



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

21411

Distr.  
RESTRICTED

IRD/R.12  
29 January 1996

UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

**STRENGTHENING/ESTABLISHING INDUSTRIAL AND BUSINESS  
INFORMATION CENTRES FOR SMEs IN RUSSIA AND  
OTHER SELECTED CIS COUNTRIES**

XP/RER/95/038

RUSSIAN FEDERATION

**Technical report: An action-oriented study on current and future information needs  
and accessible information resources of SMEs, containing recommendations  
for an industrial information strategy in the region\***

Prepared for the Government of the Russian Federation  
by the United Nations Industrial Development Organization

*Based on the work of Michael Lowe, consultant in  
design and establishment of information services for SMEs*

Project Manager: J. Pavlik  
Industrial Information Section

---

\* Mention of firm names and commercial products does not imply the endorsement of the United Nations Industrial Development Organization (UNIDO). This document has not been edited.

V.96 80484

## ABSTRACT

The report of the consultancy mission *An Action-oriented Study on Current and Future Information Needs and Accessible Information Resources of SMEs, Containing Recommendations for an Industrial Information Strategy in the Region (XP/RER/95/038 C!S)*. The mission was a component of the UNIDO programme *Strengthening/Establishing Industrial and Business Information Centres for SMEs in Russia and Other Selected Countries*. The consultant was Michael Lowe, of the Department of Information and Library Studies, University of Wales Aberystwyth, SY23 3AS, Dyfed, UK. Visits were made to Russia between August 20th and September 7th; 22nd October and 27th October 1995; plus one briefing and one debriefing meeting at UNIDO in Vienna.

The specified output was 'An-action oriented study' on current and future information needs and accessible information resources of SMEs containing recommendations for an industrial information strategy in the region'. Accordingly, all subjects on which SMEs might need information were considered, with the emphasis on 'business' (or 'commercial') information. Through visits, discussions and documents; information was gathered in the key interrelated areas of: information needs; information sources; and information services. Findings are reported, and recommendations made under the determining elements of a country's 'business information system': Businesses' problems, needs, demands; information sources and the information industry; information services and information professionals; the legislative and cultural environment for the generation and free flow of information; government leadership; policy, coordination and finance of business support services; communications (including information technology and telecommunications) infrastructure.

Details and reports are also included for more than thirty of the public and private sector organisations discovered to be of significance in the supply of information to business.

The research finds that support for SMEs has a very high profile in government, and that a considerable infrastructure is being put in place for information, information technology, advice, and other support. However, sources of business information are at an early stage of development, as are information and other services. The most needed commodity is not money, systems, or other physical resources; but know-how. Developments, especially in the area of business information services, are hampered by the absence of relevant professional knowledge and experience. New infrastructures are striving to meet businesses' expected needs; while the professional knowledge and skills present in 'old' infrastructures is side-lined; not adapting to today's needs.

Recommendations identify priorities for attention in the above situation, addressed to policy makers in the Russian government; to the players in the SME support 'industry'; and to UNIDO.

## CONTENTS

Abstract .....	2
1. The Brief .....	6
2. Introduction .....	7
3. Methodology: nature of the work; structure of the report. ....	7
4. Relevant Russian structures; definitions of terms used in the report; structure of the analysis of the subject .....	7
4.1 Relevant administrative structure. ....	7
4.2 Interpretation of the brief. ....	8
4.3 Structure of the analysis used in the report .....	8
4.4 Executive summary. ....	8
4.4.1 The state of business information sources and services .....	8
4.4.2 The state of small businesses. ....	8
4.4.3 The problems in the country's 'business information system' .....	8
4.4.4 Solutions; recommendations .....	9
5 Detailed analysis and recommendations. ....	9
5.1 Businesses' problems, needs, demands .....	9
5.1.1 The current state of small business in Russia. ....	9
5.1.2 Solutions, recommendations .....	11
5.2 Information sources and the information industry .....	11
5.2.1 Analysis of the current situation. ....	11
5.2.2 Foreign business information companies operating in Russia .....	12
5.2.3 Bibliographical control - directories of information resources .....	12
5.2.4 Company Information. ....	12
5.2.5. Product Information .....	13
5.2.6 Market Information .....	13
5.2.7 Financial Information. ....	14
5.2.8 Solutions, recommendations .....	14
5.3 Information services and information professionals .....	15
5.3.1 Analysis of the current situation. ....	15
5.3.1.1 Understanding of the concept of 'business information' .....	17
5.3.1.2 Understanding of the role of 'business information sources' .....	17
5.3.1.3 Attitude to structures and planning for Information support. ....	18
5.3.1.4 Attitude to 'informatisation' vis a vis 'information'. ....	18
5.3.1.5 The image and role of libraries and librarianship. ....	19
5.3.1.6 Attitude to information availability; information gathering strategies .....	19
5.3.2 The level of information skills. ....	20
5.3.3 Information broking. ....	20
5.3.4 Professional organisation and communication. ....	20
5.3.4.1 Information profession periodicals of relevance to business information. ....	20
5.3.5 Solutions, recommendations .....	21
5.3.5.1 Overall. ....	21

5.3.5.2 Recommendations on policy and structure . . . . .	21
5.3.5.3 Recommendations for development of services . . . . .	22
5.3.5.4 Recommendations for development of personnel . . . . .	23
5.4 The legislative and cultural environment for the generation and free flow of information . . . . .	25
5.4.1 Analysis of the situation . . . . .	25
5.4.2 Legal disclosure of information by companies . . . . .	26
5.4.3 Solutions, recommendations . . . . .	28
5.5 Government leadership; policy, coordination and finance of business support services . . . . .	28
5.5.1 Analysis in relation to the current situation in Russia . . . . .	29
5.5.2 Solutions, recommendations . . . . .	29
5.6 Communications (including information technology and telecommunications) infrastructure . . . . .	29
5.6.1 Analysis in relation to the current situation in Russia . . . . .	29
5.6.2 Solutions, recommendations . . . . .	30
 6 Reports on the institutions involved with business information, visited or otherwise researched, between August and December 1995 . . . . .	 31
 Gosudarstvennyy Komitet po Promuishlennoy Politike (Russian National Industry Policy Committee; GOSKOMPROM) . . . . .	 31
Komitet pri Presidente Rossiiskoy Federatsii po Politike Informatizachii (Presidential Committee of the Russian Federation for Informatisation Policy; RosComInform) . . . . .	32
Institut Avtomatizirovaniykh System (Institute for Automated Systems; IAS) . . . . .	33
Rossiskaya Assotsiyatsiya dlya Razvitiya Malovo i Srednevo Predprinimatelstva (Russian Association for the Development of Small and Medium Sized Enterprises) . . . . .	33
(Confederation of Associations of Entrepreneurs of Russia) . . . . .	33
Rossiskoye Agehstvo Poderzhki Malovo i Srednovo Biznessa (Russian Small Business Support Agency) . . . . .	34
OLVIT . . . . .	34
[Moskovski Fond dlya Razvitiya Maloyo Biznessa] (Moscow Foundation for the Development of Small Businesses) . . . . .	36
Tekhnologicheskayai Ekonomicheskaya Konsultatsiya] (Techno-Economic Consultants; TECO) . . . . .	36
Russki Informatsionii Centr (Russian Information Centres) . . . . .	38
Vichislitel'naya Tekhnika i Informatika (Computing Technology and Informatics; CTI) . . . . .	42
[Moskovskoye Agenstvo dlya Razvitiya Predprinimatelctva] (Moscow Agency for Development of Entrepreneurship; MADE) . . . . .	45
[Institut po Problemam Vuichislitel'noy Tekhniki i Informatiki] (Institute for Problems in Computing Technology and Informatics . . . . .	46
(Moscow Research and Development Centre; MNITZ) . . . . .	46
[Rossiskii Natsionalny Kongress dlya Informatitsii i Telekomunikatsii] (Russian National Congress for Informatics and Telecommunication) . . . . .	46
Rossiskii Informatsionny Resursii (Russian Information Resources; RosInformResoursii) Mezhdunarodnii Byuro Informatitsii i Telekomunikatsii	

(International Bureau for Information and Telecommunications; MBIT)	
Torgova-Promuishlennaya Palata Rossiskoy Federatsii (Chamber of Commerce and Industry of the Russian Federation; Russian CCI)	48
[Informatssionny Registr. Nauchnii i Tekhnologicheskii Tsentri] (Informregister: Science and Technology Centre)	49
Gossudarstvennii Komitet po Statistike (State Committee on Statistics of the Russian Federation; GOSKOMSTAT)	50
Ministerstvo Nauchnoy i Tekhnicheskoy Politiki (Ministry for Scientific & Technical Policy)	50
Mezhdunarodnii Tsentri po Nauchnoy i Tekhnicheskoi Informatsii (International Centre for Scientific and Technical Information; ICSTI)	
Moskovskiy Gossudarstvennyy Universitet Kultury, (i) Fakultet Upravleniya i informatiki; (ii) Biblioteknii Fakultet (Moscow State University for Culture, (i) Faculty of Management and Information systems; (ii) Faculty of Librarianship)	52
Institut Povisheniya Kvalifikatsii Informatzionnih Rabotnikov (Institute for the Advanced Training of Information Specialists; IPKIR)	54
Goskomitet po Podderzhke i Razvitiyu Malogo Predprinimatelstva (State Committee for the Support and Development of Small Businesses)	55
'Kerek' ('Coats')	56
'Maria' ('Maria')	56
Avtovazbank (Avtovazbank, Cheboksari Branch)	57
Radiophysika (Radiophysics)	57
British Council	58
References	60
Appendices	61
1: Sample pages from Information World Review	61
2: Details of English language/online searching course for Hungarian business	65
information personnel, July 1996	
3: December 1995 UK Business information study tour programme	68

## 1. The Brief

This report is on consultancy work done within the UNIDO project:

'To facilitate a worldwide access to industrial information databases for the users in the selected CIS countries, particularly those from small- and medium sized enterprises, by connecting the Russian Network to the European Wide Area Network'.

Specifically the following part of 'Output 1'; though concentrating on Russia rather than the CIS:

'An-action oriented study on current and future information needs and accessible information resources of SMEs containing recommendations for an industrial information strategy in the region'.

For this output, the contract specified the following activities:

1.1 Establish contacts with organisations representing SMEs as well as with some entrepreneurs in order to determine the needs of SMEs with regard to type of information and information services.

1.2 Analyse the present situation of information services for SMEs and assess the future information needs in this field of view of the undergoing economic and industry development.

1.3 Catalogue the existing developing on-line databases of business information in CIS and Eastern Europe.

1.4 Prepare action oriented study on current and future industrial information needs of SMEs, offering recommendations on ways and means of organising the information services . . .

## 2. Introduction

The consultant is well aware of the potential shortcomings of addressing complex objectives in such a short period - with inadequate knowledge of background, language, culture and procedures. I am grateful for the patience, and openness shown by all who assisted my researches in Russia.

Some conclusions are inevitably based on incomplete evidence and the consultant's inadequate understanding. Nevertheless this has been a valuable opportunity to offer the policy makers and professionals a substantial overview of information for small businesses in Russia. The resulting survey and recommendations should make a useful contribution to the development of information services to SMEs. I hope that through wide dissemination of the results of this work, Russian colleagues will benefit from the opportunity which has been granted to me by UNIDO.

## 3. Methodology: nature of the work; structure of the report

My research was strictly guided by the brief (Section 1); the assumed definition of relevant matters (Section 4.2); and the model (Section 4.3) of a business information 'system'. I set out to gain a picture of each of the elements 1 to 6 of the model, initially visiting persons and institutions recommended to me, then others as necessary to clarify parts of the picture. Little information could be gained from 'the literature'; almost all was gained through questioning relevant persons, backed up by cross-checking, and direct observation of activities. In the limited time available, most of the information was gathered in Moscow; with only three or four days elsewhere in the Russian Federation - in Cheboksari, capital of the Chuvash Republic.

Following the 'Executive summary' (Section 4.4), the main body of the report addresses the elements of the model one by one: users, sources, services, legislative and cultural environment, government policy and support, communications infrastructure. This is followed by a directory and analysis of relevant organisations studied and encountered.

## 4. Relevant Russian structures; definitions of terms used in the report; structure of the analysis of the subject

### 4.1 Relevant administrative structure

In today's 'Russian Federation' much power, including most expenditure, is still centralised; thus controlled from Moscow. There are 89 'Subjects of the Federation' otherwise known as regions (some of which are 'Republics'); with certain delegated powers. Within regions there are about 2,000 district authorities; with their own budgets and responsibilities. Below that there are 50,000 to 60,000 village level councils. Physical, industrial and social communication with the now independent republics of the Soviet Union varies from one to the other; the frontier between Russia and Belarus is fairly nominal, whereas Estonia and Russia now seem to be truly foreign countries. Regions and districts may and do choose to support local business, both independently and by collaborating with initiatives such as telecommunications projects or setting up and running 'InfoCentres'.



#### 4.2 Interpretation of the brief

The brief refers to 'business information', ie information on the aspects of the external environment of a firm which affect its commercial performance. However it also implies SMEs' information needs in general, which would include technical information, information on management, etc. Where relevant, the report also deals with *advice and consultancy* to SMEs. This is included in the objectives of government programmes, and offered alongside information and other forms of support by some of the recently established services.

#### 4.3 Structure of the analysis used in the report

In any country, the transfer of the *information* which businesses need, involves the essential elements of the *businesses* themselves, *information sources* (in any form; documentary or non-documentary), and, *information services* - as intermediaries where necessary, between the businesses and the sources. The driving forces of the system are these three elements themselves:

1. The commercial motives of SMEs; their problems, needs and demands
2. The commercial and non-commercial motives of information producers
3. The missions of (mainly public sector) information services; the professional motives of their workers

and certain factors in their environment:

4. The legislative and cultural environment for the generation and free flow of information
5. Government leadership; including policy, coordination and finance of business support services
6. An information technology and communications infrastructure

In section 5, the detailed analysis follows the above structure.

#### 4.4 Executive summary

##### 4.4.1 The state of business information sources and services

Business information is in a very early stage of development in Russia; enormous developments have to take place before small businesses in particular, get the information and advice they need. Much relevant information does exist and is available, as do appropriate infrastructures; however there are great short-falls in human, professional knowledge and experience. Thus the priority need is to increase relevant awareness, knowledge and skills, and to change attitudes among current and potential providers of intermediary services.

##### 4.4.2 The state of small businesses

Most businesses are still in their infancy: very small, poorly developed, isolated, secretive, inexperienced, naive, impecunious. They are preoccupied with short-term problem-solving; and are in no position to translate their problems into demands for information.

##### 4.4.3 The problems in the country's 'business information system'

Much relevant local and foreign generated information is already available, valuable both for day to day problem solving and for strategic decision making. However the information is as yet barely flowing over the new or old information services, or the fast developing information technology and telecommunications systems.

Such a 'blockage' is of understandable concern to economic policy makers; though it is hardly surprising at this early stage of restructuring of every system in the country. The reasons are complex, and solutions involve developments on a broad front. Reasons are related to the infancy of the whole business information system, from the production of relevant sources, to the ability of business people to avail themselves of them. However probably the biggest gap, and in the present circumstances the most important deficiency, exists at the interface between businesses and information, that is the *intermediary services*. Information professionals and information services are urgently needed who can understand, exploit, and promote the use of the growing relevant information sources. Government is right to have given a priority to the creation of services such as 'InfoCentres'; but until a cadre of appropriately trained 'information professionals' develops, such services will not meet their objectives. It is lamentable that completely new information services are having to be created to serve business, and that the existing library and information profession is not yet adapting itself to today's demands and opportunities.

#### 4.4.4 Solutions; recommendations

Recommendations resulting from my analysis cover a broad front, but tend towards the development of existing services and personnel, rather than new and expensive enterprises. Investment and expenditure is, and always will be necessary in providing information and advice to small businesses, but what is most needed now is training and know-how, to help old established structures, practices and attitudes change; and to guide new ones.

### 5 Detailed analysis and recommendations

This analysis follows the structure described in Section 4.3 above; ie examining each in turn of the six elements of a 'business information system'

#### 5.1 Businesses' problems, needs, demands.

SMEs' need for information (information as defined in Section 4.2) is typically considerable; though it varies according to a number of factors. New businesses and business people, and businesses in an uncertain and changing market, have a high need for external information. However for well understood reasons, *demand* for information, and therefore its use, is typically very low. Hence SMEs on their own initiative, are not a strong driving force in the system.

##### 5.1.1 The current state of small business in Russia

Despite the following introduction, Sergei Glaziev, member of Duma, party chairman, and economist, concluded this recent analysis of the task facing Russia optimistically (Ref. 2):

"Russia's transition to a market economy knocked out virtually all the country's distribution systems, its organs for monitoring and steering economic performance, and its mechanisms for maintaining law and order. The country's reformers obviously believed that market mechanisms would spring up instantly and fill the vacuum left by the collapse of the old political and economic regime. They might as well have waited for a miracle. . ."

Vyacheslav Prokhorov, at the launch of the new State Committee for the Support and Development of Small Businesses (see report on this Committee) which he chairs, was quoted in the press as follows [translation]:

"In his opinion, small business in Russia, as distinct from in other civilized countries, has a vocation to provide political stability in the country (besides its economic functions). SME's will create the right environment for the formation of a middle class- a class of property owners, not owning somebody else's shares but owning their own business.

The second expectation, determining the role of SME's, is that small business (classified as any business with between 30 and 100 employees) will create a basis for the reliable collection of tax revenue for the state budget. In this, SME's are different from big conglomerates who dodge tax.

Thirdly, SME's will resolve the problem of employment at a time when unemployment is rising. According to data provided by the State Statistics Committee, Small businesses employ 9.5 million workers, and if you include suppliers, business partners etc, then the figure is 20 million people. Thus, the stake of small business in industry and construction is growing. Finally, the development of SME's will take the criminality out of the economy, removing a mass of workers from the spheres of influence of the Mafia."

Talking to managers of small businesses, and evidence from other sources, leads to the following observations, and explanations of SME's information needs and demands:

- i. Government statistics state that 9.5 million Russians are now employed in more than 1 million SMEs, contributing 12-14% of industrial output (First Deputy Economy Minister, quoted by ITAR-TASS, August 1995). Despite the large number of new businesses, 'business' itself is not much developed. That is, many businesses are not yet operating in a truly competitive, commercial manner. Their products and their managements have not yet been tested in the market. Some are as yet 'protected' from the full force of the market, by for instance lack of competition for what they do; more are simply not yet sufficiently business-like and competitive. Evidence of the immature market is the absence of specialisation of functions (including lack of sub-contracting); and absence of aggressive promotion by smaller firms.
- ii. The common twin problems of SMEs is lack of money, and lack of customers; a vicious circle. Many of the joint stock companies which were formerly parts of large state enterprises are trying to change their product or service to one for which there is a market (despite the background and expertise of the owners/employees); and trying to do so with little or no capital or hope of investment. As is well known, a situation in which information and advice is very necessary, especially for those firms with great potential. In fact many such businesses are feeling very insecure, and unless they either adjust themselves to the current market, or there is a general and rapid upturn in the economy, many will surely fail.
- iii. If the effects of competition, and other market factors are not yet much felt by SMEs, then the normally low information *demand* from this sector is made even lower. Since information *need* is nevertheless great; intermediary services have a vital role of *liaison*, and *promotion*.
- iii. Many of the Russian SME support services which are currently financially supported by central and regional government, are intended to become self-financing after an initial start-up

and proving period. Government and others who control such services should realise that while they will remain very necessary for employment and economic reasons, most services to SMEs will probably never make a profit or break even. Most businesses either cannot pay or will not pay for information. Those services which are profitable, e.g. at CTI InfoCentre, Cheboksari: desk-top publishing; sale and maintenance of equipment, are eventually likely to be offered more competitively by private sector firms; leaving the public sector to subsidise the unprofitable services.

