

資料

1. 協議議事録 (ミニッツ)

Minutes of Discussions
on
the Preparatory Study
on
the Project for Reconstruction of Basic Education Infrastructure
in
Bosnia and Herzegovina

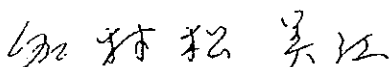
In response to a request from the Government of Bosnia and Herzegovina, the Government of Japan has decided to conduct a Preparatory Study on the Project for Reconstruction of Basic Education Infrastructure (hereinafter referred to as "the Project"), and entrusted the study to Japan International Cooperation Agency (JICA).

JICA sent to Bosnia and Herzegovina the Preparatory Study Team headed by Ms. Yoshie Muramatsu, Second Project Design Division, Grant Aid Project Study Department, JICA, and is scheduled to stay in the country from the 26 November to 17 December, 1998.

The team held a series of discussions on the Project with the officials concerned of the Government of Bosnia and Herzegovina and conducted a field survey at the study area.

As a result of discussions and field survey, both parties confirmed the main items described on the attached sheets.

Sarajevo, 4 December, 1998



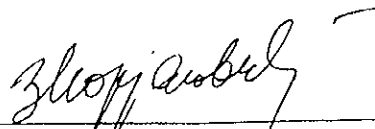
Ms. Yoshie Muramatsu
Leader
Preparatory Study Team
Japan International Cooperation Agency



Mr. Mihovil Malbasic
Assistant Minister for
International Multilateral Relations & Cooperation
Ministry of Foreign Affairs
Bosnia and Herzegovina



Prof. Dr. Azra Jaganjac
Director, PIU Education,
Ministry of Education, Science, Culture & Sports
The Federation of Bosnia and Herzegovina



Mr. Zdravko Marjanovic
Director, PIU Education,
Ministry of Education
The Republic of Srpska

ATTACHMENT

1. Objective of the Project

The objectives of the Project are to reconstruct the physical infrastructure for primary level education (grade 1-8) by constructing buildings, providing basic equipment for existing and new schools, and to contribute to the human resources development in Bosnia and Herzegovina (B&H).

2. Responsible and Executing Organization

(1) Supervising Ministry: Ministry of Foreign Affairs of B&H

(2) Responsible Ministry and Executing Organization:

The Federation of Bosnia and Herzegovina:

Project Implementation Unit (PIU), Ministry of Education, Science,
Culture and Sports (FD/MOE)

The Republic of Srpska:

Project Implementation Unit (PIU), Ministry of Education (RS/MOE)

(3) The organization charts are shown in Annex-1.

(4) After the implementation, the principal of each school, the cantonal ministry and municipality in FD, and Ministry of Education in RS will be responsible for the maintenance of the school buildings and equipment granted under the Japan's Grant Aid.

3. Project Sites

FD/MOE and RS/MOE requested the project sites shown in Annex-2.

Each site is for the primary school either damaged by the war or necessary for improving access and over-crowded classrooms at present.

4. Scope of Cooperation

(1) After a series of discussions with the Team, the FD/MOE and RS/MOE requested the construction of primary school facilities with provision of furniture and basic educational equipment.

(a) Facilities

School buildings (Normal classrooms, Special classrooms, Library, Staff room, Storage, Multi-purpose hall, etc)

Toilets

Utilities (Water, Electricity, Heating facilities, etc)

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(b) Equipment

Furniture

Basic educational material for the primary level

(2) Both Sides have agreed on the criteria for the project design as follows.

(a) The project sites will be examined in accordance with the criteria attached as Annex-3.

(b) The buildings will be designed in accordance with the criteria attached as Annex-4.

(c) The equipment will be selected in accordance with the criteria attached as Annex-5.

(3) The both MOEs have to guarantee the following preconditions of the Project.

(a) MOEs shall provide the detailed data on the proposed schools.

(b) MOEs shall secure the proper land certification and safety in the project site survey at the Basic Design Study stage.

(c) MOEs shall provide a latest estimation and actual result of the annual expenditure for the recurrent costs related to the operation and maintenance of primary schools.

5. Basic Design Study of the Project

(1) After the Government of Japan confirm the viability of the Project, a Basic Design Study will be carried out.

(2) The scope of works of the Basic Design Study will include;

(a) technical survey,

(b) management and financial survey,

(c) basic design of physical facilities and equipment for the Project,

(d) the implementation plan of the project,

(e) evaluation of the Project

(3) For the implementation of the Basic Design Study; FD/MOE and RS/MOE will provide necessary data and information, counterpart personnel, and permission from Ministries in each entities, local governments, and other organizations to the Basic Design Team.

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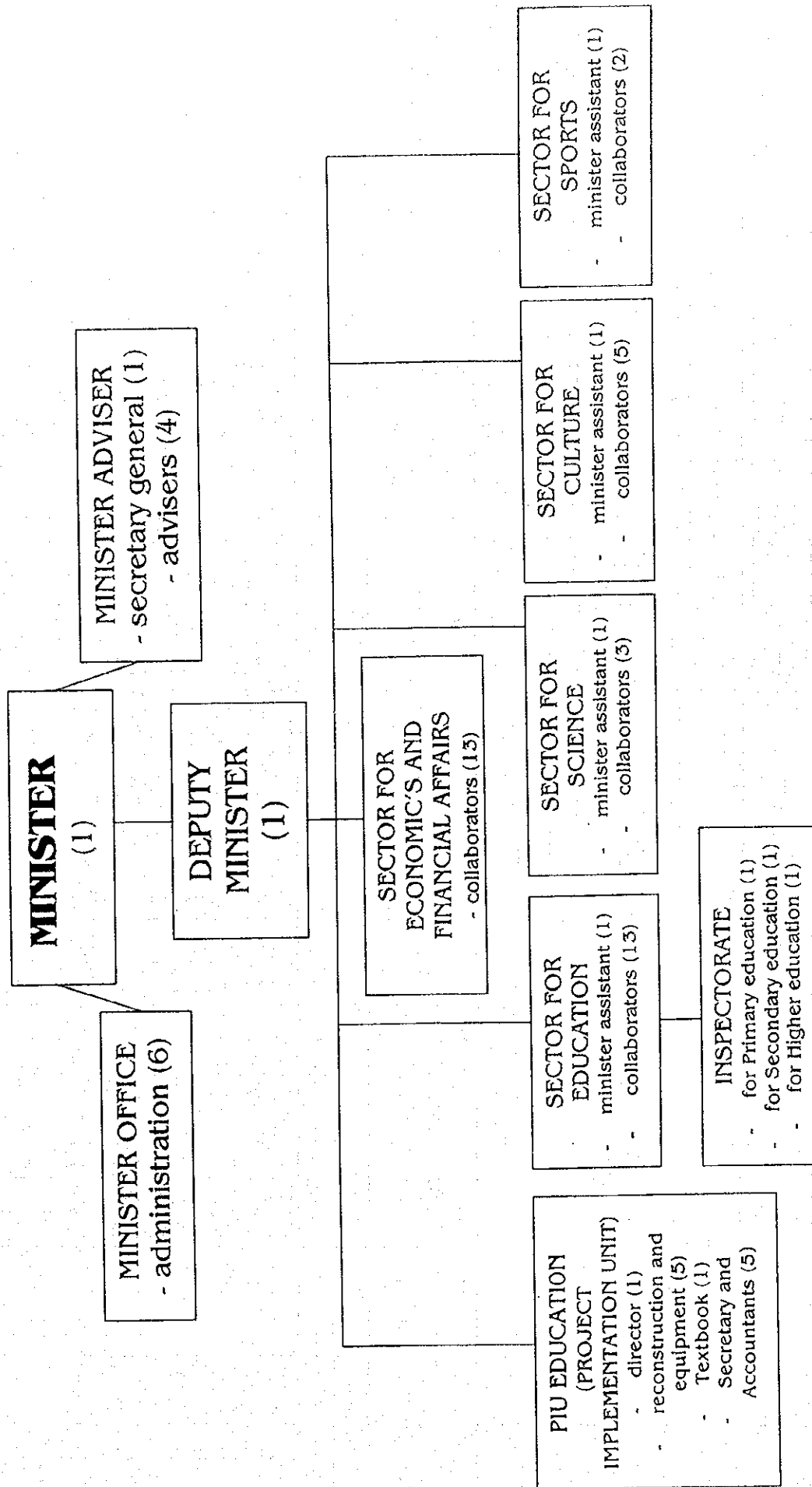
6. Japan's Grant Aid Programme

- (1) FD/MOE and RS/MOE have understood the system and characteristics of Japan's Grant Aid Programme explained in Annex-6 by the Team.
- (2) FD/MOE and RS/MOE will take necessary measures, described in Annex-7 for the smooth implementation of the Project, on the condition that Japan's grant aid is extended to the Project.

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muv [initials]

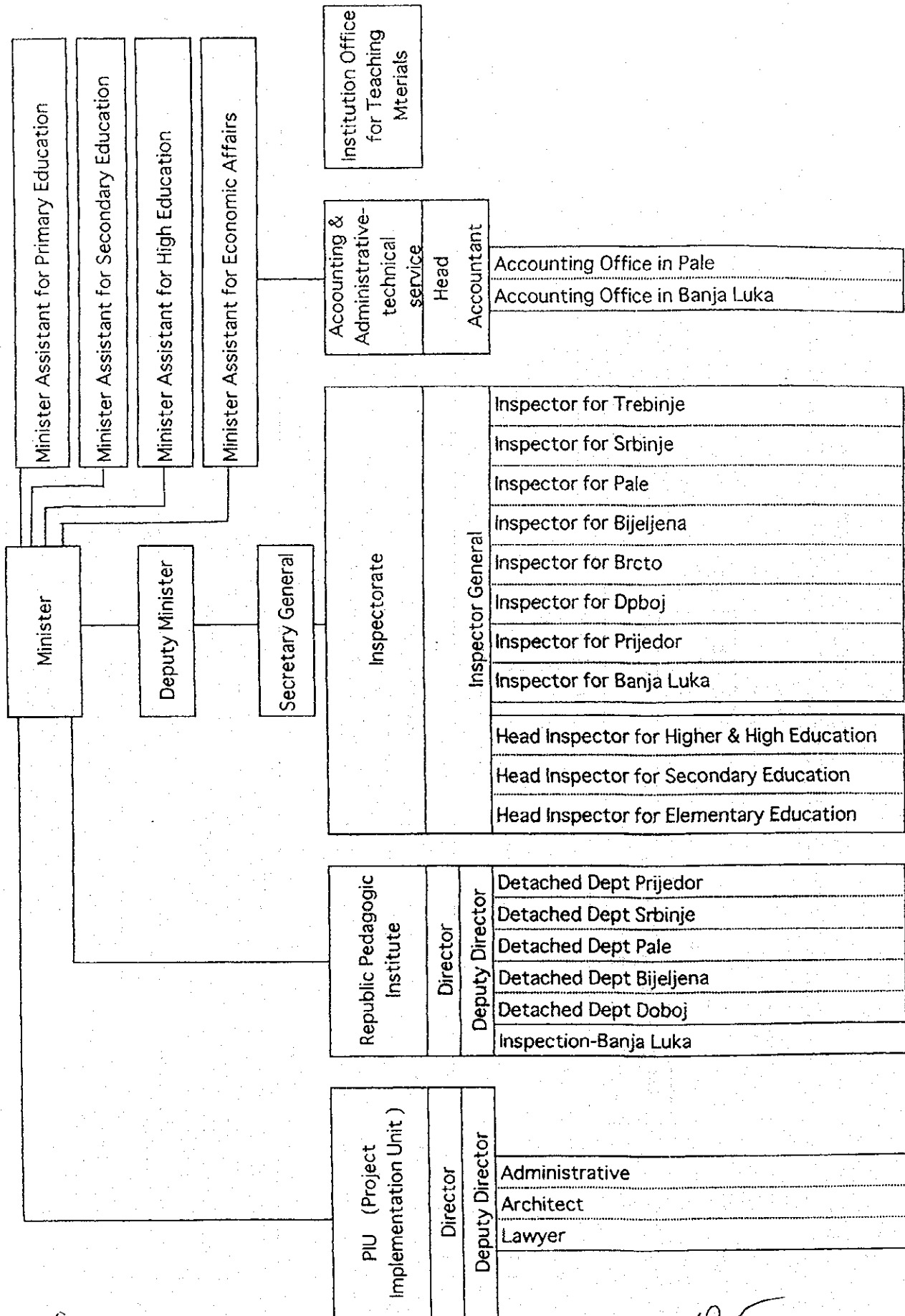
Annex 1.1. ORGANIZATION STRUCTURE
FEDERAL MINISTRY OF EDUCATION, SCIENCE, CULTURE AND SPORTS



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Organization Chart
MOE, The Republic of Srpska



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Annex-2 Requested Project Sites

The Federation of Bosnia and Herzegovina

- FD 1. Buzim (Canton 1) - Varoshka Rijeka
- FD 2. Gradacac (Canton 3) - Vida
- FD 3. Tuzla (Canton 3) - Pasci
- FD 4. Vitez (Canton 6) - Stari Vitez
- FD 5. Mostar (Canton 7) - III Primary School
- FD 6. Doboju Jug (Canton 4) - Matuzici
- FD 7. Gradacac (Canton 3) - Medjedza Donja
- FD 8. Orasje (Canton 2) - Bok
- FD 9. Orasje (Canton 2) - Prud

Note: The MOE/FD will confirm the priority of the schools with cantonal ministries, and inform to Japanese side by the end of December 1998 if the order were changed.

