

KITS: a national system for document supply in Turkey

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Abstract

Purpose – The paper aims to describe a new national system for resource sharing and document supply in Turkey.

Design/methodology/approach – The paper takes a historical and descriptive approach.

Findings – KITS has been very successful in linking academic and other institutions in Turkey to an effective and efficient system of document supply. This is illustrated by figures provided on its expansion in the last two years.

Practical implications – The paper is useful for all librarians concerned with national document supply systems, especially in the developing world.

Originality/value – This is the first published review of the national system that is transforming document supply in Turkey, and it deals frankly with the obstacles that KITS faces, at the same time indicating the ways in which success has been achieved.

Keywords Interlending, Document supply, Turkey

Paper type General review

Introduction

The last 30 years have witnessed an exponential increase in information and communication technologies. Combined with the widespread use of the internet, digitisation of scholarly publications has been one of the most influential effects on libraries, librarianship, and access to knowledge. Libraries try to supply requested materials to their users in the shortest time possible. Individual libraries are facing great difficulties in serving this aim due to the rapid increase of information sources and the high costs associated with access and usage. As a remedy for these problems, consortia have been formed for purchasing and sharing electronic subscriptions to periodicals and databases. Consortia have become widespread throughout the world, but especially in North America and Europe (Karasözen and Lindley, n.d.).

Consortia provide significant advantages especially for libraries with insufficient budget and/or printed sources.

Even though consortium activities started more than 40 years ago in North America and Europe, the first attempt to form a consortium in Turkey occurred in 2000 through the collaboration of a state university and three private universities signing an agreement to subscribe to two databases offered by Ebsco (Karasözen and Lindley, n.d.). This agreement was the first step in forming ANKOS (the Anatolian University Libraries Consortium). Today, ANKOS, with 102 member libraries, subscribes to 63 databases. ANKOS has contributed significantly to the scientific performance of Turkey, as a huge number of users from many university and research libraries with limited budget and insufficient collections have been able to access electronic resources through the ANKOS consortium. The function of ANKOS is to give economic online access to knowledge by means of contemporary information technologies, but it also provides a forum for librarians to know each other better and to facilitate professional communication. To support these

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aims, ANKOS follows advances in information technologies and related activities worldwide. With its several working and research groups, ANKOS attends scientific events nationally and internationally, (Karasözen, 2002). One of these groups is the ANKOS Collaboration Research Group, which was founded in 2006 in order to focus on three subjects:

- 1 a staff exchange program for ANKOS members;
- 2 a national resource sharing guideline; and
- 3 a program to manage all interlibrary loan processes between university libraries.

Document supply applications in Turkey

Nowadays, the vision of a library owning all information resources has become outdated and resource sharing has become mandatory. It is gaining importance, especially in institutions and countries with limited resources. Collection development, organisation of information resources and servicing the information needs of users are the areas in which collaboration is most observed. Resource sharing, together with ILL and document supply services, is observed to be the most common type of collaboration activity and is the main focus of this paper.

Both the Staff Exchange Program and the National Resource Sharing Guideline have been the first comprehensive examples of this activity in Turkey. Standards developed by IFLA, ALA, Canada, New Zealand, UK and Australia have so far been considered, and they have been adapted to local conditions in the Turkish National Resource Sharing Guideline.

When comparing resource-sharing activities from abroad with local examples, it is evident that collaboration is limited in Turkey because of several shortcomings, which are discussed below:

- *Lack of a national union catalogue.* Several projects have been carried out in Turkey with the aim of collaboration between libraries. Among these are studies on a union catalogue for periodicals, document supply and collaborative collection development, online library catalogues and various bibliographical databases (Tonta, 1999). The online union catalogue service of Bilkent University, Gazi University, Hacettepe University, Middle East Technical University (METU), and ULAKBİM (National Academic Network and the Information Centre of the Scientific and Technological Research Council of Turkey) is an example of a local union catalogue [1]. There are also union catalogues developed by commercial software, such as BLISS-CAT and Yordam-2001. Catalogues of 32 libraries can be browsed by BLISS-CAT, and 47 by Yordam-2001 (Küçük *et al.*, 2004).

The most recent work on a National Union Catalog for Turkey is the Integrated E-Library Project, which is the responsibility of the General Directorate of Libraries and Publications. The implementation of the project is being carried out by ULAKBİM (National Academic Network and Information Centre). The beta version of this National Union Catalogue (TO-KAT, abbreviated from the phrase TOplu KATalog) was launched in September 2008 with contributions from five institutions, of which three are university libraries. TO-KAT became fully operational during the Week of Librarianship, on 3 April 2009 [2]. Currently, records of 13 institutions are included in the system. Given that there are 148 institutions of

higher education, 1,162 public libraries, and several other libraries of information and research centres, it can be seen that the national union catalogue has a long way to go in order to reach the desired level.

