make. However, political uncertainty, threat of renewed hostilities, and lack of confidence in the new governmental structures hold them back. Two main schemes have been designed to encourage foreign private entrepreneurs to enter into business relationships with companies from Bosnia and Herzegovina, and donor assistance is required to get them started. One is a political risk guarantee for short-term business transactions, the other a noncommercial risk guarantee facility for long-term investments.

Box 6. How the political risk guarantee facility would work

A survey of well over a 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 private involvement in Bosnia and Herzegovina. Such coverage would enable viable parts of former conglomerates and other enterprises to re-start activity on purely commercial terms -- which should have a strong impact on employment and production.

The 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. 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]

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4 The IPC, a German consulting firm specialized in micro-finance, will provide a cash contribution and also 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. US$35 million in cofinancing is required to support a political risk guarantee facility to encourage foreign investors, input suppliers, trading companies, and financial institutions to provide financing for short- to medium-term transactions with industrial enterprises of 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) to cover such transactions. 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.* After resumption of short-term business transactions, interest in longer-term investments is expected to pick up. 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 restructure conglomerates and banks

28. A comprehensive restructuring and privatization strategy is needed to revitalize the prewar conglomerates, where possible, and to endow them with appropriate and competitive structures (as described in 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 currently working on this issue.

29. Technical assistance is also required for restructuring 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 (Asset Liquidation Fund) and frozen foreign exchange deposits (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.*

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6 While indications are that transactions to be covered could exceed US$100 million, the Governments have fixed an initial target of US$50 million -- Switzerland has already committed US$5 million and the World Bank recently approved a US$10 million credit on concessional terms.

7 The Fund will be administrated by MIGA on behalf of the sponsors -- including the evaluation of investor claims in accordance with the MIGA guidelines.

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

30. The EBRD is developing a Bosnia and Herzegovina Reconstruction Equity Fund (BREF). This US$35 million fund, cofinanced by the EBRD and the European Commission, will provide equity (and quasi-equity) capital to selected small and medium-size enterprises -- with a view to participate to corporate governance and provide management support. The Government of Italy will provide a US$7.5 million of grant financing 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. It will initially focus on private enterprises with a successful prewar record of operations, which need capital to re-start; later, after they will be 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 would finance the creation, modernization, expansion, and restructuring of small and medium-size enterprises, and would 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 which 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

There is only a small number of small- and medium-size enterprises (SMEs) in Bosnia and Herzegovina. To prepare its Reconstruction Equity Fund, EBRD undertook a survey, which showed that:

- SMEs generally suffered less from the war than large enterprises did. Most of 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 them when approaching equity investors;
- Financial statements need to be revised according to international accounting standards; assets are often over-valued, and financial clarity is lacking (reflecting also "black market" or "parallel" activities);
- SMEs' indebtedness is generally limited: enterprises have been (re-)started mainly through self-financing;
- Markets within 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 material 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 assets pledging for accessing 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 or not.

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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 for the revival of the industry sector has been difficult. Decisionmakers in Bosnia and Herzegovina should not be misled by postwar difficulties (particularly the need to generate employment rapidly): while special conditions in Bosnia and Herzegovina may create a temptation to revert to centralized government-controlled industry, only strong involvement of the private sector will help to 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 both 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 for implementation of 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. Economic reform issues will be discussed at length in another report.[9] 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 for facilitating 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 for attracting 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 of time, 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 the industrial structures, particularly in the Federation, where privatization is to be handled by the cantons.

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9 To be submitted to the donor community during the February 1997 Donor Conference.

EMPLOYMENT GENERATION AND LABOR MARKET DEVELOPMENT

I. BACKGROUND

Unemployment was increasing even before the war

1. Unemployment is one of the most fundamental postwar issues that Bosnia and Herzegovina has to face. 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 in part rooted in the economic transition just beginning throughout the region. Enterprise restructuring prior to the war was already leading to changes in the labor force that were resulting in rising unemployment. Labor policies and institutions, however, were not responding to the 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 double that of 1991. Though there are no reliable data on unemployment, 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 those 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), which prevent them from resuming their former occupations. If not given 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 into 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 and yet they 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 a measure of sensitivity. Over one million refugees, representing a

potentially significant proportion of the labor force, still reside outside of Bosnia and Herzegovina. Many of those who left the country to escape the effects of 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 now be a minority if they were to return. Nevertheless, employment opportunities are a vital component of the preconditions necessary to encourage refugees to return.

6. Overall, 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. However, 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 in place 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 into all sectoral investment strategies. Reconstruction and recovery activities in Bosnia and Herzegovina 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 the 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 -- towards 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 (these issues are addressed in more depth in the Economic Report that will be submitted at the February 1997 Donor Conference). In concept and scope, the overall employment generation program submitted in April 1996 remains unchanged. Implementation will require US$76 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$42 million was firmly committed,** representing 56 percent of the original US$75 million in estimated needs (paragraphs 11 to 20);
- **In 1997, US$30 million of external financing is required**, 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); a list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998-99, US$4 million in investment will be necessary,** 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	32.8	14.7	17.1	1.0
Microenterprise development	21.9	14.7	5.2	2.0
Employment counseling	3.3	2.1	1.2	0.0
Training	12.0	5.1	5.9	1.0
Institution building	5.6	5.0	0.6	0.0
Total	75.6	41.6	30.0	4.0

9. There are five main areas of investment under the Employment Generation Program:

- *Public employment*: provision of rapid, short-term employment opportunities;
- *Microenterprise development*: promotion of self-employment, microcredit and microentreneurship;
- *Employment counseling*: provision of counseling and placement services, particularly for demobilized soldiers and refugees wishing to return;
- *Training*: retraining and education to assist workers to gain the skills necessary for a more market-oriented economy; and
- *Institution building*: provision of demand-driven services to the unemployed.