The Republic of Srpska

- RS 1. Banja Luka
- RS 2. Bijeljina
- RS 3. Lukavica - Srpsko Sarajevo
- RS 4. Ribnic - Prevoja
- RS 5. Srpski Sanski Most - Ostara Luka

Note: the schools are listed in order of the priority of MOE/RS

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BOSNIA AND HERZEGOVINA

FEDERAL REPUBLIC OF YUGOSLAVIA

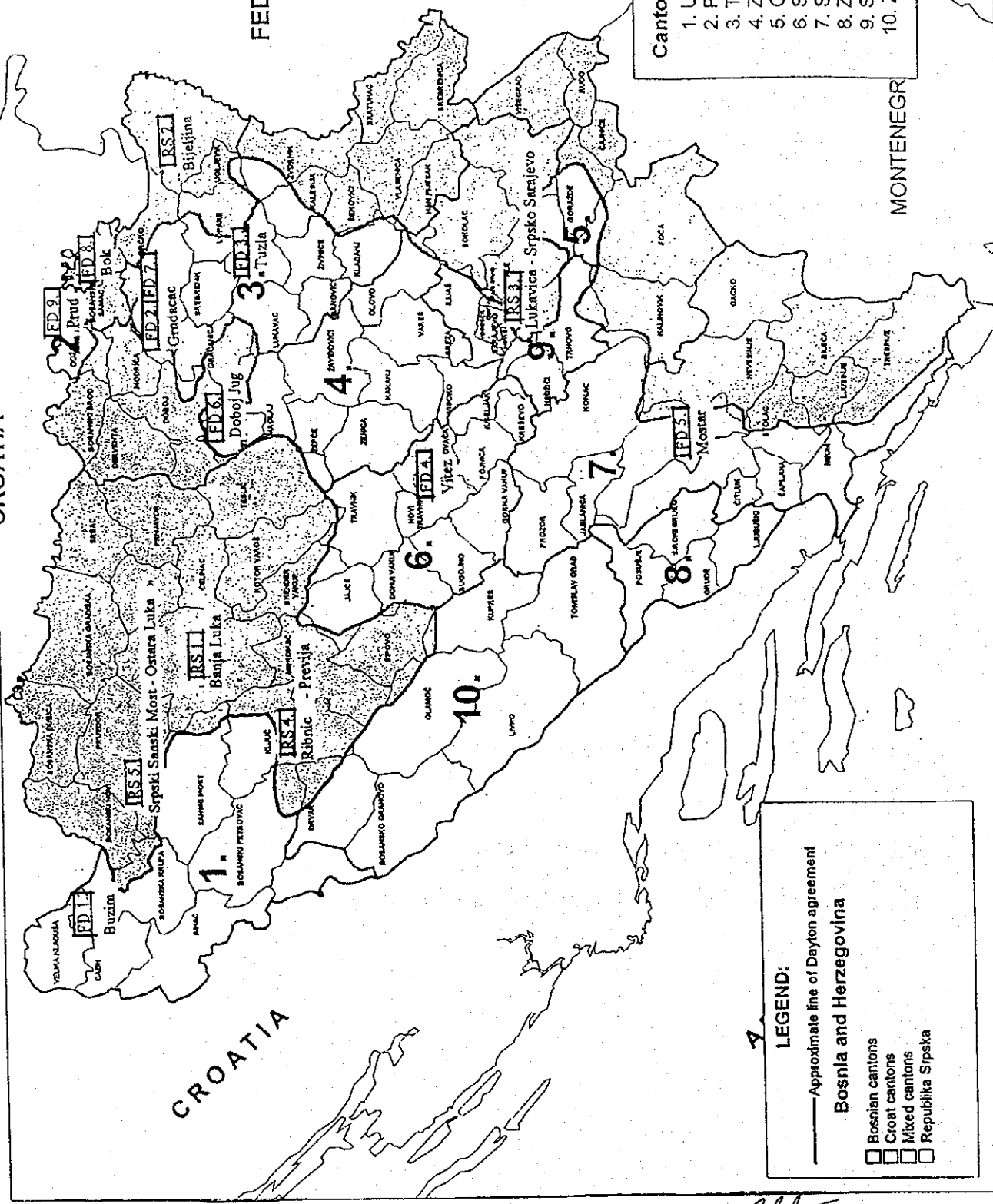
SERBIA

MONTENEGRO

- Cantons:**
1. Unsko-sanski
 2. Posavski
 3. Tuzlanski-podrinjski
 4. Zeničko-dobojski
 5. Gornjedrinski
 6. Srednjobosanski
 7. Srednjehercegovački
 8. Zapadnohercegovački
 9. Sarajevo
 10. Zapadnobosanski

LEGEND:

- Approximate line of Dayton agreement
- Bosnian cantons
- Croat cantons
- Mixed cantons
- Republika Srpska



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Annex-3 Criteria for the Sites Selection

1. Give a priority to the existing schools which are dangerous to continue to use because of physical damages by the war, over aging and does not satisfy the basic functions as a primary school.
2. Give a priority to the existing or new schools located in dense areas suffering from overcrowded classrooms and triple shift sessions, in which any major investment to physical facility improvement has not been implemented after the war.
3. There must exist minimal required pupils in the school district wherein a project site is located.
4. Any plan for school construction or other projects, by either the own government or international / bilateral donors, should not exist on the same project sites.
5. The legal rights for using a project site and site clearance must be secured by the commencement of the construction work.
6. Proper access road must exist in order to carry construction materials and equipment into each project site.
7. A project site in topographically inappropriate for construction (e.g. steep land, swamp, etc.) shall be eliminated.
8. On each project site, there shall be no foreseen natural and environmental or social hazards which endangers the workers safety during the construction.

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Annex-4 Criteria for the Building Design

1. Buildings should satisfy the minimal functions complied with the curriculum for primary education at present and near future.
2. The number of classrooms and other rooms in a building should accommodate the minimal necessity complied with circumstances at present and near future, such as the educational system, school age population in a school district, etc.
3. The specification of buildings shall follow the building standards and city code in municipalities in B&H.
4. Buildings should secure the enough durability against the climate and predictable natural disaster.
5. The most portion of the buildings should be able to be built with materials procured or imported easily and cost effectively in B&H.
6. Buildings should be able to be built and maintained with locally procurable techniques.
7. Buildings should be able to be maintained locally and cost effectively under the responsibility of the Cantonal Ministry of Education in FD and the Ministry of Education in RS.
8. Norms will be decided in consultation with PIU of each MOE.

Annex-5 Criteria for the Equipment Selection

1. Each equipment should satisfy the minimal requirement complied with the curriculum for primary education.
2. Each equipment should have the enough durability against the climate and proper use.
3. Each equipment should be procured in B&H in principle.
4. Each equipment should be maintained locally procured or imported easily and cost effectively in B&H, and its consumable materials must be supplied easily and continually.

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Annex-6 Japan's Grant Aid System

1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

- Application (A request made by the recipient country)
- Study (Basic Design Study conducted by JICA)
- Appraisal & Approval (Appraisal by the Government of Japan and Approval by the Cabinet of Japan)
- Determination of Implementation (Exchange of Notes between the Governments of Japan and the recipient country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study) using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Programme, based on the Basic Design Study Report prepared by JICA, and the results are then submitted to the Cabinet for an approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and recipient country.

Finally, for the implementation of the project, JICA will assist the recipient country in such matters as preparing tenders, contract and so on.

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Shoichi Muroi

2. Basic Design Study

1) Contents of the study

The aim of the Basic Design Study (hereafter referred to as "the Study") conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows :

- a) Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project.
- e) Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of the Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whether measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA select (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consultant firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

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3. Japan's Grant Aid Scheme

1) Grant Aid

The Grant Aid Programme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) Period

"The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Purchase of the Products and or Services

Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely, consulting constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

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6) Undertakings required of the Government of the Recipient Country

(As described in Annex-7)

7) Proper Use

The recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

8) Re-export

The products purchased under the Grant Aid should not be re-exported from the recipient country.

9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.

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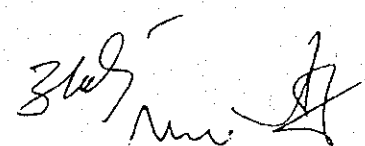
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Annex-7 Necessary Measures to be taken by B&H

Following necessary measures should be taken by B&H on condition that the Grant Aid by the Government of Japan is extended to the Project:

1. To provide data and information necessary for the Project.
2. To prepare the land for the Project and secure the rights to build a building.
3. To secure, clear, level and reclaim the site for the Project prior to the Project implementation.
4. To provide proper access road to the Project area.
5. To undertake incidental outdoor works, such as landscaping, fencing, exterior lighting, and other incidental facilities in and around the Project site, if necessary, but not for the use of contractors.
6. To provide facilities for distribution of electricity, water supply, telephone, drainage, sewage and other incidental facilities into the Project site borderline, if necessary.
7. To allocate appropriate budget and teaching and administrative staff members for proper and effective operation and maintenance of buildings and equipment provided under the Grant Aid.
8. To bear commissions to the Japanese bank for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and payment commission.
9. To ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation and prompt internal transportation therein of the materials and equipment for the Project purchased under the Grant Aid.
10. To exempt Japanese juridical and physical nationals engaged in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in B&H with respect to the supply of the products and services under the verified contracts.
11. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into B&H and stay therein for the performance of their work in accordance with the relevant laws and regulations of B&H.
12. To provide necessary permissions, licenses and other authorizations for implementing the Project, if necessary.
13. To maintain and use properly and effectively the facilities constructed and the equipment provided under the Project in responsibility of the organization described Attachment 2.(4).
14. To bear all the expenses, other than those to be borne by the Japan's Grant Aid within the scope of the Project.

