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Citation:

Külcü, Özgür and Tolga Çakmak, "Evaluation of Institutional Conditions for Electronic Records Management (ERM) in Turkey: Results of Surveys Carried Out in 17 Institutions," in *Proceedings of the InterPARES 3 International Symposium, 4-5 June 2009, Seoul, South Korea* (Seoul: Sungkyunkwan University, 2009), 301-335.

Evaluation of Institutional Conditions for Electronic Records Management (ERM) in Turkey: Results of Surveys Carried Out in 17 Institutions

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Abstract

The InterPARES 3 Project is an international research project composed of numerous regional, national and multinational research teams. One of the fundamental tasks of the research is to evaluate the digital records management practices of test-bed institutions within different sectors in each region or country to allow the Project's researchers to better understand the nature and scope of the similarities and differences of these practices both within and between institutions in different sectors and, eventually, across cultural boundaries. Accordingly, TEAM Turkey has evaluated seventeen test-bed institutions from six sectors: Education, Research, Publishing, Health, Military and Government. This research involved qualitative and quantitative analyses of each institution from different perspectives, including their technological capabilities, their staff structures, and their digital records policies. This paper presents the TEAM's preliminary findings, which indicate that although these seventeen institutions exhibit different records management characteristics due to their unique organizational structures, they nevertheless share some similarities in their digital records management policies and some of their other related policies. Given the wide scope of the institutions examined, it is felt that these findings accurately reflect the broader picture of the current nature and status of digital records management in Turkey and, as such, provide critical insight into the digital records management processes that affect Turkey's digital records management infrastructure.

A Brief Overview of Administrative Development in Turkey

After it was established in 1923, building on its heritage from the Ottoman Empire, the Republic of Turkey dedicated itself to the modern world and has since realized numerous reforms in administrative and social fields, and is still continuing this process.

Approaches to improve the administrative structure of the Republic of Turkey and its institutional services have always been popular, and many studies have been carried out in this field.¹

Another factor that has profoundly affected the institutional structures and administrative system of Turkey is the EU process. Turkey-EU relations have gained a new dimension with the decision to initiate negotiations for full membership on October 3, 2005, in Luxembourg.² Having turned its attention to the modern world and continuing its development, Turkey is now the 15th largest economy with a population of 71 million and a Gross Domestic Product of \$1 trillion.³

Development of Records Management Studies in Turkey

The basic regulation guiding records and archival studies in Turkey is the "Law on Amended Decree Law on Disposing Redundant Records and Materials" released on October 4, 1988. "Regulation on State Archiving Services" of May 16, 1988, on the other hand, presents an application model for institutional records procedures. In addition to these regulations, various arrangements have been carried out to meet the requirements in records and archives services within the framework of the changing conditions. It is thought that these arrangements have emerged in response to the need for restructuring information and records procedures according to the changing conditions, coordinating these procedures with other related constituents, setting up the environment for the realization of information and records procedures in the electronic environment, and as a result of the process of Turkey's alignment to the EU and similar international institutions. These arrangements are chronologically as follows:

1. "Receiving Opinion of General Directorate of State Archives on Sorting and Disposing Procedures, Sending Annual Archives Activity Report Without Delay, Transfer of Board of Management or Similar Decisions and Archive Material in Old Turkish Without Delay to the State Archives," *Prime Ministry Circular*, No: 18975, October 20, 1998.
2. "Regulation on Amending the Regulation on State Archiving Services," *Republic of Turkey Official Journal*, No: 24487, August 08, 2001: 95-100.
3. "Law on Freedom of Information," *Republic of Turkey Official Journal*, No: 25269, October 24, 2003: 1-8.
4. "Law on E-Signature," *Republic of Turkey Official Journal*, No: 25355, January 23, 2004: 1-8.

