

# THE USE OF INTERNET IN GOVERNMENT LIBRARIES: THE CASE OF TURKEY \*

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**Abstract:** Turkish government libraries can use Internet since 1993. Together with an increasing growth in the membership of the network, arose problems. However, most of these problems were the extensions of the already existing difficulties confronted by the government libraries.

With the aid of the results of an institutional library survey and of more detailed observations upon a sample of 7 government libraries, the major administrative, economic and technical problems were identified and discussed. Conclusions made possible to forward some workable proposals.

## 1. Introduction

### 1.1 Information demand of government

Government institutions, being organized for the sake of fulfilling the responsibilities under their concern, require efficient means of communication at interoffice, interregional and international levels. Keeping the highly complex and multiaspect coverage of state affairs under consideration, it is evident that a substantial demand for quick, reliable and organized information of adequate detail will continuously persist. One of the primary tasks of government libraries is therefore to play a crucial role in the proper satisfaction of such an information demand.

### 1.2 Government libraries

Government libraries, being usually considered under the class of "special libraries", are established within the bodies or at the service of the governmental

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institutions (like those of the parliament, ministries, judiciary, state owned enterprises etc.) both at levels of local or central government<sup>1</sup>. As such, a government library should ideally be equipped with all the necessary superstructure in order to provide information for daily requirements of administration and expert force, and for longer term intentions like preparing reports, making analytic research, planning, designing projects, formulating policies, controlling and evaluating implementations. Therefore, a government library might steadily provide apart from usually expected services extensive reference facilities, bibliographic search, abstracting and translation services, and produce furthermore awareness bulletins, subject bibliographies and the like.<sup>2</sup>

Thus the government libraries are able to considerably influence the quality of work done by the government. Consequently, problems concerning the services of the government libraries might, in turn, create serious problems of information adequacy on the side of governmental institutions.

### 1.3 Purpose

During the last decades, the impact of rapid advance in communication technologies upon the quality, time use and extent of library services had at the same time urged the governmental institutions to make the necessary innovative investments in their libraries. Setting up the infrastructure concerning the Internet use in government libraries becomes to be one of those innovations.

In the following sections, a short account of Internet use in Turkish government libraries will be given. On viewing the problems to be encountered special emphasis will be attributed to economic and administrative issues, since the considerations of purely technical character will be the subject matter of another paper to be presented.<sup>3</sup>

## 2. Internet use in Turkey

### 2.1 Demand for Internet use

The history of Internet use in Turkey covers only a period of about 3 years. However, the development of the number of users had rather been explosive according to the reasons met everywhere like satisfying the general human

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<sup>1</sup> This is a practice oriented description. For a formal definition, see e.g. Thompson.

<sup>2</sup> For details, see e.g. San, pp 25-29.

<sup>3</sup> Mentioned is the paper of Çakir on Internet use in TÜBİTAK.

curiosity upon exploring the economic, social, scientific and technical world better, having a library without walls and collective brains, sharing resources of the global community etc.<sup>4</sup> Only the relative importances attributed to single reasons might have indicated a local pattern. Thus the emerging possibilities by using Internet received a cordial welcome, mainly due to the shortage of supply for detailed, better systematized and more precise data and time saving information services of wider scope and range.

## 2.2 History

On the 12 th of April 1993 the international network connection of Internet was realized between the Middle East Technical University in Ankara and National Science Foundation in Washington D.C. over a 64 Kbit transmission line. The achievement was a result of the project TR-NET, which was mutually conducted by the Middle East Technical University and the Scientific and Technical Research Council of Turkey.

Soon discovered the librarians the various benefits provided by Internet in retrieving, cataloguing and ordering. Especially at a time, in which Turkish economic instability had caused certain difficulties of finance, and hence imposed restrictions upon the purchase of books, periodicals, on line retrieval services and CD ROM's, the new possibilities rendered by Internet use had gained high popularity among the library administrators. The existence of user friendly programs like Gopher, WWW might also have had an influence upon such a popularity.

To be inclined to handle a technical device, and to be able to undertake the necessary investments and arrangements for its efficient use are two different issues. Nevertheless, following the inevitable growth of the network locally and also towards Istanbul and Izmir, the library memberships of Internet had increased at an accelerated rate.

Soon arose problems of electronic highway and network environment essentially due to disproportions between the communications infrastructure and the pressing demand for Internet use. Failing financial support, lack of a legal personality being in charge of Internet matters, lack of reliable forecasts and planning measures for medium and long run developments had made the related problems graver.