- *Organisation in most of the libraries/information centres is not sufficient for document delivery and loan services.* There are many reasons for this situation. Some examples include some automation systems used by Turkish academic libraries not having an ILL module, insufficient staff to manage ILL activities, and many libraries not havinf an institutional ILL policy.
- *Proposed projects are not sustainable due to the lack of funds and legal issues, as well as an inadequate infrastructure.*

Work on standardisation in resource sharing in Turkey is minimal, such that the existing attempts could not go further than the preparation of regulations or drafts for law bills. Among them, the regulation for the “Interlibrary Loan of Printed Books” aims to govern ILL services for printed books among public libraries in Turkey (*Official Gazette*, 1981). Another work is specifically related to university libraries, namely the “Committee for Interlibrary Collaboration Law”, which prepared a draft for “Interlibrary Collaboration Law” in 1988 (Legal Regulations in Libraries and Standardisation, 1988). Since then no progress has been made at a national level.

Printed forms were used in the ILL operations of academic institutions between 1998 and 2008. The requesting institution sent the printed form via post or fax to the supplying institution. Later the forms were sent by e-mail attachments; however, whichever method is used forms could not create an efficient, fast, and easy ILL process. Advances in information technology (IT) have allowed the development of new methods giving rise to KITS – a new document supply tracking system for all higher education institutions in Turkey.

Table I shows the document supply operations carried out using printed forms; the data are for 2007. One of the most important features of KITS is that ILL statistics can be obtained instantaneously.

Table I Number of materials lent to libraries

		Total requests ^a	Requests satisfied	Books lent	Copies supplied
Total	A	36,415	29,795	27,471	6,008
	B	17,446	17,011	15,372	3,305
	C	103	89	39	20
	D	18,866	12,695	12,060	2,683
Public	A	27,591	21,551	19,985	5,810
	B	13,193	12,883	11,865	3,244
	C	88	74	24	20
	D	14,310	8,594	8,096	2,546
Foundation	A	8,324	8,244	7,486	198
	B	4,253	4,128	3,507	61
	C	15	15	15	0
	D	4,556	4,101	3,964	137

Notes: A, total; B, academic personnel; C, administrative personnel; D, students. ^aTotal requests can represent more than one item

Source: TurkStat, Cultural Statistics (2008, p. 78)

The data above has been collected individually from institutions; there exists no online application that monitors all ILL processes at national level.

KITS (Document Supply Tracking System)[3]

The ANKOS Collaboration Research Group has developed the national Resource Sharing Regulations, and the online application, KITS, so as to stimulate awareness of resource sharing. The subject of this paper, the KITS application, was developed by the members of the Collaboration Research Group working as a research group of ANKOS. All members of the group are trained librarians.

The ANKOS Workshop in October 2008 decided that KITS should be open to all libraries and information centres of higher education institutions in Turkey for test purposes. The Document Supply Tracking System (KITS) is a multi-user, online application that tracks processes related to resource sharing. The application is being developed by Zeki Çelikbaş, at the ITÜ (Istanbul Technical University) library.

KITS centralises all document supply operations and processes in different formats (print, postal, fax, e-mail, computer files, etc.). When institutions decide to participate in the KITS system, they no longer need to use customised document supply processes. Institutions can manage all resource sharing activities on-line. The general characteristics of KITS are:

- online filing system;
- request monitoring screens for books and articles;
- detailed statistics for book/article requests;
- manual and/or copy-paste entry option for the MARC records of book requests;
- facility to add special notes at any stage of the request, and if necessary, to send e-mails to librarians; and
- facility to send detailed information about requests to the requester, when needed.

The outcomes of the KITS system can be summarised as follows:

- all the document supply operations and processes will be centralised;
- standardisation of document supply procedures in Turkey;
- obtaining detailed statistics nationally; and
- production of data for the acquisition policies of individual libraries.

KITS is the first application for online resource sharing operations in Turkey; we believe that in the near future all the institutions in the higher education system will be participants. This is because KITS is very user-friendly, and institutions like to obtain their own document supply statistics easily.

Infrastructure of KITS

KITS is an online database application. As in similar applications, it needs a web server, a script processing language, and a database. KITS is coded using the PHP language. Apache is used for the web server software, and MySQL is used as the database server. Conversion of the system into database server software would be easy since standard Structured Query Language (SQL) queries have been used as much as possible. Similarly, the system can also be used on any other web server software supporting PHP. It

is possible to access and use KITS using all modern web browsing programmes. The entity relationship diagram (ER diagram) of KITS is given in Figure 1, which shows the database table structure of KITS.

The document supply process (Figure 2) is initiated by a request from a library. The resource sharing system deployed in KITS is designed to conform to the rules described in the National Resource Sharing Regulations. The library to which the request is sent will either satisfy or reject it and inform the requesting library. After this step, three workflows may happen between the libraries that will be fully supported by KITS. Firstly, the document supply process continues in the usual way and is completed. Secondly, the lending library may recall the material (without the need to supply any reason). Thirdly, the requester library may ask for a renewal of the loan. There are mechanisms for dealing with any kind of special cases in these steps and for sending messages in KITS. Every document supply request initiated and completed within this process is logged instantly by the KITS system.