10. For these investments to have the desired employment impact, policy reforms are critical. 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 those made jobless by the war and to start up other active employment programs (job placement, retraining, microenterprise development) while simultaneously building the institutional 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	14.7	EC, Netherlands, Norway, UNDP, US, World Bank
Microenterprise development	14.7	EC, Italy, Netherlands, Turkey, UNHCR, US, World Bank
Employment counseling	2.1	World Bank
Education and training	5.1	Austria, Netherlands, World Bank
Institution building	5.0	EC, Netherlands, World Bank
Total	41.6	

Public employment: 10,000 months of employment already 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.

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 will already have 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 aimed to create jobs rapidly in their areas of military command. 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. [1] During 1996, the International Labor Office (ILO) also carried out preparatory work for a prospective Emergency Employment Program, based on the creation of "unemployment companies", a model which has worked successfully in eastern Germany.

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

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 had 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.[2] 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 include 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, it is projected that some 400 loans will have been disbursed for a total value of approximately US$800,000. The pilot phase has demonstrated a high demand for such small amounts of credit (10,000 DM and less) and has shown 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 will become operational in December 1996 under the management of the ETFs. As well as providing financing for microcredit programs managed by NGOs, this project will finance considerable technical assistance and training to help build the capacity of these organizations to develop financially sustainable microfinance operations over the long term.

Box 2. Lessons from the 1996 program

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

14. In September 1996, the US Government launched the Bosnian Women's Initiative, a US$5 million fund, administered by UNHCR and run by NGOs. The 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

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2 This represented the pilot phase of a full-scale US$18 million Local Initiatives Project which is expected to become effective in December, 1996. The Local Initiatives Project complements the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD) project to setup 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 micro-credit bank would support existing micro and small businesses at the higher end of the spectrum.

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 will include a small-scale microcredit program in three municipalities in the Una-Sana canton (Bihac) and Banja Luka region. UNDP also started a program to set up enterprise assistance bureaus in Bihac, Central Bosnia, and Mostar, beginning with Bihac in October 1996. These bureaus will 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 (ICMC), to provide counseling and job-finding services for demobilized soldiers. More contracts will be signed by the end of 1996. The International Organization for Migration (IOM) 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. An integral part of job-finding services is having 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 has 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 (USDOL) is providing technical assistance in this effort. In October 1996, the USDOL 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. The ILO also sent a technical specialist to examine issues related to labor market information during 1996. The ILO is coordinating closely with the USDOL 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. Two service contracts for skills training programs had been signed as of mid-October (one with an enterprise and one with an

NGO), and over ninety proposals to provide training services, solicited through promotional campaigns, are now being appraised. The programs should provide training for over 2,000 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 sector 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 will have 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 US Department of Labor and by several international experts in microcredit.

20. The second initiative was to explore 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 each in Sarajevo and 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 to reintegrate into 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. For 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 underway 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 company, 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 micro-finance 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 will begin full-scale operations in December 1996 under the management of the ETFs (paragraph 12). The project will provide credit and business services to people from economically disadvantaged groups who wish to start income-generating activities and microenterprises. Loan funds will be 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 reach this goal. Attention also needs to be focused on the legal and regulatory framework for microenterprises and for non-bank 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 IOM 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 get economic reform and other messages across to a broad 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 wishes 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 the 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.

V. STRUCTURAL AND POLICY ISSUES FOR THE YEARS AHEAD

29. A major issue is the sustainability of employment creation 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 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 are well aware 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:[3]

- *Extremely high payroll taxes*. Wage taxes, including social charges, stand at over 50 percent of gross salary. By comparison, the average is 18 percent for most OECD countries and 30 percent for eastern and central European countries. Such high rates are likely to be a major constraint to the expansion of employment.

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3 A more complete discussion of these issues is provided in an economic report to be submitted in February 1997.

- *Restrictive work practices and contracts* that limit the flexibility of employment relationships. Employment contracts in Bosnia and Herzegovina are a holdover from the times of the former Yugoslavia, when employees were typically guaranteed lifetime employment with generous leave time and extensive protection against dismissal. In a market economy, private sector employers are likely to begin to avoid legal labor contracts, as they have in all other transition economies, because of their restrictiveness. Workers in Bosnia and Herzegovina will find this avoidance of legal contracts acceptable because of the 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, official wage scales are still 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. Official minimum wages are also 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, this 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 sector 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 going on.

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 need to 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. However, because prewar productivity was low -- particularly in the 540,000 small private farms which owned 94 percent of the land -- the sector accounted for only 14 percent of the 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 south with its mediterranean climate, 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 about 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 was heavily damaged;
- High-value orchards and vineyards were burned;
- 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$63 million has been firmly committed;** despite a financing gap of 35 percent (the first-year program was initially estimated at US$97 million), a number of successful activities have been carried out this year (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). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, some US$151 million will be necessary** -- 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	10	5	5
Livestock and farm equipment	89	43	25	21
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	3	7	20
Agricultural policy development/Tech. Asst.	7	0	3	4
Incremental recurrent costs	21	3	7	11
Total	304	63	90	151

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. Donor assistance to agriculture in 1996 focused on emergency-type 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 forest workers reintegration;
- 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 have led to a high degree of success in implementing the 1996 agriculture program. Of a total 1996 program of US$97 million, some US$63 million was firmly committed by thirteen donor countries and agencies (table 2 and annex for a detailed breakdown) -- leaving a sectoral financing gap for 1996 of about US$34 million (35 percent).

