

## CULTURAL HERITAGE INVENTORY SYSTEM OF TURKEY ON THE WEB

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### ABSTRACT:

Cultural heritage inventory systems have important roles for the cultural heritage management and in formulation of investment plans. In Turkey, any kind of issue or subject related with Cultural Heritage is under the responsibility of *Ministry of Culture and Tourism* basing on the “The Law of Conservation of Cultural and Natural Properties”<sup>1</sup>. Registration of the cultural and natural assets is under the responsibility of Ministry of Culture and Tourism, General Directorate for Cultural Assets and Museums. This paper presents two web-based projects: (i) “Cultural Heritage of Turkey” and (ii) “Fixed Cultural Heritage Automation Project” of Turkey. First project aims coordination between different organizations and data sharing through the internet. Second one is e-government application via which the general information is accessible for everyone whereas entry and query tools can be used only by admin people.

### 1. INTRODUCTION

Preservation of the Cultural Heritage is one of the main issues for all countries. Hence, documentation and inventory of the cultural heritage in Turkey vitally needs to be completed as soon as possible for the efficient conservation interventions. By the way, in Turkey, advantageously, the number of the organizations interested in documentation and preservation of cultural heritage are increasing in number almost every day. Nonetheless, this also articulates recent and new problems in coordination problematic. Within this context, this paper presents the web based Cultural Heritage inventory system of Turkey.

In Turkey, any kind of issue or subject related with Cultural Heritage is under the responsibility of *Ministry of Culture and Tourism* basing on the “The Law of Conservation of Cultural and Natural Properties” However, determination and inventorying of the fixed cultural and natural assets belonging to registered and subsidiary foundations are under the rule or supervision of the *General Directorate for Foundations*, and mosques, mausoleums, caravansaries, hammams (article 7, Law no 2863). On the other hand, registration of the cultural and natural assets is under the responsibility of *Ministry of Culture and Tourism, General Directorate for Cultural Assets and Museums*. Approximately 60.000 monumental buildings, 75.000 fixed Cultural Heritage and 8200 protected sites and 2.800.000 movable heritage are registered till now.

Until today, inventory and other works conducted by *Ministry of Culture and Tourism* have not been shared with public and also have not been adapted with the new technologies. Therefore, in Turkey, it is not possible to talk about regular and healthy data transfer concerning cultural heritage with and between other organizations such as societies, universities and municipalities.

Each organization is carrying out different methods for documenting and inventorying for the Cultural Heritage without coordination. This situation results in repeated work, extra cost

and lack of time. Due to the fact that there are no standards for documentation, archiving and inventory, using a shared information system for this purpose seems not to be suitable and possible.

Here, two projects “Cultural Heritage of Turkey” and “Fixed Cultural Heritage Automation Project” is tried to take into consideration.

### 2. OVERVIEW

In Turkey, having a cultural heritage inventory system is necessity and urgent task. Rapid urbanization, widely expanded cities, development of new tourism and industrial areas which necessitates infrastructure facilities such as transportation system, sewage system, etc., mechanization in agriculture, opening new raw material mines affect the land and destroy not only the nature but also the cultural heritage. As an instance, it is not a surprising situation to coming across with an important historical ruin by coincidence in any construction site, in Turkey. In such situation, Law obligates that construction activity should be brought to a stand. It means to stop the investment, as well. Another possibility also can be to sacrifice the ruins. In any way, this causes unwanted results. Regional inventories help the investigators for their projects and archaeologists can make some conservation interventions to protect cultural heritage. (Özdoğan 2001: 72 , 124 ). Making investment plans without damaging the cultural asset is the ideal way, however if it is not possible, making a detailed documentary/inventory about that asset becomes an obligatory situation. Therefore, all kind of information that is conducted by different organizations on cultural assets should be accessible by everyone (Özdoğan 2006: 28).

### 3. THE PROJECTS

#### 3.1 “Cultural Heritage of Turkey”

At the end of 2005 the project namely “Cultural Heritage of Turkey” ([www.kulturvarliklari.org](http://www.kulturvarliklari.org)) and “The Cultural Heritage

<sup>1</sup> “The Law of Conservation of Cultural and Natural Properties” dated 21.07.1983; No: 2863; amended by law no: 3386 and 5226

Coordination Committee” had been settled down with the participation of member of the several organizations.

The project participants are Ministry of Culture and Tourism, General Directorate for Cultural Assets and Museums, Turkish Historical Society, General Directorate for Foundations, The Turkish Academy of Sciences (TÜBA) (Fig.1).



Figure 1. Main page of the “Cultural Heritage of Turkey” Project (www.kulturvarliklari.org).

The Scientific and Technological Research Council of Turkey (TÜBİTAK)-Turkish Academic Network and Information Center (ULAKBİM) is supporting as a service provider. (© All projects participants have the copyrights of the project and the data in the system).

Those organizations had different sets of inventory and documentation data and tools. So that, web-based system is preferred for sharing data for the Committee because internet enables access from all over the world, and it is the cheapest way (only needs internet connection and web browser) and the most user-friendly system by integrating different database sets without complex software. At the beginning of the system the idea was using distributed database architecture however there were some problems related to standards and infrastructure. After that, an integrated database is preferred so that each organization could transfer data with FTP using XML format in Structured Query Language (SQL) and the organizations could be responsible to update data every two months.