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<sup>4</sup> It should perhaps be pointed out that in counting items, reasons, influencing factors, parts of a whole etc. the purpose is not to be exhaustive, but just to illustrate by examples.

## 2.3 Users

In 1994 the Internet users in Turkey could roughly be categorized as follows; Real persons by 51 %, government institutions by 15 %, commercial establishments by 13 %, the universities by another 13 % and other institutions 8 %<sup>5</sup>. Though not strictly comparable, figures of user aims for the world of 1993 seem to be as: 48 % for research, 29 % for trade, 10 % for defense, 7 % public affairs and 6 % for education<sup>6</sup>. Despite the differences between the definitions of variables upon which the estimates were based, one might feel to conclude that the percentage weight of the public sector Internet users in Turkey approach to the same level as that of the rest of the world.

## 3. Internet use of government libraries in Turkey

### 3.1 A general view

Concerning the use of Internet by government libraries an illustrative cross section might be helpful to visualize the current situation.

First of all it should be pointed out that there are a number of so called "government libraries" which are actually nothing but warehouses of books or archive material of certain government institutions. Evidently these cannot provide government library services in the above defined sense, nor the reasons behind their establishment were in accordance with the expectations from a usual government library.

Discarding such examples out of the framework of examination, what remain as government libraries are mostly situated in Ankara. On the other hand, a survey comprising 25 institutional libraries in Ankara was recently conducted by the Department of Informatics of the Turkish Scientific and Technical Research Council.<sup>7</sup> Since the final report of the survey was not available by the time of investigations for the present paper, only a direct glance to the questionnaire material could be casted.

It was observed that 10 of 25 institutional libraries had Internet connections, and 4 of them will also be integrated within a few months. Out of the mentioned 10, only the director of a single library complained about non use, and frequent use

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<sup>5</sup> According to Önalın, p.3.

<sup>6</sup> Cabezas, p 11.

<sup>7</sup> Next year a more illuminating survey will be conducted.

were registered by the remaining 3. Interesting might furthermore be the observation, that 6 of user libraries were benefiting from Internet as an information center or library, whereas only two provided databases open to Internet.

As for government libraries, e mail seems to be the most common form of Internet use. Moreover, data bases (like those of the United Nations), the library catalogues (like those of the Library of Congress), certain archives of importance or historical fame, files of technical reports, addresses, statistical data, sound and image retrieval were also recurrently asked.

## 3.2 Some sample libraries

### 3.2.1 Introduction

For a library, the extent of the real gains from Internet use depends upon the scope and nature of its services. Therefore, it would be better to forward a closer account of the work done in certain selected government libraries, which seem - for some reason or other - to be convenient for illustrative exemplification. Thus a purposive sample of 7 government libraries had been selected out of the population that was referred for the recent institutional library survey. Among those, 5 are using Internet already, and the rest two will soon be potential users.

### 3.2.2 Scientific and Technical Research Council

The Scientific and Technical Research Council of Turkey, being one of the two forerunners of Turkish Internet project, utilizes library services over an integrated library automation system. The library administration is hierarchically situated under the Directorate of Information Services. Apart from the traditional services and the possibilities offered by the youth video club (for popular science and technology), the library also provides documents, delivers copies, and arranges upon request certain educational and consultant services. The Directorate of Information Services makes furthermore on-line CD-ROM search facilities available, and presents 4 national bibliographic databases upon Scientific and Technical Articles, Medicine, Environmental Science and Sponsored Projects by the Council.

On the other hand, the Directorate supplies the following sources of knowledge ready for dissemination through Internet. Of the Council: Comprehensive information including organisation, legal status, activities, research groups, scholarships, news bulletins, and moreover the above mentioned databases and the library catalogue; and of Turkey: Directory of Information Centers.

### 3.2.3 Central Bank

The Central Bank of the Republic of Turkey disposes of a wide network in order to communicate with national and international branch offices, and also with the related national and international institutions<sup>8</sup>. Since January 1995 the electronic data transfer system of the bank supplies the Internet with statistics and own estimates of money, credit, banking and allied data. Retrieval is possible through Gopher, WWW and Telnet over the public telephone network by means of a modem.

Library of the Central Bank provides interlibrary loan, index, awareness and CD ROM search services in addition to the customary library activities. However, the direct access to Internet over the library had not been realized yet, since the recent public expenditure cuts had resulted in the retardation of the related investments.