### 5.1.2 Solutions, recommendations

It is true that many SMEs cannot thrive without the support services under discussion; and the support services cannot thrive until the SMEs who use them do! Currently, SMEs and the 'business information industry' both feel very vulnerable. Because of their interdependence, both obviously have to be supported by public expenditure until at least SMEs have developed enough to make at least some of the support services financially viable. However, it must be realised by all levels of government that:

#### *Specific recommendation*

Even in developed, thriving economies, small business needs ongoing financial assistance for information, advice and certain other support services; it is in government's interests to subsidise those services on a long-term basis.

The need for information, including in the form of education and advice, is greatest at the time business are starting up, learning their trade, and how to do business. Government and private and public sector information providers alike should further realise that:

#### *Specific recommendation*

External information will not be paid for, or used at all by the majority of SMEs unless it is heavily and continuously promoted, at a very direct and personal level. 'Liaison' activity is acknowledged as a necessary component of information services for SMEs.

The authors of *Project: Creation of a network of consulting firms to support small and medium business in Russia* (a proposal to UNIDO; Ref. 6) have a great understanding and experience of these points, and serious attention should be paid to their proposed assistance to SMEs.

## 5.2 Information sources and the information industry

Normally a strong, driving force in the 'business information system'. Most producers of information products are firms which depend on the sale of those products for their survival.

### 5.2.1 Analysis of the current situation

Though there is quite a high absolute number of what could be called business information sources, the existing sources are very limited in terms of range of types, reliability, and sophistication. Sources tend towards the simple company directory, or reproduction of official communications or data; there is a particular lack of 'value-added', 'secondary' sources. In terms of the potential range of business information sources, large and important areas of the commercial environment are not covered, and/or not covered in the ways required. Particular gaps are identified under the 'subject' headings below.

A useful English language survey of the Russian business information industry appears in the article 'Information in the Russian Federation (Ref. 4 - pages 5 - 8), under the headings: Stock

exchange and financial information; economic and population statistics; commercial information (ie company and market information); legal and foreign trade information; business news, reviews and analytical information; electronic publications (ie electronic newspapers and newswires); sources of information about information; online information support . . . ; etc.

Informregister's *Databases in Russia* (Ref. 5) has 71884 entries in the 1995 edition, about 10% of which are available online (via hosts or direct from the producers); most are distributed on floppy disk. However fewer than 20 of these are obvious sources of business information; mainly company and trade directories.

### 5.2.2 Foreign business information companies operating in Russia

Primarily because of the interest of foreign firms in the new opportunities, foreign business information firms are opening up operations in Russia to collect and send relevant information back to them. Esmerk has just established an office in Moscow, from which information is fed into their central database, then packaged as regular current briefings for subscribers. (their UK 'phone is 01635-34867; fax 01635-40212).

The leading multi-national business information firm Dun & Bradstreet has at least one office in Russia; as does the company/trade directory publisher Kompas. At least several, small, independent Russian information brokerages are operating (e.g. Olvit: see report), some used by foreign business information publishers and brokerages for the difficult task of finding information on Russian topics.

### 5.2.3 Bibliographical control - directories of information resources

Informregister (see Informregister report) regularly updates the catalogue *Databases in Russia* (translated title Ref. 5) covering all subjects, published in floppy disk and printed form.

MBIT (see report on MBIT) publishes *Information on Information* (translated title), in 3 volumes: v. 1: Details of about 1,200 'information industry' organisations (this includes libraries) and their products and services. v. 2: Major personalities from those organisations. v. 3: Details of the products and services.

### 5.2.4 Company Information

There is universal concern at the unreliability of information resulting from the legal disclosure process (for instance dates for submission of financial data to GosComStat do not coincide with companies' accounting dates - so companies say they have to 'make up' the data for the submission!). There is even great difficulty of accessing the information which is supposedly available for public inspection.

Problems in the supply of this 'primary' information leads to a dearth of detailed, reliable information on even the larger companies. *Databases of Russia: catalogue*, 2nd ed. (Ref 5) lists only about 6 general databases of Russian firms, and about 8 more trade directories of particular industries. Despite the great need and market potential, neither Russian nor foreign publishers can yet offer an established source for comparative company financial performance, and credit assessment. (see also Section 5.4 on legal disclosure of company information).

GOSKOMPROM has funded RosComInform to monitor firms and industry in the FRS, and it is being done through the expanding InfoCentres network. It is intended to make use of

existing sources of company information, especially that disclosed by law; with a view to operation in 1997.

CTI, the InfoCentre in Cheboksari has begun a major new company information project involving visiting the 22 district registration offices, and sending questionnaires to firms. This 'Enterprise' database of Chuvash companies currently includes ca. 2,500 firms; an estimated 30% of the total; which should increase to 80% by the end of 1995.

*Specific recommendation*

[see the recommendation in Section 5.4.3 concerning availability of company information]

### 5.2.5. Product Information

MBIT (see report) publishes a Moscow trade directory (companies, products and services). Available in electronic and printed form.

### 5.2.6 Market Information

#### Market research

There are various sources of 'ad hoc' (ie commissioned by individual clients) market research. In the free, English language trade directory *Moscow business telephone guide* the firm Media Arts Advertising Group, offers 'mass media and sociological researches'. The company Public Opinion Foundation has *published* a list of what are essentially opinion surveys; and the firm University (related to Moscow University) also carries out opinion research on demand. However, there do not appear to be any Russian firms publishing 'market surveys' (ie 'syndicated market research' such as ICC's *Keynotes* series, or Mintel's or Frost and Sullivan's reports; a compilation for a particular market sector of consumer, trade, sales, production, etc. statistics; market share information; product information; company information; forecasts etc.). This is surprising, and constitutes a problem for companies studying markets, and a considerable gap in the business information market.

#### Statistics

Though GOSKOMSTAT (see report) collects and publishes official statistics, (apparently recently reduced) there seems to be little usage and/or confidence in its output - though this could be related to ignorance of what is available (see also section on professionals' information skills). Since they themselves submit flawed and out of date information, business information organisations are well aware of the unreliability of the resulting publications!

MBIT's (see report) publishes 'Russian import/export statistics'; data covering ca. 10,000 Russian enterprises acquired from the customs authority; available in print, diskette, online via various hosts. Searchable by SIC code; value (\$), (company name?), number of transactions.

#### Advertising monitoring

MBIT says that its Moscow trade can also be used to roughly calculate firms' advertising expenditure. They believe that the firms Teler and Mobile are also involved in monitoring advertising. However it was not possible to trace any service like those of MEAL (Media Expenditure Analysis Ltd.), Adtrack, Media Register etc. in the UK)

### 5.2.7 Financial Information

A major publisher of print and electronic sources of financial information is Delovoy Mir (Business World); Shchelkovskoe sh., 77, Moscow. Tel: 095-460-4338; Fax: 095-460-4289; Email: max@db.mmtel.msk.su. As well as daily and weekly financial newspapers, there is a monthly periodical on the Russian financial market; and a databases on Russian banks. Subscribers can access offline and online price data on the Russian financial markets. A 'consulting department' carries out research and answers enquiries on demand. (Information from article the Russian Chamber of Commerce's 'Business World' in *Business Contact*, special survey: 'Business Information in Russia' (Ref. 4 - page 12))

### 5.2.8 Solutions, recommendations

Commercial information providers suffer like any new SME from lack of investment, an underdeveloped market; inexperience in the trade, and in business practice. As referred to in Section 5.1.2, they are on the threshold of a necessary and commercially successful market; but are financially vulnerable until business clients become more successful themselves.

Producers and distributors of information products need to take a higher marketing profile; copying western firms in taking every opportunity to promote their company name and their services; finding more outlets for distribution. They need to be aware of the points in Section 5.1.2 above concerning the need to liaise very closely with business on information matters; and the reluctance of business to pay for information. Because of the latter especially, source providers and service providers are interdependent; so publishers should target library and information services as much as businesses themselves.

Relevant developments in the UK and elsewhere lead me to generally discourage the public sector (their information *service* providers in particular), from taking on the role of *source* creator. Apart from ensuring the availability of certain primary information (as discussed in Section 5.4), and taking very obvious opportunities to produce sources; this role is better left to commercial 'publishers', including trade and industry organisations.

#### *Specific proposals*

a) The lack of understanding of 'business information', and lack of significant involvement by any major library, higher education institution, or professional association; means that there has been no in-depth survey of Russian business information resources. Such an exercise, resulting in a published directory would help promote available sources, and guide the developing information services to the resources to collect and/or use. The work would best be done by a foreign expert working with one or more Russian counterparts - who would benefit from visiting and contacting relevant institutions, use the results in their own work; and hopefully update the work in future. The nucleus of similar surveys was created by the present consultant in Hungary and Poland; these have proved useful stimuli to workers there, who would have benefited even more by being involved in the collection of information.

b) The statistical collection and dissemination activities of the official statistical service are of great importance in the supply of primary business information in any country; especially as the raw data of market intelligence. Thus a high priority should be given by government to developing these activities of GOSKOMSTAT, (and any other such official agencies)

### **5.3 Information services and information professionals**

Though this element of the system less often driven by commercial motives (because the majority are in the public sector), professional motivation, to link information providers and users, are normally very strong. Standing between providers and users, this group has the opportunity, as well as the skills and the responsibility, to ensure the flow of information between them.

#### **5.3.1 Analysis of the current situation**

Collating the different actual and potential SME support services, identified and reported on in Sections 5 and 6, produces the following picture:



Schematic Representation of Different Networks of Relevant Services

	RosComInform/ GOSKOMPROM	IAS/OLVIT/ (+ UNIDO)	Ministry of S & T Policy	Russian Chamb. of Commerce	Russian Small Business Supp- ort Agency	? Ministry
<b>State Level</b>	Russian Information Centres	national data network centre	State Lib. for GPNTB S & T	Moscow HQ	Moscow HQ	State Library
<b>Republic Level</b>	Info- Centres (89 planned 35 exist)	Regional Centres	Regional Centres (ca. 80)	Chambers of Commerce (ca. 80)	Offices in major cities (in 23 diff. regions)	'National' Libraries/ Reg. Libs
<b>District Level</b>	Info- Centres (1 or 2)					Local Public Libraries
<b>ROLE</b>	<i>wide business support role</i>	<i>telecoms, data transfer</i>	<i>collection &amp; dissem. of S&amp;T info.</i>	<i>promotion; information; support</i>	<i>promotion; information; support</i>	<i>information</i>

The following common misconceptions and gaps in knowledge were observed among persons currently and potentially involved in business information; these must be contributing to the deficiencies observed in the flow of information to business:

#### **5.3.1.1 Understanding of the concept of 'business information'**

i) Not surprisingly, there is a fundamental lack of understanding of what 'business information' is. This is not simply an English-Russian language problem; and the knowledge gap exists among the new business information practitioners as well as non-practitioners. Understanding depends not just on hearing a conventional definition, but also on seeing examples of established sources on the subjects which constitute 'business information', and appreciating how the information in them assists business decision making. In any language, terms within business such as 'market information' do not convey much meaning until typical examples of what constitutes market information, are seen and understood. As discussed elsewhere in this report, all types of business information exist in Russia, but many are only just being published as formal sources, and those which exist are little known by intermediaries and end-users alike. As also reported more fully elsewhere, there are as yet no major or prominent collections of such sources; and little pre- or post-qualification training about them, by either the relevant institutes, libraries/information services themselves. or the library/information profession.

#### **5.3.1.2 Understanding of the role of 'business information sources'**

ii) There is the misunderstanding that services (normally defined as intermediaries between users and information sources) must *create* sources, rather than primarily exploit existing ones. There is the misconception that information services can or should monitor events in 'commercial environments', and analyse them for their clients assumed needs. Thus information services are attempting to produce databases and documents, which they imagine will largely satisfy their users' needs.

This is misguided, for several reasons:

- a) despite the state of the available sources, a service must concentrate its efforts on exploiting them for users.
- b) A service cannot and should not predict the information users will need and 'spoon-feed' it to them - this is a 'centrally planned' attitude not appropriate in the free market. It should primarily respond to demands by collecting or otherwise accessing the whole diverse range of sources available.
- c) By taking on the role of source producer/publisher, services providers are in danger of suppressing the development of a strong and diverse business information industry.

### 5.3.1.3 Attitude to structures and planning for SME information support

iii) There is the misunderstanding that some authority, probably government, or particular ministries, must plan and implement the 'total business information system' for SMEs. This misconception is not uncommon, and the very thought of such a daunting task, may be holding back the development of necessary elements of an eventual 'system'. Though government should indeed research and monitor all aspects of information for SMEs, the 'central plan' concept is unrealistic because:

- a) it could never be afforded.
- b) many elements of the system can and should develop in the private sector, for market reasons (especially information sources)
- c) many elements can and should evolve from old/existing public sector agencies (especially libraries/information services).

Thus central, regional and local government is advised to provide the culture, the environment for as many elements as possible to develop independently; to subsidise where necessary (especially *services* - either the subsidising services directly, or the businesses for their use of services).

### 5.3.1.4 Attitude to 'informatisation' vis a vis 'information'

iv) There is the misunderstanding that creating the physical infrastructure for data transmission and communication; especially telecommunications and databases, goes most of the way towards providing businesses with the information and advice they need. Probably because of the late or non-arrival of librarians/information professionals on the business information scene, leaving IT people to lead developments, there appears a common assumption that 'the medium is the message'. It is often assumed that (as in i) and ii) above, once the necessary information is captured in databases, and everyone is connected to those databases and to each other, there is little more to do. Of course the technological infrastructure is important for information systems and services; but it is not the deciding factor in the provision of information to business. Information sources and services can and do work without advanced technology.

The problem is increased because under current government SME support programmes, *information provision*, and within that *business information* provision, exists alongside *informatics* - the application of computer technology to various processes. The term 'informatisation' is often used to cover the part of the programme which Goskomprom is responsible for, which clearly implies the increase of computer and telecommunication technology; but does not so obviously imply the provision of information; especially that which is not carried by electronic means.

Thus new networks of information services are being created to serve SMEs, with the emphasis on database creation and telecommunications; neglecting the many *existing* sources of information, especially those in diverse printed forms; and neglecting the role of the intermediary in information *delivery*. Probably because of the conservatism and depressed state of the library profession, the newly created business information services are in danger of:

- a) neglecting the many Russian and foreign essential sources only (or best) available in printed form. Often uniquely available in printed form; cheap or free, and of high visual impact.

b) underusing all sources, especially printed ones and those not in the centre or its network; because of lack of training in matters such as information sources, their bibliographic control, and enquiry and research techniques.

c) presenting themselves and their users with an in-house resource which is very limited for both answering specific questions, and browsing for ideas and inspiration. For many good reasons, business people need to use the original sources themselves; many local and specialised sources can still not be used by small businesses via their own multi-media computer terminals.

d) neglecting professional intermediary services, particularly necessary when serving SMEs, such as enquiry services, research services. Neglecting the role of intermediary to the wider world of resources outside the immediate system.

### **5.3.1.5 The image and role of libraries and librarianship**

v) Related particularly to 5.3.4 above, is the assumption that libraries and librarians have little or no relevance or role in providing information to business, in information centres, or in connection with creating and exploiting databases and online information. As discussed elsewhere, this is partly because of the background and experience of those who are taking a lead role in the 'informatisation' programme; and partly because of the low profile and conservative, (humanities, print-based; or science and technology oriented) nature and image of the 'library' profession. The fact that 'librarians' have not taken on the role of managing business information, whatever its form, is leading to some of the problems and deficiencies I have identified.

### **5.3.1.6 Attitude to information availability; information gathering strategies**

vi) Related to points in other sections above (including 5.2.4, is the assumption that business information has to be obtained by unofficial, even illegal means. The lack of 'transparency' of business related activity in Russia is as stated above depressing trade; through lack of business to business, investor to business, business to government etc. confidence. The covert style of information gathering is caused by a combination of factors:

a) because sources are poorly developed and for many purposes non-existent.

b) Information which should be made available as a matter of government policy, is often not; for instance company registration and disclosure law is as yet poorly implemented. The operation of government departments which collect tax, allocate grants and exemptions, etc., is not sufficiently trusted, predictable or transparent. For reasons including the complication of the registration, taxation, and official statistics regulations; as well as concealing income to avoid the notice of tax authorities and organised crime; companies disclose information reluctantly.

c) that the new business information professionals' background is unlikely to include knowledge and use of published information sources for research/enquiry work; in fact it is more likely to have involved covert information work, using definitely unofficial sources.

d) there is an historical low expectation of information, and of the reliability of information, from government and public institutions; furthermore there is the expectation of secrecy, by all organisations and individuals. Thus information flow is still depressed by a combination of the seeker's expectations, and the potential provider's continued reluctance.

e) there is a serious lack of knowledge of the many sources which do in fact exist. Partly because there are as yet no 'show-piece' collections or services; partly because of the lack of training of those working in business information; and partly because there is very poor communication between those involved in the new 'business information industry'. To provide this communication, there is a great need for relevant professional association/s, and/or relevant news-type periodical/s - such as *Information World Review* (Appendix 1), covering business and other information products, services, persons, etc.

### 5.3.2 The level of information skills

Among those currently involved in different way in business information, consistent with their non-information professional background, there appears to be a great deficit of 'information skills' in the most general sense. That is, a lack of knowledge of the information sources available, and a lack of a systematic strategy to discover, obtain, and use them. Very often source producers were found to be unaware of each others products, and information service staff unaware of relevant sources or collections of sources. As stated elsewhere, 'traditional' resources, such as printed documents, and libraries, seemed to be the most overlooked.

### 5.3.3 Information broking

Partly due to the early state of development of business information sources, quite a few firms are already undertaking information broking for clients. These brokers are required to use personal and unofficial research methods to compensate for the deficiencies of publicly available sources, in terms of scope, accuracy and currency. As reported in another section, the database host Olvit is also an information broker. Apparently Dun and Bradstreet's Moscow office has an enquiry service offering fee-based research. As well as advertised business information brokers, there are many individuals who are subcontracted to use their own 'informal' methods to pass on information which they have access to.

### 5.3.4 Professional organisation and communication

The 'Association for Librarians' appears to have an office in Moscow State University. Its activities were unknown to the informatics and business information persons met, and considered to be 'traditional' and/or not having widespread impact in LIS education, training, professional communication, professional publishing, or integration of the changing LIS profession. Other organisations reported on, such as the Russian National Congress for Informatics and Telecommunication, did not appear to fulfil the business information professional communications role of for instance the Institute of Information Scientists 'City Information Group' in the UK

#### 5.3.4.1 Information profession periodicals of relevance to business information

*Information Resources in Russia* (translated title) is published 6 times a year by the Ministry of Science and Technology Policy's 'RosInformResoursii'. Started only about four years ago, this is a relevant periodical for placing articles on business information.

*Nauchno-tekhnicheskaya Informatsiya (Scientific and Technical Information)* has long been published by the Ministry of Science and Technology Policy's VINITI. Though obviously S&T oriented, it has carried articles related to business information. *Series 1* carries 'practical' articles, and *series 2* 'theoretical'.

*Scientific and Technical Libraries* (translated title; no other details to hand).

*Intellectual property* (translated title; no other details to hand).

Long established, probably more conservative titles are:

*Bibliotekar (Librarian)*

*Bibliographovedenie (Bibliography)*

*Bibliotekovedenie (Librarianship)*

### 5.3.5 Solutions, recommendations

#### 5.3.5.1 Overall

The current mission identifies this element as the weakest link in the national 'business information system'. Problems and solutions involve individuals' attitudes and skills, as well as the policy and services of the libraries and information services they work for. Perhaps not the most expensive element of the system to reconstruct, but perhaps the most difficult. Many detailed problems and solutions are discussed above, and in the reports on relevant individual institutions. In summary, long-established information institutions need to adapt their roles and practices; and the personnel of both old and new information services need updating and retraining. This section concentrates on recommendations to achieve this.

