BULGARIA

Education Modernization Project

Project Appraisal Document

Europe and Central Asia Region
ECSHD

Date: July 26, 2000
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Project ID: P055158
Sector(s): EY - Other Education
Lending Instrument: Adaptable Program Loan (APL)
Theme(s):
Poverty Targeted Intervention: N

Program Financing Data

APL	Indicative Financing Plan				Estimated Implementation Period (Bank FY)		Borrower
	IBRD US$ m	%	Others US$ m	Total US$ m	Commitment Date	Closing Date	
APL 1 Loan/ Credit	14.39	78.1	4.04	18.43	09/05/2000	03/31/2004	Government of Bulgaria
APL 2 Loan/ Credit	38.00	76.0	12.00	50.00	07/01/2003	12/31/2006	Government of Bulgaria
APL 3 Loan/ Credit	10.00	66.7	5.00	15.00	07/01/2006	12/31/2009	Government of Bulgaria
APL 4 Loan/ Credit							
Total	62.39		21.04	83.43			

Project Financing Data

☒ Loan ☐ Credit ☐ Grant ☐ Guarantee ☐ Other (Specify)

For Loans/Credits/Others:
Amount (US$m): $14.39

Proposed Terms: Variable Spread & Rate Single Currency Loan (VSCL)
Grace period (years): 5
Years to maturity: 20
Commitment fee: 0.75 %
: %
Front end fee on Bank loan: 1.00%

Financing Plan: Source	Local	Foreign	Total
GOVERNMENT	4.04	0.00	4.04
IBRD	7.86	6.53	14.39
Total:	11.89	6.53	18.43

Borrower: GOVERNMENT OF BULGARIA
Responsible agency: MINISTRY OF EDUCATION AND SCIENCE

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Estimated disbursements (Bank FY/US$M):

FY	2001	2002	2003				
Annual	2.9	5.5	6.0				
Cumulative	2.9	8.4	14.4				

Project implementation period: 3 years.
Expected effectiveness date: 12/01/2000 **Expected closing date:** 03/31/2004

OCS APL PAD Form: Rev. March, 2000

A. Program Purpose and Project Development Objective

1. Program purpose and program phasing:

The purpose of this program is to improve overall resource management and quality of teaching and learning in Bulgarian general (primary and secondary) and higher education institutions, while continuing to maintain the already high levels of access and to improve equity in higher education (HE).

To achieve this purpose, the program would support a plan of activities that will be implemented in three phases over a period of nine years. The first phase will have a duration of three years and will concentrate on changing the institutions (norms and regulations); establishing the structures (directorates, centers, boards, steering committees, independent institutes); developing the technical capacity (management information system, methodology for optimization of the network of schools and HE institutions, and student assessment); and setting the foundations required for: (i) successfully introducing new resource allocation mechanisms, and new standards-based curriculum, and programs of study; (ii) changing management practices; (iii) changing teaching approaches; (iv) establishing a demand-driven teacher in-service training systems; (v) establishing a new system of education monitoring and evaluation; and (vi) establishing a new student loan and stipend system.

The second phase will have a duration of three years. It will consist of activities aimed at supporting the implementation of the new standards, improving teaching and learning conditions in education institutions, improving resource management in education institutions, establishing a new system of resource allocation in HE, and facilitating equal access to HE institutions. During this phase the program will finance interventions aimed at improving; (i) professional skills of staff working in the education sector; (ii) provision of modern education materials and equipment; (iii) planning, monitoring and evaluation capacity of the education system; (iv) resource allocation system in HE; (v) management of resources in HE education; and (vi) capacity of the HE system to introduce student fees while maintaining the current levels of access.

The third phase will have a duration of three years and will focus on adjusting and consolidating the changes introduced during the previous two phases and establishing a demand-driven system of in-service teacher training.

2. Project development objective: (see Annex 1)

During phase one, the program seeks to create the conditions for a more efficient use of financial, physical and human resources, and for enhancing the quality of the teaching force and improving the learning processes in primary, secondary and higher education institutions. To achieve these objectives, the project will: (i) strengthen Ministry of Education and Science (MES) management and technical capacity for modernizing the sector; (ii) increase MES capacity for introducing the new education standards and standards-based curriculum in general education, and for collecting and utilizing education information for monitoring and decision making both in general and higher education; (iii) provide initial training to inspectors, school directors and teachers on the newly introduced standards and curriculum; (iv) expand a pilot program aimed at giving school directors greater discretion on spending decisions in their schools; (v) develop a methodology to support local efforts to optimize the school network; (vi) reform the allocation process for resources and seats in higher education; (vii) create a competitive fund for improving teaching, resource management and internal quality assurance in HE institutions; and (viii) establish a modern student loan and stipend program for HE. To facilitate project implementation, the project will be supported by a small project coordination unit (PCU) responsible for providing support to the MES in areas such as procurement, financial management, project coordination, and communication.

3. Key performance indicators: (see Annex 1)

The following indicators will be used to measure the achievement of the program objectives. Progress towards these indicators will be monitored during the implementation of the different phases of the program. Performance indicators for phase one would function as "triggers" for consideration of World Bank support for the second phase of the program (see section B.4).

1. MES operates an effective national school place planning system, including a consistent approach to measuring school capacity and the setting of regular targets for the removal of surplus capacity.
2. Municipalities are active in optimizing the system. No municipality has more than 20 percent surplus primary school places, 15 percent secondary school places.
3. Delegation of budgets and increased discretion at school level leads to more flexibility and efficiency in the use of resources indicated by an average increase of 50 percent in the amount of school budget spent on teaching materials and a decrease of 10 percent in the staff-student ratio.
4. During Phase I, adoption of interactive learning processes and improved access to new teaching materials leads to at least eighty percent of schools showing year-on-year improvements in teaching conditions as measured by classroom observations.
5. During Phase II and III, new national framework for inspection and information from a new education management system (EMIS) provide comparative data to support target setting for improved pupil performance at national local and school levels.
6. At least twenty five percent of HE institutions are offering joint services and programs through consolidation and/or merging.
7. Curriculum in participating HE institutions is revamped with greater emphasis on meeting labor force and societal needs.
8. The number of young academic staff in HE institutions having post-graduate degrees has increased by 20 percent.
9. At least twenty five percent of students enrolled in HE institutions are able to borrow to pay all or a significant portion of their tuition fees.
10. Sixty percent of HE institutions have established internal quality assurance systems.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)

Document number: 17655 **Date of latest CAS discussion:** 04/28/98

The Bank Group's assistance strategy for Bulgaria set four priorities for support, consistent with the country's development needs and the Government's priorities. The first three priorities are: promoting structural reform and private sector development; strengthening and rationalizing the role of the state; and protecting and enhancing the environment. The fourth key priority is to directly fight poverty and develop human capital. Within this, the Bank has already been providing active assistance to improvements in social protection (partly through a Social Protection Adjustment Loan), and to improvements in Health care (through two investment projects). The CAS also anticipated Bank-supported investments in education to arrest the deterioration in education quality, increase the efficiency of resource allocation and improve the equity of the education system.

2. Main sector issues and Government strategy:

Background/General description.

Education in Bulgaria is compulsory for children between ages 7 and 16. **Primary education** consists of Grades I-IV and schools admit children at the ages of 6 or 7. There is some repetition in the system but

normally students cover this cycle in four years. There is no formal test at the end of grade four. **Middle schools** provide a further four years of schooling in Grades V-VIII. In most cases Grades I-VIII are provided in a single school called basic school. In larger communities, general schools with Grades I-XI are common. **Secondary schools** are of four main types: (i) the gymnasium offers a formal academic education for four years in Grades IX-XII; (ii) specialist high schools differ from the gymnasium in that they offer education in specialized subjects in areas such as foreign language, humanities or the sciences. These schools are highly selective and select their students at the end of grade VII by competition. The period of study at these schools is one year longer because students are asked to spend one extra year between grade VII and VIII studying the specialized subjects; (iii) technical and art schools, have the same core curriculum as the gymnasium but are supplemented by study and training in a vocational area; and (iv) vocational schools offer two or three year courses leading to a qualification at basic craft level. In addition to these mainstream schools, there are special schools catering to the needs of students with special needs. These schools are often located in remote villages and are poorly staffed and resourced.

Provision of finance and hiring of teachers and non-teacher staff for most schools is largely the responsibility of approximately 260 municipal governments which get a subvention from the central Government to cover these expenses. Although the subvention formula allows municipalities to allocate funds in line with their individual priorities, the actual discretion of local governments is limited by tight national guidelines related to class-size and teacher-per-class requirements. These guidelines are enforced by 28 deconcentrated County Inspectorates responsible to the MES. Another limitation faced by local authorities is that, although they are usually represented on selection committees, school directors are formally appointed and employed by the MES. All these regulations limit the ability of local education officials and school directors to make expenditure decisions in accordance with local needs, preferences and abilities to economize.

During the past decade, education has declined from 11-13 percent of total government expenditures in the early 1990s, to 9-10 percent in the last two years. It has also suffered a decline as percentage of the GDP from about 5-6 percent early in the decade to 3-4 percent in recent years. This decline has had a significant impact on teacher salaries, which represent by far the largest category of expenditures (70 percent), school maintenance and teaching materials.

Access to education. Gross enrollment rates in primary schools of 102 percent indicates that access is not a problem, however low gross enrollment in middle (87 percent) and secondary (68 percent) schools are worrisome. An increasing number of dropouts is perceived as a major problem for secondary education. High unemployment and the perception that secondary education studies are irrelevant are said to be the reasons behind the high drop out rate. However, little is known about the causes of this decline in school attendance after primary education. More precise measurement of access using net enrollment rates and in-depth studies of the causes of attrition need to be conducted in order to determine why attendance is so far below the compulsory level of age 16.

Issues

Improving quality of teaching and learning in primary and secondary schools. The current *curriculum* is well developed along discrete subject lines and is very demanding in terms of the volume and level of knowledge imparted. There is, however, a consensus among educators and Ministry officials that there is a need for a reduction in content, for the introduction of practical elements in school work, and for a change in teaching styles. Currently, teaching is based on a teacher-centered methodology focused on imparting knowledge with very little attention to problem solving, encouragement of discussion, disagreement and debate, and promotion of research and independent work. The curriculum development process is

dominated by subject content experts running the risk of developing a curriculum that leaves out important elements in the emotional, moral and spiritual development of students. In practice, there is relatively little coordination across subjects. On the practical side, schools are not structured in a way to facilitate co-operative approaches to planning and implementing the curriculum. At a systemic level, MES does not monitor the implementation of the curriculum and has no formal mechanisms to assess whether pupils are learning what is being taught, whether they have learned well what was taught previously, and the extent to which students are reaching the intended standards.

Pre-service teacher training produces quantitatively a more than adequate supply of teachers for the system. At all levels, teachers are in possession of pre-service qualifications. Although the structural format of pre-service training appears to be basically sound, the qualitative content of that training is more problematic, since it is based on highly abstract and outdated psychology and pedagogical theories and practices, with very little emphasis on hands-on classroom practices and mentoring. Official in-service training aimed at enhancing teachers qualifications and pay is currently provided almost exclusively by three in-service teacher-training institutes, which have the monopoly for issuing certificates that are recognized as valid teachers' career development activities. Although the range of training offered by these institutions is agreed annually with the MES, the Ministry has no instruments at its disposal to help monitor either the quality or the final activities and curricula of courses offered by the institutes. Most courses are institution-based and not school-based, and are not organized to support curriculum changes or to address the needs of teachers to renew and extend their skills and understandings. Funding for the institutes is provided through the MES budget, based on historical patterns as well as discussions of the proposals presented by each institution. The final offering of training courses responds more to the current capacity of the three institutes than to the demand of schools or local authorities, including inspectors. The in-service institutes have recently been placed under the jurisdiction of institutions of higher education, and therefore, revisions proposed for the operation of these institutes may have implications for the overall system of higher education.

Improving overall resource management in primary and secondary schools. School directors have no freedom to modify the curriculum and teaching methods, and lack control over budget spending. This situation makes it extremely difficult to introduce changes at the school level so they can better respond to local circumstances. In March 1998, the Government, with the support of PHARE, initiated a pilot program, *Financial Management of School Education* (FMSE), to introduce delegated budgets to 100 schools in four municipalities. Through this program, participating schools receive lump-sum budgets based mainly on the number of students, and directors are given greater discretion in spending decisions. A preliminary evaluation of the program showed that participating schools have achieved greater community involvement and are using resources more efficiently by saving on current expenditures such as electric, water and heating bills. These changes have allowed school directors to introduce innovations in school management as well as in teaching activities. So far, the evaluation of the program has only covered the monitoring of inputs. As schools become self-managing, evaluation of effectiveness would need to be judged by educational outcomes. The pilot program was extended in March 1999 for six months to provide training for school directors in 20 additional municipalities.

Education efficiency; school network. Since the present school network was established in the 1960s, the number of students in Bulgarian schools has declined by almost half. In 1998, the school age population (ages 7-17) was 18 percent below that of 1989. The number of schools and classes, however, has not been reduced in line with declining enrollments. This has been reinforced by a rigid system of regulations (standards) governing class sizes, staff teaching hours, and teaching practices that have encouraged a low number of teaching hours per teacher and small class size. The number of teachers has remained the same during this period, leading to a very generous average pupil-teacher ratio which in primary school is equal

to 11.2 and an average class size of 21. As a consequence, an increased proportion of scarce resources is now devoted to salaries at the expense of maintenance of school buildings and educational materials. Over the last 15 years, several municipalities have experienced declines in first-grade cohorts of roughly 40-65 percent. There is considerable scope for improving efficiency in the allocation of school resources at the municipal level, but since municipalities and individual catchment areas will not experience the same rate of decline in their school age populations, policy changes will affect them differently. Therefore, school planning and resource mobilization needs to be carried out at the school and municipality level. One action taken by education authorities has been the closure of schools, especially in small villages, but these decisions have not been made with the speed and scope required. Most municipalities so far have been reluctant to come forward with optimization proposals because of lack of incentives, concerns of the impact of school closure on employment, and strong cultural attachment to the school as the center of village life. Inevitably, school closures will lead to staff reduction and, consequently, to increased unemployment, often in remote areas where the creation of new jobs is slow and few alternative jobs are available.

Education efficiency; class-size and teacher ratios. Two main sources of inefficiency in Bulgarian education are low class-size and generous teacher-class ratios. The national average class size varies between 21 to 23 at different education levels. This figure is not only below the national statutory maximum (22-26) but is also low as compared to observed international standards. It has been estimated that an increase of 20 percent in class-size could free up almost 20 percent of total costs. Another source of inefficiency is the high teacher-class ratios in middle and secondary schools, which are the combined result of national mandated norms with respect to teacher-class ratios and teaching-hours regulations. These regulations, together with the rapid demographic decline, the strong desire not to increase un-employment during economic decline, the large number of small rural schools help explain why most schools in Bulgaria have a student-teacher ratio below 20, and a large majority of middle and secondary schools show a ratio below 15 students per teacher.

Improving quality of teaching and learning in HE. During the past decade, higher education has experienced two fundamental transformations. Universities have gained considerable autonomy while at the same time their enrollments have increased more than twice, transforming HE from an elite into a mass system in less than a decade. These transformations, however, have not been accompanied either by the adoption of a long-term policy framework, or by a modernization of management at the level of the institutions and the introduction of a dynamic and competitive system of resource allocations. As a consequence, Bulgaria still has a proliferation of highly specialized higher education institutions (there are 86 HE institutions, amounting to one institution per 100,000 inhabitants) with very weak internal governance structures, with low quality teaching and research, with an aging academic staff, with few incentives for staff renewal via re-training and hiring of young academics, and with deteriorating physical facilities, libraries, equipment and laboratories.

The increase in higher education enrollment has primarily been a product of an expansion of fee-paying and part time students, which has more than doubled between 1991 and 1997. In 1991 the proportion of state subsidized students represented almost 90 percent, while in 1997 it only reached a level of 50 percent with the rest being fee-paying students. Part-time students represented 25 percent of the total number of students in 1991, while in 1997 they represented 35 percent. Public expenditure per student in higher education has experienced a continuous deterioration, and it is relatively low as compared to similar countries (the ratio of unit cost to per capita GDP was 22 percent in 1998 compared with 73 percent for Hungary, 44 percent for Costa Rica; 40 percent for Romania).

Research and teaching. The higher education system maintains from its past the divorce between research and teaching and between universities and science academies. Most research institutes operate under the

umbrella of the Academy of Science and only a few operate as research centers within universities. In both cases these institutions are underfunded and operate in relative isolation with respect to HE teaching. In a parallel situation, the three in-service institutes that have traditionally operated separately from the institutions of HE and are now operating under the auspices of universities, also make a clear distinct division between research and practice in the field of education which is not something commonly found in other European countries.

Improving overall resource management in Higher Education institutions. *The Government strategy for HE* has included two main components. One is to modify the system of tuition so all students will be required to pay fees not to exceed 30 percent of the cost per students. This policy, however, has been designed in such a way in the medium term that it is not expected to increase total fee revenue over the current level because students who presently pay "full cost" will find their fees reduced in the new fee structure. The other changes consist of sharing of responsibility for allocation resources between the Ministry of Finance (MOF) and the MES, whereby MES submits the proposals for resource allocation to MOF. The main HE funding mechanism will be changed from one based on historical patterns to one based on a normative cost formula.

In terms of *student aid and loans*, Bulgaria has a system of student stipends designed both to support high merit students and also to help students who demonstrate financial need by paying a portion of their living costs. Budget restrictions have reduced over time the proportion of students receiving stipends. There is also a small student loan program to help students paying tuition fees, but this program has been largely ineffectual.

Since 1989 the allocation of resources and seats in HE has been split between the MOF and MES and there has been very little coordination between the institutions. The process of allocation of resources does not typically take into account labor force needs and other education-based criteria, and the process of allocation of seats typically does not take into account issues of efficiency and effectiveness. Since both allocation processes have been based primarily on historical patterns they have retained inequities and inefficiencies existing in the system before the changes introduced in the 1990s.

Additionally, one of the main problems that policy makers confront is the *lack of a modern system of monitoring and information.* Even the most basic information is scattered, outdated, of poor quality and difficult to obtain. In the absence of a transparent system of information policy makers, government officials tend to operate through detailed regulations, creating a vicious circle of lack of innovation and risk taking, lack of transparency, lack of public confidence and trust, lost of autonomy, and increased dependency from the state.

3. Sector issues to be addressed by the project and strategic choices:

Sector Issue	Strategic Choices
Need to update curriculum content and performance standards for education.	The transition of Bulgaria into a more global market economy and the changes that this implies, calls for a closer look at the goals of the education system and a revision of the standards for education to ensure quality and relevance to the needs of future generations of Bulgarians. The project will help MES improve quality and relevance of education by supporting the introduction of new standards and curriculum in primary and secondary schools in Bulgaria. It will also strengthen the policy function of the General Education Directorate by shedding its operational tasks, and will support the creation of a Curriculum Council which will operate as an advisory body to the Minister for the implementation and monitoring of the new standards and curriculum.
Lack of quality in-service teacher training.	The project will promote the reform of the current in-service teacher training system and the establishment of a demand driven system that responds to the needs of schools and teachers for skill development and improved teaching methods. This will complement changes in school curriculum and standards.
Lack of reliable mechanism for systematically assessing students learning outcomes.	To measure student learning outcomes, a systematic and reliable national assessment system will be established starting with a Grade 12 school leaving exam (matura), and then Grades 4 and 8. Currently, the Bulgarian assessment system lacks the capacity to issue a national standard exam that can ensure tests are administered fairly, grades are assigned objectively or that items on the examinations are able to capture the aims of the curriculum.
Education Inspectorate functions are weak and ineffective.	The project will support the Government in its effort to re-focus the role and functions of the Inspectorate to make them more supportive of the changes in primary and secondary level education that would be taking place at the school level.
School directors have no control over the school budget and lack freedom to modify the curriculum and teaching method.	The project will encourage flexibility and innovation at the school level, and will support a more effective use of resources in schools through a wider introduction of Delegated Budgets.

Municipalities have not adjusted school network in response to decline in student enrollment. There is a need to improve efficiency in resource allocation at the local level.	The project will promote a more efficient allocation of education resources at the local level through a program that seeks to strengthen MES's technical capacity to provide support to local government for the design and implementation of school network optimization plans.
MES has weak capacity to conduct policy analysis, prepare long term plans and to monitor the reform.	The project will strengthen MES's policy making and monitoring capacity through support of applied research on the impact of the new curricula, the introduction of efficiency improvement initiatives and other reform initiatives, and by developing MES capacity to measure systematically academic performance of students and to collect and analyze education statistics on a regular basis.
Inefficient system for resource allocation and utilization in higher education.	The project will encourage improvement in resource allocation and management by linking the process of allocation of seats and resources, by using a policy-based criteria for the allocation of resources in higher education.
Lack of incentives and resources for improving teaching and management within and across higher education institutions.	The project will support the improvement of teaching and learning in higher education institutions through the promotion of curriculum reforms, integration of teaching and research, strengthening the recently established quality assurance processes, and raising the quality of academic staff by promoting early retirement of current staff and hiring younger staff, and by providing new training opportunities to young academic staff. This will be achieved through the establishment of a competitive fund to help institutions improve teaching and equipment, and to support the creation of an internal quality assurance and professional management structures at each institution.
Lack of system to support the introduction of cost-recovery at the higher education level.	The project aims to support the Government in retaining the already high accessibility to higher education institutions through the establishment of a student loan program to help students pay tuition fees and to restructure the existing student stipend system.

4. Program description and performance triggers for subsequent loans:

As noted above, the program has three phases. A first phase is designed to create the institutional conditions, organizational structures and interventions or projects required to implement and sustain the changes envisioned by the program. A second phase has been designed to begin the implementation of the projects and interventions prepared during phase one and to prepare the institutional, organizational and technical conditions for introducing further changes in teacher training. And a third phase is designed to consolidate the changes promoted during phase two and to further advance the reform of teacher training.

Phase	Main Activities	Triggers
Phase I.- Preparation of institutional and organizational conditions and design of specific interventions.	● Establishment of Curriculum Council, Curriculum Resource Center, National Assessment Unit, Resource Allocation Committee for Higher Education, Board of Competitive Teaching and Management System for Higher Education and Student Loan Agency.	● Curriculum Council, Curriculum Resource Center, National Assessment Unit, Resource Allocation Committee, Competitive Teaching and Management System for Higher Education Board and Student Loan Agency fully operational, with adequate legislation, and properly trained staff, facilities and equipment.
	● Evaluate impact of delegated budget in the 24 pilot municipalities.	● Evaluation of delegated budget program in first 24 municipalities shows increased flexibility in the use of resources indicated by an average increase of 50 percent in the amount of school budget spent on teaching materials and a decrease of 10 percent in the staff-student ratio.
	● Develop curricula and programs of study in grades 1, 2, 5, 6, 9, 10, 11 and 12	● Curricula introduced in all relevant grades in awareness sessions held by directors.
	● Commission studies related to effective teaching methods, techniques for curriculum monitoring and classroom evaluation, and the development of a demand-driven in-service teacher training system.	● Studies and consultation process completed and findings incorporated in the design of teacher training programs, and in preliminary plans for development of demand-driven in-service teacher training systems.
	● Pilot test matura examination.	● Initial test of assessment of grade 12 students piloted in 100 schools.

	● Design and pilot test the establishment of a National Education Management Information System (EMIS).	● Pilot EMIS fully operational including the production of standardized reports.
	● MES develop and pilot test a methodology for school place planning and roll forecast with municipalities.	● Methodology for school place planning and roll forecasts designed and tested. Operational plan for Phase II optimization activities approved by MES.
	● Conduct awareness-raising training in new standards for all school directors, inspectors and relevant municipality staff.	● School directors, inspectors and relevant municipal staff attend annually a two day training on implementation of new standards.
	● Develop and pilot test a new system and formula for integrating allocating resources and seat in HE.	● New system for allocating resources and seat in HE pilot tested successfully.
	● Prepare and enact legislation to allow the creation of a student loan system including funding and guarantee mechanisms.	● Legislation for the operation of new student loan system enacted.
	● Design and establish a Competitive Teaching and Management System for Higher Education for improving management and quality of teaching in HE.	● HE Competitive Teaching and Management System for Higher Education is fully operational with at least five HE institutions implementing teaching improvement grant proposals.
Phase II.- Implementation of interventions and programs.	● Implement new curriculum in all grades including the provision of new educational materials and training of teachers of all grades but 4 and 8.	● New curriculum operating in all subjects and grades, with new instructional materials available in all schools and grades.
	● Prepare implementation plan for the establishment of a demand-led system of in-service teacher training.	● Detailed implementation plan developed and approved by MES.
	● Make necessary changes in laws, norms and regulations to accredit new in-service teacher training providers.	● .Constraints removed for implementation of plan for the establishment of a demand-led system of in-service teacher training.
	● Modify funding mechanism to finance teacher training.	● Funding mechanism in place to facilitate demand-driven system.
	● Revise incentive system for teachers, including system for qualification of in-service teacher training.	● Revised system in place, ready for implementation in phase 3.

	• HE institutions compete for funds to improve quality of management and teaching processes.	• Seventy percent of HE institutions have received funding for management and teaching improvement programs through the Competitive Teaching and Management System for Higher Education.
	• Student Loan Program is made operational.	• Student loan guarantee system is in place.
	• Mainstream the Higher Education MIS.	• HE institutions provide reliable and valid information to MES on a regular basis.
Phase III. Consolidation and expansion.	• Implement assessment for grade 8. • Design and implement assessment for grade 4. • Develop test materials for other grades that can be used by individual schools. • Implement Delegated Budget in Special Schools. • Provide in-service teacher training on new methods and pedagogical approaches to support the introduction of the new curriculum to teachers using a decentralized demand-led approach. • Mainstream student loan program. • HE institutions compete for funding to improve quality of teaching and research.	

C. Program and Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

As noted above, the program is to improve overall resource management and quality of teaching and learning in Bulgarian general (primary and secondary) and HE institutions, while continuing to maintain the already high levels of access and to improve equity in HE. The program has three phases. A first phase is designed to create the institutional conditions, organizational structures and interventions or projects required to implement and sustain the changes envisioned by the program. A second phase has been designed to begin the implementation of the projects and interventions prepared during phase one and to prepare the institutional, organizational and technical conditions for introducing further changes in teacher training. And a third phase is designed to consolidate the changes promoted during phase two and to further advance the reform of teacher training.

The project is to support the first phase of the Borrower's program to modernize its education system which aims to: (a) improve overall resource management in pre-university and HE; (b) design and pre-pilot of a new inspection system related to the new curriculum; (c) enhance the quality of teaching and learning in

pre-university and HE institutions; and (d) continue to maintain high levels of access and equal opportunities to HE. The project components include: (i) improvement of quality of teaching and learning in general education; (ii) improvement of overall resource management in general education; (iii) improvement of efficiency and effectiveness in resource allocation to HE institutions; (iv) development of student loan program and re-design of stipend system; (v) creation of CTMS and improvement of quality of HE system; and (vi) strengthening MES project management capacity.