¹ See, for example: Fritz Neumark, *Devlet Daire ve Müesseselerinde Rasyonel Çalışma Esasları Hakkında Rapor* (Ankara: Başbakanlık Devlet Matbaası, 1949); Milletlerarası İmar ve Kalkınma Bankası: Kalkınma Planı İçin Tahlil ve Tavsiyeler, *Milletlerarası İmar ve Kalkınma Bankasının Türkiye Hükümet ile İştirak ve Finansı Etiği Heyetin Raporu* (Ankara: Başbakanlık, 1955); James W. Martin and Frank J. E. Crush, *Maliye Bakanlığı Kuruluş ve Çalışmaları Hakkında Rapor* (Ankara: Başbakanlık Devlet Matbaası, 1952); *Kamu Yönetimi Araştırma Projesi (KAYA)*: Genel Rapor (Ankara, 1991); Burhan Aykaç (1991), "Yönetimin İyileştirilmesi ve Örgütsel Değişim," *Amme İdaresi Dergisi* 24(2): 94-97; *Merkezi Hükümet Teşkilatı Araştırma Projesi (MEHTAP) Yönetim Kurulu Raporu*, 2nd ed. (Ankara: TODAİE, 1962); and *Kamu Yönetiminde İdareyi Geliştirme Çalışmaları 1991-95* (Ankara: Başbakanlık İdareyi Geliştirme Başkanlığı, 1996).

² Türkiye Avrupa Birliği Karma Parlamento Komisyonu [Turkey-European Union Joint Parliamentary Commission], *Türkiye-AB İlişkilerinde Önemli Tarihler Kronolojisi*. http://www.tbmm.gov.tr/ul_kom/kpk/trabils.htm (accessed 4 April 2008); H. Gümrükçü (2002), "Avrupa Türkiye İlişkilerinin Geleceği." http://www.abhaber.com/belgeler/blg_00034.asp.

³ World Bank (2008), "Gross domestic product 2007, PPP." http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP_PPP.pdf (accessed 21 July 2008).

5. "Regulation on Principles and Procedures for Application of the Law on Right of Information," *Republic of Turkey Official Journal*, No: 25445, April 27, 2004: 1-13.
6. "Regulation on Principles and Procedures to be Applied in Official Correspondence," *Republic of Turkey Official Journal*, No: 25658, December 02, 2004: 5-26.
7. "Prime Ministry Circular on Standard File Plan," *Republic of Turkey Prime Ministry General Directorate of Personnel and Principles*, 320-3802, March 24, 2005: 1-55.

In addition to these arrangements, although not legalized yet, the *Draft Law on Foundation and Duties of General Directorate of State Archives and State Archiving Services*; and the *Draft Law on Organization for National Information Security and Its Duties* have been finalized by the Prime Ministry General Directorate of State Archives,⁴ and they have passed from the Commission of National Education in TGNA on May 4, 2006, which accelerated the legalization process.⁵ This process is still in progress.

In 2007, the Turkish Standards Institution published a Turkish edition of ISO 15489, the international standard for records management (TS ISO 15489-1 2007; TS ISO 15489-2 2007). Another crucial study carried out in Turkey is the Reference Model for System Criteria of Electronic Records Management (EBYSKRM), which was prepared in 2005, and whose revised second edition was published in 2006.⁶ The Turkish Standards Institution adopted EBYSKRM as a standard with the code of TSE 13298 on June 19, 2007.⁷ It is thought that TSE 13298, which was prepared to be compatible with the studies of the ICA, the Australian and British National Archives, the MoReq Model, the DoD 5015.2 Standard, the InterPARES Project, the ISO 15489 Standard, ANSI/ARMA Standards, etc., will be beneficial in conducting studies on records management in the electronic environment in Turkey that are compatible and coordinated with international applications and standards.

The "E-Government Gate" portal, which was opened on December 18, 2008, is regarded as the peak of successes in electronic public services and, in this framework, in electronic records management applications in Turkey. E-Government Gate is an Internet portal that provides access to all public services from a single point. The goal of the Gate is summarized as offering public services to citizens, companies and public institutions through information and communication technologies in an effective and fruitful way.⁸ Besides this general arrangement, many projects, application samples and arrangements in institutional bases, including e-records management and e-government applications, have been developed in Turkey. The major ones are chronologically shown below.