As of April 2009, there are 148 higher education institutions in Turkey: 101 state universities, 43 private (foundation) universities, and four private higher vocational schools. The regional distribution of KITS members is displayed on the map shown in Figure 3. The map reveals that there is regional clustering but there is at least one member institution in nearly every city of Turkey. In other words, KITS has almost reached the target of wide national participation.

Statistics about KITS

Of the 148 higher education institutions in Turkey 108 are members of ANKOS (see Figure 4). All non-member institutions have been created within the last year. Hence, a large proportion of these institutions have not completed or have not even begun the formation of their libraries. These newly formed institutions are not using any electronic resource supplied by ANKOS. Out of the 108 members of ANKOS, 95 institutions are members of KITS (see Figure 5), 73 of which are using KITS actively. Twenty-two institutions have still not carried out any ILL operation using KITS after their registration as a member.

Testing of KITS began in July 2008 by a group of seven institutions of which four are members of the Collaboration Research Group. KITS's membership had reached 11 when regional tests were started in August and September 2008. A pilot application commenced nationally in October 2008 with the collaboration of 24 members. Figure 6 shows the increase in the membership of KITS.

Figure 7 displays the number of operations carried out in KITS. It is evident that document supply increases as the member count of KITS increases. However, the rapid increase of operations starting in February (even though there is no huge increase in member count) indicates that KITS started to be adopted by members because operations can be carried out much more easily using KITS. Less research is carried out between April and June given the focus on exams, and hence the dip in that period.

During the period of the application of KITS, 5,397 titles have been requested (Figure 8) and 4,658 have been satisfied. Seven hundred and thirty-nine requests could not be satisfied, for example because the title had been lent to another user, or is not allowed to be lent.

