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**EXPERT REPORT
ON THE UYAP SYSTEM
(NATIONAL JUDICIAL NETWORK PROJECT)**

Project on Support to the Court Management System in Turkey

by

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1. Introduction

The *Project on Support to the Court Management System in Turkey* is one of several projects, funded by the EU, which is currently being implemented in Turkey by the Council of Europe.

The overall objective of this project is to provide the Turkish Ministry of Justice with a technical support for the improvement of the functioning and the efficiency of the courts. The project which mostly focuses on case-flow management and court administration has also some consequences on IT.

The Turkish Ministry of Justice (MoJ) has, since 2004, embarked on a country-wide initiative named UYAP (National Judiciary Informatics System) whose fundamental aim is to introduce and develop ICT (Information and Communication Technology) systems to all courthouses (see annex I UYAP presentation prepared by the MoJ and Annex II National Judiciary Informatics System). According to information provided by the MoJ to date this initiative has been applied to 98% of Turkish courthouses including the Court of Cassation.

2. Purpose of the mission

I was invited by the Council of Europe to do the following:

- Review the current UYAP system against the initial strategy plan to identify and consider the modifications required to fulfil the project objectives.
- Make a general assessment of the current situation and needs of UYAP, with particular emphasis on the following points:
 - Supervision of reception, processing, archiving and distribution of documents, cases and all court files (including case-files, evidence submitted in proceedings and archives);
 - Integrity and security of information;
 - Operation of case-related databases ;
 - Preparation and management of the statistics;
 - Preparation of trial records and facilitation of the recording of court proceedings
 - Operation of the court schedule and management of the use of courtrooms;
 - Operation of an automatic case allocation system for the entire courthouse;

In addition to the above, I was asked to propose recommendations for the future development of UYAP.

3. Agenda

The agenda of the visit was as follows:

Monday 6 October

- 09:30 – 12:00 Meeting at the Council of Europe Project Office
with the Project Team
Presentation of the mission
- 14:00 – 17:00 Preparation of the next meetings

Tuesday 7 October

- 09:30 – 12:00 Meeting at the Ministry of Justice IT Department.
Presentation of UYAP
Discussion on UYAP
- 14:00 – 17:00 Meeting at the Ministry of Justice IT Department.
Presentation of UYAP and discussion

Wednesday 8 October

- 09:00 – 11:00 Visit of the Court of Cassation's IT unit:
Review of UYAP's functioning
- 13:30 – 17:00 Visit to the Administrative and Tax Courts of Ankara:
Review of UYAP's functioning

Thursday 9 October

- 09:30 – 12:00 Visit of the Ankara Courthouse
Review of UYAP's functioning at the Prosecutor's Office
Review of UYAP's functioning in the criminal courts
Review of UYAP's functioning in the civil courts
- 14:00 – 17:00 Visit of the Kizilcihamam Courthouse
Review of UYAP's functioning

Friday 10 October

- 10:00 – 12:00 Meeting at the Ministry of Justice IT Department
Exchange of views

Presentation of the IT System of the European Court of Human Rights

14:00 – 15:30 Visit to the Representative of the Ankara Bar Association

4. Review of the UYAP system

The UYAP system is an ambitious nation-wide project to link all of Turkey's courthouses to a central database in Ankara which then interfaces with other national ICT systems (such as the MERNIS¹ database, police and prison databases).

I had several meetings with various user groups from top-level management, to prosecutors, judges and data entry personnel. Overall I was impressed by the enthusiasm and overall support for the system. There was a determination shared by all concerned that this project would succeed and a willingness to embrace new technology and new ways of working.

5. Process driven system

Throughout several demonstrations it became clear that the UYAP system had been both well designed and implemented. As a process driven system all major functionality is in place to enable the numerous courthouses to create, manage and exchange information quickly and effectively. An integrated Workflow component automatically assigns tasks to various users.

Consistency and usability are strong characteristics of the system. A single user interface and its core functionality are universally applied. So, for example, if a judge initially works for the court of 1st instance and then moves to the Court of Cassation she/he will be already familiar with the UYAP working environment. This approach has led to significant savings in terms of training.

Equally, the system has over 1350 detailed warning messages to inform users of required information, best practice and data such as when the police have issued an arrest warrant for an individual associated with a case. Judges have been supplied with USB keys to enable them to electronically sign documents and this is being adopted across the board.

The system registers the state of proceeding of a case which along with associated information is used for statistical analysis. This makes it easy, for example, to produce a report that identifies how many cases relating to burglary were registered either by the Ankara Court or country-wide. Such ease of reporting is critical for the prosecutors who then use the data to examine the case load allocation for their particular court.

¹ A national database that contains citizens' ID number and their address.