#### 5.3.5.2 Recommendations on policy and structure

##### Russian InfoCentres

It is to be celebrated that government has given a high priority to SME support in its 1994/95 and 1996/97 funding programmes. Among the programmes' different elements, the InfoCentres network is a large and ambitious project, already well underway, and beginning to deliver services. Although such a concept is reminiscent of the former centrally planned approach; it has a good chance of success in the long term, and too much has already been done to suggest a completely different approach. The concept of all SME support services available from or via a single organisation, with national resource sharing and coordination; is a very attractive one - if it can be achieved. In Britain, business support services have developed in a highly diverse way, and Department of Trade and Industry is trying to overcome the problem and achieve some degree of integration (initially at the local level) through its 'Business Link' initiative.

However, if InfoCentres try to be too 'comprehensive', there is the danger of stultifying and/or duplicating services which would be best offered by specialised public or private sector organisations. Although this report has regretted the absence from the 'business information system' of the physical and professional resources of public sector libraries; these may not adapt and become involved if InfoCentres take on the role which would 'naturally' be theirs.

Although InfoCentres are companies in their own right, it seems likely that they will eventually find themselves subsidised to run just the services which are not commercially viable, and not offered by more obvious public sector bodies. As stated in Section 5.1.2, even if they are well used by SMEs, InfoCentres will need long-term financial support.

The claims of Russian InfoCentres that they cooperate with other organisations which have overlapping objectives, and sometimes a centres of their own, is encouraging. In terms of cost and effectiveness, it is important that this policy is rigorously pursued. It should be seriously considered whether the Ministry of Science and Technology Policy's network could be integrated with the Russian InfoCentres. Also encouraging and necessary is the involvement of regional government, and regional industry organisations.

#### National and local public library and information services

It has already been said that in other countries, established national and public library services have taken a leading role in developing information services to business; and it has already been lamented that as yet they have little role in Russia. It is a problem that GPNTB (the State Public Library for Science and Technology) is administered separately from 'The State Library' (formerly the Lenin Library), because one or other (probably the former), or both together, should be the basis of a national business information resource. The British Library is a suitable model, where in the 1980s the science and technology division responded to changing demand from business by adding to its existing legal deposit collections to create an open access 'Business Information Service'. Thus business people (and information workers on their behalf) within reach of the capital, can do their own research in the best collection of printed and electronic sources; or have quick enquiries answered, including by 'phone, fax etc. In-depth research and online searches are done by staff at cost price, on demand. Despite indications (Ref. 3) neither GPNTB nor any other such library appears to have made the necessary dual initiative of developing such a service; and giving a lead to the country's local public library services.

The research did not discover any initiatives in regional or local public library services; not even in Moscow. Because of the relevant resources and skills they potentially have to offer, it is vital that as even in Hungary and Poland, the Russian public library services play their role in informing local business. It is understood that public libraries have been very much associated with culture, that separate systems served science and technology, and factories; and that they are currently demoralised and starved of funds. However, if they seek a new and necessary role, developing services to business could give them one.

#### 5.3.5.3 Recommendations for development of services

Implications for the services of relevant intermediary organisations are included in the recommendations above and below. In addition though, special emphasis should be given to the need not only to exploit the many *existing* sources of information; but in particular to establish strategic, appropriately staffed, open access *collections of printed* and other acquirable physical forms.

#### *Specific proposal*

Appropriate representatives from the Russian state library and information services referred to above, and the Ministries which control them, should study the British Library Business

Information Service; with a view to the urgent establishment of a model and national business information resource in Moscow.

#### **5.3.5.4 Recommendations for development of personnel**

The single most obvious need identified by this consultancy mission, is for training of those involved and potentially involved in informing and otherwise supporting SMEs. The proposal: *Project: Creation of a network of consulting firms to support small and medium business in Russia* (Ref. 6), deals adequately with training needs for business consultants; so the following deals with information workers.

##### **Library and information education and training**

As noted in the report on Moscow State University for Culture, Faculty of Management and Information systems and Faculty of Librarianship, necessary changes in the profession appear not to be led by the education and training system either. Like libraries themselves, and the profession in general, LIS higher education appears to be at a low point of status, resources, and initiatives. It has not yet been possible to identify any one of 16 or so which is notable for involvement in business information, or in information management in general.

LIS departments or faculties have a vital role in the preparation of librarians and information managers for today's and tomorrow's Russia; and could also take a role in the updating and retraining of those who are working or could work in the developing business information services. At least some of the faculties should be identified to develop 'information management' programmes, including studies in business information.

##### ***Specific proposal for middle and long-term improvement***

To achieve this would require a 'survey' of departments; and curriculum and resource planning, with foreign counterparts. This would have to be followed by training of academic staff, and detailed curriculum design by them. Such a process has been followed by at least one such forward-looking department in Hungary, and one in Poland; where appropriate staff members have spent time with a University of Wales DILS counterpart to find out about business information, and how it can be taught. As a shorter-term measure, selected Russian LIS students could be sponsored to study either complete programmes abroad (e.g. as a British Council's Study Fellow), as in the EU's Erasmus scheme, a single semester.

The Institute for the Advanced Training of Information Specialists (IPKIR) is structurally and otherwise well placed to take a major short-term updating and retraining role; and appears dynamic and well motivated to do so:

##### ***Specific proposals for short-term development***

a) Senior IPKIR staff are keen to develop their in-service training courses in the business information area. This could be done in a similar way to that suggested above for full-time education; by identifying a foreign counterpart to help design and deliver course/s which could then be repeated independently. Discussions would have to take place on target trainees, duration and status of course/s; and funding would be required for training of the Russian tutor/s (including reciprocal visits between counterparts), to improve learning/teaching resources, and probably to support trainees.



- b) Alternatively, a short course or seminar, aimed at increasing awareness of what Russian business information is, could be developed by a foreign tutor together with Russian counterparts, and be run under the auspices of any relevant organisation (or none in particular), in different locations at different times. Similar financial support is obviously necessary.
- c) Short course/s could as well, or alternatively, be created and delivered abroad, where examples from a developed system could be studied. This could be particularly appropriate for key senior professionals; such as heads of new business information services, or those intending to teach the subject in institutes. Advantage could be taken of existing relevant courses, experience and facilities; such as at DILS, University of Wales Aberystwyth. Such courses could be combined with learning or improving English; such as the online searching and English course being sponsored at Aberystwyth in July 1996, for Hungarian business information personnel of this kind (Appendix 2; the DILS participants join in with English language classes of the appropriate level in the mornings; all subsistence costs and arrangements are included in the English language course package).
- d) UNIDO has already successfully used the study tour format, to help provide the know-how, and working examples which are desperately needed at the moment. (Appendix 3 gives the programme of the December 1995 1 week tour in the UK). I recommend that these be repeated; tailored to the needs of appropriate groups. Such tours can if desired have formal education/training added to them; or could be a small part of a course. In addition to, or instead of courses and tours, work placements in developed foreign services are very desirable for certain Russian working professionals.
- e) The immediate and basic need to raise awareness of the concept of 'business information' and 'business information service' (among both new practitioners and potential practitioners) can also be achieved more simply. I have already recommend (Section 5.3.1.6) that a Russian organisation which does accept a lead role in business information service (such as InformationResource, GPNTB or a new or existing association of working information professionals) initiates a news type periodical for the 'business information industry' in general (similar to the British *Information World Review* Appendix 1, or *Managing Information*). Basic awareness and knowledge can be increased almost immediately, by using the periodicals listed in Section 5.3.9 to carry relevant articles. It is my own intention to submit articles via a Russian intermediary, for this purpose. I also recommend that extracts from the present report be translated into Russian and disseminated as appropriate.
- f) Though the absence of lead organisations in the form of major libraries, professional associations, or information and library studies departments, makes it more difficult to achieve this; there is an immediate need to set up seminars and conferences, to raise awareness and foster the kind of policy and structural changes referred to above. It would be appropriate for sponsorship or international aid to be sought and offered for such events, to enable local and foreign participation.

#### 5.4 The legislative and cultural environment for the generation and free flow of information

The essential elements of trade, and therefore a country's economy are: buying from a company, investing in it, working for it, entering into partnership with it; selling in a measurable market; with reasonably predictable costs, etc.. None of these can take place satisfactorily without *confidence* in other companies, markets, etc.; gained through plentiful and reliable *information*.

Government cannot create the information required for free enterprise, nor ensure that it is used. However, it has the vital role of 'priming' the system in two ways. Government has the ability to ensure the availability to the public and to commercial providers of certain key 'primary' business information. People's ability to access such publicly disclosed information, and their confidence in it, also depends on government; through legislation which provides 'transparency' of the operation of business (including government's relations with businesses). None of which works without fair and rigorous enforcement of all relevant laws, regulations, and procedures.

##### 5.4.1 Analysis of the situation

The bustle and commercialism of Moscow tends to confirm indications that already 80% of workers are occupied in the private sector, and that inflation is under control. But there are equally clear indications that there is little yet to replace collapsed industries and infrastructures; leading to high imports, high unemployment, and a frustrated electorate. Analysts report that while foreign business partners are encouraged by the macroeconomic signs; the role of foreign and Russian businesses alike in growth and restructuring, is seriously hampered by many aspects of the Russian environment for doing business.

My work confirmed that accepted belief that foreign investment, foreign trade, partnership with foreign businesses; expansion by Russian companies, and relationships between Russian companies, are all being adversely affected by problems in the interrelated areas of *information, knowledge, and communication*. The effects can be separately identified in the following broad terms:

i. The inevitable lack of business knowledge and experience by Russia's new business people is well accepted and many foreign and domestic programmes are targeted at it. Though it is not the subject of the present report, it means that especially the 'small' business person in Russia is even less likely to resort to relevant information sources and services than their counterpart elsewhere:

They have little experience of commercial realities (competition; use of suppliers, distributors, contractors; customer satisfaction; etc.), therefore make little demand for information on these and other aspects of their external commercial environment. Since relevant *sources* of business information are only just emerging (the suppliers of which also have limited marketing and distribution experience), business people can have little knowledge of them. For similar reasons, business people have little experience and knowledge of relevant information and/or advice *services*.

ii. A residual institutional suspicion of free movement of people and information, together with the habit of concealing of commercial activity, and suspecting authority; is being reinforced

today by a 'fear' of a highly complex business taxation system, institutional corruption, and organised crime. Even public buildings still rarely give an impression of welcoming accessibility; public and private sector establishments have surprisingly anonymous exteriors, and barriers inside doors with armed security guards and complex procedures. Things are of course rapidly changing, despite the conservative influence criticised by Mr Yeltsin :

Translated by Agence France Press from a speech in Moscow; on 1st September; reported in Moscow Tribune, 2nd Sept. 1995, p. 1

'Yeltsin blasts violations against media'

"There is a divergence between freedom of information on paper and the exercise of it in reality, and that divergence is increasing. . . The tradition of a closed society is still too alive among us"

Thus people do not expect reliable information to be available, and do not demand it. Indeed without proper statutory and voluntary disclosure of information on companies, production, sales, etc. etc. reliable primary information is not available; depressing the development of business information sources and services; in turn discouraging business investment, growth and partnership. Without a free flow of basic information; neither potential investors, partners, nor customers, can have the confidence in each other necessary to do business. This is particularly true of foreign partners who may expect to freely obtain much reliable information, before making a business decision.

#### 5.4.2 Legal disclosure of information by companies

In any country, the information disclosed by companies in return for the limited liability of the owners, is fundamentally important to successful business, and thus to the economy. Many of the deficiencies in Russian business information, and therefore problems in business itself, stem from the very poor state of company disclosure. This problem is well known to those in the information industry, and well known to the Ministries and Committees running the small business support programmes. It has resulted in the British 'Companies House' being contracted to advise GOSKOMSTAT on a new, hopefully as in the UK centralised, system (Ref. 1).

For the last three years the Civil Code has required all 'businesses' to register at one of the ca. 2,000 central or local government local offices. They have also had to provide separate information to one of ca. 2,000 statistical offices; and from January 1996 'companies' must also submit audited accounts. Data from the statistical offices is cumulated by GOSKOMSTAT as a single database, of ca. 3 million businesses.

This system is failing for reasons of: inadequate legislation; poor compliance on the part of business; poor enforcement by the government agencies, and their failure to make the disclosed information available. New legislation has been drafted, incorporating the advice of the British Companies House, but it could be several years before significant improvements filter through to users of the information

The present system is as follows (as far as it has been possible to discover it):

(Law requires anyone doing businesses to register locally - whether or not a legal 'company'; and also disclose information to a local statistical office, including, from Jan. 1996: audited accounts)

*Types of business (standard abbreviation in brackets)*

- i. Sole traders - unlimited liability (TOO)?  
[Russian name?]
- ii. Companies - limited liability (TOO)  
[Russian name?]
- iii. Joint stock co. - open share  
Otkrit aktsioner noe obshestvo (JSC-OAO - formerly AOOT)
- iv. Joint stock co. - closed share  
Tovarischestvo s ogranichennoy  
otvetstvennostju (ZAO? - formerly AO3T)

*Registration numbers*

such as followowing a company name on its letterhead: G.R.N. 8700-RP  
ie: Gosudarstvennoy Registracii Nomer (State Registered Number . . .; RP=Russian enterprise)

*Details disclosed*

Little information is disclosed at registration; and there are few or no requirements to update or revise the data. It appears that name and address data for some of the above more formal types of company is in theory available from district registration offices. Different types of business/company are required to register/disclose as follows:

- i. Sole traders - unlimited liability  
[to date, unable to discover the disclosure requirements]
- ii. Companies - limited liability  
[to date, unable to discover the disclosure requirements]
- iii. Joint stock co. - open share  
[to date, unable to discover the disclosure requirements]
- iv. Joint stock co. - closed share  
[to date, unable to discover the disclosure requirements]

***Details available to the public***

Information about different types of business/company are supposed to be available as follows:

## i. Sole traders - unlimited liability

[to date, unable to discover the disclosure requirements]

## ii. Companies - limited liability

[to date, unable to discover the disclosure requirements]

## iii. Joint stock co. - open share

[to date, unable to discover the precise disclosure requirements. It seems that certain data must be published in newspapers like *Economy and Life* (translated title); but apparently this is poorly complied with, and there is no more systematic source of the information than the particular issue of the newspaper.

## iv. Joint stock co. - closed share

[to date, unable to discover the disclosure requirements]

It appears that much of the information deposited by law is not intended for public access; the only detailed and reasonably reliable information is said to be that on state enterprises. The public is supposed to have access to *financial* information only of open-share joint stock companies; but this is via the relevant local statistical office; and there are said to be barriers to access in most, even if the data is accurate. GOSKOMSTAT's central company database is presumably available for consultation, including online. The unavailability and unreliability of legal disclosure leads to company sources being based mainly on voluntarily disclosed information.

**5.4.3 Solutions, recommendations**

It is beyond the competence of the present mission to make detailed recommendations to rectify the fundamental problems described above; government is aware of the problem, and GOSKOMSTAT is currently taking advice from the British Companies House. Those in the 'business information industry', who are or soon will be, most aware of these adverse effects, must constantly remind legislators and policy makers of what needs to be done.

***Specific recommendation***

In the interests of the economy, government must urgently put into operation an effective company disclosure system for at least all limited liability companies; so that the current and accurate information is freely available to all.

**5.5 Government leadership; policy, coordination and finance of business support services**

Because of the weakness of SME demand for the information and other support services they need; and their inability or unwillingness to pay the full commercial cost of information; as national and local government knows, for social and economic reasons it must intervene. Any government's strong motivation, though reluctance to commit public funds, usually results in the long and short-term funding of initiatives for the *direct* aid of SMEs, and *indirectly* by aiding intermediary services. SMEs are sometimes helped through grants, loans, vouchers etc. for support services. More often they are helped through the provision of information, advice

and other services which are either free at the point of delivery; or below economic price. Since even in long-established market economies, the information and other support services are largely publicly funded, government has the power to control and coordinate them in its best interests.

Other than creating the conditions for the generation of reliable 'primary' information, and the free flow of information, governments can generally leave the production of information sources to market forces.

#### **5.5.1 Analysis in relation to the current situation in Russia**

In August 1995 it was announced that 1.8 trillion rubles (\$408 million) had been allocated for the 1996-97 programme of support to SMEs. Both the First Deputy Economy Minister and the Prime Minister confirmed that the aid was for building the 'network of information and training centres'; the latter also referred to simplifying the company registration procedure.

#### **5.5.2 Solutions, recommendations**

The Russian Government has set an impressive lead in SME support; rightly giving funding and high priority to: financial assistance, simplification of tax and other procedures, disclosure of company information, informatisation, information and information and consultancy services. It is beyond the competence of this mission to comment further on all the elements of the current development programme, except to urge government to maintain the investment in such business support.

#### *Specific proposal*

I recommend that the Ministries and Committees responsible for relevant elements of the SME support programme should make best use of the present UNIDO funded mission, by giving due attention to the findings and recommendations of this report.

### **5.6 Communications (including information technology and telecommunications) infrastructure**

Related to Element 4 above, there obviously have to be physical channels for the flow of information among primary and secondary producers of information, businesses, and intermediaries. This includes means of accessing databases held in-country and abroad, means of making enquiries and disseminating often complex responses; and means for business people to generally communicate with each other and with their 'industry'. Personal visits, telephone, mail and periodicals have provided speedy, high quality access to information up to today in the UK and elsewhere. Technological developments in telecommunications can and will be usefully exploited for business information purposes (every business connected to every other and to wide-area-networks; transmission of multi-media data by ISDN lines, etc.); governments are wise to assist its national implementation. Nevertheless state of the art IT and telecoms are not a prerequisite of an effective business information system.

#### **5.6.1 Analysis in relation to the current situation in Russia**

The aim of the government's 'informatisation' programme is said to be to facilitate all social activities; including business. It is concerned not only with developing an infrastructure for information transmission, but also with the information to be transmitted, whether in electronic, printed, or other form. Nevertheless, whether intended or not, the emphasis is very much on modernising the means of processing and transmitting information.

An English language survey of the telecommunications industry and infrastructure in Russia appears in the article 'Telecommunications: Russian firms start an offensive' (Ref. 4 - page 9).

#### **5.6.2 Solutions, recommendations**

This programme is excellent in itself. The problem is that other aspects of provision of information to business are often more important; but since they involve more complex, human processes, may be neglected in favour something as tangible as information technology. As identified elsewhere in this report, the priority in business information is the professional know-how to exploit for users whatever information sources exist. Know-how which is perhaps harder to develop than technology, though perhaps also less capital-intensive.

##### ***Specific recommendation***

I have no reason to doubt the desirability of the present technical program; only to put it into perspective. The proposal (see report on Olvit) for financial support to design and test a prototype regional data network as a building block of a national one, appears very sound; and a natural continuation of previous UNIDO assisted RosComInform developments.

**6 Reports on the institutions involved with business information, visited or otherwise researched, between August and December 1995**

Russian name :Gosudarstvenny Komitet po Promuishlennoy Politike  
 English translation :Russian National Industry Policy Committee  
 Abbreviation, if any :GOSKOMPROM  
 Address :1-st Tverskaya-Yamskaya str., 103819, Moscow. Tel: 209-82-05;  
 Fax: 200-52-84  
 Activities :Responsible for industrial policy; and for the realisation of  
 different elements of the government's programme for small  
 businesses; including informatisation.  
 Visited :30.8.95  
 Contact person :Vyacheslav Beresnev, Deputy Chairman

**Report**

Structure

Goskomprom is the state committee responsible for industrial policy. Under the 1994/95 government SME support programme (since renewed for 1996/97) Goskomprom is jointly responsible with the anti-monopoly body for reforming business laws and regulations, and taxation. It is jointly responsible for foreign business relations with the Ministry of Foreign Affairs. Goskomprom's primary responsibility under the programme is however the realisation of 'informatisation', including information provision; to be jointly executed with RosInformResoursii.

Activities

It is in relation to informatisation that the company InfoCentre was set up (and since then the umbrella company 'Russian InfoCentres', and 15 InfoCentres already set up, with 21 planned (4 or 5 by the end of 1995). Each centre jointly founded with regional the authority. Another element of the programme is the creation by this structure of regional and federal databases.