Table 2. Firm Donor Commitments in 1996
(US$ million)[a]

	Amount	Main Donors
Imported seasonal farm inputs	10.5	EC, Germany, Islamic Development Bank
Livestock and farm equipment	42.6	IFAD, EC, Japan, Norway, Saudi Arabia, Slovakia, Slovenia, Switzerland, World Bank
Seed multiplication development	3.7	Japan, Norway, Switzerland
Fruit trees and vineyards rehabilitation	0.3	Norway
Farmer support services development	2.9	Germany, Sweden
Incremental recurrent costs	3.2	EC, IFAD, Netherlands, World Bank
Total	63.2	

[a] No commitments were made for the following components: 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 restored freedom of movement -- the World Food Programme, 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 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 the end of 1997 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 seeds 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, chicken, and rabbits.

12. *Farm equipment.* Financing was provided by the European Commission (US$5.8 million for tractors in the Federation) and the World Bank (for import to the Federation of 2,600 small tractors and 14 combine harvesters). Most of this machinery will be delivered to Federation farmers (on a credit basis) by the end of 1996. 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 has focused on the provision of critical inputs, detailed programs have been prepared for the rehabilitation of orchards, vineyards, and forestry as potential vehicles for future donor financing. The FAO has designed a US$10 million project aimed at replacing damaged high-value fruit trees and vineyards, primarily in the southern part of the country. The Government of Norway has a program in Tuzla to revitalize orchards. The two Entity Governments (with the World Bank's support) have drafted a US$35 million forestry rehabilitation program that would benefit both the Federation and Republika Srpska.

Redeveloping support services: A good start

14. *Rural financial markets development and rural industries and services.* The European Commission (EC) has committed US$1 million to support the dairy industry. The agriculture sector has 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 have been allocated to small and medium-size enterprises in the agroprocessing sector (shown as part of the Industry sector and not reflected in Agriculture sector totals). Credit lines opened under the United States-financed "Bosnia and Herzegovina Reconstruction Finance Facility" have also been partly disbursed in the agriculture sector. (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 will be completed by the end of 1996. The EC committed an additional US$0.3 million for a veterinary support program in Banja Luka.

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 for agricultural policy, strategy, and institutional development, resources were provided by the International Fund for Agriculture Development, 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 of external financing is needed to meet next year'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 from the war), 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-type 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, additional seed multiplication initiatives will be prepared by the FAO 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 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 bulk procurement by the Government or on-lent 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.

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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. Cofinancing is being sought from donors.

23. About 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 the 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.

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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 micro-lending 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 (for example, 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 banking regulation and supervision, 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 the overall banking sector reform which is required (as described in the "Industry and Finance" sector report).

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. To that effect, adequate farmer support services are urgently needed and it should be possible to ensure their suitability to a market-economy already in the initial phase, 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.

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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 also 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 Entities' 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 such as foreign trade, prices and taxation, land ownership and land market development, rural credit, enterprise and state farm privatization, agricultural and food markets, as well as farm technology;
- **Market information systems and agriculture statistics**, to gather information required for decision makers (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 the food 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 hand-over 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 already 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 grown 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 the Governments can abandon their implementing role and focus on establishing an enabling environment for the sector.

Box 7. Lessons learned in 1996

Several lessons were learned from implementing the 1996 program:

- **Donors should seek to work with and through the Entity ministries** when implementing agricultural programs. The central and regional project implementation units are readily available to channel donor funds to the intended beneficiaries in the agricultural community; examples of duplication have occurred when donor plans developed without knowledge of government agencies duplicated the government's own plans.
- **Donor-financed farm equipment or livestock should be provided to farmers on a credit basis**, rather than as a donation, to maximize the likelihood that items provided be 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 the 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 benefiting farmers and enterprises. At the same time, remaining price controls (e.g. for timber) should be abolished.

Privatization of government-owned assets

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

- The assets of state farms and agrocombinats,[6]
- Non-core 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 have expressed their commitment 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 developments. 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. This Commission's work will be key: since budgetary funds for compensation are not likely to be available,

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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. A forthcoming World Bank economic report to be submitted at the Third Donor Conference will address privatization issues.

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

other solutions (possibly exchanges) for addressing rights to land and farm assets will have to be 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 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 responding to the needs of the sector.

Resolving policy issues: A pre-condition 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. Decisiveness of governments' action to resolve 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. In spite of 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 46 institutes and faculties. Higher education enrollments emphasized science and engineering.

Damaged infrastructure and 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 all but useless through loss of windows, furniture, and educational material. 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 from one part of the country to the other. The Bosniac-majority part of the Federation suffered most damage, both to its facilities and its teacher force; budgetary resources were critically lacking, and salaries were not regularly paid. The situation in the Croat-majority part of the Federation was somewhat better: damage was more limited; 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 hyper-inflation, which drastically reduced budget resources and availability of materials, despite substantial support provided by the Federal Republic of Yugoslavia; physical damage to schools was significant but less extensive.