To start with, the information about tangible historical assets has been included into the system after that intangible data has been added.

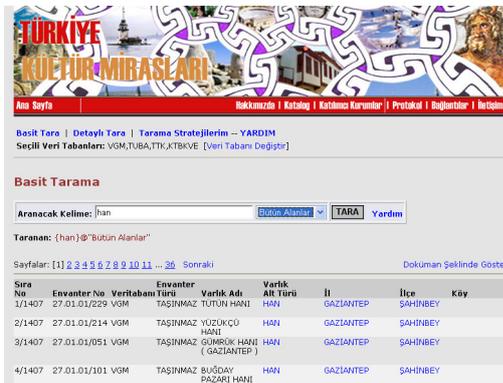


Figure 2. Query of the “han” from the system as a list.

Basic information is aimed to be shared through the internet such as database name (organization name), name of the asset, type of inventory, type of asset, subtype of asset, location (without coordination), city name in a simple list format (Figs. 2 and 3).



Figure 3. Query of the “han” from the system as a document.

### 3.2 “Fixed Cultural Assets Automation Project”

In second half of 2006, on the basis of “Cultural Heritage of Turkey” project (© Republic of Turkey Ministry of Culture and Tourism has the copyrights of the project and the data), another project, namely “Fixed Cultural Heritage Automation Project” (Fig. 4) (see www.kultur.gov.tr), which can be integrated with Geographic Information Systems (GIS’s), is started. Similar to the first project, XML format in Structured Query Language (SQL) is used in this project.

In the first project, the data is open to all users however in the second one; the general information is accessible for everyone whereas entry and query tools can only be used by admin people.



Figure 4. Main page of the “Fixed Cultural Assets Automation Project” (http://212.174.179.207/kv%5Fwebapp/)

While using the system, guest user can only see the reports of the general information and basic statistical data about monuments and conservation areas (Fig. 5).

In Turkey, fixed cultural/natural heritage is registered only by Directorate of Conservation Board of Cultural and Natural Assets organized in regional base. Those Directorates are organized regionally in twenty nine cities recently. Those Boards are working and taking decisions on fixed cultural/natural heritage. Such decisions are the base of the inventory system of the Ministry of Culture and Tourism. With this project the decisions taken by these Boards could be entered through the internet and accessible by the admin people (Fig. 6).

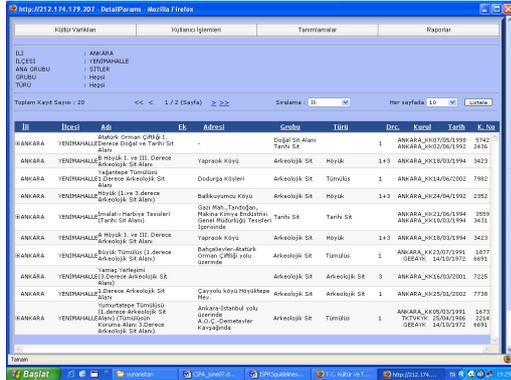


Figure 5. Query page of quest user.

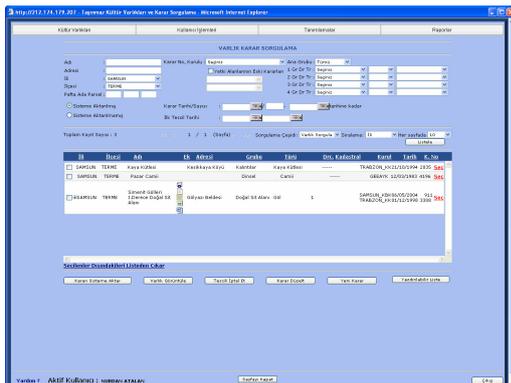


Figure 6. Query page of asset and decision.

Both projects are the parts of e-government applications whereas the second one is more developed and allows admin users to enter the Board decisions (in the law no 2863, article 58) so that the work progress can be stored in the computer and open to constant updates.

#### 4. CONCLUSION

In Turkey, Cultural Heritage inventory is the most important part of the Cultural Heritage Management. None of the inventory systems about cultural heritage completely finished even using modern techniques or intensive documentary system (Özdoğan 2006:93). However, those two projects are the first steps of the inventory systems for sharing information using web-based architecture.

On the other hand, an important problem needs to be solved is standardization (for documentation, registration, inventory and database). In the near future, additional information such as maps, photographs, 3D applications, other visual documents including movable heritage and museum information will be able to integrate with GIS in the main inventory system for

Cultural and Natural Heritage of Turkey. Other data providers such as TAY (The Archaeological Settlements of Turkey) Project, universities and excavation/survey directors are also aimed to be included in a new system for sharing new ideas and data.

Since Turkey has an important role in the World Cultural Heritage it has to be designed in Multilanguage format.

The main aim of the internet-based inventory system for Cultural Heritage in Turkey is to share available data with all users, make that information easily accessible from everywhere and also to support decisions about conservation interventions.

#### 5. REFERENCES

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