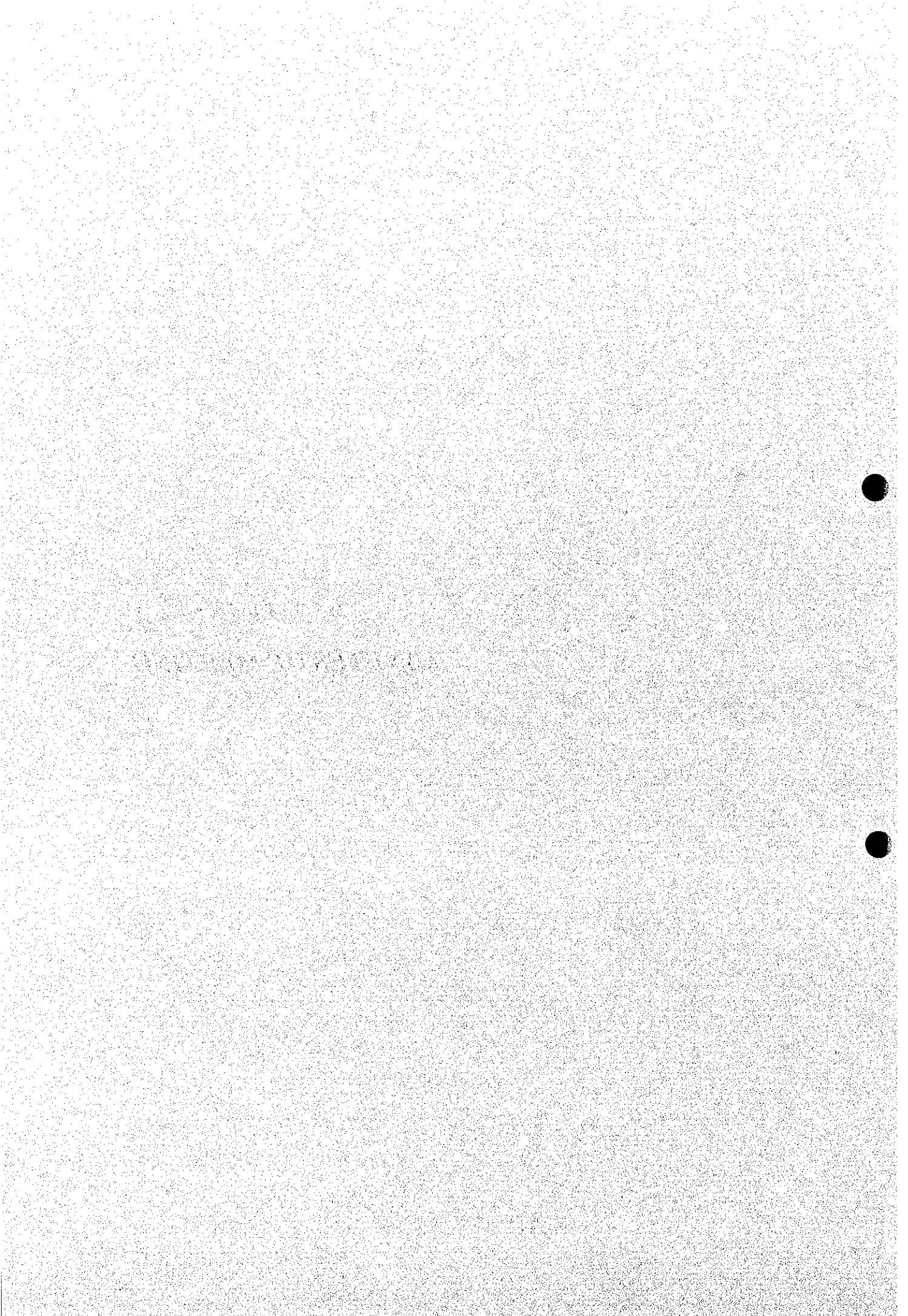
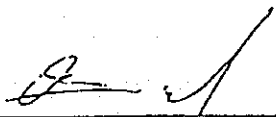


**APPENDIX A**  
**MINUTES OF MEETING**

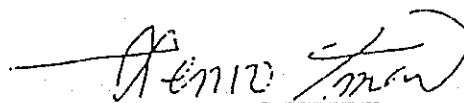


MINUTES OF MEETING  
ON  
THE SCOPE OF WORK  
FOR  
THE STUDY  
ON  
INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR  
THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA

SOFIA, OCTOBER 3, 1996



Mr. Ognian VELEV  
Deputy Minister  
Ministry of Environment



Mr. Senro IMAI  
Leader  
Preparatory Study Team  
Japan International Cooperation  
Agency

1. In response to the request of the Government of the Republic of Bulgaria, (hereinafter referred to as "the Government of Bulgaria") the Government of Japan has decided to conduct a Study on Integrated Environmental Management for the Maritza River Basin (hereinafter referred to as "the Study") through the Japan International Cooperation Agency (hereinafter referred to as "JICA").

The Japanese Preparatory Study Team (hereinafter referred to as "the Study Team"), headed by Mr. Senro IMAI, visited the Republic of Bulgaria from September 24th to October 3rd, 1996, where field survey of the study area was carried out and a series of meetings were held with the Ministry of Environment (hereinafter referred to as "MOE") and other authorities concerned. The list of attendants is attached herewith.

The draft Scope of Work (hereinafter referred to as "the SW") proposed by the Study Team was discussed in detail between MOE and the Study Team. The Study Team stressed that the SW is a standard procedure based on which various types of Development Studies are conducted including such in Bulgaria.

2. The Study Team introduced the JICA's Development Study Program and MOE fully acknowledged the objectives, study areas, durations and so forth. Both sides agreed to make the final report open to the public.

3. Both sides recognized the importance of the coordination among ministries and authorities concerned as well as with UNDP. Both sides recognized the necessity of the establishment of an Inter-ministerial Advisory Board or steering committee with coordinating function (middle management)

staff members) to facilitate the smooth conduct of the Study and to avoid any duplicated works.

4. The Study Team requested MOE to assign necessary counterpart personnel and supporting staff for the smooth implementation of the Study and MOE accepted the request.

5. With respect to the provision of available information in need for the Study, the Bulgarian side promised to provide such information in English to possible extent. The Study Team requested that MOE should bear the expense in need for the participation of counterpart personnel in the Study.

Bulgarian side requested to the Study Team that the necessary equipment and other material including reagent might be brought in for the conduct of the Study. The Study Team promised to convey the request to JICA H. Q.

6. The Study Team confirmed that MOE would provide necessary office space (two rooms with the capacity for ten people) in the National Center for Environment and Sustainable Development with necessary equipments (Telephone, FAX, E-Mail, Copy Machine etc.) and furniture (desks, chairs etc.).

7. The Study Team requested that MOE would provide two vehicles with drivers, fuel and maintenance cost. MOE, however, expressed a difficulty over this request due to the budgetary constraint. The Study Team promised to convey this to the JICA H.Q.

8. The Study Team explained the counterpart personnel training program in

Japan. MOE requested the Study Team to convey to JICA H.Q its strong wish to participate in the program especially in the fields of computer simulation modeling, integrated environmental management method, advanced chemical analysis.

9. The Study Team suggested, for a good start up, to invite, in the occasion of the submission of the Inception Report, the Bulgarian officials and experts concerned to make presentations on the progress of research and countermeasures in relation to the Mariza river. MOE welcomed this suggestion.

MOE requested the Study Team to hold a seminar as a part of technology transfer twice in the course of the Study (at the time of Interim Report / Draft Final Report) and the Study Team agreed to convey the request to JICA H.Q. for the positive consideration.

10. Bulgarian side intended that signing of the SW should be done subject to the approval at the Ministers Council after the consultation with the relevant ministries and agencies.

Japanese side considered the intention of the Bulgarian side on the signature of the SW and decided to sign the SW by Japanese side alone and to hand it over to MOE as Bulgarian counterpart.

Both sides agreed that the Bulgarian side would return to Japan the SW signed by Bulgarian representative by the end of October 1996 and that the SW should become in force when Japanese side received the SW through diplomatic channel.

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In case the Bulgarian side offers some amendments of the S/W, the due arrangement will be made through diplomatic channel.