Component	Sector	Indicative Costs (US$M)	% of Total	Bank-financing (US$M)	% of Bank-financing
I. Teaching and learning in general education.	Other Education	5.22	28.3	4.02	27.9
II. Resource management in general education.	Other Education	6.13	33.3	4.79	33.3
III. Resource allocation in HE institutions.	Higher Education	0.45	2.4	0.32	2.2
IV. Establishment of student loan system and reform of the stipends system.	Higher Education	0.23	1.2	0.18	1.3
V. Creation of CTMS and strengthening of HE institutions.	Higher Education	5.59	30.3	4.42	30.7
VI. Strengthening of MES capacity for project management.	Institutional Development	0.67	3.6	0.52	3.6
			0.0		0.0
			0.0		0.0
			0.0		0.0
			0.0		0.0
			0.0		0.0
Total Project Costs		18.29	99.2	14.25	99.0
Front-end fee		0.14	0.8	0.14	1.0
Total Financing Required		18.43	100.0	14.39	100.0

2. Key policy and institutional reforms supported by the project:

At the school level. The proposed project would support giving school directors greater discretion in spending decisions in order to get a more efficient use of school resources, encourage flexibility and innovation in school management and promote greater community involvement in education.

At the Inspectorate level. The introduction of new standards will require consistent support to schools, and therefore, require new approaches in the inspection process. The project will support changes in the role of the Inspectorate, including support to schools in the interpretation of student assessment results and identification of reasons for under-performance as well as promotion of good practices. This will require the development of new skills among the inspectors.

At the municipal level. The project will support the MES's efforts to promote the optimization of the school network by encouraging municipalities to develop and implement a program of school closures and amalgamation to ensure high quality education is delivered in a more cost-effective way. Savings resulting from this program should be retained within the municipality budget to contribute to the improvement of education quality. This will require wide consultation at the local level to secure consensus on criteria for viable schools. One consequence of the school optimization efforts will be staff reduction which could lead to temporary unemployment, especially in remote areas where few alternatives are available. Severance pay for staff made redundant as the result of school closures should be considered. Also, grants for re-training redundant teachers could be made available to ameliorate the unemployment impact of this initiative.

On teacher training. The creation of a demand driven system of in-service teacher training would be promoted by encouraging the development of an industry of local independent training providers capable of delivering modern and high quality teacher training programs for in-service teachers. To achieve this, MES would need to establish an appropriate regulatory structure, including accreditation procedures for the licensing of training providers. It would also be necessary to revise the incentive system for teachers, to provide for a more objective system of examination and qualification for attained levels, and to provide additional incentives throughout teachers' careers.

At the HE level. The optimization of the network of HE institutions would be promoted by encouraging amalgamation of institutions through a competitive fund for improving the quality of teaching and for management efficiency. The mechanisms for resource and seat allocations would be reformed to make them more responsive to market needs and to promote competition and more accountability of institutions. Additionally, the reform of the student loan program and the stipend system would ensure that they both work in tandem to enhance access to HE.

3. Benefits and target population:

The project will reach the ultimate beneficiaries - primary and secondary school students - by improving the quality of teaching and enhancing learning opportunities. It will do this by providing first-line benefits to teachers, school principals, inspectors and MES staff through the enhancement of their knowledge and skills, and by assisting them in the development and introduction of innovations in teaching and learning processes at both the classroom and school level.

For HE, it is expected that the program will benefit students of HE institutions by improving quality of teaching and enhancing learning opportunities, and by providing financial support to enhance opportunities to attend HE institutions. The program will also benefit academic staff at HE institutions by providing them opportunities and incentives to enhance their knowledge and skills, improving their working conditions through investments in teaching materials and equipment, laboratories and libraries.

It is also expected that the program will benefit independent training providers by creating an institutional mechanism to facilitate the operation of a competitive market for in-service training.

Finally, the program will benefit MES staff by enhancing their knowledge and skills, and by improving their working conditions through access to new technologies and technical resources.

4. Institutional and implementation arrangements:

Project Management

The MES would be responsible for overall implementation of the Project. To coordinate the activities of the proposed Project, the MES has strengthened the current Project Coordination Unit (PCU) established in 1993 to coordinate the technical assistance for implementing the Public Sector Management Loan.

Currently, the PCU is headed by a Project Coordinator, who is accountable to the Secretary General under the MES. The PCU will consist of the following staff: (i) a director; (ii) one coordinator for HE and one for general education; (iii) a procurement specialist who should be appointed before negotiations; (iv) an accountant; (v) a planning specialist; (vi) a communication specialist, and (vii) a bilingual (Bulgarian/English) secretary. A Project Board, chaired by the Minister of Education and composed of the Secretary General, the Deputy Minister of Higher Education and the Deputy Minister of General Education, is being established to guide project implementation and to monitor its progress. The Project Board will meet at least twice a year to revise and approve the bi-annual progress report presented by the coordinators of the PCU and to make necessary corrections to project implementation activities.

Project actions will take place both in MES, at the Regional and School levels, and at the level of HE institutions. Principal participants in the proposed project will be MES staff, the Inspectorates, Regional and Municipal Officers responsible for education provision, school directors and teachers, HE rectors, HE academics, and non-governmental organizations willing to participate in the provision of some of the services to be financed by the project. Direct responsibility for the implementation of the project will rest with different units within MES which will be supported by the PCU.

The PCU would be responsible for overall project coordination, including coordination of preparation of annual work programs and project budget, submission of work programs and monitoring reports to the Project Board, conducting procurement and contract administration according to the World Bank guidelines; managing financial systems for project expenditures; ensuring that project audits are carried out on an annual basis; producing annual monitoring and evaluation reports of project activities; preparing annual procurement plans; publishing annual updates of Annual Procurement Notices (APN); handling public relations, dialogue, and feedback with MES management and the project stakeholders to ensure ownership and to promptly resolve problems; ensuring accountability of contractors and consultants, and liaising with the World Bank and other donors. On May 15 of each year, the PCU will submit to the Bank the annual monitoring report and the annual procurement plan. These documents will be reviewed jointly by the Bank and MES on the second half of June of each year. The PCU would also lead, by November 30, 2002, a Phase I review to be conducted jointly between the MES and the Bank to assess progress in achieving project outcomes and triggers for Phase II and to make recommendations for adjustments as needed. Upon completion of the project, an Implementation Completion Report (ICR) will be prepared by the MES, outlining the project impact and lessons learned.

Direct responsibility for implementation of project activities will fall on different MES line units and the MES working groups that have participated in the preparation of the project. They would be responsible for managing the timely implementation of project activities, including: managing the day-to-day aspects of project implementation and coordination with stakeholders and monitoring key performance indicators for both quality and physical outcomes. Management responsibility for each component will be clearly assigned to MES managers heading organizational units within the Ministry.

To oversee and coordinate the implementation of the HE component of the project, the MES will establish a Higher Education Steering Committee (HESC) within the State Policy in Higher Education Department. Rectors of HE institutions, employers, the MES and MOF will be represented at the HESC. The Director of the State Policy in Higher Education Department will act as the Secretariat of the HESC, while the HE coordinator of the PCU will be responsible for the day-to-day operation of the HESC. The head of the HE working groups will report directly to the HESC through the Secretariat. In the case of the implementation of the resource allocation sub-component, the MES will formally establish a Resource Allocation Committee (RAC) working group which will operate under the guidance of the HESC and will include staff from the MES Departments of Finance, Students, State Policy in HE and MOF.

For the implementation of the activities under the Higher Education Competitive Teaching and Management System (CTMSHE), the MES will establish a special body responsible for managing the system. The system will be managed by an executive director (ED), appointed by the Minister of Education. To perform its function, the ED will be supported by a small staff responsible for promoting the activities of the system, conducting the initial screening of proposals, and for follow-up and evaluation of grants. Contracts between winning institutions and the MES, and disbursement of funds will be handled directly by the PCU. In addition to the ED, the CTMSHE governance structure will consist of an Executive Council (EC), an International Supervising Committee, two advisory committees, one for each window of the fund, and peer review committees. The Executive Council would consist of four members of recognized reputation within the academic community and the Deputy Minister of HE who will act as the EC chairperson. The EC will be responsible for setting the priorities of the system, approving the criteria for project evaluation, selecting the members of the peer review committees, monitoring progress, and evaluating the implementation of the activities of the system. To perform its functions the EC will have quarterly meetings. The International Supervising Committee will consist of seven members, three of whom would be international experts. It will meet once a year to provide guidance to the implementation of the system, to monitor the transparency in the operation of the different activities promoted by the fund and to make suggestions for new orientations in the operation of the system. The advisory committees would be established on the basis of the number of components (or windows) of the system. They will meet in accordance with the schedule for project presentation and evaluation. Their main role is to conduct the final screening of proposals presented by HE institutions based on evaluation reports prepared by the respective peer review committees, and the eligibility and priority criteria established by the EC. The peer review committees will be responsible for evaluating proposals presented by HE institutions based on the academic and professional merits of each proposal. The members of the peer review committees should be recognized experts in their field and would be appointed only for the period of evaluation of each contest.

Disbursements/Project Financial Reporting Requirements.

A financial management assessment was carried out to determine the Government's institutional capacity to implement the project's financial management system, as prescribed in OP/BP 10.02. A report of the assessment's findings is included in Annex 11. Key actions needed to bring the activities relating to the financial management up to an acceptable level include: recruitment of the PCU accountant; purchase/installation of accounting software capable of producing Project Management Reports (PMRs); (iii) putting in place an integrated accounting system satisfactory to the Bank; (iv) submission of financial management manual; and (v) appointment of independent auditors acceptable to the Bank. Most of these activities, described in an agreed time-bound Action Plan, has already been carried out and also verified during a visit by a financial management specialist in July 2000. The updated Action Plan is presented in Annex 11.

During appraisal, the format and frequency for the submission of Project Management Reports (PMRs) was discussed with the identified PCU accountant, who also received a copy each of Project Financial Management Manual, LACI Handbook, and Financial Accounting Reporting and Auditing Handbook. It was agreed that during the initial period when the PCU may not be ready to prepare quarterly PMRs, disbursements will start using traditional methods, i.e., Statements of Expenditures (SOEs) reimbursements, direct payment, etc. It was further agreed that, even though the PCU will initially be using traditional disbursement methods it will, on a parallel basis, also produce PMRs, not necessarily for replenishment purposes, but for reporting and gaining experience with the new reporting requirements. Once the PCU has gained experience with the financial management system (FMS) and reporting under

project management reports, and provided that an improved FMS is reviewed and found satisfactory by the Bank, and with agreement of the Borrower, the Project will move to PMR-based disbursements. Once converted, the PCU will be responsible for preparing quarterly PMRs, acceptable to the Bank, each of which will include: (i) a financial report summarizing sources of project financing and project expenditures, disbursement, and forecasted project expenditures; (ii) reconciliation of the Special Account; (iii) a project progress report comprising output monitoring and summary of project progress; and (iv) a procurement management report on status of procurement and contract management.

Auditing arrangements:

The annual audit will be carried out in accordance with acceptable international standards and Bank guidelines on auditing and financial reporting as outlined in *The World Bank Financial Accounting Reporting and Auditing Handbook and Project Financial Management* Manual. The audit report shall be in a format in accordance with the International Standards on Auditing promulgated by the International Federation of Accountants (IFAC) and with Bank guidelines. The audit report will include separate opinions for the project financial statements, the Special Account, SOEs and the PMRs against which disbursements have been made or are due to be made from the Loan. The Borrower will submit to the Bank audited financial statements and the audit report within six months following the fiscal year-end. It was agreed during Negotiations that the auditors should be contracted no later than March 30, 2001.

Flow of Funds/Special Account:

Loan funds will be channeled through a Special Account within the Bulgarian National Bank or a commercial bank acceptable to the Bank. To facilitate timely project implementation, the Government will establish, maintain and operate under terms and conditions acceptable to the Bank, a Special Account at a local bank in which loan amount will be transferred. Where necessary, funds will be transferred from the Special account to the Project account for eligible project activities. The PCU will manage the Special Account, including preparing Loan withdrawal applications and supporting documentation, replenishment and reconciliation of the Account. The authorized allocation for this Special Account is proposed to be Euro $1,000,000.

Financial Management Manual:

A Financial Management Manual (FMM) is presently being prepared by the PCU Accountant and the Bank is providing all necessary support. The FMM would include: (i) the project's financial management system with special emphasis on accounting and auditing policies, standards and internal controls; (ii) role of the financial management systems in project management and implementation; (iii) accounting arrangements required for project management, the format and content of project financial reporting; and (iv) the auditing arrangements that will be used during project implementation. It is expected that by September 30, 2000, a final FMM, satisfactory to the Bank, will be ready.

Time Bound Action Plan:

For strengthening of the financial management system, a time-bound Action Plan was produced during appraisal and updated during a visit by a financial management specialist (FMS) in July 2000. The FMS issued a 4-B certificate after confirming that the Bank's minimum financial management requirements were in place. The updated Action Plan, presented in Annex 11, was discussed and agreed with the relevant government officials, including PCU staff during the above mentioned visit. The PCU Director and

Accountant will be responsible for ensuring adherence to the agreed timetable. Instructions will be sought from the management of MES, wherever necessary.

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

Several alternatives associated with improving overall resource management and teaching and learning in pre-university and higher education were discussed with the Government and with the Quality Enhancement Review panel in the Bank. The current approach and components were selected as the most appropriate to achieve the program objectives.

Lending instrument. Sector Investment Loan (SIL) versus Adaptable Program Lending (APL). The APL approach was selected because it provides the flexibility and long term framework required to address the challenges of introducing systemic changes in the education sector. Although the MES has already been introduced and the Parliament has enacted several legislative changes that provide the legal support for the introduction of those changes, considerable work remains to establish and develop the key institutions and organizations required for the implementation of those changes. The first phase of the APL will concentrate on developing those institutions and organizations, and in preparing the specific interventions contemplated in the framework proposed for the modernization of the sector. The SIL would not allow for the same degree of flexibility.

Changing teachers behavior and upgrading of skills. Given the weakness of the existing teacher training institutions in Bulgaria, and the need to involve school directors and inspectors in the training and support of teachers, the program would begin with a series of activities to raise awareness and provide initial training for teachers during the first two phases of the project, rather than starting with an ambitious program of extensive teacher training aimed at changing teachers' behavior. Also, during phase one of the APL, the program will commission research on removal of obstacles for the operation of a demand-driven teacher training system with an expanded number of qualified training providers, and will develop a proposed plan for the new system. During phase two, a detailed plan for the new system will be developed and implemented, putting in place necessary changes in regulations, funding, licensing of in-service providers and qualification of teachers for in-service levels. During phase three, the demand-driven system will be implemented, so that teachers may receive continued training in new teaching methods, with the active participation of an extended network of training providers.

Inclusion versus exclusion of vocational education and training from the objectives of APL1. Because of what the EU and other donors are already doing in vocational education in Bulgaria, it was decided to monitor closely what MES is doing in this area and to make a decision regarding the need to include World Bank support for the objectives of that reform during phase two and three of the APL, based on the progress and achievement of on-going initiatives.

Direct investment in teaching, learning and management improvement initiatives at HE institutions. It was decided that it would be best to provide incentives to encourage each institution to prepare its own improvement plans and to achieve long term sustainability through co-financing arrangements rather than providing direct inputs to the institutions. To accomplish this objective, a Competitive Teaching and Management System (CTMS) will be established to invite HE institutions to compete for funds to improve their internal management practices, as well as teaching and learning conditions. Those proposals that win will be aligned with governmental policies to encourage institutional consolidation and quality

improvement.

Funding of student loan scheme. Through the reform of the current stipend system, the Government is committed to and has the capacity to fund a guarantee fund to provide incentives to private banks to fund student loans. It was decided that the World Bank will finance technical assistance to design the new student loan and stipend system and to establish an agency responsible for managing the new student loan program.

Restructuring and improving efficiency of HE network of institutions. Based on the lessons learned from an unsuccessful previous experience in Bulgaria that attempted to promote the optimization of the existing network of institutions through the reform of the legal framework, the program is designed to achieve this objective through changes in the system of financial incentives contained in the allocation procedures. Consequently, the program seeks to promote optimization of the existing network through the reform of the system of resource and seat allocation. During phase one of the program, this reform will be designed and implemented by a Resource Allocation Committee established within MES. Based on the evaluation of this experience and consultation with relevant stakeholder, a decision will be made whether the long term sustainability of this reform requires a buffer body outside the control of MES. If that need is justified, a more independent Finance Council would be established during the second phase of the program.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed	Ongoing:		
	Health Sector Restructuring	S	S
	Social Insurance Administration	HS	HS
	Social Protection Adjustment	S	S
	Regional Initiatives Fund	S	S
Other development agencies			
1. PHARE: -introducing modular type training in the field of secondary and post-secondary education in compliance with the labor market demands; developing a certification system and legal framework for vocational education and training (VET).	Upgrading VET; ongoing		

2. PHARE: -raising the qualifications of vocational teachers and establishing common standards for the job description of vocational teachers; defining initial indices for assessing the quality of teachers in accordance to educational policy and existing legislation.	Teacher Career Path; project completed.		
3. PHARE: -upgrading the foreign language training of vocational teachers; setting up a functioning model for the foreign language training (English and German) of vocational teachers; and effecting the vocational training of teachers and students.	Foreign Language Training; project completed.		
4. PHARE: -establishing the level of the Bulgarian science and technology potential; setting up a National technology center for information dissemination; developing a national policy for science and technology; and creating a Technology Unit.	Development and Management of Science and Technology; ongoing.		
5. PHARE: -developing a preventive program for dropout children and reducing their numbers through incentives to return to the school system via various flexible forms of training;	School Drop-outs (feasibility study); completed.		
6. PHARE: -setting up a system for assessment and accreditation in the field of higher education on international standards; -international recognition of Bulgarian diplomas and qualifications.	National Evaluation and Accreditation Agency (feasibility study); completed.		

7. PHARE: -restoring ties and inter-relations between higher education and private and public institutions and units that need research and technology products in a market environment. Drafting a model for a science park infrastructure.	Science Park Network (feasibility study); completed.		
8. PHARE: -setting up an operative, efficient system for the assessment and institutional accreditation of Higher Education Institutes; building capacity for the functioning of a National Agency for assessment and accreditation, developing the criteria, methods and procedures; and continuing pilot projects on assessment and accreditation within selected fields.	National Evaluation and Accreditation Agency; completed.		
9. PHARE: -Developing a system for monitoring, training and socialization of school dropouts; setting up centers for teachers in three regions; building a scheme for the pilot centers; building an efficient data base.	School Drop-Outs; ongoing.		
10. PHARE: -delegation of budgets to 100 schools and units in four pilot municipalities; -training in school-based management for school directors, municipality staff and inspectors in the pilot areas; -development and installation of school administration software in pilot schools; -legislative framework for delegation.	Financial Management of School Education (FMSE); Extended to provide basic training in school-based management for a further 400 schools in 20 new municipalities as the first stage of a national extension of delegated budgets.		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. Lessons learned and reflected in the project design:

Lessons from several PHARE projects and from Bank-financed projects have been incorporated into the design of this proposed project. The PHARE Project BG 95.06-02: Financial Management of School Education (FMSE) has produced an interim evaluation that assesses the impact of delegated budgets in schools taking part in the FMSE project in four municipalities in Bulgaria. Delegation has already led to efficiency savings, the generation of additional income, and strengthening of management structures at the school level. A component within the proposed project would support the effort for a national extension of the delegated budget developed under the PHARE pilot project. (see Section C, sub-component 2.1).

Key lessons from the Argentinean Fund for Enhancement of Education Quality (FOMEC is the Spanish acronym) indicate that: (i) in order to prepare competitive proposals, HE institutions need to receive technical assistance in advance; (ii) HE institutions need to enhance both their management capacity to implement projects and the management information system required for monitoring investment and tracking quality assurance; (iii) the selection criteria for the Competitive Teaching and Management System for Higher Education should be linked to plans for improvement of productivity and establishment of modern budget management procedures; (iv) there is a need for stronger articulation of individual project components and sub-components; and (v) the management of the System needs to have the capacity and be ready to cut funding to projects that are not performing.

4. Indications of borrower commitment and ownership:

The proposed program is part of the education strategy of the Bulgarian Government and will contribute to implementing several changes introduced by MES in the legislative framework of both pre-university and higher education. At the request of the Bank, the MES has sent a letter of sector strategy to the Bank. For the preparation of the project, the MES has created several working groups that have been working during the past year in the design of the different components of the program and on the preparation of an implementation plan. To carry out these task, the working teams have benefited from external and local technical assistance financed under a PHRD Grant.

5. Value added of Bank support in this project:

During project identification and preparation, the Bank has provided MES with expertise and international experience for the consideration of technical and operational alternatives related to the design of interventions aimed at improving quality of teaching and enhancing management in pre-university and higher education. The Bank's involvement in the education sector in Bulgaria has already encouraged technical dialogue on subjects that are key to the improvement of the performance of the sector. During project identification and preparation, the Bank has promoted an increase in dialogue and participatory approaches for the formulation of a strategy for higher education and the development of a long term vision for the sector. This has allowed the MES to gain crucial technical knowledge and increase dialogue and cooperation with key stakeholders in the sector.

Prior to the Bank involvement in the sector, the MES was receiving support from the European Community through its PHARE program and from the Open Society Foundation (OSF) through the support of small education projects. PHARE and OSF have significantly reduced their presence and funding to the sector because, in the case of the European Union, education is not a priority in the process of expansion of membership, and in the case of OSF, the organization's priorities have been redirected to other countries in the region. This leaves the Bank as the main international agency supporting the modernization of education in Bulgaria.

E. Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4):

○ Cost benefit NPV=US$ million; ERR = % (see Annex 4)

○ Cost effectiveness

● Other (specify)

An examination of the additional expenditures, savings and long-term returns of the proposed project indicates that it is justifiable on economic grounds. This analysis has taken the framework of a traditional cost-benefit analysis, but recognizes that it is not possible to forecast the labor market effects of these

far-reaching reforms of the educational system. This analysis does not attempt to answer the usual question asked in investment decisions: what is the expected rate of return of this investment? Rather, it sets out to answer the question: if we have a target rate of return of 10 percent, what would be the increase in labor productivity resulting from the project necessary to achieve it? It should be noted that the lower this required increase, the better the project.

Current inefficiencies of the system can be attributed to outdated management practices, rigidity of the norms regulating deployment of teachers and teaching load, and outdated curriculum and teaching practices. Potential gains can be achieved by modernizing management practices, including the introduction of more flexible regulations, and by upgrading the curriculum and introducing more student centered teaching practices. In addition, it is expected that changes in curriculum and teaching practices will improve labor productivity through improved student learning. Another potential benefit, which is difficult to quantify, is the potential for improved performance in higher education of the students who have benefited from the schools reform. The interaction between the reform at the primary and secondary and that at the tertiary level is a complex matter and no attempt has been made to deal with it during project preparation.

General education component

Two of the project components -- Delegated Budgets and Optimization of the School Network -- are expected to lead to cost savings. Based on the results of a pilot project on Delegated Budget financed by the European Union PHARE program, showing average gains of about US$500 per year per school, a conservative estimate of the expected gains of the proposed program is of the order of US$1.8 million per year (see Annex 4, Table 1). An investigation by MES shows that the potential saving from closing schools that are redundant due to decline in school population is of the order of US$12,000 per school closed. A conservative estimate of the potential recurrent costs savings from optimizing the school network would be US$6 million per year (see Annex 4, Table 1). However, in the first years of the program these costs savings would be offset by severance payments made to redundant staff.

The introduction of new curriculum and testing in grades twelve, eight and four, plus the new program to upgrade knowledge and skills of school inspectors, directors and teachers will entail additional expenditures for MES. It is estimated that the introduction of new teaching methods required by the new curriculum will demand recurrent cost in new materials of about $5 per students, or approximately $5 million per year in the medium term when the program is completed. The administration of the new test would also involve additional recurrent costs of $1 million per year, while staff training will demand another million per year.

In order to achieve these long term saving the MES will need to make a total investment of approximately $69 million during the next nine years. These direct savings would also be complemented by a once-and-for-all increase in labor productivity resulting from the modernization of the system. Even a modest increase in productivity of 2.65 percent should produce an internal rate of return for this project of about ten percent.

The net impact is estimated on the basis of pilots undertaken when the norms were still in place. The additional savings from delegated budgets and the optimization of the school network in the current environment are, therefore, likely to be considerably higher. The student-teacher ratio in Bulgaria is currently 18 and therefore considerable scope for savings exist as Bulgarian schools move towards international best practice in terms of teacher-student ratios particularly in the context of demographic change. These savings offer an opportunity to MES to restructure salary payments and, in particular, to increase teacher salaries in the medium term in order to retain and attract effective teachers. This strategy

will help to ensure that the overall decline in teacher numbers is managed in such a way as to sustain an effective teaching force to enhance standards of teaching.

More generally, it will be important that a considerable proportion of the savings be retained by the schools – or at least by the municipalities – in which they were generated in order to maintain incentives for such savings.

Higher Education Component

This component of the project is structured so that there is intended to be no long term impact on recurrent costs and expenditures other than those directly attributable to the project. The budgets and expenditures of HEIs as a whole will remain unchanged although a substantial reallocation between them is expected. This should translate into a more efficient and relevant higher education sector, which in turn should lead to substantial productivity gains.

Annex 4, table 3 shows the economic costs and benefits estimated for this component. Since there is intended to be no net impact on recurrent expenditures, the only costs are project costs while the only benefits are the increased productivity of HE graduates. A once-and-for-all modest increase in labor productivity of 1 percent for HE graduates will result in the achievement of a target internal rate of return for the program of 10 percent.

2. Financial (see Annex 4 and Annex 5):

NPV=US$ million; FRR = % (see Annex 4)

Fiscal Impact:

Although in the medium term the program will reduce net recurrent revenues, in the short term it is expected that there would be a net increase in recurrent expenditures. In 2002, it is expected that there would be a net increase in expenditures in the order of US$780,000; in 2003 a net increase in expenditures of almost US$3 million; in 2004, a net increase of US$3.8 million. The increase in expenditures is expected to reach its peak in 2006 at US$4.5 million, thereafter falling to US$2.9 million in 2007, and to US$2.5 million and US$1.3 million in 2008 and 301,000 in 2009. However, these increases are offset by a net saving in recurrent expenditures of almost one million per year from 2010 onwards.

3. Technical:

The program has been designed taking into consideration the findings and recommendations obtained from analytical work conducted both during the preparation of the project as well as studies sponsored by the European Union through the PHARE program and by the Open Society Foundation (see annex 8 for specific reference), and from consultation with different stakeholders. It also draws on lessons from best practice distilled from similar projects supported by the World Bank and other donors in general and higher education.