4. In spite of these difficulties, due to the extraordinary efforts of parents, local governments, and aid agencies, most children managed to continue 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 currently in the classroom 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 yet been

established as to 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 pedagogy 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. Education materials, reading materials, and basic furniture are scarce. Even in schools which have been "repaired" by the efforts of bilateral donors and nongovernmental organizations (NGOs), electricity, heating, and/or water are often lacking and the facility is thus unfunctional for parts of the year. Education programs at all levels need to be revamped, and the teaching force composed of war-time volunteers needs to be professionalized. Salaries have still to be restored to levels which attract a qualified teaching force.

II. THE RECONSTRUCTION CHALLENGE

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 the donor community 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 the available resources are so limited, these choices involve tradeoffs between the highest priority needs, and needs which 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 which could have an immediate impact and benefit the largest possible number of school children. 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 which are more appropriately addressed at the next stage of the reconstruction effort -- either because they will take longer to implement, or because they will require policy decisions not yet taken. On that limited basis,

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

8. Based upon updated damage estimates, and better data on the situation in Republika Srpska, the overall foreign financing requirements for education reconstruction have increased somewhat from the original figure. 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. These needs are presented in table 1 below.

- **In 1996, US$82 million was firmly committed** (the initial first-year estimate was at US$72 million) to the reconstruction program; about half this amount will be disbursed this year (paragraphs 9 to 15);
- **In 1997, US$70 million is required**, of which about US$25 million for Republika Srpska (paragraphs 16 to 27); a list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **For 1998 and 1999, a further US$121 million is required**, along with a concerted effort to address sector reform and sustainability issues (paragraphs 28 through 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	72	58	91
Educational materials	25	4	6	15
Student recovery	11	1	2	8
Teacher training	7	2	2	3
Institution building	9	3	2	4
Total	273	82	70	121

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 has received assistance from both humanitarian and reconstruction assistance programs of many

1 In addition, requirements for initial budget support for very modest teachers' salaries and school operating requirements for communities which lack other resources for these needs are estimated at US$50 million during the three- to four-year period of reconstruction. 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 sector report on "Fiscal and Social Support").

donors, and the distinction is not always clear in the information provided, especially when humanitarian assistance involves compensation for teachers. Implementation has often taken 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 canton level (in the Federation) are 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 set forth in the priority reconstruction program.

10. These caveats notwithstanding, table 2 summarizes available information on firm commitments to the sector for 1996. A total of US$ 81.9 million has been 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 are for less urgent activities which 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 are 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 UNESCO, the Task Force comprises representatives of the Ministries of Education of both Entities -- thus far, the Ministry of Education of Republika Srpska has not participated -- EC, the United Nations High Commissioner for Refugees (UNHCR), the United Nations Development Program (UNDP), UNICEF, the World Bank, and bilateral donors and key NGOs represented in Sarajevo. Over the coming months, the Task Force will 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 data base of individual contracts at the school level.

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

	Amount	Main donors
School reconstruction	72	Albania, Austria, EC, Finland, Greece, ISDB, Luxembourg, Netherlands, Norway, Saudi Arabia, Slovenia, Switzerland, UNDP, US, World Bank
Educational materials	4	EC, Malaysia, Norway, World Bank
Student recovery	1	Malaysia, Austria
Teacher training	2	Indonesia, Luxembourg, Norway, Slovenia, Switzerland
Institution building	3	US, World Bank, various European countries
Total	82	

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 91 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 level, 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 which guided the design of the program were, first, to improve the educational situation of as many school children 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 of it in the first six months. Within the Federation, activities under the Emergency Education Reconstruction Program 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 has been considerable progress in implementation of the Emergency Education Reconstruction Program in the Federation, as described below. Preparation of program activities for Republika Srpska is in progress; implementation is expected to start soon.

- *School reconstruction/rehabilitation.* Damage assessments have been completed for all schools which are to be refurbished under the program. Of the US$10 million financing initially provided by the World Bank, over 90 percent has been committed; more than US$5 million has been disbursed, and an additional US$6 million will be disbursed by the end of 1996. Contracts have been signed and rehabilitation is in progress for 28 primary schools -- 12 in Croat-majority cantons and 16 in Bosniac-majority cantons. Other donor financing is supporting the rehabilitation of 22 schools located in Bosniac-majority cantons. Another 20 schools are ready for tendering for rehabilitation; only the necessary donor financing is lacking. Architectural designs will be completed by end-January, 1997 for the remaining 16 schools to be constructed or refurbished under the program. But, again, work cannot proceed until additional donor financing is provided. 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 underway. Two of these new schools are being financed by NGOs. Financing for the three other new schools is being sought;

- *Educational materials.* Contracts have been 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 German Government. An additional twenty-four textbook and supplementary reader titles are ready for tendering; again only the necessary financing is lacking. All of this is for schools in Bosniac-majority areas since education officials for the Croat-majority areas of the Federation or Republika Srpska prefer to continue 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) has been 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 particular attention in the future. More generally, there is a serious need for better coordination among education authorities at various levels of government. Clarification of roles of these bodies (paragraphs 28 through 30) should help to improve this coordination.

Box 1. Lessons learned

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

- **Operating in a policy vacuum on the question of government roles 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**; it is crucial to its success that the education recovery effort 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 this 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 in 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 will be 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; the 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 are further described in the following paragraphs.