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*Handwritten signature*

## APPENDIX

## LIST OF ATTENDANTS

## BULGARIAN SIDE

Ministry of Environment

Mr. OGNIAN VELEV

Ms. MARIETA STOIMENOVA

Mr. IVAN PEICHTV

Mr. DAMIAN BOICHEV

Mr. HRISTO MINKOV MINKOV

Dr. VERA GEORGIEVA BARAKOVA

Mr. PETR STANEV

Ms. EKATERINA DODOVA

Mr. ANGEL BORISOV ANGELOV

UNDP

Ms. DAFINA GERCHEVA

Mr. HRISTO NAYDENOV

ZELLHART GmbH

Mr. KOSTADIN KOVATCHEV

AGROBIOCHIM EAD

Mr. KRASSIMIR GROUEV

Municipality of Haskovo

Mr. ATANAS VASSILEV

NEO CHIM SA

Mr. DIMITAR HADJIIVANOV

Deputy Minister

Expert-International Co-operation  
Programmes and Projects

Department

General Director of Natural Center  
for Environment and Sustainable  
DevelopmentDeputy General Director of Natural  
Center for Environment and  
Sustainable DevelopmentDirector of Regional Inspectorate-  
PlovdivDirector of Regional Inspectorate-  
Stara ZagoraDirector of Regional Inspectorate-  
HaskovoDirector of Regional Inspectorate-  
PazardzikDirector of Regional Inspectorate-  
Sofia

Sustainable Development Advisor

Project Coordinator

PMU-project BUL 94/003

Chief Engineer

Head of Ecological Department

Mayor

Executive Director



Sewage Treatment Plant-Plovdiv  
Mr. BOGDAN MATEV

Chief Director of MWNTTP Plovdiv

TRAKIA PAPIR SA  
Mr. TAKVOR TAKVORJAN

Executive Director

#### JAPANESE SIDE

Embassy of Japan  
Mr. MASATOSHI SATO

First Secretary

Preparatory Study Team  
Mr. SENRO IMAI  
Mr. TAKASHI KOIZUMI  
Mr. KAZUHIRO FUKUDA  
Mr. SHUICHI TAKANASHI  
Mr. SATOSHI KAZAMA  
Mr. MAKOTO MIGITA  
Mr. KANJI WATANABE

**MINUTES OF MEETING  
ON  
THE INCEPTION REPORT  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA**

**SOFIA, APRIL 25, 1997**

  
**PROF. EMIL MARINOV**

**DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT**

  
**Mr. HAJIME TANAKA**

**TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**

  
**Mr. DIMITAR KANTARDJIEV**

**GENERAL DIRECTOR  
OF NATIONAL CENTER OF  
ENVIRONMENT AND  
SUSTAINABLE DEVELOPMENT**

  
**Mr. SENRO IMAI**

**CHAIRMAN  
ADVISORY COMMITTEE  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**

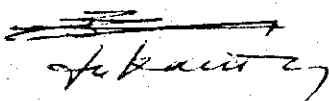
The Advisory Team of the Japan International Cooperation Agency (JICA) and the Study Team of JICA arrived and submitted thirty (30) copies of the Inception Report (April 1997) for the Study on Integrated Environmental Management for the Maritza River Basin in the Republic of Bulgaria to the Ministry of Environment (MOE) on April 22, 1997, according to the Scope of Work agreed upon between MOE and JICA on December 30, 1996.

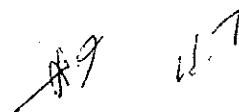
The Advisory Team and the Study Team held a meeting on April, 1997 with MOE on the report that presents the study program, including ten (10) basic approaches and study schedule. The meeting was attended by the officials concerned and chaired by Prof. Marinov, Deputy Minister of MOE. The Study Team explained the outline of the report to the officials. At the end of the explanation of the report, the Study Team stressed some of the points that were agreed upon in the Minutes of Meeting between MOE and the Preparatory Study Team of JICA on October 3, 1996, in order to carry out the study smoothly and effectively. The points stressed were as follows:

1. Necessary counterpart personnel are required to be assigned timely to the study for MOE and the Study Team to pursue the objectives of the study effectively,
2. The establishment of a steering committee with coordinating function is indispensable for MOE and the Study Team to facilitate the smooth conduct of the study and to avoid any duplicated works, and
3. The results of researches and the countermeasures done by the Bulgarian side in relation to the Maritza river basin might be duly incorporated in the study. Therefore the meetings for the presentation of these results and countermeasures are required to be held timely and the timing of the meetings will be discussed between MOE and the Study Team.

In response to these points, MOE explained as follows:

1. With respect to counterpart personnel, MOE is in a process of establishing a working group.
2. As for steering committee, members of the committee will be nominated by MOE till the end of June, 1997.





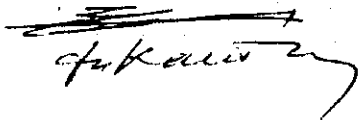
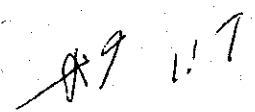
During the meeting various views were exchanged between the officials and the Study Team on the approaches and the methodologies proposed in the report. In addition it is suggested that different technical and principal comments that would be helpful for the improvement of the approach and methodology for the study, will be presented in written form and will be discussed. Before closing the meeting MOE expressed its satisfaction to the report and stressed that this study will be an important pilot project for the integrated river basin management.

During the meeting the points discussed and agreed by the participants were as follows:

1. The Inception Report (April 1997) were agreed in principal without special comments,
2. MOE agreed to try to fulfill the agreed points in the Minutes of Meeting between MOE and the Preparatory Study Team of JICA on October 3, 1996, and
3. The study team agreed to hold regular technical meetings with the officials concerned and with the counterpart personnel on the study in the course of the study.

MOE has provided the Study Team with the office space consisting of two rooms for working space and two rooms for meeting.

The list of participants is shown in Annex-1.

A handwritten signature in black ink, appearing to be 'fukami', written over a horizontal line.Handwritten initials or a signature in the bottom right corner, possibly 'A9 117'.

ANNEX-1  
LIST OF PARTICIPANTS

**BULGARIAN SIDE**

MINISTRY OF ENVIRONMENT

Prof. EMIL MARINOV	Deputy Minister
Ms. MARIETA STOIMENOVA	National Coordinator for the Maritza River Basin Project in Water Protection Department
Mr. KALINKA KRASTANOVA	Chief Expert of Water Quality in Water Protection Department
Mr. NICOLA MATEV	Chief Expert of Water Quality in Water Protection Department
Mr. ELI TZVETKOVA	Expert in Department of Strategy and Economic Regulators
Mr. TZWETANKA KOSTADINOVA	Expert in Department of Solid Waste Management
Mr. IANISLAV BAMBOV	Chief Expert of Land Protection and Soil Protection Department
Mr. STEFAN DASKALOV	Head of Urban Environment Department
Mr. IONKA MARINOVA	Chief Expert in Urban Environment Department
Mr. NINO NINOV	Expert in Air Protection Department
Ms. NIKOLA MATEV	Water Quality Expert in Water Protection Department
Mr. IVAN MILUSHEV	Chief Expert in Division of Computer Information Processing in National Center of Environment and Sustainable Development
Dr. GEORGY MIRINTCHEV	Head of Water Quality Monitoring Department of National Center of Environment and Sustainable Development

Mr. ANGEL ANGELOV

Director of Regional Environment  
Inspectorate-Sofia

Mr. TODOR AKOV

Head of Air Protection Division of Regional  
Environment Inspectorate-Plovdiv

Mr. PLAMEN FOTEV

Head of EIA Division of Regional  
Environment Inspectorate-Pazardjik

Dr. VERA BARAKOVA

Director of Regional Environment  
Inspectorate-Stara Zagora

NATIONAL WATER COUNCIL

Ms. ROSITZA NIKOLOVA

Head of Water Resources Department

Prof. IVAN PAPASTCHEV

Dean of University of Architecture, Civil  
Engineering, Construction and Geodesy

COMMITTEE OF FOREST

Mr. VENTZISLAV VELITCHKOV

NATIONAL INSTITUTE OF METEOROLOGY AND HYDROLOGY OF BULGARIAN  
ACADEMY OF SCIENCE

Prof. DIMITAR MANDADJIEV

Prof. STRAHIL GERASSIMOV

Head of Section

Dr. KONSTANTIN TZANCOV

Head of Section

COMMITTEE OF GEOLOGY

Dr. DIMITAR DRAGANOV

UNDP

Mr. CRISTO NAIDENOV

Project Manager PMU-MOE of BUL/94/003

**JAPANESE SIDE**

EMBASSY OF JAPAN

Mr. MASATOSHI SATO

First Secretary

JICA ADVISORY COMMITTEE

Mr. SENRO IMAI

Chairman of Advisory Committee

Mr. SATOSHI KAZAMA

Committee Member of Advisory Committee

JICA HEADQUARTER

Mr. KAZUHIRO FUKUDA

Task Manager

JICA STUDY TEAM

Mr. HAJIME TANAKA

Team Leader

Mr. TAKASHI FURUKAWA

River Basin Management Expert

Mr. M.M. SABBIR HASSAN

Hydrology and Hydraulic Engineer

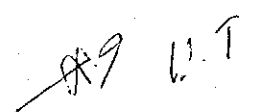
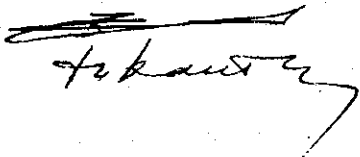
Mr. NOBORU IKENISHI

Landuse/Vegetation/Information System/Data

Base Expert

Mr. TSUTOMU HASHIMOTO

Coordinator



**MINUTES OF MEETING  
ON  
THE PROGRESS REPORT (1)  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITSA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA**

**SOFIA, AUGUST 27, 1997**

  
**PROF. EMIL MARINOV**

**DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT  
AND WATER**

  
**Mr. HAJIME TANAKA**

**TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**



The Study Team of JICA submitted thirty (30) copies of the Progress Report (1) (August 1997) of the Study to the Ministry of Environment and Water (MOEW) on August 22, 1997, according to the Scope of Work agreed upon between the Ministry and JICA on December 30, 1996.

MOEW has organized a steering committee to facilitate the smooth conduct of the Study and to avoid any duplicated works, according to the Minutes of Meeting on April 25, 1997.

MOEW held a meeting with the members of steering committee, the officials concerned and the Study Team on the Progress Report (1) on August 26, 1997. The meeting was chaired by Prof. Marinov, Deputy Minister of MOEW and the Chairman of the steering committee. The chairman gave a brief of the Study to the participants at the beginning of the meeting.