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2. 調査団構成

ボスニア・ヘルツェゴビナ国初等学校再建計画予備調査

Preparatory Study on the Project for
Reconstruction of Basic Education Infrastructure
in
Bosnia and Herzegovina

調査団員名簿

Member List of the Study Team

- 1 総括／村松 美江 JICA無償資金協力調査部調査2課
Leader, Ms. Yoshie MURAMATSU,
Second Study Division, Grant Aid Study Department,
Japan International Cooperation Agency (JICA)
- 2 機材・調達計画Ⅰ(施設計画)／重里 輝夫 財団法人日本国際協力システム
Equipment & Procurement Planner I (Facility Planning), Mr. JURI Teruo,
Japan International Cooperation System (JICS)
- 3 機材・調達計画Ⅱ(教育計画)／水野 敬子 財団法人日本国際協力システム
Equipment & Procurement Planner II (Education Planning), Ms. MIZUNO Keiko,
Japan International Cooperation System (JICS)

(全員公用旅券使用)

3. 調査行程

ボスニア・ヘルツェゴビナ国初等学校再建計画予備調査

Preparatory Study on the Project for
Reconstruction of Basic Education Infrastructure
in Bosnia and Herzegovina

No of Date	Month/ Date	Day	ITINERARY	
			JICA	JICS
1	11/25	WED	NARITA 11:20 (NH207) - VIENNA 15:20	Same as Officials
2	26	THU	9'45 Meeting with JICA Office 10'30 Courtesy Call on Embassy of Japan VIENNA 13:20 (OS831) - SARAJEVO 14:35 16'00 Courtesy Call on M/o Foreign Affairs 17'00 Courtesy Call on Embassy of Japan in Sarajevo	Same as Officials
3	27	FRI	10'00 Courtesy Call & Meeting with FD/MOE,PIU 16'00 Meeting with IMG	Same as Officials
4	28	SAT	10'30 FD/PIU in Mostar, Site Visit >> Banja Luka	Same as Officials
5	29	SUN	Internal Meeting	Same as Officials
6	30	MON	9'00 Courtesy Call & Meeting with SR/MOE, PIU Site Visit (Banja Luka, etc)	Same as Officials
7	12/1	TUE	9'00 Site Visit (Sepski Sanski Most-Ostra Luka) 15'00 Una-Sana Canton, Site Visit (Buzin)	Same as Officials
8	2	WED	9.00 Meeting on Minutes of Discussions with RS/MOE >> Sarajevo	Same as Officials
9	3	THU	7'00 Site Visit (Vitez) 10'00 Meeting on Minutes of Discussions with FD/MOE 14'00 Meeting with WB	Same as Officials
10	4	FRI	9'00 Care International 10'00 Meeting with UNHCR 12'00 Joint Meeting FD&RS MOE Signing on Minutes of Discussions 16'30 Meeting with IMG >> Tuzla	Same as Officials
11	5	SAT	Site Visit (Tuzla, Gradacac, Bijeljina)	Same as Officials
12	6	SUN	Internal Meeting, Site Visit (Lukavica, Malaysian Project)	Same as Officials
13	7	MON	11'00 Meeting with UNESCO 12'30 Report to Japanese Embassy in Sarajevo SRAJEVO 15:15 (OS832) - VIENNA 16:40 18'00 Report to Embassy of Japan, JICA Office	13'30 Meeting with FD/MOE
14	8	TUE	VIENNA 20:35 (NH208)	08'30 Visit Contractor 09'00 Meeting with UNESCO
15	9	WED	TOKYO 15:35	08'30 Meeting with UNICEF 10'30 Meeting with UNHCR 15'00 Meeting with WB
16	10	THU		09'30 Meeting with PIU
17	11	FRI		Site Visit (Doboj Jug, Medjidja Donja)
18	12	SAT		Site Visit (Bok, Prud)
19	13	SUN		Internal Meeting

No of Date	Month /Date	Day	ITINERARY
			JICS
20	14	MON	09:00 Meeting with RS/MOE Site Visit(Banja Luka No.2)
21	15	TUE	09:00 Visit Contractor 11:00 OHR Meeting 04:00 UNHCR Meeting 06:00 ECMM Meeting
22	16	WED	Site Visit(Medjedza Donia)
23	17	THU	SARAJEVO 15:15 (OS832) - VIENNA 16:40
24	18	FRI	Report to JICA Office and Embassy of Japan VIENNA 13:30 (NH286)
25	19	SAT	NARITA 9:00

4. 面会者リスト

Ministry of Foreign Affairs

Mr. Mithat Pasic Director of Unit for Reconstruction, Dept for Multilateral Relations
Ms. Jasna Cehic International Aid Coordinator, Dept for Multilateral Relations
Mr. Aziz Hadzimuratovic

ボスニア連邦

Ministry of Education

Prof. Dr. Fahrudin Rizvanbegovic Minister
Prof. Dr. Jakov Pehar Vice Minister
Prof. Dr. Azra Jaganjac Director of PIU
Ms. Valida Galisid Technical Director of PIU
Mr. Ivan Galic Director of PIU in Mostar
Ms. Mersija Ahmetpahic Chief for Equipment

West-Mostar Municipality

Mr. Ljubo Golemac Mayor of Municipality West Mostar
Mrs. Andja Bebek Principal of III Primary School
Mr. Ivica Rosic Municipality Sector of Education, Culture and Sport
Mr. Josip Merdzo PIU Member (Consultant), Sector of Construction and Housing

Busim Municipality

Mr. Ekrem Pehlic Mayor of Buzim
Mr. Mehmed Cenanovic Advisor to the Mayor for the Social Activity and Culture
Mr. Sead Emric Chief of Construction and Development
Mr. Dzewel Alodzic Director of PS Buzim

Vitez Municipality

Mrs. Katica Cerkez Chief of the Social Activity and Culture (tel:072-712255)

Strai Vitez Municipality

(tel:072-712858)
Mrs. Enisa Zisko Chief of the Social Activity and Culture
Mr. Hasan Sadipasic Chief of the Urban Planning
Mr. Osman Smajic Chief of Dept. of Reconstruction Development

Zenicko-doboski Canton

Mrs. Zahida Sisic Deputy Minister

Tuzla-Podrnije Canton

Prof. Dr. Nihada Latifagic Minister
Prof. Abdulah Hodzic Deputy Minister
Vahid Camedzic Principal, Pasci Primary School
Fikret Vrtagic Expert Cooperator for Education, MoE for Tuzla-Podrnije Canton

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Ms. Nermina Hadzimuhamedovic Expert Cooperator for Education
Ms. Sadeta Subasic Chief of Social Affairs Department
Mr. Sefik Durakovic Chief of Department for Economy and Development
Ms. Emina Omeragic Expert cooperator for Space Planning

Mr.Enes Hadzimuhamedovic	Assistant for Agriculture and Utility Issues
Mr. Biberkic Nermin	Director, Edhem Muallbdc PS
Doboj Jug Municipality	
Mr. Hasan Skijo	Mayor
Mr. Zijad Bajraktarevic	Secretary
Mr. Mustafa Kovcevic	Chief of Economy Department
Mr. Maida Hotic	Chief of Activities Department
Posavina Canton	
Mr. Mijo Mijic	Deputy Minister, MOE
Bok Municipality	
Mr. Jvo Brasnic	Principal of School
Mr. Pavo Grgic	Mayer of Local Community
Mr. Mato Yozic	Minister of Internal Affairs(Police)
Mr. Yanjo Stjepanovic	Technical Advisor in LC Bok
Prud Municipality	
Mr. Maruko Brukcic	Member of School Board. Mayer of Local Community
Mr. Luka Yuric	Principal of the School
Mr. Yvo Matkovic	Member of School Board .Member of Local Council
Mr. Yosip Vidovice	Member of School Board Mayer of Local Council Contorol
	Tax Inspector
Mr. Pavo Brajinovic	Teacher of Religion
Zapadnohercegovascki Canton	
Mr. Mijo Mijic	Deputy Minister, MOE
スルブスカ共和国	
Ministry of Education	
DsC Nenad Suzic	Minister of Education
Mr.Zdravko Marjanovic	Director of PIU
Mr.Stevan Jovanovic	Project Coordinator (engineer), PIU
Srpski Sanski Most Municipality	
Mr. Ribic Dobrivoce	Chief of Social Affairs
Ms.Pavic Radocka	Teacher, Ostra Luka TS
Ms.Brkcic Micka	Teacher, Ostra Luka TS
Bijeljina Municipality	
Mr.Cedomir Mandic	Mayor
Mr.Milan Grujcic	Principal, Primary School "Sveti Sava"
Mr.Vlado Simic	President of Executive Board
Mr.Nedojsa Tomic	Chief of Urban Planning Dept
Ms.Branka Blagojevic	Designer, Architect, ODFP RAD
Mr.Radomir Nikolic	Republic Inspector for Education
Srpsko Sarajevo Municipality	
Mr.Milenko Todorovic	Serb "Srpsko" Mayor

Mr.Stojan Bjelica	President of executive Board
Mr.Stojan Sljuka	Deputy President of Executive Board
Mr.Milovan Bogdanovic	Principal of PS Sveti Sava
Mr.Mirko Mitrovic	Chief of Dept of Social Activities
Mr.Slavisa Tusevljak	Civil Engineering Inspector
Ms.Jadranka Obrenovic	Chief for Urban Planning
Ms.Sonja Bogdanovic	Journalist of Srpsko Sarajevo

Ribnic-Previja

Mr.Donja Previja	Milos Todorovic Prncipal of PS Nikola Mackic
Mr.Dragana Copcc	Chief of Urbanism Dep
Mrs. Sinisa Macanovic	Chief of Survey Dep
Mr. Djordje Galic	School Pedagogue
Mr. Sava Savic	Chief of Property-Law Dep

国際機関等

IMG

Mr.Dino Biciato	General Manager
Mr.Thierry Bernard-Guele	Head of Housing and Social Building Unit
Ms.Ljiljana Sulentic	Senior Project Manager

World Bank

Ms.Zorica Lisic	Social Sector Project Officer
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Care

Mr.Haward Bell	Country Director, Care International
Ms.Jeanette Stove	Care Austria Representative

UNESCO

Dr. Kolin Kaiser	Representative in Bosnia and Herzegovina
Mr. Kay Lisengard	Associate Expert
Mr. Johannes Stippel	Head,Coordination Center Banja Luka

UNICEF

Dr. Bertrand Desmoulins	Senior Programme Officer
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ECMM European Community Monitor Mission

Ms. Esperanza Vives	Education Officer
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OHR

Mr. Joran Bjallerstedt	Head Humanitarian Dept
------------------------	------------------------

UNHCR

Mr. Shunitirou Asaba	Senior Proqramme Officer
Mr. Jean-paul Cavalieri	Proqramme Officer
Mrs.Corolyw Wand	Field Officer,BanyaLuka Field Office

建設会社

Mr. Vlatko Zrilic	TEPMOHT OMEPH Construction Company Manager (RS)
Dir .Bajramovic	" ZENITH"D.O.O.SARAJEVO Construction Company (FD)
Tec Dir.Orman Auja	Ditto

設備会社 (電気、給排水)

Dir. Kolecicing Huso

DP Technika(FD)

5. 討議経過

「BiH」国外務省、FD.RS 両エンティティの教育省に対し、無償資金協力のシステム及びインセプション・レポートの説明を行い、両エンティティ教育省 PIU をカウンターパート要請サイトおよび、要請コンポーネントの確認、サイト選定および施設・機材計画の基本的な条件、「BiH」国側負担事項の4点について説明、協議を行った。最終的な合意内容は3者合同のミニッツ協議において確認されたため、まとめて以下に記述する。

(1) 協力規模の設定

協力の規模については、いずれのエンティティにおいても先方政府のプライオリティを尊重しつつ、現地を確認した上で、妥当性を判断し、基本設計調査を実施する場合の調査対象を決定する旨を確認した。

(2) 調査対象サイトの選定

調査対象サイトの選定基準は、基本設計調査時の対象絞り込みの第一の基準となるため、双方が完全に合意できる内容とすることが肝要であり、あらかじめ我が方の基準案を各関係者に提示し、先方内部でも確認した上で、協議を行った。具体的な基準は別紙3に記載のとおりである。

(3) 要請コンポーネント

今回の要請に大規模な体育館及びコンピューター等の機材が含まれているが今回は、教室棟の不足が重要であることを踏まえ、教室棟の建設を優先することを先方に説明を行った。

要請コンポーネントの内訳については、ミニッツ付属書別紙2のとおりであるが、コンポーネントの最終決定は基本設計調査後決定される旨、確認した。

(4) 先方側負担事項の確認

「BiH」国側負担事項はミニッツ付属書別紙6において明文化されているところ、今次計画は「BiH」国教育セクターにおける初めての施設案件であること、教育省、カントン、市が責任分担を明確にする必要があることから、特にプロジェクトサイトの整地（着工時点までに自治体責任）、都市インフラの引込み、サイトの土地所有権の提出（自治体責任）、免税の徹底（教育省責任）、銀行取り決めに基づく各種支払い（教育省責

任)、維持管理に係る予算及び人員の確保(教育省・自治体責任)協力実施校の教職員の確保(教育省・自治体責任)、及び門扉の建設(教育省)等については、無償資金協力の実施に際し「BiH」国側により確実に履行される必要があることを説明した。