Methodology

This study depends on findings acquired from the analysis carried out by the Turkish TEAM of the InterPARES 3 Project. Contextual analyses, as well as records, recordkeeping systems and policy analyses were conducted based on the InterPARES 3 Project methodology. Each of the field surveys under the following titles was conducted in 17 different institutions and the required data were obtained.

1. Case Study Contextual Analysis
 - a. Institution, location, development, legal status, administrative structure, financial assistance, sources, management, constraints, aim and objectives.
 - b. Activities resulting in the creation of records: Administrative and managerial framework, general definition, types of activities, documents prepared during activities, existing records management program, personnel responsible for records procedures, strategies for records procedures, legal requirements and constraints, administrative requirements and constraints, ethical requirements and constraints.
2. Research questions to be answered for Policy Case Studies (18 questions).
3. Research questions to be answered for Records Case Studies (11 questions).
4. Research questions to be answered for Recordkeeping Systems Case Studies (14 questions).

Evaluation of Electronic Records Management Applications in Turkey: Field Surveys Carried Out in 17 Institutions

In the following part of the study, data from field surveys carried out in 17 different institutions for evaluating electronic records management applications in Turkey will be presented. The aim of the field surveys was to identify the role of information and records management in institutional objectives, structures, functions and practices in organizations that have diverse service activities; and to determine to what extent institutional information and records management activities are carried out in the electronic environment.

The study, which was carried out to determine the dimension of electronic records management applications, includes data from field surveys conducted in Turkey within the framework of the InterPARES 3 Project. The field surveys aiming to identify the institutional conditions and, in this framework, the electronic and printed information and records management expectations also proved to be the first such studies carried out in Turkey.

Table 1 includes the list of institutions in which the surveys and analyses were carried out. Analyses was conducted in the institutions using the contextual, policy, records and recordkeeping systems case study templates defined within the framework of the InterPARES 3 methodology. Then, to obtain analytical results, these data were assessed in accordance with the contextual analysis technique and entered into SPSS (Statistical Package for the Social Sciences) for further statistical analysis.

⁴ *Elektronik Belge Yönetimi Sistem Kriterleri Referans Modeli*, prepared by Hamza Kandur (İstanbul: Devlet Arşivleri Genel Müdürlüğü, 2005), 88..

⁵ Reuters News Agency (2006), *Arşiv hizmetlerini düzenleyen tasarı komisyonunda kabul edildi*. http://www.isbank.com.tr/reuters-haber-detay.asp?Document_Header=nGOK438372 (accessed 4 April 2006).

⁶ H. Kandur, *Elektronik belge yönetimi sistem kriterleri referans modeli* (İstanbul: Devlet Arşivleri Genel Müdürlüğü, 2006). http://www.devletarsivleri.gov.tr/EBYS_v_2_0.pdf (accessed 1 June 2007).

⁷ Türk Standartları Enstitüsü (2007), *Bilgi ve dokümantasyon – Elektronik belge yönetimi (TSE 13298)*. http://www.tse.org.tr/Turkish/Abone/Standard_Ara.asp?Durum=IcsTablosu&Sira=1&EskiKod=01.110 (accessed 12 August 2007).

⁸ T. C. Başbakanlık (2009), "E-Government Gate-E-Devlet Kapısı: Devletin Kısa Yolu." <https://www.turkiye.gov.tr/portal/dt?provider=HomePageContainer&channel=icerik>.

Table 1. List of Test-bed Organizations

Case Study No.	Test-bed Name
1	Barlas Interior Design
2	Ankara Province Board of Leagues
3	Undersecretaries of the Prime Ministry for Foreign Trade
4	Republic of Turkey, The Ministry of Public Works and Settlement
5	Hacettepe University Institute of Social Science
6	Hacettepe University Adult Hospital
7	Aselsan A.S. (Military Electronic Industry joint-stock company)
8	Turkey Aerospace Industries Inc.
9	Vehbi Koc Ankara Research Center
10	Hacettepe University Library Department of Consultation and
11	Hacettepe University Beytepe Center Library, User Service
12	Middle East Technical University
13	Atilim University Library
14	ULAKBIM - Cahit Arf Information Center
15	Adnan Otuken Public Library
16	Turkey Radio and Television (TRT) Central Library
17	Turkey Radio and Television (TRT) Istanbul Directorate

As shown in Table 2, the institutions in which research and analysis took place are divided into three groups: Education & Research (35.3%), Service Sector (29.4%) and Government & Military (35.3%).