Goskomprom's activities to date have been affirmed by the 1996/97 phase of SME support; they have been asked to expand the InfoCentres newtwork to all 89 regions, and to increase the range of services available to SMEs to that of any other industrial nation - at a low cost to SMEs.

Mr Beresnev described the role of the other major players in SME support as follows: RosComInform has little in practice to do with SMEs; it is more concerned at a policy level. The new (from June 1995) State Committee for the Support and Development of Small Businesses, under Mr Prokhorov, has been established to coordinate the different elements of the programme being executed by different Ministries etc. (see report on the State Committee). There appeared to be mutual understanding of roles, and communication between Mr Prokorov, Goskomprom and Russian InfoCentres.



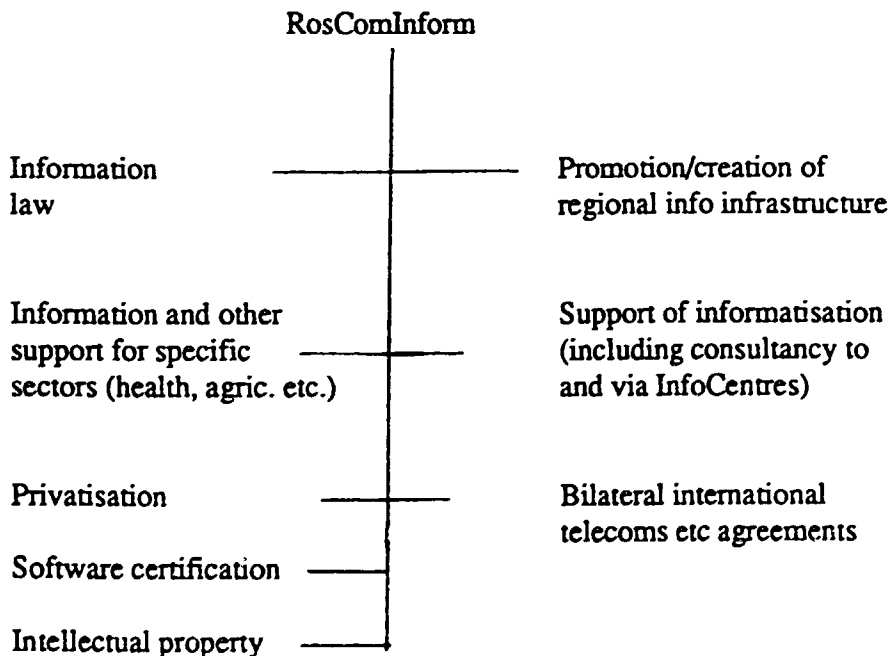
Russian name	: <b>Komitet pri Presidente Rossiiskoy Federatsii po Politike Informatizachii</b>
English translation	: <b>Presidential Committee of the Russian Federation for Informatisation Policy</b>
Abbreviation, if any	: <b>RosComInform</b>
Address	: <b>48, Myasnitskaya St., 103716, Moscow, Russia. Tel: 095 923-4081/928-3003; Fax: 095-975-2689</b>
Activities	: <b>Creation of national information infrastructure. Informatisation: ie computerisation (introduction of information technology); telecommunications; collection, analysis and dissemination of information.</b>
Visited	: <b>26.10.95</b>
Contact person	: <b>Vyacheslav V. Korchagin, First Deputy Chairman</b>

### Report

#### Activities

RosComInform role in relation to SME support services is described as the information and consultancy input. While GOSKOMPROM has a very general and broad responsibility to industry, which it partly discharges through the InfoCentres programme for SMEs. RosComInform has 'informatisation' responsibilities for all government activities, which it partly discharges through certain inputs to the InfoCentres, namely information and consulting.

TECO consultants explained the role of RosComInform as follows:



**Russian name (3)** :Institut Abtomatizirovanikh System  
**English translation** :Institute for Automated Systems  
**Abbreviation, if any** :IAS  
**Address** :Dm. Ulianova str., 7A, 117036 Moscow. Phone: 095-132-70-01/53-55  
 Fax: 095-132-70-09 EMail: administration@adonis.iasnet.com  
**Activities** :Telecommunications; value-added network services  
**Notes** :Recently become private (Joint Stock) company; formerly the state  
 telecoms utility; partial owner of OLVIT  
**Visited** :M.A. Lowe based at IAS/OLVIT for UNIDO consultancy, Aug 21 -  
 Sept 7 & Oct 23-27 1995  
**Contact person** :Dr Yuri Savostitsky, Deputy Director (& UNIDO contractor)

### Report

Apparently there are now around 16 telecomms firms, though three main networks (including IAS). An English language survey of the telecommunications industry and infrastructure in Russia appears in the article 'Telecommunications: Russian firms start an offensive' (Ref. 4 - page 9).

**Russian name** :Rossiskaya Assotsiyatsiya dlya Razvitiya Malovo i Srednevo  
 Predprinimatelstva  
**English translation** :Russian Association for the Development of Small and Medium  
 Sized Enterprises  
**Abbreviation, if any** :  
**Address** :  
**Activities** :  
**Notes** :Non-government organisation  
**Visit by MAL** :(visited by H. Nicholas)  
**Contact person** :Mikhail Lebedev, Coordinator

**Russian name** :  
**English translation** :Confederation of Associations of Entrepreneurs of Russia  
**Abbreviation, if any** :  
**Address** :  
**Activities** :Representational/government lobbying role; a union of unions - its  
 members are different industry federations  
**Notes** :Owns 10% of TECO.  
**Visited** :Not visited  
**Contact person** :

### Report

#### Activities

Apparently the initiative for the InfoCentres came from this organisation, hence TECO's strong involvement. The centres were originally to be based on the exchange of information between the USA (where the confederation is represented through a relationship with the Centre for International Private Enterprises - CIPE, and the American Chamber of Commerce) and the

centres TECO was to set up in Russia. Joint authors of the *Creation of a network of consulting firms . . . proposal*, 1995.

Russian name :Rossiskoye Agehstvo Poderzhki Malovo i Srednovo Biznessa  
 English translation :Russian Small Business Support Agency  
 Abbreviation, if any :  
 Address :17b Mosfilmovskaya St., 117330 Moscow. Tel: 095-143-7320;  
 Fax: 095-143-7321  
 Activities :  
 Notes :Jt Stock Co.  
 Visited :28.8.95  
 Contact person :Victor Ermakov, President

### Report

#### Activities

The Agency funds itself through the 'sale' of its services, and is contracted under the government's programmes for small business support to provide certain consultancy and training services in the regions (ie not Moscow, which is considered well provided for). The major activities of the Agency involve integration of Russian business into world-wide business style and markets; ie foreign trade.

The Agency has offices (each a joint stock company) in 23 of the regions, which work closely with regional governments (they are assisted with set-up, but little funded by regional governments). Each regional office has a partner town or region in Europe, which helps train agency staff abroad; with TACIS programme assistance. Its President is a member of the State Council for the Support of Small Business.

The Agency has modelled itself on American and British practice, and aspires to the role and standards of a British 'enterprise agency'.

Russian name :OLVIT  
 English translation :OLVIT  
 Abbreviation, if any :  
 Address :Dm. Ulianova str., 7A, 117036 Moscow. Tel: 095-132-52-01; Fax:  
 095-132-70-11; email: svirida@olvit.iasnet.ru or svir@sigma-s.msk.su  
 Activities :Database host; information broker, etc.  
 Notes :Jt stock co., partly owned by IAS  
 Visited :M.A. Lowe based at IAS/OLVIT for UNIDO consultancy, Aug 21  
 - Sept 7 & Oct 23-27 1995  
 Contact person :Sergey Svirida, Vice President

### Report

#### Structure

Olvit is a private company, founded and owned by IAS and two others. Its software and network facilities were provided by IAS. Departments are Marketing; Information (ie

enquiries); Analytical; Technical; Administration. Further information on OLVIT appears in the article 'OLVIT network information system' (4 - page 11)

### Activities

The emphasis of Olvit's business has switched from for example supplying the real-time trading/information systems for the new stock and commodities exchanges, and providing access to scientific and technical databases. Its main business now, is acting as a host for primarily business databases. There are also related activities, including systems design consultancy, and an ad hoc fee-based business information service (ie information brokerage); and the provision of 'network services' - e.g. access email facilities for clients, and access to Internet; World Wide Web server, and 'home page' creation. National and international connection is via ports rented from IAS's IASNET (and others). Mr Svirida estimates that there about 20 online database hosts in Russia.

The 30 plus databases hosted by Olvit are primarily from Russian publishers, and in Russian; they cover primarily business information topics, with an emphasis on company directories. Olvit has created some of the databases itself, having purchased the necessary data. Charging is either on the basis of connect time, or records viewed. Some remote users access some or all of the databases via computers distributed around the country, which receive data by telecommunications. There is not a common interface; search software varies from database to database; however some of the databases can be searched in groups. Apparently subscribers can use Olvit as a gateway to other, including the major foreign, online hosts. Olvit has been and is involved in Unido projects, including the assessing the feasibility of networking CD-ROM databases; it has founded the 'Russian Information Circle' for communication and cooperation between information and database providers.

The fee-based enquiry service grew out of the common failure of the databases to fully satisfy users' needs; the information frequently being out of date, incomplete, and presumably overlooked by the user. The seven staff, with backgrounds in business, economics, KGB etc. (none with a professional library/information training) say they use a combination of printed sources (no significant collection was apparent), their own and other hosts' databases, and organisational sources. They often have to resort to 'unofficial' means, such as using contacts in relevant district company registration offices, companies, or tax office. They will undertake monitoring (for instance on a company name, or an industry; as well as answering simple or complex enquiries, range from company credit checks to company profiles. There are said to be about 200 subscribers, from both private and public sector. Olvit believes there are several other business information brokers in Moscow.

### Problems

Olvit believes that it is underused; that the market is underdeveloped, ie unaware of and/or unable to afford the information products and services. Low penetration is partly related to the low state of development of telecommunication facilities in Russia, and of information technology among potential users. Though Olvit's databases are now available to foreign users (via Internet); to provide a most useful and attractive service it is necessary to make some or all of them available in English and/or Latin rather than Cyrillic text. Investment or other forms of financial support are necessary for this.

Conclusion:

A firm with the potential to be financially very successful, and to play a valuable role for Russian and foreign businesses and business information producers. The firm is well placed in the current market, and has a very good human and technical resource to draw upon. Mr Svirida is a good source of knowledge and advice on relevant technical matters; Oivit should be enabled to develop its core activity of hosting other providers' databases.

Mr Svirida strongly believes that for effective networking of business and other information, it is necessary to create a network of 'centres' around the federation, to act as nodes for local users to connect to. Such a 'centre' would host databases for access by local users, allow those users to communicate and exchange any kind of data with each other, and connect them to facilities at the 'the centre', and through it to all other users. Such a set up is appropriate and necessary for the current limited telecommunications infrastructure. Financial support is necessary design and test a prototype, which if incorporated into the national informatisation policy, could be replicated throughout Russia.

Documents obtained

Advertisement for enquiry service; specimen results of searches (company profiles).

Advertisement for database host; including list of databases.

Russian name	: [Mosskovski Fond dlya Razvitiya Maloyo Biznessa]
English translation	: Moscow Foundation for the Development of Small Businesses
Abbreviation, if any	:
Address	:
Activities	:
Notes	: They work with MADE et al.; information from H. Nicholas
Visited	: Not visited
Contact person	:

Russian name	: Tekhnologicheskayai Ekonomicheskaya Konsultatsiya]
English translation	: Techno-Economic Consultants
Abbreviation, if any	: TECO
Address	: 412, Building 40, Prechistenka, Moscow. Tel/fax: 095-246-44 82/137-74-23; Email: postmaster@caser.msk.su
Activities	: Management consultancy; other consultancy
Notes	: 10% owned by Confederation of associations of entrepreneurs of Russia
Visited	: 29.8.95 etc.
Contact person	: Dr Anatoly Vitkovsky, General Director; Dr Boris Vasilic, Executive Director

**Report**Structure

TECO is a Joint Stock Company partially owned by one of the federations of Russian companies; both were established in 1992, - supported by CIPE, the American chambers of commerce organisation). TECO's contracts include work for the federation; for the InfoCentre network; and the monitoring of projects under the European Union Tacis programme in

Russia. There approximately 12 consultants, divided between Moscow and regional offices. TECO is a member of the Russian InfoCentres partnership created in 1994, under which the InfoCentres will expand in activities and in number. Though there are many nominal Russian management consultancies, TECO estimated there were only a couple of 'serious' ones. They believe that only Russian firms had sufficient local knowledge and understanding to be effective in Russia.

#### Activities

TECO's input to the InfoCentres is a major one, where they are contracted to provide business consultancy services. Such services have only recently begun to operate, and thus to discover what the problems are. The principal consulting activity is helping finance new businesses in an InfoCentre's area (using TACIS grants; and banks - for whom TECO vets proposals; businesses usually only pay if they are successful, when the InfoCentre/TECO gets a percentage). Most of TECO's income is from this activity. TECO also has a contract to monitor European Union TACIS industrial development projects in Russia. The firm also develops software (with MNITZ) e.g. for the creation of business plans to international standards; and for matching investors with suitable companies; and provides software consultancy. As detailed in the Russian Information Centres report, TECO is the consultant contracted by RosComInform for the database of companies and industry which will be created via InfoCentres.

TECO benefits from the relationship with its Confederation parent, including its office in Washington; though most of its work is now independent of the Confederation.

The 1995 proposal to UNIDO, drafted by MNITZ and TECO personnel, seeks assistance for the small business consultancy services proposed for inclusion in the expanded Russian InfoCentres network. TECO wishes to be contracted to undertake some of the small business informational support which RosComInform will be made responsible for under the latest phase of government funding.

It was explained that regional InfoCentres are to provide both information services, and advice services to small businesses; including guiding a new business through seven developmental stages. TECO was not subsidised to provide these consultancy services, and small business had to pay to use them; though RosComInform was paying half the setting up cost, and for telecommunications. This part of TECO's business is currently running at a loss, and expected to do so for a number of years while the market develops. Currently (August 1995), only 12 centres of the 89 regions were established.

#### Problems

Through their experience in the InfoCentre project, and of monitoring TACIS projects, TECO consultants are well aware of precisely how business support initiatives and projects fall short of their target. In summary they say it is a problem of identifying where the real personal and organisational expertise lies, and harmonising the various parties. TECO were aware that the advice/consultancy service had not been effective enough, and that business advisers needed to target their efforts to businesses with the greatest potential, to use local knowledge to identify firms with potential, and to ensure that firms have an adequate network of support. As described above, assistance had been requested from UNIDO to provide business consultancy services in the expanding Russian InfoCentres network.

Conclusion

The TECO (and MNITZ) consultants I met, and the firm as a whole appears to be a high quality resource, with invaluable knowledge and experience of the current problems and solutions for small business. It would be a great waste of their knowledge and genuine concern for the effectiveness of business assistance programmes, if careful note is not taken of their advice and recommendations - as included in the proposal document referred to below.

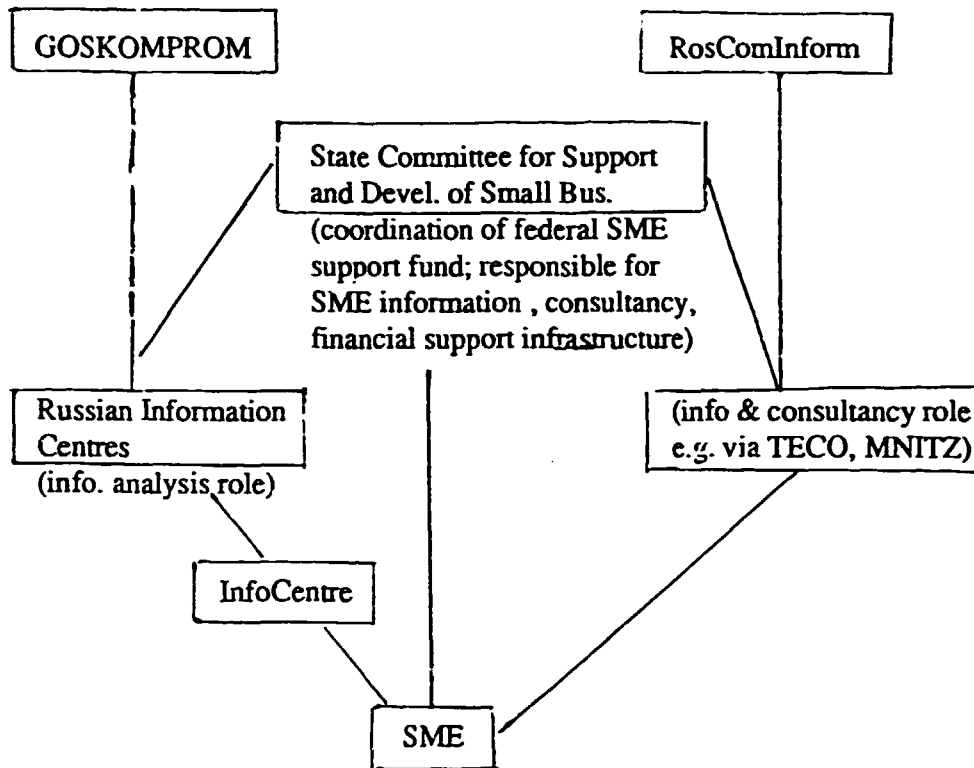
Documents obtained

*Project: Creation of a network of consulting firms to support small and medium business in Russia.* Moscow: Moscow Research & Development Centre; Committee on a policy of Informatisation, Administration of the President of Russia, 1995.

Russian name	:Russki Informatsionii Centr
English translation	:Russian Information Centres
Abbreviation, if any	:
Address	:No. 2, Spassonalivkovskii per. dom 6, 117909 Moscow. Tel: 095-238-1042/284-2465/209-8362 Fax: 095-238-2876.
Activities	:Contracted by GOSKOMPROM to deliver information and advice to businesses via regional network of centres
Notes	:separate jt stock cos.
Visited	:31st August, 1995
Contact person	:Victor V. Doenine, General Director; Bikov Vjacheslav, Director

## Report Structure

TECO consultants explained the governance of InfoCentres as follows:



Activities (see also the report on CTI, Cheboksari, for the activities of a model InfoCentre)

In terms of information provision, the network seems to assume a national information analysis and dissemination role for SMEs, rather like the monumental scientific and technical information system (and agricultural, etc.) of the former regime. The mission of Russian Information Centres is to 'realise federal the programme for a network of regional information centres'. Thus its role at the centre of the network is stated as: managing it; coordinating the InfoCentres and related organisations; and creating databases. Responsibilities to businesses are: to give them access to information; including business, technical and legal information. Within this brief GOSKOMPROM leaves it to RIC to decide on specific services and methods; balancing needs and resources. InfoCentres have an information role for government also; to monitor the development of small businesses. It was explained by TECO staff that GOSKOMPROM has instructed and funded RosComInform to monitor firms and industry in the FRS, and it is being done through the InfoCentres. TECO is advising them on the creation of a new database for this, to include information about each firm's plant, activity, finance, staff etc. It is intended to make use of existing sources of company information, especially that disclosed by law; with a view to operation in 1997.