6. 関連資料

収集資料リスト

NO	資料名	発行元/年月日
1	Implementation of the Priority Reconstruction Program Status Report 5	MOFA/BiH, 10/98
2	Bosnia & Herzegovina 1997 by Reconstruction Towards Modern Economy	Reconstruction Cabinet of the Government of BiH
3	Republic of Srpska Reconstruction and Development	3rd Donor Pledging Conference for BiH, 7/97
4	A Development and Perspectives of Teacher Education in BiH	MOE/F, 6/98
5	Strategy and Conception of Changes in the System of Education in RS	MOE/RS, 1998
6	1998 UNHCR Reconstruction Programme in BiH	UNHCR, 10/98
7	Open Cities Initiative UNHCR Sarajevo	UNHCR, 1998
8	Statistics Package	UNHCR 12/98
9	RS 教育セクター資料 (現地語)	MOE/RS, 1996
10	IMG 提出資料一式	IMG
11	UNICEF Bosnia and Herzegovina	UNICEF, 1998(?)
12	Water and Environmental Sanitation	UNICEF, 1998(?)
13	Health and Nutrition	UNICEF, 1998(?)
14	Project Proposal to the Japanese national Committee for UNICEF	UNICEF, 1998
15	BiH Composition of the Mine Awareness Kit	UNICEF
16	CEDC, UNICEF BiH	UNICEF
17	The Convention of the Rights of the Child Advocacy	UNICEF
18	Education	UNICEF
19	Mine Risk Education in BiH Brief Summary of Activities	UNICEF
20	Active Learning program for Teacher Development in the Federation of BiH	UNICEF, 1998
21	CARE International 資料一式	CARE
22	小学校リスト(1)-(4)	MOE(UNESCO より収集)
23	Review of the educational system in the Federation of BiH	UNESCO, 1996
24	1999RRTF Action Plan	OHR, 1998
25	IMG 作成地図 7 枚	IMG, 96~98
26	Banja Luka サイト地図	PIU/RS
27	MANUAL For Technical and Obligatory Conditions for Design and Execution of Works on Construction, Reconstruction, repair and Adaptation of Construction Units	Federal Ministry of Physical Planning and Environment & IMG
28	FD.RS 建設に関する資料 (入札単価、材料単価、図面等)	PIU, 1998
29		
30		
31		
32		
33		
34		

6. 関連資料

1. 建設関連等の概況

(1) 教室棟の標準的な構造・材料

表-1 材料表

屋根	瓦、波型亜鉛鉄板	電気設備	白熱電灯、蛍光灯
屋根構造	木製トラス、鉄骨	給排水設備	有り
躯体・壁	レンガ+モルタルプラスター	暖房設備	まき、石炭ストーブ、ボイラー
床	テラゾー・Pタイル、長尺塩ビシート等		
天井	モルタルプラスター		
開口部	二重木製窓・扉		

(2) 建設技術基準

「BiH」国には1998年 FEDERAL MINISTRY OF PHYSICAL PLANING AND ENVIRONMENT & IMG INTERNATIONAL MANAGEMENT GROUP の共同により製作された建設に関するマニュアル及び旧ユーゴ時代の建設工事積算基準全6編がある。

(例：4編 BILDING CONSTRUCTION INSTALLATIONS. 6編 CIVIL ENGINEERING CONSTRUCTION)

(3) 設計積算に関する条件

1) 建設資材

初等学校の建設には特別な資材は必要なく、すべての建設資材が現地調達可能である。現地調査の結果FDよりもRSの方が労務費を含めて若干安めであった。

2) 標準設計基準

前述した通り、「BiH」国においては、建設に関する設計基準が決まっている。基本設計時には詳細な設計基準、気象情報（風速、地震）等を調査し、これらの基準に合致する設計とする。

3) 教育機材

生徒、教員用の机、椅子等は入札により決定するために、現在第三国調達が多くなっている。しかし「BH」国にもこれらの家具類の工場があり調達が可能であるとPIUの機材担当者は言っている。これらの仕様及び単価を基本設計時に比較検討し設計に反映すべきであり1普通教室当たりの平均の家具費用は、4,500DM位とのことである。

(4) 調達、現地建設業者

現在、本案件要請サイトで建設されている初等学校は、すべて現地の建設業者により施工がおこなわれている。建設会社には民間と公的企業の2種類があり、FDでの建設会社での聞き取り調査では1㎡当たり1,200~1,300DM（家具を除く）であり、RSでは1,000~1,300DM（家具を除く）で標準の学校が建設可能であるということなので積算の目安にされたい。

また、工期としては、6教室の学校4箇月で施工可能であるとのことでありサブコントラクターとしての施工能力は十分である。調査団が移動中にコンクリートの打設現場をみかけたが冬季の打設はコンクリート強度の補正及び温度養生の費用（10~20DM/m）がかさむため極力さけた工事工程とすべきであるとのアドバイスを受た。

なお、地雷は撤去済みということである。しかし、聞き取り調査によれば撤去、調査等を含めて2.5~3.0DM/m程度で可能だということである。

FD 建設会社 建設会社	住 所	電 話
1.doo BEDEM Bihac	Buzimska 26	077/227-987
2.doo FINAL KOMERC Buzim	Gen.Izeta Nanica 13	077/410-286
3.CAZING po, Cazin	VIII Krajske brigade bb	077/513-204
4.UNA-SA,Bos.Krupa	Kolodvorska bb	077/471-160
5.GIP VISOKOGRADNJA,Kladanj	T.O.7	075/621-247
6.GK BOSNA,Gradacac	Industrijska zona	076/817-157
7.GPP BANOVICI dd Banovici	Branilaca Banovica bb	075/876-045
8.TEHRNOGRAD,Tuzula	Turalibegova 48	075/250-624
9.AMAX djl,Gracanica	Gracanica	075/781-011
10.GP IZGRADNJA-INVEST,Zenica	A.Golbergera 7	072/33-869
11.GRADNJA,Zenica	Strosmajerova 11	072/33-866
12.PRIMUS djl Maglaj	Lijesnica bb	090/143-971
13.GM KAKANJ	Zgoscanska 51	072/750-511
14.IP KRIVAJA Zavidovici	Radnicka 1	072/873-582
15.GP ZVIJEZDA,Visoko	Jalija bb	071/734-500
16.GRADEX,Blagaj,Mostar	Alekse Santica 11	090/137-103
17.ANS DRIVE doo,Konjic Sarajevo	Butmirska cesta 24	071/455-402
18.GP ZGP,Sarajevo	Dolina 11	071/664-595
19.GP BOSNA,Sarajevo	Mehmeda Spahe 8	071/206-524
20.NEW TIME,Sarajevo	Grbavicka 14C	071/230-302

RS 建設会社

建設会社	住 所	電 話
1.VRBAS LAKTASI		078/30528
2.TFRMONT KOMRC		078/230-202
3.BANJA LUKA		078/49850
4.VRANICA PALE		071/786-491
5.RANKOM INZENKRING		076/402-721
6.EHTA R DERVENTA		074/833-450
7.GRMEC GRHDNA		074/837-960
8.RK NEIMAR		079/51127
9.TEHNICA KOMERC		078/11-012
10.STANDARD		073/475-260

地質調査会社

地質会社	住 所	電 話
Institute for Geotechnics and Foundation	Tomica 3	071/44-2400
Institute for Material and Construction Testing	78 000 BANJA LUKA	069/-415

機材リスト表

NAME	QUANTITY	UNIT PRICE	TOTAL
1. CLASSROOM (for I-III grade)×3			
-school board green magnetized	3 pcs		
-white magnetized board	3 pcs		
-overhead projector screen on console	3 pcs		
-table with drawers with locks	3 pcs		
-chair for teacher, upholstery	3 pcs		
-school table for one pupil with fixed board	32 pcs		
-school table for one pupil with fixed board	68 pcs		
-school chair	32 pcs		
-school chair	68 pcs		
-moveable bookcase for (audio-visual equipment) AVE	3 pcs		
-mobile stand for AVE	3 pcs		
-double door bookcase with lock	3 pcs		
-double door, glazed bookcase with lock	3 pcs		
-wall cork panel	6 pcs		
-waste basket	3 pcs		
TOTAL:			
2. CLASSROOM (for IV grade)			
-school board, magnetized	1 pcs		
-white magnetized board	1 pcs		
-overhead projector screen	1 pcs		
-table with drawers with lock	1 pcs		
-teacher's chair, upholstery	1 pcs		
-school table for one pupil, with fixed board	36 pcs		
-school chair	36 pcs		
-moveable bookcase for AVE	1 pcs		
-mobile stand for AVE	1 pcs		
-double door bookcase with lock	1 pcs		
-double door grazed bookcase with lock	1 pcs		
-wall cork panel	2 pcs		
-waste basket	1 pcs		
TOTAL:			
3. CABINET-COLLECTION (strage) with classroom			
-table with drawers with lock	8 pcs		
-teacher's chair, upholstery	24 pcs		
-double door glazed lookcase with lock	8 pcs		
-stand for coats	8 pcs		
-waste basket	8 pcs		
TOTAL:			
4. SCIENCE LABORATORY			
-school board green, magnetized	1 pcs		
-white magnetized board	1 pcs		
-overhead projector screen on console	1 pcs		
-table with drawers and lock	1 pcs		
-teacher's chair, upholstery	1 pcs		
-teaching experiment table with inox-bed	1 pcs		
consist of electrical socket			
switch			
control lamp			
3 phases socket			

double gas hose	
ultra pas board	
-moveable table-extension	1 pcs
-moveable table with ceramic board	1 pcs
-school table for laboratory	18 pcs
-school chair	36 pcs
-moveable bookcase for AVE	1 pcs
-mobile stand for AVE	1 pcs
-double door bookcase with lock	1 pcs
-double door, glazed bookcase with lock	1 pcs
-low double door bookcase with lock	3 pcs
-low double door bookcase with inoxbed	1 pcs
-glazed hanging cabinet with lock	4 pcs
-wastle basket	1 pcs

TOTAL:

5. LABORATORY FOR FOREIGN LANGUAGE

-school board green magnetized	1 pcs
-white magnetized board	1 pcs
-overhead projector screen on console	1 pcs
-table with drawers and lock	1 pcs
-teacher's chair, upholstery	1 pcs
-school table for two with fixed board	36 pcs
-school chair	36 pcs
-mobile stand for AVE	1 pcs
-moveable cabinet for AVE	1 pcs
-double cabinet with lock	1 pcs
-double glazed cabinet with lock	1 pcs
-wall panel-cork	2 pcs
-waste basket	1 pcs

TOTAL:

6. COMPUTER CLASSROOM

-school board green-magnetized	1 pcs
-white magnetized table	1 pcs
-table with drawers and lock	1 pcs
-pc table without electrical cable	18 pcs
-table for printers without el. cable	6 pcs
-rotating chair with back	19 pcs
-el. channel with sockets	15 ml
-mobile stand for AVE	1 pcs
-double cabinet with lock and drawers	1 pcs
-double glazed cabinet with lock	1 pcs

TOTAL:

7. CLASSROOM FOR ART AND MUSIC

-school board, green (part for music notes)	1 pcs
-school table one person with adjusting working board	32 pcs
-school chair	32 pcs
-table with drawers with lock	1 pcs
-teacher's chair, upholstery	1 pcs
-double door cabinet with drawers	1 pcs
-double door glazed cabinet with lock	1 pcs
-wall panel-cork	4 pcs
-waste basket	1 pcs

TOTAL:

8. CLASSROOM (for V-VIII grade) x2	
-school board green-magnetized	2 pcs
-white magnetized board	2 pcs
-overhead projector screen on console	2 pcs
-table with drawers and lock	2 pcs
-teacher's chair, upholstery	2 pcs
-school table for two with fixed board	34 pcs
-school chair	68 pcs
-moveable cabinet for AVE	2 pcs
-mobile stand for AVE	2 pcs
-double door cabinet with lock and drawers	2 pcs
-double door glazed cabinet with lock	2 pcs
-wall panel-cork	4 pcs
-waste basket	2 pcs

TOTAL:

9. CLASSROOM FOR TECHNICAL TEACHING	
-school board green	1 pcs
-white magnetized board	1 pcs
-overhead projector screen on console	1 pcs
-cabinet with teaching material for geometry	1 pcs
-table with drawers and lock	1 pcs
-teacher's chair upholstery	1 pcs
-workshop table	10 pcs
-rotating chair without back	18 pcs
-table for machine	1 pcs
-cabinet for tools, double door, metal with lock and	1 pcs
-low cabinet with bed-inox	1 pcs
-low cabinet	2 pcs
-low cabinet with drawers	1 pcs
-hanging cabinet-double glazed	2 pcs
-hanging cabinet-single glazed	1 pcs
-waste basket	1 pcs
-waste basket PVC	1 pcs

TOTAL:

10. DIDACTICS CABINET	
-school table for two	6 pcs
-school chair	12 pcs
-school board green	1 pcs
-wall panel-cork	1 pcs
-table with drawers and lock	1 pcs
-teacher's chair	1 pcs
-mobile stand for AVS	1 pcs
-waste basket	1 pcs

TOTAL:

11. TEACHER'S ROOM	
-conference table	6 pcs
-angle elements for conference table (180°angle)	2 pcs
-conference chair-armchair	24 pcs
-double teacher's cabinet with 6 departments with 1c	4 pcs
-cabinet for record lock on two levels and lock	1 pcs
-low double cabinet and drawers	2 pcs
-double glazed cabinet	2 pcs

-white board for lectures timing	1 pcs
-announcing board-panel-cork	1 pcs
-waste basket	1 pcs
-stand for umbrella	1 pcs
-stand for coat	2 pcs
-flower pot	1 pcs

TOTAL:

12.OFFICE (secretary, pedagogue)×2

-writting table	
-writting table	
-angle 90°	
-rotating upholstery chair	
-club table	
-double door cabinet with drawers	
-cabinet glazed	
-hanger with stand for umbrella	
-waste basket	

TOTAL:

13.PRINCIPALS OFFICE

-office talbe	1 pcs
-conference table	1 pcs
-90°angle	
-conference half armchair	8 pcs
-rotating armchair	1 pcs
-double deep cabinet	1 pcs
-double low cabinet	1 pcs
-double middle cabinet-glazed door	2 pcs
-wall wardrobe	1 pcs
-flower pot	1 pcs
-umbrella stand	1 pcs
-waste basket	1 pcs

TOTAL:

14.LIBRARY

-desk for books handout	1 pcs
-librarian table	1 pcs
-rotating chair upholstery	1 pcs
-school chair	8 pcs
-school table for two	2 pcs
-wall bookcase	2 pcs
-bookcase for periodicals	1 pcs
-double bookcase, stand	4 pcs
-waste basket	1 pcs
-stand for coats	1 pcs

TOTAL:

15.KITCHEN

-inox-table with door and shelves	1 pcs
-wall cabinet	1 pcs
-working table without shelves	1 pcs
-double sink-inox	1 pcs
-console straining-inox	1 pcs
-double cabinet for coast	1 pcs
-cabinet for food	1 pcs

-school table for two pupils	1 pcs
-school chair	2 pcs
-waste basket	1 pcs
-al-tin "napa" with fen system and collector	1 pcs
-refrigeration 180 l	1 pcs
-electrical range-mixed (gas-electricity)	1 pcs
TOTAL:	
16. ROOM FOR OTHER STAFF	
-wardrobe cabinet with lock	4 pcs
-cabinet for kit and cleaning liquid	2 pcs
-school table for two	2 pcs
-school chair	4 pcs
-waste basket	1 pcs
TOTAL:	
17. WARDROBE WITH SPORTS HALL	
-wardrobe tables with back	10 pcs
-wste basket	2 pcs
TOTAL:	
18. SERVICE FOR BUILDING MAINTENANCE	
-joiner's working table	1 pcs
-rotating chair without back	1 pcs
-single coat cabinet	1 pcs
-double door metal bookcase	1 pcs
-cabinet with wooden shelves	1 pcs
-hanged double open shelf	1 pcs
-waste basket	1 pcs
TOTAL:	
19. COMMUNICATIONS (CORRIDORS)	
-school wall hanger	15 pcs
-metal stand for umbrellas	6 pcs
-waste basket	6 pcs
TOTAL:	
20. CABINET FOR PHYSICAL AND HEALTHY RAISE TEACHING	
-table with drawers and lock	1 pcs
-teacher's chair, upholstery	1 pcs
-hanger stand for coats	1 pcs
-double door bookcase with lock	1 pcs
-waste basket	1 pcs
TOTAL:	
21. CURTAIN	
-"markizet" curtains (long 281 m, height 2.5 m)	
-curtain holder	
-decorative curtain	
TOTAL:	
22. FLOOR COVER	
-carpet	
TOTAL:	

仕様及び図面

TECHNICAL DESCRIPTION

ARCHITECTURE OF THE SCHOOL

The main goal of the school is for children to learn how to live and work and so the space has to be simple, functional and defined. In the cooperation with PIU representative Mrs. Velida Gališec as well as with IMG representative Mr. Namik Kupusovic, designer suggested simple and rational concept of 6 classrooms primary school, dimensions 18.00 × 37.00 m and to have ground floor + first floor. Hipped roof is suggested (Without heating bodies).

The content of ground floor is according to the norms for primary school. This means that rooms for socialization (gathering) are closer to the entrance as well as the supplementary rooms : kitchen, personnel, boiler room (fuel storage) and sanitary facilities.

Two main (central) classrooms are on the ground floor and all necessary for higher grades is on the first floor.

CONSTRUCTION CONCEPT

The suggestion is monolith reinforced concrete system of carrying walls and slabs.

The definition of all construction elements will be in detailed execution design after geological geomechanical testing of soil.

Facade wall is anticipated to be "sand wich" system type, ventilated and thermic resistant wall construction.

THE USE OF MATERIAL

Roofing with tiles.

Facade walls of mortar (plaster) with final coat of "tera nova" or similar.

Windows and doors are of wood with final treatment "mater". Glazing with termic resistant glass.

Partition walls of brick, thickness 10 or 20 cm with final coat according to the use of the room.

Wall walls in sanitary facilities and laboratory with ceramic tiles.

The floor of the entrance part, space for various purposes is of stone

slabs proper thickness.

The floors in classrooms and other teaching rooms are of plastic.

Responsible designer

(architect) Mrs. Šefika Yamakovi•

OVERVIEW OF SPACE CENTRAL PRIMARY SCHOOL

NO.OF CLASSROOMS 6 SCHOOL BUILDING FOR 216 PUPILS

Teaching rooms NO.OF CLASSROOMS 6

Rate between smaller and higher grades 2+4

Main (central) classroom

-11-

classroom

-11-

-11-

laboratory for science

cabinet collection with science laboratory

-11-

laboratory for foreign language

Workshop

cabinet-collection for workshop

classroom for art and music

didacticfal cabinet

pedagogue-psychologist

Social rooms

Library and reading room

Administrative roms

Secretary and finance

Principal

Deputy principal

Teacher's room

Usefull area

Other Areas

Entrance part-communication

Windshield

Ground floor corridors

First floor corridors

Room for parents visit

Muti purpose spare (room)

Inventry

Boler room-fuel storage

Sanitary facility for personnel-MWC

-11-

-MWC

sanitary facility for pupils

·space infront of the rooms

·-11-

·-11-

·-11-

WC cabine-8

·pissoirs-2

Total of other area

TOTAL OF USEFUL AND OTHER AREA

ADD 15% ON WALLS

TOTAL BRUTO CONSTRUCTION AREA

ANNEX FOR 2 CLASSROOMS ON GROUND AND 1 FLOOR.

1.Main (central) classroom

- 2.cabinet collection for foreign language instead of personnel
- 3.workshop
- 4.library and reading room-widen
- 5.multipurpose space-widen
- 6.administration-instead inventory
- 7.teacher's room-increased in basic design
- 8.for pedagogue
- 9.doctor-dentist

D.D. "DOM"
STUDIJ, PROJEKTOVANJE, INŽENJERING
SARAJEVO

o 7420²/f

CENTRALNA OSNOVNA ŠKOLA SA ŠEST RAZREDA
SA MOGUĆNOŠĆU PROŠIRENJA ZA 2 RAZREDA

IDEJNI PROJEKAT

~ Direktor:

Kapidžić Edhem
Kapidžić Edhem diplomir. građ.

Sarajevo
avgust 1998.

TEHNIČKI OPIS

Idejni projekat za tipsku školu sa 6+2 razreda izrađen je na osnovu važećih normativa za projektovanje osnovnih škola u Federaciji BiH. Predložene lokacije za izgradnju osnovne škole su u VBičju, Bihaću i Brčkom. Projekat je imao na raspolaganju podatke na lokaciji u Vitezu Katoličanske parohije br. 2292/5.

LOCIRANJE OBJEKTA

Kod primjene tipskog projekta strogo voditi računa o orijentaciji objekta a zatim o racionalnom priključenju na postojeći infrastrukturni sistem. Prilikom smještaja objekta na parcelu predvidjeti mjesto za fiskulturnu salu koja nije predmet ovog projekta. Ostaviti dovoljno slobodne površine za igru i van školske aktivnosti.

ARHITEKTURA ŠKOLE

Osnovni cilj škole je da se djeca nauče kako da žive i rade pa i prostor treba da bude jednostavan, funkcionalan i određen. U saradnju sa predstavnikom P.I.U. gospodom Velidom Galčić, kao predstavnikom I.M.G. gospodinom Namikom Kupusovićem projektant predlaže jednostavan i racionalan koncept 6-razredne osnovne škole dimenzije 18,00 x 37,00 m. i spratnosti P+1.

Predlaže se četvorovodni krov (negrijano pokrivanje).

Sadržaji u prizemlju odgovaraju važećim normativima za projektovanje osnovnih škola, što znači da je grupacija društvenih prostorija vezana za ulaznu partiju u prizemlju, kao i ostali preteći sadržaji kuhinja, osoblje, kotlovnica (spremište goriva) i sanitarije.

Dvije matične učionice su u prizemlju dok su svi sadržaji za starije razrede smješteni na spratu.

KONSTRUKTIVNI KONCEPT

Predlaže se monolitni armirano betonski sistem nosivih zidova i ploča.

Definisanje svih konstruktivnih elemenata uslijediće u detaljnom izvedbenom projektu konstrukcije nakon geološko-geomehaničkih ispitivanja terena.

Zidni fasadni plašt predviđa se po sistemu "sendvič" ventilirane i termički otporne zidane konstrukcije.

PRIMJENA MATERIJALA

Pokrov je od crijeva

Fasadni zidovi u malteru sa završnom obradom tera nove ili slično.

Prozori i vrata su drveni sa završnom obradom natur. Zastakljenje termo otpornim staklom.

Pregradni zidovi od opečnih proizvoda debljine 10 ili 20 cm sa finalnom obradom shodno namjeni prostora.

Obloge zidova u sanitarijama i laboratoriji su od keramičkih pločica.

Pod u ulaznom dijelu, prostoru za više svrha je od kamenih ploča odgovarajuće debljine.

Podovi u nastavnim kabinama, kabinetiskm zbirakama su od plastičnih masa.

Odgovorni projektanti:

Sejka Jambaković
Sejka Jambaković dipl.ing.arh.