The Study Team presented the progress of the Study and explained major findings during the Study in Bulgaria from the end of April, 1997 through August, 1997. At the end of the presentation the Study Team requested the participants to send the comments on the report, if any, to the Study Team through MOEW. The chairman promised the Study Team to collect and send the comments from members of the steering committee and the participants. During the meeting the major points discussed and stressed were as follows:

- The importance of assessment of the available water resources of the own basin and the necessity of optimization of water use in the basin, based on the existing complex situation of water use in the Maritza River basin where is transferring water to and from the other basins and among the sub-basins,
- The necessity of preliminary assessment of transfer of water from the other basins,
- The importance of harmonization of the results of the Study to the concept for water management in Bulgaria and also in the European Communities, especially in water quality management,
- The necessity of more intensive investigation for the adverse effects of the soil contamination to water quality, including consideration of air pollution effect.
- The necessity of improvement of the difficult situation of data collection from institutions outside MOEW that was mentioned by the Study Team,

The chairman expressed his satisfaction to the report and stressed again the importance of the study to the participants before closing the meeting.

During the meeting the points discussed and agreed by the participants were as follows:

1. The Progress Report (I) (August 1997) was accepted in principal without special comments, and
2. MOEW agreed to collect and send the comments, if any, on the report from the participants to the Study Team.

The list of participants is shown in Annex-1 and the members of the steering committee are shown in Annex-2.

Annex-1

LIST OF PARTICIPANTS

**Re: PRESENTATION OF THE PROGRESS REPORT (1) OF *THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT FOR THE MARITZA RIVER BASIN IN THE REPUBLIC OF BULGARIA*- 26. 08. 1997**

- CHAIRMAN: Prof. Emil Marinov  
Deputy Minister of Environment and Water,
- SECRETARY: Mr. Georgi Ivanov  
Expert in Water Protection Department,  
Ministry of Environment and Water,  
Coordinator of the Study
1. Mr. Georgi Karagiozov Head of Water Protection Department,  
Ministry of Environment and Water,  
Member of the Inter-Institutional Consultative Council
  2. Mr. Parvan Samardjiev Chief Expert of the Ministry of Regional  
Development and Urbanization, Water Sector,  
Member of the Inter-Institutional Consultative Council
  3. Mr. Michael Kolarov Chief Expert of Environment in a Ministry of Industry ,  
Member of the Inter-Institutional Consultative Council
  4. Mr. Michael Popov Head of Department of State Sanitary Control,  
Ministry of Health,  
Member of the Inter-Institutional Consultative Council,
  5. Mr. Ivan Dyankov Chief Secretary of the Committee of Geology and  
Mineral Resources,  
Member of the Inter-Institutional Consultative Council,
  6. Ms. Radka Dobrilova Head of Department of Territorial Management and  
Regional Development, District Administration Sofia,  
Member of the Inter-Institutional Consultative Council
  7. Mr. Stoiko Walchinov- Head of Department of Territorial Management and  
Regional Development, District Administration Plovdiv,  
Member of the Inter-Institutional Consultative Council,

8. Mr. Todor Novakov Head of Department of Territorial Management and Regional Development, District Administration Haskovo, Member of the Inter-Institutional Consultative Council, UNDP office, attendance of the Inter-International Consultative Council,
9. Mr. Anton Baramov instead of Mr. VIGILANTE Project Manager-PMU of the UNDP Project BUL/94/003
10. Mr. Hristo Naidenov Project Coordinator of ARD GEF Biodiversity (for Mr. DESHMUKH, Project Sponsored by USAID attendance of the Inter-Institutional Consultative Council),
11. Ms. Marietta Sakalian Head of Department of Integrated Water Management, Ministry of Environment and Water, Member of the Counterpart Team
12. Ms. Rositza Nikolova- Director of National Nature Protection Service, Ministry of Environment and Water, Member of the Counterpart Team
13. Mr. Dimitar Stoev- Chief expert, Department of Strategy and Economic Regulators, Ministry of Environment and Water, Member of the Counterpart Team
14. Ms. Elly Tzvetkova- Chief expert, Department of the Protection of Bowels of the Earth Soils and Lands, Ministry of Environment and Water, Member of the Counterpart Team
15. Mr. Yanislav Bambov- Chief Expert, Water Protection Department, Ministry of Environment and Water, Member of the Counterpart Team
16. Mr. Nikola Matev- Expert, Department of Integrated Water Management, Ministry of Environment and Water, Member of the Counterpart Team
17. Mr. Andrey Hristov- Expert, Water Protection Department, Ministry of Environment and Water
18. Mr. Nikolay Koumdjiev- Head of Division, National Center for Environment and Sustainable Development, Member of the Counterpart Team
19. Ms. Svetla Klisurska- Head of Department, National Center for Environment and Sustainable Development, Member of the Counterpart Team
20. Mr. Georgi Mirinchev-

- |                             |  |
|-----------------------------|--|
| 21. Mr. Belcho Donchev-     | Head of GIS Department, National Center for Environment and Sustainable Development, Member of the Counterpart Team                              |
| 22. Ms. Tzvetanka Dimitrova | Director of REI- Sofia   |
| 23. Ms. Nikolina Tanova     | Expert of REI- Pazardjik   |
| 24. Mr. Ilia Dichev         | Expert of REI- Plovdiv   |
| 25. Ms. Tianska Deleva-     | Head of the Laboratory, REI- Haskovo   |
| 26. Ms. Vasilka Marhoeva    | Chief expert, Department of Water Use and Water Distribution, Ministry of Environment and Water, (for Mr. Pekov, Member of the Counterpart Team) |

#### JICA STUDY TEAM

- |                             |                                     |
|-----------------------------|-------------------------------------|
| 27. Mr. Hajime TANAKA-      | Team Leader of JICA Study Team      |
| 28. Mr. Takashi FURUKAWA    | River Basin Management              |
| 29. Dr. Reinhard JOURDAN    | Water Quality Control               |
| 30. Mr. M.M. Sabbir Hassan  | Hydrological and Hydraulic Analysis |
| 31. Mr. Nobuyuki SATO       | Assistant                           |
| 32. Mr. Kiril Iliev         | Office Manager                      |
| 33. Asc. Prof. Stefan Modev | Local Consultant                    |
| 34. Ms. Marietta Stoimenova | Local Consultant                    |
| 35. Mr. Radoslav Ivanov     | Local Consultant                    |
| 36. Ms. Svetla              | GIS Invest                          |

LIST WITH THE MEMBERS OF  
THE INTER-INSTITUTIONAL CONSULTATIVE COUNCIL

Re: *THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT FOR THE  
MARITZA RIVER BASIN IN THE REPUBLIC OF BULGARIA*

CHAIRMAN: Prof. Emil Marinov- Deputy Minister of Environment and Water  
DEPUTY CHAIRMAN: Mr. Eugene Tchatchev- Deputy Minister of Regional  
Development and Urbanization  
SECRETARY: Mr. George Ivanov- expert in Water Protection  
Department, Ministry of Environment and  
Water, coordinator of the project

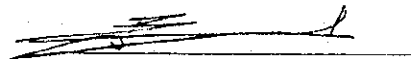
MEMBERS:

1. George Karagiozov- Head of Water Protection Department, Ministry of  
Environment and Water
2. Dimitar Kantardjiev- General Director of the National Center for Environment and  
Sustainable Development
3. Representative of the Ministry of Regional Development and Urbanization
4. Representative of the Ministry of Foreign Affairs
5. Michael Kolarov- Senior expert of Environment in a Ministry of Industry
6. Natalia Christova- Senior expert Water Transportation Department in a Ministry  
of Transport
7. Elena Ivanova- Senior expert of Environment in a Ministry of Agriculture,  
Forest and Agrarian Reform
8. Michael Popov- Head of Department State Sanitary Control in a Ministry of  
Health
9. Rumen Pavlov- Expert in a Department of Expenditures of the Ministries in a  
Ministry of Finance
10. Ivan Dyankov- Chief Secretary of the Committee of Geology and Mineral  
Resources
11. Danail Tafrov- Member of the Board of Directors of the National Electrical  
Company
12. Radka Dobrilova- Head of Department of Territorial Management and Regional  
Development, District Administration Sofia
13. Stoiko Walchinov- Head of Department of Territorial Management and  
Regional Development, District Administration Plovdiv
14. Todor Novakov- Head of Department of Territorial Management and Regional  
Development, District Administration Haskovo

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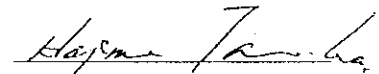
**MINUTES OF MEETING  
ON  
THE INTERIM REPORT (1)  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA**

**SOFIA, JANUARY 22, 1998**



**PROF. EMIL MARINOV**

**DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT  
AND WATER**



**Mr. HAJIME TANAKA**

**TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**

The Study Team of the Japan International Cooperation Agency (JICA) arrived Sofia on January 12 and submitted thirty (30) copies of the Interim Report (1) (December 1997) to the Ministry of Environment and Water (MOEW) on January 13, 1998, according to the Scope of Work agreed upon between the Government of Bulgaria and JICA on October 3, 1996 and December 30, 1996.

The Advisory Team of JICA arrived Sofia on January 18, 1998.

The MOEW, the Advisory Team and the Study Team held a technical meeting with the officials concerned on the Interim Report (1) on January 20 and a meeting with members of the Steering Committee on the report on January 21, 1998. The both meetings were chaired by Prof. Marinov, Deputy Minister of MOEW and Chairman of the Steering Committee.

The Study Team presented the major findings during the Study in Japan after August, 1997 and the basic concept for the Master Plan.