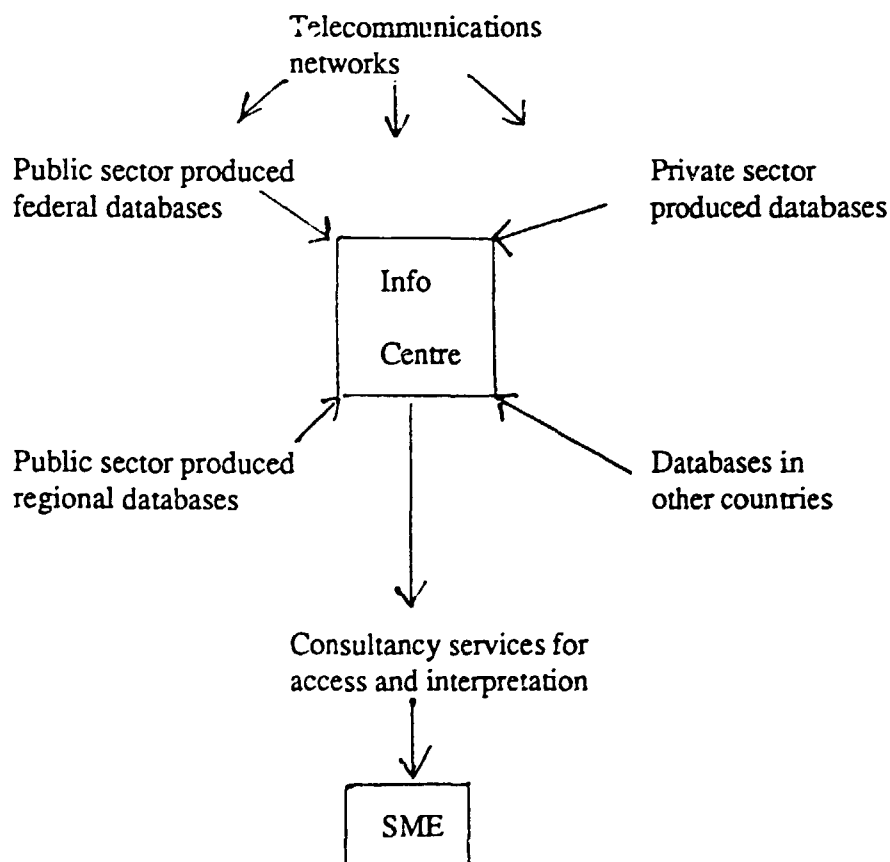
Each InfoCentre is created to a standard pattern; thus each has a standard basic range of services, as well as scope for regional variations. Basic facilities and services include:



- i. Facilities for high standard electronic data exchange
- ii. Access to remote databases: region to region; region to federal and vice-versa
- iii. Business support services: e.g. accounting software; import/export assistance; business forms; promotional materials
- iv. Consultancy service: e.g. tax, legal and strategic advice
- v. Training of business people
- vi. Production and dissemination of analytical information sources
- vii. Financial/investment assistance: advice on proposals for, and sources of grants, investment, loans etc.
- viii. Marketing and sourcing: finding suppliers, partners, sub-contractors, customers etc.

These services are achieved for each centre in 4 stages, in a standard order; it is said that each stage takes several months. As at August 1995 there are 15 regional level InfoCentres, and also a 'local' centre in other cities of each of 2 regions. 21 more regional centres are in progress; local centres are not currently a priority, though it is thought there should eventually be ca. 50 per region. In establishing new centres, the stated policy is to build on existing resources, and to work with other organisations - hence a government decree requiring them to combine forces with bodies including RosInformResoursii, Russian Chamber of Commerce, and the Russian Small Business Support Agency.

TECO consultants explained the relationships of InfoCentres as follows



The network's emphasis on databases and on database creation, rather than on collecting and otherwise exploiting printed and other existing sources, illustrates a curious policy. Certainly sources are as yet underdeveloped, and InfoCentre is doing useful publishing work; however while spending time and money creating sources it believes businesses should have, it is neglecting comparatively inexpensive commercially produced sources. This contrasts greatly with the 'styles' of even central government run 'business information' services in Western countries, which see their principal role as intermediary between businesses, and whichever sources already exist. Their role is knowing which sources exist, knowing where to find them; and collecting and/or accessing them *in response to users' needs*.

### Problems

In terms of InfoCentres' information services, I believe that the emphasis described above is misguided; and based on historical central planning, 'spoonfeeding' practice rather than on an experience of the actual needs of SMEs, and the best way to satisfy them.

InfoCentre directors cite as problems: lack of money, lack of equipment, lack of appropriately skilled personnel; and slow demand by SMEs for its services. They are finding that despite government's expectations or hopes, businesses can or will not pay much for support services; and considerable government subsidy will be necessary long after the period covered by set-up funding.

The MNITZ(MRDC)/TECO proposal (Ref. 6) is a most informed evaluation of the workings of the InfoCentres to date. In its 'Introduction' it identifies two principal shortcomings:

Centres are based on federal government structures which are no longer viable or credible

Most of the projects of both the 1994/95 and 1996/97 phases of the government's programme are devoted to technology - the problem of "how to use information provided through the network has not been considered at all"

My own knowledge and researches do not enable me to any conclusions on the first point; however they do lead to very strong agreement with the second; and with their remedy which prioritises professional intermediaries. The proposal concerns training and establishing a system of consultants, as intermediaries between small businesses and the resources available to them via the centres. I would not dispute that this is essential; but I believe the proposal overlooks the need for professional information managers to work alongside such consultants. Dr Anatoly Vitkovsky of TECO has seen this 'partnership' at work in the British Business Links, since the proposal was written; and may well now agree that part of the problem of the InfoCentres network is the absence of librarians/information managers.

Russian name :Vichislitel'naya Tekhnika i Informatika  
 English translation :Computing Technology and Informatics  
 Abbreviation, if any :CTI  
 Address :Yakovleva Av. 4/2, Cheboksari, Chuvash Republic,  
 428029, Russia. Tel: 20378; 200294;204380;211688. Fax: 206464.  
 Email: root@vti.mastak.msk.su  
 Activities :Part of InfoCentres network - wide range of business support services  
 Notes :Jt stock co.  
 Visited :M.A. Lowe based at CTI between 24th & 27th August 1995  
 Contact person :Igor Kustarin, Director

## Report

### Structure

For the past 2 years, CTI has occupied good standard purpose-built premises, with a prominent logo on the outside. It was jointly established by RosComInform and the Chuvash government as a joint stock company, 67% of shares owned by the ca. 120 employees, 20% by the Chuvash Republic government, and 13% by other individuals and institutions. RosComInform has funded CTI for several projects (telecommunications, business consultancy, etc.) during the past 3 years; to set it up from 1993 as a model regional business support centre. Initial financial input has also come from the Chuvash government; and a loan has been taken out with the intention of taking the centre to a stage where it can prove its effectiveness, and thus attract further aid, as well as income from clients.

### Activities

CTI is now seen as a model business support centre by RosComInform, and subsidises them in the role of agent for replication in other regions. Currently CTI is contracted by the Tartar Republic, and Moldavia to set up services there - republics are directed to CTI by RosComInform, and are more likely to receive central government assistance (mainly capital funding, for building and equipment) if they follow the CTI pattern. About 15 regions are said to be currently sponsored in this way for establishing InfoCentres. Contracts are still also awarded by the Republic's government in its programme of assistance to SMEs etc. - for instance the economic development department fully funds CTI's 3-month business training courses for school leavers. A treaty exists giving CTI the lead role in support of SMEs in Chuvasha, the five signatories including: GOSKOMPROM, RosComInform, CTI, and The Chuvasha government.

Other regional level organisations in Chuvashia provide business support services, including the chamber of commerce, and union of industrial enterprises. However these seem to acknowledge the lead role of CTI, and act very much in concert with it, even contracting CTI to provide services on their behalf. CTI has assisted in the setting up of some of the Federation of Industrial Entrepreneurs of Russia's 50 branches, though the Federation is represented in Chuvashia by the CTI centre. There is said to be little or no support infrastructure at the district level in the republic (22 districts).

### Services

The following impressive and ambitious range of services were seen in the centre. CTI sees itself as a 'systems integrator', selling and otherwise providing the complete range of products and services necessary to manage any business. An 'Information analysis' section receives

incoming enquiries, and redistributes them to appropriate CTI sections; for instance dividing an enquiry between Consultancy and Information Analysis sections.

#### *Telecommunications*

Includes receiving and decoding commercial transmissions of financial and legal data (via Sprint international telecoms); which is edited in CTI by subject, and sold on to subscribers in print or by diskette. Fax facilities are available to businesses; as are 'client server' facilities, and world data transmission.

#### *Library supply*

CTI had just contracted to supply books various company and public libraries of the area - a role formerly undertaken by the state, from central funds. A display/approval set of books was seen, which had just been used by librarians as the basis for selection and ordering via CTI from publishers.

#### *Information systems development*

CTI had developed and sold automated systems to replace the formerly centralised systems in local public administration (social services, health, state pensions, education etc.). Some of their systems were said to be in use in 57 different regions; and the Russian government had contracted CTI (with several other firms) to develop certain of these as a national system.

#### *Training centre*

From impressive facilities with up to date IT teaching equipment, CTI were offering basic, business orientated courses in IT, office software (MS Word, Lotus) etc.

#### *Technical services*

This successful, commercial service supplies and installs a great variety of office equipment - telephones, copiers, microcomputers, fax machines; and services it afterwards. It is the biggest department of CTI, with 40 staff; bringing in 20% of the income.

#### *Advertising and Publishing*

Originally set up to produce CTI's own information products, this section now offers its desktop publishing services to clients. There is a same-day service for the production of leaflets, brochures, etc.; equipped with a scanner, micros, DTP software, and a copier. An alternative service undertakes higher quality, colour, larger jobs. In the 'publishing' complex there was an impressive array of printing and binding equipment, currently being used for book-sized productions. 3 'computer programmers' are attached to the department. Thus CTI can create complex publications of commercial standard; but requires more large jobs/print runs to be truly profitable. It has the attraction for clients of combining in one 'firm' a wide spectrum of technical publishing expertise and resources.

#### *Video Studio*

This department was set up 3 months ago, with the capacity to make broadcast quality TV programmes. Several had already been made, and a number of adverts for local companies; and CTI had been contracted by the Chuvasha government to produce a twice weekly local business programme. The material appeared of good quality (SVHS standard, not Betacam), and there were new contracts from Chuvashia state TV and radio; however CTI said they lacked investment for the service.

*Consultancy Department*

4 or 5 staff (a lawyer, economist, management consultant; IT and information specialists) provide companies with advice on start-up; and on preparation of documents; other experts are contracted as necessary. CTI staff have expertise in certain of the industrial technologies prevalent in the region.

*Databases*

CTI is a major producer of databases relevant to the region, including of business information, and geographical data. It makes these available to subscribers online, or to visitors to the centre. A major new company information project involves visiting the 22 district registration offices, and sending questionnaires to firms. This 'Enterprise' database of Chuvashia companies currently includes ca. 2,500 firms; an estimated 30% of the total; which should increase to 80% by the end of 1995.

*Certification and accreditation of hardware*

A new CTI activity supported by RosComInform, involving testing electrical and electronic hardware to national and international standards, and if appropriate and accrediting it. This is partly for purchasers of hardware; so that it can be evaluated, and if necessary suppliers pursued under consumer law; and partly to encourage suppliers to submit their products to testing which could help promote them.

*Information Analysis*

A section not specifically visited - its work includes receiving and distributing incoming enquiries to appropriate sections, and answering requests for information. 'Information analysis' is described in a recent CTI business plan (in English) as: working out of business plans; identifying business partners; instruction and consultation; carrying out marketing surveys; business courses; organisation of seminars; conferences exhibitions.

*Commercial Centre*

This is CTI's showroom for the IT, electronic and office equipment it sells. Only high quality upmarket (imported) brands are stocked, for which there is a niche market; these are aimed at both private individuals and companies. CTI has the added selling point of the on-site service centre; which has exclusive service contracts with Epson and Sony.

*Problems*

Finance is uncertain and insecure, the centre and others like it exist at this pioneering stage on various short-term and unpredictable public sector grants and contracts. They fear they have insufficient capital to develop enough to prove themselves. There is as yet little income from the centre's services; and many services though desirable for SMEs, may never be profitable. The Director and staff feel a lack of knowhow in supporting small businesses in a market economy; they especially need staff with expertise in business consultancy. Though there is a perceived need to extend services to the local level; and a Russian InfoCentres plan do so, present resources have only to date allowed the opening of CTI branches in two of the larger towns (with representatives in other towns, and in Moscow).

### Conclusions

Surprisingly there is no separately identifiable Information service, or enquiries section; and information service does not figure in the brief version of the recent business plan.

'Information services' are listed as one of four categories of activity in another (English language) prospectus, with Analytic services; operational services; training. To the extent to which it is carried out, this function seems to be divided between several departments, including Information Analysis, and Databases. There does not appear to be very systematic exploitation of available sources to answer enquiries. No formal or informal list of sources/resources available in/to the InfoCentres network appeared to \*exist, and staff were not generally aware of the existence of the Russian database host 'Olvit'.

\*According to Mr Doenine of Russian InfoCentres, there is such a database.

Despite the volume of database resources apparently available to CTI from local and remote sources; there appeared to be little collection or exploitation of printed reference sources. The newness of the service, and lack of money were given as reasons; and it was suggested that other partners in the InfoCentres network were relied upon for this. However no strong local or national collections of business information materials were known; and public sector library services were said to be as yet uninvolved in business information, and in a poor state.

(Though CTI 'had begun working with Moscow and regional libraries'). It was my impression that CTI information staff were unaware of the nature and role of the kind of information services considered to be an \*important element of business support in other countries. In the UK 'Business Link' system for instance, 'information' is considered to be one of the three strands of service; as important as 'advice' and 'support'. There it mainly means supplying information in response to specific enquiries; while in InfoCentres it seems to mean giving the user access to a range of databases.

CTI staff probably also lacked of awareness of the information sources and services outside their own organisation, and of professional information management and research techniques in general.

Russian name	:[Moskovskoye Agenstvo dlya Razvitiya Predprinimatelctva]
English translation	:Moscow Agency for Development of Entrepreneurship
Abbreviation, if any	:MADE
Address	:
Activities	:Business consultancy
Notes	:includes work with Moscow Foundation for the Development of Small Businesses (MADE)
Visited	:Visited by H. Nicholas, Aug. 1995
Contact person	:Elena Emelianova, General Manager

Russian name :[Institut po Problemam Vuichislitel'noy Tekhniki i Informatiki]  
 English translation :Institute for Problems in Computing Technology and Informatics  
 Abbreviation, if any :  
 Address :  
 Activities :Coordination of developments in the field  
 Notes :Mentioned & recommended by Mr Kustarin, TCI, Cheboksari  
 Visited :Not visited  
 Contact person :Mr Michaelov (?)

Russian name :  
 English translation :Moscow Research and Development Centre  
 Abbreviation, if any :MNITZ  
 Address :  
 Activities :Research and consultancy service of Roscominform (?)  
 Notes :MNITZ work includes collaboration with TECO on consultancy and contracts for the development of the InfoCentres; joint authors of the *Creation of a network of consulting firms . . .* proposal, 1995.  
 Visited :Not visited  
 Contact person :Mr V. Bikov

Russian name :[Rossiskii Natsionalny Kongress dlya Informatsii i Telekomunikatsii]  
 English translation :Russian National Congress for Informatics and Telecommunication  
 Abbreviation, if any :  
 Address :5 Lublanskiy Prospekt, Dom 5, 101958 Moscow. Tel/fax: 095-921-4739.  
 Activities :Trade organisation/professional association with the aim of coordinating the relevant industry organisations  
 Visited :Not visited  
 Contact person :Dr Y. Savostitsky, IAS (Committee member)

#### Report

##### Documents obtained

Explanatory sheets, incl. constitution (in Russian)

Russian name :Rossiskii Informatsionny Resursii  
 English translation :Russian Information Resources  
 Abbreviation, if any :RosInformResoursii  
 Address :  
 Activities :National dissemination system for S & T research  
 Notes :Referred to by V. Goubanov, Min. for S & T  
 Visited :Not visited  
 Contact person :

Russian name :Mezhdunarodnii Byuro Informatsii i Telekommunikatsii  
 English translation :International Bureau for Information and Telecommunications  
 Abbreviation, if any :MBIT  
 Address :  
 Activities :Publisher and distributor of business (and other) databases  
 Visited :1.9.95  
 Contact person :Mr Igor Ashurbeily, President

## Report

### Activities

MBIT was established the day that private businesses were legalised, in 1988. Despite its name, the company's activities are today centrally rooted in the emerging business information industry: as business database producers; and as publishers and distributors of about 1,000 databases of other producers. Sales were made from the Moscow premises (which was by no means central, prominent or a shop-front); the majority by mail. MBIT is seeking a foreign partner which might invest in its Russian business information products, so that they can be improved for distribution abroad.

One of their own major publications is Russian import/export statistics; data covering ca. 10,000 Russian enterprises acquired from the customs authority; available in print, diskette, and online via hosts including OLVT. Quite elaborate analyses can be made using the electronic versions, such as calculating value in dollars by SIC code. Another publication is a trade directory for Moscow; ie a directory of companies and products or services; based on advertisements and announcements appearing in the press. Apparently it can also be used to roughly calculate advertising expenditure. This is also available in electronic and printed form, the volumes selling at only \$3 each.

A third major product is *Information on Information* (translated title), in 3 volumes: v. 1 Details (provided by the organisations) of about 1,200 'information industry' organisations (this includes libraries) and their products and services. v. 2 Major personalities from those organisations; entries by invitation. v. 3 Full information about the products and services. There are sections for example for online hosts (73 of them listed), and global online networks (71 listed).

### Conclusions

MBIT was impressively go-ahead and dynamic; its products seemed of high quality and relevance to business' needs today. However the President emphasised that it depended entirely on sales, in a market which was depressed, and immature. Unless the economy improved soon, and business began to appreciate the value of MBIT's products, or a foreign partner with capital and access to foreign markets was found; the company could not succeed.



Russian name	:Torgova-Promuishlennaya Palata Rossiskoy Federatsii
English translation	:Chamber of Commerce and Industry of the Russian Federation
Abbreviation, if any	:Russian CCI
Address	:
Activities	:National chamber of commerce, and parent body for all the CCIs in Russia
Notes	:non-government, non-profit organisation
Visited	:5.9.95
Contact person	:Mr Valeri Vlasov, International Export Department

## Report

### Structure

This national chamber was established in 1993 to 'unite and coordinate the 80 or more regional chambers which set it up. Some regions have more than one chamber, but all are part of the same national organisation.

### Activities

The 'unified information system' was the first step in satisfying the regional chambers' information and communication needs. There is further information on UIS in the English language article 'Unrestricted system of business information in Russia is a reality' (4 - pages 2 - 4). PCs with modems are put into each, linking them with each other and with the centre; and thus beyond. They contribute information in a format compatible with European Union norms to create a central their own database; and can also access to the external databases (legislative; company information) which the central chamber hosts for them.

There has been some formal involvement with the Government's current programme for SME support, in particular setting up with RosComInform and 14 other shareholders, the Russian version of the EU's BC-NET, the 'Russian Business Cooperation Network' - a joint stock company. It's objective is to bring Russian businesses, via their regional chambers of commerce, into contact with European and American partners.

The modest fees for membership of regional chambers include nearly free access to the above information resources, where an operator is available to give them the help they need in searching online. Information needs not satisfied in this way can be passed to the centre, which collaborates with other organisations, including foreign chamber of commerce organisations, to assist. A selling point of chamber membership is this network of resources, and favourable rates which can be negotiated by the national body for shared access to databases etc.

Businesses which are not chamber members have access to the information services; but at a higher cost. Small firms predominate as members, and membership is said to be not very high; related to businesses lack of awareness of the value of information - "there is a big education job to do".

In common with the other business information services seen in Russian, this system was not based on a library or information centre; in fact there was apparently no significant collection of conventional sources, and no central service where information professionals manage and exploit in-house and remote sources. Mr Vlasov explained that the chambers' services to members did not duplicate the InfoCentres' services in regions; rather they complement each other, and cooperate.

Russian name	: [Informatssionny Registr: Nauchnii i Tekhnologicheskii Tsentri]
English translation	: Informregister: Science and Technology Centre
Abbreviation, if any	:
Address	: see card
Activities	: Responsibilities under RosComInform for accreditation and documentation of Russian databases; electronic (etc.) publisher
Visited	: 5.9.95
Contact person	: Dr A.B. Antopolsky, Director of Info. Science; K. Vigursky, Deputy Director

## Report

### Structure

Informregister is a government agency, under the Ministry for Scientific and Technical Policy. They have 40 staff, 8-10 occupied with each of its main activities.

