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ASSISTANCE TO THE RESEARCH INSTITUTE OF SCIENTIFIC
AND TECHNICAL INFORMATION (RISTI)

XP/KYR/94/068

KYRGYZSTAN

Technical report: Advisory assistance on the establishment of
INTIB focal point at the RISTI*

Prepared for the Government of the Kyrgyz Republic
by the United Nations Industrial Development Organization

Based on the work of Mieczyslaw Muraszewicz, consultant on
design and establishment of information centres

Backstopping officer: J. Pavlik
Industrial Information Section

* This document has not been edited.

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Explanatory Notes

Value of the local currency "SOM"
1 US \$ = 10.00 SOM (August 1994)

Abbreviations

EU	-	European Union
FP	-	Focal Point
ICTBI	-	International Center for Technical and Business Information
INTIB	-	Industrial Technology Information Bank (operated by UNIDO)
OSI	-	Open Systems Interconnection
PC	-	Personal Computer
R&D	-	Research and Development
RISTI	-	Research Institute of Scientific and Technical Information
SME(I)	-	Small and Medium Enterprises (Industry)
UNDP	-	United Nations Development Programme
UNIDO	-	United Nations Industrial Development Organization
USD	-	United States Dollar

ABSTRACT

Muraszkiewicz, M., UNIDO consultant
Assistance to Research Institute of Scientific and Technical
Information (RISTI)
Technical report, XP/KYR/94/068/11-51/052000

This report presents the results of the mission undertaken by the consultant in the second part of August, 1994 to the Research Institute for Scientific and Technical Information (RISTI), Bishkek, Kyrgyzstan. The main tasks of the mission were:

1. to assess the present capacities and capabilities of RISTI in providing information services to industrial and technology information users, in particular with regard to SMEs and outline the ways and means to upgrade them;
2. to outline a proposal of setting up the INTIB Focal Point at RISTI.
3. to prepare a Project Document specifying further action towards the International Center for Technical and Business Information building.

As a result of the investigation a number of conclusions were drawn of which two are quoted below.

- A strong unsatisfied demand was found for domestic and international information on existing and new technologies, machinery and equipment, upgrade of technologies, business opportunities and markets.
- Existing facilities in terms of information resources available, access procedures, services offered, completeness, reliability and timeliness are inadequate to meet the information needs. Also, the horizontal co-operation of information institutions is poor, therefore the facilities available are isolated from each other.

The Project Document has been written where detailed action to improve and enhance the information facilities in Kyrgyzstan is defined.

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INTRODUCTION

The consultant was attached to the Research Institute for Scientific and Technical Information (RISTI), Bishkek, Kyrgyzstan. The mission took place in the second part of August, 1994. The main tasks of the mission were:

1. to assess the present capacities and capabilities of RISTI in providing information services to industrial and technology information users, in particular with regard to SMEs and outline the ways and means to upgrade them;
2. to outline a proposal of setting up the INTIB Focal Point at RISTI.
3. to prepare a Project Document specifying further action towards the International Center for Technical and Business Information building.

All objectives of the mission were reached.

* * *

Acknowledgments

A great deal of very helpful opinions and suggestions, and valuable contributions were received from the counterpart specialists; some of their proposals have been incorporated into the present document. The final conclusions and recommendations of the mission, however, reflect the views of the consultant only.

CONCLUSIONS AND RECOMMENDATIONS

1. In order for its industrialization strategy to succeed Kyrghyzstan must have better access to the various type of information dealing with technical, technology and production issues as well as business matters. To enhance the information flow within and to Kyrghyzstan (including the establishment of access to international information services) substantial and well organized efforts are required to develop appropriate methodological frameworks and informatics infra-structure, covering telecommunications, hardware and software.
2. Currently there is a need:
 - for state-of-the-art computerized facilities to support the information requirements of the main Kyrghyzstan industries, including those which are converting their profiles from military to civil production, and the emerging private sector;
 - for competent and trained industrial information professionals to undertake information processing assignments;
 - for current publications, technical and business information and communication with overseas services;
 - to keep up with rapidly changing technology;
 - to train related workers and thus through the motivation of access to up-to-date technology accelerate the process of information dissemination;
 - for bringing together various information technology professionals and end users scattered throughout the private sector, as well as, government agencies and universities in order to share knowledge and skills;
 - for identifying the sources of technology and industrial information which exist locally and in the relevant international community; in particular, for establishing sound co-operation with the Central and South-East Asian countries in the field of technical, business and related information;
 - to add value to the minimal raw data now extracted;
 - for governmental policies to ensure that information flow into the industrial sector and business is happening;
 - for installing a performance cost method for the provi-

sion of information services;

- to bring this needed information directly to where it is used;
- for providing prospective SMEs with information on how to start up business (e.g. the most demanded products, transfer of technology, company registration procedure, bank credits availability, training available), and also, providing the actual SMEs with information on how to improve their present performance.