During program preparation special attention was given to the analysis of the institutional capacity of MES to implement the activities described in the program. The local working teams that prepared the program benefited from technical assistance provided by leading international experts in education and by project managers of similar education projects, particularly for the design of the Competitive Teaching and Management System for Higher Education. The operational manual for this system has been designed taking into consideration the experience of similar systems in Argentina, Chile and Romania.

4. Institutional:

a. Executing agencies:

The MES has no experience implementing similar programs. The analysis of the organization capacity of MES to execute this program
(see Annex 13) revealed that the line units responsible for the direct execution of program activities would need to be strengthened through additional training in project planning and management and through short and long term local and foreign technical assistance. Expert committees will be used in those areas where MES has little experience in implementing reforms such as resource allocation in HE, student loans and the Competitive Teaching and Management System for Higher Education.

b. Project management:

The project will be implemented by line units within MES. A Project Coordination Unit (PCU) placed directly under the General Secretary will help coordinate project implementation and will provide support in areas of procurement, financial management, communications and management training to the MES line units responsible for implementing the project activities. The PCU Manager will report to a Project Board chaired by the Minister of Education and composed of the General Secretary, the Deputy Minister of Higher Education and the Deputy Minister of General Education.

The PCU will consist of the following staff: (i) a director; (ii) one coordinator for higher education and one for general education; (iii) a procurement specialist; (iv) an accountant; (v) a planning specialist; (vi) a communication specialist, and (vii) a bilingual (Bulgarian/English) secretary.

The management responsibility for the project as a whole, and for each and every component and sub-component, will be clearly assigned to managers heading organizational units within the Ministry and not to working groups and committees. Working groups and committees will continue to perform and review project-related work, but will not carry management responsibility for whole components and sub-components. The overall management responsibility for the project will be held by the Ministry's General Secretary. The management responsibility for all components and sub-components will be held by specifically designated managers as per the list included in Annex 13.

5. Social:

Program preparation activities have identified three groups whose individual and social characteristics demand differential treatment: ethnic minorities, students of HE institutions and school teachers. A project financed consultation process and social assessment will strengthen the capacity of MES to tailor different program activities to respond to the specific needs and demands of these groups. One of the main challenges of the program is to build support among HE students for the reform of the financing of HE institutions. Another important challenge is to get teachers and parents to understand and support the optimization of the school network and the changes on teaching practices. To face these challenges the program will use the information collected through the consultation process to prepare and implement an information and communication strategy, and to involve these groups in the design of some of the interventions.

A study of the education situation of ethnic minorities in Bulgaria was recently completed as part of project preparation. The study summarizes the main education problems faced by ethnic minorities in Bulgaria, documents some projects targeted to ethnic minorities that are currently under implementation and makes recommendations for addressing the main problems. One area that seems to be of key importance is the introduction of special teaching methods and teaching materials specially targeted to the needs of these

groups. The initial training and support provided to teachers will begin to address some of these issues. In phase III it will become possible to address these issues through specially designed and targeted programs for in-service teacher training.

6. Environmental assessment: Environment Category: C (Not Required)

It is not expected that the program will have any negative impact in the environment since it will only finance rehabilitation of MES offices required for the operation of the PCU and some of the working groups, and will not finance rehabilitation or construction of schools.

7. Participatory Approach (key stakeholders, how involved, and what they have influenced or may influence; if participatory approach not used, describe why not applicable):

a. Primary beneficiaries and other affected groups:

Participation has been central to program preparation and will continue during program implementation through a carefully designed process of information sharing, consultation and communication with different stakeholders. Different types of consultations have taken place during project preparation using different formats such as ad-hoc meetings, workshops and specialized surveys. Representatives of practically all direct beneficiaries of the program have been involved. Students teachers, MES staff, HE rectors, school directors, inspectors, NGOs, associations of ethnic minorities, members of parliament have participated in this process.

Stakeholder	**Participation Level**
School teachers	IS/CON
HE professors	IS/CON
School directors	IS/CON/COL
HE Rectors	IS/CON/COL
Inspectors	IS/CON/COL
Pre-university students	IS/CON
HE Students	IS/CON
Teacher Training Institutions	IS/CON/COL
Local Education Authorities	IS/CON/COL
Parents	IS/CON
NGOs	IS/COL
Association of Ethnic minorities	IS/CON
Central Government Authorities (MES, Ministry of Finance)	IS/CON/COL
Policy makers and members of Congress	IS/CON
Bankers	IS/CON/COL
International donors	IS/CON/COL

(IS: Information sharing; CON: consultation; COL: Collaboration

b. Other key stakeholders:

Stakeholder	**Participation Level**
Teacher Training Institutes	IS/CON/COL
Central Government authorities (MES, Ministry of Finance)	IS/CON/COL

Local education authorities	IS/CON/COL
Parents	IS
NGOs	IS/COL
Associations of ethnic minorities	IS/CON
Employers and business leaders	IS/CON
Policy makers and members of Parliament	IS/CON
International donors	IS/CON/COL

(IS: information sharing; CON: consultation; COL: Collaboration)

F. Sustainability and Risks

1. Sustainability:

The following factors are critical for sustainability of project benefits:

(i) Stability in education sector strategy and sector management.
(ii) Government willingness and capacity to provide system with incentives for improved efficiency and quality.
(iii) Local Government willingness and capacity to improve efficiency of school network.
(iv) Higher education institutions willingness to improve management efficiency and quality of teaching and learning.
(v) Private sector willingness to participate in the provision of in-service teacher training and student loans.

While it is not possible to avoid political changes during project implementation, the use of a participatory approach during preparation and a well defined strategy for a continuous process of consultation, and for a permanent process of communication and information should help to increase the prospects for a stable commitment to the objectives of the program and to a stable project management.

2. Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk	Risk Rating	Risk Mitigation Measure
From Outputs to Objective		
MES does not have the capacity to reform its internal structure and to create new units required for the implementation of the reform.	M	Agreement reached prior to appraisal on education sector strategy letter and agreement on program to strengthen implementation capacity of MES.
MES lacks the capacity to change regulations affecting resource allocation mechanisms	M	Continuous consultation with key stakeholders and communication to the broader public.
Key stakeholders do not accept the changes to legislation.	S	Consultation and information strategy.
There is not a State Guarantee to continue with program activities in Phase II and III	H	Continuous dialogue with the Government and relevant stake-holders.
From Components to Outputs		
Weak MES implementation capacity.	S	Strengthen capacity of MES through technical assistance and participation of private sector in the provision of some key services.

Sufficient incentives lacking to encourage inspectors and school directors to use the new skills and training materials.	M	Communication strategy and incentives such as improved working conditions through the provision of state of the art training materials.
Insufficient or delayed counterpart (Government) funds.	S	Public commitment by the Government to Modernize the education sector reduces the risk that funding will not be available.
Insufficient incentives are in place to encourage HE institutions to carry out internal reforms and to participate in the Competitive Teaching and Management System for Higher Education.	S	Consultation and communication strategy.
Insufficient incentives are in place to encourage local governments to participate in Delegated Budget and School Network Optimization programs.	S	Constant consultation supported by a continuous information and communication strategy.
Overall Risk Rating	S	Permanent communication with MES and close supervision during the initial phase of project implementation.

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N(Negligible or Low Risk)

3. Possible Controversial Aspects:

Increase in student fees for higher education could create opposition from students. The Government has recently submitted to Parliament, and Parliament has enacted legislation establishing student fees with very little opposition. The establishment of a modern student loan and stipend system should help reduce this risk.

Another sensitive area is school optimization. School closings are typically very controversial. Effective public communications explaining the educational benefits for children or cost benefits to municipalities might help alleviate problems. Also, teachers that would be losing their job could be provided with "lifelong learning" training opportunities to effectively help retrain them. Some of these teachers could be provided with employment opportunities by the newly established in-service teacher training providers.

G. Main Loan Conditions

1. Effectiveness Condition

1. None.

2. Other [classify according to covenant types used in the Legal Agreements.]

1. Maintain with adequate staff and resources the Project Coordination Unit, the Competitive Teaching and Management System, the Higher Education Steering Committee, the Student Assessment Unit, the Resource Allocation Committee for higher education.
2. Appoint independent auditors by March 30, 2001.
3. Submit a Progress Report and an Annual Action Plan no later than May 15 of each year, including a Procurement Plan.
4. Carry out review, by November 30, 2002, of the implementation of the project and achievement of its objectives.

Conditions of Disbursement:

1. The appointment of the communication officer and the bilingual secretary in the PCU would be conditions of disbursement for payments for consultant services for the communication and information sub-component.
2. The appointment of an executive director and members of the executive council for the CTMS with qualifications and terms of reference acceptable to the Bank would be condition of disbursement for payments for consultant services for the CTMS sub-component.

H. Readiness for Implementation

☐ 1. a) The engineering design documents for the first year's activities are complete and ready for the start of project implementation.
☒ 1. b) Not applicable.

☒ 2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.
☒ 3. The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.
☐ 4. The following items are lacking and are discussed under loan conditions (Section G):

The procurement documents for the first six months activities are complete and ready for the start of project implementation.

I. Compliance with Bank Policies

☒ 1. This project complies with all applicable Bank policies.
☐ 2. The following exceptions to Bank policies are recommended for approval. The project complies with all other applicable Bank policies.

Ernesto P. Cuadra	Annette Dixon	Andrew N. Vorkink
Team Leader	**Sector Manager/Director**	**Country Manager/Director**

Annex 1: Project Design Summary

BULGARIA: Education Modernization Project

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Sector-related CAS Goal: Support the Government's effort to fight poverty and develop Human capital. Support measures designed to arrest the deterioration in education quality, increase the efficiency of resource allocation, and improve equity in the education sector	**Sector Indicators:** New curriculum is aligned with modernization of economy Increase proportion of education expenditures going to inputs other than teacher salaries	**Sector/ country reports:** Analysis of student assessment and of special surveys with employers Analysis of education expenditures	**(from Goal to Bank Mission)** No major economic or social crisis Enough resources are allocated to develop policy dialogue on education with the Government
Program Purpose: 1. Improve the quality of teaching and learning in Bulgarian pre-university and higher education institutions.	**End-of-Program Indicators:** At least 60 percent of school teachers are using interactive learning processes in their classrooms. Inspectorates are supporting school directors and teachers in their effort to improve student attainment by providing mentoring sessions and by helping them understand the results of student assessment and evaluation. Curriculum in participating HE institutions is revamped with greater emphasis on meeting labor force and societal needs. Increase by 20 percent in number of young academic staff in HE institutions with post-graduate degrees.	**Program reports:** Student assessment Surveys and studies assessing the operation of schools and HE institutions. Routine statistics compiled and published by MES. Internal reports of HE institutions. Reports produced by the HE accreditation system. Audit of HE institutions.	**(from Purpose to Goal)** Government maintains commitment and continuity towards the education reform. Government develops commitment and support for the reform among key stakeholders (teachers, school directors, inspectors, and rectors, faculty and students of HE institutions. State budget and expenditures for education remains at least constant in real term over time.

2. Improve overall resource management in Bulgarian pre-university and higher education institutions.	85 percent of municipalities have prepared school network optimization plans. 80 percent of the municipalities which have prepared school network optimization plans are implementing those plans. Schools participating in the Delegated Budget program increase by 50 percent the amount of the school budget spent on teaching materials. 25 percent of HE institutions are offering joint services and programs through consolidation and/or merging. The management structure, including the management staff at participating HE institutions is improved.		Municipalities are motivated and interested in optimizing their school network. Municipalities are interested in transferring school management and budget to the school level. HE institutions are motivated to offer join services and to consolidate some of their services and programs. Senior faculty members in HE institutions are willing to retire and to open opportunities to new faculty members.

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Project Development Objective:	**Outcome / Impact Indicators:**	**Project reports:**	**(from Objective to Purpose)**
1. To create the conditions for enhancing the quality of the teaching force and improving the learning processes in primary and secondary schools.	1.1 Curriculum Council (CC) established. 1.2 Curriculum Resource Center (CRC) established. 1.3 National Assessment Unit is operational. 1.4 Detailed plan for training teachers in the new standards and curriculum is ready and operational; training of teachers in grades 9 and 10 is completed and evaluated.. 1.5 Research Studies Completed, Stakeholders Consulted, And Preliminary Plan Proposed For The Design And Implementation Of A Demand-Led In-Service Teacher Training System.	Routine project supervision.	Support for education reform is sustained at the level of the Government in general and specially at the level of the Ministry of Finance and Ministry of Education and Science. HE institutions have the capacity to prepare and present proposals to the Competitive Teaching and Management System for Higher Education.
2. To create the conditions for a more efficient use of financial, physical and human resources in primary and secondary schools.	2.1 Legislation to expand Delegated Budget modified. 2.2 Education Management Information System established.		
3. To create the conditions for enhancing the quality of the teaching force and improving the learning processes in higher education institutions.	3.1 Competitive Teaching and Management System for Higher Education is operational.		
4. To create the conditions for a more efficient use of financial, physical and human resources in higher education institutions.	4.1 Finance Council for Higher Education established. 4.2 Student Loan Agency established. 4.3 Higher Education Management Information System established.		

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Output from each Component: **I. Create the conditions for enhancing the quality of the teaching force and improving the learning processes in primary and secondary schools.**	**Output Indicators:**	**Project reports:**	**(from Outputs to Objective)**
1. New standards-based curriculum developed for grades 1 to 12, and student assessment and evaluation system created.	**Capacity Building in MES:** 1.1 Train key MES personnel in curriculum design and implementation by 12/2001. 1.2 Develop and introduce new curriculum standards and content for different subjects in grades 1, 5, and 10 by 9/2001. 1.3 Establish subject working groups and appoint members by 2/2001. 1.4 Training seminars for writing new state requirements (national standards) and curriculum content (programs of study) for all subjects with advice on teaching approaches attended by 120 specialists. 1.5 Curriculum Council members participate in study tours by 1/2002. 1.6 Council members receive 100 hours of technical assistance for defining and writing new standards. 1.7 Regulations to support the introduction of new standards are prepared by September 2001. 1.8 Draft, consult and approve state requirements and curriculum content for grades 1,5,and 10 by 7/2001. **Structures for Sustainable Curriculum Development:** 1.9 New structure and operational rules and roles of the Educational Policy Directorate are defined by 12/2000.	MES statistics Project supervision reports	MES is willing to reform its internal structure for the creation of new units MES is willing and has the capacity to change key regulation. Trained staff are motivated to implement the new curriculum. New methods and materials are used by newly trained staff. Competencies acquired by trained staff are actually used. Results of surveys and studies are utilized to improve design and implementation of curriculum and training.

	1.10 TORs, constitution and memberships of CC defined by January 2001. 1.11 Ministerial Decree creates the CC by March 2001. 1.12 Recruit and train members of CC by June 2001. 1.13 Complete study visits to schools by November 2001. 1.14 Equip and endow Resource Center with state of the art materials and access to internet by end of project (EOP). 1.15 Commission background studies on effective teaching and monitoring implement- ation of new curriculum by EOP. **Assessment and Evaluation System:** 1.16 Establish TORs, agree on staffing structure and draft job description for student assessment and evaluation unit by12/2000. 1.17 Establish student assessment and evaluation unit within MES by 6/2000. 1.18 Refurbish and equip student assessment and evaluation unit, including hardware and software by 3/2001. 1.19 Develop assessment instruments by 7/2002. 1.20 Train student assessment specialists by 1/2002. 1.21 Train staff of schools in administering instruments and for markers by 7/2002. 1.22 Study visits to learn from best practices on development of student assessment systems completed by 11/2001. 1.23 Fellowship to train assessment specialists on state of the art methodologies for student assessment completed by 12/2001.			

2. Awareness-raising training in new standards and curriculum implemented and plan for systematic training prepared.	1.24 Develop assessment instruments for assessing student achievement, including consultation with stakeholders by 7/2002. 1.25 Assessment of grade 12 students, including pilot test by Y 3/2003. 1.26 MES develops a working system to monitor the efficiency of individual schools by 3/2003. **Educational Materials** 1.27 Technical specifications for the production of new educational material ready by 9/2002. 2.1 200 2- day training seminars for 9000 school directors and inspectors conducted in August 2001 and August 2002. 2.2 Detailed Information Packages To Support Awareness Training By School Directors Produced And Distributed For Each Teacher In Relevant Grades: 21000 In For Grades 1,5,11 In 2001; 21,000 For Grades 2,6,12 In 2002; 12,000 For Grades 3,7 In 2003. 2.3 awareness sessions provided annually in every school by directors for teachers in relevant grades (listed in 2.2 above) 2.4 3-day training sessions provided annually for 140 members of regional support groups, to assist them in supporting teachers implementing new curricula. 2.5 2-day training sessions provided for all teachers in grades 9 and 10 (approx. 12,000) in groups no larger than 35, in July and august 2002.	Project Monitoring system Project supervision reports	Trained staff are motivated to implement new curriculum and they use the competencies acquired during the training.

3. MES capacity to organize a demand-led training is developed.	3.1 Two research studies for the development of a demand-led in-service teacher training completed by January 2002. 3.2 One consultation seminar for 60 participants to provide input on proposed plan for demand demand-driven in-service teacher training completed by April, 2003.		Results of surveys and studies are utilized to improve design and implementation of curriculum and training.
II. Create the conditions for improving overall resource management in primary and secondary schools. 1. The Delegated Budget Program is extended.	1.1 Selection criteria to choose participating municipalities and selection of municipalities is prepared by 12/2000. 1.2 Allocation formula in participating municipalities is designed and implemented by 12/2000. 1.3 Policy makers complete study visits to current sites where program is in operation and abroad where similar programs are operating at a national scale by 9/2001. 1.4 FMSE Center staff is increased from 3 to 5 by 1/2001. 1.5 Equip the FMSE Center with appropriate hardware and software by 3/2001. 1.6 Implement a train the trainer program to increase the total number of trainers that will be supporting the introduction of delegated budget in schools by 3/2001. 1.7 Assessment of training, hardware and software needs of participating municipalities and schools is completed by 6/2001. 1.8 School administration tools and software to support the introduction of delegated budget are developed by 2/2001.	Supervision reports Special surveys MES statistics	Municipalities are motivated to participate in the Delegated Budget Program. Competencies acquired by trained staff are actually used. Municipalities and schools have the resources to maintain and update the equipment received.

	1.9 1600 school directors participate in training seminars and workshops on management of school budget by 9/2003. 1.10 300 school administrative staff participate in training workshops on uses of specialist school administration tools and software by 9/2003. 1.11 10% of local education officers are trained in the operation of the program by 9/2002. 1.12 1600 participating schools and 24 municipalities receive hardware and software to support financial control and management of school budget by 7/2003. 1.13 A total of 1600 schools receive and administer lump-sum budget in 24 municipalities by 7/2003.		
2. MES' capacity to provide technical support to municipalities for optimizing the school network is strengthened.	**School Place Planning and Optimization System:** 2.1 Methodology for School Place Planning and optimization system (SPPO) including criteria which schools should satisfy to be educationally and financially viable is developed by 12/2002. 2.2 Geographic Information System to support SPPO, including data collection and analysis is established by 2/2003. 2.3 Procurement of hardware and software to support the implementation of SPPO is completed by 6/2001. 2.4 Training of local education officials on SPPO is completed by 1/2003. 2.5 School place planning system is operational by 10/2003.	Supervision reports. MES statistics.	There is political will in MES to empower Municipalities to prepare and implement their own school optimization plans. Municipalities are willing to work with MES in the preparation of school optimization plans. Competencies acquired by trained staff are actually used.

3. MES Education Management Information System (EMIS) is established.	3.1 Develop and implement capacity for information gathering through the use of periodic surveys, focus groups, special studies, auditing, etc. by 10/2002. 3.2 Develop and implement capacity for data analysis (system, statistical, financial, cost, etc. simulation and forecast, dissemination and reporting by 5/2003. 3.3 Training seminars and workshop for EMIS staff of the on techniques of data collection, simulation, analysis and reporting by 12/2001. 3.4 Study visits for 4 to learn from best practices abroad by 4/2002. 3.5 Refurbish and equip EMIS unit with hardware and software required for data collection, storage, analysis and dissemination by 8/2002.	Supervision reports.	MES authorities are willing to use empirical data for the formulation of educational policies and for the evaluation of the impact and results of the changes introduces. Trained staff are motivated and are given the opportunity to use the new knowledge and skills acquired and to be involved in policy design. Competencies acquired by trained staff are actually used.
III. Create the conditions for improving overall resource management in higher education institutions. 1. The allocation process for resources and seats in HE is reformed.	1.1 Working group of MES staff and HE officials is established by 12/2000 date to develop a merged process of allocating seats and resources. 1.2 With foreign TA, the Working Group develops criteria for setting “prices” for the allocation of seats and resources by 7/2001. 1.3 A governance mechanism to serve as a forum for negotiations between MES and HE officials is established by 10/2001. 1.4 A computer model for simulating the results of different allocation procedures and prices is developed by MES staff and foreign and local consultants by 7/2001.	Supervision reports Regular reports from the Resource Allocation Committee.	MES maintains commitment to implement new resource allocation system. MES has the capacity to involve HE institutions in the design of the new resource allocation system. There is no strong opposition from HE institutions to the reform of the resource allocation system.

	1.5 MES prepares a proposal for new allocation procedures by 8/2001. 1.6 New allocation procedures for resources and seats are adopted by Parliament by 1/2002. 1.7 The new allocation procedures are implemented by 7/2002.		
2. A Higher Education Management Information System (HEMIS) is established.	2.1 Develop and implement capacity for information gathering through the use of periodic surveys, focus groups, special studies, auditing, etc. by 9/2003. 2.2 Develop and implement capacity for data analysis (system, statistical, financial, cost, etc. simulation and forecast, dissemination and reporting by 9/2003. 2.3 Training seminars and workshop for HEMIS staff of the on techniques of data collection, simulation, analysis and reporting by 10/2002. 2.4 Study visits for a team of 4 to learn from best practices abroad by 5/2002. 2.5 Refurbish and equip HEMIS unit with hardware and software required for data collection, storage, analysis and dissemination by 5/2002.	Supervision reports	HE institutions are motivated to participate in the new HE management information system and are willing to submit accurate and reliable reports on a regular basis.
IV. Retain Accessibility to higher education institutions. 1. A student loan program and reform of existing system of stipends is established.	1 Reports are prepared by local consultants by 11/2001 date on the current use of financial assistance in Bulgaria for both stipends and student loans. 2 Working group of MES staff, HE officials, and consultants is formed by 12/2000 to identify the need for student financial assistance in the future and to recommend a student aid scheme in Bulgaria.	Supervision reports Data from MES	MES maintains commitment to the introduction of student fees and systematically increase its value to match real costs. There is no strong opposition from students to the introduction of fees and to its increase in value.

	3 A financial model is developed by 7/2001 to estimate the costs of different financial assistance arrangements. 4 A proposal is developed by the Student Aid Working Group by 11/2001to the MES. 5 The MES proposes a student aid scheme by 4/2002. 6 The Parliament adopts a student aid scheme by 4/2003.		MES is able to design a student loan program that motivates Private Banks to participate.
V. Create the conditions for enhancing the quality of the teaching force and learning processes in higher education institutions. 1. A Competitive Teaching and Management System for Higher Education for improving teaching and resource management is created.	1.1 TA is provided to identify priorities for a Competitive Teaching and Management System for Higher Education to improve the quality of teaching. 1.2 Working group of MES staff and HE officials is formed by 11/2000 to identify priorities for the proposed Fund. 1.3 List of activities contemplated under the auspices of the Fund are presented by the fund working group to MES for consideration by 12/2000. 1.4 Estimates of the potential cost entailed in funding the list of priorities of the Fund are prepared by 1/2001.	Supervision reports. Periodic reports from the Competitive Teaching and Management System for Higher Education.	HE institutions are motivated and have the capacity to prepare and implement proposal for improvement of management and teaching.
VI. Strengthen MES internal management capacity for project management and communications. 1. Project Coordination Unit (PCU) established.	1.1 Refurbish and equip the PCU with necessary hardware and software by 5/2001. 1.2 PCU is trained in pro-gram planning, moni-toring, procurement and financial management by 5/2001.	Supervision reports	PCU and working groups have full ownership of the goals, and implementation arrangements of the project and have the tools and resources to adopt a result oriented approach to project implementation.

2. Project has an operating communication strategy.	2.1 Communication cam-paign to support the introduction of new standards and curriculum content and its implication for teaching methods established by EOP. 2.2 introduction of new student assessment system established by EOP. 2.3 Communication campaign to support the introduction of new inspection framework established by EOP. 2.4 Communication campaign to support the introduction of Competitive Teaching and Management System for Higher Education for in-service training established by EOP. 2.5 Communication campaign to support the Introduction of the School Network 2.6 Communication campaign to support the introduction of new system of student loans and stipends for higher education established by EOP. 2.7 Communication campaign to support the introduction of Competitive Teaching and Management System for Higher Education for improvement of teaching and management in higher education established by EOP.		

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Project Components / Sub-components: **I. Create the conditions for improving the quality of the teaching force and learning processes in primary and secondary schools.** **1.1** Development of new curriculum and teaching approaches, and establishment of student assessment system. **A**. Build sustainable expertise in curriculum design and implementation within MES. **B**. Establishing the structures for sustainable curriculum development. · Strengthening policy functions of Educational Policy Directorate. · Establishment of Curriculum Council. · Establishment of Curriculum Resource Center within the Education Policy Directorate. **C**. Establishment of a student assessment and evaluations system and a unit within the MES. · Establish National Student Assessment Unit as a financially independent project within MES. · Development of assessment system and implementation of system in grades 12. · Analysis and dissemination of results. **D.** Develop new educational materials. · Consultation process and study tours for the definition of needs and technical specifications of new educational materials. · Prepare technical specifications for new educational materials.	**Inputs: (budget for each component)** **US$5.22 million**	**Project reports:** Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	**(from Components to Outputs)** Trained staff are motivated to continue to work in relevant positions and are able to apply new knowledge and skills. Newly created structures are accepted and operate with minimum conflict with exiting units. Newly created units receive adequate resources for its operations.