School reconstruction (US$58 million)

18. The Emergency Education Reconstruction Program, when fully funded, will achieve the rehabilitation or reconstruction of one-eighth of the primary schools in the Federation, including most of the largest primary schools. But the program deliberately focuses on lightly damaged schools, because these schools could most quickly be made fully functional. The many (often smaller) primary schools which suffered more extensive damages are not included; nor, yet, are damaged primary schools in Republika Srpska. Neither are damaged educational institutions above the primary level in either Entity. There is as yet no systematic plan for repair and reconstruction of these educational facilities throughout the country, although a few establishments have undoubtedly received some 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 for schools 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 making a start in providing some textbook titles to primary schools in the Federation. But there is an urgent need for donor assistance to enlarge this effort to cover carefully selected other textbook titles and additional educational 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 in practice imply a larger proportion of the overall effort dedicated to supplementary reading materials.

Student recovery (US$2 million)

21. Most students have 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 with 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 -- post-war 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, non-formal programs are needed to provide an opportunity to catch up in missed skills which are relevant to job needs.

22. There are also vast needs in the two district areas of psychologically traumatized and mentally retarded children. 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 underway with the participation and funding of UNICEF, the United States 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 renewal of 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 for strengthening of capacity at the local level for routine education administration, and at the central level for setting educational standards, providing quality control and pedagogical support, and carrying out other professional leadership functions which are appropriate in a decentralized education system. This will require not only clarification of roles of education authorities at the various levels of the system (paragraphs 28 through 30), but also vastly improved communication and coordination among them. Training and equipment are needed to enable this to happen, as well as to introduce the program changes which are necessary to ensure sustainability (paragraphs 28 through 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, refurnishing 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 single most important structural issue which 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 which 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 teachers' 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 budget 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 the State level. In view of the sizable differences in income among the cantons, there is also likely to be a need for some inter-cantonal 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 issues of decentralization, there are nonetheless similar issues to be resolved involving the roles and responsibilities of local education authorities vis a vis central authorities.

Teachers' qualifications need to be improved

31. Another, related policy question which is crucial for 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 attract those who have left to return to the profession. In the Federation, the Ministry of Education has collected data on teachers and their qualifications in primary education, and is carrying out a study of secondary education teacher needs. The Ministry estimates that about 8,000 teachers lack formal qualifications. The Federation Ministry of Education has also maintained contact with many of the former teachers who are now 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 post-war reconciliation among the parties to the former conflict. At the secondary level -- especially in vocational/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 may be expected to 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 secondary vocational/technical schools which 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 at the same time starting the process of developing vocational/technical education programs which embody a more modern curriculum than was in use before the war. To start with, this should involve 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 give greater emphasis to the synthesis and application of facts rather than the simple mastery of facts. And there should be more emphasis upon self-directed learning and teamwork learning rather than passive absorption of material provided by the teacher or the textbook. 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 for modification of the content of social studies and other courses to explain recent political developments in the region in a fashion which encourages reconciliation among the parties of the former conflict, and the return to a common language.

There is a need for change in higher education administration and finance

33. In order 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. This 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. In order to contain the budgetary cost of higher education, there is a need for introduction of student fees and the development of needs-based and merit-based fellowships. In order to ensure the market relevance of program offerings in higher education, budgetary resources should be allocated to programs based upon student demand and efficiency of past use of budget resources.

HEALTH

I. BACKGROUND

Systemic problems before the war

1. Despite significant improvements in health status 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 approach to centralized planning 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). The damage to the health infrastructure has been unevenly distributed throughout the country, however, and reconstruction efforts must take into account these differences. 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 ravages of war in the health sector

- 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-five-fold increase in the number of people with communicable diseases;
- A dramatic rise in infant mortality and premature deaths (doubled in some areas);
- 35 to 50 percent of health infrastructure damaged or destroyed;
- 35 percent of hospital bed capacity lost;
- Critical shortages of essential drugs and supplies; and
- 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

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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 the transition to a modern and efficient system;
- Scarce resources should be optimally used, in order 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, as presented to the donor community in December 1995 and April 1996, remains valid.[2] It will require US$425 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$83 million was firmly committed**; despite a financing gap of nearly 43 percent (the first-year program was initially estimated at US$145 million), a number of activities were carried out successfully this year (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). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997;
- **In 1998 and 1999, some US$252 million will be necessary**, and policy issues should be addressed to ensure sustainability of the program over the medium-term (paragraphs 27 to 30).

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2 The total amount required has been revised from the initially estimated at US$540 million to US$425 million:

- Massive support for health personnel salaries was initially foreseen; in view of the current salary structure within the country (and the reluctance of the donor community to finance such costs), this amount has been substantially reduced; and
- 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	3	4	9
Reconstruction and rehabilitation	290	50	54	186
Rehabilitation of War Victims	30	23	3	4
Budget support for recurrent expenditures	76	5	22	49
Sector reforms	8	1	4	3
Program management	5	1	3	1
Total	425	83	90	252

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 simultaneously support a two-sided approach:

- Emergency-type 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 primarily 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$83 million in external financing has been firmly committed out of an estimated $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.

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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 provide such support through humanitarian programs and budget lines which may not have been reported to the donor database.