3. Specifically, the following conclusions were drawn.

- A strong unsatisfied demand was found for domestic and international information on existing and new technologies, machinery and equipment, upgrade of technologies and markets.
- Existing facilities in terms of information resources available, access procedures, services offered, completeness, reliability and timeliness are inadequate to meet the information needs. Also, the horizontal co-operation of information institutions is poor, therefore the facilities available are isolated from each other.
- A very positive response for the need for an ICTBI type organization was noted among technology and business concerned agents. The following types of information services are expected by the prospective ICTBI users, inter alia, (i) Enquiry Services; (ii) Extension Services which include Information Consultancy, Customized Research, Market and Technology Reports (Selective Dissemination of Information), Business Opportunity Bulletins, Company Matching services, Seminars and Workshops; (iii) Network Services which include Database Access and Electronic-mail.
- Awareness that information per se and information services are commodities was noted among the industrialists, entrepreneurs and businessmen. They are ready to pay for information services. The amount of SOM 100 (approx. USD 10) for an answer to a simple query (e.g. addresses of manufacturers of soap in Pakistan) or amount of SOM 1,000 (approx. USD 100) for a more sophisticated service (e.g. state-of-the art of milk pasteurization technologies) are acceptable for an average industry related user.
- In order to make ICTBI an efficient and effective organization, to place it close to the private sector entrepreneurs and provide it with a consistent interface

with the private sector ways of operation, it is necessary that ICTBI will be settled as a private sector company whose main share-holder will be yet the Government. However, it is recognized that the private sector approach to investment would not enable the establishment of ICTBI on its own, not least because of the high start up cost and the fact that profitability will not be realized immediately. Therefore, it is the Government, UNIDO and other prospective sponsors (share holders) which are supposed to provide a start up capital and appropriate legal arrangements. Note that the Government is already financing the RISTI operation and transferred the plot of 12 ha by the Yssyk Kul lake into ownership of RISTI for building the prospective ICTBI.

- A very preliminary and rough cost estimation of constructing the new ICTBI premises by the Yssyk Kul lake, combined with a conference hall, training rooms, exhibition and hotel facilities, done by Mr. B. Lundstroem, Managing Director of the five star hotel construction project in Alma-Ata, PAN-Baugesellschaft m.b.H., according to the requirements provided by the counterpart, is as follows

- * the center, one star dormitory for 200 beds with a simple cafeteria and other entities mentioned above along with some recreational facilities - approx. USD 5.3 mln;
- * the center, four star hotel for 450 beds and other entities mentioned above along with sophisticated recreational facilities - approx. USD 21.6 mln.

"In-between" solutions are also possible. Note the building costs may be dramatically diminished by reducing the number of beds (building a bed in 4 star hotel costs approx. USD 40,000). Mr. Lundstroem underlined the need for preparing a feasibility study of the ICTBI/hotel building before identifying donors/sponsors/co-founders.

- The establishment of ICTBI should proceed in two main phases, namely
 - * the preparatory assistance encompassing (i) the establishment of basic functionalities of the prospective ICTBI at RISTI and starting its operation; (ii) the preparation of a Feasibility Study containing, *inter alia*, a detailed analysis and proposals of building the ICTBI premises, enhancements of the ICTBI functionalities and a benefit-cost analysis regarding the ICTBI operation;

- * having decided on the further development of ICTBI on the basis of the Feasibility Study, funds have to be raised and the implementation will start.

 - ICTBI should become economically a self-sustainable, plausible and sound organization after some 5 years of its operation.

 - Kyrgyzstan hardware vendors, telecommunication agents and software developers have sufficient experience to participate in the implementation of ICTBI.
4. The Government strongly supports the idea of building ICTBI in two phases (see above), in particular Prof. K. M. Jumaliev, First Deputy Minister of the Ministry of Education and Science and Chairman of Science and New Technologies Committee, said "the amount of SM 150,000 (USD 15,000) will be allocated to RISTI for the establishment of the UNIDO/INTIB Focal Point in 1995".