### Activities

The activities are concerned with assuring the quality of databases; especially databases created from public expenditure:

- i. For RosComInform they monitor Russian database production, and report back via periodic reports in *Nauchno-tehnicheskaya Informatsiya* . (*Scientific and Technical Information*). The main result is a regularly updated catalogue of Russian databases of all subjects, which is published in floppy disk and printed form. *Bazy Danykh Rossii* (Databases of Russia: catalogue, 2nd ed., 1995) (5) now has 1884 entries (2nd ed., 1995). Informregister say that there are at least 4 other published bibliographies of databases, but most are based on Informregister data. Informregister Directors estimate that about 10% of all Russian databases are available online (via hosts or direct from the producers); most are distributed on floppy disk.
- ii. Also for RosComInform, Informregister is concerned with database quality, through inviting producers to submit their databases for testing and certification. Russian standards are being developed, based on international ones. Currently certification is voluntary; but it may become compulsory for publicly funded databases, and those containing personal information.
- iii. New legislation requires from January 1996 producers to 'legally deposit' copies of electronic documents to Informregister. Thus databases etc can be systematically catalogued, and made available for public reference - Informregister is in the same building as a branch of GPNTB, the State Public Library for Science and Technology - ie legally deposited printed materials. All informational CD-ROMs are included by the legislation, though electronic entertainment will probably not be claimed; computer software is or will be deposited, to another institution.
- iv. Informregister has also begun to create and publish its own electronic products. Its first CD-ROM was a collection of 16 classification systems (including 5 library schemes, Russian SIC, etc.). More CD-ROMs are in development, including a scholarly collection of a Russian playwright's works, criticisms of them, his letters etc.; and elaborate software for its analysis.

Russian name :Gossudarstvennii Komitet po Statistike  
 English translation :State Committee on Statistics of the Russian Federation  
 Abbreviation, if any :GOSKOMSTAT  
 Address :  
 Activities :The Russian agency for the collection and dissemination of official statistics  
 Visited :Not visited  
 Contact person :

### Report

Much of Goskomstat's work and statistical publications are of obvious importance to business; especially in providing information on markets (ie statistics of population, consumption, production, etc.). Some of their statistics are available in electronic as well as printed form. Despite the severe reservations which users currently have about quality, it is vital that government improves this primary source of information, and that all business information intermediaries are aware of it.

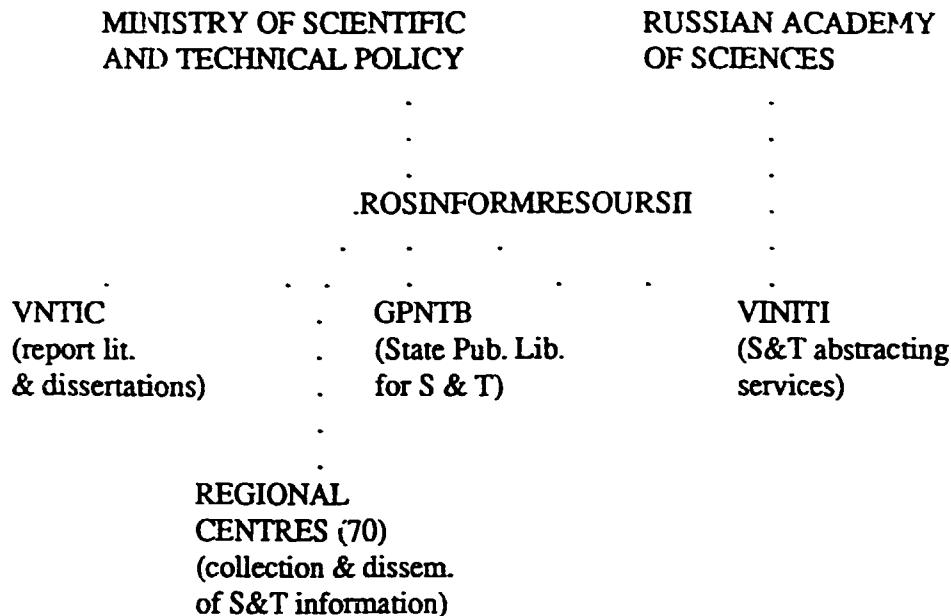
Russian name :Ministerstvo Nauchnoy i Tekhnicheskoy Politiki  
 English translation :Ministry for Scientific & Technical Policy  
 Abbreviation, if any :  
 Address :email: stidep@stidep.minntp.msk.su  
 Activities :Policy, management, and dissemination of results, of state funded R &D  
 Notes :Parent body of RosInformResoursii (national dissemination system for S & T research, incl regional network of information centres); VINITI (S & T abs & ind. services); VNTIC (documentation of state funded research reports); and GPNTB (State Public Library for Science and Technology)  
 Visited :6.9.95  
 Contact person :Vladimir Goubanov, Head of Science & Technology Dept

### Report

#### Structure

Mr Goubanov states that most of the elements of the state structure for scientific research and development have survived Perestroika, and remained in the public sector. (Others claim that due to reduced expenditure on both R&D and its dissemination, the structure is a shadow of the former one). The responsibilities of the Science and Technology Department include the support of VINITI (S&T abstracting services), and GPNTB (State Public Library for Science and Technology); and \*VNTIC (reports of state funded research).

The relevant structure under the Ministry is as follows:



#### Activities

Mr Goubanov explained that the above structure remains quite strictly concerned with scientific and technical information; 'business information' is not their responsibility. Information on other subjects are the responsibility of other relevant ministries; none of which has an equivalent of VINITI, though information functions are performed for them by now privatised departments. Despite this assertion, staff of GPNTB have published articles describing moves towards providing *business* information; for instance:

*Creation of the library's Office of Business Information*[translated title]. A. Zemskov et al., Russian National Public Library for Science & Technology (Ref 3).  
From abstract: "The main purpose of this structure is to provide library users, the representatives of enterprises, research organisations, firms and foreign companies with legal, economic, statistical and commercial information . . ."

It proved difficult to contact the library, for further information or a visit; but it is possible that what has been developed is not a business information service, but a collection of business *management* texts, sponsored by a Western consulting firm. Certainly none of my contacts was aware of this, or any other significant collection of *business information* resources in Moscow.

\*VNTIC: Apparently Silver Platter publish a CD-ROM of the abstracts produced (in English). The Centre is trying to automate further, and seeks assistance and advice; from for example UNIDO.

Russian name : **Mezhdunarodnii Tsentr po Nauchnoy i Tekhnicheskoi Informatsii**  
 English translation : **International Centre for Scientific and Technical Information**  
 Abbreviation, if any : **ICSTI**  
 Address :  
 Activities : **The Russian centre for this international S & T information system**  
 Notes : **contributes to, and has access to data on the resulting database/s)**  
 Visited : **Not visited**  
 Contact person : **Alexander Butrimenko (mentioned by Mr Goubanov, of Min. for S & T Policy)**

### Report

Represents Russia on ICSTI; the International Council for Science and Technology. This was the state agency said to be originally responsible for accessing and providing access to foreign scientific and technical databases. Since Perestroika, its objectives are less political and more commercial; it is concerned with business as well as scientific information. The Centre has been the agency 'distributing' UNIDO's databases in Russia.

Russian name : **Moskovsky Gossudarstvenny Universitet Kultury, (i) Fakultet Upravleniya i informatiki; (ii) Bibliotchnii Fakultet**  
 English translation : **Moscow State University for Culture, (i) Faculty of Management and Information systems; (ii) Faculty of Librarianship**  
 Abbreviation, if any :  
 Address : **(i) Tel: 095-570-3322 Fax: 095-570-0444**  
 Activities : **First degree level programmes for library and information work**  
 Visited : **24.10.95**  
 Contact person : **(i) Dean: Prof. Konstantin W. Tarakanov; (ii) Dean: Prof. Mazuritski**

### Report

There are said to be approximately 16 institutions in Russia training librarians for traditional and humanities oriented libraries; almost all attached to institutes of culture in universities. They do not prepare the staff of RosInformResoursii science and technology information centres, who are primarily scientists, with professional training provided in-post by the Institute for the Advanced Training of Information Specialists. There appears to be no nationally agreed system of qualifications for professional library and information posts. This University does not use degrees nomenclature for its (5-year) programmes - they are said to be higher than bachelors level, and lower than masters level. When asked about the involvement of librarians (and library education) with business information, the professors pointed out that librarians were normally associated with the humanities; with the management of printed sources for cultural purposes, rather than with electronic sources and information provision. The University had no online access; and appeared to have very limited physical resources for teaching some of the subjects offered.

#### - Faculty of Management and Informatics

This faculty includes aspects of library and information work not falling within the traditional librarianship topics covered by the Faculty of Librarianship; ie apparently information services, information technology, and information work in a commercial context.

Students of the faculty take the first two years in common, then specialise. Specialisms in the final 3 years include advertising; economics and management; and information and library work. In the latter, options were mentioned in reference librarianship; information technology; and the management of commercial information services. All programmes include courses in the humanities; including English; and computing. Whatever the specialism, it appeared that all graduates were equally eligible to work in library/information posts. Each year approximately 15,00 applicants compete for the 100 state funded studentships; others pay for themselves.

- Faculty of Librarianship

The faculty offered various specialisms, including some treatment of documentation of management, and science and technology. However all were traditional and conservative librarianship topics.

Comments

Seeing and hearing about the work of these faculties, and their description of others in Russia, explains why professional librarians are nowhere to be seen in the expanding business information field. Despite high demand from students for places, the Institute appeared seriously under-resourced, and probably demoralised. The Faculty of Librarianship especially, seemed on course to meet only yesterday's needs; not those of today and tomorrow. It is possible to understand the dilemma of such Institutes and such faculties; it is difficult to make drastic changes of direction when you are locked into an inappropriate (ie culture/humanities) structure, lack the skills to do so, and you are demotivated by very poor salaries, status and resources. The impression given by the Institute coincided with the following report:

Low salaries leading to education 'brain drain'

Nearly a quarter of lecturers at higher education institutions have given up teaching careers since 1991 for new sales- and business related jobs offering higher salaries, according to the state Higher Education Committee. Anatoly Torkunov, head of the Moscow State Institute of International Relations said that his institute, like many others, is suffering from a 'walkout trend' which has led to a sharp decrease in academic standards. . . Heads of advanced institutes said in a recent poll that the condition of higher education was either disastrous or difficult, Vladimir Rodionov, a deputy director of the Independent Institute research centre said.

(Moscow Times, Oct. 24th, 1995, p. 3)

This all amounts to a very serious problem for the current and future library and information profession. Without major changes, in at least structure, policy, and resourcing, the higher education system is in no position to produce the professionals desperately needed in the emerging business (and other) information services. That is: people oriented to the needs of groups including business people, familiar with all the sources of information which are relevant, and able to manage and otherwise exploit them on the user's behalf.

Russian name :Institut Povishenia Kvalificatsii Informatcionnih Rabotnikov  
 English translation :Institute for the Advanced Training of Information Specialists  
 Abbreviation, if any :IPKIR  
 Address :22 Usiyevicha Ul., 12315 Moscow. Tel: 095-155-4538/151-7058 Fax:  
 095-151-7319.  
 Activities :Self-financing through the provision of in-service-training in a  
 range of information, management and other topical subjects  
 Visited :26.10.95  
 Contact person :Prof. Yuri Yu. Ukhin, Rector; Prof. Yuri Aroutiounov

## Report

### Structure

The Institute's parent is RosComInformResource, under the Ministry of Science and Technology Policy - though it was affirmed that government no longer directly provides a single ruble to the Institute. The Institute was created in 1971, primarily to provide the continuing professional development of the ca. 220,000 staff of the (former Soviet Union's - or Russia's?) scientific and technical information system. (The Institute's services were also available to information and library staff outside this system). All sectors of industry had a formal scientific and technical infrastructure; and the Institute had a central role in training information workers at fixed points in their careers.

### Activities

Now 6,000 persons per year attend part-time, or short residential courses; only 15% of whom are information and library workers. Courses are now concerned with 'information resources' in the widest sense; not just scientific and technical information service. The new curriculum includes 10 courses for banking professionals - e.g. plastic card technology; security of banking information; there are also many management courses, including on personnel management. The State Committee of General Education has licensed the Institute to offer courses in 20 subject areas; all related to the needs and practice of today - e.g. financial management (ca. 10 different courses).

An evolving group of information and library studies courses include apparently 'Income generation in libraries', and even a "small course in business information". Apparently there is demand from librarians for business information training; though the Professors could not name any developed business library or information service. They believed that TACIS was supporting certain 'business centres' which involved a business information service. The Professors were enthusiastic about the suggestion of developing a business information course alongside a foreign specialist in the subject, which they could repeat at the Institute independently. They also sought opportunities to study business information, and its training, in Britain.

Workers (presumably only in the public sector) are allowed by law a certain time off work to study relevant courses of their choice; with pay and costs. A minority of 'students' pay for themselves, and some are sponsored by the unemployment authorities. The Institute is proud that it has been a leader in developing teaching methods (management games etc.); though distance learning was not mentioned. It seems that courses are all taught through centres, including the RosComInformResource scientific and technical information centres.

There are only 15 full-time tutors, but around 1,000 part-timers are used every year; from industry and the professions.

Russian name	:Goskomitet po Podderzhke i Razvitiyou Malovo Predprinimatelstva
English translation	:State Committee for the Support and Development of Small Businesses
Abbreviation, if any	:
Address	:
Activities	:Coordination of the activities being carried out by different ministries and committees, under the government programme for the support of SMEs
Visited	:none
Contact person	:Vyacheslav Prokhorov, Chairman

## Report

### Structure and activities

Translated extract from newspaper report on press conference given by Mr Prokhorov, launching the Committee:

"In May, 1995, a federal law was passed for state assistance to small businesses, in June a decree was signed for the creation of the above Committee. Thus, SME's and their development become one of the most important objectives of the state's economic policy. The Committee has been charged with the implementation of state policy in the small business sphere, working out a financial and taxation policy facilitating the development of small business and is also responsible for checking that funds provided are being used effectively. In particular the committee is responsible for coordinating the activity of the federal fund for SME support. The Committee should also set up in its entirety an infra-structure taking in consultancy and information and financial assistance to SMEs .

Included in its functions: sharing of experience in the development of samll business, cooperation with international and commercial and public organisations in the sphere of support for SMEs."

"Prokhorov, in conclusion, gave his vision of the objectives for his Committee:

1. The creation of an ordered structure for the support of SMEs.
2. Enhancement of the image of small business and raising its profile amongst the population.
3. Creation of conditions for the development of small business through developing a legislative base, financial lending and the implementation of the federal program for the support of SMEs.
4. The attraction of private capital, including foreign investment, into Russian small business.
5. The creation of a system whereby the repayment of loans would be guaranteed.

Part of this guarantee should be undertaken by the government, the rest by the banks."

### Comments

The creation of such a high profile Committee, with such laudable objectives must be welcomed. Its stated role of coordinating initiatives being undertaken within the state support programme by different ministries, is understandable; as is its role in overseeing expenditure from the federal fund, and supervising loans to businesses. What is not so clear, is the



Committee's role in relation to GOSKOMPROM and RosComInform in for instance: "The creation of an ordered structure for the support of SMEs"; "... should also set up in its entirety an infrastructure taking in consultancy and information ... assistance to SME's. It is hoped that precise roles and responsibilities will soon be established by the bodies involved; and that government's very desire to help small business, does not have the effect of confusion; and prove counterproductive.

Russian name : 'Kerek'  
 English translation : 'Coats'  
 Abbreviation, if any :  
 Address : ... Cheboksari, Chuvash Republic  
 Activities : Medium-sized manufacturer of sheepskin garments  
 Visited : 25.8.95  
 Contact person : [Directors (father and son)]

### Report

A joint stock company of about 60 employees, founded and managed by a father and son who formerly worked in the state clothing industry. In response to the question about information needs, the directors only referred to information on taxation; especially avoiding it. They said they did not need information on competitors, or their products; or on retail outlets. They seemed largely unaware of the local InfoCentre's (CTI) services, and obviously had not made much or any use of them - they did seem interested when the services were described.

### Conclusion

The firm was very conservative in many ways; they said they were content to survive at the present size, had a virtual monopoly of a large enough local market; and were reluctant to expand and for instance find retail outlets in Moscow, for reasons of increasing taxation, and for fear of illegal 'competition'. It is probably typical of many such new firms that they have not yet felt the effects of competition, or seriously researched many aspects of their market. Their information needs are therefore undeveloped, and likely to remain so without effective promotion and education by all business support agencies.

Russian name : Maria  
 English translation : Maria  
 Abbreviation, if any :  
 Address : ... Cheboksari, Chuvash Republic  
 Activities : Sole trader, manufacturing, assembling and supplying office furnishings  
 Visited : 25.8.95  
 Contact person :

### Report

The firm had been quickly built up since the owner and some of his employees split from the former cooperative in 1992. Originally the only office furniture specialist, it was now among four or five leaders in Chuvassia. The owner's dynamism, and willingness to take risks was obvious; as was his very 'modern' businesslike style. He recognised the greatly increased need

for information which commercial status had brought, and was in close contact with the CTI InfoCentre. He works with foreign companies, collecting ideas and information from them and from exhibitions; but apparently using trade journals, databases and more formal information sources very little. He expressed needs to identify other companies, for various reasons, but seemed unaware of CTI's ability to help in this way. He also had pressing needs for technical information. The firm would also benefit from a monitoring service - e.g. for new office developments, and new products; for relevant new laws and regulations. Although CTI were willing to help, there was not much evidence that they were currently promoting such services, or able to provide them.

#### Conclusion

As a dynamic and ambitious small enterprise, 'Maria' did have considerable needs for commercial and technical information. The firm was ripe for such help from central and regional government supported institutions like CTI, but it seemed that CTI (and/or the InfoCentres network as a whole; as recommended elsewhere) needed to develop its information sources and services, then promote them very directly to such firm.

Russian name	:Avtovazbank, Cheboksari Branch
English translation	:
Abbreviation, if any	:
Address	:. . . Cheboksari, Chuvash Republic
Activities	:Branch one of major commercial and consumer banks
Visited	:24.8.95
Contact person	:Lev. E. Smirnov, General Manager

#### **Report**

Mr Smirnov was aware of his need for an information service. He was also aware that 'raw data' would not be of much use to him; he needed analysed and in-depth information. I interpret from this that he needed a service (such as CTI) to have access to sophisticated sources, but also to have the time and expertise to select and package the information required by the Bank Manager. Although his bank's head office should have such a service; there was a vital need for local information.

#### Conclusion

This is another business 'modern' enough to have identified information needs; and is thus a potential user of appropriate information services.

Russian name	:Radiophysika
English translation	:Radiophysics
Abbreviation, if any	:
Address	:123364, Moscow, Russia
Activities	:Computer and telecoms systems manufacture and supply
Notes	:Joint stock company
Visited	:4th September 1995
Contact person	:Boris Levitan, Vice General Director/Vice General Designer

## Report

### Structure

The firm was formerly part of the state enterprise working at the leading edge of high frequency location systems - presumably for defence purposes. It became a joint stock company (open share) with 80% of shares released to employees and public (employees hold 60% of the shares). There are now ca. 1500 employees, including 150 in the partly owned subsidiary 'Kami' - involved in the supply and servicing of various foreign companies' computer equipment.

### Activities

Today, telecommunications activities predominate; producing and buying-in equipment which Radiophysics integrates to create satellite communications stations, and mobile communications systems. Their other main area includes the production of computer hardware, and the design and installation of local area networks.

The firm was subcontracted for the satellite communication part a current \$147,000 UNIDO project (\$50,000 of which was contracted for the satellite component). Now that the infrastructure is in place, Radiophysics and other partners in the project are waiting for a decision on what it is to be used for.

### Information needs and use

The firms say they need and acquire both technical and commercial information; but that they probably do not invest sufficiently in acquiring it. Both have their own 'libraries', which they did not later mention in relation to their information needs and use. The Directors said they were aware of the need for information on competitors, the market, consumers, etc; but that accurate information was very hard to obtain. They said that official sources of such information were unavailable, and that the commercial sources disagreed greatly with one another in the information they gave. Thus they depended most on journals and personal contacts. They rarely used databases themselves, not having found them cost effective. When they needed e.g. to discover a foreign supplier, they paid a foreign information broker.