Figure 1 KITS entity relationship diagram

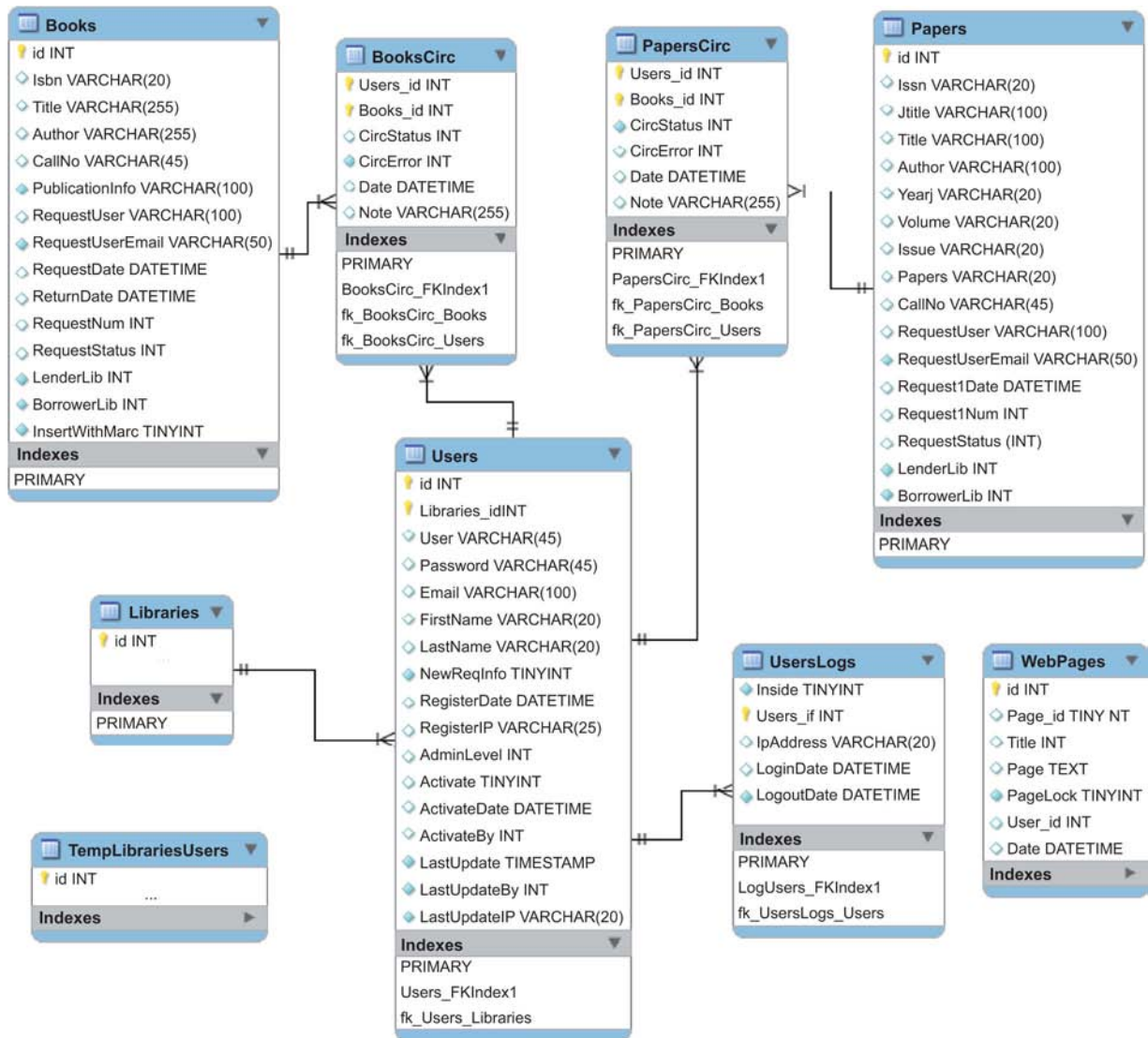


Figure 9 shows the top ten requesting institutions. These have made 1,286 requests out of the total of 4,658. In other words, 27.6 per cent of requests have been made by 10.5 per cent of the institutions.

The top ten lending institutions are shown in Figure 10. A total of 4,658 items have been sent to the requester libraries, of which 2,396 (51.4 per cent) have been supplied by the top ten. It is evident that those ten institutions are the main lenders.

Figure 11 shows the ratio of the number of titles supplied to the number of titles requested by the institutions. Ideally, this ratio should be around one. Three institutions – Gaziosmanpaşa University Library (1.0), Sabancı University Information Centre (1.07), and Çukurova University Library (0.84) – are closest to the ideal ratio. The graph only includes institutions that have a ratio between 0.5 and 2.0 so as to remove outliers. Although three institutions have a ratio of around 1, Sabancı University Information Centre is the closest to the ideal if the total number of operations are taken into account: Gaziosmanpaşa University Library has a very

low level of activity (three lendings/three borrowings = 1.0), whereas Sabancı University Information Centre obtains its ratio of 1.04 by virtue of 214 supplied items over 200 requested items.

Figure 12 displays the histogram of turnaround times for requests in KITS. Requests supplied in over ten days are not included in the graph; 30.9 per cent of requests were met in less than one day. Another 33.5 per cent of requests were met in one day. In other words, more than 64.4 per cent of requests were met within one day, and hence it can be said that member institutions and librarians have taken document supply services seriously and conscientiously.

Conclusion – problems, suggestions and future outlook

The intention of collaboration is to supply services to users in a better, faster, and more economical manner. One of the most important factors hindering interlibrary collaboration is that the incentive is not sufficient for working together and