### 3.2.4 State Institute of Statistics

State Institute of Statistics is the responsible government agency for the compilation, preparation and publication of basic statistical data for Turkey. Having the same status with the Central Statistical Offices of the other countries, the Institute is obliged to be in regular and planned international contact with partner institutions and international statistical offices like those of UN, OECD etc.

It shouldn't be hard to imagine the variety of benefits that the Institute's library could gain by the use of Internet. At present the library is connected to Internet as a mode over a leased line. The Internet users receive thereby statistical summary reports. However, 1995 seems to bring substantial developments in the Internet use of the library. Firstly, access to the comprehensive disaggregate data sets provided by the Institute will be possible through Gopher or WWW. Library catalogue will also be available. Secondly, the newly established local area network will enable the different Departments of the Institute to be in exchange contact with the library computers over the backbone. With the aid of the same backbone the library will also interact through Internet.

### 3.2.5 State Planning Organisation

State Planning Organisation was founded for the sake of preparing long term development plans and thereby functioning as a principal government agency which gives the government expert support for the specification of social and economic policies. Consequently, the Organisation is also held responsible for follow up studies of plan implementation and for relevant coordination.

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<sup>8</sup> For detailed information about the network, consult T.C. Merkez Bankasi, *passim*.

The library was integrated to the AX 780 computer network system of the Organization in 1987. Since 1994 the Internet could be reached over TURPAK in the position of an end user of the Middle East Technical University facilities. By full membership, which will probably be the case during the coming months, the library will furnish certain databases, including the library collection after 1980, the periodical catalogue, plan and implementation data of economic variables at adequate sectoral aggregation levels.

### 3.2.6 Undersecretariat for Treasure

The government library of the Undersecretariat for Treasure has a collection which is primarily specialized in economic sciences, and is composed of books, reports, statistical series, CD-ROM databases and microfiches. Cataloguing and lending services are computerized. The recording of the general catalogue by means of MARC format had also been completed.

The Internet use was realized by means of a node connected to the Middle East Technical University over a lease line. In case of a membership, library catalogue will primarily be subjected under disposal.

### 3.2.7 Export Promotion Center

The Export Promotion Center of Turkey aims at covering the necessity for every possible expert guidance to export merchants, for the sake of promoting export development. Therefore the library of the Center was also equipped to provide international trade information such as customs tariffs, foreign trade legislation, world prices, exporter importer catalogues and other relevant commodity information.

With 16 terminal points the Center disposes of the HX/3000-922 RX system. The library catalogue was completely transferred to computerized media. On the other hand, current information on foreign trade statistics, product codes, foreign exchange rates and the like can at request be promptly transmitted from the Undersecretariat of Foreign Trade over a special terminal. Internet use will be available until the end of the year, through which the library collection will be propagated to a wider range of interested people.

### 3.2.8 General Directorate for Woman's Statute and Problems

In the realm of the newly established General Directorate for Woman's Statute and Problems, an Information and Documentation center on woman's studies is under development. One of the principal goals of the Center is to prepare an extensive database comprising all sorts of documents on the Turkish woman in the world.

Computerized library services will be enhanced by means of having access to Internet up till the end of the year. Over Internet use it will be possible to retrieve the library catalogue, special statistics database on woman, and certain subsets of the above mentioned database in various forms, like women news.

#### **4. Problems of government libraries and Internet use**

##### 4.1 Fundamental perspective

The brief account on the use of Internet in Turkish government libraries might induce the impression that the attempts within such a short time were remarkable. However, it is not concealable that behind the efforts paid, there was neither an organizing and directing force nor a selective policy of tasks and priorities. After so many years of discussion, it seems that the long term library and information policies with chances of a high target attainment could not have yet been devised for Turkey<sup>9</sup>. As by most of the developing countries, the priorities of Turkey had lain in securing high rates of growth through swift industrialization. The very fact that the accumulation and propagation of knowledge was equally important, and as being one of the driving forces behind the steady growth even more important, was not well realized.

When observing the problems of Internet use at the micro level of each library, we mostly detect nothing but the reflections of the main problems of government libraries upon our present concern. The below treatment will therefore comprise a greater area of interest, namely that of considering the adequacy and effectiveness of government library services in a more general context.

##### 4.2 Main problems

###### 4.2.1 Administrative issues

For an explication as our space permits to, it is perhaps better to begin with the administrative problems. The core of these type of problems lies in the establishment of government libraries without specifying the aims, duties, competences and responsibilities properly. Some government libraries seem to be founded just as a traditional unit of the organisation, without paying much attention to the ways and means it might effectively occupy within the division of labour to be expected from the related administrative body.