1.2a Awareness-raising training in new standards and curriculum implemented and plan for systematic training delivered. · Prepare training program for school directors, inspectors, and regional support groups. · Recruit and train trainers of school directors and regional support groups. · Prepare training materials for school principals, inspectors, and regional support groups to be used by trainers. · Prepare each year detailed information packages for teachers in relevant grades, to be used in awareness sessions provided annually by directors in each school. · Provide Annual Training For School Directors, Inspectors and Regional Support Groups. · Train school directors and inspectors. · Cascade awareness-raising training for all teachers by school directors and inspectors. · Prepare training plan and strategy on new standards and curriculum. · Recruit and train trainers for second wave of teacher training. · Prepare training packages for training of teachers in grades 9 and 10 in 2002 and grades 1,5,11 in 2003 Provide training of teachers in grades 9 and 10, in July and august, 2002. · Evaluate all training sessions provided and incorporate recommendations, for continued improvement of training system.		Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	Training materials are used by inspectors and school directors to raise awareness and train teachers. Competencies acquired by inspectors and school directors are actually used in working with teachers.
. **1.2b** Development of MES capacity for stimulating the creation of a demand-led in-service training system. · Feasibility studies for the development of a demand-led in-service teacher training system. · Consultation process for the design of a demand-led in-service teacher training system.		Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	There is interest within NGOs and other independent institutions to participate in the provision of in-service teacher training.

II. Create conditions for improving overall resource management in primary and secondary schools.	**US$6.13 million**		
2.1 Extension of Delegated Budget Program · Establishment of institutional capacity for implementation of delegated budget; define rules and regulations; and strengthen implementation capacity of the Financial Management of School Education (FMSE) Center. · Allocation of lump-sum budgets to participating schools and management of the budget by schools. · Equip schools participating in the program. · Train school personnel and local education officials involved in the program. · Select municipalities that will participate in the next phase of extension of the program.		Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	Training, equipment, protocols and systems developed by the program are used at the school level for managing resources.
2.2 Strengthening MES capacity for providing technical support to municipalities for the optimization of the school network.		Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	Methodology and systems developed by MES are accepted and adopted by Municipalities for optimizing their network of schools

Development of a school place planning and optimization system (SPPO). Development of a geographic information system. Training of local education officials on school place planning. **2.3** Establishment of an Education Management Information System (EMIS) in the MES at the secondary level. · Establishment of a unit responsible for putting in place and managing an integrated EMIS. · Development and testing of data collection instruments and collect data. · Equip central and pilot units. · Training of staff and development of data analysis and reporting capability by EMIS unit. **III. Creation of conditions for improving overall resource management in higher education institutions.** **3.1a** Reform of allocation processes for resources and seats in Higher Education. · Consultation process and technical work for designing of formula and new allocation system. · Creation of the governing body that will manage the resource allocation process. **3.1b** Establishment of a Higher Education Management Information System (HEMIS) in the MES. · Establishment and set up of a unit responsible for putting in place and managing an integrated HEMIS. · Development and testing of data collection instruments and collect data. · Training of staff and development of data analysis and reporting capability by HEMIS unit.	**US$0.45 million**	Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	Training and equipment are used by staff for data collection, synthesis and analysis. School directors and local authorities are motivated to provide accurate and valid information to MES.

IV Establishing a student loan program and reform of existing system of stipends. Consultation process and technical work for designing the student loan and stipend system. · Creation of the governing body that will manage the student loan system.	**US$0.23 million**		
V. Creation of a Competitive Teaching and Management System for Higher Education for improving teaching and resource management · Study visit to learn about the operation of similar systems in other countries. · Consultative process for the creation of the system. · Establishment of procedures for the operation of the system and the governing body that will administer the system.	**US$5.59 million**	Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	
VI. Strengthen MES internal management capacity for project management and communications. **6.1** Establishment of a Program/Project coordination unit, including: · Development of the staff's procurement capacity and set up of a financial management system to tract and monitor project accounts. **6.2** Design and implement a communications campaign · Development of a communication campaigns to inform public at-large about the implementation of the program and to support specific aspects of it.	**US$0.67 million**	Regular Bank monitoring reports including: ● progress reporting ● financial reporting ● disbursement reports ● procurement records ● Contracts, TORs ● Audits ● Supervision reports	PCU remains fully staffed and operational with appropriate skills and procedures PCU communicates effectively with working groups and other implementing agencies MES management provides leadership to guide and support communication and information strategy.
Front End Fee **TOTAL:**	**US$0.14** **US$18.43 million**		

Annex 2: Detailed Project Description
BULGARIA: Education Modernization Project

By Component:

Project Component 1 - US$5.22 million

Component 1. To improve the quality of teaching and learning in general education the program will: (i) support the introduction of new standards-based curriculum, design and test on a pre-pilot basis a new inspection system related to curriculum, and student assessment and evaluation instruments; and (ii) reform the in-service training system for teachers, school directors, inspectors and local education administrators.

Sub-component 1.1. To help introduce a **standards-based curriculum and the creation of a student assessment and evaluation system** the program supports two main interventions. First, it will contribute to building sustainable expertise in curriculum development and implementation within MES. Second, it will help establish the structures for sustainable curriculum development by establishing a Curriculum Council and a Curriculum Resource Center within the Educational Policy Directorate. The principal activities to be implemented during phase I of the program will consist of: (a) establishment of the Curriculum Council and the Curriculum Resource Center; (b) commissioning studies on effective teaching methods and techniques for curriculum monitoring and evaluation of students at the classroom level; (c) continuing the implementation of the interim curriculum in grades 1, 2 , 5, 6, and 9 to 12 and the evaluation of the impact of that curriculum; (d) development of detailed programs of study for the new curriculum in core subjects in the relevant grades; (e) design technical specifications and preparation of bidding documents for the production and distribution of new educational materials to schools; (f) establishment of the National Assessment Unit; (g) initial development of test for grade 12; (h) refurbish and equip assessment unit; and (i) train core staff of assessment unit. The main activities to be implemented during phase II of the program will consist of: (a) implementation of the new curriculum in all remaining grades; (b) production and distribution of new teaching materials for all grades; (c) monitoring the implementation of the new curriculum; (d) conduct full assessment of grade 12 students; (e) finalize training of staff of assessment unit; (f) initial development of assessment of grade 4 (or 8); and (g) complete equipping assessment unit. Finally, in phase III the program contemplates: (a) consolidate the new curriculum by introducing changes to reflect the results of the monitoring and evaluation process; (b) conduct an impact evaluation of the introduction of the new curriculum; (c) implement assessment of grade 4 (or 8); (d) design and implement assessment of grade 8 (or 4); and (e) develop testing materials for other grades that teachers can use in their schools. The inputs to be finance under this sub-component include technical assistance, training seminars, study visits, data collection and analysis, equipment, small civil works, fellowships, and state-of-the-art materials.

Sub-component 1.2. To encourage the development of an improved national capacity to deliver high quality, cost effective and relevant in-service training for teachers, school directors, inspectors and local education administrators and planners, the program will promote the **development of a demand-driven system of in-service teacher training**. It is envisioned that in the early stages of the creation of this system, MES will need to adopt a more directive role than what will be required at a later stage, when a network of independent training providers has been developed. During the initial stage MES will need to make sure that inspectors, school directors and teachers receive some basic training to support the implementation of the new standards and curriculum. At the same time it will need to develop the accreditation procedures for licensing training providers, revise the funding procedures for in-service training and the system for certification of in-service levels, and the standards of accountability and procedures for monitoring quality of provision. Finally, it will need to support training providers so they

can development the technical capacity and skills needed to deliver the training courses that will be required by the new system of standards. The main activities that will be implemented during phase I include: (a) awareness-raising training of school directors and inspectors on the new standards; (b) cascade awareness-raising training for all teachers by school directors and inspectors; (c) training of regional support groups, to assist teachers in implementation of new curriculum and teaching methods; (d) design, printing and distribution of information packages for teachers, for use annually in awareness sessions provided by directors; (e) design, printing and distribution of training packages for the training of teachers, to start in the last year of phase 1; (f) training of teachers in grades 9 and 10 in july-august, 2002; (g) feasibility study and consultation process for the creation of a demand-led training system for in-service teacher training; (h) develop sample norms and regulations in consultation with stakeholders for the introduction of such a system; and (i) strengthen the capacity of MES to organize a demand-led in-service teacher training system. The main activities contemplated for phase II are: (a) initial training of 21,000 teachers in 2003 and 2004, and 12,000 in 2005; (b) impact evaluation of the training; (c) develop procedures to accredit teacher training institutions that will participate in the new demand-led training system; (d) design training program in new teaching methods to be delivered through the new training system; (e) strengthen the capacity of the current and potential new providers to provide in-service teacher training close to schools; (f) design a pilot project for operating a demand-led training system; and (g) revision of certification arrangements for the provision of in-service teacher training and removal of exiting monopoly of teacher training institutes. Finally, during phase III the project will concentrate on: (a) establishing the new demand-led in-service teacher training system; (b) training teachers on new teaching methods and pedagogy using the newly established demand-led training system; and (c) evaluating the impact of the new system. The main inputs to be financed under this sub-component include training seminars, development of training and promotional materials, fellowships, technical assistance, and monitoring and evaluation.

Project Component 2 - US$6.13 million

Component 2. To improve overall resource management in general education the program will support the following three sub-components: (i) extension of the Delegated Budget Program at the national level; (ii) strengthen MES capacity to provide technical support to municipalities for optimizing the local school network; and (iii) establishment of a modern Education Management Information System (EMIS) in MES.

Sub-component 2.1. To give school directors greater discretion in spending decisions in their schools, the program contemplates **extending the pilot project on delegated budget** to all general and vocational schools by the year 2009. This should help promote a more efficient use of school resources, encourage flexibility and innovation in school management and promote greater community participation on school matters. The infrastructure for a national extension of delegated budget was developed under the pilot project supported by PHARE. There is currently an active Working Group including representatives from MES and the Ministry of Finance. Training materials have been developed and tested, and there is a cadre of experience trainers. Also, a Training Center has been established as an independent unit within MES and a director appointed to manage the national extension of the program. The main activities contemplated for phase I include: (a) update and expand decree 30/98, removing conflicts with other legislation and setting a time table for national implementation; (b) evaluate the impact of delegated budget in 24 pilot municipalities incorporated to the system during 1999-2000; (c) strengthen the training capacity of the Training Center; (d) equip schools participating in the 24 pilot municipalities; (e) extend delegated budgets to an additional 30 municipalities, including equipping schools; and (f) select municipalities for the next phase. During phase II, the program contemplates: (a) extending delegated budget to an additional 214 municipalities base on the following schedule: 30 municipalities in year 2003, 50 municipalities each in year 2004 and 2005, and 80 municipalities in year 2006; and (b) evaluate impact of delegation in the first

54 municipalities and on the new municipalities that are added each year. Finally , starting in the year 2007 the program contemplates extending delegated budget to special schools. As schools become self-managing, effectiveness has to be judged by educational outcomes rather than inputs. This means that a student assessment and evaluation system would need to be developed concurrently with this initiative. The main activities to be financed under the project include training materials and seminars, computer equipment and software, e-mail connection, office equipment, technical assistance, and study visits to current sites where program is in operations and abroad where similar programs are operating on a national scale.

Sub-component 2.2. In order to assist MES and individual municipalities implement a program of school closure and amalgamation, the program will **strengthen MES capacity to assist municipalities** in deciding how to optimize their school network. For this sub-component, the first phase of the program will focus on: (a) developing and evaluation of a school place planning and optimization methodology by the MES that would be made available to local governments so they can prepare their own optimization plans; (b) training local officials on how to use the methodology; (c) developing and distributing training materials for school place planning and optimization; and (d) equipping MES to work with a computerized school place planning model. During the second phase, the program will support dissemination work and technical assistance provided by MES to municipalities to assist then in the preparation and implementing optimization programs. The main activities to be financed under this sub-component include training seminars, technical assistance, field visits, consultation process, development and printing of training and promotional materials, equipment and software, data collection, analysis and dissemination, and grants to municipalities.

Sub-component 2.3. To strengthen MES capacity to design, implement and evaluate new policy options and programs, the program will help establish a new **Education Management Information System**. This unit will be responsible for providing policy makers with information about the state and evolution of the education system, and for conducting simulations and forecast. During phase I, the program will support: (a) the establishment of the EMIS unit with qualified personnel; (b) the development of the specifications of the EMIS both with respect to the structure of the data that it will contain and manage, and in relation to the hardware and software that will be necessary to support the data management activities; (c) training of MES personnel and users at the national level; (d) develop of a pilot system for data collection and management at the central level; (e) evaluation of the pilot; and (g) tender and procurement of hardware and software for pilot system. During phase II, the program will support the expansion of the pilot to the national level including: (a) training of inspectors and other local users; (b) tender and procurement of hardware and software to support national expansion; and (c) evaluation of data utilization practices by users. The main activities to be financed under this component will be data gathering and analysis, policy studies and evaluation, technical assistance, the development of a comprehensive education data base for pre-university education, hardware and software, training, seminars, and study visits.

Project Component 3 - US$ 0.45 million

Component 3. To improve efficiency and effectiveness in allocating resources to higher education institutions the program contemplates the implementation of the following two sub-components: (i) reform of allocation processes for resources and seats; and (ii) the establishment of a dedicated national higher education management information system (HEMIS).

Sub-component 3.1. The **reform of the allocation process for resources and seats** will be promoted in two important ways. First, the processes of allocating seats and resources would be integrated and a system of normative costs would be introduced. Second, there will be debate over whether the priorities for funding should be based on policy considerations more than on costs and whether the funding for research

should be separate from the funding for instruction. It is expected that these reforms in the allocation process would encourage the consolidation of institutions and, that together with other measures supported by the program such as the Competitive Teaching and Management System for Higher Education (see sub-component 3.2), would increase the efficiency of the system, thus freeing up resources that could be used for quality enhancements. During phase I, the program will support: (i) the establishment and setting into operation of a Resource Allocation Committee; (ii) a consultation process for deciding on the principles and priorities that will guide the new allocation system; (iii) the definition of the formula for allocation; and (iv) pilot testing and evaluation of the new system and formula. During phase II, the program will support; (i) the implementation of the new system and formula on a national scale; and (ii) the continuous monitoring and evaluation of the new system and formula. Finally, during phase III, the program will support the introduction of changes in the new system and its continuous evaluation. The principal activities to be financed by this sub-component would be technical assistance to develop the new allocation system and formulas, studies to support the design and evaluation of the new system and formula, training of staff responsible for operating the new system, equipment necessary for the establishment and operation of the Resource Allocation Committee, seminars and other consultation related activities, dissemination materials, and a study tour to observe how such a process works in selected other countries.

Sub-component 3.2. The program will support the development of a modern monitoring system to assist the MES and higher education policy makers track the implementation of the reforms. This will be accomplished through the establishment of a higher education management information system that will collect, disseminate and make information available on the status and management of the higher education system and institutions. During phase I, the program will support: (i) the design of the system through a process of consultation that will involve different stakeholders, technical analysis and feasibility studies; (ii) the establishment of a HEMIS within MES with qualified personnel; (iii) design and validation of data collection instruments and processes; (iv) design and validation of a dissemination and data utilization strategy and procedures; (v) training of key personnel and users; and (vi) a pilot test of the system and its evaluation. During phase II, the program will support: (i) the expansion of the pilot to the whole system of HE institutions; (ii) training of users; (iii) production of reports and monitoring; and (iv) evaluation of the system. The main activities to be financed under this component will be data gathering and analysis, policy studies and evaluation, technical assistance, the development of a higher education management data base, hardware and software, training, seminars, and study visits.

Project Component 4 - US$0.23 million

Component 4. To retain accessibility to higher education institutions, the program contemplates the establishment of a student loan program and the reform of the existing system of stipends. The program would support the development of a **student loan program** designed to help higher education students pay tuition fees. It would also include a **redesign of the current stipend system** to ensure that stipends and loans work in tandem to enhance access. The desired project outcome would be that at least 25 percent of students are able to borrow to pay all or a significant portion of their tuition fees and that a similar percentage of students receive stipends. During phase I, the program will support: (i) the establishment of a student loan organization; (ii) the creation of the legal and institutional conditions required for the operation of a student loan system; (iii) training of personnel responsible for operating the new system; and (iv) feasibility studies. During phase II, the program will support: (i) the operation of the new student loan system; and (ii) dissemination activities related to the student loan system; (iii) monitoring and evaluation activities related to its operation. During phase III, the program will support activities aimed at evaluating, monitoring, consolidating and sustaining the operation of the Student Loan System. The activities funded under this component would be technical assistance to develop the loan program, training of staff responsible for operating the new system, feasibility studies, impact evaluation and monitoring studies,

equipment, and partial funding of the student loan program, most probably in the form of a loan guarantee to private banks.

Project Component 5 - US$5.59 million

Component 5. To improve the quality of teaching and learning in higher education the program contemplates the establishment of a **Competitive Teaching and Management System for Higher Education to improve *the quality of teaching and learning in Bulgarian higher education institutions as well as their internal management structures***. The proposed system would invite proposals from higher education officials and academic staff to: develop modern and professional management structure and systems; encourage more scholarship work as opposed to research; encourage the reform of the curriculum and academic programs of higher education institutions; promote early retirement of targeted academic staff; and encourage upgrading of the skills and knowledge of new academic staff. During phase I, the program will support: (i) the establishment of the Board of the Competitive Teaching and Management System for Higher Education; (ii) the creation of the legal and institutional infrastructure required for the operation of the System; (iii) capacity building activities related to making the system operational; and (iv) invitation to a first round of submissions of proposals to the System. During phase II, the program will support: (i) providing grants to HE institutions on a competitive basis; (ii) evaluating and monitoring the impact of the grants; and (iii) providing technical assistance and training to HE institutions for the preparation of proposals. During phase III, the program will support activities aimed at consolidating and sustaining the operation of the System. In addition to providing most of the financing for the System, the principal activities to be financed by this sub-component would be technical assistance, feasibility studies to support the design, evaluation studies of the operation of the grant system, training of staff responsible for operating the new system, training of university staff interested in presenting proposals to the system, study visits to learn from countries that have similar systems operation, equipment necessary for the establishment and operation of the Board and staff of the Competitive Teaching and Management System for Higher Education, dissemination materials, seminars and other consultation related activities, and grants to institutions.

Project Component 6 - US$0.67 million

Component 6. Strengthen MES capacity for project management and communication. The program contemplates the establishment of a small project coordination unit (PCU) to monitor and provide support to lines units within MES during project implementation and a higher education steering committee (HESC) to coordinate the implementation of the different higher education sub-components. The PCU unit would be responsible for providing project implementation support in the areas of: (i) procurement; (ii) financial management; (iii) project monitoring; (iv) dissemination and communications; and (v) management training to the different MES units responsible for carrying out the different activities of the project. The PCU would also be responsible for assisting MES management in preparing and executing a general communication strategy for the project. The immediate objective of this strategy would be to facilitate the implementation of individual project components. The strategy will include a public information campaign and will be based on MES' "vision" and policy objectives for the education sector. The communication strategy would also help MES introduce change and empower other actors in the system such as inspectors, school directors and local education officers. The activities funded under this component include, technical assistance, equipment, software, dissemination seminars, communications events and meetings, production of information and dissemination materials, and communication campaigns.

Annex 3: Estimated Project Costs

BULGARIA: Education Modernization Project

Project Cost By Component	Local US $million	Foreign US $million	Total US $million
1. Teaching and learning in general education.	3.70	0.84	4.54
2. Resource management in general education.	2.95	2.38	5.33
3. Resource allocation in higher education institutions.	0.22	0.19	0.41
4. Establishment of student loan system and reform of the stipends system.	0.08	0.12	0.20
5. Creation of CTMS and strengthening of HE institutions.	3.07	2.15	5.22
6. Strengthening of MES capacity for project management.	0.26	0.36	0.62
Total Baseline Cost	10.28	6.04	16.32
Physical Contingencies	0.66	0.35	1.01
Price Contingencies	0.62	0.34	0.96
Total Project Costs	11.56	6.73	18.29
Front-end fee		0.14	0.14
Total Financing Required	11.56	6.87	18.43

Project Cost By Category	Local US $million	Foreign US $million	Total US $million
Goods	2.38	2.55	4.93
Works	0.05	0.00	0.05
Services	1.65	1.66	3.31
Training	4.11	0.64	4.75
Competitive Teaching and Management System for Higher Education	2.80	1.88	4.68
Recurrent Costs	0.57	0.00	0.57
Total Project Costs	11.56	6.73	18.29
Front-end fee		0.14	0.14
Total Financing Required	11.56	6.87	18.43

Annex 4

BULGARIA: Education Modernization Project

Economic Analysis

This project has two major components focusing on (1) primary and secondary (schools) education and (2) higher education respectively. These two components are largely independent of each other and the economic impact of each has, therefore, been considered separately.

1. Primary and Secondary Education

1.1 Background[1]

Bulgaria's education system was developed in the context of a strictly-controlled command economy and, therefore, contained considerable inflexibility which made it ill-suited to provide the educational basis for the work force of a dynamic market economy. In addition, demographic change has resulted in a significant fall in the school-age population and a geographical redistribution of that population. Finally, budgetary constraints have resulted in a fall in the real resources available to education.

One of the outcomes is a high student-staff ratio relative to other European countries which are much richer than Bulgaria. This has been a result partly of a widespread belief in Bulgaria (as elsewhere) that small class sizes improve student performance (in spite of the research evidence which generally fails to support that belief). The high student-staff ratio is also a result of the "norms" which are legal requirements on schools which determine the number of classes, the number of teachers per class, the number of hours to be worked by teachers, the number of hours for which students were to be taught and the curriculum to be covered. Because the funding of municipalities from the central budget depended more on the number of classes than on the number of students, there has been an incentive for municipalities to permit classes below the legal minimum size. Since teacher hours were lower than student hours resulting in teacher-class ratios considerably in excess of 1, these norms contributed to a rise in the student-staff ratio particularly in the face of falling school rolls. The regulations concerning these norms (Regulations 3 and 5 referring to the number of teachers per class and the number of classes) have recently been relaxed for schools with delegated budgets. MES is planning to open discussions with the Trades Unions in order to extend this relaxation. In addition, there are plans to give more weight to student numbers in municipality funding.

The economic difficulties of Bulgaria have been reflected in decreasing resources for Bulgarian schools. Education's share of GDP has fallen from 6.1 percent in 1992 to 3.2 percent in 1998. While the budgeted amount for 1999 was 3.6 percent and is planned to be 3.8 percent for 2000 to 2002, this falls far short of the EU average of 4.3 percent. There would be no scope for any savings generated by this project to reduce the overall expenditure.

[1]. For more detail, see D L Adkins, "School Finance in Bulgaria in an Era of Educational Reform", Paper prepared for the World Bank, June 1999.

This point is emphasized by the current level of teachers' salaries which are now very low and, in the medium term, will make it difficult for Bulgaria to retain and recruit effective teachers. The average salary for a Headteacher is now approximately US$120 per month (or about the average earnings) and that for a teacher approximately US$70 per month (approximately 60 percent of average earnings).

1.2 Objectives

The primary and secondary education component of this program will provide for a major reorientation of the Bulgarian education system consistent with Bulgaria's overall development policy objective of transforming its economy into a modern market economy. The education system will play its part by providing new entrants to the labor force with a set of skills needed for a flexible workforce.

1.3 Project Activities

The Ministry of Education and Science and the World Bank have considered how best this project can contribute to the necessary transformation of the education system. Through sector work and structured dialogue, it was agreed that certain activities were a prerequisite for the achievement of a more efficient and effective education system. These activities are: (a) *per capita* funding of municipalities' budgets by MES; and (b) the removal of existing norms. These changes will contribute to efficiency gains by allowing full benefits to be obtained from the *optimization of the schools network* and the introduction *delegated school budgets* by allowing schools and municipalities to make best use of their resources by varying the input mix - in particular, by decreasing the overall teacher-student ratio. *Per capita* funding of schools and the relaxation of some existing norms for some schools have already been accomplished and the way is now clear for the full benefits of the reforms envisaged under these sub-components to be reaped particularly in the context of MES' commitment to further reform.

The effectiveness and efficiency of the education system is to be further supported by *improving the capacity of MES* and its agencies to play a leading policy role while delegating the responsibility for the day-to day management of the network to municipalities and schools. The development of an *education management information system (EMIS)* will also contribute to an enhancement of MES' policy capacity. The benefits from these sub-components would be the increased relevance of the education system. By devolving responsibility for day-to-day operations while enhancing MES' role in the development and implementation of national policy, the education system would be better fitted to satisfy the demands of society by supporting the development of democracy and participation.

Further benefits are expected from the introduction of a new curriculum and a national testing system supported by the establishment of the *National Curriculum Council* and *National Assessment Unit* and by *developing the in-service training system*. These sub-components will result in a more efficient education system by producing better-educated graduates with competencies which are more relevant to the new market economy.

1.4 Indicators of Economic Impact

Indicators of the economic impact of the project have been derived by: (i) estimating the potential net recurrent cost savings or additional expenditure generated by the project; (ii) assessing the potential benefits generated by the project; and (ii) estimating the internal rate of return to the project making very modest assumptions about the gain in labor productivity to be generated by the program.

1.4.1 Estimating Net Recurrent Cost Savings/ Additional Expenditure

Recurrent Cost Savings

Two sub-components - Delegated Budgets and Optimization of the School Network - are expected to lead to cost savings.

Delegated Budgets

The pilot project financed by the EU Phare Programme was shown to generate efficiency gains - both from using inputs more efficiently and generating extra income. The gains within the four pilot municipalities were estimated to be about US$500 per year per school in a situation where the norms were still in force. Therefore, a conservative estimate of the expected gains from the national extension envisaged in this program is US$1.8 million per year when all schools are managing their delegated budgets. These gains are expected to start at a low level of US$140,000 in 2001 rising to the full amount by 2006. (See Table 1.)

Optimization of the School Network

An investigation by MES of the potential for saving in one municipality show annual recurrent cost savings of approximately US$12,000 per school closed. These savings are a result of an overall reduction in the number of staff (teaching and non-teaching) even in the absence of savings due to the relaxation of class norms. MES has calculated that there are currently at least 500 schools eligible for closure. Therefore, a conservative estimate of the potential recurrent cost savings would be US$6 million per year. In the first years of the program, these cost savings would be offset by the severance payments made to redundant staff. Again these savings will increase over time as the program rolls out. (See Table 1.)

Additional Recurrent Expenditures

MES is likely to incur additional recurrent expenditures from three sub-components of the program: the introduction of the new curriculum; the introduction of testing at grades 4, 8 and 12; and the new arrangements for in-service teacher training.

The introduction of new teaching methods required by the new curriculum will entail recurrent costs on new teaching materials of about US$5 per head. Since the new curriculum will use less didactic teaching methods, there will be an increased need for consumables (for example, paper, crayons, glue and so on) for the students. This will entail additional recurrent expenditures of almost US$5 million per year in the medium term when the program is complete.

Similarly, national testing will cost US$5 per test administered. This will involve additional recurrent cost expenditures of US$1 million per year.

In-service teacher training will cost MES an additional US$10 per teacher per year. This will involve additional recurrent expenditures of US$940,000 allowing for the reduction in teachers as a result of the optimization program.