I. ACTIVITIES

1. The consultant got acquainted with the Research Institute for Scientific and Technical Information (RISTI), see Annex 2, and the documents related to the mission, in particular with a decree No. 229 on 22 May 1992 issued by the Government of Kyrgyzstan on establishing an UNIDO/INTIB Focal Point (FP) at the Kyrgyz Research Institute for Scientific and Technical Information (RISTI) under the name of the International Center for Technical and Business Information (ICTBI). The decree states that "ICTBI be constructed in the city of Bishkek and the Yssyk Kul lake region". To this end, the Government has made RISTI the owner of the plot of 12 ha (the former pioneer camp 'Unost') laying in the Komsomol village by the Yssyk Kul lake.
2. The working plan for the consultant's intervention was set up.
3. The consultant thoroughly got acquainted with the services provided by RISTI, in particular those services which are based on computers. For the summary see Annex 2.
4. A questionnaire was elaborated, discussed and refined with the counterpart (Annex 3).
5. The visits were paid to the selected institutions (some 15 organizations, see Annex 1 and the questionnaires). Of special importance was a visit to Prof. K. M. Jumaliev, First Deputy Minister of the Ministry of Education and Science and Chairman of Science and New Technologies Committee, who said the amount of SM 150,000 (USD 15,000) would be allocated to RISTI for the establishment of the UNIDO/INTIB Focal Point in 1995.
6. The data by means of the questionnaire was collected and evaluated (the filled out questionnaires were given to Mr. J. Pavlik, Backstopping Officer).
7. The place where ICTBI is planned to be constructed was visited.
8. Discussions with Mr. B. Lundstroem, Managing Director of the five star hotel construction project in Alma-Ata, PAN-Bauggesellschaft m.b.H. on the ICTBI construction took place.
9. Discussions with the managers of RISTI on the prospective ICTBI building took place.

II. OUTPUTS

1. The Project Document specifying the further action on the part of UNIDO and RISTI, in particular the establishment of the INTIB Focal Point written.

In particular, the Project Document indicates ways and means for upgrading the existing RISTI facilities and services. To this end, a key concept is to set up the INTIB/UNIDO Focal Point at RISTI along with a nucleus of the ICTBI information system. In parallel, a Feasibility Study regarding the establishment of ICTBI should be done. These steps are considered as a Preparatory Assistance for the second phase, namely the establishment of full-fledged ICTBI.

2. As stated by Prof. K. M. Jumaliev, First Deputy Minister of the Ministry of Education and Science and Chairman of Science and New Technologies Committee, "the amount of SM 150,000 (USD 15,000) would be allocated to RISTI for the establishment of the UNIDO/INTIB Focal Point in 1995".

III. ACTION PROGRAMME (FOLLOW-UP)

to UNIDO:

1. To evaluate, revise and approve the Project Document submitted, and to implement the programme given there.

to counterpart:

1. To start preparatory work for the INTIB Focal Point establishment as specified in the Project Document.

to consultant:

1. To participate in the Project Document refinement.

Annex 1. (Selected) Persons Contacted

Aitkiev, A.I.	President, Business Association
Kenzebayev, E.	Director, ELKAT
Lundstroem, B.	Managing Director PAN Baugesellschaft m.b.H. Alma-Ata, Kazakhstan phone 0073272/476002 fax 0073272/476965
Murzaev, S.K.	Deputy Director RISTI phone 3312-299642 or 434820 fax 3312-299622
Samoilenko, A.F.	Director, INFOTEL
Sidikov, C.S.	Director, RISTI phone 3312-299658 or 294368 fax 3312-299622
Toktosunova, A.T.	Director, UNESCO Center
Yurtaiev, B.C.	Director, MAGNA
Jumaliev, K.M.	President, First Deputy Minister of the Ministry of Education and Science and Chairman of Science and New Technologies Committee
<u>UNDP</u>	
Ercan Murat	Resident Representative, UNDP

Annex 2. Note on RISTI

RISTI is a state organization whose mandate is to collect, process and make available the technical and scientific information in Kyrgyzstan. It employs 84 persons of whom 34 are information and computer professionals, 18 are working as technical personnel related to the information activities and the rest of the staff constitute supporting personnel. The State Science and New Technologies Committee is supervising RISTI.