PREGLED POVRŠINA
CENTRALNA OSNOVNA ŠKOLA
BROJ ODJELJENJA ŠEST

ŠKOLSKA ZGRADA SA DVA PRIPREMNA ODMJESTA

Nastavne prostorije	2-4	
BROJ ODJELJENJA ŠEST		
Odnos odjeljenja nižih i viših razreda		
matična učionica	56	55,91
matična učionica	56	55,91
učionica	56	55,91
učionica	56	55,91
kabinet - zbirka uz učionicu	16	17,28
kabinet - zbirka uz učionicu	16	17,28
kabinet - zbirka uz učionicu	16	17,28
laboratorij prirodnih nauka	72	74,88
kabinet zbirka uz laboratorij prirodnih nauka	16	14,97
kabinet zbirka uz laboratorij prirodnih nauka	16	13,39
laboratorij za strani jezik	32	17,28
radionica	32	32,4
kabinet - zbirka za radionicu	16	20,38
učionica za likovno i muzičko vaspitanje	32	32
dirigentski kabinet	16	17,28
pedagog - psiholog		
Drštvene prostorije	36	40
biblioteka i čitaonica		
Upravne prostorije	12	24,84
sekretar i računovodstvo		
direktor		26,62
pomoćnih direktora		16,32
zbornica	24	31,68
Korisna površina	632	693,43
OSTALE POVRŠINE		
ulazna partijska - komunikacije	11	11
višetroban		134,53
hodnici prizemlja		94,47
hodnici sprata		
prostorija za prijem roditelja		10,12

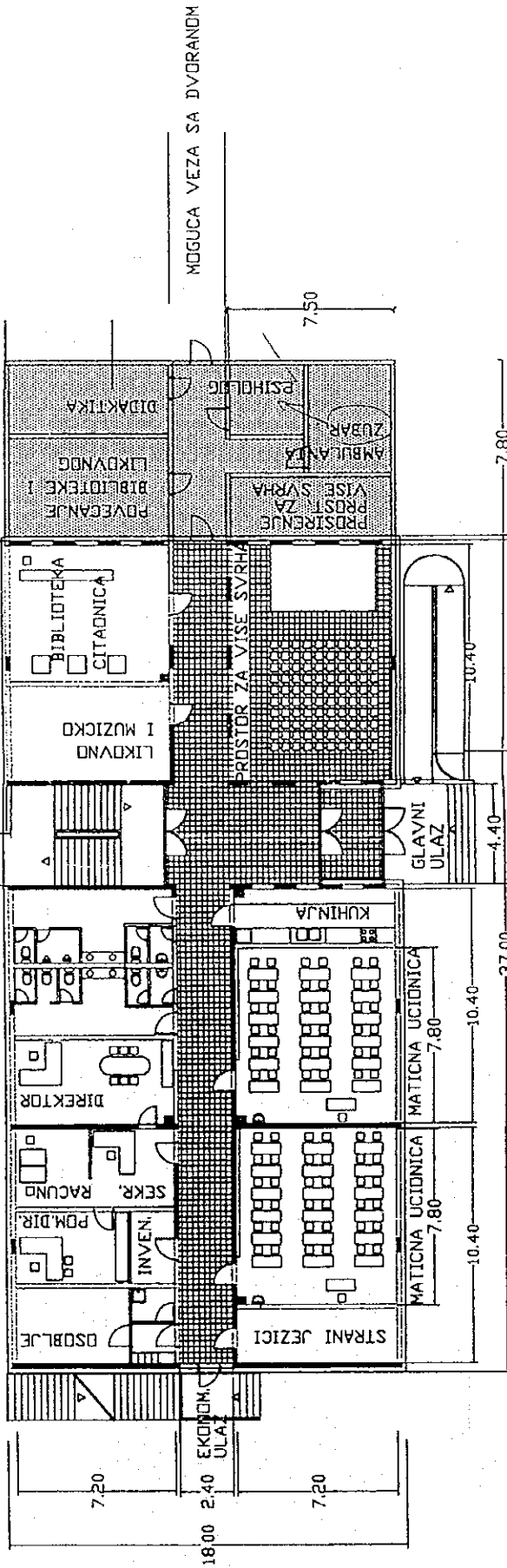
prostor za više svrha (70) multi purpose Hall Space 74,5

servisi		
prostorija za osoblje	6	6,00
inventar	12	6,4
kolonijica-spremište ogreva	24	
sanitarije za osoblje - WDM		6,58
sanitarije za osoblje - WCZ		6,58
sanitarije učnika		12,92
predprostor		14,59
predprostor		12,92
predprostor		14,59
WC kabine-8	12	12
pisuari-2		5,62
Ukupno ostale površine		456,2
UKUPNO KORISNE I OSTALE POVRŠINE	1121	1149,63
DODATAK 15 % NA ZIDOVE		172
UKUPNO BRUTO GRAĐEVINSKA POVRŠINA		1321,63
PROŠIRENJE ZA DVA RAZREDA U PRIZEMLJU I NA SPRAATU		
matična učionica	56	
kabinet zbirka uz laboratorij za strani jezik - umjesto osoblja	16	
radionica	24	
biblioteka i čitaonica - proširenje	20	
prostor za više svrha - proširenje	20	
administracija - umjesto inventara -	12	
zbornica - unaprijed povećana u osnovnom projektu	8	
za pedagoga	12	
lijeakar - zubar	12	
	180	

VEZA SA IGRALISTEM DOGRADNJA FISKULT.SALE DOGRADNJA

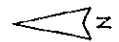
DOGRADNJA

UPRAVA

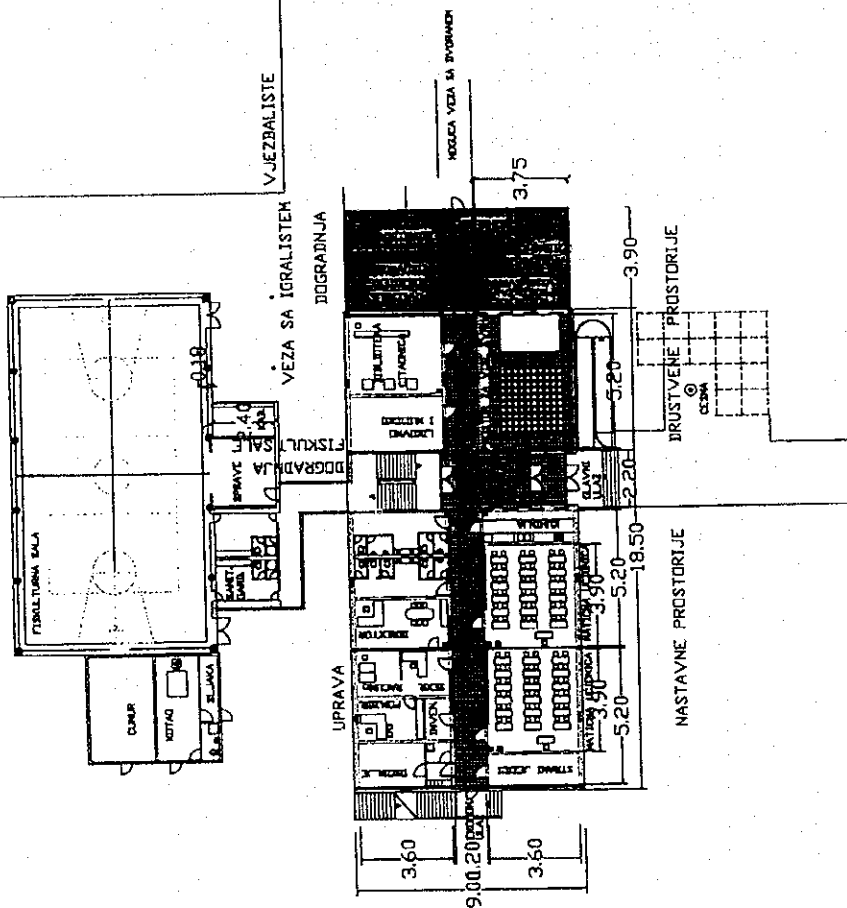
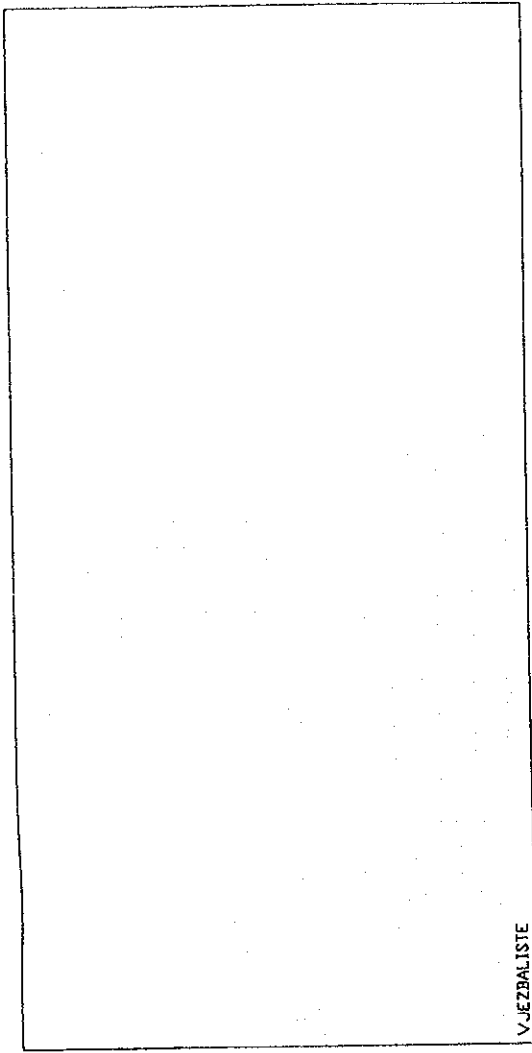


TIPSKA CENTRALNA OSNOVNA SKOLA - IMG + PIU

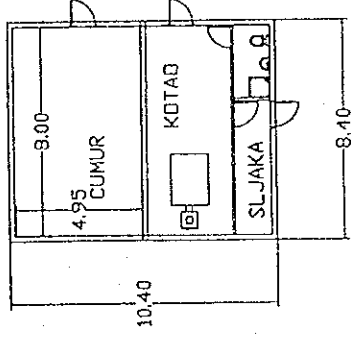
Oblikovni PROJEKAT	IDEJNI PROJEKAT
Investitor	Sadržaj i naziv
IMG + PIU	PRIZEMLJE
Projektna organizacija	broj lista 1.
DD BOM - SPI SARAJEVO	AVGUST 1998.
Projektni inženjerski biro	MJERILO 1:200



KOTLOVNICA

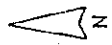


KOTLOVNICA

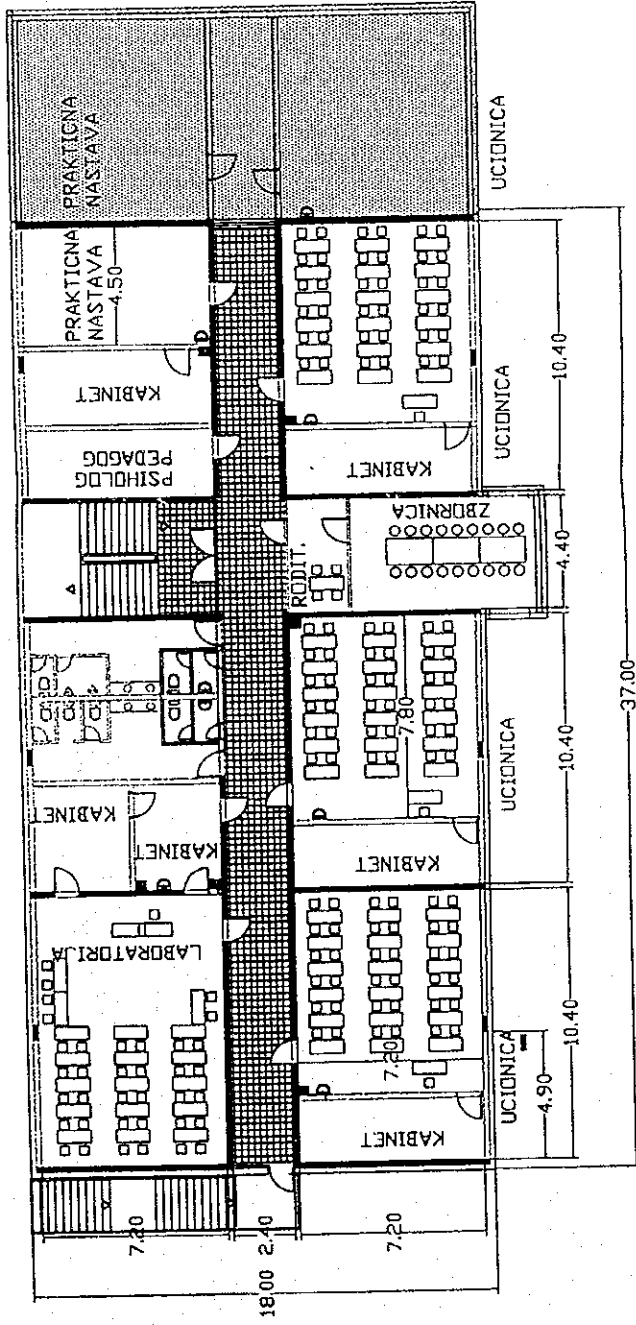


TIPSKA CENTRALNA OSNOVNA SKOLA - IMG + PIU

Objekat: CENTRALNA OSNOVNA SKOLA	IDEJNI PROJEKAT
Investitor: IMG + PIU	Sadržaj nacrtu: <i>paralelno-konformno</i>
Projektna organizacija: DD-JIDH-SPJ - SARAJEVO	broj lista: 1A
Projekcija: JUNE 1988.	AVGUST 1988.
Projekcija: JUNE 1988.	MJERILO: 1:200