Net Impact on Recurrent Expenditures

Table 1 shows that, in the medium term, the program will reduce net recurrent expenditures. However, because of the phasing of program activities, there may be expected to be a net increase in recurrent expenditures in the early years. In 2002, there is expected to be a net increase in expenditures of US$780,000; in 2003 a net increase in expenditures of almost US$3 million; in 2004, a net increase of US$3.8 million. The increase in expenditures is expected to reach its peak in 2005 at US$4.5 million; thereafter falling to US$2.9 million, US$2.5 million, US$1.3 million and US$301,000 in 2006, 2007, 2008 and 2009 respectively. However, these increases are offset to some extent by a net saving in recurrent expenditures of almost US$1 million per year from 2010.

The net impact is estimated on the basis of pilots undertaken when the norms were still in place. The additional savings from delegated budgets and the optimization of the school network in the current environment are, therefore, likely to be considerably higher. The student-teacher ratio in Bulgaria is currently 18 and therefore considerable scope for savings exist as Bulgarian schools move towards international best practice in terms of teacher-student ratios particularly in the context of demographic change. These savings offer an opportunity to MES to restructure salary payments and, in particular, to increase teacher salaries in the medium term in order to retain and attract effective teachers. This strategy will help to ensure that the overall decline in teacher numbers is managed in such a way as to sustain an effective teaching force to enhance standards of teaching.

More generally, it will be important that a considerable proportion of the savings be retained by the schools – or at least by the municipalities – in which they were generated in order to maintain incentives for such savings.

1.4.2 Assessing the Potential Benefits

Since this program provides for structural change, the traditional cost benefit analysis is inappropriate since this structural change is expected to result in a different set of relative prices; indeed, the very purpose of the transformation is to effect such a change in relative prices. Moreover, we have no reliable information by which the effects could be estimated. However, the overall aim of the program is to support the transformation of the economy in order to *inter alia* improve labor productivity primarily through the establishment of the Curriculum Council and the National Assessment Unit and developing the in-service training system. Although we have no way of estimating these benefits *a priori*, we would expect them to be considerable.

These benefits would be reaped by means of an increase in labor productivity. As well as the overall benefits to society, this increase in productivity may be expected to produce an increase in tax revenues for the general budget – though not for the budget of MES. No attempt has been made here to estimate the impact on the budget because the tax structure cannot be expected to remain unchanged throughout the restructuring.

Another potential benefit, which has not been taken into account, is the potential for improved performance in higher education of the students who have benefited from the schools reform. The interaction between the reform at the primary and secondary and that at the tertiary level is a complex matter and not attempt has been made to deal with it here.

1.4.3 The Internal Rate of Return[2]

The savings to be generated by this program are expected to be considerable even on very modest assumptions. In addition, the improvements in efficiency and effectiveness generated by this project are expected to result in considerable gains in labor productivity. As set out above, we have no way of estimating the value of these gains. Therefore, we examine what productivity gains would be required in order to achieve a target rate of return of 10 percent for this component.

Table 2 shows the economic costs and benefits estimated for this component assuming that all three proposed phases are undertaken. With the once-and-for-all increase in labor productivity of 2.65 percent for each labor force entrant[3] caused by the restructuring of the education system assumed in Table 2, the internal rate of return on this project could be expected to be 10 percent. This increase in labor productivity is a very modest assumption about the impact of radical restructuring.

2. Higher Education

2.1 Background[4]

The Bulgarian Higher Education sector has suffered from similar problems as those affecting the Primary and Secondary Education sectors. Particular issues which have been identified have been:

· the separation of the decisions about the funding of higher education institutions (HEIs), which has been the responsibility of the Ministry of Finance, from the decision about the allocation of student places, which is the responsibility of MES;

[2] The internal rate of return is defined as the discount which sets the net present value of an investment equal to zero. The internal rate of return, i, is calculated by solving the equation:

$$\sum_t S(Bt - Ct)/(1+i)t = 0$$

where Bt is the total benefits in year t and Ct is the total costs in year t.

[3] That is, an upward shift of the earnings function by 2.65 percent.

[4] For more detail, see: J J Brunner, "Higher Education: Policy Design and System Management", Paper prepared for the World Bank, March 5, 1999; and Ministry of Education and Science, "Higher Education Reform Project", Sofia, January 2000.

· courses and teaching methods which were unresponsive to the needs of the new market economy;

· outdated and inferior facilities, equipment and libraries;

· inadequate quality assurance systems;

· increasingly constrained resources because of an increase in student numbers without a corresponding increase in resources;

- a number of inefficiently small institutions;

- inequity of finance where some students paid tuition fees and receive no contributions towards their maintenance costs while others continued to obtain their tuition without paying fees while also receiving stipends to contribute towards maintenance costs.

These issues may be summarized under three headings:

- inadequate quality of teaching and learning process and management of institutions;

- inefficiency and ineffectiveness in resource allocation policies;

- difficulties in maintaining accessibility.

MES has recognized these issues and has already started on a process of reform which has involved:

- increasing the autonomy of HEIs;

- updating the legal framework;

- introducing a uniform system of tuition fees.

As a result of these changes, degrees are now more clearly defined, the system has become more user-friendly, more demanding and more consistent with international practice. However, MES recognizes that much remains to be done in order to develop the HE system corresponding to the values and traditions of Bulgarian society. This project is part of the ongoing reform process.

2.2 Project Objectives

The overall objective of the higher education components of the project is to improve the quality and relevance of Higher Education while retaining accessibility and increasing equity.

Specific objectives are to:

- improve the efficiency and effectiveness of resource allocation in the Higher Education sector;

- retain accessibility of HE in Bulgaria;

- improve the quality of teaching and learning processes and the management of HEIs.

2.3 Project Activities[5]

2.3.1 Improving the Efficiency and Effectiveness in Allocating Resources in the Higher Education Sector

A Resource Allocation Committee (RAC) will be established within MES which will be responsible for:

- developing cost and resource profiles of each HEI in order to test the distribution effects of

different funding formulae and to provide benchmark information in developing management information systems for each HEI;

- merging the processes for allocating seats and resources;

- introducing a system of normative costs for determining allocations;

- sponsoring a consultative process on a price-based allocation system.

In addition, a consultative process will be established to consider longer-term reforms in allocation policies to improve the accountability and increase the autonomy of HEIs.

2.3.2 Retaining Accessibility of HE in Bulgaria

This component of the project will create a new student loan and stipend system by:

- expanding the availability of student loans by considering a variety of options for the development of the current system;

- reforming the existing system of stipends by introducing a single set of criteria (including both performance and social indicators) at the national level to be used together with criteria set by the individual HEIs in order to allocate stipends;

- sustaining the implementation of uniform tuition fees.

2.3.3 Improving the Quality of the Teaching and Learning Process and the Management of Institutions

This component has a number of elements as follows:

- the creation of a Competitive Teaching and Management System (CTMSHE) which will operate for at least six years and will provide funding on a competitive basis for innovative projects to improve teaching or management in HEIs;

[5].For more detail, see Ministry of Education and Science, "Higher Education Reform Project", Sofia, January 2000.

- strengthening internal quality assurance procedures;

- strengthening the internal management capacity of HEIs.

2.4 Indicators of Economic Impact

2.4.1 Impact on Recurrent Costs and Expenditures

This component of the project is structured so that there is intended to be no impact on recurrent costs and expenditures other than those directly attributable to the project. The budgets and expenditures of HEIs as a whole will remain unchanged although a substantial reallocation between them is expected.

2.4.1 Assessing the Potential Benefits

This component is expected to have considerable impact on the labor productivity of HE graduates. However, as with the Primary and Secondary Education components, since this effect is expected to be part of the overall structural change, there is no easy way of predicting the size of this productivity effect. Therefore, again we have estimated the internal rate of return to this component using modest assumptions about the size of the productivity gain.

2.4.3 The Internal Rate of Return

Again, as with the Primary and Secondary Education components, we examine what productivity gains would be required in order to achieve a target rate of return of 10 percent for this component.

Table 3 shows the economic costs and benefits estimated for this component. Since there is intended to be no net impact on recurrent expenditures, the only costs are project costs while the only benefits are the increased productivity of HE graduates. A once-and-for-all increase in labor productivity of 1 percent for HE graduates will result in the achievement of the target rate of return of 10 percent.

3. Conclusions

For a project such as this where the objective is to assist in the transformation of a transition economy, traditional cost-benefit analysis is of limited usefulness. Cost-benefit analysis was developed in order to deal with situations in which relative prices are expected to remain stable or in which changes in relative prices are fairly straightforward to estimate.

The case of a transition economy is very different. If the transformation strategy is successful, then the resulting economy will bear limited resemblance to the original and we have little information and few analytical tools which will help in forecasting the result.

However, investment decisions still have to be made and it is important that they take into account the information that is available. Therefore, this analysis has taken the framework of cost-benefit analysis but has recognized that it is not possible to forecast the labor market effects of these far-reaching reforms of the educational system.

Thus, it cannot answer the usual question asked in investment decisions: what is the expected rate of return of this investment? Rather, it sets out to answer the question: if we have a target rate of return of 10 percent, what would be the increase in labor productivity resulting from the project necessary to achieve it? It should be noted that the lower this required increase, the better the project.

The answer to this new question is 2.65 percent in the case of the primary and secondary components and 1 percent in the case of the HE component. Those taking the investment decision need to decide whether it is reasonable to expect that such an increase would result from the structural change to be delivered by the project.

TABLE 1: BUDGETARY IMPACT OF EDUCATION REFORM PROJECT, 2000-2020

Primary and Secondary Education Component

(US $000s)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Additional Recurrent Expenditure											
New Curriculum (1)			1,437	2,873	4,310	5,747	4,853	4,853	4,853	4,853	4,853
Testing (2)					20	400	769	1,128	1,078	1,078	1,078
In-service teacher training (3)				940	940	940	940	940	940	940	940
1. Total Additional Expenditure			1,437	3,813	5,270	7,087	6,562	6,921	6,871	6,871	6,871
Recurrent Cost Savings											
School Optimisation (4)			300	300	600	1,300	1,850	2,650	3,750	4,750	6,000
Delegated Budgets (5)		140	350	560	910	1,260	1,820	1,820	1,820	1,820	1,820
2. Total Cost Savings		140	650	860	1,510	2,560	3,670	4,470	5,570	6,570	7,820
Net Budgetary Savings (2-1)		140	-787	-2,953	-3,760	-4,527	-2,892	-2,451	-1,301	-301	949

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Additional Recurrent Expenditure										
New Curriculum	4,853	4,853	4,853	4,853	4,853	4,853	4,853	4,853	4,853	4,853
Testing	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078
In-service teacher training	940	940	940	940	940	940	940	940	940	940
1. Total Additional Expenditure	6,871	6,871	6,871	6,871	6,871	6,871	6,871	6,871	6,871	6,871
Recurrent Cost Savings										
School Optimisation	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Delegated Budgets	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820
2. Total Cost Savings	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820	7,820
Net Budgetary Savings (2-1)	949	949	949	949	949	949	949	949	949	949

Notes:

(1) It is assumed that the new curriculum will require teaching and learning materials costing $5 per student per year.

(2) The cost of testing is calculated to be $5 per test administered.

(3) In-service teacher training is calculated to cost $10 per teacher per year.

(4) Potential savings are calculated to be $500 per year per school.

(5) Potential savings are estimated to be $12,000 per year for each school closed. It is estimated that there are 500 schools eligible for closure.

TABLE 2: COSTS AND BENEFITS OF EDUCATION REFORM PROJECT, 2000 - 2020

Primary and Secondary Education Component

(US $000s)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Project Costs (1)											
World Bank & Government Co-financing		3,644	4,038	4,874	5,879	5,432	5,249	1,919	1,919	1,919	
Recurrent Costs borne by MES											
New Curriculum			1,437	2,873	4,310	5,747	4,853	4,853	4,853	4,853	4,853
Testing					20	400	769	1,128	1,078	1,078	1,078
In-service teacher training				940	940	940	940	940	940	940	940
Total Costs		3,644	5,475	8,687	11,149	12,519	11,810	8,839	8,789	8,789	6,871
Project Benefits											
Recurrent Expenditure Savings											
School Optimisation			300	300	600	1,300	1,850	2,650	3,750	4,750	6,000
Delegated Budgets		140	350	560	910	1,260	1,820	1,820	1,820	1,820	1,820
Increased Labor Productivity (2)							470	940	1,420	1,899	3,564
Total Benefits		140	650	860	1,510	2,560	4,140	5,410	6,990	8,469	11,384

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Project Costs										
World Bank & Government Co-financing										
Recurrent Costs borne by MES										
New Curriculum	4,853	4,853	4,853	4,853	4,853	4,853	4,853	4,853	4,853	4,853
Testing	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078
In-service teacher training	940	940	940	940	940	940	940	940	940	940
Total Costs	6,871	6,871	6,871	6,871	6,871	6,871	6,871	6,871	6,871	6,871
Project Benefits										
Recurrent Expenditure Savings										
School Optimisation	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Delegated Budgets	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820
Increased Labor Productivity (1)	5,228	6,675	7,403	9,945	12,487	14,654	16,821	19,550	22,280	24,967
Total Benefits	13,048	14,495	15,223	17,765	20,307	22,474	24,641	27,370	30,100	32,787

Note:

(1) Project Management and Loan Front-end Fee allocated to these components on a *pro rata* basis.

(2) Once-and-for-all increase in labor productivity of 2.65% applied to cohorts of labor force entrants who have experienced the new curriculum throughout their school life. Older cohorts have had the productivity increase applied *pro rata* according to the proportion of their school life spent under the new curriculum.

TABLE 3: COSTS AND BENEFITS OF EDUCATION REFORM PROJECT, 2000 - 2020

Higher Education Component

(US $000s)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Project Costs (1) (2)											
World Bank & Government Co-financing		781	5,108	6,904	7,102	7,307	7,518	2,748	2,748	2,748	
Total Costs		781	5,108	6,904	7,102	7,307	7,518	2,748	2,748	2,748	
Project Benefits											
Increased Labor Productivity (3)					79	317	713	1,267	1,980	2,851	3,881
Total Benefits					79	317	713	1,267	1,980	2,851	3,881

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Project Costs										
World Bank & Government Co-financing										
Total Costs										
Project Benefits										
Increased Labor Productivity	5,069	6,416	7,921	8,713	9,505	10,297	11,089	11,881	12,673	13,465
Total Benefits	5,069	6,416	7,921	8,713	9,505	10,297	11,089	11,881	12,673	13,465

Notes:

(1) Project Management and Loan Front-end Fee allocated to these components on a *pro rata* basis.

(2) Assuming that Phase 3 of the HE component is a similar proportion of Phase 2 expenditure as is the case for the schools components

(3) Once-and-for-all increase in labor productivity of 1% applied to cohorts of graduate labor force entrants in 2013 who are assumed to have experienced the full benefits of the improved He system. The cohort entering the labor force in 2004 have been assumed to have obtianed 10% of the final gain; the cohort entering in 2005 is assumed to have gained 20% of the final gain; and so on.

Annex 5: Financial Summary

BULGARIA: Education Modernization Project

Years Ending
in US$ million, Project Year 1 ending 2001

	IMPLEMENTATION PERIOD						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Total Financing Required							
Project Costs							
Investment Costs	3.4	6.9	7.5	0.0	0.0	0.0	0.0
Recurrent Costs	0.1	0.2	0.3	0.0	0.0	0.0	0.0
Total Project Costs	3.5	7.1	7.8	0.0	0.0	0.0	0.0
Front-end fee	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Financing	3.6	7.1	7.8	0.0	0.0	0.0	0.0
Financing							
IBRD/IDA	2.9	5.5	6.0	0.0	0.0	0.0	0.0
Government	0.7	1.5	1.8	0.0	0.0	0.0	0.0
Central			0.0	0.0	0.0	0.0	0.0
Provincial			0.0	0.0	0.0	0.0	0.0
Co-financiers			0.0	0.0	0.0	0.0	0.0
User Fees/Beneficiaries			0.0	0.0	0.0	0.0	0.0
Others			0.0	0.0	0.0	0.0	0.0
Others			0.0	0.0	0.0	0.0	0.0
Others			0.0	0.0	0.0	0.0	0.0
Others			0.0	0.0	0.0	0.0	0.0
Others			0.0	0.0	0.0	0.0	0.0
Total Project Financing	3.6	7.0	7.8	0.0	0.0	0.0	0.0

Main assumptions:

The Project becomes effective by December 1, 2000.
Expenditures are costed over a three year period.
The Loan Closing date is March 31, 2004.

Annex 6: Procurement and Disbursement Arrangements
BULGARIA: Education Modernization Project

Procurement

Procurement of goods and Works will be procured in accordance with the Bank's *Guidelines: Procurement under IBRD Loans and IDA Credits (January 1995, revised up to January* 1999). Services would be carried out in accordance with the Bank's published *Guidelines: Selection and Employment of Consultants by World Bank Borrowers (January 1997, revised up to January 1999).* The project elements, their estimated cost and procurement methods, are summarized in table A. Other procurement information and prior review thresholds are given Table B. The General Procurement Notice will be published in August 2000. The Procurement launch work-shop is planned to be conducted in October 2000.

Goods (US$6.93 million): Goods to be financed under the Loan include: office equipment, computers, off-the-shelf software, furniture, materials, dissemination of mass media materials, vehicles, and equipment for reproduction of examinations. Contracts estimated to cost above US$100,000 would be procured through ***International Competitive Bidding (ICB)*** procedures. Printing of educational materials each estimated to cost US$250,000 or less up to an aggregate of about US$400,000 million will be procured through **National Competitive Bidding**. Contracts estimated to cost less than US$100,000 may be procured under ***International Shopping (IS)*** procedures (total aggregate amount of US$1.5 million). Contracts estimated to cost less than US$50,000 may be contracted through ***National Shopping*** *(NS)* procedures (total aggregate amount of US $1.3 million). Contracts for books, technical journals, training materials, audio visual materials, computer software, including annual upgrading and licensing arrangements, copyrights, translation and reprinting rights and other proprietary items up to an aggregate amount of US$50,000 may be awarded after direct negotiations with suppliers, publishers, copyright owners or other authorized distributor, subject to the approval of the Bank on a case-by-case basis. As an alternative to International and National Shopping, goods could be procured through Inter-Agency Procurement Services Office (IAPSO) of the United Nations Development Programme in accordance with provisions of paragraph 3.9 of the Guidelines.

Works (US$0.5 million): Civil works under the project include refurbishing of office space to be occupied by the Administration of the Curriculum Resource Center, the Assessment Unit and the PCU. Works estimated to cost US$50,000 or less up to an aggregate of US$500,000 million shall be procured under lump-sum, fixed-price contracts awarded on the basis of quotations obtained from three (3) qualified domestic contractors in response to a written invitation. The invitation shall include a detailed description of the works, including basic specifications, the required completion date, a basic form of agreement acceptable to the Bank, and relevant drawings, where applicable. The award shall be made to the contractor who offers the lowest price quotation for the required work, and who has the experience and resources to complete the contract successfully.

Consulting Services and Training (US$9.24 million): Services to be financed under the Loan include consulting services; training courses, fellowships, and study tours; research studies and surveys. Several Bank-financed contracts for *In-service training, Improving Quality of Primary and Secondary Education and Higher Education Reform* would be awarded on the basis *of* ***Quality and Cost-Based Selection (QCBS)*** procedures (US$7.39 million). For assignments of "Writing Programme of Study"

and "Preparing Student Assessment Instruments", for which no suitable alternatives from private sector consultants are available due to the requirements of language and knowledge of local standards, and participation of government-owned universities is critical to the objective of the project, the selection of the consultant will be done, on the basis of ***Quality-Based Selection (QBS)***, among the Bulgarian Universities (total aggregate amount of US$500,000 million). The institutions, for training, conducting seminars, and for fellowships, will be selected on the basis of an analysis of the most suitable program of training offered by the institutions/Universities, availability of services, period of training and reasonableness of the cost (total aggregate amount of US$500,000 million). Project audits and contracts for training estimated to cost less than US$200,000 or less per contract up to an aggregate of US$500,000 million may be procured under contracts, based on ***Least-cost Selection***. Individual consultants would be contracted in accordance with procedures for ***Selection of Individual Consultants*** **(IC)** according to the Bank Guidelines and based on the comparison of CVs (US$400,000 million). The individual consultants will be selected on the basis of comparison of qualifications among those expressing interest in the assignment in response to advertisements of the positions in a newspaper with national circulation. In addition, the qualifications and experience of procurement experts to be funded by the project will be satisfactory to the Bank.

Competitive Teaching and Management System for Higher Education (US$4.68 million): Through yearly competitions, the system will co-finance projects for the improvement of management, teaching and learning conditions in HE institutions. Winning HE institutions will sign separate sub-project agreements with the MES for the implementation of grants expected to range between US $30,000 and US$200,000. The agreements will indicate how each HE institution will utilize the grant for the provision of equipment, information resources, staff development and faculty training, and management improvement, in accordance with their strategic plans. This will involve procurement of laboratory equipment, books, and computers, minor repairs to laboratory buildings, hiring of consultants, and training for staff. Since the items to be procured will be small in value, most of the items for goods (aggregated about US$2.0 million) will be procured either following national or international shopping. The works contracts (aggregated about US$290,000 million), which will be also small in value will be contracted following minor works procedure mentioned for the rest of the project. Individual consultants for TA (aggregated about US$450,000) will be hired based on comparison of CVs and identified institutions will be selected for fellowships (aggregated about US$730,000 million). However, due to the nature of the grants and individual procurement time schedules, the aggregated amounts indicated in the tables do not include funds assigned to the Competitive Teaching and Management System for Higher Education. The threshold for the method of procurement of goods and works will be same as for the rest of the project.

Non-Bank financed (NBF) Recurrent Costs (US$0.57 million): Incremental recurrent costs cover incremental operating costs and incremental staff salaries for the Education Policy Directorate and the Assessment Unit at the central MES level, the FMSE Center, the Higher Education Steering Committee (HESC), the Student Loan Agency (SLA), the Executive Council of the CTMSHE. The Government of Bulgaria will finance all recurrent costs.

Review of Procurement Decisions: Procurement of works, goods, and services will be carried out according to the agreed procurement plan described in Table A and will be subject to the reviews noted in Table B of this Annex.

A Procurement Plan, including samples of letters of invitation, terms of reference for the first year of implementation, will be elaborated.

Standard Documents for national procurement and contracting of consultants will be developed by the Project Coordinating Unit for the use of the project and approved by the Bank before the first request for proposals. Participating *HE Institution* will follow procurement procedures detailed in an Operational Manual, satisfactory to the Bank.

Action Plan for Strengthening Capacity of the PCU:

The following action plan is recommended to build Ministry of PCU's procurement capacity:

1. One additional full time Procurement Specialist with experience in public procurement and knowledgeable on the World Bank procurement procedures should be hired to assist the PCU in implementing procurement activities (planning, time scheduling, monitoring and reporting), for the project and to provide in-house training to the current two Procurement Staff in PCU. The Procurement Specialist shall be identified as early as possible and hired not later than the date of Effectiveness for this Project.

2. The current two procurement staff of the PCU should go for the next available 4-week procurement training course offered by ILO in Turin, Italy, or the course provided by Crown Agents, in U.K. and also to participate in the next procurement workshops conducted by the Bank, in the Region for Borrower Implementing Agency staff.

3. A detailed week long seminar on procurement shall be held, at the project launch workshop and later during implementation, for the beneficiaries/end user, staff, who will participate in bid evaluation. Training shall also include the preparation of bidding documents for each type of procurement methods proposed in the loan agreement.

Procurement Capacity Assessment
Summary of Findings and Actions

	Assess ment		**Risk Assessment**		
Item Assessed	**Null**	**Poor**	**Fair**	**Satis-factory**	**Major Weaknesses Low Ave. HighActions Proposed Completion Date**
(a) Legal Aspects					
(i) Laws & Regulations			X		X
(ii) NCB Procedures				X	X
(iii) Internal codes and manuals				X	X

(b) Proc. Cycle Mgmt.					The PMU proposed to implement the proposed project has limited experience in administering Bank financed procurement (preparing bid documents, inviting bids, evaluating bids, awarding contracts and managing contracts, handling complaints etc.)One additional Procurement Staff to be hired ;Training to be arranged and obtain help from experienced PIUs of other ongoing projectsStaff to be hired not later than project effectiveness date;, Turin training before end of 2000.
(i) General handling					X
(ii) Procurement planning					X
(iii) Preparation of documents		X			XXHire short term consultants/architect to prepare specification,/detailed drawings.According to procurement time schedule.
(iv) Management of process		X			XThe Procurement Specialist to be hiredBy project effectiveness
(v) Bid evaluation		X			X
(vi) Contract award		X			X
(vii) Preparation and signing of contracts		X			X
(viii) Contract management		X			X
(c) Organization and Functions					
(i) Organization of unit and functions		X			X
(ii) Internal manuals and instructions	X				X
(d) Support and Control Systems					
(i) Auditing		x			X
(ii) Legal assistance		x			X
(iii) Technical and administrative controls		x			X
(iv) Code of ethics				X	X
(v) Anticorruption initiatives				X	X
(e) Record keeping					
(i) Public notices		x			X
(ii) Bidding documents	x				X
(iii) Bid opening information	x				X
(iv) Bid evaluation reports	x				X
(v) Formal appeals and outcomes	x				X
(vi) Signed contract documents		X	X		X
(vii) Claims and dispute resolution records	x				X
(viii) Comprehensive disbursement data	x				X

(f) Staffing			X		XProcurement Specialist to be hired.By effectiveness of the project .
(g) General Procurement Environment			X		X
(i) Promoting a culture of accountability			X		X
(ii) Reputation of procurement corps			X		X
(iii) Salary structure		X			XNeeds periodical review
(iv) Freedom from political interference		X			XNo contract to be awarded without PMU's approval.Immediate
(v) Existence of experienced and capable staff	x				XAll staff need additional training.December 2000
(vi) Clear written standards and delegation of authority		x			X
(vii) Sound budget/financial systems		x			X
(h) Private Sector Assessment					
(i) General efficiency and predictability				X	X
(ii) Transparency				X	X
(iii) Quality of contract mgmt.				X	X
(iv) General reputation				X	X

Prior Review Thresholds Proposed	**Overall Risk Assessment**
Goods US$ 100,000 (equivalent)	HighX
Works US$ 50,000 (equivalent)	Average
Consulting US$ 50,000 (equivalent) for firm and US$10,000 for individuals	Low
Post Review Ratio: One in 5 contracts	
Frequency of procurement supervision missions proposed: One every 6 months (includes special procurement supervision for post-review/audits). The supervision mission should include a procurement specialist during the first two years of the work. (However, this is only a recommendation and the budget for supervision is not within the control of the Procurement specialist.)	**Form prepared by**: V. Vijayaverl(Procurement Specialist/Accredited staff assigned to the project)
	Signature: _____ Date: _____
Comments: Issues to be addressed immediately are (i) hiring of expatriate procurement specialist knowledgeable in World Bank procurement procedures to provide in house on the job training to the PMU staff and to strengthen the procurement unit of the PMU. (ii) training of the existing staff in the next available course by ILO, Turin, Italy and other procurement training provided by the bank	

The Project is rated as "**High Risk**" regarding procurement. It is planned to have procurement supervision twice a year, during implementation.