Figure 2 KITS workflow for books

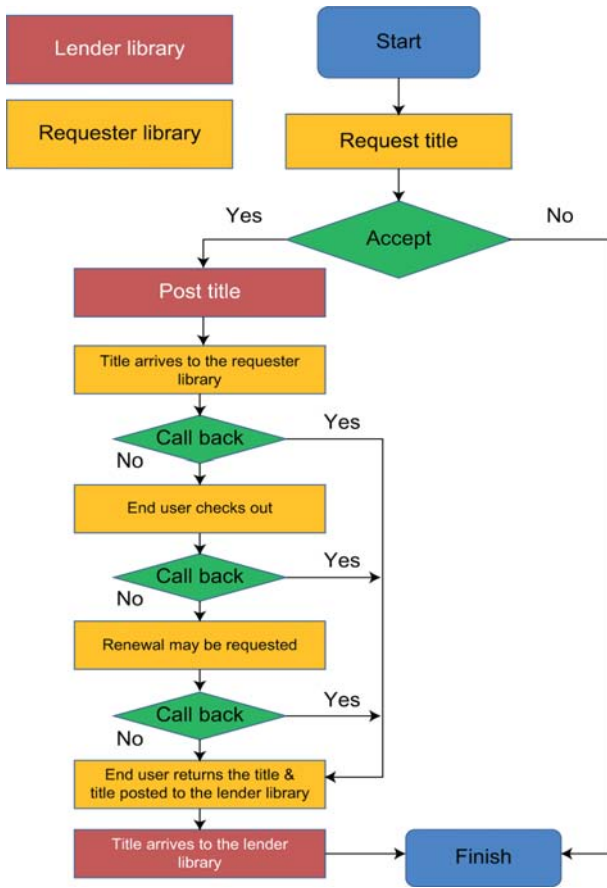


Figure 4 KITS and ANKOS members

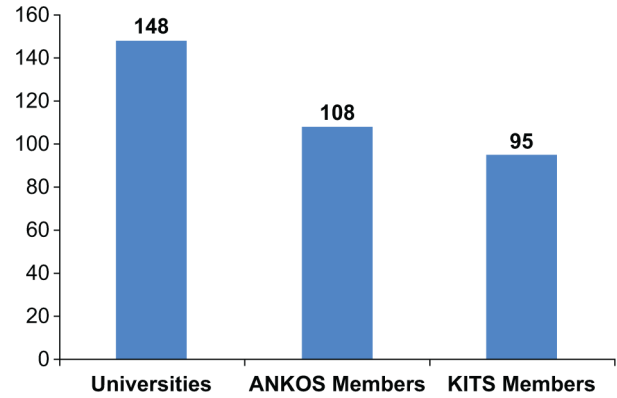


Figure 5 Categories of KITS member libraries

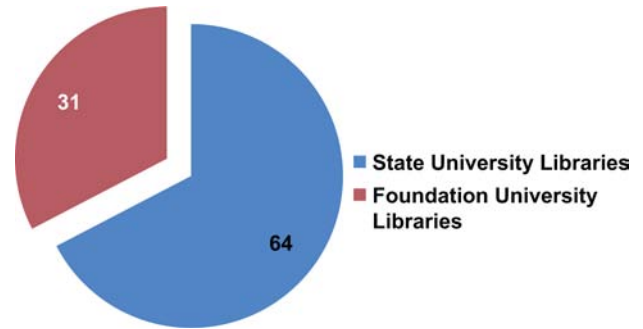


Figure 3 Current state of KITS: distribution of members in Turkey

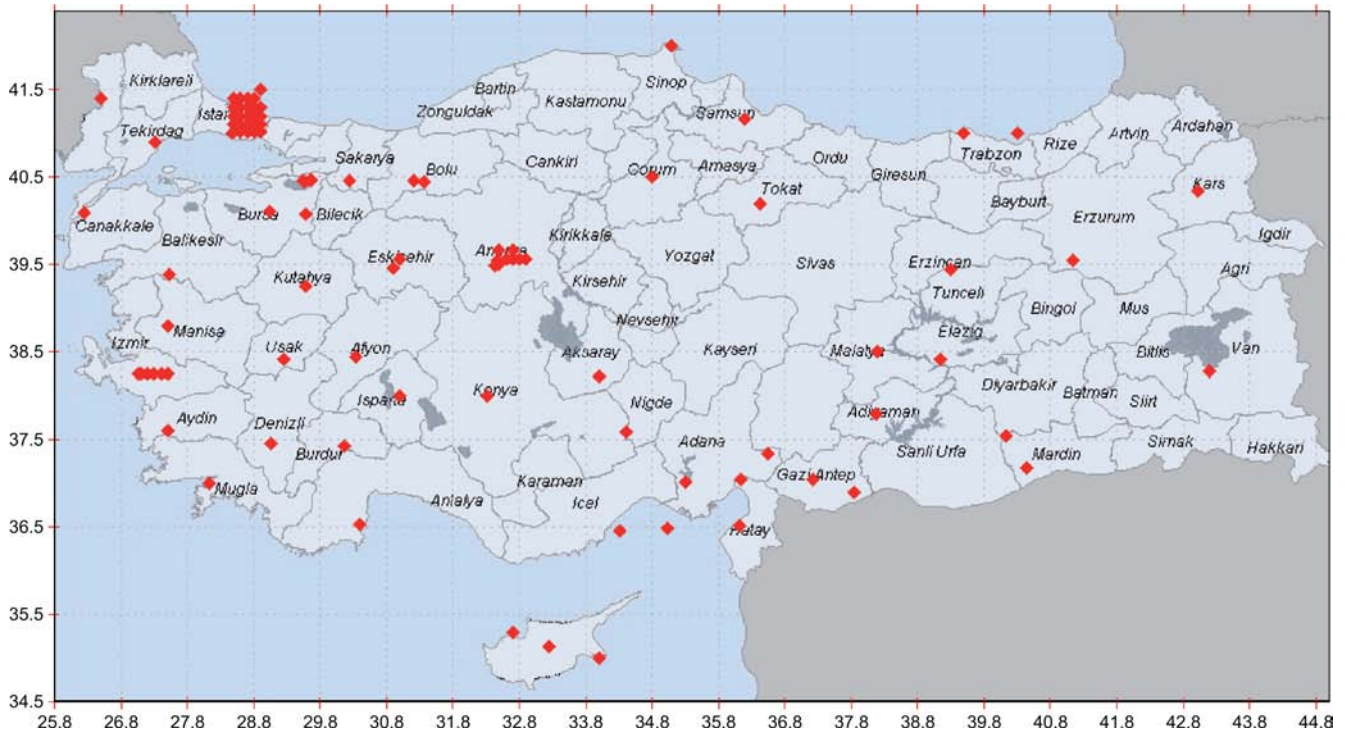


Figure 6 Number of KITS members

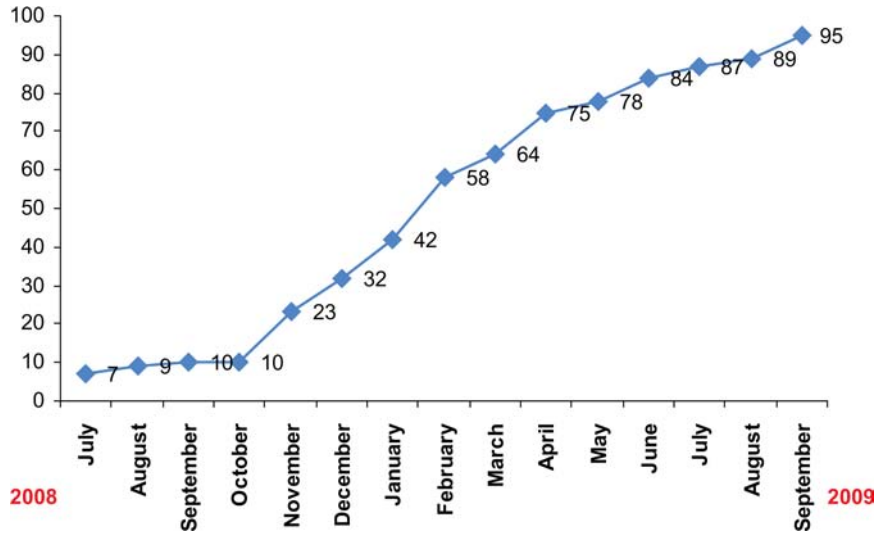


Figure 7 Number of monthly operations in KITS

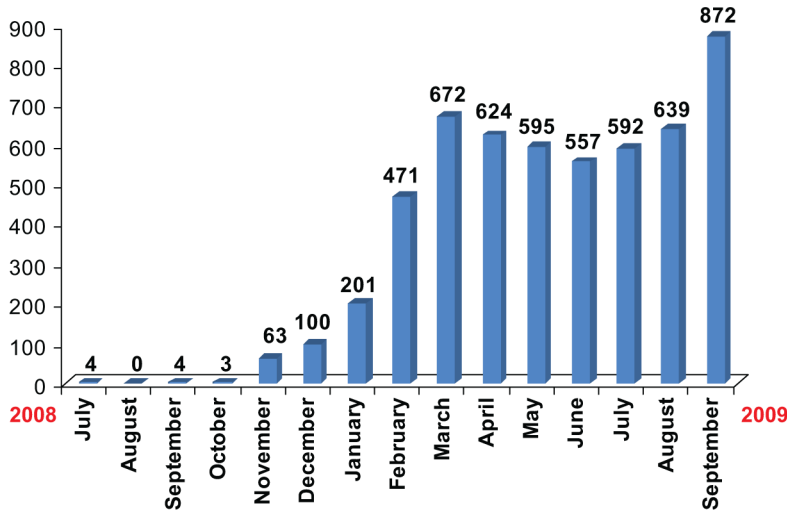
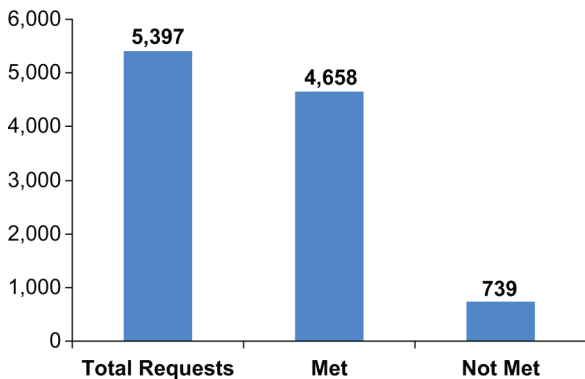


Figure 8 Total operations



producing joint projects. Collaboration is easy to talk about but its realisation requires hard struggle and joint efforts. Usually, almost all parties are in favour of collaboration; however, it can easily be given up when it comes to carrying out the necessary work. Collaborating libraries are expected to conform to certain standards, and to maintain a common level of quality. However, many people are disturbed by being told that the work can be done in a way that is different from current practice. They think that their solution is the best one, even in circumstances where a compromise is easy to achieve.

KITS is being developed by a group of dedicated volunteers that have started their journey of teamwork, instead of individual effort. The use of KITS by 75 member institutions during the pilot application has given great pleasure to the