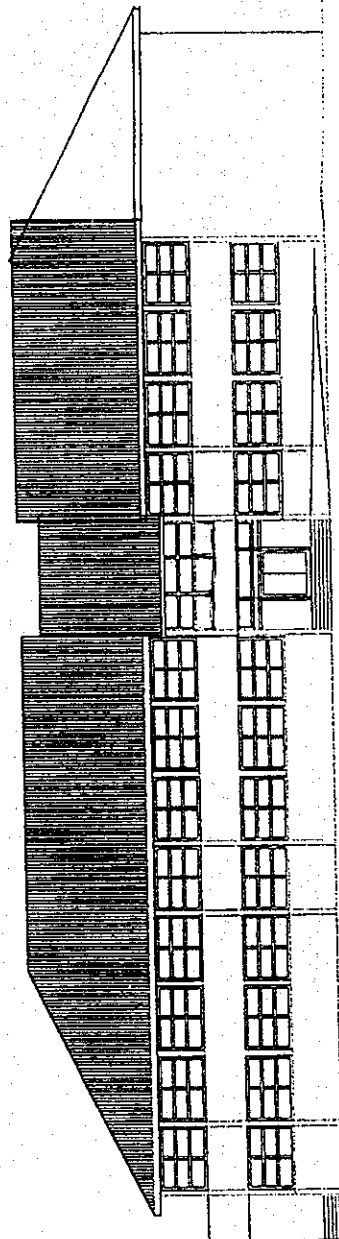
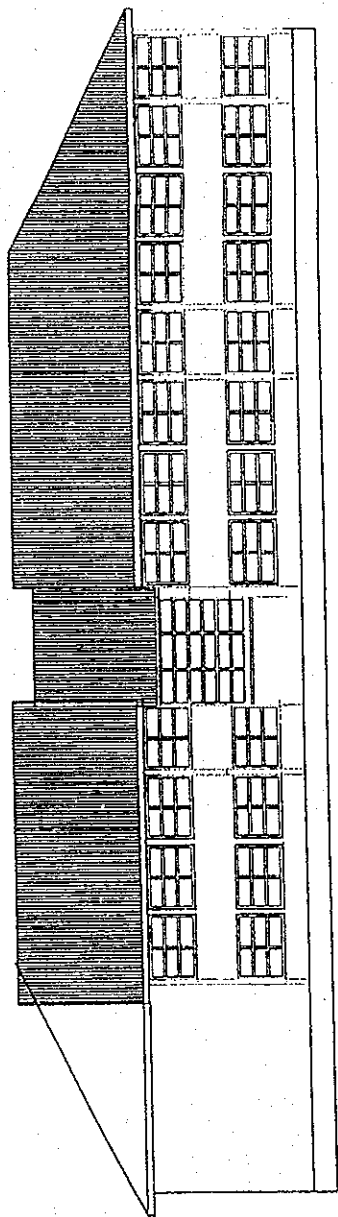
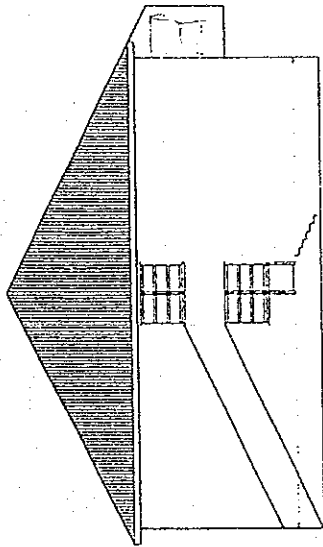


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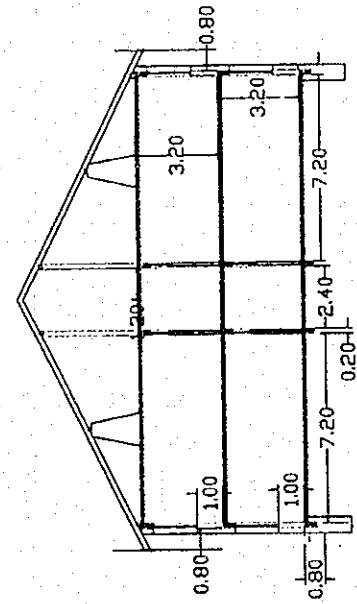
NASTAVNE PROSTORIJE

TIPSKA CENTRALNA OSNOVNA SKOLA - IMG + PIU	
Objekat: CENTRALNA OSNOVNA SKOLA	IBICNI PROJEKAT
Investitor: IMG + PIU	Strucni nacrt
Projektna organizacija: DITOM SPI SARAJEVO	SPRAI
	broj lista 2.
	AVGUST 1988.
Projektant: Jankovic Zefka objavljen.	

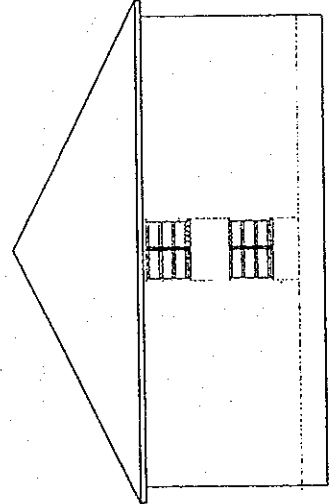


TIPSKA CENTRALNA OSNOVNA SKOLA - IMG + PIU

Delikat: CENTRALNA OSNOVNA SKOLA	IDEJNI PROJEKAT
Investitor IMG + PIU	Sadržaj nacрте FASADE
Projektna organizacija DD'ZDM' SPI SARAJEVO	br. i lista 3.
Projektant: Janković Štefa d.p.o.o.	AVGUST 1998.



PRESJEK



TIPSKA CENTRALNA OSNOVNA SKOLA - IMG + PIU

Objekat: CENTRALNA OSNOVNA SKOLA	TIPSKI PROJEKAT
Investitor: IMG + PIU	Sadržaj nacrtu: FASADA+PRESJEK
Projektne organizacije: DOPUN. SPI SARAJEVO	broj lista: 4
Projektant: Jovanović i Pilić arhitekti	AVGUST 1998.

入札数量及び単価表

Description		Unit	Q'ty	Unit price
I Preparation Works				
1.	Removal of the damaged material from the site in order to prepare building for proper and quality work implementation. Works according to the tender document	Lump sum		
II. Roofing				
1.	Make and mount wooden roof construction and lathing; wind filling. Hipped roof (Olligue projection).	m ²		
2.	Roof covering with tiles	m ²		
3.	Supply and install wooden floor construction	m ²		
4.	Planceer piece (trim) width 60 cm with matched floor or lining painted with protection paint.	m ²		
III. Brick Works				
1.	Build brick wall in compo 1:3:9 Brick block walls:			
	- Brick block 25×25×20	m ²		
	- -11- 25×25×14	m ²		
	- Standard brick 25×12×6.5	m ²		
2.	Wall plastering (two-coat work) in compo 1:2:6 including installation of match lining d=2.4 mm, reed and fly wire. The calculation does not include floor beams.	m ³		
3.	Ceiling plastering (two-coat work) in compo 1:2:6	m ²		
4.	Ceiling plastering (two-coat work) in compo 1:2:6 including installation of match lining d=2.4 mm, reed and fly wire. The calculation does not include floor beams.	m ²		
5.	Wake a chimney with standard brick 25×12×6.5	m ³		
IV. Concrete Work				
1.	Make concrete slab MB 10 as a base for matched floor thickness 10 cm.	m ³		
2.	Make vertical ring beam (column) with concrete MB 30 in suitable forms with use of reinforcement 90 kg/m ³ .	m ³		
3.	Make horizontal ring beam (cornice, lintol, door lintel) with concrete MB 30 in suitable forms with use of reinforcement 45÷60 kg/m ³	m ³		
4.	Make reinforced concrete slab MB 30 in suitable reinforcement with use of reinforcement, d=12 cm. Staircase+2 reinforced concrete beams.	m ³		
5.	Make concrete shaft (including excavation) dimensions inside 80×80×80 cm, thickness of wall is 10 cm with concrete cover 60×60×5 cm, concrete MB 20.	pcs		
6.	Supply and install concrete chimney cleamout door.	pcs		
7.	Supply and install concrete chimney flaunching.	pcs		

V. Joinery Work				
Supply and install joinery ; preliminary works on openings and treatment after installment.				
1.	Windows (glazed with finish hardware and protection paint, insullation glass 4+12+4 mm), installment+finish hardware	m ²		
-	Window 60×60 cm	m ²		
-	-11- 160×120 cm	m ²		
-	-11- 80×140 cm	m ²		
-	-11- 140×110 cm	m ²		
2.	Repair of existing windows (make window winds complete window finish hardware and protection paint)	m ²		
3.	Doors (with frames, strips, finish hardware and lock, protection paint)			
-	Entrance door (fullfiled) 120×210 cm	pcs		
-	Door 70×205 cm	pcs		
-	-11- 80×205 cm	pcs		
-	-11- 90×205 cm	pcs		
-	Balcony door (glazed) 80×220 cm	pcs		
4.	Repair of existing door (on existing frame install winds, finish hardware.)	pcs		
VI. Floor works				
1.	Supply and install matched floor with standard moist, d=22 mm with sleeper plates 5/8 and square staff.	m ²		
VII. Insulation works				
1.	Waterproofing			
1.1	Supply and install vertical and horizontal waterproofing (1 layer of "biverplast" d=4 mm) with necessary base treatment.	m ²		
2.	THERMAL INSULATION			
2.1	Supply and install thermal insulation layer "tervol" d=5 cm with plastic cover.	m ²		
VIII. Ceramic tiles				
1.	Supply and install wall ceramic tiles (I and II class quality) dimensions 15×15 cm with adequate glue.	m ²		
2.	Supply and install floor ceramic tiles (1. and 2. class quality) dim. 20×20 cm in cement mortar. 1×Painting works Paint walls and ceiling 2 times with half disperzive paint with all necessary pre-treatments.	m ²		
IX. Painting works				
	Paint walls and ceiling 2 times with half disperzive paint with all necessary pre-treatments.	m ²		
X. Water and sewer				
1.	Supply and install water and sewer installation.			
-	Zinc pipe DN 1/2" with flanges	m		
-	-11- DN 3/4" -11-	m		
-	PVC pipe DN 50 with components	m		
-	PVC pipe DN 110 with components	m		

2.	Supply and install sanitary facilities wash basin with sagpipe			
-	WC suite with cover, cistern and flushing pipe	pcs		
-	Bathtub 140 cm with overflow valve	pcs		
-	Showertub 80X80 cm	pcs		
-	Boiler 50 l	pcs		
-	Moveable tap	pcs		
-	Hot+cold water tap	pcs		
-	Shower tap	pcs		
-	Floor gully	pcs		
-	Combined kitchen sink wide 80 cm with sag pipe	pcs		
XI. Electrical works				
1.	Supply and install electrical material at exit.	exit		
2.	Supply and install			
-	Junction box	pcs		
-	Junction boards with 6 automatic fuses	pcs		
-	One phase, two rate el, meter	pcs		
-	Switching equipment	pcs		
XII. Tin works				
1.	Flashing with corrugated tin wind strip d=0.55 mm R.S. 33 cm	m		
2.	Flashing chimney with corrugated tin 0.55 mm	pcs		
3.	Supply and install chimney rosette	pcs		
4.	Supply and install gutter of corrugated tin d=0.55 mm R.S.33 cm round shape with accessories (R.S.-open width)	m		
XIII. Other works				
1.	Close remaining openings with PVC cover.	m ²		

Rad. broj	Opis pozicije	JM	Kolelna	x	Gijena mater. po J.M	x	Gijena radova po J.M	=	Total mate.	+	Total rad.	=	TOTAL
I Pripremlni radovi													
1	Uklanjanje cjelokupnog oštećenog materijala sa postojećeg objekta u cilju pripreme objekta za neometano i kvalitetno izvođenje radova navedenih u tenderu.	pausa	0	x	—	x	—	=	—	+	—	=	—
TOTAL:									—	+	—	=	—

II Krovopokrivacki radovi													
1	Izrada i montaza drvene krovne konstrukcije sa ietvisanjem, te vjetar lajsnama. Krov na 4 vode (kosa projekcija).	m2	118.4	x	12.00	x	13.00	=	1.420,80	+	1.539,20	=	2.960,00
2	Pokriivanje krova opek. crijepom sa korugama	m2	118.4	x	12,00	x	4,00	=	1.420,80	+	473,60	=	1.894,40
3	Nabavka te postavljanje drvene stropne konstrukcije	m3	0.79	x	250,00	x	150,00	=	197,50	+	118,50	=	316,00
4	Pokov strehe (opsav), sirine 60cm brodskim podom ili lampernjom, premazan zaštitnom bojom.	m2	28	x	10,00	x	9,00	=	280,00	+	252,00	=	532,00
TOTAL:									3.319,10	+	2.383,30	=	5.702,40