Procurement methods (Table A)

Table A: Project Costs by Procurement Arrangements
(US$ million equivalent)

	Procurement Methods [1/]				
Expenditure Category	**ICB**	**NCB**	**Other**	**NBF**	**Total**
1. WORKS			0.05 [2/] (0.04)		0.05 (0.04)
2. GOODS					
a. Computer equipment	2.72 (2.18)		0.68 [3/] (0.54)		3.40 (2.72)
b. Office equipment	1.00 (0.80)		0.06 [4/] (0.05)		1.06 (0.85)
c. Furniture				0.05	0.05 (0.00)
d. Materials and supplies		0.37 (0.30)			0.37 (0.30)
e. Vehicles			0.04 [5/] (0.03)		0.04 (0.03)
3. SERVICES					
a. Consultants			3.25 [6/] (2.68)		3.25 (2.68)
b. Training seminars, study tours, fellowships			4.81 [7/] (3.88)		4.81 (3.88)
4. Recurrent Costs					
a. Incremental staff salaries				0.40 (0.0)	0.40 (0.0)
b. Incremental operational Costs				0.17 (0.0)	0.17 (0.0)
5. Competitive Teaching and Management System for Higher Education			3.74 [8/] (3.74)	0.94 (00)	4.68 (3.74)
6. Front-end Fee			0.15 (0.15)		0.15 0.15
TOTAL PROJECT (TOTAL IBRD)	3.72 (2.98)	0.37 (0.30)	12.78 (11.11)	1.56 (0.0)	18.43 (14.39)

[1/] Figures in parenthesis are the amounts to be financed by the Bank Loan. All costs include contingencies.
[2/] Includes small works for civil works.

[3/] Includes national and international shopping for goods.
[4/] Includes national shopping for goods.
[5/] Includes national shopping for goods.
[6/] Includes QCBS, individual consultants and hiring of universities.
[7/] Includes QCBS and least-cost selection for training, fellowships and seminars.
[8/] Includes small works for civil works, national and international shopping for goods and individual consultants and training.

Prior review thresholds (Table B)

Table B: Thresholds for Procurement Methods and Reviews

	ICB	NCB	IS	NS	Other Methods	Remarks
1. Works						
Procurement thresholds: Individual and Aggregate					Small works: Below US$50,000; Aggregate US$500,000 (l)	
Prior review					First contract	
2. Goods						
Procurement thresholds: Individual and Aggregate	Above US$ 100,000					
Prior Review	All contracts					
Procurement thresholds: Individual and Aggregate		Printing of education materials: BelowUS$250,000 Aggregate US$400,000				
Prior Review		Contracts over US$50,000				
Procurement thresholds: Individual and Aggregate			Below US$100,000, Aggregate US$1,500,000 (2)	Below US$ 50,000, Aggregate US$1,300,000(3)		
Prior Review			First two contracts	First two contracts		
Procurement thresholds: Individual and Aggregate					Direct Contract Aggregate US$50,000	
Prior Review					Each contract	

	QCBS (training)	IC (Individual National and International consultants)	Least Cost (Training, Seminars)		Other Methods	Remarks
3. Services						
Procurement thresholds: Individual and Aggregate	QCBS Aggregate US$7,350,000					
Prior Review	All TOR, Short Lists, Qualification, Evaluations and all contracts					
Procurement thresholds: Individual and Aggregate		Aggregate: US$400,000				
Prior Review		All TOR, and contracts, above US$10,000				
Procurement thresholds: Individual and Aggregate			Below US$200,000 Aggregate US$500,000			
Prior Review			All TOR, and contracts above US$50,000			
Procurement thresholds: Individual and Aggregate					First five contracts	
Post Review	Post review mechanism: Semester random sample reviews during supervision missions; Reviews in accordance with Para 4 of Appendix 1 of the Bank's Guidelines (about 25 percent of documentation subject to post review, mainly for shopping, would be reviewed)					

(1), (2), (3) The Aggregate amount includes procurement under Competitive Teaching and Management System for Higher Education.

Bulgaria
Education Modernization Project
Procurement Plan - Year 1 Goods & Works
General procurement notice to be published August 30, 2000

	Category of Procurement	Procurement Method	Estimated Costs (US$'000)	Specific Procurement Notice	Draft Bid Docs	Bank Review	Issue of Document	Bid Opening	Bid Evaluation Report	Bank Review	Contract Award	Contract Completion
I	**Civil Works**											
1	Refurbishment of office space	Minor Works	37.608	11/30/00	11/15/00	11/30/00	11/30/00	12/15/200	12/30/00	01/15/01	01/30/01	03/30/01
2	Refurbishment of office space - PCU	Minor Works	11.207	11/30/00	11/15/00	11/30/00	11/30/00	12/15/200	12/30/00	01/15/01	01/30/01	03/30/01
II	**Goods**											
1	ICB I - computer deliveriesYear 1	ICB	834.445	11/30/00	11/15/00	11/30/00	12/30/00	02/30/01	03/30/01	04/30/01	05/30/01	12/30/01
2	EMIS Computer Equipment	ICB	247.782	11/30/00	11/15/00	11/30/00	12/30/00	02/30/01	03/30/01	04/30/01	05/30/01	12/30/01
3	Computers for PCU	NS	13.913		10/15/00	10/20/00	10/25/00	11/10/00	11/15/00	11/20/00	11/30/00	12/30/00
4	Accounting Software PCU	Direct contracting	5.619									
	Office Equipment											
5	Security system	NS	6.843		11/30/00	12/05/00	12/10/00	12/30/00	01/10/01	01/15/01	01/25/01	02/30/01
6	Office Equipment (telphone exchange, telephones, faxes, etc)	NS	48.791		11/30/00		12/10/00	12/30/00	01/10/01		01/25/01	02/30/01
7	Copy Machines	ICB	924.414	01/30/01	01/30/01	02/15/01	03/15/01	05/15/01	07/15/01	08/15/01	09/15/01	03/30/02
8	Equipment for PCU	NS	5.604		11/30/00		12/10/00	12/30/00	01/10/01		01/25/01	02/30/01
	Furniture											
9	Office Furniture	IS	70.968		11/15/00	11/30/00	11/30/00	12/15/200	12/30/00	01/15/01	01/30/01	03/30/01
10	Office Furniture - PCU	NS	7.060		11/30/00		12/10/00	12/30/00	01/10/01		01/25/01	02/30/01
	Materials and Publications											
11	Design and printing of Materials and Publications (One framework contract for Phase 1)	NCB	233.815		02/28/01	03/15/01	03/30/01	05/30/01	06/30/01	07/30/01	08/30/01	12/30/01
12	Reference Materials	Direct Contracting	10.796		Nov. 2000						Nov. 2000	Nov.2003
	Vehicles											
13	Minibus for transport of trainers	NS	25.471		6/30/01		7/30/01	8/30/01	9/15/01		9/30/01	12/30/01

Bulgaria
Education Modernization Project
Procurement Plan - Year 1. Services
GPN to be published August 30, 2000; and SPN inviting Expression of interest to be published October 15, 2000.

Category of Procurement	Procurement Method	Estimated Costs (US$'000)	Expression of Interest	TOR, short list and LOI prepared	RFP Issued	Technical opening	Evaluation of Technical Proposals	Financial Bid Opening	Bid Evaluation Report	Bank Review	Contract Award	Contract Completion
III Services and Training												
Consulting Services												
1 Curriculum Development	QBS	175.000	10/15/00	11/30/00	12/15/00	01/30/01	02/30/01	03/15/01	03/30/01	04/15/01	05/15/01	05/30/02
2 Higher Education Reform	QCBS	370.655	10/15/00	11/30/00	12/15/00	01/30/01	02/30/01	03/15/01	03/30/01	04/15/01	05/15/01	05/30/03
3 CTMF-organisation and management	QCBS	776.005	10/15/00	11/30/00	12/15/00	01/30/01	02/30/01	03/15/01	03/30/01	04/15/01	05/15/01	05/30/03
4 International Consultant to PMU	Individuals	331.740										
5 PCU - Local consultant	Individuals	64.111										
7 Auditors	LCS	17.825										
9 Consultancy for Communication Campaign (PCU)	QCBS	170.422	10/15/00	11/30/00	12/15/00	02/15/01	03/15/01	03/30/01	04/15/01	04/30/01	05/30/01	05/30/02
Training												
1 Training all components (including consultancy, materials and handouts)	QCBS	1,799.996	10/15/00	11/30/00	12/15/00	02/15/01	03/15/01	03/30/01	04/15/01	04/30/01	05/30/01	05/30/03
2 Fellowships	Other	133.351									Jan 2001	
3 Training for PCU Staff	Other	67.260									Jan 2001	
Studies and Research												
1 Studies and commissions for writing programs	Other	49.384									Jan 2001	

Other Method for selection of Training institution will be based on the most suitable cources available.

Disbursement

Allocation of loan proceeds (Table C)

Table C: Allocation of Loan Proceeds

Expenditure Category	Amount in Euro million	Financing Percentage
Works	0.04	80%
Goods and Vehicles	3.53	100% of foreign expenditures; 100% of local expenditures (ex-factory cost) and 80% of local expenditures for other items procured locally
Consultants' Services		100%
(a) Under Part A,B,C,D, E.1 and F.1 of the Project	1.86	
(b) Communications Campaign under Part F.2 of the Project	0.10	
(c) CTMS under Part E.2 of the Project	0.66	
Training	3.46	100
Grants under Part E.2	3.98	100
Unallocated	1.52	
Total Project Costs	15.15	
Front-end fee	0.15	
Total	15.30	

Use of statements of expenditures (SOEs):

Disbursements will be made against Statements of Expenditures (SOEs). Supporting documents for expenditures financed on basis of SOEs will be retained by PCU for at least one year after disbursements and made available for review by Bank representatives and external auditors.

The proposed allocation of Loan proceeds for Phase I is shown in Table C shown above. Disbursements would not be made for works, goods and services which have been procured from ineligible sources or which have not been procured according to Bank's procurement and consultants' guidelines.

The Bank Loan for this phase is expected to be fully disbursed over a three year period. All applications to withdraw from the Loan will be made in accordance with guidelines set out in the bank's disbursement handbook. All applications to withdraw will be fully documented, except those for training and contracts not subject to prior review, as shown above, for which reimbursement may be made against certified statements of expenditures (SOEs).

Disbursement from category 5 (Competitive Teaching and Management System for Higher Education) will only be authorized after a *Project Agreement* has been signed between the MES and the respective HE institution under terms and conditions satisfactory to the Bank, and according to the procedures established in the
Operational Manual of the CTMS.

As noted before, project accounts will be subject to an independent audit for each fiscal year, in accordance with auditing standards acceptable to the Bank.

Administration of Disbursement:

The MES, through the PCU, will co-ordinate and monitor the overall implementation of different components of the Project. The PCU will be responsible for the maintenance of a centrally managed financial management system, including records and accounts, for the preparation of financial statements in a format acceptable to the Bank, adequate to reflect the operations, resources and expenditures of all withdrawal applications in accordance with Bank's guidelines.

Special account:

In order to facilitate Loan disbursement, the Government of Bulgaria will establish a Special Account in the National Bank or a major commercial bank on terms and conditions satisfactory to IBRD to cover IBRD's share of expenditures. The Authorized Allocation for the Special Account would be Euro 1,000,000. Applications for replenishment of the Special Account would be submitted monthly, or whenever one-third of the amount has been withdrawn, whichever occurs earlier.

Traditional Disbursement Procedures. Applications for Withdrawal from the Loan will be used to request: (i) direct payment to third party for amount due; (ii) replenishment to the Special Account; (iii) reimbursement of payments already made by the Borrower for eligible expenditures; and (iv) application for Special Commitment.

Annual financial statements of Bank-financed activities will be prepared in accordance with International Accounting Standards (IAS) and audited in accordance with International Standards on Auditing (ISA) and the Bank guidelines on auditing and financial reporting such as *The World Bank Financial Accounting Reporting and Auditing Handbook and Project Financial Management Manual.*

Annex 7: Project Processing Schedule
BULGARIA: Education Modernization Project

Project Schedule	Planned	Actual
Time taken to prepare the project (months)	18	14
First Bank mission (identification)	11/22/98	
Appraisal mission departure	01/15/2000	02/13/2000
Negotiations	04/10/2000	07/13/2000
Planned Date of Effectiveness	12/01/2000	

Prepared by:

Bulgarian Ministry of Education and Science working teams

Preparation assistance:

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Barbara Hunt, Teacher Training Specialist

Bank staff who worked on the project included:

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Hong Chen	Operations Analyst
Nadeja Mochinova	Program Assistant
Vijay Vijayaverl	Procurement Specialist
Yingwei Wu	Procurement Specialist
Eliezer Orbach	Organizational Analysis Specialist
Richard James	Financial Analyst
Boryana Gotcheva	Project Officer - Social Sector
Antonia Viyachka	Procurement Analyst
Junko Funahashi	Legal Counsel
Alessandra Iorio	Senior Legal Counsel
Rohit Mehta	Senior Disbursement Officer
Roque A. Ardon	Financial Management Specialist

QUALITY ENHANCEMENT REVIEW TEAM	
Ralph Harbison	Sector Leader SASED
Hena Mukherjee	Principal Education Specialist
Christine Allison	Lead Specialist SASED
Stephen Heyneman	Education Economist
Kathryn Johnston	Senior Education Specialist
Young Hoy Kimaro	Economist

Annex 8: Documents in the Project File*
BULGARIA: Education Modernization Project

A. Project Implementation Plan

1. Higher Education Reform Implementation Plan. Ministry of Education, January 2000.

B. Bank Staff Assessments

Country Assistance Strategy, April 1998.

C. Other

1. Ministry of Education and Science, September, 1999. Draft Strategy for the Development of Higher Education in Bulgaria.
2. Institutional Assessment and Capacity Building of the Ministry of Education and Science, March, 2000
3. Jose Joaquin Brunner, March 1999. Bulgaria Higher Education: Policy Design and System Management.
4. Pencho Mihnev, George Simidtchiev, Vladimir Atanassov, Antoaneta Voikova, December 1999. Intergovernmental Roles in the Provision of Education Services in Bulgaria.
5. S. E. McClelland, I.R. Smith, October 1998. Aspects of the Current School Education System in Bulgaria.
6. Douglas L. Adkins, June 1999. School Finance in Bulgaria in an Era of Education Reform.
7. Olena Marushiakova and Vesselin Popov, December 1999. Study of the Education Situation of Ethnic Minorities in the Republic of Bulgaria.

*Including electronic files

Annex 9: Statement of Loans and Credits
BULGARIA: Education Modernization Project

				Original Amount in US$ Millions			Difference between expected and actual disbursements[a]		
Project ID	FY	Borrower	Purpose	IBRD	IDA	Cancel.	Undisb.	Orig	Frm Rev'd
P008316	1993	Bulgaria	ENERGY	93.00	0.00	9.00	15.07	25.37	0.00
P033965	1998	Bulgaria	ENVIRONMENT REMEDIATION PILOT	16.00	0.00	0.00	10.29	8.38	-1.72
P057927	2000	Bulgaria	ENVIRONMENT & PRIVATIZATION SUPPORT SAL	50.00	0.00	0.00	31.33	1.55	0.00
P055157	2000	Bulgaria	HEALTH SECTOR REFORM	63.30	0.00	0.00	63.10	0.00	0.00
P008318	1996	Bulgaria	HEALTH SECTOR RESTRUCTURING	26.00	0.00	0.00	10.14	12.99	0.00
P008315	1996	Bulgaria	RAILWAY REHABILITATION	95.00	0.00	0.00	14.10	18.38	0.00
P055156	1999	Bulgaria	REGIONAL INITIATIVE FUND	5.00	0.00	0.00	0.68	0.24	0.00
P008323	1997	Bulgaria	SOCIAL INSURANCE ADMINISTRATION	24.30	0.00	0.00	8.52	8.39	0.00
P070086	2000	Bulgaria	TRADE & TRANSPORT FACILITATION IN SE EUR	7.40	0.00	0.00	7.22	0.00	0.00
P008319	1994	Bulgaria	WATER COMPANIES RESTRUCTURING & MODERNIZATION	98.00	0.00	41.00	27.13	61.89	23.19
			Total:	478.00	0.00	50.00	187.58	137.19	21.47

BULGARIA
STATEMENT OF IFC's
Held and Disbursed Portfolio

In Millions US Dollars

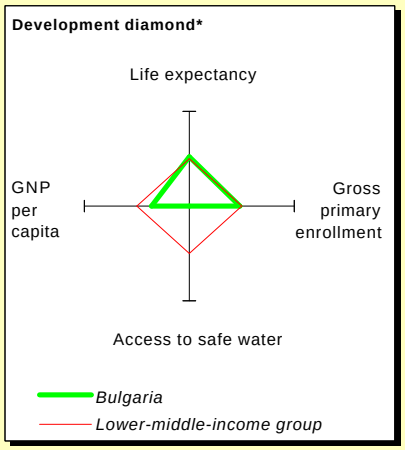
		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1999	BAC Bank	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00
1999	Celhart	13.90	1.50	0.00	0.00	13.90	1.50	0.00	0.00
1998	Devnya Cement	27.51	0.00	0.00	0.00	21.30	0.00	0.00	0.00
1994	Euromerchant FND	0.00	5.00	0.00	0.00	0.00	4.50	0.00	0.00
1996	Interlease Inc.	3.21	0.30	0.00	0.00	1.71	0.30	0.00	0.00
2000	Kronospan Group	11.58	0.00	0.00	8.34	7.54	0.00	0.00	5.43
1997	Sofia Hilton	10.80	0.00	2.00	9.50	8.11	0.00	2.00	7.13
	Total Portfolio:	67.00	6.80	7.00	17.84	52.56	6.30	7.00	12.56

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic
1999	BPBank	10000.00	0.00	12400.00	0.00
2000	Florina	3600.00	0.00	0.00	0.00
2000	Podem	3100.00	2000.00	0.00	0.00
	Total Pending Commitment:	16700.00	2000.00	12400.00	0.00

Annex 10: Country at a Glance

BULGARIA: Education Modernization Project

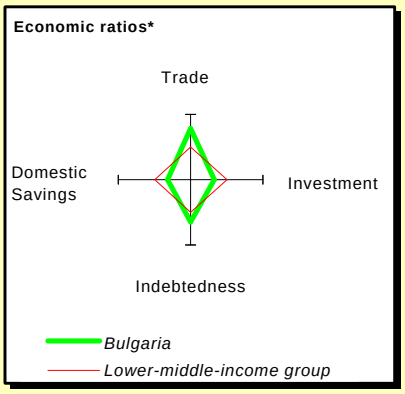
POVERTY and SOCIAL	Bulgaria	Europe & Central Asia	Lower-middle-income
1998			
Population, mid-year *(millions)*	8.2	473	908
GNP per capita *(Atlas method, US$)*	1,230	2,190	1,710
GNP *(Atlas method, US$ billions)*	10.1	1,039	1,557
Average annual growth, 1992-98			
Population *(%)*	-0.6	0.1	1.1
Labor force *(%)*	-0.6	0.6	1.5
Most recent estimate (latest year available, 1992-98)			
Poverty *(% of population below national poverty line)*	36	..	..
Urban population *(% of total population)*	69	68	58
Life expectancy at birth *(years)*	71	69	68
Infant mortality *(per 1,000 live births)*	18	23	38
Child malnutrition *(% of children under 5)*	..	..	..
Access to safe water *(% of population)*	..	..	75
Illiteracy *(% of population age 15+)*	2	4	14
Gross primary enrollment *(% of school-age population)*	99	100	103
Male	100	101	105
Female	98	99	100



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

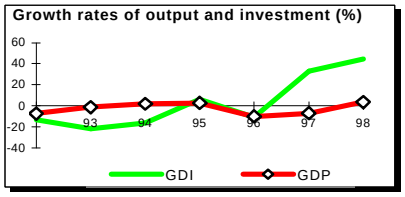
	1977	1987	1997	1998
GDP *(US$ billions)*	..	28.4	10.1	12.3
Gross domestic investment/GDP	..	32.9	11.4	14.7
Exports of goods and services/GDP	..	40.8	61.9	45.2
Gross domestic savings/GDP	..	31.1	16.9	13.7
Gross national savings/GDP	..	30.3	15.7	12.9
Current account balance/GDP	..	-2.5	4.2	-2.1
Interest payments/GDP	..	1.4	4.3	3.7
Total debt/GDP	..	29.1	97.2	80.8
Total debt service/exports	..	17.2	14.4	22.3
Present value of debt/GDP	..	..	92.2	..
Present value of debt/exports	..	..	143.6	..

	1977-87	1988-98	1997	1998	1999-03
(average annual growth)					
GDP	3.6	-4.0	-7.0	3.5	4.6
GNP per capita	3.5	-3.0	-5.9	4.8	5.6
Exports of goods and services	6.2	-12.2	3.1	-15.6	3.9

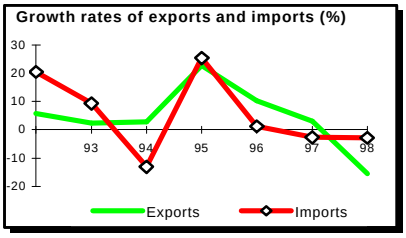


STRUCTURE of the ECONOMY

	1977	1987	1997	1998
(% of GDP)				
Agriculture	..	11.8	23.8	18.7
Industry	..	61.5	25.3	25.5
Manufacturing	..	..	16.8	17.0
Services	..	26.7	50.9	55.7
Private consumption	..	61.5	70.3	71.2
General government consumption	..	7.4	12.8	15.1
Imports of goods and services	..	42.6	56.4	46.3



	1977-87	1988-98	1997	1998
(average annual growth)				
Agriculture	-2.5	-2.1	32.9	1.4
Industry	6.4	-6.2	-11.3	4.3
Manufacturing	..	..	-14.9	6.5
Services	3.8	-2.0	-19.3	4.0
Private consumption	3.3	-4.9	-22.8	-4.7
General government consumption	8.6	-4.3	-1.4	4.0
Gross domestic investment	3.2	-7.7	33.1	44.3
Imports of goods and services	6.1	-16.3	-2.7	-2.8
Gross national product	3.7	-3.8	-6.6	4.4

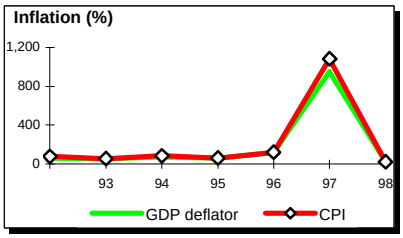


Note: 1998 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

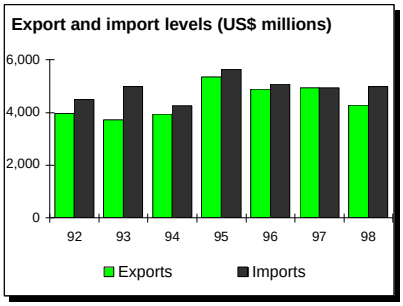
PRICES and GOVERNMENT FINANCE

	1977	1987	1997	1998
Domestic prices				
(% change)				
Consumer prices	..	..	1,082.3	22.3
Implicit GDP deflator	..	0.1	949.1	22.2
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	60.2	32.7	34.6
Current budget balance	..	..	1.7	4.1
Overall surplus/deficit	..	..	2.1	2.8



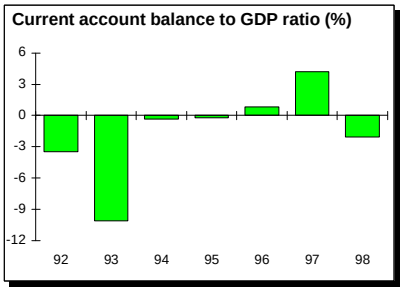
TRADE

	1977	1987	1997	1998
(US$ millions)				
Total exports (fob)	..	10,287	4,940	4,293
Other metal	..	1,801	..	..
Other agriculture	..	1,479	..	..
Manufactures	..	..	..	..
Total imports (cif)	..	11,298	4,932	4,995
Food	..	409	141	192
Fuel and energy	..	1,565	1,594	1,151
Capital goods	..	5,128	862	1,070
Export price index *(1995=100)*	..	95	98	86
Import price index *(1995=100)*	..	65	87	85
Terms of trade *(1995=100)*	..	148	112	100



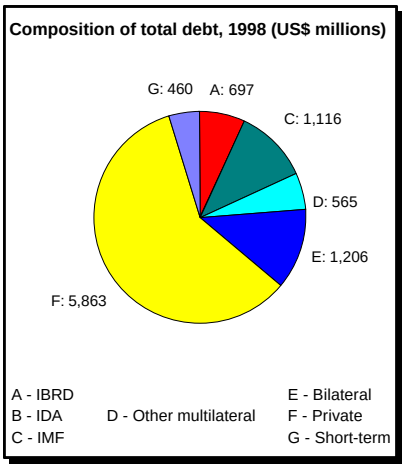
BALANCE of PAYMENTS

	1977	1987	1997	1998
(US$ millions)				
Exports of goods and services	..	11,444	6,277	5,548
Imports of goods and services	..	11,959	5,730	5,716
Resource balance	..	-515	547	-168
Net income	..	-314	-357	-314
Net current transfers	..	108	237	230
Current account balance	..	-721	427	-252
Financing items (net)	..	389	820	697
Changes in net reserves	..	332	-1,247	-445
Memo:				
Reserves including gold *(US$ millions)*	..	..	2,474	3,057
Conversion rate *(DEC, local/US$)*	..	1.3	1,696.0	1,760.3



EXTERNAL DEBT and RESOURCE FLOWS

	1977	1987	1997	1998
(US$ millions)				
Total debt outstanding and disbursed	38	8,266	9,859	9,907
IBRD	0	0	501	697
IDA	0	0	0	0
Total debt service	2	1,989	932	1,296
IBRD	0	0	47	57
IDA	0	0	0	0
Composition of net resource flows				
Official grants	0	0	129	59
Official creditors	0	651	-75	73
Private creditors	1	779	-59	32
Foreign direct investment	..	0	507	401
Portfolio equity	..	0	133	-219
World Bank program				
Commitments	0	0	140	101
Disbursements	0	0	101	197
Principal repayments	0	0	16	20
Net flows	0	0	85	177
Interest payments	0	0	31	37
Net transfers	0	0	54	140



Additional
Annex No.: 11

Financial Management

Assessment of Financial Management System

Objective: The primary objective of the assessment is to determine whether the project has in place adequate financial management systems for project implementation and credit disbursements as required under OP/BP 10.02.

