e-Government in Palestine

By Wassim Abdullah

The discussions about e-Government in Palestine started around 2005 at the Ministry of Telecommunications and Information Technology (MTIT), and were followed by numerous studies and workshops that took place with a view to get acquainted with the experience of other countries. International organizations such as OECD, UNDP, and the World Bank supported the initiative. The experiences of many countries were studied, including Ireland, Italy, the United States, Malaysia, the United Arab Emirates, and Tunis, and although more than one report about the project was produced, there was no actual implementation on the ground because stakeholders were unable to reach consensus.

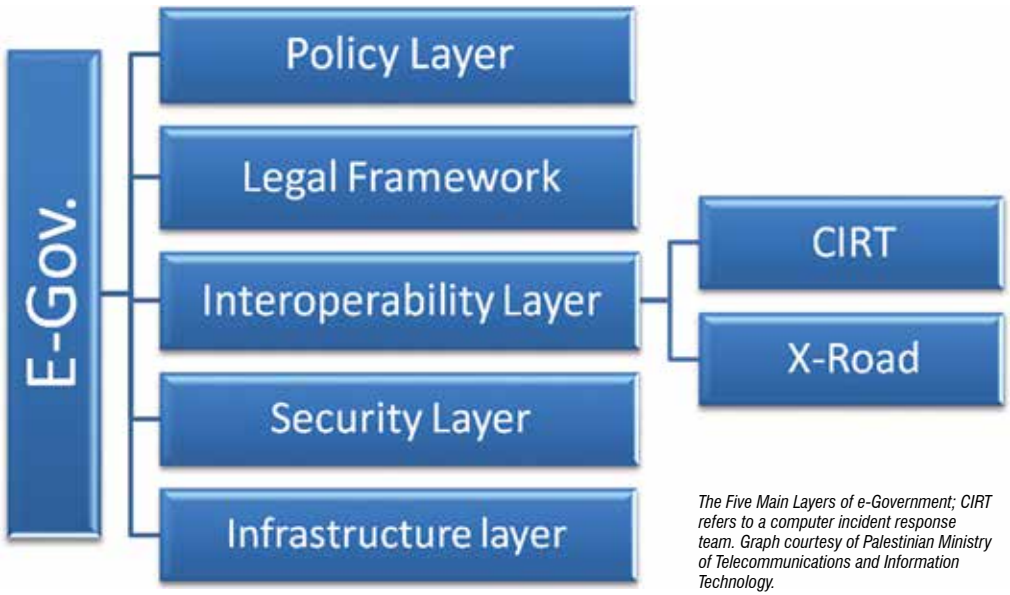
When the Annapolis conference about the Middle East took place in the Unites States in November 2007 followed by the Paris conference in December 2007, a total of $7.4 billion in assistance to the Palestinian Authority was pledged, well over the pre-conference goal of $5.6 billion. The foreign minister of Estonia, Mr. Urmas Paet, pledged a contribution of 12 million Kroon (0.8 million Euros, about one million US$) to Palestine. A letter was sent to him signed by the Minister of Interior at the time, Brigadier General Abel Razzaq Al-Yahya, asking for this money to be used for the development of e-Government in Palestine. An immediate positive reply was sent back, and this initiated long-term cooperation between Palestine and Estonia.

Estonia is among the most advanced countries in IT systems – their development and application – as well as in data security. It has already left its mark in Europe and in many other countries as a model and training resource in e-Government. It is remarkable that Estonia's population is smaller than that of Gaza (less than 1.4 million), yet Estonians have created one of the most developed e-Government systems. President Toomas Ilves, who met with Prime Minister Salam Fayyad and President Mahmoud Abbas in June 2010, said during a speech in Ramallah that information technology, e-Government, and e-Governance enables a country with a small population to advance and to play in the larger League of Nations on equal footing.

> E-Government is normally defined as the services shared between government ministries and institutions, namely, government to government (G-G), government to businesses (G-B), or government to citizens (G-C).