Figure 9 Top ten requester libraries

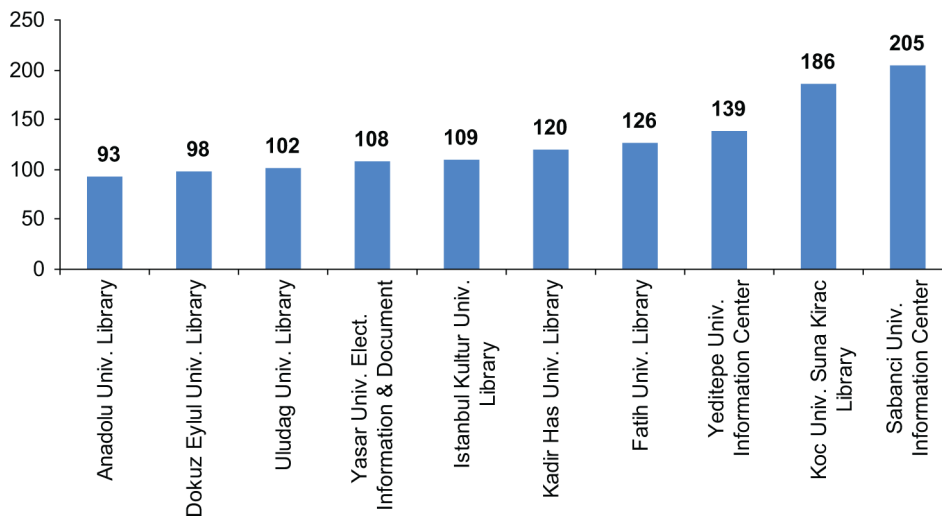
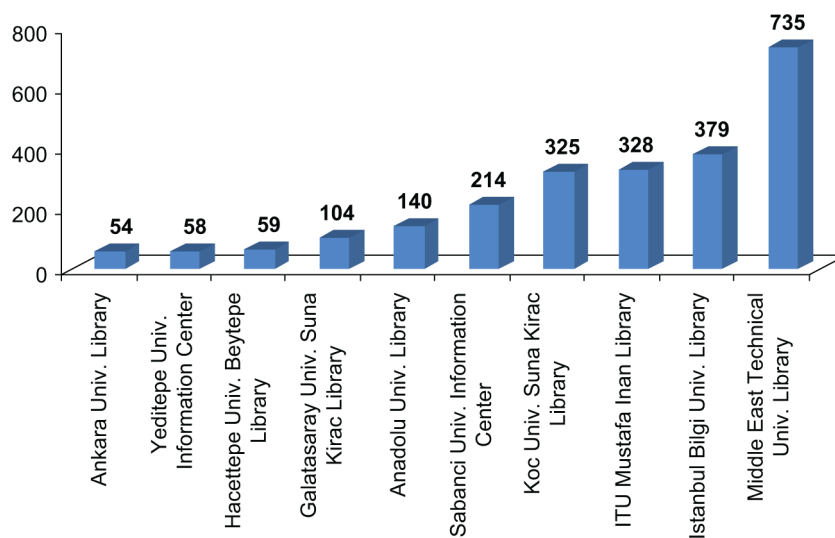


Figure 10 Top ten lender libraries

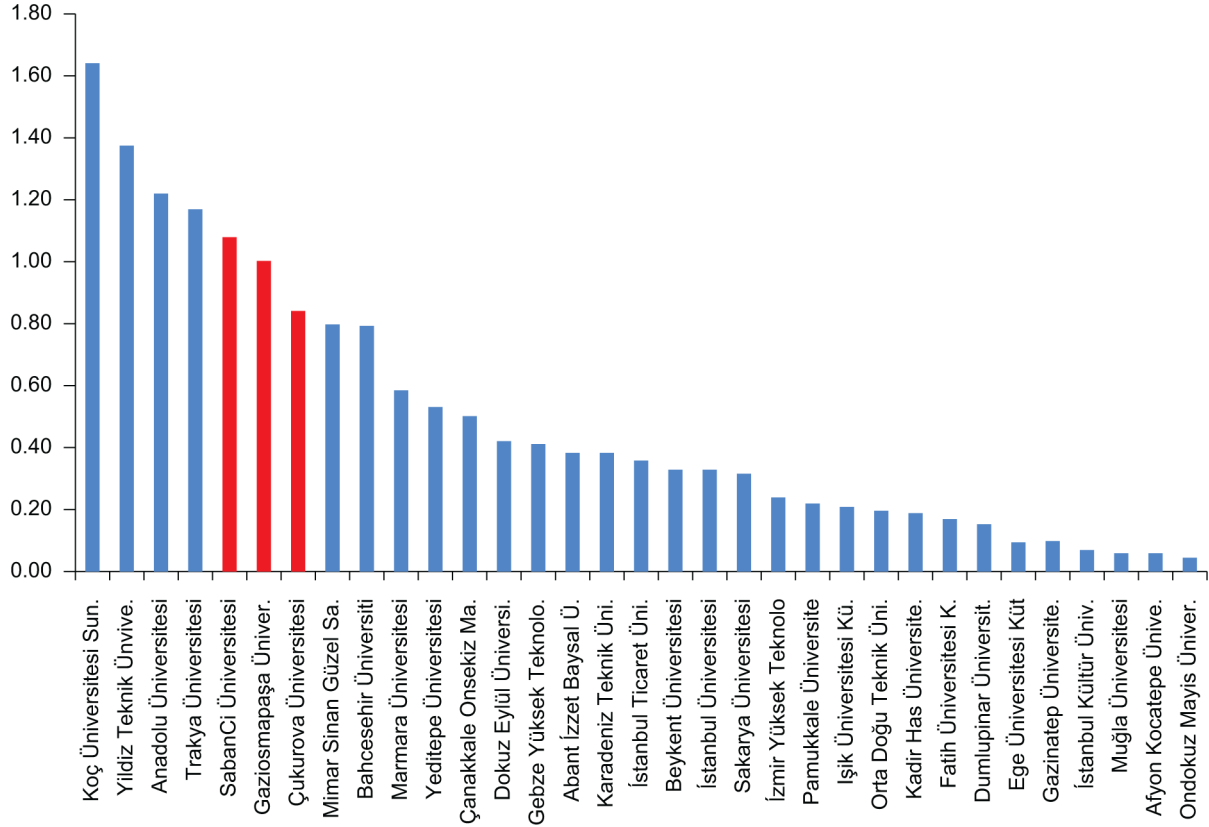
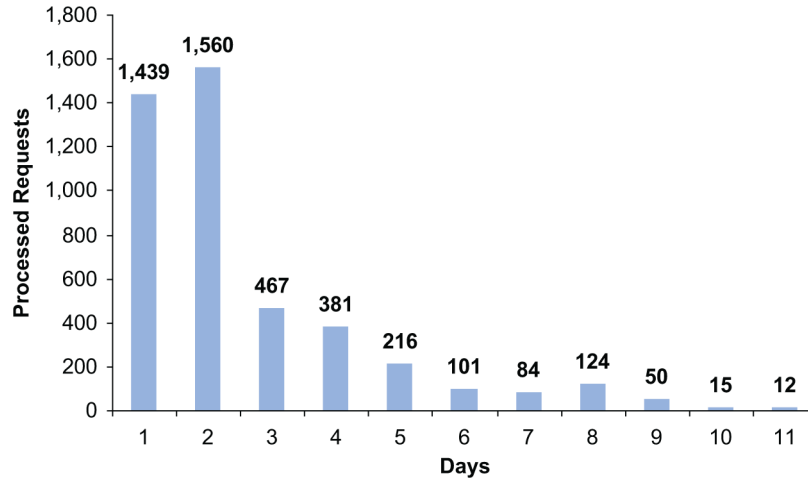