III Zidarski radovi													
1	Zidanje zidova opekrom u PCM 1:3:9. Zidove ozidati od:												
-	blok opeke 25x25x20	m3	13.21	x	130,00	x	45,00	=	1.714,30	+	594,00	=	2.311,30
-	blok opeka 25x25x14	m3	1.2	x	145,00	x	45,00	=	210,00	+	54,00	=	264,00
-	opeka 25x12x6.5	m2	2.5	x	45,00	x	35,00	=	112,50	+	87,50	=	200,00
2	Maltersanje zidova (grubo i fino) u PCM 1:2:6.	m2	140	x	6,00	x	10,00	=	840,00	+	1.400,00	=	2.240,00
3	Maltersanje plafona (grubo i fino) u PCM 1:2:6.	m2	50	x	6,00	x	10,00	=	300,00	+	500,00	=	800,00

Red. broj	Opis pozicije	JM	Kolicina	Cijena mater. po JM	Cijena radova po JM	Total mater.	Total rad.	TOTAL
4	Maltersanje plafona (grubo i fino) u PCM 1:2:6., uključujući postavljanje daske d=2,4 mm trstike i rabić pletiva. U obracune ulaze stropne grede.	m2	0	9,00	19,00	—	—	—
5	Zidanje dimnjaka punom opekom 25x12x6,5.	m3	1,6	270,00	80,00	432,00	128,00	560,00
TOTAL						3.611,80	2.763,50	6.375,30

IV Betonski radovi								
1	Izrada betonske ploče MB 10 kao podloge za brodski pod debljine 10 cm.	m3	0,5	100,00	40,00	50,00	20,00	70,00
2	Izrada vertikalnih serklaza (stubova) betonom MB 30, u odgovarajućoj oplati sa utroskom armature 90 kg/m3	m3	1,56	140,00	145,00	265,20	225,20	490,40
3	Izrada horizontalnih serklaza (vjenac, natorozomik, nadvratnik) betonom MB-30, u odgovarajućoj oplati sa utroskom armature 45 - 60 kg/m3	m3	1,96	150,00	140,00	294,00	274,40	568,40
4	Izrada AB ploče, betonom MB 30, u odgovarajućoj oplati sa odgovarajućim utroskom armature, d=12 cm. Stepenište+2Ab grede	m3	3	210,00	140,00	630,00	420,00	1.050,00
5	Izrada betonskog sahta (sa iskopom), unutrasnjih dimenzija 80x80x80 cm, debljine stijenke 10 cm i sa betonskim poklopcem 60x60x5 cm, betonom MB 20.	kom	0	—	—	—	—	—
6	Nabavka i ugradnja betonskih dimnjackih vratasca.	kom	2	15,00	4,00	30,00	8,00	38,00
7	Nabavka i ugradnja betonske dimnjacke kape.	kom	2	35,00	15,00	70,00	30,00	100,00
TOTAL						1.339,20	948,60	2.287,80

Red. broj	Opis pozicije	JM	Kolicina	x	Cijena mater. po JM	x	Cijena radova po JM	=	Total mater.	+	Total rad	=	TOTAL
V Stolarski radovi													
	Nabavka i ugradnja stolarije sa pripremom otvora za istu i obradom spaletni nakon ugradnje i dopasivanja:												
1	<u>Prozorj</u> (ustakljeni, sa okovima i premazani zaštitnim premazom, lzo staklo 4+12+4), ugradnja+okovi prozor 60x60 cm	m2	0.36	x	200,00	x	50,00	=	72,00	+	18,00	=	90,00
-	prozor 100x120 cm	m2	1.2	x	150,00	x	20,00	=	180,00	+	24,00	=	204,00
-	prozor 160x120 cm	m2	3.84	x	150,00	x	20,00	=	576,00	+	76,80	=	652,80
-	prozor 80x140 cm	m2	1.12	x	150,00	x	20,00	=	168,00	+	22,40	=	190,40
-	prozor 140x110 cm	m2	0	x	—	x	—	=	—	+	—	=	—
2	Reparatura postojećih prozora (izrada krila prozora, kompletiranje okova, ostakljivanje krila i bojenje zaštitnim premazom).	m2	0	x	—	x	—	=	—	+	—	=	—
3	<u>Vrata</u> (sa stokom, letvicama, okovima i bravom, premazana zaštitnom bojom)												
-	ulazna vrata (puno drvo) dimenzija 120x210 cm	kom	1	x	180,00	x	130,00	=	180,00	+	130,00	=	310,00
-	vrata 70x205 cm	kom	0	x	150,00	x	20,00	=	—	+	—	=	—
-	vrata 80x205 cm	kom	4	x	150,00	x	25,00	=	600,00	+	100,00	=	700,00
-	vrata 90x205 cm	kom	0	x	150,00	x	25,00	=	—	+	—	=	—
-	balkonska vrata (ustakljena) dimenzija 80x220 cm	kom	0	x	300,00	x	30,00	=	—	+	—	=	—
4	Reparatura vrata (na postojeće stokove postavljanje krila vrata, okov...)	kom	0	x	—	x	—	=	—	+	—	=	—
TOTAL									1.776,00	371,20	2.147,20		
VI Podopolagački radovi													
1	Nabavka i ugradnja broskog poda propisane vlačnosti, d=22 mm sa podpatosnicama 5/8 i kutnim lajsnama.	m2	50	x	15,00	x	5,00	=	750,00	+	250,00	=	1.000,00
TOTAL									750,00	250,00	1.000,00		

Red. broj	Opis pozicije	JM	Kolicina	x	Cijena mater. po JM	x	Cijena radova po JM	=	Total mater.	+	Total rad	=	TOTAL
VII Izolaterski radovi													
1	HIDROIZOLACIJA												
1.1	Nabavka i ugradnja horizontalne i vertikalne hidroizolacije (1 sloj biverplasta d=4 mm) sa potrebnom pripremom podloge.	m2	6	x	5,00	x	6,00	=	30,00	+	36,00	=	66,00
2	TERMOIZOLACIJA												
2.1	Nabavka i ugradnja termoizolacionog sloja od tervola d=5 cm sa PVC folijom.	m2	50	x	4,00	x	2,00	=	200,00	+	100,00	=	300,00
TOTAL									230,00	136,00	366,00		

VIII Keramicki radovi													
1	Nabavka i postavljanje zidnih keramickih pločica (kvalitet I ili II klase) dim 15x15 cm sa odgovarajucim vezivnim sredstvom.	m2	14	x	12,00	x	12,00	=	168,00	+	168,00	=	336,00
2	Nabavka i postavljanje podnih keramickih pločica (kvalitet I ili II klase), dim 20x10 cm u cementnom malteru.	m2	4.5	x	14,00	x	14,00	=	63,00	+	63,00	=	126,00
TOTAL									231,00	231,00	462,00		

IX Molersko-farbarski radovi													
	Krecenje zidova i plafona 2x, poludisperzivnom bojom sa svim neophodnim predradnjama	m2	0	x	—	x	—	=	—	+	—	=	—
TOTAL									—	—	—		

Red. broj	Opis pozicije	JM	Kolicina	x	Cijena mater. po JM	x	Cijena radova po JM	=	Total mater.	+	Total rad	=	TOTAL
X Vodovod i kanalizacija													
1	Nabavka i ugradnja vodovodne i kanal. instalacije:												
-	poc. cijev Fi 1/2" sa fitinzima	m	12	x	5,00	x	3,00	=	60,00	+	36,00	=	96,00
-	poc. cijev Fi 3/4" sa fitinzima	m	6	x	8,00	x	4,00	=	48,00	+	24,00	=	72,00
-	PVC cijev Fi 50 sa fazo- nskimi komadima	m	10	x	5,00	x	3,00	=	50,00	+	30,00	=	80,00
-	PVC cijev Fi 110 sa fazo- nskimi komadima	m	6	x	12,00	x	4,00	=	72,00	+	24,00	=	96,00
2	Nabavka i ugradnja sanitarija i sanitarnih uređaja:												
-	umivaonik sa sifonom	kom	1	x	52,00	x	30,00	=	52,00	+	30,00	=	82,00
-	WC školjka sa daskom i po- klopcem, vodikotlicom i ispl- nom cijev.	kom	1	x	105,00	x	45,00	=	105,00	+	45,00	=	150,00
-	kada 140 cm sa preljevnim ventilom	kom	1	x	150,00	x	30,00	=	150,00	+	30,00	=	180,00
-	tus kada 80x80 cm	kom	0	x	-	x	-	=	-	+	-	=	-
-	bojler 50 l	kom	1	x	130,00	x	30,00	=	130,00	+	30,00	=	160,00
-	pokretna slavina	kom	1	x	10,00	x	10,00	=	10,00	+	10,00	=	20,00
-	T+H slavina	kom	1	x	19,00	x	10,00	=	19,00	+	10,00	=	29,00
-	tus baterija	kom	1	x	69,00	x	10,00	=	69,00	+	10,00	=	79,00
-	podni slivnik	kom	1	x	10,00	x	10,00	=	10,00	+	10,00	=	20,00
-	kombinovani kuhinjski sudoper sirine 80 cm, sa sifonom	kom	1	x	200,00	x	10,00	=	200,00	+	10,00	=	210,00
TOTAL									915,00	299,00	1.214,00		

Red broj	Opis pozicije	JM	Kolicina	Cijena mater. po J.M.	Cijena radova po J.M.	Total mater.	Total rad.	TOTAL
XI Elektroinstal. radovi								
1	Nabavka elektro materijala i montaza po izlazu	exit izlaza	20	19,00	13,00	380,00	260,00	640,00
2	Nabavka i montaza, Razvodnog ormara	pes kom	1	110,00	32,00	110,00	32,00	142,00
	Razvodne table sa 6 automatskih osiguraca	kom	1	90,00	40,00	90,00	40,00	130,00
	Monofazno dvotarifno el. brojilo.	kom	1	130,00	50,00	130,00	50,00	180,00
	Uklopni sat	kom	0	—	—	—	—	—
TOTAL						510,00	382,00	1.092,00

XII Limarski radovi								
1	Opsav vjetar lajsni pocincanim limom d=0.55 mm, R.S.33 cm	m1	0	6,00	6,00	—	—	—
2	Opsav dimnjaka pocincanim limom d=0.55 mm.	kom	2	20,00	30,00	40,00	60,00	100,00
3	Nabavka i ugradnja dimnjackih rozetni.	kom	2	5,00	5,00	10,00	10,00	20,00
4	Nabavka i ugradnja horizontalnih oluka od pocincanog lima d=0.55 mm, R.S. 33 cm, polukruznog oblika sa pripadajucim ovjesnim priborom.	m	0	—	—	—	—	—
5	Nabavka i ugradnja vertikalnih oluka od pocincanog lima d=0.55 mm, R.S. 33 cm, kruznog oblika sa pripadajucim selnama	m	0	—	—	—	—	—
TOTAL						50,00	70,00	120,00

XIII Ostali radovi								
1	Zatvaranje svih preostalih vanjskih otvora na objektu PVC folijom.	m2	0	—	—	—	—	—
TOTAL						—	—	—

機材業者単価見積リスト表

業者見積り

	pcs	price	total
chair	30	27	810
table	15	85	1275
teacher's table	1	138	138
teacher's desk	1	102	102
コートハンガー	2	11	22
45° 定規	2	10	10
60° 定規	1	10	10
コンパス	1	26	26
分度器	1	10	10
定規	1	7	7

A`LES

LAKTASI

Preduzeće za proizvodnju,
inženjering i trgovinu d.o.o

tel/fax. 078/ 36-794

SPECIFIKACIJA-CJENE OPREME ZA OSNOVNU UCIONICU

	kom.	cjene	ukupno
Stolica "Vl.Han" za ucenike	30	27	810
Skolska klupa "V.Karadzic"	15	85	1275
Katedra "F.Visnjic"	1	138	138
Tapacirana stolica C-55 sa naslonom	1	102	102
Vjesalica -letva sa kukama	2	11	22
Trougao 45°	2	10	10
Trougao 60°	1	10	10
Sestar	1	26	26
Uglomjer	1	10	10
Lenijar	1	7	7

Ukupno

2410 DM



JICA