The relationship between Palestine and Estonia started in May 2008 with the Palestinian Ministry of Interior and the e-Governance Academy under the watchful eye of the Estonian Foreign Ministry. A number of consultants came from Estonia to train Palestinians, and numerous teams from the various ministries and IT departments went to Estonia for training and a firsthand look at the way things were done. The project is ongoing, and Palestine has adopted the Estonian model of e-Government based upon the X-Road concept of interconnections.[i]

To ensure the continuation of the e-Government program with the Estonians, it was transferred from the Ministry of Interior to the MTIT after the cabinet reshuffle in September 2009, and the appointment of Dr. Mashhour Abudaka as the Minister of



The Five Main Layers of e-Government; CIRT refers to a computer incident response team. Graph courtesy of Palestinian Ministry of Telecommunications and Information Technology.

Telecommunications and Information Technology. The program then continued at full throttle with more technical cooperation and two-way visits to Estonia. In addition, a most valuable and necessary addition to the e-Government program was the cooperation with Birzeit University and the phenomenal work done by Dr. Mustafa Jarrar and his team to develop the most comprehensive "interoperability" program and project that defined and unified all the terms, words, institutions, and names, etc. that e-Government personnel, computers, and the general population will use to inter-communicate accurately and seamlessly. The culmination of this project was embodied in ZINNAR, the interoperability framework, a first in the Arab world.[ii]

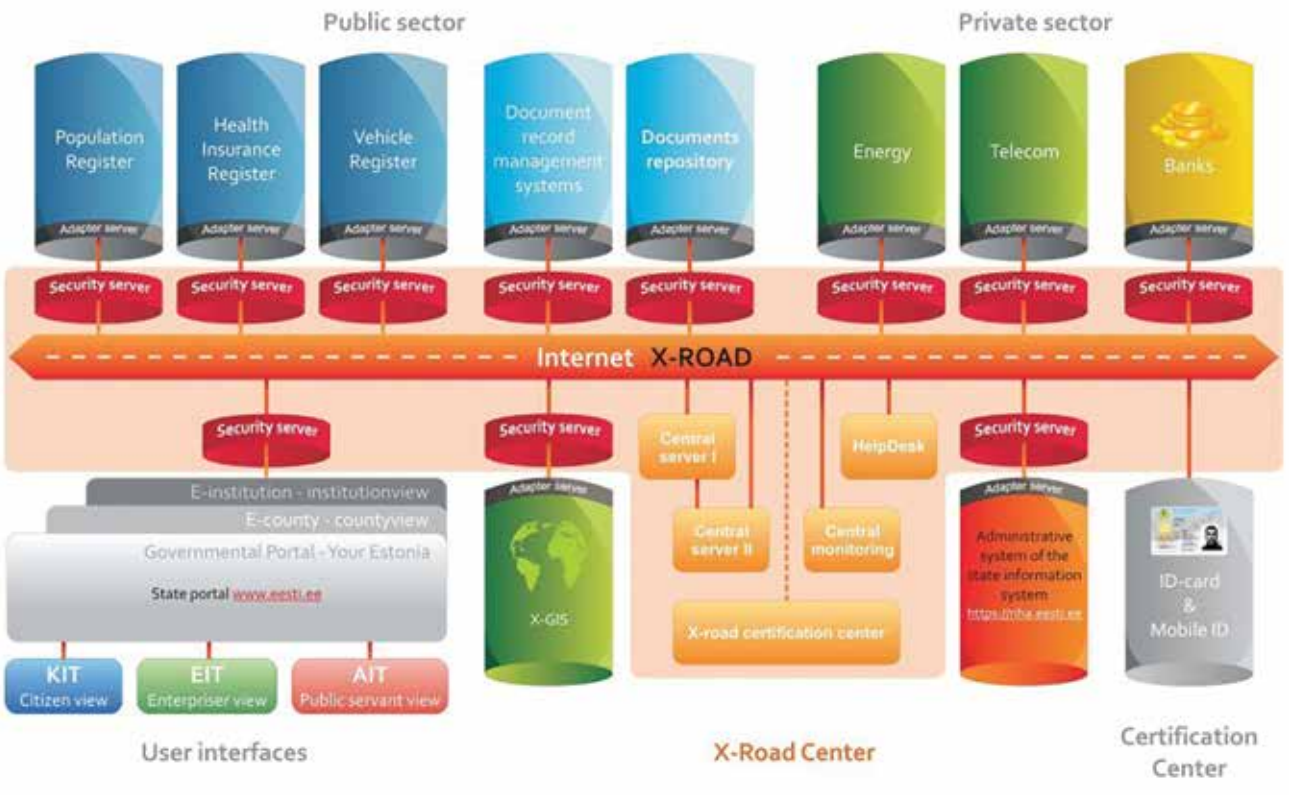
Although there were numerous studies and attempts to develop e-Government in Palestine, the various Palestinian ministries and other governmental institutions were not starting from zero; in other words, each ministry already had its own system, computers, and servers, and its own operating software to do its work. Each IT employee was sitting in his or her comfort zone and was reluctant to change. These were the real difficulties that prevented any success prior to the Estonian X-Road model. The X-Road model starts with the important concept of keeping each database as is and avoids any interference into the inner working of each IT department. The X-Road concept concentrates on HOW to interconnect the various databases in a secure and safe manner. It took numerous training and discussion sessions among ALL stakeholders to reach a unified vision and understanding, eventually leading to their accepting that this would be the best way to go for Palestine. Thus everybody got on board and the project started to move from the theoretical into the practical domain.