The directors did not seem to have heard of the Infocentres network; and had a very low opinion of public sector libraries, because they were suffering from lack of funds for journal subscriptions etc.

Russian name	:
English translation	: <b>British Council</b>
Abbreviation, if any	:
Address	:Biblioteka Inostrannoi Literaturi, Ulitsa Nikolo-Yamskaya 1 Moscow 109189. Tel: 095-9153511; Fax: 9752561; Email: Internet bc.moscow@british-council.sprint.com
Activities	:Generally cultural; also promotion of trade with UK
Visit by MAL	:4th September 1995
Contact person	:Rachel Roberts

## Report

The British Council is establishing certain services for business, in various towns in Russia; but is not concerned in the provision of business information as such. Rachel Roberts has

joined the Moscow Office to set up information/resource centres to promote British business to Russian businesses. BC Moscow and its own Resource Centre is currently housed in the 'international centre', as are the American and some other countries' equivalent services and libraries. The Rudomino Library (the State Library for Foreign Literature) is also located there; and is an unusually well endowed and developed state library. None of the various libraries is known for its business coverage, or business information service.

## References

1. Business planet. *Register*, Winter 1995, 12-13. (article in the UK Companies House newsletter on their consultancy work on systems for the legal disclosure of company information, for the Russian Government)
2. Sergei Glaziev Don't believe in miracles. *Business in Russia*, no. 58 July/Aug 1995, pp 34 - 35.
3. Creation of the library's Office of Business Information [translated title]. A. Zemskov, Y.L. Shraiberg, S. Osharina, O. Putilina, Russian National Public Library for Science and Technology. *Nauchno-tekhnicheskaya Informatsiya (Scientific and Technical Information)*, no. 2 1993. (From abstract: "The main purpose of this structure is to provide library users, the representatives of enterprises, research organisations, firms and foreign companies with legal, economic, statistical and commercial information . . .")
4. 'Business World' in *Business Contact*, special survey: 'Business Information in Russia'. Moscow: Russian Federation Chamber of Commerce and Industry, (1995?) (in English).
5. *Bazy Danykh Rossii* (Databases of Russia: catalogue, 2nd ed., Moscow: Informregister, 1995)
6. *Project: Creation of a network of consulting firms to support small and medium business in Russia*[proposal to UNIDO]. Moscow: Moscow Research & Development Centre; Committee on a policy of Informatisation, Administration of the President of Russia, 1995.

### Other relevant source noted

Konn, Tanya. The Internet and Eastern Europe. *Information World Review*, Dec. 1995. (includes descriptions of the Russian information resources, including business ones, and 'Russia's main Web server Windows-to-Russia' on the Internet).

# internet developments

24

DECEMBER 1995 INFORMATION WORLD REVIEW

## The Internet and Eastern Europe

In recent years, the countries of Central and Eastern Europe (CEE), including the new republics of the former Soviet Union, have established a considerable presence on the Internet. At the same time the growing interest in CEE issues and developments is reflected in proliferating CEE-oriented electronic services throughout the West. The results, for CEE information seekers and providers, have been described as "wonderfully chaotic".

Like everyone else with serious intent, CEE specialists using the Internet have to ignore the drawbacks and concentrate on getting the best out of what is on offer. A great deal of useful CEE information is accessible through the network in English, as well as in the national languages. For some of the latter, employing Cyrillic alphabets, special software is needed. Obviously the following groupings are not mutually exclusive, and neither do they exhaust the range of what is available, but they are representative of a dynamic current scene.

### General

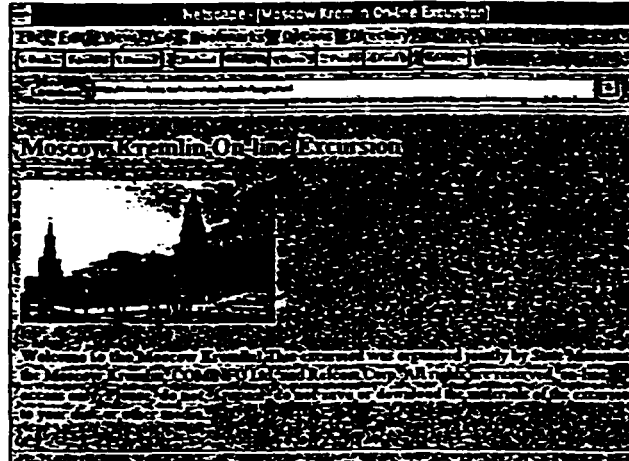
REESweb Russian and East European Studies, sponsored by the University Center for Russian and East European Studies at the University of Pittsburgh, provides extensive and generous coverage of CEE sources.

It is the most comprehensive of servers, and the first recourse when exploring the availability of material on the Internet. Sources are grouped under six broad subject areas — Language, Literature, Music, Art, Culture, Government and Public Affairs, Science, Technology, Engineering, Computers, Communications, Business, Economics, Law, History, Geography, Sociology. There is a Directory of Internet Resources by Type (document repositories, interactive databases, etc.) and a listing of national home pages and major sites that are valuable guides in themselves for specific country searches. Monthly updates of new material are provided.

Another server with extensive sources coverage is Friends and Partners, one of the first information services to be developed jointly by the USA and Russia. This service is sponsored by Sun Microsystems, NATO, International Science Foundation and RELARN. The most important Russian server is Relcom's Window-to-Russia.

### News

News services are well represented on the Internet. Most countries in the region, as in the West, now offer a variety of commercial and free services. OMRI Daily Digest, probably the best



Russia's main Web server, Window-to-Russia covers everything from art to business.

known, comes in two parts, one covering the former Soviet Union, the other Central Europe. OMRI is the successor to Radio Free Europe/Radio Liberty.

Then there is the daily Monitor from the Jameson Foundation in the US, which covers the former Soviet Union (e-mail: [web@jameson.org](mailto:web@jameson.org)). Analytica, from Carleton University, has a series of three weekly newsletters covering economics, politics and general news and is highly respected, but these are not free.

The Monitor Week, a lively commercial print source of general and business news, has recently gone online through the Web (<http://www.comus.com.pl/monitor/>). Bulgarian Daily News is available in similar fashion (<http://www.psa.edu/dn/1913261874>). Hungary Report, which provides weekly news free of charge is available at <http://www.jak.net/hungary-report/>. Romanian Press Digest, from Balkan Media Group Inc., provides English-language coverage of the news at <http://www.balkan.com/romanp/>. There are numerous other similar services.

### Business

The scope, depth and presentation of CEE business news and data have been transformed in recent years — a direct result of the economic

revolution that has been taking place.

For example, CET On-Line is a free daily business digest sponsored by, among others, The Economist and Andersen Consulting. Romanian Economic Indicators is a new Web page at UCLA with statistics updated every 48 hours (<http://www.econometrics.uci.edu/indicators/romanian.html>). Prague Financial Monitor is a weekly newspaper's newsletter providing up-to-date information about the financial markets of the Czech Republic. It is free (e-mail: [prague-fm-report@com.cz](mailto:prague-fm-report@com.cz)). A & G News from St Petersburg supplies business news culled from the Russian press. The newsletters included in the service cover company and financial news, privatisation, markets, legislation and politics. (e-mail: [spbnr@com.ru](mailto:spbnr@com.ru)). Based in the US a Russian Business News from Russian Business Ventures, a commercial business news magazine (e-mail: [rvb@com.ru](mailto:rvb@com.ru)).

Russia's Institute For Commercial Engineering provides the InfoMarket server — billed as "the best source of commercial information about Russia available on the Internet". It supplies information on Russian shares, securities market laws, market indices, and much else besides.

The Centre for Co-operation with the Economies in Transition at the OECD in Paris now has

The Internet and Eastern Europe was compiled by Tania Kenn, Information Specialist Eastern Europe at the University of Glasgow.

She can be reached at [Tania.Kenn@ib.gla.ac.uk](mailto:Tania.Kenn@ib.gla.ac.uk)

information available at the CCET OECD Centre. Early items included lengthy extracts from the much published *Economic Survey of the Russian Federation-1995*.

The efforts of the US government to promote business information online are impressive. For example, the National Trade Data Bank provides wide information collected from more than 20 Federal agencies covering such topics as export opportunities, foreign companies looking for partners and socioeconomic information. The Data Bank includes CEE countries as part of its worldwide coverage. Access to these can be found at <http://www.ntdb.gov/IBEN/summary/idx.html>. In this category, there is also CEEBICnet, produced by the Central and Eastern Europe Business Information Centre. It is updated daily with information and developments on investment, commerce, economics, trade fairs and conferences.

### Legal

The legal structure of East European countries is still in transition. It is important in such circumstances to gain swift access to legal documents, decisions and interpretations. Developments in this area have not been as rapid as in other sectors, but the potential of the Internet for remote communication is beginning to be exploited.

Russian Legal Server (<http://online.rls.ru/online/ru/mon.html>) gives access to legal and related information concerning the Russian Federation. Some of this is in Russian and therefore, Cyrillic. Russian Law, which provides texts of legal documents in Russian, is a primary and comprehensive source (<http://www.infors.ru/ru/>).

There are also discussion lists enabling legal practitioners, businessmen, and other interested parties to share information on new laws and regulations like, for example, FPLegal (e-mail: [fplegal@online.nl.nl.edu](mailto:fplegal@online.nl.nl.edu)), which is a part of the Russian Legal Server and covers all of the CIS. Another is EELAW-L for discussion of East European law (e-mail: [lawyer@era.polina.yale.edu](mailto:lawyer@era.polina.yale.edu)).

### Academic

Academic interests are well represented on the Internet, as reflected in the large number of bibliographic databases, conference announcements, boards, journals, discussion lists and archive material dedicated to furtherance of CEE research.

A most important bibliographical source is ABSEES Online — the electronic version of the hard-copy American Bibliography of Slavic and East European Studies, which contains citations for

## Multimedia Packaging

BOXES • BROWSERS • MAILERS • VACPACS

We manufacture a complete range of purpose-made Software Packaging Products which will fit your own marketing and sales profile. Our SmartPacks™ range of fully customisable printed board will hold your CD-ROMs, 3.5" Disks, manuals & collaterals, and we also have many off-the-shelf retail-ready Packs to suit all kinds of purposes and budgets.

Call the Complete Business of Software Manufacturing

**data** packaging

Tel: 01865 842224 Fax: 01865 841507  
The Data Business Ltd Barkside, Kidlington, Oxford OX5 1JE

See us on  
Stand 456  
Online Information 95

See our brochure on <http://www.webcom.com/~dret/>



## Direct Data Capture Ltd

Reduce your costs — have your data converted off-shore

Low Cost Data Entry

FAST EFFICIENT TURNAROUND

EXCELLENT LEVELS OF KEYING ACCURACY

Our 'onshore' offices will ensure that your data is picked up from your premises and returned to meet your deadlines. For cost effective solutions to your data capture requirements...

Contact: Brett Trevelyan on 01695 570707 FAX: 01695 570722  
73a Ormskirk Business Park, New Court Way, Ormskirk, Lancs L39 2YT, UK  
Company No 1003311043

a wide range of CEI related materials published in the USA and Canada is a searchable website change until the end of the year.

Conferences, programs, publications and services are listed on Social Sciences in Eastern Europe. Neighbors from the Social Science Information Center in Berlin (E-mail: [library@socsci.gwdg.de](mailto:library@socsci.gwdg.de)). Academic journals, the journal of academic conferences, are being regularly monitored & review (example in Science Review), a scholarly quarterly of high standing (<http://www.socsci.de/ScienceReview.html>). Discussion lists abound. Some examples are: Eurasian Studies for the exchange of information and discussion in the US (E-mail: [subscribers@eurasianstudies.org](mailto:subscribers@eurasianstudies.org)); Eurasian Studies of the Eastern Bloc Countries, a new list concerning the period 1945 to 1989/90 (E-mail: [eurasianstudies@mail.rockwell.edu](mailto:eurasianstudies@mail.rockwell.edu)); POLAND-L, a discussion list for Polish culture and current events (E-mail: [POLAND-L@groups.aigtek.edu](mailto:POLAND-L@groups.aigtek.edu)).

A specific development for scholars relevant to have the first available of CEI related material. This includes the formation of a web-based one of the latest general sources, written and published. One example is Eurasianism from the Russian Network. Research notes concerning an article can be accessed through subject matter (subject matter) in the list. In one example, Danilchev and the CEI countries have adopted the Internet with enthusiasm. The Eurasianist information article that has included often reprinted and ongoing paper for communication and search the region. In one for years, an information revolution has taken place. However, a word of caution is necessary. The explosion of services on the Internet, in an other words, has not been accompanied with rigorous quality control. Users have to be wary. There is a source, however, of a promising source for quality information. This concrete trend will indicate the real measure of development.

### Eastern Europe Hot List

NEWS web: An excellent starting point. Offers some of the most comprehensive listings and hot links on the Web. <http://www.pc.edu/~ryg/usa.html>  
 Friends and Partners: An excellent starting point for Russian information in Good links to a wide range of resources. <http://www.net.adelphi.edu/~fpa/usa.html>  
 Balkans Windows-40-Browsers: The main WWW server for Russia. Information on everything from art to economics. <http://www.baw.us/usa/usa/>  
 Analytical: Weekly newsletters on politics, economics, and general news from Columbia University. Currently offered: \$150 per semester plus E-mail subscription. [usa@usa.columbia.edu](mailto:usa@usa.columbia.edu)  
 OMOID Daily Digest: Latest news from FSU and Central Europe in two languages. Free <http://www.socsci.uzh.ch/OMOID.html>  
 CET On-Line: Daily business newsletters covering Eastern Europe. Free. <http://www.socsci.uzh.ch/infocet.html>  
 InfoWebster: Incredible source for Russian commercial financial information. <http://www2.f.uh.edu/~infowebster/infocet.html>  
 CETI OECD: The CETI OECD Web site currently contains online information on the latest Economic Survey of the Russian Federation. <http://www.oecd.org>  
 CESSION: US Government's Central and Eastern European Business Information Center which provides daily updates on developments, economic, commercial, agricultural. <http://www.usinfo.org/usa/ce/ce.html>  
 AMERRES Online: American Bibliographic of Africa and East European Studies Online which contains bibliographic citations for journal articles, government and research reports, dissertations, books, and chapters of books published in the US and Canada. Tables: general list, etc. — <http://www.amerres.org>

## Engineers on the Internet



Engineers on the Internet were compiled by Sheila Theissen, Principal Information Scientist at TWI. She can be reached at [twi@twi.com](mailto:twi@twi.com) or [twi@twi.net](mailto:twi@twi.net).

I work in the Information Services arena at TWI where we do a wide variety of work on the Internet and other technology solutions and the marketing of data and other online products to an international TWI is a research and consulting organization specializing in joining technology. We are interested in the success of the applications of group, and the characteristics of change over time. TWI has Industrial America companies. I would like to do a project for a research organization at TWI in reference to a pricing engineer with a well-developed problem on the other side of the globe. Or create someone in about to start a personal new website company — perhaps the Internet can help here.

I have been hoping to get open for Internet resources that might be useful to TWI for over a year now. I am a little disappointed in what I have found — there is a vast amount of information but not much real value. This is particularly true of engineering resources. The WWW will not replace our traditional means of getting information using the online base but there are a few things you do for us: we do difficult or expensive to do by other means.

**Manufacturing**  
 The Internet is used to a large extent, the domain of computer engineers so it is not surprising that the majority of manufacturing data projects, especially those dependent on hardware, are technical engineering and science. Good starting points to cover the area are the WWW Project <http://light.com.com/22117r/wwwproject> and <http://www.net.com>.

**Professional institute activities**  
 There is very productive activity in professional kind of information. Most of the existing professional organizations with WWW pages are listed in the directory their publications, electronic, computer, other meetings and training centers. An example is American Society of Mechanical Engineers (ASME) <http://www.asme.org/> and TWI <http://www.twi.com>.  
 Research organizations and universities: Frequently organizations with reports of research papers which can now be published online, available in full text. This is the factor we have found to look at what areas of research primary engineering departments or projects are known and can be very useful when seeking research papers. Many of new work can be available here before it gets into traditional print.  
**Commercial companies, industry press and patients**  
 We do not have to search for the Internet. Many have been doing so to look for the primary information. If a company has a WWW site then a very good way to find out how they present information and what they think is important to tell is to visit about their activities.  
 In addition to company-specific sites, industry press sites are also valuable to search out: trends and events. Some areas of interest are: 24

## Put the power of STN<sup>®</sup> International to work for you

To meet the demands of a fast-paced work environment, to get the right information when your research needs vital scientific decisions, you need a premier source to turn to. The distinction on STN International provides you access to a wealth of information on a broad range of scientific and technical fields.

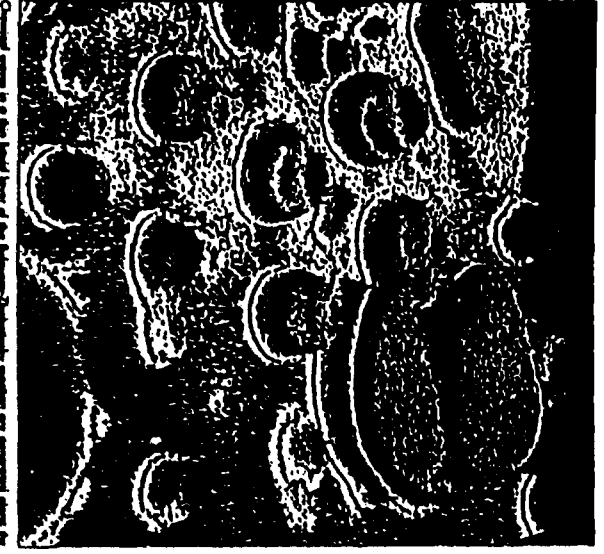
A convenient one-stop shopping source, STN's chemical databases are central to chemists, S & CA and Cash, REGISTRY, ELISTEN, CASREACT, CHEMFORWARD, CHEMREACT, GEMIN, ANASTR, CINA, CN, to name only a few.

You'll find a concentration of the world's leading databases in bio science and pharmacology on STN, among them BIOS, BIOCHEM/BIOTECH, CANCERIT, Derwent Drug File, EMBASE and EMBL MEDLINE, NICK, TOXLINE and TOXNET.

STN excels as a provider of worldwide patent information, combined in databases such as: Derwent's comprehensive World Patents Index with images from the original patent, INPADOC, PATDATA (with integrated patent profiles), the PATCO files, USPATVUL (with full text of U.S. patents), the FICDAMS files, JAPVO, etc.

To be introduced to the ONLINE/CD-ROM INFORMATION 95, the two Derwent databases, Patent Creation Index (PCI), containing citations of the examiner as well as of the inventor, and GENESIC, with information on nucleic acid and protein sequences from patents, will be valuable additions to STN's comprehensive patent data.

For more information, please contact your STN Service Center:  
 STN International 416 St. Catherine St., Montreal, PQ H3B 2Y4, Canada  
 STN International 3100 Central Expressway, Fremont, CA 94538, USA  
 STN International 2500 The James Watson Center of Science and Technology, 53 Whitehead Crescent, Shepparton, VIC 3620, Australia  
 STN International 449 The James Watson Center of Science and Technology, 53 Whitehead Crescent, Shepparton, VIC 3620, Australia  
 Tel: (416) 724/2085, Fax: (416) 724/2085  
 Tel: (916) 724/2085, Fax: (916) 724/2085  
 Tel: (011) 812/442379, Fax: (011) 812/442379  
 Tel: (011) 53714413, Fax: (011) 53714410



Controlled system in a thin liquid layer of the biological. Randomly motion are generated along the boundaries of membrane cells.

Come and see us at the ONLINE/CD-ROM INFORMATION 95, 5-7 December, Olympia 2, London, stand 218/223, level one.