Implementation Arrangements: The Ministry of Education and Science (MES) will have the overall responsibility for project implementation with the assistance of the Project Coordination Unit (PCU) within the Finance and Economic Department that would have day to day responsibility for all PCU activities. The main functions of the PCU will be procurement, project accounting, administration of the Special Account, disbursements, financial reporting, auditing arrangements and coordination with the World Bank. To coordinate the activities of the proposed project, the MES would continue to rely on the previously established PCU under the Public Sector Management Loan. The existing PCU is headed by a coordinator and has a procurement specialist, both of whom will report to the Secretary General of MES.

Staffing: It was agreed that the new PCU will have one director, two coordinators, one each for higher and general education component; two procurement specialists; one financial management specialist (accountant); and one office secretary/interpreter. The PCU is presently headed by a coordinator who has experience in managing a PHRD grant including procurement of consultants. Arrangements have also been put in place to provide her with training in accounting software that the PCU intends to use. The accountant is hired and is in place since July 10, 2000.

Financial Management Reporting: During appraisal, the format and frequency for the submission of Project Management Reports (PMRs) was discussed with the newly identified PCU accountant, who also received a copy each of Project Financial Management Manual, LACI Handbook, and Financial Accounting Reporting and Auditing Handbook. It was agreed that during the initial period in which the PCU may not be ready to prepare quarterly PMRs, disbursements will start using traditional methods i.e. Statements of Expenditures (SOEs) reimbursements, direct payment, etc. It was further agreed that even though the PCU will initially be using traditional disbursement method it will, on a parallel basis, also produce PMRs, not necessarily for replenishment purposes but for reporting and gaining experience. Once the PCU has gained experience with the financial management system (FMS) and reporting under project management reports, and provided that an improved FMS is reviewed and found satisfactory by the Bank, and with agreement of the Borrower, the Project will move to PMR-based disbursements. Once converted, the PCU will be responsible for preparing quarterly PMRs, acceptable to the Bank, each of which will include: (i) financial report summarizing sources of project financing and project expenditures, disbursement, and forecasted project expenditures; (ii) reconciliation of the Special Account; (iii) project progress report comprising output monitoring and summary of project progress; and (iv) procurement management report on status of procurement and contract management.

Accounting Software: The PCU has already installed an accounting software package acceptable to the Bank. The system runs on a window based 'PIAS' accounting software and is based on double entry accrual accounting system. The package is considered to be adequate with respect to meeting basic accounting requirements.

Auditing arrangements: The PCU has provided the Bank assurance that independent auditors will be in place by March 30, 2001. This was discussed and agreed during Negotiations. The Bank has already provided a 'no-objection' to a short list of auditors. Draft terms of reference for the audit of the Project Management Reports (PMRs), project financial statements, the Special Account, and system of internal controls have been provided to the PCU. Independent auditors whose qualifications and experience as well as terms of reference acceptable to IBRD, will be selected by March 30, 2001. It has been agreed that the auditors should be selected in time to carry out their responsibilities, including review of the financial management systems at the beginning of Project implementation, and to enable the timely issuance of annual audited financial statements. The audit will be carried out in accordance with acceptable international standards, and Bank guidelines on auditing and financial reporting, such as *The World Bank Financial Accounting Reporting and Auditing Handbook and Project Financial Management Manual.* The audit report will include a separate opinion for SOEs and the PMRs against which disbursements have been made or are due to be made from the Loan. The Borrower will submit to the Bank audited financial statements and audit report within six months following the fiscal year-end.

Flow of Funds/Special Account: The funds will be channeled through the Special Account to be opened in the National Bank or a commercial bank acceptable to the Bank. To facilitate timely project implementation, the Government will establish, maintain and operate under terms and conditions acceptable to the Bank, a Special Account at a local bank in which loan amount will be transferred. In parallel, a Project Account will also be opened (in a local commercial bank) to facilitate payment for local project expenditures financed from counterpart funds. Where necessary, funds will be transferred from the Special account to the Project account for eligible project activities. The PCU will manage the Special Account, including preparing Loan withdrawal applications and supporting documentation, replenishment and reconciliation of the Account. The authorized allocation for this Special Account is Euro $1,000,000 equivalent. The replenishment applications should be submitted at least every three months and must include reconciled bank statements as well as other appropriate supporting documents.

Financial Management Manual: A Financial Management Manual (FMM) is presently being prepared by the PCU Accountant. The Bank has already received a draft version of the Manual and provided comments. The FMM include: (i) financial management system proposed under the Project, with special emphasis on accounting and auditing policies, standards and internal controls; (ii) role of the financial management systems in Project management and implementation; (iii) accounting arrangements required for Project management, the format for and content of Project financial reporting; and (iv) the auditing arrangements that will be used during Project implementation. It is expected that by September 30, 2000, a final FMM, satisfactory to the Bank, will be ready.

Readiness for Implementation and Risks: Even though a qualified accountant has been put in place since July, further training is being provided to the accountant to ensure that an acceptable financial management system is in place before the project goes to the Board. A recent visit (July 2000) by a financial management specialist confirmed that such training has already begun to Bank's satisfaction. A time-bound Action Plan (prepared during appraisal) was also updated during this visit.

Action Plan: For strengthening of the financial management system, a time-bound Action Plan was produced during appraisal and updated during a visit by a financial management specialist (FMS) in July 2000. The FMS issued a 4-B certificate confirming that the Bank's minimum financial management requirements are in place. The updated Action Plan, presented in Annex 11, was discussed and agreed with the relevant government officials, including PCU staff during this visit. The PCU Director and Accountant will be responsible for ensuring adherence to the agreed timetable. Instructions will be sought from the management of MES, wherever necessary.

	Action	Responsibility	Date
1	Recruitment of PCU Accountant	PCU	Done: July 10, 2000
2	Recruitment of Procurement Specialist	PCU	Done: June 1, 2000
3	Installation of accounting software capable of producing PMRs acceptable to IBRD	PCU	Done: July 11, 2000
4	Preparation of Draft Financial Management Manual	PCU/IBRD	Done: June 7, 2000
5	Start of Financial Management training for accountant	PCU/IBRD	Done: July 11, 2000
6	Presentation of short-list of auditors acceptable to IBRD	PCU	Done: June 1, 2000
7	IBRD to confirm adequacy of financial management arrangements	IBRD	Done: Aug. 4, 2000 4B Certificate Issued
8	Accounting software tested and operational	PCU	Done: Aug. 4, 2000
9	Submission of final Financial Management Manual	PCU	By Sept. 30, 2000
10	Production of sample PMR	PCU	By Dec. 1, 2000
11	Appointment of auditors	PCU	March 30, 2001
12	Preparation of first PMR submitted to IBRD	PCU	September 30, 2001

Additional
Annex No.: 12

Letter of Sector Policy

THE REPUBLIC OF BULGARIA
MINISTRY OF EDUCATION AND SCIENCE
OFFICE OF THE MINISTER

Date 01/07/2000
Mr. James D. Wolfensohn
President
The World Bank
1818 H Street N.W.
Washington D.C. 20433
U.S.A.

Letter of Sector Policy

Dear Mr. Wolfensohn,

This Letter of Sector Policy sets out the main policy direction of the Ministry of Education and Science, indicates areas where further development is anticipated, and identifies areas where assistance is sought.

Our educational policy and the content of education in our schools and universities have been transformed since 1990. The beginning of the transformation was signaled by the National Education Act, which was enacted on the 18th of October 1991. This act returned school education in Bulgaria to its rightful place in a democratic pluralistic society. Since then, we have supported this enabling act with numerous subsidiary laws and regulations dealing with different elements of the education system, each of which putting into effect our policies.

While our education system and our educational institutions are a fundamental pillar of civic society and democracy, they also play a critical role in helping Bulgaria maintain and improve its economic strength. Bulgaria has applied for membership in the European Union, and we have begun a programme of adaptation and amendment of our legislation as well as initiating institutional and economic reforms to facilitate this process. We also are strengthening our educational institutions, their quality and improving outcomes in order that Bulgaria will be able to withstand the competitive pressures, which the Single Market will bring.

Until now, the close working relationships between our Ministry and the World Bank have not included borrowing for education. We envisage this as the next step in an already existing strong relationship, which began in 1990. We are working closely with other international partners, including the EU Phare Programme, bi-lateral donors, and other leading educational development agencies including the Soros Foundation.

In this letter, I would like to brief you on the key issues in the education sector, present our policies on these issues, and highlight where we seek assistance.

I. Recent developments and key issues in basic, secondary and higher education:

A. Primary and Secondary Education

Structure of the system. The Bulgarian educational system is based on laws passed by the National Assembly of the Republic of Bulgaria. Basic and secondary education is provided in conformity with the National Education Act (NEA) of 1991. School education is compulsory from age 6 or 7 up to the age of 16. Basic education (grades 1 to 8) covers primary school (grades 1 to 4) and pre-secondary school (grades 5 to 8). It may be obtained at state, municipal, or in a small number of private schools. Secondary education covers pupils from grades 9 to 11 and in some specialized schools, up to grade 13. A recent decision has been taken to extend secondary schooling to grade 12 in all schools. Vocational secondary schools (grades 7 or 8 to 11 or 12) provide specific vocational education for pupils.

Enrollment. In the academic year 1997/98 there were approximately 1.1 million children in schools in Bulgaria, of whom 71% are in grades I – VIII, 13% are in general secondary education and 16% are in technical/vocational secondary education. The gross enrollment ratios at basic, secondary and technical/vocational schools are about 100%, 87% and 68% respectively. The incidence of school drop out is noticeably high in middle schools. There were 84 000 teachers in 1997/98 working in schools. Pupil teacher ratios range from 18:1 in primary schools to 11:1 in vocational schools. Projections made on the basis of demographic change show school populations dropping by 31% for primary and 23% for middle school by the school year 2006/07. These changes are a major concern to the MES, and underpin the Ministry's Optimization Policy.

Access. Access to schools is generally good, particularly at the primary level, as shown by the enrollment ratios. However, after primary, in middle school, drop out rates are quite high. To encourage participation in school by children from minorities, special provision is made through special language instruction in the mother tongue. However, the incidence of drop out is higher in basic and lower secondary schools amongst minorities than the average rate.

Basic school education is usually provided in the pupil's nearest school, though parents have the right to choose an alternative school for their children provided there are free places. In rural areas where there are no village schools, the municipality is responsible for the provision of transport for children to the nearest primary/basic school. The choice of secondary school is optional and depends on pupil and parental preferences. Some of the specialized secondary schools require an entry examination.

Management. The administration of education is organized at four levels: national, regional, municipal, and school level. The Ministry of Education and Science determines and implements state policy in the field of education. At the regional level, Educational Inspectorates are responsible for supervision of state education policy and schools' performance. The school is a legal entity. Its administrative bodies are the Head of School and the Pedagogical Council. Recently school Governing Bodies have been reintroduced, which is a return to previous educational practice.

Finance and Financial Systems. Based on the primary source of financing, schools in Bulgaria are grouped as state schools or municipality schools. The state schools (mainly vocational and for children

with special needs) are funded directly from the MES (or other concerned line ministries) budget. Municipality schools, which form the biggest proportion of schools, are funded from three sources. First, a block grant is awarded to the Municipality from the Ministry of Finance for the provision of social and other services (including education). In respect of education, this grant is based on a formula which principally reflects pupil numbers and number of classes, in approximately equal proportion. Second, the Municipality may award education a share of locally raised taxes thus allocating to education resources above the central government block grant. Third, some schools are able to raise funds themselves.

At the municipal level, each school submits a proposed programme for the coming year, which the Municipality approves. These programmes have to follow state norms of educational provision, notably those pertaining to class size, national curricula, and also must reflect the employment conditions for teachers, e.g. number of teacher hours per week. Schools, with the exception of those working under so-called delegated budgets programme, do not manage funds. Services are provided and paid for by the municipality, teachers' salaries are paid centrally by the municipality, and building maintenance is organized by the municipality. One hundred schools have been following an experimental programme (the Delegated Budgets programme) to manage their own school budgets since March of 1998. Following a review of this pilot programme, the government decided to extend this approach to all schools in Bulgaria.

***Inspection and Monitoring*.** Responsibility for implementing the state educational requirements and norms rests with the Education Inspectorates. Teams of inspectors based in each of the 28 regions control activities in all state, municipal and private schools, kindergartens and servicing units on their territory. Each inspection team within given Inspectorate consists of about 12 subject specialists together with inspectors for finance and economics, and for organization. Each Inspectorate is a legal entity. The quality of the leadership provided by the Head of the Educational Inspectorate in each region is a key factor in promoting change. There are approximately 700 inspectors, who perform approximately 20,000 school inspections per year.

The inspectors assess the results of school based teaching-learning activity. The results of the inspection are summarized in a report made available to the school. On the basis of the final report and its findings, the Inspectorate makes recommendations to the school directors. Inspectors also contribute to the quality of education by appointing school directors (as from May 1st, 1999) of municipal schools approving the curriculum and staffing structure of the school, and intervene in cases of malpractice. Inspectors are also responsible for monitoring compliance in financial and economic management of schools, as governed by the norms and legislation.

Curriculum. From September 1999, a new curriculum framework was introduced based on national content standards for each subject expressed in terms of the knowledge, skills and attitudes that students should acquire. A National system of assessment standards in each subject will be developed as well. This will replace the current curriculum, which is defined largely in terms of subject content, is academic in nature, and is targeted to more able learners.

Assessment and Examinations. School-leavers currently receive certificates based mainly on teacher assessments. There are very few national tests to provide the consistency demanded by higher education and employers. The certificates issued as pupils complete basic education (grade 8) are also based on internal teacher assessments. They do not provide the necessary information to guide students into the next phase of education nor do they provide decision makers with sufficient information about school performance and effectiveness.

Links to the Labour Market. Traditionally, vocational schools were tied closely to individual enterprises, and the specialization of the enterprises played a large part in the focus of skills training in these schools. These close ties have largely been broken though the inheritance of subject and skill specialization is still within the vocational school system.

The vocational schools need the knowledge and experience of the social partners in order to respond to the challenges of the changing business environment within which the school graduates will work. The commitment and influence of the employers will be enhanced by:

- Provision of practical experience to the students, which complements the training delivered within the vocational schools
- Participation of the employers in the development of vocational standards
- Participation of the employers in the assessment, certification, and awarding the vocational qualifications
- Participation of the employers in the vocational teacher training related to the labour market needs

A methodology for labour market needs analysis is developed that could help the vocational education system. It could be applied at the 28 regions for identifying the trends, which determine the enrollment state plan for the vocational schools. The Ministry of Education and Science involves the employers and the concerned state institutions in the process of developing the new State Register of Specialities, which is designed in conformity with the ISCED requirements. Taking into account the labour market needs, the priority will be given to the large-profile professions and to building essential skills such as foreign language skills, entrepreneurial skills, ICT-skills, and teamwork skills. Thus, the training will be provided that match the market labour needs and the ongoing structural reform of the national economy.

B. Higher Education System

Structure of the system. Within the system of Higher Education in Bulgaria there are 41 Higher Schools, 29 are state owned, 8 military and 4 private. This number includes the ex-semi higher institutes). After the enactment of the Academic Autonomy Act in 1990, the Higher Schools established a number of detached education units. Some Higher Schools covered the whole territory of the country with such units. The tuition in those detached units is of poor quality.

Number of students. Enrollments in the Higher Schools have grown substantially in the 90s, from less than 150 thousand students in 1991 to nearly 250 thousand students in by 1997. The entire increase of the number of students is the result of the Higher Schools now being able to enroll students who pay for their tuition. Until the 90s, the students in Bulgaria paid no fees for their tuition, i.e. the Higher Education was free. Together with this type of students, in the 90s, the Higher Schools were allowed to receive students who could pay for their tuition - the so-called paid education. The number of students enrolled in the Higher Schools for paid and free tuition has always been controlled by the Government, but in 1995 the number of paid students doubled as compared to the same number in 1993, and by 1997 they constituted half of the total number of students. Another specific feature of the development of the System during this period is the sharp increase of the number of part-time students – it more than doubled in the period between 1991 and 1997.

Structure, number, and age of the academic staff. The number of tutors did not increase so sharply as the number of students. In spite of that, the ratio of students to tutors remains relatively low – 11.7/1

(according to the information from the National Statistics Institute – 1997). In the 90s there has been a particular increase in the number of social sciences (mostly economics) students. As a result, the ratio of students/tutors in this sphere is especially high (average 50/1 for the Higher Schools of Economics).

More interesting is the data regarding the aging of the tutors at the Higher Schools. For instance 40% of the professors in Bulgaria are now at the age of 60-65 and 29% are 65 – 69, whereas only 9% are at the age of up to 54. The average age of the lecturers is over 50. Apart from a lack of motivation due to low salaries and bad conditions in the country for scientific research, low pensions appear to be the reason for lecturers' lack of desire to retire. With young people uninterested in academic careers due to different reasons, a "habilitation" crisis can be expected soon.

Quality assurance system. The system for improving and maintaining the quality of higher education contains the following elements:

- The normative documents should be considered a medium, in which the Higher Schools (HS) and other institutions take part in the process of evaluation and maintenance of the quality.. They are subject to assessment, criticism and amendment.
- External quality assessment – A National Agency for Evaluation and Accreditation has been established and is functioning. The first assessments of programs and institutions have already been made under a two-phase EU Phare Project that supported the establishment of the Agency. During the second phase, special attention will be paid to institutional accreditation issues.
- Internal quality assessment – Inter-university systems for quality assessment and maintenance have not been developed yet. But the amendments to the Higher Education Act (HEA) require such systems and in a number of universities the implementation of pilot projects under the Tempus Program has begun.
- Professional quality assessment – Diplomas for higher education, qualified by professional organizations, shall be the result of the connection between the professional organizations and the Higher Schools. The assessment shall be done on the basis of the requirements of the professional organizations to judge the qualification of the HS graduates. At the moment, however, no such assessment is being done.

Funds for Higher Education. The funds allocated for Higher Education in the 90s decreased from 42% of the GDP per capita in 1991 to 22% in 1998. For a long time, private funding of Higher Education has remained at its present low level – around 1% of the GDP per capita. Given the inappropriate premises, the outdated financial management, lack of modern administration, and the fragmented university structure, the available funds are sufficient only for salaries and current expenses. As a result, the equipment necessary for the training process has become outdated, the supply with new titles and the maintenance of the periodic editions for the libraries has deteriorated, and publishing scientific findings of the academic staff becomes more difficult. In a word, the whole academic life is upset and the final result is lowered education quality.

Material base and access to scientific information and information networks. The reduction of funds available for the Higher Education System (HES) has had a negative impact on the maintenance and renewal of the material base of the Higher Schools. Only 15% of the equipment is deemed adequate for teaching purposes (60% is evaluated as partly adequate but in need of some renewal and 25% needs thorough renewal). Among the higher schools, 70% of the buildings need overhaul. 91% of the scientific equipment for training purposes needs renewal, and only the computers supplied mainly under international EU Programmes are in a relatively good condition. The reduced funding for higher education also has had a very negative impact on libraries. The flow of new literature has decreased considerably, as has the number of periodic magazines for which the libraries subscribe – only 27% of

the Higher Schools have what might be considered sufficient access to scientific literature. Libraries need total restructuring. Access to Internet is assessed as sufficient at only 55% of the Higher Schools (and there are a number of Higher Schools without any access to Internet).

Quality of education and adequacy of the HE System and HS to society and the economy. This short review and analysis of the HE System unequivocally shows that education quality is sharply lowered:

- The Higher Schools were not prepared (in either equipment and tutors) for such a sharp increase in the number of students. The wider opening of the university doors led to mass enrollment in higher education, but also allowed a flow into the system of people who do not possess the necessary skills to do university work. At the same time the System turned out to have an increased permeability. In 1997 the students numbered 250,000. At an average of 45,000 students enrolled per year, the training period becomes 5.6 years (at an average duration of the training period of around 5 years).
- Part-time training is also of lower quality. One reason is the lack of modern textbooks and tutorials, small number of lectures and workshops – 3 weeks in a semester, in some cases even less (as compared to 15 weeks in a semester for the regular students), lack of appropriate libraries in the places, where the part-time students work and live, sharply reduced contacts with the lecturers, and lack of academic atmosphere.
- The tuition in the detached units of the Higher Schools also shows low quality (with a few exceptions). These detached units are usually located in buildings, where apart from the basics necessary for the training process, no other facilities are available - libraries, Computer Information Systems, access to the Internet, an academic atmosphere (not to mention capacity for scientific research, seminars, optional extra-curricular courses, etc.).
- Funds allocated for HE decreased, as a result of which the quality of education also decreased.
- The Academic Managerial Council and most staff of the Higher Schools still refuse to discuss the seriously changed environment – the changed economic structure of the country, the introduction of the market economy rules in all spheres of social life, the necessary cutting of training costs related to the mass enrollment in the HE system, the introduction of the broad-spectrum specialties, very often from interdisciplinary spheres of science, the autonomy of the Higher Schools, the increased requirements for inter-university maintenance of the education quality, the competition between the Higher Schools, the reduction of the real earnings of the staff etc. As a result, the HE system as a whole and the individual Higher Schools do not react adequately to the requirements of society and the economy.

II. Strategic vision for the future development of the sector

Main Objective: To improve the quality and relevance of education while retaining accessibility and increasing equity

A. Development of basic and secondary education

The priorities for future development of basic and secondary education are: **improving access** to basic and secondary education, particularly amongst disadvantaged and minority groups, and introducing lifelong education; **improving the quality of education**, through the introduction of national standards, improved teacher preparation and in-service training, building in improved quality assurance and evaluation systems, and; **making education more effective** through greater transparency in

professional qualifications, improved governance of education, improved use of resources devoted to education, and closer links with the social partners.

The main development in terms of improving the quality of secondary education are connected with:

- development of systems of content standards and assessment standards to form a sound base for a new national curriculum
- development of new, standards-based, curriculum to upgrade the existing one by preparing programmes of study for each subject
- training of specialists in curriculum development for the different subjects, together with some resources for curriculum development (writing programmes of study for different subjects), as well as some resources for capacity building in MES in the scope of curriculum design.
- National Curriculum Council will be established to co-ordinate the development, implementation, monitoring and revision of the curriculum and standards
- upgrading of the in-service teacher training system based on the new demands of education and supporting a reliable network of training providers; the main goal is to create a competitive market of training providers and services;
- initial training of new teachers' needs to reflect and introduce the new developments in the secondary education;
- MES will enhance an accreditation process for the providers;
- assessment and examination process will be further developed by additional training in assessment techniques and establishment of national assessment unit;
- educational Inspectorates need further institutional building support in terms of implementation of the educational policy on new curriculum and standards, related assessment, handling the decentralization process, optimization of the school network, delegated budgets and design of an effective inspection system for new curriculum and assessment.

The main development in terms of making secondary education more efficient are connected with:

v Governance and management of the secondary education which includes :

Ø development of the Management Information System (MIS) by refining the overall design and providing appropriate soft- and hardware.

Ø Training and qualification of the management personnel in the education system

v Providing internal efficiency of the secondary education by:

Ø further decentralization of the management through development of an in-house training capacity to support the implementation of the main educational policies;

Ø optimization of the school network by reorganization or closure of schools and to establish flexible criteria to encourage innovative solutions to local needs;

Ø further implementation of delegated school budgets and training for municipality and school authorities for the implementation

B. Development of Higher Education

The main characteristics of the future Higher Education System in Bulgaria can be outlined in the following way:

· An effective network of Higher Schools and improved resource management in the HE sector;
· Uniform fee structure and a viable system of student loans and stipends;
· Well-trained academic staff providing high quality instruction through a relevant syllabus and curriculum.

It is expected that the number of the public HE establishments (incl. branches and centres) will be optimized and a couple of private universities will be maintained to meet the requirements of the new HE strategy. The autonomy of the universities (decisions on staff, budget and curriculum) will be kept, while flexibility of the curriculum will be stimulated to provide mobility within and between the different specialties, faculties and HE establishments. The public financing of the sector will be based on the demand driven priorities and needs relevant to the development of the market economy and social changes.

The following **strategic objectives** have been identified:

1) Improving Resource Management in HE Sector;
2) Retaining Accessibility of HE in Bulgaria;
3) Improving Teaching and Learning Process

1) Improving resource management in HE sector.

Changing the method of distribution of student seats. The distribution of student seats in specialties at HS is being done in accordance with the State Register of Specialities. This means that the distribution is done in 194 specialties at 41 universities and 42 colleges. This approach complicates the procedure and does not enable universities to carry out a more flexible policy in the enrollment of students. The state should take part in the process of distribution of student seats not in specialties, but in spheres or areas. Thus, instead of distribution in 194 specialties, it can be done in 19 or 20 scientific spheres or areas.

Co-operation with representatives of employers. In the process of reform, it is mandatory to involve more fully representatives of the employers and social partners, with who close co-operation should be maintained. This relationship is especially important in the processes of: developing new educational standards and programs; and ensuring proper conditions for practical training, renewal of material base and equipment and the use of practicing tutors in the training process. It will also be important to involve employers in the process of redefining the type of specialties in the distribution of student seats.

Life-long learning. In order to improve the relevance of HE to the needs of the economy and social requirements, it also is necessary to encourage more life-long learning. This is the only way to satisfy the needs for new knowledge and skills that result from the fast changing environment and a rapidly developing information society.

2) Retaining accessibility and increasing equity of the HE System

Sustainability of the access to HE and equity of HE shall be reached through:
- achievement and sustainability of an optimum enrollment in HE;
- introduction of uniform tuition fees for everybody;
- developing a scheme for student loans and stipends;
- introduction of unified entrance exams in HS; and
- encouraging more non-university programs for Higher Education.

3) Quality improvement in teaching

Curriculum reform. The curriculum reflects the narrow specialties in the Bulgarian HE system

inherited from the Soviet influence. In spite of the introduction of the three degrees (Bachelor, Master and Doctor) and the State Register of Specialities (in 1997), which reduced the number of specialties by more than half, in some Higher Schools a considerable number of narrow specialties are still taught. Another aspect of the existing curriculum is the necessary annual minimum number of academic hours per tutor, which amounts to 360 hours lecturing. This means that the curriculum is designed in such a manner as to ensure enough hours for the lecturers. For that reason the weekly engagement of the students in many cases reaches 30 hours. The curriculum is often designed to suit the tutors' interests, not the students'. Also it almost never reflects the requirement for minimum costs for tuition.

The Unified State Requirements to Education in Specialities and the State Register of Specialities should be replaced with standards, which will create conditions for the design of wider-profiled, flexible, modern curriculum. To achieve these reforms, the State Register should meet the ISCED-97 requirements.