In addition - and perhaps as anatural extension of the missing status - the government library administrators cannot usually partake in the high level

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<sup>9</sup> See, T.C. Devlet Bakanligi, p.83

decision mechanisms. Indirect evidence to this matter is collected by the mentioned survey of institutional libraries. Only 4 of the 25 libraries were situated directly under the highest level hierarchical positions (like the office of the president), and 2 of them were under the highest administrative officer (like that of the general secretary). The rest of the government libraries were administrative department head). Thus the chief librarian might not in an abundance of cases take an active part in the determination of procurement and investment plans, and could this be fortunately the case, he would probably struggle with the upper bureaucracy for the fulfillment of policy decisions in due time and at the desired extent. Especially in an era of permanent technological change in the information production and propagation where the Internet might be regarded as a recent example of such an advance these handicaps might in turn create serious drawbacks in the quality and coverage of services provided by government libraries.

#### 4.2.2 Budget

Out of the actually interwoven problems of government libraries that would effect the Internet use, another important category consists of budgetary difficulties. Short- and medium-run stabilization policies in Turkey resulted in the pursuit of anti inflationist type of public finance measures, the most familiar of which were the drastically shortened current expenditures by institutional budgets. This fact, however prevented a satisfactory fulfillment of an essential library service requirement, namely having a budget in order to run a minimum amount of operations for a good subsistence, as for example in purchasing serials, in covering maintenance costs and let us say in constantly paying the membership fees for Internet use.

On the other hand, it should be pointed out that a relative freedom to spend out of specific - though insufficient - funds might sometimes create miracles through ingenious ways of allocating the sum at the free disposal. However, the mentioned survey of institutional libraries shows that only 4 out of 25 of them were authorized to use independent budgets.

Moreover, it should not be forgotten that government budgets of stabilization periods are prepared to reflect more or less an "investment shy" character especially for the projects with indeterminate rates of return in the short run. Up to a certain extent, it seems that the Turkish government libraries had also suffered from such budgeting attitudes and practices.

Among other budgetary problems, an important one in this context might furthermore be the unforeseen inflationist pressures upon the relative prices and hence the total costs, which enlarged the inadequacies of the predetermined yearly

budgets in Turkey. Under these circumstances, usual interventions of the Ministry of Finance e.g. in controlling the partial release of funds (according to short run changes in monetary indicators) had also augmented the effects of budgetary restrictions.

#### 4.2.3 Physical conditions

The difficulties to be encountered, in case that the library or information center could only be situated at places which are not specifically designed for its purposes, are well known. In Turkey, the limitations imposed upon the sites, physical plans, environmental relations and infrastructures of libraries are more severe than of those in the developed countries. The problems to be confronted due to physical inadequacies will be acuter when products of new technologies are used, since they require higher physical standards for efficient utilisation.

Here, a word of warning might be suitable! When a new investment will be made for a library in addition to the existing capital stock its proper construction or installation might necessitate certain changes in the previously maintained physical conditions. If the limited resources don't permit to make the thereby induced new expenditures, clever minds become inclined to consider some improvised solutions as satisfactory. Such attempts arising from emergencies are not seldom, though the underlying bright ideas prove themselves to cause serious inefficiencies. Leaving examples of technical sort aside, and just thinking of the example that the Internet facilities are kept in some other unit of the institution and will yet be shared with the library, the reduction of the library service efficiency due to this simple misarrangement can even be more than one might imagine.

#### 4.2.4 Technology use

Technological issues concerning the Internet use is the central theme of another paper. Here, an important economic implication will be stressed upon.

Throughout the time, as a result of the hasty race to keep up with the highly innovative computer revolution, a stock of obsolete or out-of-date machinery and equipment was collected in government institutions. Especially at times of restrictive investment policies, government libraries might obtain generous grants of old- generation hardware equipment - usually with the capacities and specifications of which a library cannot for example produce its planned databases. On the other hand, under the mentioned budgetary and organisational limitations, only a small number of government libraries seem to be liable and capable of planning their future technological developments, and thereby specifying what they should actually acquire in detail.

Similarly and under the existing conditions explained so far, the government libraries also confront with a multitude of problems of discrepancy between the available softwares and the actual software needs, due to various reasons like limited assortment or lack of expert decisions. As a result, half way mechanizations, inefficient use of personnel, discovery of strange service conceptions, duplicated efforts and highly increasing costs were also observed by the government libraries from time to time.