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

	Amount	Main Donors
Public health interventions	3	UNICEF, UK, SIDA
Reconstruction and rehabilitation	50	EC, Italy, Japan, Denmark, SIDA, UK, UNICEF, USAID
Rehabilitation of war victims	23	Canada, Council of Europe Social Development Fund, EC, Iceland, ICRC, Italy, Netherlands, SIDA, UK, UNDP, UNHCR, the World Bank
Budget support for recurrent expenditures	5	EC, Denmark, Italy, ICRC, UK
Program management	1	WHO,[6] World Bank
Sector reforms	1	EC, Italy, SIDA, UNICEF, UK, WHO, World Bank
Total	83	

Public health interventions

9. In both Entities, public health interventions have focused on preventive medicine, with particular attention to the most vulnerable groups (displaced persons, children). These decentralized activities (for a total amount of commitments of US$3 million) were supported or carried out by a number of agencies and Governments, among them WHO, UNICEF, the United Kingdom Red Cross, the United Kingdom (UK), 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$50 million. Efforts focused on:

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

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

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

- Preparation of an Essential Hospital Services Program has been completed (including support for sector-wide finance reform), in both the Federation and Republika Srpska;

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6 WHO extra-budgetary resources.

- Preparation has begun for a rehabilitation and restructuring plan for Basic Health Services (Primary Health Care and Public Health) initiated by the Entity Ministries of Health with WHO support; and
- Pilot projects for the Primary Health Care Project have been initiated in eleven *ambulantas* in Sarajevo by UNICEF, 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 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, including the reconstruction of facilities (US$5.5 million), the supply of drugs and medical supplies (US$3.5 million) and equipment (US$10 million). Three-quarters of the required amount has been committed by the Council of Europe's Social Development Fund, the Governments of Canada, Iceland, and Italy, WHO, the United Nations Development Program (UNDP) and the World Bank; ECHO has also contributed by financing direct in-kind support (drugs and supplies) through NGOs.

13. A number of NGOs have also implemented decentralized projects, with funding from ECHO, ODA, SIDA, the Governments of Italy and the Netherlands. However, coordination of these decentralized initiatives with activities undertaken as part of the Government-designed program has often been difficult. In Republika Srpska, which has not yet developed a comprehensive program, various 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 WHO have provided services and supplies for rehabilitation activities.

Budget support for operating expenditures: Drugs and medical supplies first

14. Support for recurrent expenditures has focused heavily on essential drugs and medical supplies directly procured and distributed by the donor community on a decentralized basis through NGOs. The main financiers have been ECHO and ODA. In addition, a number of donors have included support for recurrent expenditures (drugs and supplies) in larger support programs aimed at physical rehabilitation and repairs of facilities. No significant support has been provided for complementing 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). Later, the War Victims Rehabilitation Working Group was 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 has been followed in Republika Srpska, where the Ministry of Health has 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 WHO, was established in Sarajevo in May 1996. Through this framework, the main actors in the health

sector have met regularly to exchange information, discuss strategies, and prepare a compendium of the needs and priorities in the health sector.

Sectoral reforms: A productive dialogue initiated

17. In 1996 sectoral reform activities focused on initiating dialogue between the Entity Governments and international organizations such as WHO and the World Bank and on preparation for health reform and reconstruction.[7] Policy issues have often been addressed as part of the preparation for priority investment projects process. Three main areas have been 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 pre-war level, and incentives for improving the quality and efficiency of health care;

- *Health financing mechanisms.* The underlying principles for the Federation's future health financing system (e.g. universal access, efficiency, cost-containment and sustainability) were agreed upon 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 currently developing a similar approach; and

- *Sector governance.* Discussions on the roles and responsibilities of various levels of government (State, Entity, and Canton/region) have been held between the Federation Government and the Cantons, and between the Republika Srpska Government and regional and municipal health planners, with the support of WHO; progress has been 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;

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7 Efforts have been made difficult by the understaffing of the Ministries of Health and the subsequent limited availability of qualified personnel.

8 Substantial technical assistance was provided by the UK Government through the Know-How Fund.

- Ensure the short-term functioning of the health system by providing consumables and medical supplies (in support of primary and secondary health care networks);
- Initiate the health sector reform to ensure financial sustainability and effectiveness of the health system; and
- Undertake a program for human resources development, including training and re-training of current health workers.

Public health interventions (US$4 million)

19. Public health interventions in 1997 would build on the gains of 1996 and broaden the scope of activities to preempt future epidemics of avoidable chronic diseases. The activities would focus on:

- Continuing disease prevention and health promotion activities through immunization, tuberculosis control, rabies control, water purification and testing, toxic waste management, 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 diseases.

Reconstruction and rehabilitation (US$54 million): Restoring essential services

20. Reconstruction and rehabilitation of health services are the primary focus of 1997 activities, following through 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 subsector[9] 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 the provision of technical assistance in support of health finance reform. Total financing required over a three-year period is estimated at US$192 million (73 percent for the Federation and 27 percent for Republika Srpska). The Governments of Greece, Iceland, Italy, Luxembourg, Spain, and the UK and the World Bank have indicated interest in supporting this program.[10]
- 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 system (box 3). Priority will be given to the renovation and equipping of *ambulantas*, particularly to those participating in family medicine retraining, and to the selective renovation and

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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 (Prijedor, Gradiska, Doboj, Bijeljina, Pale/Kasindol/Sokolac, Trebinje, Brcko and Zvornik) and part of the Banja Luka Clinical Center.

10 A World Bank (IDA) US$15 million credit was approved on December 14, 1996.

equipping of portions of dispensaries (*dom zdravljas*) that could support *ambulantas*, 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. Services 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 *dom zdravljas* (polyclinics), emphasizing instead primary care delivered through family doctors based in *ambulanta* (dispensaries). Restoration of hospital services should focus on most essential secondary-level care.