Table 2. Test-Bed Sectors

Sector	N	%
Education & Research	6	35.3
Service Sector	5	29.4
Governmental & Military	6	35.3
Total	17	100.0

Because the results of the analyses from the 17 institutions are very comprehensive, including 37 tables of statistical analysis, this study only summarizes the final evaluations and results of these analyses.

Evaluation and Conclusion

Since the early 20th century, Turkey has faced drastic changes in administrative organization and institutional structuring in parallel with the effect of modern administration and system approaches. In spite of inactive periods at certain times, the overall changes point to a long-term innovation in both the public and private sectors. As a part of these changes, information and records systems were revised and, as a result of this, the legal and administrative arrangements mentioned in this study were set up and put into effect. Today, records management studies are guided by electronic applications. Electronic applications, which have rapidly become widespread in the West since the mid-1990s, were introduced to Turkey in the early 2000s. In this context, many public services are currently conducted in the electronic environment. Turkey is rapidly upgrading its ranking in e-government indexes. However, there still remain some challenges related to structural and practical problems and deficiencies. The primary issue at this point is to determine to what extent the existing conditions meet the expectations. Results obtained from the analyses conducted in the 17 institutions are as follows:

Service areas of the case institutions consist of information services, publishing, research, public services, medical services and advertising. These institutions are chosen at nearly equal rates from sectors under three groups: Education & Research, Service Sector, and Governmental & Military.

In general, in most of the institutions from these three groups, the units responsible for information and records services have no decision-making and expenditure authority, which poses a serious problem. It is thought that information and records procedures can be conducted more efficiently through efficiency calculations and appropriate financial accounting in services. On one hand, the number of personnel responsible for information and records procedures is sufficient in each of the three groups; on the other hand, there are serious problems in the number of trained personnel in the institutions that belong to the Service Sector and to the Governmental & Military groups. Although the Service Sector has the highest ratio of annual records creation, its personnel number is lower than that of Education & Research. This shows that inequalities exist in personnel distribution. Again in the Service Sector, existing policies and administrative arrangements for information/records procedures prove to be more inefficient than in other sectors.

Records are frequently used in daily affairs in the institutions from each of the three groups. No serious problems are observed in the systems for conventional (printed) information and records in each of the three groups. As well, there is no communication or coordination problem amongst units within the institutions surveyed. It is a positive fact that 47.1% of the institutions have at least one information and/or records manager. More than three quarters (79%) of the institutions surveyed conduct information/records procedures in the electronic environment, which provides evidence for how rapidly the recent changes have been in Turkey. However,

the systems used by a great majority of the institutions, especially by those belonging to the Governmental & Military group and to the Service Sector, in information/records procedures within the electronic environment are too simplistic, and lack professionalism. The institutions predominantly make use of electronic information/records systems for administrative transactions and control, user statistics and for providing the required sources. It is a serious problem that half of the institutions belonging to the Government & Military group have no software applications for information processing. Again, it is remarkable that none of the institutions serving the Governmental & Military sector have software application for institutional transactions.

Only 35% of the 17 institutions surveyed have an identified records management system that comprises functions for the management of records from creation to disposition in the electronic environment. Programs used in other institutions can meet some stages of the records lifecycle. Approximately three quarters (76%) of all institutions conduct their official records activities in the printed environment. The institutions do not have any problem with technological infrastructures, yet infrastructure facilities for electronic records management applications are insufficient in 53% of them.