6. Aims of UYAP

The main aim of UYAP is to register every case brought before the national courts electronically and to scan all relevant case documents so that this information too can be handled electronically. This has a numerous advantages including the fact that:

- All data pertaining to a case is stored electronically in a database facilitating electronic transmission of document to the relevant parties
- Data can be analysed via a data mining reporting tool thereby enhancing management of the courts.
- Cases that are referred from one court to the Court of Cassation or to other courts can be sent on seamlessly without a need to rescan and re-input the information.
- The future Archive of case files will be easier to handle
- Centralisation of all court related case load
- The case load of courts can be allocated automatically
- Documents can be signed electronically
- Notifications to lawyers and applicants can be sent via SMS
- Link with other institutions for example prisons, MERNIS, police etc
- Statistical analysis
- Case warning system
- Court fees can be paid via the UYAP system

7. In-house development

The UYAP system was initially developed in collaboration with a Turkish software house Havelsan but is now entirely managed by the MoJ who have a team of judges and developers ensuring the continuity and future development of the system. The UYAP system has its own custom DMS (Document Management System) which was developed in-house and workflow solution to enable the system to create and assign tasks to judges for action. As mentioned previously, the system is process driven which enhances the overall work productivity and

enables top level managers to effectively manage the case load of the courts and to identify the overall productivity of staff members.

Previously, all registration of cases was done in ledgers and the allocation of cases was done manually. The system now registers and automatically assigns cases to judges based on their current workload. The system has been implemented using JEE2 on the client-side and runs on an Oracle database.

8. Links to other nation-wide database

The system is linked to the MERNIS system which enables the courts to register the party's address details automatically as it captures the information from the MERNIS system and registers the recent address details in UYAP. Equally, if UYAP users see that the party now has a different address they can assign the new one and update MERNIS. The beauty of this system is that each citizen in Turkey has a unique identifier which can be used by the system to identify any other cases they have registered in UYAP. This is useful as in the past sometimes plaintiffs registered their case many times and they were allocated to different judges. The plaintiff then only turned up for a hearing where they thought the judge would be more favourable. Since the introduction of UYAP this does not happen any more. Equally judges can identify past convictions when dealing with a new case and look at other cases assigned to a citizen if needs be.

The system is also linked to the police and prison databases and if a person is registered into the system and for example is sought by the police a warning will appear on the screen indicated that the person is wanted for questioning.

9. Computers in the court rooms

The UYAP has also been extended to enable computers to be present in the court hearing rooms. Each room is equipped with a screen for the lawyers so that they can see the minutes of hearings being directly typed by the court clerk and also computers for the judge and clerk to follow the case file. This is extremely useful as the lawyer can see the minutes as the hearing proceeds and can intervene if mistakes are made - effectively accelerating the justice procedure.

10. Lawyer and Citizen Portal

UYAP also has a lawyer portal interface that is has developed in collaboration with the Ankara Bar Association so that lawyers can register cases for the courts, find out information relating to the current state of proceeding of the case they have registered and also receive notifications via SMS on hearing dates. The SMS notification is a service they can subscribe to and it means that notifications are sent out more effectively than by post. Previously this was done via post and often meant that the lawyer went directly to the court to obtain information. The

lawyers also have the ability to use electronic signatures to sign documents that they send. This is thanks to a specific electronic protocol developed for UYAP which allows the use of four different electronic signature providers.

The portal also allows lawyers to pay court fees on line without having to go to the court in person and pay for the fees by cash. I interviewed the Ankara Bar Association President who was very impressed with the system and has recommended it to other Bar Associations in the country. He felt that the collaboration with the MoJ was extremely fruitful for all parties concerned and indicated that UYAP has helped to speed up case processing time for the Bar Association members and has allowed them to manage their case file more effectively.

Citizens can also access on certain information on their case via information posts in the Ankara Court (provided by the bar association) and via manned information desks in the various courts. Information on the state of proceedings of a case will appear after the user has provided their MERNIS citizen ID number.

11. Scanning facilities

All of the courts have scanners to enable case files to be scanned into UYAP and once registered barcodes can be printed to stick on to the hard copy case file. Once the file is scanned it is then assigned to a case-file and is then available to users that have appropriate security rights.

12. Training

The MoJ has a training unit within the IT Department especially established to ensure proper training on the UYAP system. There are on-line e-learning tutorials and manuals available to users and also a team of “expert users” on hand at each court to train users face to face.

13. Disaster recovery

UYAP has disaster recovery procedures in place and the system is fully backed up each night. A new system centre is currently being built to upgrade hardware and to enhance the overall disaster recovery strategy.

14. Security

The system has numerous Quality Certificates assigned to it including TS-EN-ISO 9001, AQAP-150, AQAP-110 SW CMM Level 3 and soon hope to obtain ISO 17799 and ISO/IEC 15408 CC Standard. The system is protected by a firewall and anti-virus software.