After the presentation the Study Team expressed that the Study Team is ready to exchange opinions with the related Ministries and organizations on the Interim Report (1) as much as possible during the Study in Bulgaria from January to March, 1998. During the meetings the major points discussed and stressed were as follows:

- MOEW stressed the importance of the assessment of groundwater both in quantity and quality. The Study Team explained that the Study Team will conduct preliminary examination on the groundwater based on available supplementary data and recommend further studies, if necessary.
- MOEW stated that the demographic expectations of 10 % by the year 2015 expressed in the Interim Report (I) is optimistic, because there were actually negative demographic developments in the Study area. However the Study Team explained that the negative demographic trends will be reversed based on the assumed economic growth expected in the next 20 years.
- MOEW suggested the effect of solid household waste on the quality of ground and surface water and the necessity of countermeasures. The Study Team explained that the solid household waste will be assessed as a part of the pollution sources based on available data to be collected.



- MOEW stressed the importance of the study on technologies used in the industries and suggested the updated new data of the industries in the data base of the Ministry. The Study Team explained that the supplemental data on the industry sector in the Maritza river basin. will be collected and assessed.
- It is stressed that the Master Plan shall employ internationally acknowledged criteria and Bulgarian funding criteria for evaluation of projects. Especially projects expected to be funded by Bulgarian funds shall be subjected to legally defined Bulgarian funding criteria. The Study Team and MOEW agreed to seek ways to harmonize criteria for evaluation and selection of priority projects.
- MOEW emphasized the necessity of the collection of water use data and the operation data of major reservoirs, especially in seasons when the river discharge becomes minimum. The availability of this information will facilitate the more precise assessment of water quality under the minimum discharge conditions in the river..
- MOEW seek to improve cooperation between its employees and the Study Team, as well as information interchange between the UNDP and the JICA projects on the Maritza river basin.

Before closing the meetings the chairman expressed his satisfaction to the report and stressed to the participants that more experts shall take part in the Study. During the meeting the points discussed and agreed by the participants were as follows:

1. The Interim Report (1) (December 1997) was accepted in principal without special comments,
2. MOEW agreed to arrange meetings to discuss on the opinions from the participants on the basic concepts for the Master Plan and priority projects in the Master Plan.

The list of participants in the meetings on January 20 and on January 21 are shown in Annex-1 and Annex-2 respectively.

**List of Participants**

Technical Discussion on Interim Report I

20 January 1998 at Ministry of Environment and Waters

**Present at the**

	<b>Name</b>	<b>Institution</b>	<b>Position</b>
1.	Prof. Emil Marinov	MoEW	Vice Minister
2.	Mr. George Ivanov	MoEW	Expert
3.	Mr. Andrei Hristov	MoEW	Expert
4.	Mr. Stephan Donchev	MoEW	Department Chief
5.	Mrs. Katya Rainova	MoEW	Expert
6.	Ms. Margarita Voycheva	MoEW	Chief Expert
7.	Mr. Nikolay Zhelyazkov	MoEW	Expert
8.	Mr. Dimitar Vergiev	MoEW	Chief Expert
9.	Mr. Yanislav Bambov	MoEW	Chief Expert
10.	Ms. Romyana Ilieva	MoEW	Expert
11.	Ms. Nikola Matev	MoEW	Chief Expert
12.	Mr. Krassimir Atev	MoEW	Expert
13.	Mr. Plamen Netkov	MoEW	Expert
14.	Ms. Eli Tzvetkova	MoEW	Chief Expert
15.	Mr. Alexandar Pekov	MoEW	Chief Expert
16.	Mr. Dimitar Stoev	MoEW	Chief Expert
17.	Mr. Alexandar Keremidarski	NCESD	Department Chief
18.	Mr. Belcho Donchev	NCESD	Department Chief
19.	Mr. Velcho Kuyumdjiev	NCESD	Expert
20.	Ms. Kalina Shopova	NCESD	Expert
21.	Mr. Boris Videlov	NCESD	Chief Expert

## ANNEX I

22.	Mrs. Ekaterina Dodova	REI – Pazardjik	Director
23.	Ms. Nikolina Tanova	REI – Pazardjik	Chief Expert
24.	Mrs. Vera Barakova	REI – Stara Zagora	Director
25.	Mrs. Aneta Ivanova	REI – Plovdiv	Director
26.	Ms. Ilya Dichev	REI-Plovdiv	Chief Expert
27.	Mr. Dimitar Iliev	REI-Haskovo	Director
28.	Ms. Vera Barakova	REI-Stara Zagora	Director
29.	Ms. Tzvetanka Dimitrova	REI-Sofia	Director
30.	Mr. Liubomir Mihdarev	REI-Smolyan	Chief Expert
31.	Prof. Strahil Gerasimov	NIMH	Expert
32.	Mr. Shuichi Takanashi	Committee member of JICA Advisory Committee	Chiba Prefectural Government, Japan
33.	Mr. Satoshi Kazama	Committee member of JICA Advisory Committee	Ministry of Construction, Japan
34.	Mr. Kazuhiro Fukuda	JICA, Social Development Study Department	Task Manager
35.	Mr. Hajime Tanaka	JICA Study Team	Team Leader
36.	Mr. Takashi Furukawa	JICA Study Team	River Basin Management
37.	Dr. Reinhard Jourdan	JICA Study Team	Water Quality Control
38.	Mr. M. M. Sabbir Hassan	JICA Study Team	Hydrological and Hydraulic Analysis
39.	Mr. David S. Wallace	JICA Study Team	Water Quality Analysis/Waste Water Treatment
40.	Dr. Tuyoshi Hashimoto	JICA Study Team	Socio-economy
41.	Dr. Chaisak Sripadungtham	JICA Study Team	Structural Planning
42.	Mr. Eric Koch Rasmussen	JICA Study Team	Water Quality Simulation
43.	Mr. Teruo Tahara	JICA Study Team	Hydrogeology
44.	Ms. Marietta Stoimenova	Local Consultant	

**List of Participants**

Meeting on Interim Report I by Steering Committee

21 January 1998 at Ministry of Environment and Waters

**Present at the**

	Name	Institution	Position
1.	Prof. Emil Marinov	MoEW	Vice Minister
2.	Mr. George Ivanov	MoEW	Expert
3.	Mr. Andrei Hristov	MoEW	Expert
4.	Mrs. Katya Rainova	MoEW	Expert
5.	Mr. Krassimir Barokov	MoEW	Expert
6.	Mr. Ognyan Gabev	MoEW	Expert
7.	Mrs. Margarita Voicheva	MoEW	Chief Expert
8.	Mrs. Romyana Ilieva	MoEW	Expert
9.	Mr. Nikolay Zhelyazkov	MoEW	Expert
10.	Mr. Dimitar Stoev	MoEW	Expert
11.	Mr. Velcho Kuyumjiev	NCESD	Expert
12.	Mr. Belcho Donchev	NCESD	Expert
13.	Mrs. Ekaterina Dodova	REI – Pazardjik	Director
14.	Mrs. Vera Barakova	REI – Stara Zagora	Director
15.	Mrs. Aneta Ivanova	REI – Plovdiv	Director
16.	Prof. Strahil Gerasimov	NIMH	Expert
17.	Mr. Totka Hristova	Dams & Cascades	Expert
18.	Mr. Elli Anavi	Ministry of Industry	Chief Expert
19.	Mr. Rumen Pavlov	MoF	Expert
20.	Mrs. Nataliya Hristova	MoT	Chief Expert
21.	Mrs. Iveta Marinova	MoRED & C	Chief Expert

## ANNEX II

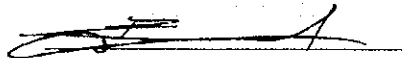
22.	Mr. Parvan Samardjiev	MoRED & C	Chief Expert
23.	Dr. Mihail Popov	MoH	Chief
24.	Mr. Boris Dimitrov	Ministry of Industry	Chief Ecologist
25.	Mr. Stoyko Valchinov	District Administration /Plovdiv District	Chief
26.	Mr. Venelin Parapanov	District Administrator – Haskovo District	Expert
27.	Mrs. Snezhana Borshukova	Sofia District – Alabin Str.22	Chief
28.	Mrs. Elena Ivanova		Chief Expert
29.	Mr. Christo Naydenov	Project BUL/94/003 UNDP	Coordinator
30.	Mr. David Rodda	UNDP Maritza Basin	Consultant
31.	Mrs. Marieta Sakalyan	GEF – project	Coordinator
32.	Mr. Shuichi Takanashi	Committee member of JICA Advisory Committee	Chiba Prefectural Government, Japan
33.	Mr. Satoshi Kazama	Committee member of JICA Advisory Committee	Ministry of Construction, Japan
34.	Mr. Kazuhiro Fukuda	JICA, Social Development Study Department	Task Manager
35.	Mr. Hajime Tanaka	JICA Study Team	Team Leader
36.	Mr. Takashi Furukawa	JICA Study Team	River Basin Management
37.	Dr. Reinhard Jourdan	JICA Study Team	Water Quality Control
38.	Mr. M. M. Sabbir Hassan	JICA Study Team	Hydrological and Hydraulic Analysis
39.	Mr. David S. Wallace	JICA Study Team	Water Quality Analysis/Waste Water Treatment
40.	Dr. Tuyoshi Hashimoto	JICA Study Team	Socio-economy

## ANNEX II

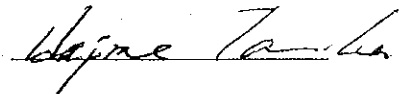
41.	Dr. Chaisak Sripadungtham	JICA Study Team	Structural Planning
42.	Mr. Eric Koch Rasmussen	JICA Study Team	Water Quality Simulation
43.	Mr. Teruo Tahara	JICA Study Team	Hydrogeology
44.	Ms. Marietta Stoimenova	Local Consultant	
45.	Ms. Svetla	GIS Invest	

**MINUTES OF MEETING  
ON  
THE PROGRESS REPORT (2)  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA**

**SOFIA, MARCH 24, 1998**



**PROF. EMIL MARINOV  
DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT  
AND WATER**



**Mr. HAJIME TANAKA  
TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**

The Study Team of the Japan International Cooperation Agency (JICA) has issued the Progress Report (2) (March 1998) that presents the results of the Study in Bulgaria from January, 1998 to March, 1998 and submitted thirty (30) copies of the report to the Ministry of Environment and Water (MOEW) on March 13, 1998, according to the Scope of Work agreed upon between the Government of Bulgaria and JICA on October 3, 1996 and December 30, 1996.