The target audience of the groups shows variation according to the services offered. In Education & Research, the target audience is the general public, while it is various in-house units in the Governmental & Military group.

It is seen that, while records metadata are identified in electronic systems, some information, in particular that related to activities and summary information, is missing. Although all office applications are carried out in the electronic environment in all institutions surveyed, it is a serious problem that there are no systematic procedures for retaining data on the e-mail platforms through which these institutions conduct their in-house communications.

In the institutions surveyed, there are no problems related to activities such as authorization, security, backup, and long-term preservation in ERM applications. However, records procedures requiring original signatures cannot be conducted in the electronic environment, which is a problem requiring immediate attention. Long-term preservation is most problematic in the Governmental & Military sector. A great majority of the groups (82.4%) keep their data in databases belonging to institutional information systems. Changes can continue to be made to these data at various levels. Yet, each of the three groups has problems at various levels in terms of the authorization, security and long-term preservation of data integrity related to these changes.

Institutions in the Governmental & Military group exhibit a disconnect between the information/records center and other official units, while, in general, the other groups do not have such serious problems.

It is seen that there is no integrated structures, in general, between information and records management programs and other information systems. This situation may lead to several problems in the processing of institutional information systems as a whole, conducting coordinated information and records procedures, and sharing the required information and records on time.

In the institutions surveyed, information and records sources are arranged according to the structure of the existing material. However, the predominant materials used in the Governmental & Military group are records. As can be inferred from the other results of the analysis, problems related to records procedures are more significant in this group. Nevertheless, more than 10% of all institutions and 20% of the institutions in the Service Sector state that they do not have any systematic records arrangement, which is a serious problem.

In general, the institutions surveyed indicated that they need an integrated and centralized digital recordkeeping system for controlling all records of the organization in all media and formats created and used within the scope of ERM. Yet, this ratio decreases to 33.3% in the Governmental & Military group. On the other hand, 83.3% of the institutions belonging to Governmental & Military group state that there is need to modify the existing policies, procedures and standards that currently control or influence records creation, maintenance, preservation or use. This shows that the Governmental & Military group primarily needs to reorganize its own system. The ratio is 50% and over in the other two groups, which proves that they need such reorganization as well.

Recommendations

Nearly all of the institutions surveyed intend to transfer their entire information and records applications into the electronic environment. However, under the existing conditions, one of the most challenging problems is the lack of central institutions that could coordinate these applications. Initially, a unit bound to the central government needs to be established that would set up the infrastructure for electronic information/records applications, and coordinate, arrange and supervise them. The existing units within the State Planning Organization can be made more active. Moreover, the following recommendations, proposed within the framework of the findings obtained from this study, are thought to be important to take into account:

1. Units of institutions responsible for information/records procedures should have the authority of independent decision-making and expenditures.
2. Institutions in need of professional personnel should be supported. It is important to take into account the distribution of workload in appointments.
3. An important rate of institutional workload has already been transferred into the electronic environment. Administrative and legal arrangements, which would identify information/records procedures in the electronic environment just as in the printed environment, should be put into effect as soon as possible.
4. Currently, the systems used by institutions in the electronic environment involve little more than word processing. Other systems (particularly those used in information centers) do not focus on information sources. Information systems for institutions should be developed, including modules for information, records, documents, human resources, administrative information systems and budget programs. Transition, information exchange and interoperability should be enabled among modules within ERM.
5. Metadata fields used in identifying records should be expanded, and it should be made possible to monitor and preserve the entire in-house correspondence within the system.
6. Transferring official correspondences requiring original signatures into the electronic environment by using secure electronic signatures should be given priority.

7. Disconnections between information/records centers and other units should be eliminated, and a harmonized and coordinated process should be enabled.
8. ERM applications used in institutions should be restructured to provide an integrated and centralized digital recordkeeping system for controlling all records of the organization in all media and formats.

It should be taken into account that fulfilling the above recommendations will enable e-government and ERM applications to become more efficient, reliable and systematic in Turkish institutions in the face of their rapid transition to the electronic environment, which will, in turn, promote innovations and advances.

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