developers. The ideal goal is to carry out interlibrary resource sharing operations through the national union catalogue. It is the hope of the developers that integration of KITS with the national union catalogue will be a topic for the near future.

KITS and similar applications succeed with utilisation and support at a national level; KITS reached a membership of 95 at the end of September 2009, and an important level of support has been observed. Some of the key institutions among the main suppliers (that also have an important place among the libraries in Turkey because of their collections) are not yet participating in KITS; this has been one of the principal problems experienced during the project. Interviews and general investigation have identified “adherence to traditions” as the main reason for not participating in KITS. Those institutions either use their existing document supply modules and consider that KITS is an extra demand, or they are using in-house semi-manual document supply systems and are remote from KITS and similar new

applications. They also have another reason for not being part of KITS: they fear that their already heavy workload will increase if they participate.

It has been observed during the pilot application of KITS that managers of state university libraries especially (who are supposed to carry out all the operations according to formal laws and regulations) are expecting a legal basis for such applications. The developers of KITS, however, think that there is no need for such a legal basis because KITS aims to carry the existing applications into the electronic environment. The aims of KITS emphasise the importance of document supply operations, creating awareness, providing standardisation, shortening the duration of processes, recording processes, and increasing service quality in document supply operations. During this study, we have noted that KITS has gone a long way to achieving these aims. Processes are recorded, service quality has been improved and a standard application has been implemented. Furthermore,

Figure 11 Net lending of member institutions**Figure 12** Turnaround time

the most important aim achieved is the creation of awareness, indicated by the fact that some KITS members have carried out their first document supply operations over the KITS platform. The KITS project has continued to recruit new members after the pilot application finished in April 2009.

The KITS project aims to carry out all document supply operations in Turkey using standards, processed online, and monitored centrally. It is expected that manual systems will be

abandoned. Listed below are future planned activities that will transform KITS into a nationwide application:

- use of KITS by all university libraries in Turkey;
- permanency of KITS;
- support for a union catalogue;
- international collaboration;
- a national conference for dissemination and evaluation;
- filing an application for a Turkish standard;

- user feedback and suggestions for improvement; and
- agreement with shipping providers.

“Taking responsibility, common understanding, developing a consensus, and patience” are the topics emphasised by Tonta (1999) for successful collaboration.

We wish to conclude our paper with a quotation from the talk by Jordan M. Scepaniski, as it correctly describes our approach in starting the KITS application:

All of these are topics to be overcome by all of us in the library world in order to advance to the upper level stated by Kittay. I suggest to you the following, in order to advance to the upper level together:

- Continuity. Never give up, keep trying.
- Talk to each other. Expression of inner feelings and discussion of thoughts are important.
- Listen to others. Listening is important. All of us want to be heard.
- Great dreams give birth to great works. You should have great dreams in order to spend a good life. And, lastly,
- Action gives results! Change requires action Scepaniski, 2001).

Notes

- 1 See The National Union Catalogue, available at: www.ulakbim.gov.tr/cabim/katalog/
- 2 See www.toplukatalog.gov.tr
- 3 KITS is available at: www.ankos.gen.tr/KITS/index.php

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