The MOEW and the Study Team of JICA held a technical meeting with the working group on the report at the conference room of MOEW on March 18, 1998. The meeting was chaired by Mr. Stefan Dontchev, Dipl. Eng., Head of Department of Use and Protection of Surface Water, MOEW. The Study Team of JICA explained the report and discussed on the opinions and comments raised by the attendants on the report and also on the further program of the Study.

After the discussion on various opinions and comments from the attendants, the Study Team proposed the Chairman and the attendants that the further opinions and comments, if any, shall be collected by the MOEW from the attendants and sent to the Study Team within one month in order to enable them to be incorporated in the next report. The Chairman noticed that the attendants should submit opinions and comments, if any, in written form to Mr. Goerge Ivanov, the coordinator of the Study of the MOEW, by April 10, 1998 and that the MOEW will send them to the Study Team by April 18, 1998.

During the meeting the major points discussed were summarized as follows:

- MOEW stressed that the health risks and pollution loads from transport, industries and mines in the study area should be assessed in the Study. The Study Team explained that the data collected will be assessed, but the actual data are still limited or not available and that the locations of mines including possible hazardous spots collected are considered as spots to be required for the Government to take care for mitigation of risks from hazardous substances and accidental pollution.
- MOEW stressed that the study on the improvement of wastewater treatment facilities for major industries should be required. The Study Team explained that such study is beyond the Scope of the Study and the industry should have a full responsibility to treat its waste and refuse properly.



- MOEW suggested that a simulation model on groundwater should be included in the Study. The Study Team explained that the Study Team has no plan to develop a simulation model for the groundwater, but it might be useful for an optimum management of groundwater resources to establish a basic monitoring system.
- MOEW stressed that the Maritza river basin should include the Tundza and Arda river basins from the river basin management aspects. The Study Team suggested that it would be necessary to include the two river basins for management of the Maritza river basin and recommended that MOEW is to conduct the study on the two river basins based on the methodology used in this Study.
- MOEW stressed that training should be necessary for local staff or REI to utilize the results of the Study, including simulation models. The Study Team suggested that MOEW should prepare a training program for the staff in order to implement the Master Plan duly.
- The Study team requested MOEW to follow up the collection of supplementary data, including supplementary data on the industry sector in the Maritza river basin that will be required to update the pollution loads. MOEW agreed to follow it up.

Before closing the meetings the Chairman expressed his satisfaction to the report and the presentation. During the meeting the points discussed and agreed by the participants were as follows:

1. The Progress Report (2) (March 1998) was accepted without any special comments.
2. MOEW requested to have a series of technical discussion meetings with staff instead of a seminar agreed in the Minutes of Discussion on October 1996, in which MOEW requested JICA to hold a seminar as a part of technology transfer twice in the course of the Study (at the time of Interim Report / Draft Final Report) and proposed to expand members of participants from different groups related. The Study team agreed to convey the request to JICA H.Q for consideration.
3. MOEW requested the Study team to send a few copies of the Interim Report (2) in advance in order to have an enough time for the staff to review it. The Study Team agreed to send it as early as possible so far as circumstances permits.

The list of participants in the meetings on March 18 is shown in Annex-1.

Annex 1

**List of Participants**

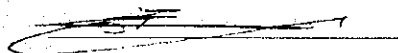
Meeting on Progress Report (2)

18 March, 1998 at Ministry of Environment and Waters

N	Name	Institution	Position
1.	Mr. Stephko Donchev	MoEW	Head of Department
2.	Mr. Georgy Ivanov	MoEW	Expert
3.	Mr. Andrei Hristov	MoEW	Expert
4.	Mrs. Katia Rainova	MoEW	Expert
5.	Mr. Mincho Minchev	REWI Stara Zagora	Director
6.	Mrs. Rositza Nikolova	MoEW	Head of Department
7.	Mrs. Jonka Marinova	MoEW	Chef expert
8.	Mrs. Neviana Teneva	MoEW	Chef expert
9.	Mr. Ognian Gabev	MoEW	Expert
10.	Mrs. Runiana Ilieva	MoEW	Expert
11.	Mr. Alexander Pekov	MoEW	Chef expert
12.	Mr. Kliment Dilianov	MoEW	Chef expert
13.	Mrs. Kalina Shopova	NCESD	Expert
14.	Mr. Boris Videlov	NCESD	Chef expert
15.	Mr. Velcho Kouyumdzhev	NCESD	Expert
16.	Mrs. Rositza Gorova	NCESD	Expert
17.	Mr. Georgy Mirinchev	NCESD	Head of Department
18.	Mrs. Aneta Ivanova	REWI Plovdiv	Executive Director
19.	Mr. Ilia Dichev	REWI Plovdiv	Chef expert
20.	Mrs. Ekaterina Dodova	REWI Pazardjik	Director
21.	Mr. Lubomir Dainovski	REWI Haskovo	Deputy Director
22.	Mrs. Tonka Docheva	REWI Sofia	Chef expert
23.	Mr. Hristo Naidenov	UNDP Project BUL/94/003-PCU	Coordinator
24.	Mr. Nikolai Tzankov	UNDP Project BUL/94/003-Subcontractor- IHM	Chef of section Subcontractor Team Member
25.	Mrs. Tzvetanka Atanasova	UNDP Project BUL/94/003-Subcontractor- "Vodokanalengineering" Ltd.	Manager Director Subcontractor Team Leader
26.	Mrs. Stela Ivanova	UNDP Project BUL/94/003-Subcontractor- "Vodokanalengineering" Ltd.	Chef expert Subcontractor Team Member
27.	Mr. Masatoshi Sato	Embassy of Japan	First Secretary
28.	Mr. Hajime Tanaka	Jica Study Team	Team Leader
29.	Mr. Takashi Furukawa	Jica Study Team	River Basin Management
30.	Dr. Reinhard Jourdan	Jica Study Team	Water Quality Control
31.	Mr. M.M. Sabbir Hassan	Jica Study Team	Hydrological & Hydraulic Analysis
32.	Mr. Eric Koch Rasmussen	Jica Study Team	Water Quality Simulation
33.	Mr. Kiril Iliev	Jica Study Team	Office Manager
34.	Mrs. Marietta Stoimenova	Jica Study Team	Local Consultant

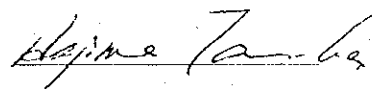
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**MINUTES OF MEETING  
ON  
THE INTERIM REPORT (2)  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA  
SOFIA, SEPTEMBER 24, 1998**



**Prof. EMIL MARINOV**

**DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT  
AND WATER**



**Mr. HAJIME TANAKA**

**TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**

The Study Team of the Japan International Cooperation Agency (JICA) issued the Interim Report (2) (August 1998) that presents a Master Plan of Integrated Environmental Management for the Maritza River Basin and the priority projects for F/S, and send copies of the Report to Ministry of Environment and Water (MOEW) on September 2, 1998, in order to have an enough time for the staff of MOEW to review it, as agreed in the Minutes of Meeting on March 24, 1998.

The Study Team arrived Sofia on September 16, 1998 and submitted thirty (30) copies of the Report to MOEW on September 17, 1998, according to the Scope of Work agreed upon between the Government of Bulgaria and JICA on October 3, 1996 and December 30, 1996.

MOEW and the Study Team held a meeting with members of the Steering Committee for the Study and staff concerned on the Report at the conference room of MOEW on September 18, 1998. Prof. Emil Marinov, Deputy Minister of MOEW and the chairman of the Steering Committee, chaired the meeting. The Study Team explained the Report and the priority projects identified for F/S, and expressed that the Study Team is ready to exchange opinions with the related ministries and organization on the Report during the Study in Bulgaria from September to December, 1998.

After the discussion on various opinions and comments from the attendants, the chairman expressed his satisfaction to the Report and the presentation, and noticed that the attendants should submit opinions and comments, if any, in written form to Mr. Goeorge Ivanov, the secretary of the Steering Committee and the coordinator of MOEW for the Study by October 15, 1998.

During the meeting the major points discussed and recommended were summarized as follows:

- In EU regulation NO3 is used for the definition of environmental sensitive zones and recommended to be added in the water quality evaluation criteria together with BOD, DO and NH4 in the Study. The Study Team explained that it was explained in the last report and agreed to include it in the draft final report.
- The Study Team stressed that the more participation of the counterpart to the Study will be required from technical cooperation aspects. MOEW seeks to improve cooperation between the counterpart and the Study Team.