So far, the functioning programs of e-Government in Palestine are those that provide a small number of G-G services. Additional services are in the pipeline for more G-G services as well and the introduction of some G-B services with the cooperation of the private sector.

It goes without saying that there are many infrastructure and hardware requirements needed in order to implement the X-Road, in addition to the proper security system to access it and communicate over it. For this reason, the success of the project starts by defining a particular service that is needed by the government, by a business, or by a citizen; for instance, obtaining or renewing a driver's license. Numerous items are necessary: an ID (from the Ministry of Interior), the previous driver's license or proof that the applicant passed the driving exam (from the Ministry of Transport), the results of an eye exam and a blood-sugar test (from the Ministry of Health), proof that all fines have been paid (from the Ministry of Finance), etc. Each piece of information is stored on a different ministry's server. The X-Road system allows access by authenticated and authorized personnel to check and obtain this information before the application has been processed and the new driver's license is issued. Any other service provision must go through the same process of authentication and interconnection between the various databases in order to be complete.

For the database of each ministry or institution to be connected to the X-Road, it must have a security server and an adapter server whose function is to convert only that part of the data needed to complete a service into the appropriate format for use over the X-Road. Thus the integrity of the original data on that database remains intact. (See diagram.)

The project, which is still under the direction of the MTIT, has benefited from a number of cabinet resolutions. However, it is worth investigating the real reasons that the program is moving forward at such a slow pace.



The Estonian Government supports the Palestinian Authority in the implementation of e-Government services via its X-Road concept on interconnections. Graph courtesy of Estonian e-Governance Academy.

A thorough investigation into those who benefit from a system that is not automated and not transparent should be initiated. Such hurdles may be found in all governmental and nongovernmental institutions, and only a serious and sustained effort to overcome these delays can lead Palestine to implement many more services for all sectors of the population. This is a vital project for Palestine. Other countries that started after Palestine are already ahead of us.

Much of the infrastructure for the government networks and interconnections is already complete and functional: Fiber optic cables and VPN networks link more than 94 government institutions and 606 branches, the X-Road network, the Government Computer Center, the Technical and innovation training center, etc. In addition, a national committee for ZINNAR has been established, and another technical committee, PALCERT, has also been established for data security and data protection; the system of identifying the electronic services and the government portal is being prepared.

Difficulties remain, however, such as the legal framework, private-public partnerships, a national center for certifications and digital signatures, certifying authority, electronic payment, e-security, PKI (Public Key Infrastructure) policy, and of course, the necessary finances and know-how to avoid any false sense of security and arrive at a trustworthy, functional, broad, and secure system.

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[i] For more information on X-Road and the Estonian eGA, please visit https://e-estonia.com/component/x-road/ and www.ega.ee.

[ii] For more information, please visit www.zinnar.pna.ps.