...individual database. It may be that each individual company has its own page. It is a new thing in our country. It is a new thing in our country. It is a new thing in our country. It is a new thing in our country.

...the legal and accountants professions, who want the option of credit assessment. Mr Ruggles had said.

...to make them easier to follow, the Jordan's Pro Notes are allowed in five bank notes, which, normal, unstable and high risk. At launch they are available to those with direct access via JordanLink at 2% per note viewed. Over the coming weeks they will also become available through third-party hosts including I T World, BT and Altranet.

...This must be frustrating. "Sometimes, yes, however, it is our job to convince them to hang their heads low and we are the one in the end, doing it anyway. Part of our job is to give them feedback from the user and convince them that they have to hang."

# Jordans adds company credit scores to file

The JordanLink online database about 200,000 UK companies now includes scores from the Credit Assessment Limited. They show how likely a company is to fail within the following 12 months.

Customers have asked for this feature, and David Ruggles, Jordan's Director of Information Services. "In recent months we have been seeing a demand for our information from a wider range of users, many of whom are involved in risk assessment and credit control."

A growing number of more traditional users,



David Ruggles, Director of Information Services at Jordans

## inbrief

### DRUG SYNONYMS COLLECTED

A handbook designed to ease confusion when drug companies market the same product under different names is now available in electronic form. Over 105,000 trade names and synonyms for 12,000 pharmaceuticals appear in MEDICATE - 70% more than in the latest print equivalent.

For each active substance, FIZ Chemist's new database gives the topological structure, CA preferred name, common name, CAN Register Number, molecular formula and pharmacological effects.

+44 (0)20 76321181/76334 (fax)

### RISK DISCS GO MONTHLY

A CD-ROM of full-text international business listings for 100 countries will be available with monthly updates from January.

From International Business Communications, Political Risk Services on CD-ROM (PRIS), contains the same basic information as in the online database, available through Data-Star and BUR. There are said to be around 5000 clients.

Distribution Accounts charges £815 plus despatch for an annual disc, and £5715 per for the monthly server during 1995.

+44 (0)20 86848 (tel)/89889 (fax)

### SYN ADDS NEWSLETTERS

The full text of more than 600 business and industry newsletters is now being scanned into the devastating SYN International host.

From Information Access Company, Synline Database contains about 1.7 million records from 1988 onwards, updated daily with an average of 1500 additions. Titles such as *Card and System Technology*, *Fiber Optics News* and *Textile Materials News* are among those likely to be of particular interest to SYN users.

+49 747 BUR 5554 (tel)/2591 (fax)

### EPO FILE FOR DIALOG

Information on over 600,000 granted patents and patent applications from the European Patent Office is now available with Dialog.

Europe Patent Index includes bibliographic and administrative information, legal status data, EP3 search reports and English-language abstracts. There is also full text of the claims and specifications for published international applications, with that of eventual patents planned to follow.

Updated immediately after each weekly edition of the *Register of European Patents*, the file covers 17 countries.

+415 (0) 370 (tel)/349 (fax)

# ICC Information Group

## UK Business Information



ON

# CD-ROM

ICC Information Group has the UK's most extensive range of business information services.

Our CD-ROM products have been recognised as the best source of reliable, accurate information, offering answers to all strategic and tactical questions.

Throughout the world, information specialists can rely on ICC to provide them with high-quality company and market analysis on CD-ROM, putting our entire range of data at your complete disposal.

By using CD-ROM, ICC can give you an alternate way to search for reliable business information. In fact, even novices can browse with confidence without the fear of high online charges.

So whether you're interested in:

- Company Profiling
- Credit Management
- Financial Analysis
- Market Research
- Target Marketing

...satisfy your business information needs by simply sending this reply coupon back to the address below, and let ICC keep you ahead of the competition.

g

To receive your free copy of:

- ICC Information Online
- ICC Information on CD-ROM

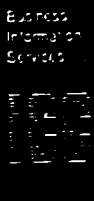
Return this coupon to:

Max Hardinge  
ICC INFORMATION GROUP Ltd.,  
FREEPOST, Hampton, Middlesex,  
TW12 1BR

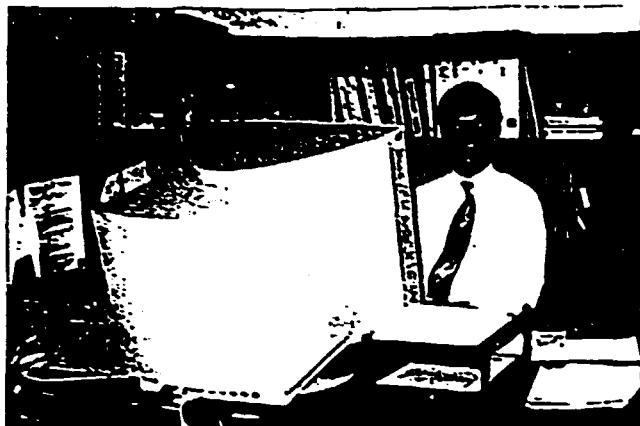
Telephone: +44 (0181) 783 1122  
Facsimile: +44 (0181) 783 0049

NI IWR

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
Post code \_\_\_\_\_  
Telephone \_\_\_\_\_  
Information Needs \_\_\_\_\_







Man and machine — Peter Holden, Head of the EIU's London Research Department

# The pros and cons of third-party databases

The Economist Intelligence Unit (EIU) is a business information publishing company with centres in London, New York, Vienna and Hong Kong. GILL SHEARER talked to Peter Holden, Head of the London Research Department about the drawbacks of third-party databases.

There are eight full-time members of Mr Holden's Department, which he describes as a combination of a traditional library and a statistics department. "Three people do the press cuttings that we send out to the Country Reports office every week," he explains. "The coach marking up my papers, magazines and trade journals as well as a large amount of photos going. It also involves putting together statistics tables that we send out regularly so that everyone uses the same numbers in their writing. Another member of staff manages the subscriptions to some 5000 periodicals. The Deputy Head of Research, Sally Harding, undertakes online searching and takes care of the library side of the department."

Since the EIU provides information on countries and industries from all over the world, the Research Department needs access to the widest possible, and the cheapest, range of business publications. Mr Holden notes that the EIU subscribes to both real-time and historical online databases. "We have Reuters Business Briefing (RBB), Dialog, NEXIS, Compu, IT Profile. We also take Bloomberg and use the UN Committee Department's electronic bulletin board service."

At present, the Department is making extensive use of the RBB service, introduced earlier this year, mainly because of a highly competitive fixed fee arrangement. "When Reuters introduced the service they gave us a very favourable contract," explains Mr Holden. "It's a flat fee of £100 a month, plus one hundred lines."

Mr Holden adds that, at present, Mr Harding spends "a good five hours out of every eight-hour day connected to the Reuters service". The heavy dependence may change when Reuters ends its current pricing arrangement this January, however. "I expect the new pricing structure to be based on charging for blocks of time," he says.

The EIU has no fixed-price, unlimited-use arrangements with the other online services it subscribes to. "We just pay as we go, which can be very expensive, especially with Dialog and NEXIS, which are based in America," Mr Holden explains.

With a product range that includes weekly

typical newsletters, quarterly country forecasts, country risk reports, research reports and commentaries, the EIU has a continuing need to acquire amounts of global economic and business information. For this it relies primarily on a worldwide network of 750 contributors who monitor developments in individual countries and provide first-hand information to EIU editors. The editors use online databases mainly for current awareness, fact checking and background information.

Editors currently have direct access to the EIU's internal editorial database, but not external ones. Were this to change, according to Mr Holden, RBB would be the only viable option.

**"Reuters Business Briefing was designed with the end-user in mind, but the other services are too complicated."**

"Reuters designed the service with the end-user in mind, but the others are too complicated. With Dialog, for example, you have to go on a three-day course and there are lots of different search strategies and commands and so on. Even if we're referred to them, I think most people here would just give up in frustration."

The main drawback to making third-party databases available to editors, however, is not so much technical as economic. "We thought about making RBB available direct to end-users because it is Windows driven and easy to use. The problem is that once the pricing structure changes it's going to be a bit difficult to control access and therefore costs."

As an internal cost centre, the Research Department pays out charges for online searching to the relevant departments and products. It charges an additional hourly rate for staff-member time used to perform the search. "It does put people off sometimes when you see, 'Well, that will be the cost of the database search, plus the charge for our time,'" says Mr Holden.

From moving over to the EIU, Mr Holden was Deputy Head of Research at The Economist, an EIU publication. The attitude towards using third-party online databases at the newspaper office was quite different than at EIU, he says. "It was a much more straightforward at the newspaper. There, if someone wanted something you just did it for them — and you didn't worry about the cost." □

Whitaker/Bowker

## Global BookBank



### Premium Service

Evaluation discs will be available at the Online Exhibition Stand 126

Whitaker, Bowker and LW Group (UK)

Full records, fully searchable as provided by the source databases

Including in-print, forthcoming and recently out-of-print titles

Southern African Books in Print titles and publisher records will be added in 1995

A free disc containing company details, contact details for the CD-ROM discs

A sample disc containing a partial database is available to evaluate the service before purchasing a second disc

Please contact Simon Summer at Whitaker and specify one or two disc evaluation



Whitaker Bibliographic Services

12 D'Yall Street  
London W20 0P  
T +44(0)171 836 8811  
F +44(0)171 836 2988



## FIZ CHEMIE BERLIN

Fachinformationszentrum Chemie GmbH

### Successfully solving joint objectives

With the latest information in chemistry, chemical engineering, and related areas, tailored to your specific needs

**FIZ CHEMIE Structures & Reactions**  
always current about the newest syntheses - prepared by experts

**FIZ CHEMIE Engineering Data**  
for planning, construction, process control, processing, and processes

**FIZ CHEMIE Service & Consulting**  
literature searches - training - consulting

**FIZ CHEMIE Input Service**  
setting up customized information systems

Call on us! Daily service.  
Tel: + 49 (30) 390 76 - 111 • Fax: - 334 • P.O.Box 12 60 50 • D-10593 Berlin

**Your Partner for the CAS Databases on STN**

Visit our stand at ONLINE/CD-ROM Information '94,  
Dec 06.-08.1994, London, Stand 221

## Appendix 2 Details of English language/online searching course for Hungarian business information personnel. July 1996

### 1. Project Title

Increasing the effectiveness of librarians through combined training in English language and online searching. A workshop for \*Hungarian librarians, in July 1996, held jointly at Szombathely and Aberystwyth

### 2. Proposers

Department of Information & Library Studies, University of Wales Aberystwyth (represented by Michael Lowe); LIS Department Berzsenyi College, Szombathely, Hungary (represented by Agnes Teglas)

### 3. Justification

#### 3.1 The Topic

It is recognised that the economic and general development of the target countries is dependent on the effective transfer of information, not least by state of the art methods, and on an international scale. This in turn relies upon the development of the skills of practising library and information workers; where the related skills of English language, and remote database searching are usually identified as of urgent and vital importance.

\* It should be noted that though this specific proposal relates to Hungary, the workshop could alternatively or additionally be run for information professionals of any other country or language group identified by OSI RLP as a priority.

#### 3.2 Background to proposed Workshop

The need for such a workshop was identified in 1994 by Ibolya Billedi, the former president of the Association of Hungarian Librarians. Considerably detailed planning of content and arrangements was done at the time jointly by Michael Lowe and Agnes Teglas on behalf of DILS, University of Wales, Aberystwyth; and LIS Department Berzsenyi College, Szombathely respectively; in consultation with Graham Perry, Head of the UWA English Language Unit. It has not yet been possible to run the workshop, due to the absence of funding.

#### 3.3 Aims and Objectives

The aim of the workshop is quickly and effectively to provide selected Hungarian library/information professionals with skills both in English and in online database searching. The skills are currently of high priority in their national development and in their workplaces; often related to each other in day to day professional work; and in the workshop will be learned in relation to each other.

The main objective is that by the end of the workshop participants will be able to demonstrate (through appropriate individual appraisal) practical, transferable knowledge and skill, in both English and online searching.

### 3.4 Outline Programme and Timetable

The Workshop has three elements, a), b) and c) below:

The first week, week beginning 1st July 1996:

a) Preliminary English language training (including professional vocabulary) in a specialised institution in the home country - Berzsenyi College, Szombathely

The second and third weeks, simultaneously, 8th July 1996 - 19th July 1996:

b) Participation in an existing, established English language programme in the English Language Unit of a British University - University of Wales Aberystwyth's English Language Unit. (Appendix 1: details of Aberystwyth English language programme)

c) Undertaking a specially designed course on online searching in a leading department of Information and library studies in the same university, with home-country language assistance - University of Wales, Aberystwyth's Department of Information and Library Studies (Appendix 2 details of online searching programme)

Participants will join in with most of the arrangements already in place for b) above (including programme, transport, pre-booked accommodation, and social events). Since English language classes are confined to mornings, element c) will take place during afternoons.

### 3.5 Project organisers and project organisation

The two ILS departments have collaborated actively over recent years, with mutual participation in projects, and reciprocal visits of staff. UWA Aberystwyth has excellent facilities, subject and teaching expertise; and previous experience of organising combined English/professional workshops. Berzsenyi College has expertise in both ILS and teaching English for ILS. As well as designing the present Workshop, Michael Lowe and Agnes Teglassi have on several occasions worked side by side, in Hungary and in the UK (CVs attached as appendices 3 and 4).

Michael Lowe will direct the project from Aberystwyth, coordinating the three components of the workshop, and participate with other specialist DILS colleagues in delivering component c) above. Agnes Teglassi will coordinate the Hungary side of operations: principally the identification and briefing of the participants, their travel arrangements; and the introductory English course at Berzsenyi College. She would also travel to the UK with the group and provide language assistance in component c) of the Workshop.

In the absence of either of the named organisers, their departments would appoint a substitute.

### 3.6 Target Participants

The Workshop is designed for between ten and fifteen practising professionals, who currently have little or no English language and online searching skills, but for whom those skills are or will be a high priority. The Hungarian organiser will identify participants on the basis of the individual's appropriateness, individual institution's needs, and national priorities and plans (including the current cooperative development of business information services; and the current plan to upgrade higher education libraries). Thus persons from various types of library and information service would be eligible; including LIS education, national commercial and technical information services, firms, public libraries, and academic libraries. Relevant persons who are not professionally qualified, and students, would also be considered on their merits.

### 4. Budget

The following figures assume fifteen participants (including the Hungarian organiser). The overall cost could be reduced by reducing number of participants, but below 10, some of the costs would have to be requoted.

#### Element a): Berzsenyi College

Accommodation (based on Berzsenyi College student accomm., incl. b&b; 1 week; 14X£7.50x7)	£735
Tuition (based on 2 tutors for 5 days)	£600
Berzsenyi College overheads	£250
Hungarian organiser's fee (additional to tutorial fees)	£200

#### Flights to and from UK

(Assuming group rate; 15X£200)	£3000
--------------------------------	-------

#### Element b) DILS, Aberystwyth

Tuition (based on 2 tutors; incl. tutor/interpreter, for 8 days)	£800
DILS overheads (incl. rooms, equipment, telecoms, online costs)	£500
UK organiser's fee (additional to tutorial fees)	£250

#### Element c) English Language Unit, Aberystwyth

English Language Tuition (15X£295)	£4425
Airport transfers (London; 2 transfers; 15X£80)	£1200
Accommodation (self-catering, single, hall of residence rooms; 15X£125)	£1875
Transfers between departments/campuses (8 days; 15X£70)	£1050

#### Daily subsistence allowance

Incl meals except breakfast, and travel within Hungary (15X£10X21)	£3150
--	-------

<b>Total cost</b>	<b>£18,035</b>
-------------------	----------------

## Appendix 3 Dec. 1995 UK Business information study tour programme

### Study Tour of UK Business Information Institutions

#### Programme

(visit finish times are approximate; maps or directions are attached for some of the visits)

#### Sunday 3rd December

1855 hrs - arrive at London Heathrow Airport  
 approx 2000 hrs - arrive at The Concord Hotel, 155-157 Cromwell Rd., London SW7. Tel.  
 0171-370-4151

#### Monday 4th December

1030 - 1230 hrs - ICC

*Contact details:*

Sharon Brady,  
 Help Desk Supervisor,  
 ICC Information Group Ltd.,  
 16 - 26 Banner St.,  
 London.  
 EC1Y 8QE

Publisher of leading company and market information sources, in print and electronic formats. ICC's databases are available via major international hosts (Dialog, DataStar etc.), or online direct from ICC. It also offers a fee-based information/enquiries services, based on its own library's print and electronic resources.

Afternoon free for orientation, and/or suggested independent visits

#### Tuesday 5th December

1000 - 1200 hrs - Companies House

*Contact details:*

David Walke,  
 Assistant Director Policy,  
 Companies House,  
 Crown Way,  
 Cardiff.  
 CF4 3UZ

The government agency responsible for the centralised collection and distribution of the information which 'limited' companies have to disclose by law. This is the primary source for many of ICC's and similar companies' products. The administrative headquarters is in Cardiff, the London 'search room' is the busiest public enquiry point.

1400 - 1600 hrs - British Library Business Information Service

*Contact details:*

Dave Townsend,  
 Marketing & Public Relations Dept.,  
 Science Reference and Information Service,  
 British Library,  
 25 Southampton Buildings,

London.  
WC2A 1AW

The relevant printed resources of the national library have been brought together, and complemented by electronic sources and enquiry services. Access is open and free to all who call in person or by telecoms, with the option of paying for online searches and research. The biggest collection in Britain of printed business sources; in the same building as a superb technical library and information service.

Wednesday 6th December

*1000 - 1100 hrs - FT Profile (NB: meeting at the International Online Information Meeting)*

*Contact details:*

*FT Profile*  
Kate Grady,  
Strategic Sales Manager,  
FT Information,  
13 - 17 Epworth St.,  
London.  
EC2A 4DL

This division of the Financial Times has quickly become one of the major hosts of business information databases. It has recently replaced command-based search software with a menu-based interface. (We meet at the FT Profile stand at the IOLIM exhibition; then go to a reserved meeting room for the talk/discussion)

*1100 - 1700 hrs - International Online Information Meeting*

Participants are free to visit any of the hundreds of stands of the IOLIM exhibition. A considerable proportion relate to business information, including network services, source publishers, and information brokers. Even the Russian Chamber of Commerce has a display.

Thursday 7th December

*1100 - 1300 hrs - Thames Valley Business Link, Slough, Berkshire*

*Contact details:*

Mark Sharman,  
Information Manager,  
Thames Valley Chamber of Commerce & Industry,  
Commerce House,  
2 - 6 Bath Rd.,  
Slough.  
SL1 3SB

A good example of the Department of Trade and Industry's 'Business Link' initiative to encourage diverse local business support services to cooperate. We shall visit one of the Thames Valley partners, a chamber of commerce, and hear about the information and advice services of others also; and the way they work together. Slough is just West of London, near Heathrow airport.

*1400 - 1600 - Berkshire County Library Service. Slough Public Library*

*Contact details:*

Mrs Yvonne Cope,  
Acting Divisional Manager, East Division,  
Berkshire Library and Information Service,  
Slough Library,  
High St.,  
Slough,  
Berks.  
SL1 1EA

Berkshire, like most public library authorities, offers a mainly free 'business information service' - itself a partner in Thames Valley Business Link. The public library in Slough is one of the county library's service points.

**Friday 8th December**

*1000 - 1200 hrs - Financial Times Business Research Centre*

*Contact details:*

Tony Northeast,  
Manager,  
Financial Times Business Research Centre,  
1 Southwark Bridge,  
London.  
SE1 9HL

Businesses pay FTBRC to answer enquiries and carry out research on their behalf. FTBRC is probably the largest business information broker in Britain. It initially depended heavily on the resources of the FT's own library, but today makes greatest use of electronic sources; both on disk and online.

M.A. Lowe, Dept of Information & Library Studies, University of Wales Aberystwyth,  
Llanbadarn Fawr, Aberystwyth. SY23 3AS. Tel. 01970-622177. Fax 01970-622190

Revised 1.12.95