During the meeting the points agreed by the participants were as follows:

1. The Interim Report (2) (August 1998) and the proposed priority projects for F/S were accepted without any special comments.
2. The request by MOEW for counterpart training in Japan was agreed to be transferred to the JICA headquarter.

The list of participants in the meeting on September 18 is shown in Annex-1.

Annex I  
List of Attendants  
Presentation of Interim Report II

No.	Name	Institution	Position	Telephone/ Address
1.	Prof. E. Marinov	MoEW	Vice Minister	
2.	George Ivanov	MoEW	Expert	
3.	Rada Staneva	MoEW	Expert	Ext. 23 86
4.	Stefan Donchev	MoEW	Chief of Dept.	980 39 23
5.	Katya Rainova	MoEW	Expert	980 13 90
6.	Plamen Nikiforov	Ministry of Regional Development	Chief of Water Supply Systems Dept.	88 23 82
7.	Nadezhda Buhova	Ministry of Transport	Expert in Dept. Air Transport	987 73 54
8.	Simeon Kuikin	Aurimetria Co.	Consultant	621 550
9.	Stoiko Valchinov	District Administration Plovdiv	Chief of Dept.	62 56 59
10.	Rumen Arsov	University for Architecture and Civil Engineering	Assistant Professor	668 995
11.	Ivanka Mihailova	Institute of Water Problems, Bulgarian Academy of Sciences	Assistant Prof.	979 24 46
12.	Yordan Kosturkov	Institute of Water Problems, Bulgarian Academy of Sciences	Assistant Prof.	979 24 46
	Rossitza Gorova	National Centre for Environment and Sustainable Development	Chief Expert "Ground Waters"	955 98 18
	Nikola Matev	MoEW	Chief Expert	988 48 20
	Aneta Ivanova	RIEW – Plovdiv	Chief of Dept.	62 89 94
16.	Velichka Hadjitodorova	RIEW – Plovdiv	Chief Expert "Waters Dept."	63 11 89
	Krassimir Barokob	MoEW	Expert	981 52 71
18.	Todor Georgiev	Sofia District	Expert	980 24 39
	Rumyana Ilieva	MoEW	Expert	8472 22 76
20.	Radoslav Stanolov	Ministry of Industry	Chief Expert	87 40 76
21.	Grigor Mihailov	University for Architecture and Civil Engineering	Assistant Professor	668 995
	Trendafil Velov	RIEW – Pazardjik	Chief Expert	(034) 20 972
23.	Maria Yankova	University for Architecture and Civil Engineering	Student	76 51 31
24.	Yordan Byalokov	Haskovo District	Chief Expert	2 23 60
25.	Boris Dimitrov	Ministry of Industry "Environment Dept."	Chief Expert	867 20 67
26.	Kenji Matsuoka	Embassy of Japan in Bulgaria	Second Secretary	971 27 08
27.	Marietta Stoimenova	JICA Study Team	Local consultant	955 90 18
28.	Andrei Hristov	MoEW	Expert	981 32 01
29.	Mincho Minchev	RIEW – Stara Zagora	Director	(042) 2 38 73
30.	Georgi Mirinchev	National Centre for environment and Sustainable Development	Expert	
31.	Hajime Tanaka	JICA study Team	Team Leader	
32.	Takashi Furukawa	JICA Study Team	Expert	
33.	Tsutomi Hashimoto	JICA Study Team	Expert	
34.	Noboyuki Sato	JICA Study Team	Expert	
35.	Kiril Iliev	JICA study team	Office Manager	

List of Abbreviations:

MoEW	Ministry of Environment and Water
JICA	Japan International Cooperation Agency
RIEW	Regional Inspectorate for Environment and Water
	Member of Steering Committee
	Member of Working Group

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## Annex I

## List of Attendants


## Presentation of Interim Report II

No.	Name	Institution	Position	Telephone/ Address
1.	Prof. E. Marinov	MoEW	Vice Minister	
2.	George Ivanov	MoEW	Expert	
3.	Rada Staneva	MoEW	Expert	Ext. 23 86
4.	Stefan Donchev	MoEW	Chief of Dept.	980 39 23
5.	Katya Rainova	MoEW	Expert	980 13 90
6.	Plamen Nikiforov	Ministry of Regional Deelopment	Chief of Water Supply Systems Dept.	88 23 82
7.	Nadezhda Buhova	Ministry of Transport	Expert in Dept. Air Transport	987 73 54
8.	Simeon Kuikin	Aurimetria Co.	Consultant	621 550
9.	Stoiko Valchinov	District Administration Plovdiv	Chief of Dept.	62 56 59
10.	Rumen Arsov	University for Architecture and Civil Engineering	Assistant Professor	668 995
11.	Ivanka Mihailova	Institute of Water Problems, Bulgarian Academy of Sciences	Assistant Prof.	979 24 46
12.	Yordan Kosturkov	Institute of Water Problems, Bulgarian Academy of Sciences	Assistant Prof.	979 24 46
13.	Rossitza Gorova	National Centre for Environment and Sustainable Development	Chief Expert "Ground Waters"	955 98 18
14.	Nikola Matev	MoEW	Chief Expert	988 48 20
15.	Aneta Ivanova	RIEW – Plovdiv	Chief of Dept.	62 89 94
16.	Velichka Hadjitodorova	RIEW – Plovdiv	Chief Expert "Waters Dept."	63 11 89
17.	Krassimir Barokob	MoEW	Expert	981 52 71
18.	Todor Georgiev	Sofia District	Expert	980 24 39
19.	Rumyana Ilieva	MoEW	Expert	8472 22 76
20.	Radoslav Stanolov	Ministry of Industry	Chief Expert	87 40 76
21.	Grigor Mihailov	University for Architecture and Civil Engineering	Assistant Professor	668 995
22.	Trendafil Velov	RIEW – Pazardjik	Chief Expert	(034) 20 972
23.	Maria Yankova	University for Architecture and Civil Engineering	Student	76 51 31
24.	Yordan Byalokov	Haskovo District	Chief Expert	2 23 60
25.	Boris Dimitrov	Ministry of Industry "Environment Dept."	Chief Expert	867 20 67
26.	Kenji Matsuoka	Embassy of Japan in Bulgaria	Second Secretary	971 27 08
27.	Marietta Stoimenova	JICA Study Team	Local consultant	955 90 18
28.	Andrei Hristov	MoEW	Expert	981 32 01
29.	Mincho Minchev	RIEW – Stara Zagora	Director	(042) 2 38 73
30.	Georgi Mirinehev	National Centre for environment and Sustainable Development	Expert	
31.	Hajime Tanaka	JICA study Team	Team Leader	
32.	Takashi Furukawa	JICA Study Team	Expert	
33.	Tsutomi Hashimoto	JICA Study Team	Expert	
34.	Noboyuki Sato	JICA Study Team	Expert	
35.	Kiril Iliev	JICA study team	Office Manager	

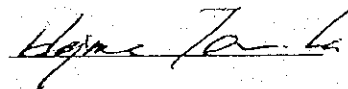
## List of Abbreviations:

MoEW	Ministry of Environment and Water
JICA	Japan International Cooperation Agency
RIEW	Regional Inspectorate for Environment and Water
	Member of Steering Committee
	Member of Working Group

MINUTES OF MEETING  
ON  
THE PROGRESS REPORT (3)  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA  
SOFIA, DECEMBER 09, 1998



Prof. EMIL MARINOV  
DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT  
AND WATERS



Mr. HAJIME TANAKA  
TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY

The Study Team of the Japan International Cooperation Agency (JICA) issued the Progress Report -3 (December 1998) that presents the results of the field study on the priority projects for F/S, and submitted 10 draft copies of the Report to the Ministry of Environment and Water (MOEW) for their reference on December 03, 1998.

The Study Team submitted thirty (30) copies of the Report to MOEW on December 08, 1998, according to the Scope of Work agreed upon between the Government of Bulgaria and JICA on October 3, 1996 and December 30, 1996.

MOEW and the Study Team held a meeting on the Report with staff concerned from MOEW and Municipalities of Pazardjik, Dimitrovgrad and Stara Zagora at the conference room of MOEW on December 08, 1998. Prof. Emil Marinov, Deputy Minister of MOEW, chaired the meeting. The Study Team presented an outline of the Report and major findings during the Study in Bulgaria from September through November 1998. At the end of the presentation the Study Team requested MOEW to collect comments and opinions, if any, on the Report from the participants and the staff concerned, and send to the Study Team by the end of December 1998 in order to incorporate them into the next report.

During the meeting various comments and opinions were raised from the attendants and the major points to note were as follows:

- MOEW asked the Study team's opinion on the new monitoring networks for environmental components introduced by MOEW in July 1998. The Study team had not finished of reviewing them yet, but promised to do and refer it in the next report.
- MOEW asked about the basic principles for formulating the Master Plan and applicability of them to other river basins in Bulgaria. The Study team answered that the Study set a target for the basin to improve the water quality of the Maritza river to the level of class-1 or class-2 by 2015, and that the target and methodologies used in the Study could be applied to the other basins in Bulgaria.
- MOEW asked the Study team's opinion about the basin management principles for management of environmental components other than water quality. The Study team answered that still it is necessary for the basin to continue to compile basic data and information on various environmental components from basin management aspects, and further studies/ investigations would be required after the Study.
- MOEW stressed the importance of Minimum River flows and the necessity of a guideline of Minimum River flows for the basin from environmental and water management aspects. The Study team expressed that it is not easy to set a guideline of the Minimum River flows from ecological and environmental aspects in the Study, but the Maritza basin might be at a level of the minimum or less, according to the existing water balance, and that there are possibilities for the river flows to increase by more efficient operation and management of water intake facilities in



the basin, because there is a big gap between the water supplied and the water demand estimated.