RISTI offers classic information services such as enquiry service; information consultancy, customized research, editing information newsletters and other material of that kind, organizes seminars and workshops and runs a small library (some hundred volumes of rather obsolete monographs and very few, mainly local, journals) where acquisition, cataloguing, loaning and other librarian work is being done. Note RISTI has easy access to a big library (some 2 million volumes) which previously was a part of RISTI. This library, however, does not represent any value to SMEs. RISTI works on the various aspects of information methodology (research) and is in the process of designing and setting up its own computerized databases. RISTI has a well developed printing unit where an array of information material is printed.

The RISTI users are of the various categories, however, the majority of them are state administration policy and decision makers, state owned industry managers and decision makers, researchers, R&D engineers and consultants. Private entrepreneurs and businessmen are rare visitors at the RISTI premises. Interestingly enough, RISTI prepares on a regular basis information material dealing with domestic and world economy for top level government executives.

The needs of the RISTI users depend on the user's category. The decision makers are seeking synthetic information and macro-data related to their fields of interest. They also require factual, sometimes statistical, information. The managers are basically interested in information which might help them in increasing productivity, improving management, reducing costs, improving quality of products and services. They ask also for market information, especially related to abroad markets. Again, this category needs factual information. Researchers, sometimes students, basically are looking for bibliographic information related to their work. SMEs, who infrequently address RISTI, are first of all interested in locating potential business partners in the country and abroad, law constraints, banking operations and requirements, credits, taxes, markets, technology transfer, training and business opportunities. It often happens that potential entrepreneurs seek basic information on how to start up a business. The overall number of queries and orders generated by users and addressed to RISTI is small.

Although the qualifications of the RISTI information staff is fairly good, the quality of information services rendered by RISTI to their users is rather poor, mainly due to the lack of reliable information resources and/or access to them, both domestic and foreign ones. In addition, RISTI is not prepared to serve SMEs because of its previous orientation which had nothing to do with business operations.

It has been difficult to assess to what extent the RISTI users are satisfied and accept the information and services provided by RISTI. However, what is definitely obvious is the fact that SMEs are unsatisfied; their sources of information are primarily personal contacts, newspapers and promotion leaflets, TV and radio.

Presently, RISTI has 4 PCs of which one is i386 whereas the others are i286. The FoxPro software package is used for implementing computer databases. The databases (i) on research institutions in Kyrgyzstan; (ii) a roster of researchers; (iii) on scientific reports, including Ph.D. theses are being developed on the RISTI computers.

Three copying machines (U-Bix, Rikon 5560, Era) and three Romayor devices are available at RISTI.

RISTI is in working contact with its counterparts in Russia, Kazakhstan and Uzbekistan. It has also good co-operation with INTIB.

Annex 3. Questionnaire

Note: The questionnaire below was used as a prototype. The actual questionnaire is its subset, adopted to the local requirements.

objective: to assess the needs in terms of technical and business information and to identify future needs of the prospective customers of the International Center for Technical and Business Information

Instruction:

1. Try to answer the questions shortly and precisely.
2. Often, the answer consists in choosing one or more options from many. Indicate relevant option(s) by ticking or, by providing a relevant figure (number). If none of the options is applicable, add items according to your knowledge.
3. Questions irrelevant to your institution should be skipped.

Thank you for your co-operation.

I. GENERAL DATA

I.1. Organization name:

I.2. Address:

I.3. Telephone:

Fax:

Telex:

I.4. Name of the interviewee(s)

I.5. Type of organization

.... public sector

.... NGO

.... private sector

I.6. Annual budget or turnover.....

I.7. Number of employees

II. USERS AND THEIR NEEDS

I.1. The reasons your organization uses or intend to use informa-

tion services

- increase productivity
- improve management
- reduce costs
- improve quality of products/services
- since information are inherent parts of technological processes
- other (specify)

II.2. Types of user

- policy/decision makers
- managers
- R&D engineers
- designers
- workers
- researchers
- consultants
- teachers
- students
- private entrepreneurs/businessmen
- salesmen/sales managers
- other (specify):

II.3. To what extent the information facilities used meet your needs

- high medium low

V.4. Source of obtaining needed information and service

- domestic sources (specifically from where)
- foreign sources (found as a result of technology, search, foreign visits, study tours, training, etc.)
- acquired as a part of other equipment purchase
- joint-venture
- foreign technical assistance
- other (specify)