Rehabilitation of war victims (US$3 million): A community-based approach

21. For war victims, efforts in 1997 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 in various health facilities -- and efforts should be made to prevent such a situation in 1997. Emphasis should be put on strengthening coordination mechanisms by systematically involving Government's agencies in the quantitative and qualitative definition of needs and allocation of supplies.

Sector reform (US$4 million): Management and administrative reforms for improving sustainability

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 for

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[11] The Program would also include undergraduate educational reforms at faculties of medicine (starting in the academic year 1996-97) 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 credentialling family physicians should also be developed.

capacity building and preparation of 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;
- 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 (e.g. access to care, quality of health care processes, health status, health outcomes for each local geographic area);
- Ensuring coordinated information and management for hospitals, primary care providers, and insurance institutions;
- Designing management systems (including operating systems and associated computer hardware and software requirements) for new insurance arrangements;
- Regulating cantonal and municipal health systems (with a view to limiting overall spending and seeking 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-based 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 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

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 post-war 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 introduce the private sector to activities once dominated by the government. 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 post-war recovery, which should help to ensure the acceptability and feasibility of the reform. Donor support, both financial and advisory, is required for an intense startup phase in 1997, in light of the 1996 experience (box 5), that includes policy analysis, limited-scope surveys, and local and external training. Ongoing support for implementation during 1998 and 1999 will subsequently be needed. 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 given to revenue generation and expenditure patterns, responsibility sharing among the various levels of authority (Entities, Cantons in the Federation, municipalities), and private sector involvement. The governance issues are particularly critical in the Federation. The health system is currently split between the Croat-majority and the Bosniac-majority areas. In addition, the 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 would be 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, financed by a mandatory payroll tax; and
- The third tier corresponds to a voluntary private insurance, financed by private premiums, which covers enhanced types of 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, etc.).

Sector financing

29. The Federation 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 underway in Republika Srpska, where substantial effort will be required. Health care is currently financed through a Public Health Fund, which collects and distributes funds through regional branches that in turn pay health institutions. The prices are set by the Public Health Fund and are not based on actual costs. Payments to health institutions are insufficient to cover even the minimal needs of the health system. In its *Strategy of Health Development for Republika Srpska by the Year 2000*, the Ministry of Health has indicated 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 (e.g. financial projections, governance and regulatory mechanisms, etc.).[12] The Ministry of Health is currently working, with the support of WHO, on a detailed set of measures to implement reforms -- and donor assistance will be required.

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12 The proposed reform is based on the establishment of a two-tier financing system:

- 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
- Optional private insurance.

Prices would be determined by the Public Health Fund. Republika Srpska 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. As a consequence of the conflict in Bosnia and Herzegovina, the prewar government structure in the country disintegrated. The new institutional framework laid out in the Dayton-Paris Peace Agreement implies substantial changes to the country's legislative and policy-making institutions. At the State level, ministries and institutions responsible for those functions designated to the State have to be set up, including the Ministry of Finance (with a foreign debt management unit), Foreign Trade and Communications, Justice, as well as the Central Bank. The start-up cost of these efforts will be significant, both to attract well-qualified individuals from all parts of the country, and to provide adequate facilities for these institutions to function.

2. At the Federation level, ministries and institutions also need to be set up or strengthened, including line and sector ministries, the tax and customs administrations, the payments bureau, and the banking 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 banking 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 of the population

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 children without parents reached 14,000 during the conflict. In addition, at least 7,000 war-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 only 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 some 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, in parallel with gradual recovery of the economy and to strengthen the institutions to cover all necessary public expenditures on a sustainable basis. During the transition, financial assistance should be provided to help develop and strengthen the government 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 financial 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$121 million), protection, on a supplementary basis, of the most vulnerable groups during the transition (US$83 million), and general fiscal support to the government budget (US$310 million) to cover counterpart costs associated with donor-financed reconstruction programs, recurrent social expenditures in health and education, and to provide liquidity for ongoing external obligations. Of the total requirement:

- **In 1996, US$262 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 the Republika Srpska (paragraphs 13 to 17). A list of corresponding investments will be prepared for the Third Donor Conference to be held in early 1997; and
- **In 1998 and 1999, some US$132 million will be necessary**. The specific need for further 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	121	61	20	40
Support for social expenditures	83	41	20	22
General fiscal support	310	160	80	70
Total	514	262	120	132

III. 1996 ACHIEVEMENTS

7. 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$262 million committed for these purposes in 1996, US$61 million was

allocated to institution building, US$41 million to support of vulnerable groups, and US$160 million to general fiscal support. Some US$183 million had been disbursed by October 1996. By the end of 1996, disbursements are expected to reach US$230 million.

Support to government institutions

8. In 1996, support to State and Federation governments amounted to US$61 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$38.6 million to provide office equipment (such as furniture and computers, 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 United States Agency for International Development (USAID), the United States (US) Treasury, the German Agency for Technical Cooperation (GTZ), the United Kingdom's Overseas Development Administration (ODA), and the World Bank; and
- A US$5 million Wage Fund to provide salary supplements to staff of the core State and Federation government institutions (financed by the Governments of the Netherlands and Switzerland, and the World Bank, under an Emergency Recovery Project) (table 2).