After the discussion on opinions and comments from the attendants, the chairman expressed his satisfaction to the Report and noticed that the attendants should submit further opinions and comments, if any, in written form to Mr. Goeorge Ivanov, the coordinator of MOEW for the Study, until December 25, 1998 in order to send them to the Study Team by the end of December 1998.

During the meeting the points agreed by the participants were as follows:

1. The Progress Report (3) (December 1998) is accepted without any special comments.
2. The technical seminar (2) is requested to be held in Plovdiv, instead of Sofia, because Plovdiv is located in the center of the Maritza river basin and convenient for the attendants from the Municipalities and the Regional Environmental Inspectorate in the Maritza river basin.

The list of participants in the meeting on December 08 is shown in Annex-1.


## Annex-1

List of Participants  
Meeting on Progress Report (3) at Ministry of Environment and Waters  
on December 08 1998

N o	Name	Institution	Position	Telephone
1	Prof. Emil Marinov	MoEW	Deputy Minister	981 88 61
2	Dipl. Eng. Georgi Ivanov	MoEW - Protection and Use of Surface Water Department	Chief Expert	980 13 90
3	Dipl. Eng. Katya Rainova	MoEW - Protection and Use of Surface Water Department	Expert	980 13 90
4	Dipl. Eng. Andrey Hristov	MoEW - Strategy & Policy of Integrated Water Management	Expert	981 32 01
5	Dipl. Eng. Mariana Koleva	REWI - Haskovo	Chief Expert	038/ 2 80 14
6	Dipl. Eng. Mincho Minchev	REWI - Stara Zagora	Director	042/ 3 10 77
7	Mr. Kunio Kunev	Stara Zagora Municipality	Deputy Mayor	042/ 60 04 16
8	Dipl. Eng. Stephan Popov	Stara Zagora Municipality	Expert	042/ 5 10 07
9	Ms. Kalina Shopova	NCESD	Expert	955 98 11
10	Dipl. Eng. Krassimir Barokov	MoEW - Protection and Use of Ground Water Department	Expert	981 52 71
11	Dimitar Ginin	Pazardjik Municipality	Chief of Department	034/ 2 60 51
12	Dipl. Eng. Kosta Ganev	MoEW- Environmental Impact Assessment Department	Expert	8472 2296
13	Dipl. Eng. Ely Tzvetkova	MoEW- Strategy & Economic Regulators	Chief Expert	8472 2391
14	Dipl. Eng. Velcho Kuyumdjiev	NCESD	Expert	955 98 18
15	Dipl. Eng. Georgi Mirinchev Ph D	NCESD	Chief of Department	955 98 18
16	Dipl. Eng. Nikola Matev	MoEW- Strategy & Policy of Integrated Water Management Department	Chief Expert	988 48 20
17	Dipl. Eng. Andon Tonev	W & S Company- Stara Zagora	WWTP Expert	042 601 543
18	Dipl. Eng. Fedya Dimitrov	Dimitrovgrad Municipality	Chief Expert Ecology	0391 23 713
19	Dipl. Eng. Plamen Fotev	REWI - Pazardjik	Director	034 28 389
20	Dipl. Eng. Nikolina Tanova	REWI - Pazardjik	Expert	034 20 972
21	Dipl. Eng. Anna Sabeva	W & S Company - Pazardjik	Chief of W & S Department	034 26 225
22	Dipl. Eng. Kamen Nikolov	W & S Company - Dimitrovgrad	Manager Director	0391 23 874
23	Dipl. Eng. Dimitar Stoev	REWI - Sofia , Vitosha Park Administration	Director	83 851/486 0489 60 452
24	Dipl. Eng. Krasimir Naydenov	MoEW- Accesion Programs & Projects Department	Expert	8472 2360
25	Mr. Hajime Tanaka	JICA Study Team	Team Leader	955 90 18
26	Mr. Takashi Furukawa	JICA Study Team	River Basin Management	955 90 18
27	Dr. Reinhard Jourdan	JICA Study Team	Water Quality Control	955 90 18
28	Dr. Chaisak Sripadungtham	JICA Study Team	Structural Planing	955 90 18
29	Mr. Makoto Koike	JICA Study Team	Structural Designing	955 90 18
30	Mr. Nobuyuki Sato	JICA Study Team	Assistant	955 90 18
31	Mr. Kiril Iliev	JICA Study Team	Office Manager	955 90 18
32	Dipl. Eng. Marietta Stoimenova	JICA Study Team	Local Consultant	955 90 18
33	Dipl. Eng. Stoyan Valev	JICA Study Team	Local Consultant	569 704
34	Dipl. Eng. Maria Beremska	JICA Study Team	Local Consultant	564 774

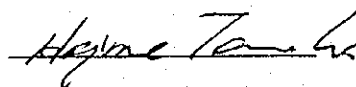
**MINUTES OF MEETING  
ON  
THE DRAFT FINAL REPORT  
FOR  
THE STUDY ON INTEGRATED ENVIRONMENTAL MANAGEMENT  
FOR THE MARITZA RIVER BASIN  
IN  
THE REPUBLIC OF BULGARIA**

**SOFIA, FEBRUARY 10, 1999**



**Prof. EMIL MARINOV**

**DEPUTY MINISTER  
MINISTRY OF ENVIRONMENT  
AND WATERS**



**Mr. HAJIME TANAKA**

**TEAM LEADER  
STUDY TEAM  
JAPAN INTERNATIONAL  
COOPERATION AGENCY**

The Study Team of the Japan International Cooperation Agency (JICA) issued the Draft Final Report (January 1999) of "The Study on Integrated Environmental Management for the Maritza River Basin in the Republic of Bulgaria" and submitted fifteen (15) draft copies of the Report to the Ministry of Environment and Water (MOEW) for their reference on January 29, 1999.

The Study Team arrived in Sofia on February 3, 1999 and submitted thirty (30) copies of the Report to MOEW on February 4, 1999, according to the Scope of Work agreed upon between the Government of Bulgaria and JICA on October 3, 1996 and December 30, 1996.

MOEW and the Study Team held a meeting on the Report with the Steering Committee and staff concerned from MOEW and the other related organizations at the conference room of MOEW on February 8, 1999. Prof. Emil Marinov, Deputy Minister of MOEW and the Chairman of the Steering Committee, chaired the meeting. The Study Team presented an outline of the major results of the Study and suggested at the end of the presentation that the Study Team would like to consider comments or opinions, if any, on the Report from the attendants to incorporate into the Final Report and to receive them, if possible, by February 22, 1999.

After the presentation various opinions and questions were raised in the meeting. Among them the points to note are summarized as follows:

- MOEW asked whether the over-staffed and inefficient organizations of Water Supply and Sewerage Companies (VIKs) mainly depend on the lack of good information systems and proper managing equipment including the lack of modern computers. The Study Team answered that the major cause of the inefficiency of the VIKs may depend on the lack of experience, and the VIKs require an optimum on the job training for the staff in order to improve their efficiency.
- National Electric Company-Dams & Cascades Enterprise asked about optimization of the management of hydropower schemes from the river basin management aspects. The Study Team answered that the water resources including the hydropower schemes should be reviewed by national level first because there are many existing inter-basin transfer systems even in the Maritza River Basin and accordingly the hydropower schemes should be managed by the river basin management approach, not by the sector wise management approach that has caused the existing water

stresses in quantity and quality in the Maritza River Basin.

At closing of the meeting, the chairman expressed his satisfaction to the presentation and the Reports and also to the Study, and noticed that the attendants should submit opinions and comments, if any, in written form to Mr. Georgi Ivanov, the secretary of the Steering Committee and the coordinator of MOEW for the Study, by February 20, 1999 in order to present them to the Study Team in time.

During the meeting the points agreed by the participants are as follows:

1. The Draft Final Report (January 1999) is accepted without any special comments.
2. The request by MOEW to participate in the JICA technical training program related to the technical fields of environmental management that was agreed by the Study Team is to be conveyed to the JICA headquarters.
3. It is confirmed that the final report will be opened to the public as agreed in the Minutes of Meeting on the Scope of Work between the Ministry of Environment and the JICA Preparatory Study Team on October 3, 1996.

The list of participants in the meeting on February 8 is shown in Annex-1.