#### 4.2.5 Personnel

A last group of serious problems that the government libraries frequently face with consist of personnel administration.

Especially in government libraries of smaller size, not only the number of employees are small, but also the proportion of the skilled personnel. On the other hand, a government library with the above defined multitude of functions and goals should not only be composed of librarians, but have a complicated personnel structure with experts from different disciplines. Moreover, since the labour markets and employment regulations cannot permit an infinite mobility of the labour force, almost the same personnel should be able to adapt themselves to new conditions, tasks and developments. Therefore the hired personnel should be so qualified and the in service training programmes should be so sufficiently arranged, that the elasticity of orientation of labourers to new types of work will always remain high enough.

Regarding the Internet, the persons who will be in charge of its utilisation should at minimum be aware of basics in librarianship and information science, and master English and computer applications at some satisfactory level. Will these people be trained properly, one might envisage how much more should the trainers be educated.

The personnel bottlenecks of Turkish government libraries might not be very serious, but rather have a lasting character. By some government libraries, better recruitment and placement strategies and sensible reorganisations might partially help. However, to get rid of qualitative and quantitative insufficiencies in library employment, additional and demand oriented growth of appropriate human resources is required, and this is definitely a long-term solution.

### 5. Conclusive remarks

#### 5.1 On benefits

If all the important government libraries could be interconnected through Internet some of the above stated problems or at least their present dimensions will be

reduced. For example, unit costs will tend to diminish. Hazards of unsuccessful library organization upon service efficiencies will be compensated by other means. Up to some extent, human resource use will also be rationalized.

Moreover it can easily be identified that the share and exchange of information and mere cooperation of government libraries are far from being satisfactory, which in turn cause a common duplication of efforts and low service effectiveness. Internet use might be the cure of such deficiencies.

On the other hand, Internet use might encourage the government libraries in developing own information retrieval and even information management systems. Internet membership will also enable or at least motivate the creation of national databases and the completion of daring projects of the past.

Internet membership of Turkish government libraries might also convert the international demand for specific and serious information about Turkey from potential to actual, and hence will close an important shortage.

The possibilities of access to the Turkish government library collections, (which comprise countless unique documents) will deeply enlighten the world about a relatively unknown country. An abundance of information supply (from Ottoman archive material to the documentation of cultural heritage) will also enable to clarify the controversial questions in the minds of people of other countries.

## 5.2 Some Proposals

Internet use all over the world brought about a new set of economic, technological and even social problems which show a large variety like those of information overload, intellectual property rights, public interest safeguards etc.<sup>10</sup> It seems that within a relatively short time span, Turkey will also find herself to be plunged into the same vast accumulation of problems, if necessary precautions are not taken today.

Therefore, it becomes to be an urgent matter to develop a national policy of Internet. The policy should specify the role of Internet use in the realm of the long run national information strategies and set the principles and targets about its development under the light of the global experience, and furthermore by means of a planned government support. The technological considerations attached to the realization of the mentioned policy will therefore take the warning signals of the steadily growing excess demand for Internet into account, and hence put

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<sup>10</sup> For such problems, see e.g. Bauwens, Clement, Hattery (July 94), Kalin and Tennant., Sawyer, Williams, and some other references to be selected from the bibliography according to purpose.

priorities for the construction of backbones, local area networks and other infrastructural investments, under the principal aim of widening and improving the network. In achieving this, care should of course be payed to use the limited resources in the best possible manner, and not to cause inefficient utilisations in the future. Details of such issues is the concern of another paper.

Considering all the propounded aspects together, it seems that a national agency, being solely authorized for Internet, might have more chances to solve the arising or expected problems. Thus the foundation of such an institution might be proposed. It will mainly be responsible for the developmental matters concerning Internet ranging from public relations to legal aspects and for all sorts of problems to be dealt with in relation to Internet use. Planning and control of investment efforts might also be under the mutual competence of the proposed institution and an authorized expert agency for countrywide network technologies (like the Turkish Postal Administration).

Government libraries require an organized and regulated coordination and collaboration among themselves - for evident reasons that can easily be inferred from the illustrative discussions stated above. The proposed agency for Internet affairs might also contribute to the satisfaction of the mentioned requirement. It could e. g. be charged with adequate responsibility in order to coordinate the government libraries which use Internet. Such a coordination might also include an educational cooperation component with the intention of developing Internet user skills which will, on the other hand, serve to cover an important need of government libraries.

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