The curriculum should:

- enable students to acquire broader knowledge in the specific sphere;
- reflect the necessity for the students to learn how to study, thus preparing them for constant training throughout their lifetime;
- be flexible, in order to give the students a choice;
- allow for student mobility and credit transfer;
- encourage the smaller, narrow specialized institutions to consolidate.

Consolidation of lecturing and scientific research for maximum use of the academic staff of the country. Traditionally scientific research and student tuition has been divided between two institutions in Bulgaria – the Bulgarian Academy of Sciences (BAS) and the Higher Schools. This traditional method of organization is inadequate both with regard to resources (financial and human) of the country and with regard to the requirement for quality training. It is obvious that such waste of academic staff and resources cannot exist for a long period of time in the conditions of financial and (increasing) staff insufficiency. This is a difficult task that requires strong political will and sound analysis of the future of the Bulgarian science and Higher Education. Therefore the existing scientific institutes of BAS and HS should combine efforts and resources with the common purpose of ensuring adequate scientific volume and the necessary quality of education.

Subsidizing scientific research related to the training process. The Amendment of the Higher Education Act (HEA) envisages that the Higher Schools receive a subsidy amounting to 10% of the student's allowance, which shall be used for scientific research for the needs of the training in the specific sphere. The Higher Schools should ensure the necessary conditions, which will guarantee that the subsidy shall be used for that purpose only.

Assessment of the lecturers' qualities. The HEA requires that the Higher Schools shall have an internal system for evaluation of the quality of training and the tutors. Such internal systems have not yet been developed. They should be designed to help remove tutors who do not possess the necessary qualities and enhance future tutor development. The problem of the high average age of tutors can be reduced to a certain extent through a system for early retirement of older lecturers who do not possess the necessary skills.

Modernization of equipment. An important element of the improvement and maintenance of the education quality is the ensuring of modern equipment. The analysis of the equipment currently available in Bulgarian Universities (with small exceptions) indicates it is woefully outdated. This

means that modernization of the equipment within the system of HE must constitute an important part of the HE reform strategy.

Stimulation and bonuses to attract and keep young academic staff. One of the reasons for the aging of the academic staff is that young people are less interested in making academic careers for various reasons. Young staff could be attracted and kept through a special program for the development of doctorates and privileged bonuses for them.

Establishment of a teaching-quality improvement fund. The establishment of a special Fund for financing HE projects, related to improvement of teaching quality, together with the Institutional System for Evaluation and Support of Tuition and Tutors Quality, thus is an important part of the overall strategy for improving the HE quality.

III. Means for achieving the strategy objectives: Statement of the assistance needed.

A. Basic and Secondary Education

Decentralization. Assistance is sought to extend delegated budgets on a phased basis to all schools in Bulgaria. Funding will be required for the training of municipality staff in the design of funding formulas, school directors in new financial and general management skills, and inspectors in new approaches to assessing school effectiveness in a delegated system. Assistance is sought also for the gradual expansion of the delegated budget system to cover all schools in the country.

In line with the principle of decentralization, training funds would be delegated to schools to purchase training from accredited providers operating in a competitive market. Assistance is required to promote the establishment of a training market, to develop an accreditation system for both in-house and private sector providers.

Optimization of the School Network. Assistance is sought for supporting MES and the local authorities in introducing network optimization programmes, which will simultaneously optimize efficiently the school network while maintaining the quality of education. Funding is also required for technical assistance and training to strengthen the school place planning capacity of the MES and the Inspectorates, and to support municipalities in the identification and implementation of school reorganizations, including improved arrangements for local consultation.

New National Curriculum. Funding is required for:

- printing and publishing the developed content standards and development and publishing of assessment standards;
- technical assistance and training to strengthen the curriculum development function of the MES (including seminars, study visits, fellowships), support for teams that will write the programmes of study for each subject;
- the set-up costs of an Information Centre for curriculum developers at MES - minor refurbishment, office furniture, reference materials, and computers with Internet access.

Teacher training and staff development. Headteachers will require training in curriculum design and implementation, but the most significant cost will be for a national programme of in-service teacher training so that all serving teachers are familiar not only with the new curriculum content, but are able to adapt their teaching methods to the new requirements. Technical assistance will be required to help design the national programme, to train trainers and to fund a large number of courses and training materials.

Assessment and examinations. Assistance is needed to establish the proposed assessment and examinations system. Specifically, the funding will be used for:

- technical assistance to support the development of the infrastructure and training of key personnel;
- training in assessment techniques, test development, and data analysis - seminars, study visits, fellowships;
- refurbishment of premises to provide secure accommodation for the proposed National Assessment Unit;
- equipment - office equipment, hardware and software for desktop publishing, examination administration and data analysis.

Changing role of the Education Inspectorate. Significant training needs for inspectors arise, not only from the new curriculum and assessment system, but also from the impact of decentralization in general and the implementation of delegated budgets in particular. Assistance is sought for technical assistance to help develop a new national framework for inspection of assessing and reporting on school effectiveness in a decentralized system. Funding will also be required for training inspectors in curriculum development and monitoring, in data analysis and interpretation, and how to act as change agents.

Management Information System (MIS). Assistance is needed to implement the proposed MIS. Reference has already been made to the cost of an administration computer in each school capable of transferring base data electronically. Specifically, funding is required for:

- initial design of the MIS and development of a prototype of MIS, which will be piloted at the four management levels – national, regional, municipal, and school.
- system developers to refine the design of the MIS;
- purchase of additional computers, printers and network hardware for the central MES and Education Inspectorates;
- programmers to write system software;
- user training.

Communications strategy. Funding is sought for an information and media campaign to run alongside the implementation of the policy initiatives. It is envisaged that a company with experience in the field will be employed to design and manage the campaign. Assistance is sought for the cost of employing the company together with the cost of items such as press advertisements, leaflets, videos, a web site and promotional material.

B. Higher Education

Reform of the HEI Funding. in the area of HE funding reforms, technical assistance is sought for: further elaboration of the student allowances normative document; modifying the existing uniform tuition fee scheme; and narrowing the range of disciplines employed in the allocation of student seats. Technical assistance is needed to design the reform strategy and introduce price-based allocation principles into the HE institution funding process. To support the implementation of these and other reforms, an appropriate unit must be established within the MES that will require support and assistance in terms of equipment, staff training, and structure development.

Restructuring of HE Network of Institutions. Funding is sought for restructuring of the HE network of institutions, consolidation of small HE establishments and merging of services. For this purpose, assistance is needed for designing a concept/action plan for introducing joint services of HE Institutions and elaboration of midterm merging initiatives and of the necessary institutional and legislative framework. The initiative will help small institutions to understand their role in the process. The dialogue between the HE establishments for achieving the above initiative is to be enhanced. Technical assistance will help the overall design (including detailed regulations, procedures, staff training, institutional and logistic structure, etc.) of Competitive Teaching and Management Improvement Fund (CTMSHE). Publicity for the reform and CTMSHE is to be supported as well.

Internal Reorganization of the Structure and Management of HE Establishments. Assistance is sought for improving the internal management and structure of HE institutions, including the more efficient use of staff and of other resources. Internal restructuring activities will be encouraged through the Competitive Teaching and Management Improvement Fund. Assistance is needed to implement the proposed Higher Education Management Information System (HEMIS) Universities will need assistance to prepare their own mid-term management information strategies. Funding for technical assistance is sought for preparation of the strategies taking into account performance indicators. The universities will receive co-financing from the CTMSHE on the basis of prepared management information strategies.

Specifically, funding is required for:

- system developers to design the HEMIS;
- purchase of computers, printers and network hardware for the MIS;
- programmers to write system software; and
- staff training.

Establishment of Student Loan and Stipend System - Assistance is sought for the elaboration of a student loan and stipend system accessible for all students. Technical assistance is needed for identification of the amount of the funds necessary for students crediting. Support for the reform of the existing system is to be provided. Assistance for the design of a new law for student crediting is sought following article 96 of the Higher Education Law. Specific funding is needed for establishment of an entity to administer the new system.

Strengthening of the Quality Assurance System at University level. Assistance is sought for establishment capacity for external audit of internal quality assurance systems in HE institutions. Additional training and support for establishing a capacity of external auditors is envisaged together with appropriate training and piloting to ensure independent evaluation and validation.

Improving Teaching Structures. Funding and technical assistance is sought for establishment of a Competitive Teaching and Management Improvement Fund as well as additional support (training in evaluation, assessment and monitoring) for financing HE projects, related to improvement of teaching quality. Funding for procurement of modern equipment to improve the quality of teaching is envisaged.

Communications Strategy. – Funding is sought for publicity campaign for each of the components described above. The MES, Higher Education Steering Committee, HR institutions, etc. will implement this campaign.

In conclusion, this presentation of the state of the art in the field of education in Bulgaria and of the strategic visions about its restructuring underscore the important role that we expect the World Bank

loan will play as a key tool for the successful implementation of the critical reforms already under way in education sector.

Thanking you in advance for the kind attention you will devote to this matter, we remain

Sincerely Yours

Prof. Dimitar Dimitrov
Minister of Education and Science

Muravei Radev
Minister of Finance

Additional
Annex No.: 13

Institutional Analysis and Implementation Responsibilities

An institutional assessment exercise was undertaken during the preparation of the project to: (a) determine whether the MES has adequate capacity to implement the project and, if not, to identify activities that would help develop that capacity during project implementation; and (b) identify opportunities for the improvement of longer-term management capacity in the Ministry.

The assessment was conducted by the MES project preparation team with the support of a local consultant and guidance from a World Bank expert. The following six questions guided the exercise:

- Has the MES working groups adequately analyzed the work involved in implementing each component in the proposed project?
- Does the MES have a clear and adequate organizational home for all of its key functions, and is it clear particularly which organizational unit in the Ministry will be responsible for managing each of the component of the project?
- Does the MES have managers in place in all of the units responsible for managing project components? Will they be able to effectively lead and manage their units, and particularly the project components assigned to them?
- Based on the analysis of work, does each unit responsible for some project component have the right number of people, with the right mix of skills, to implement the component - in addition to carrying out its routine work?
- Based on the analysis of work, is it clear what counterpart funds will have to be provided by the Ministry in order to implement the project, and are arrangements in place to ensure that these funds will be available?
- How efficient and effective are current management practices in the MES?
- Has the MES developed logistical plans for each component? Do these plans reflect efficient and effective work practices?

The findings relating to these seven questions, and the actions carried out in each area, are summarized briefly in the following paragraphs.

(a) A detailed analysis of the work involved in implementing each component of the project was done in order to ensure optimal design and to assess realistically both the resources and the time required for implementation. The working groups that prepared the project were trained during preparation to perform this analysis. They produced logistical plans for each component and used the plans to re-assess resources, costs, and performance targets.

(b) A clear assignment of, firstly, the management responsibility for each project component and, secondly, the work responsibility for all activities included in each component, was done in order to ensure efficient implementation. All components and activities must be clearly assigned to units and managers. The working groups were trained to conduct a work breakdown analysis to facilitate the optimal assignment of these responsibilities. However, since the MES has been undergoing a major reorganization during the preparation of the project, at the beginning it was difficult to establish in all cases where will the management responsibility for several key components lie. Some unit managers were unwilling to accept responsibility, arguing that they were not sure whether their unit will continue to be the organizational home for the functions and activities in question, and whether they will remain the managers of these units.

This issue was dealt with during appraisal and immediately thereafter. An agreement which clarifies both management responsibility and work responsibilities for all components was reached. A list of components by management responsibility is included at the end of this annex.

(c) Management skills and management practices in the MES are weak; management procedures can be greatly improved. This is an important area requiring attention, to help improve both the implementation of the proposed project and of the Ministry's overall capacity. To address this issue the project will support a series of activities aimed at improving, modernizing and strengthening management practices. They will consist of short-term, modular training activities, highly focused on specific management practices. The implementation of this sub-component will be responsibility of the PCU and will start immediately upon effectiveness

(d) The logistical plans developed for all project components, allowed MES to check the realism of its assumptions regarding the number of staff required to implement these components, their skills and the time they will require to complete implementation. The plans helped also in reviewing the costs of project components and providing to the MES a realistic indication of the necessary counterpart funding.

Based on the work done and on these considerations, the Bank team concluded that the MES has the core capacity to start the implementation of the project, but that given the current organizational changes in the Ministry it was important to include as part of the project some management training and development activities to enhance the Ministry's capacity to implement the general plan to modernize the sector and the proposed project.

Implementation Responsibilities Matix

I. GENERAL EDUCATION COMPONENT	
PROJECT SUB-COMPONENT	**MANAGEMENT RESPONSIBILITY**
CURRICULUM **Sub-Component Objective 1.1:** To introduce a standards-based national curriculum	Head of Directorate "General Education”"
ASSESSMENT **Sub-Component Objective #1.2:** To monitor and evaluate the outcomes of the school system through the creation of a national student assessment system	Head of Directorate "General Education"
INSPECTIONS **Sub-Component Objective #1.3:** To support the new curriculum by strengthening the role of the Inspectorate in the assessment of school performance	Head of Directorate "General Education"
TEACHER TRAINING **Sub-Component Objective #1.4:** To improve the national capacity to deliver high quality, cost-effective and relevant in-service training for teachers, school directors and local education administrators	Head of Directorate "General Education"

DELEGATED BUDGETS **Sub-Component Objective #2.1:** To promote efficiency, flexibility and innovation in schools by giving school directors more discretion over the financial management and internal organization of their schools	Head of Direction "Labor management and regulation in the education and science systems"
OPTIMIZATION OF SCHOOL NETWORK **Sub-Component Objective #2.2:** To encourage and facilitate further optimization of the school network	Head of Directorate General "Central School Inspectorate"
EMIS **Sub-Component Objective #2.3:** To enhance the capacity of the MES to develop policies, monitor quality and promote efficient management of the education service system through the introduction of an education management information system (EMIS).	Head of the Directorate "Information Technologies"
PCU **Sub-Component Objective #3.1:** To support the implementation of the project through the establishment of a Project Co-ordination Unit (PCU)	Secretary General of MES
II. HIGHER EDUCATION COMPONENT	
RESOURCE ALLOCATION **Component Objective 1.:** To improve efficiency and effectiveness in allocating resources to HEI's	Head of Directorate "State policy in Higher Education"
Component Objective 2.: To retain the accessibility to higher education in Bulgaria	Head of Directorate "Finance"
Component Objective 3.: To improve the quality of teaching & learning and the management of institutions	Head of Directorate "State Policy in Higher Education"

Additional
Annex No.: 14

Competitive Teaching and Management System For Higher Education

Objectives

The priorities of the Competitive Teaching and Management System for Higher Education (CTMSHE) are to promote improvement of management practices, including de establishment of quality assurance mechanism, and teaching and learning conditions in Bulgarian higher education (HE) institutions.

To achieve these goals CTMSHE will finance projects prepared by higher education institutions aimed at reforming and improving its institutional management, internal quality assurance procedures, and teaching and learning processes. Higher education institutions will receive the funds provided by the CTMSHE as grants. They must put in place reliable mechanism to manage and monitor the uses of funds, and to produce regular reports showing how the funds are being used and assess their impact.

The CTMSHE will have two components. One will support improvement of management and internal quality assurance mechanisms in HE institutions, while the other will support the improvement of teaching and learning conditions, including reform of curriculum, improvement of teaching processes and conditions, upgrading of teaching skill of its faculty, updating and increasing teaching equipment and materials, modernizing libraries, etc.

Operation of the CTMSHE

To ensure the operation of the CTMSHE according to principles of transparency, democratic management, pluralism and competence, the organizational structure of the CTMS will be collegiate, having at the top a five member Executive Council (EC) responsible for ensuring that the CTMS operates according to its stated objectives. The chair-person of the CTMS will be the Deputy Minister of Higher Education, the other members of the system will be appointed by the Deputy Minister of HE following wide consultations with the higher education academic community, non-governmental organizations with links to higher education and the business community. Before the final appointment of the members of the EC, the Council of Rectors will be asked for its opinion. The members of the EC will be members of the higher education academic community of high academic reputation and representatives of the business community with links to higher education.

The functions of the Executive Council would be to : (i) supervise the management of the operation of the CTMS; (ii) control the observation of the regulations related to its operation; (iii) determine annual priorities for the preparation and evaluation of projects, subject to consultation with the HE Department of MES; (iv) set the criteria for project evaluation in consultation with the HE Department of MES and the Council of Rectors; (v) select the members of Peer Review Committees; (vi) ensure transparency of all phases of project evaluation; (vii) make the final decision on financing the approved projects; (viii) request from the Executive Directorate to prepare and deliver analytical reports on the outcome of the subsidized CTMS components in view of providing grounds for better operation; (ix) determine penalties for poor performance of approved projects; (x) contract surveys on the impact of the projects financed by the CTMS on the HE institutions; (xi) suggest to the HE Department of MES the establishment of new components or elimination of existing one; (xii) keep MES and WB informed about the development of the CTMS operation; and (xiii) collaborate in finding new funding sources for the CTMS.

Organizational Structure of the CTMS

The other collegiate bodies of the CTMS will be the International Supervising Committee (ISC), the Advisory Committees (AC) and the Peer Review Committees. The management of the CTMS will be responsibility of the office of the Executive Directorate (ED).

The International Supervising Committee will serve as a guarantee that the principles of the operation of the CTMS shall be observed and confidence in it will be built. It will consist of seven members with high academic reputation. Three of the members shall be from outside Bulgaria. The committee shall meet once a year to: (i) monitor the transparency in the operation of the CTMS; (ii) assess the efficiency of the management of the CTMS; (iii) make specific recommendations related to the tools, activities and projects that it sees necessary to create, expand, correct or terminate; (iv) prepare reports on the development of the program in the framework of the suggested objectives, and in particular on the quality of the activities and the efficiency of the participating HE institutions both in the academic and in the institutional aspect; and (v) make suggestions for new orientation of the operation of the CTMS when seen as necessary.

The Executive Directorate (ED) will be the administrative body responsible for the operation of the CTMS. Its main functions will be to: (i) implement the decisions of the Executive Council; (ii) manage the subsidies of the CTMS; (iii) organize and manage the competitive process of the CTMS; (iv) monitor the correctness of the applying and evaluation process of projects submitted to the CTMS; (v) submit the approved project to the advisory committees to assess them, after evaluating its eligibility; (vi) ; provide conditions for the work of the committees and the project reviewers for the evaluation of the projects; (vii) prepare evaluation reports for the Executive Council concerning the funding of projects and programs depending on the recommendations given by the advisory committees; (viii) report the CTMS operation results to the Executive Council; (ix) create and maintain reviewers data base; and (xi) provide support and consulting to HE institutions as requested by them for the development of projects in compliance with the CTMS objectives.

The staff of the ED will consist of an executive director, an accountant, three experts responsible for the initial assessment of the applying process and for monitoring the approved ones, and expert in information technology, a technical assistant. The executive director will be selected by the Executive Council on a competitive basis and shall be appointed by the Minister of Education.

The Advisory Committees (AC) will be formed on the basis of the number of CTMS components. Initially it will consist of two committees: one shall be responsible for activities related to improvement of teaching and learning, the other shall work on issues related to improvement of management efficiency and quality assurance mechanisms. Each AC will consist of seven members who will meet in accordance with the approved project evaluation schedule and will be remunerated for its work. The main function of the ACs will be to analyze and the peer reviewers' evaluations and rate the evaluated projects according to the CTMS's priorities. They will make recommendations to the EC for final project approval. The AC members shall be appointed by the Deputy Minister of HE in broad consultation with the Council of Rectors. The shall come from different HE institutions and different parts of the country, with appointment lasting four years.

The Peer Review Committees (PRC) will be responsible for evaluating the technical and academic merits of each project, and their feasibility and expected long term impact. The members of the PRCs shall be appointed by the EC based on recommendations made by the Executive Director. A reviewer shall not participate in the evaluation of project submitted by her/his institution or by persons with whom he/she is up to the third degree relationship. The shall be appointed for the period of evaluation of each contest and will not receive remuneration.

Institutional Eligibility

Projects of state HE institutions and their structural units (departments, institutes and so on) shall be eligible for subsidies from the CTMS. Joint projects of several universities or departments thereof shall be eligible for fund subsidies, they will have priority since the project effect will be multiplied. Joint projects provide better possibilities for the mobility of students, post-graduate students and academic staff. They are help create conditions for changing the structure of the network of HE institutions and merging individual institutions. Applying for particular projects shall have the explicit approval of the leaderships of the participating HE institutions for the implementation of the planned objectives. The provisions of the agreements between the parties participating in the projects shall be clearly stated when applying for funds. University departments shall be eligible for fund subsidies if they are sponsored by their universities.

To be eligible for fund subsidies, the universities shall confirm their compliance to the following conditions: (i) transfer the funds to those who will implement the project without any delay or reallocation; (ii) implement a project monitoring information CTMS and shall provide access to the project monitoring and financial control information to authorized fund representatives; (iii) sign an agreement with the CTMS that shall determine in detail the legal and financial responsibilities of the implementation of the projects; (iv) set up a project executive unit that shall be coordinated by a person who is responsible for projects administration and for the relations with the CTMS; and (v) prepare systematic self-evaluation programs in agreement with the existing regulations.

Funding of Projects

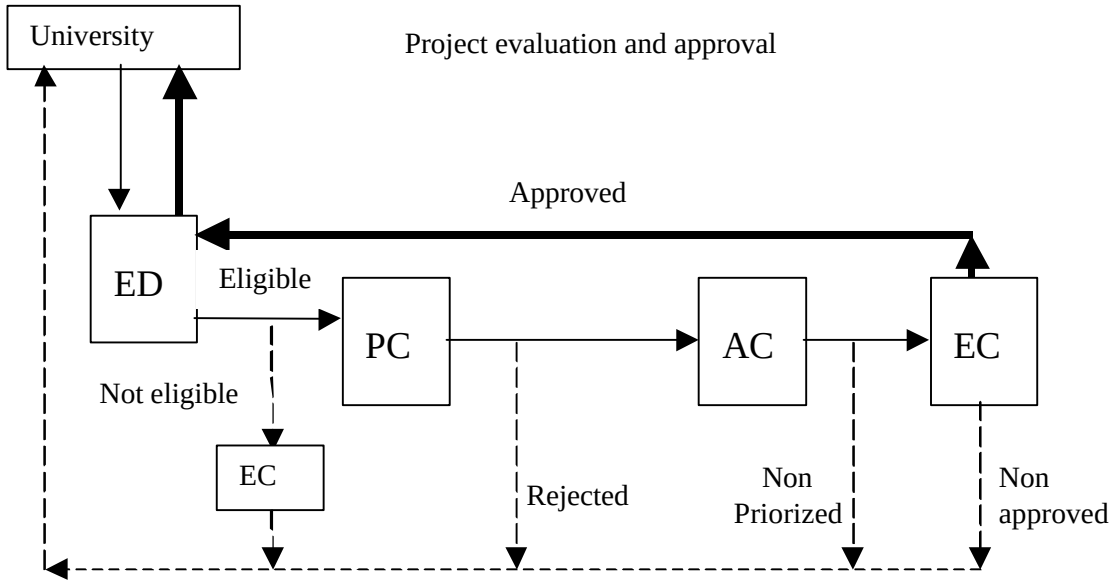
Projects presented to the CTMS will receive financing from the following sources: (i) the loan from the World Bank; (ii) the Ministry of Education and Science; and (iii) each institution. The CTMS will cover one hundred percent of fresh resources required for the implementation of each project with 80 percent coming form the World Bank loan and 20 percent coming form MES. In addition, each institution will be required to put as counterpart a contribution equivalent to 15 percent of the cost of the proposal to cover recurrent expenses of the approved project.

It is expected that the allocation of fund subsidies will be done according to the following proposed allocation table.

Project Type	**Goods**	**Scholarships**	**Consultant & Visiting Prof.**	**Total**
HE self evaluation	8%	3%	4%	15%
Quality improvement	35%	15%	5%	55%
Management Improvement	23%	3%	4%	30%
Total	66%	21%	13%	100%

Project Evaluation, Selection and Approval

Each project will be subjected to three types of evaluation. The first one will be an eligibility evaluation to determine if the project meets with the eligibility conditions set by the EC. This evaluation will be done at the level of the Executive Directorate. The second one will be a technical evaluation done by the peer reviewers to assess the technical, academic, feasibility and sustainability of each project. This evaluation will be done by the peer reviewers. The final one will be a priority evaluation to rank the approved projects and select the most relevant according to priority criteria set by the EC. This final evaluation will be done by the Advisory Committee. The following flow chart show this process.



Picture 1

Document of
The World Bank

Report No: 20234-BUL

PROJECT APPRAISAL DOCUMENT

ON THE FIRST PHASE OF THE

PROPOSED ADAPTABLE PROGRAM LOAN

IN THE AMOUNT OF EURO15.30 MILLION
(US$14.39 EQUIVALENT)

TO THE

REPUBLIC OF BULGARIA

FOR AN

EDUCATION MODERNIZATION PROJECT

August 7, 2000

Human Development Sector Unit
South Central Europe Country Unit
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective August 7, 2000)

Currency Unit	=	Lev
Lev 1.00	=	US$ 0.4638
US$ 1.00	=	2.1561 Lev

FISCAL YEAR
January 1 to December 31

ABBREVIATIONS AND ACRONYMS

APL	Adaptable Program Loan
APN	Annual Procurement Notice
CAS	Country Assistance Strategy
CC	Curriculum Council
CTMS	Competitive Teaching and Management System
ECA	Europe and Central Asia
EMIS	Education Management Information System
EQ	Equipment
EU	European Union
FMSE	Financial Management of School Education
GDP	Gross Domestic Product
HE	Higher Education
HEMIS	Higher Education Management Information System
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
ICR	Implementation Completion Report
IDA	International Development Association
IFC	International Finance Corporation
IT	Information Technology
MAT	Material
MES	Ministry of Education and Science
MOF	Ministry of Finance
NS	National Shopping
OSF	Open Society Foundation
P1	Phase One
P2	Phase Two
PAD	Project Appraisal Document
PCU	Project Coordination Unit
PHRD	Population and Human Resources Development (Japanese Grant)
PIP	Project Implementation Plan
PMR	Project Management Report
PVQ	Price-Volume-Quality [contracts]
QCBS	Quality and Cost-Based Selection
RAC	Resource Allocation Committee
RI	Regional Inspectorates
SA	Social Assessment
SCQ	Selection under Consultant Qualification
SFB	Selection under Fixed Budget
SIL	Sector Investment Loan
SPPO	School Place Planning & Optimization System
TA	Technical Assistance
TOR	Terms of Reference
VAT	Value Added Tax
VET	Vocational Education & Training
WG	Working Group

Vice President:	Johannes F. Linn
Country Director:	Andrew N. Vorkink
Sector Director:	Annette Dixon
Task Team Leader:	Ernesto P. Cuadra

BULGARIA
EDUCATION MODERNIZATION PROJECT

CONTENTS

Annexes

MAP(S)
Republic of Bulgaria - IBRD 26532R