Annex-1 List of Participants (1/2)

Meeting with the Steering Committee on the Draft Final Report on  
February 08 1999

No	Name	Institution	Position	Telephone
1	Prof. Emil Marinov	MoEW	Vice Minister Chairman of the Steering Committee	980 67 28
2	Georgi Ivanov	MoEW	Chief Expert, Project Coordinator	980 13 90
3	Katia Raynova	MoEW	Expert	980 13 90
4	Andrey Christov	MoEW	Expert	981 32 01
5	Stefan Donchev	MoEW	Chief of Dept.	980 39 23
6	Nikola Matev	MoEW	Chief Expert	988 48 20
7	Svetla Chemeva	Sofia District Administration	Expert	987 93 11
8	Svetla Markova	Sofia District Administration	Expert	980 34 40
9	Radka Dobnilova	Sofia District Administration	Chief of Dept.	988 40 65
10	Parvan Samardjiev	MRDPW	Chief Expert	988 03 77
11	Alexandar Pekov	MoEW	Chief Expert	981 43 95
12	Rositza Nikolova	MoEW	Chief Expert	981 72 08
13	Mincho Minchev	RIEW-Stara Zagora	Director	042/23873
14	Boris Videlov	NCESD	Chief Expert	955 98 25
15	Rositza Gorova	NCESD	Expert	955 98 18
16	Georgi Minchev	NCESD	Chief of Dept.	955 98 18
17	Velcho Kuiuudjiev	NCESD	Expert	955 98 18
18	Eli Tzvetkova	MoEW	Chief Expert	8472/2391
19	Tonka Docheva	RIEW-Sofia	Expert	955 93 62
20	Emilia Lekova	Ministry of Transportation	Expert	987 73 54
21	Yordan Byalkov	Haskovo District Administration	Chief Expert	2 26 60
22	Plamen Fotev	RIEW - Pazardjik	Director	034/2 83 89
23	Nikolina Tanova	RIEW - Pazardjik	Expert	034/3 18 75
24	Aneta Ivanova	RIEW - Plovdiv	Chief of Dept.	032/62 89 94
25	Elena Ivanova	MAFAR	Chief Expert	980 98 97
26	Mitko Stoichev	Plovdiv District Administration	Expert	032/63 20 69
27	Anton Slavov	NEC-Ltd	Chief of Dept.	980 19 77
28	Kosta Ganev	MoEW	Expert	847 212296
29	Ivanka Vaseleva	NEC-Dams & Cascades	Expert	87 56 24
30	Iskra Ilieva	NEC-Dams & Cascades	Expert	87 56 24
31	Mariana Koleva	RIEW-Haskovo	Expert	2 80 14

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**Annex-1 List of Participants (2/2)**

32	Satoshi Kazama	Member of JICA Advisory Committee	Ministry Of construction, Japan	
33	Yoichi Shio	JICA HQ	For Task Manager	
34	Hajime Tanaka	JICA Study Team	Team Leader	955 90 18
35	Takashi Furukawa	JICA Study Team	River Basin Management	955 90 18
36	Reinhard Jourdan	JICA Study Team	Water quality Control	955 90 18
37	Marietta Stoimenova	JICA Study Team	Local Expert	955 90 18
38	Kiril Iliev	JICA Study Team	Office Manager	955 90 18

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***APPENDIX B***  
***PROJECT DIGEST OF***  
***THE FURTHERE STUDIES***





## PROJECT DIGEST OF THE FURTHER STUDY (1)

No.	Item	Contents
1.	Project Title	Integrated Water Resources Management Study in the Republic of Bulgaria
2.	Objectives of the Project	<ol style="list-style-type: none"> <li>1) To update global condition of water resources potential, present and future water demand and water balance in Bulgaria</li> <li>2) To formulate a master plan for well-balanced integrated water resources management including inter-basin and inner-basin water transfer considering natural social environment in each river basins as well as in the neighboring river basins</li> <li>3) To pursue technology transfer to the counterpart personnel in the course of the study</li> </ol>
3.	Justification of the Project	<ol style="list-style-type: none"> <li>1) Water resources are one of the key factors for sustainable development of the country.</li> <li>2) Water resources are utilized extensively and inefficient way in the present. There is an urgent need for controlling water utilization to be efficient way considering balance with environment.</li> <li>3) As the water resources are variable resources for the country, conservation, enhancement and efficient control of water resources potential are necessary.</li> </ol>
4.	Implementing Agency	Ministry of Environment and Waters
5.	Study Area	Whole Bulgaria (110 994 km <sup>2</sup> ) Special attention: Maritza, Tundza, Arda, Struma, Iskar, Kamchiya and Danube River Basins
6.	Prospective Beneficiaries	Country of Bulgaria Ministry of Environment and Water Water users
7.	Major Outputs of the Study	Integrated master plan for water resources management for whole Bulgaria
8.	Scope of Works of the Study	<ol style="list-style-type: none"> <li>1) Phase I: Assessment of present water resources               <ul style="list-style-type: none"> <li>- Present water resources potential, water demand and water balance</li> <li>- Relating items to water resources</li> <li>- Development of simulation model for water resources</li> <li>- Institution and organization for water resources management</li> </ul> </li> <li>2) Phase II: Study on integrated water resources management plan               <ul style="list-style-type: none"> <li>- Alternative study for water resources management</li> <li>- Formulation of an integrated master plan for water resources management</li> <li>- Identification of priority project(s) for urgent implementation</li> </ul> </li> </ol>
9.	Study Schedule	Total 24 months (Phase I: 12 months, Phase II: 12 months)

## PROJECT DIGEST OF THE FURTHER STUDY (2)

No.	Item	Contents
1.	Project Title	Study on the Agricultural Development in the Upper-middle Part of the Maritza River Basin
2.	Objectives of the Project	<ol style="list-style-type: none"> <li>1) To formulate a master plan for sustainable development of agriculture including fish culture in the upper-middle part of the Maritza River Basin as a pilot area for crop production and center of fish production</li> <li>2) To conduct a feasibility study on the priority project(s) identified in the Master Plan</li> <li>3) To pursue technology transfer to the counterpart personnel in the course of the study</li> </ol>
3.	Justification of the Project	<ol style="list-style-type: none"> <li>1) There is an urgent need to recover and attain sustainable development of agriculture including fish culture of the Maritza River Basin as well as of Bulgaria as a basis for the socio-economy of the country.</li> <li>2) Water is extensively used for agriculture with inefficient way. Agricultural water supply and usage is necessary to be conducted in efficient way considering balance with environment.</li> </ol>
4.	Implementing Agency	Ministry of Agriculture, Forestry and Agrarian Reform
5.	Study Area	Upper-middle part in the Maritza River Basin, located northern area of Pazardjik and Plovdiv (91 000 ha)
6.	Prospective Beneficiaries	Farmers and cooperatives Irrigation Systems Ltd. Ministry of Agriculture, Forestry and Agrarian Reform Government of Bulgaria
7.	Major Outputs of the Study	A new strategy for sustainable development of agriculture in the Study area for restructuring agriculture in the Maritza River Basin
8.	Scope of Works of the Study	<ol style="list-style-type: none"> <li>1) Phase I: Master plan study               <ul style="list-style-type: none"> <li>- Assessment of existing agriculture</li> <li>- Assessment of the relating items to agriculture</li> <li>- Development of GIS database</li> <li>- Formulation of a master plan for sustainable development of agriculture including a concept of reformulating farmers and cooperatives, improvement of farming and fish cultivating practice, improvement of marketing systems, extension service, infrastructure facility plan and financial plan</li> <li>- Project evaluation</li> <li>- Identification of the priority project(s)</li> </ul> </li> <li>2) Phase II: Feasibility study               <ul style="list-style-type: none"> <li>- Formulation of a farming plan</li> <li>- Formulation of a water supply and usage plan for agriculture</li> <li>- Preliminary design for the infrastructure facilities</li> <li>- Formulation of an implementation plan</li> <li>- Environmental impact assessment (EIA)</li> <li>- Project evaluation</li> </ul> </li> </ol>
9.	Study Schedule	Total 20 months (Phase I: 12 months, Phase II: 8 months)

### PROJECT DIGEST OF THE FURTHER STUDY (3)

No.	Item	Contents
1.	Project Title	Study on Groundwater Management for the Pilot Areas in the Maritza River Basin
2.	Objectives of the Project	<ol style="list-style-type: none"> <li>1) To assess the potential, abstraction and usage and quality of groundwater</li> <li>2) To formulate a master plan for groundwater management for protection, improvement and sustainable utilization</li> <li>3) To identify priority project(s) for urgent implementation</li> <li>4) To pursue technology transfer to the counterpart personnel in the course of the study</li> </ol>
3.	Justification of the Project	<ol style="list-style-type: none"> <li>1) Domestic water depends on groundwater with about 95 % and industrial water and animal breeding also rely on groundwater very much in the Maritza River Basin.</li> <li>2) Groundwater abstraction is not so much conducted in efficient way such as loss of the domestic water supply (52 %) in the basin.</li> <li>3) Groundwater contamination can be observed especially in the Upper-Middle Basins and Sazliyka River Basin.</li> <li>4) It is very important to formulate a master plan for groundwater management in the Maritza River Basin for protection of groundwater resources, control of groundwater use and improvement of groundwater quality.</li> </ol>
4.	Implementing Agency	Ministry of Environment and Waters
5.	Study Area	Upper-Middle Basins around Pazardjik and Plovdiv as pilot areas for the study
6.	Prospective Beneficiaries	Ministry of Environment and Waters
7.	Major Outputs of the Study	<ol style="list-style-type: none"> <li>1) Assessment of groundwater potential, groundwater abstraction and usage, groundwater quality and pollution sources in the pilot areas</li> <li>2) A master plan for the integrated groundwater management for the pilot areas</li> <li>3) Priority project(s) for urgent implementation</li> </ol>
8.	Scope of Works of the Study	<ol style="list-style-type: none"> <li>1) Phase I: Investigation and assessment stage               <ul style="list-style-type: none"> <li>- Investigation and assessment of the groundwater potential, abstraction and usage, groundwater quality and pollution sources</li> <li>- Development of simulation model for groundwater</li> <li>- Development of GIS database</li> </ul> </li> <li>2) Phase II: Master plan stage               <ul style="list-style-type: none"> <li>- Formulation of a master plan for groundwater management including a management plan for groundwater quantity and quality as well as countermeasures for improving excessive groundwater use and contamination</li> <li>- Project evaluation</li> <li>- Identification of the priority project(s) for urgent implementation</li> </ul> </li> </ol>
9.	Study Schedule	Total 22 months (Phase I: 12 months, Phase II: 10 months)