9. With these resources and funds provided under the general fiscal support, donors directly supported more than ten Government institutions, including:

- *Federation Customs Administration* (US$2.7 million from the EC and others);
- *Federation Tax Administration* (US$1.8 million from the US 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* (being created; US$1 million from the World Bank's Transition Assistance Credit);
- *Cantonal privatization agencies* (being created; US$4 million from the World Bank's Transition Assistance Credit);
- *Public finance control institutions*, including *financial police* (US$0.8 million from the World Bank's Transition Assistance Credit); and
- *Cantonal budget offices* (US$2 million from USAID and others).

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

	Amount	Main donors
Support for key government institutions	61	Austria, EC, Germany, Iceland, Japan, Luxembourg, Netherlands, Switzerland, US, World Bank
Support for social expenditures	41	Austria, Canada, EC, Ireland, Italy, Malaysia, Netherlands, Sweden Switzerland, UK, UNICEF, World Bank,
Other fiscal support	160	Japan, Netherlands and the World Bank
Total	262	

Support to social safety net

10. In 1996 donors committed US$41 million to support vulnerable groups through two different types of programs: (i) *transitory emergency relief* to ensure minimum consumption needs and living standards are 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. Specifically, the following programs in the Federation have 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 World Bank and other donors;
- Mobility and other equipment for the war-disabled, from the World Bank; other donors have provided similar support through nongovernmental organizations;
- Microprojects for the retraining of the disabled and blind, from the World Bank and individual 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 has 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 have received firm commitments for US$160 million in fiscal support in 1996 (including fiscal support for counterpart funding to donor's reconstruction assistance from the Government of Japan for US$50 million, a US$20 million grant from the Government of the

Netherlands, and a US$90 million World Bank Transition Assistance Credit). These resources have supported:

- Recurrent expenditures of the government, 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 the institutions 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. A total of about US$120 million in external financing will be needed in 1997 for fiscal support. Assistance to government institutions in 1997 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 such as computers, vehicles, furniture, communications equipment; and, equally important, buildings and office space. Social assistance needs will progressively decline in 1997 to reflect the economic recovery which has already started in 1996. Nevertheless, there are still significant gaps between the needs for protecting vulnerable groups and the revenues that can possibly be generated by the domestic economy. Thus, the 1997 assistance to the social safety net needs to continue focusing 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. First, 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 necessary equipment to modernize, strengthen auditing and financial capacities, and the like.

15. Second, 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 the 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 which 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, procedures of 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 administration – staffing, structure, and functions together with modernization of procedures and facilities (about US$4 million for both Entities);

- Entity 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 pre-condition for the development of a sound financial system (US$2 million for both Entities);

- Auditing and budget control should be strengthened to develop 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 needs to be improved, including: population and migration statistics; household surveys on income, consumption, and unemployment; and cost of living data (about US$1 million for both Entities).

Box 1. Projects to reform public finances for 1997

Two projects with a total cost of US$135 million have been designed to strengthen public finances, which would be implemented in 1997 and 1998: the ***Government Services Project*** and the ***Public Finance Reform Project***. Donor support for these projects will be key to achieving the desired reforms.

Government Services Project (US$45 million). This project supports improvements in public sector management at the State, Entity, and local government levels by modernizing revenue collection (tax and customs administrations) and by improving the targeting and efficiency of public expenditure and public expenditure management. Envisaged components include:

- Tax administrations modernization, with an emphasis on rationalizing structures, functions, and procedures, developing coordination mechanisms across Entities, establishing identification and registries of taxpayers, and training in tax assessment and compliance methods;
- Expenditure management, with an emphasis on budget preparation and execution to improve transparency in the budgeting process, including support for the management of extrabudgetary funds (mainly pensions) as well as for external debt management;
- Public finance management control, to strengthen internal and external auditing and control;
- Public facility investment funds, to finance the reconstruction of government institutions (including office facilities) and the provision of basic office equipment; and
- 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.

Public Finance Reform Project (US$90 million). This project will help establish and reform key public finance institutions and policies at the State and Entity levels. The main objective is to support appropriate fiscal arrangements between State, Entity, and local governments, develop external borrowing arrangements, and initiate tax policy reform and public expenditure reform, in particular pension reform. Envisaged components of reform include:

- Fiscal federalism with assignment of spending and tax responsibilities as well as transfers among State, Entity, and local governments;
- Establishment of external borrowing arrangements, including debt reporting, monitoring, and management system at the State and Entity levels;
- Unification of trade policy across Entities;
- Harmonization of tax policies and rates across Entities; and
- Review of public expenditures and reform of the public pension system.

Assistance to provide a minimal social safety net (US$20 million)

16. Some US$20 million is needed in 1997 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 to achieve this objective. Sustainability can be achieved by: (a) establishing new fiscal arrangements between the 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 simultaneously with the establishment of new institutions and rationalization of overall government spending. These issues are also discussed in Volume 2 of this report.

Establishing a new system of intergovernment 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 determine the assignment of responsibilities and the allocation of revenue across different levels of government. According to this 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 revenues

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, rather than for evasion:

- *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. The overall 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 existing 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.

- *Reducing expenditure.* Major cuts are needed in certain areas of public expenditure, including defense, broad subsidization of the economy, and various entitlement programs. Avoiding the buildup of large administrative structures for the governments is also important to controlling expenditures. Public employment in government institutions should be rationalized, pari passu 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 in the medium-term. This requires setting them in accordance with the Government's capacity to generate revenue.