15. Possible Changes to the current system / recommendations

The UYAP system is a constantly evolving solution that will grow exponentially in the next 10 to 20 years and for this reason a number of issues must be looked at:

- **Speed.** Due to the fact that the system is nation-wide and that the number of documents and case files will grow significantly each year the MoJ will need to ensure that the system optimisation is kept to a very high level. During meetings users did mention the fact that at times the system slows down. Having said that, a new data centre is being built at present and discussions are taking place with Oracle, IBM and other IT vendors to ensure that the system is future proofed for the long term and to ensure that as new courts and connections to other national institutions are established the speed of the system is optimal. Due to the fact that everything is centralised in Ankara, fail-over load balancing capabilities must be established to a high degree and where possible distributed processing should be exploited. Equally, the land and satellite connections must also be closely monitored to ensure that traffic from the satellite to courts run smoothly and that access to the system is to a high-level.
- **Disaster recovery.** This is a crucial element to the UYAP system. As the system is centralised measures must be adopted to ensure 100% uptime of the system and to ensure the security and integrity of the system. Real time replication database technology could be considered so that fail-over load balancing solutions can be fully exploited to ensure high availability of the UYAP system. Equally, the LAN, WAN and satellite connections should also support automatic server fail over.
- **Reporting.** At the moment reports are run directly on the live UYAP server and this can and will lead to speed bottle necks on the system. I would advise that all reporting services are run on a replicate copy of the database so that the live system is not affected by many users running large reports. This is highly recommended and as far as I am aware being planned.
- **Scanning.** Investment could be made in providing the courts with more powerful scanners so that the scanning process can be speeded up. Equally, documents being scanned could have a barcode stuck on them that will automatically register the document scanned against a case file. Bar-coding technology could then be used for batch scanning of documents. The ECHR has a solution that it would be very happy to show the MoJ if they decide to visit the European Court of Human Rights in Strasbourg. Equally, scanned documents are in TIFF format which means they cannot be full text searched. This is a limitation of the current system that could be addressed by converting the image into PDF with text integrated.
- **Searching.** The MoJ could invest in a modern search engine to search more effectively for documents and metadata. Again the ECHR has good experience in this arena and would be willing to share its experiences with the MoJ.

- **Training.** At the moment training is done on the functionality of UYAP, however our experience shows that training on legal procedures of the courts is also necessary so that users understand how the courts work and then see and understand the benefits of UYAP.
- **Data entry.** Judges are expected to use UYAP for data entry and to manage tasks. However, there could be a need for judges' assistants to help the judge with this type of administrative duties and free up their time for the judicial part of the case file handling.
- **Appeals court.** The Court of Cassation has an enormous workload and this could be alleviated by the establishment of courts of appeal with UYAP system. I am aware that the process to instigate a court of appeal is ongoing.
- **Archiving / Records Management.** As the system grows there will be a need for archiving capabilities so that closed cases can be stored off-line. This will become more apparent as the system grows in size. I believe this is already under discussion but represents a major development.
- **More screens and information points in courthouses.** Due to the volume of visitors to the larger courts the provision of information points should be encouraged in all Turkish courts. Also, in the larger courts an effort should be made to easily guide citizens to the appropriate meeting rooms either by clear and comprehensive signs or colour coded lines.
- **Change requests and future developments.** There are already processes in place for users to send any change requests or suggestions for future developments and this seems to be well managed. It would be beneficial to inform users of exact delivery date times and the prioritisation criteria for their requests and to make this information available to the user base.
- **Raise Bar Association Awareness.** The Bar Association of Ankara has embraced the UYAP system and has integrated the technology well. Other Bar Associations in Turkey are slower to react and for this reason efforts should be made to further raise awareness of the system and to demonstrate the good practice experiences of the Ankara Bar Association.
- **Exploit the use of templates in UYAP.** UYAP provides users with numerous templates that they can use and adapt to their own criteria. This could be exploited more by creating Template pilot groups directly within the various courts to provide more each with a set of specific templates relating to their procedures.
- **In-house development.** The reliance on an entirely custom built solution does pose a number of issues such as a reliance on the internal development team to

continue to support and maintain the system. Ensuring the proper life cycle and future proofing of the system - this requires proper budgeting and project planning.

16. Conclusion

UYAP is probably one of the most advanced nation-wide court justice systems in the world and an excellent example of best practice for national courts. The Ministry of Justice of Turkey can only be congratulated on the implementation of the UYAP and the benefits that it will give to the Turkish national judiciary and the rule of law.

I would like to thank all the officials and users of the UYAP system that I met for their frankness, the time they gave to me to demonstrate the system and for their warmth and overall enthusiasm for the continued development of this project. UYAP is a system that will continue to evolve over time and will become an integral element in the Turkish justice system. I wish the Ministry of Justice every success in the continuation of this project.