

NEMIS

NEMIS stands for National Electronic Motor Insurance System; the acronym was coined by the Information Technology Committee of the Jordan Insurance Federation (JOIF). The concept of linking third party liability motor insurance (compulsory) premiums to responsible driving habits was first proposed on a national level by JOIF in early 2003. The concept was thoroughly discussed with relevant stakeholders in all aspects (technical, financial, procedural and regulatory) and concrete implementation steps (design, specifications and tendering) were initiated in 2004 crowned by the signature of an electronic data interchange agreement with the Public Security Directorate in mid October 2004. The main stakeholders of NEMIS are:

- The Jordan Insurance Federation
- Insurance Companies operating in Jordan
- The Public Security Directorate
- The Insurance Commission
- The Ministry of Finance / Customs Department

NEMIS consists of the following components:

- A nationwide Managed Frame Relay Network
- Servers, PCs and printers
- Encryption and Data Security systems
- Networking and communications systems
- Web enabled MS-SQL based integrated suite of applications.

The multiple stakeholders of NEMIS and its wide geographic spread make it easily one of the largest dedicated secure private data networks implemented in the country to date. It is also one of the first cases of private sector / public sector cooperation in implementing e-services on a national basis. A total of (78) NEMIS access points are available nationwide distributed as follows:

- (19) JOIF offices nationwide
- (11) Border posts and crossings
- (25) Insurance companies head offices
- (21) PSD - Drivers & Vehicles Licensing Departments nationwide
- (1) Ministry of Finance office / Customs Department
- (1) Insurance Commission head office

The project is currently in the final stages of implementation. Once completed, NEMIS is designed to:

- Provide speedy, accurate and convenient access to information related to motor insurance, accidents and claims.

- Improve JOIF operational efficiency and planning.
- Improve the financial standing of insurance companies by reducing motor insurance fraud and implementing the "Points System" for third party liability motor insurance (compulsory) premium calculations.
- Raise awareness and instill responsible driving habits in the general public by adopting the "Points System" as a basis for third party liability motor insurance (compulsory) premium calculations.
- Introduce new services.

JOIF covered the full capital and operational costs of hardware, applications software, security and networking infrastructure. In return to a pre-agreed percentage of the additional premium revenue generated, PSD will provide JOIF with regularly updated insurance related information on drivers, vehicles and accumulated points. As for licensed and insured drivers, the more traffic violations they accumulate, the higher goes their third party liability motor (compulsory) insurance premium. The formula is a well balanced one in terms of cooperation, revenue sharing, raising driver awareness, and the prevention of motor accidents. NEMIS will also track the cross border movement of vehicles with foreign license plates in order to ensure their compliance with relevant legal insurance coverage requirements during their stay in the country.

NEMIS (as system and a network) has a huge potential for growth both vertically and horizontally. It provides a platform for numerous avenues of cooperation in e-services between the private and public sectors based on the well tested formula of transaction based income sharing. For example by linking hospitals, pharmacies, doctors and clearing houses directly to insurance companies, NEMIS can easily accommodate all types of applications related to medical records and the processing, clearing and payment of health and medical insurance bills.

Another example of an interesting application that was raised during a recent discussion with the Ministry of Transport (MoT) is related to the possibility of levying, collection and control of a mileage based road tax on trucks transporting goods transiting the Kingdom to cover maintenance and wear and tear costs of public highways. Since NEMIS access points are available on all border posts and crossings, the implementation of such an application is a simple and straightforward process. Assuming the proper handling and resolution of legal and procedural aspects, the MoT can make full use of NEMIS to implement such an application with minimal additional investment thus avoiding the duplication of systems, equipment and resources if they so wish.

Back to the subject of raising driver awareness and motor accident prevention, one must not forget that police forces worldwide were

established long before the invention and subsequent widespread use of the motor vehicle. The mandate of any police force was (and still is) based on the following three principles:

- Crime Prevention
- Crime Detection
- Crime Solving

These principles are certainly correlated, but prevention is by far the most important one of the three because it is the trigger that drives the other two. It is also the fastest one to implement and the most rewarding in terms of cost benefits. The more time and effort spent on prevention, the less crimes to detect and even less to solve. On the other hand, in the detection and solving phases, the supposed crime would have already taken place and the losses, whether financial or personal, would have already been incurred. While the majority of traffic violations are not legally classified as crimes, motor insurance fraud and serious accidents that result in personal injury or death are usually classified as such. The implementation of NEMIS as a financial deterrent to curb irresponsible driving habits including complacency and negligence in abiding by traffic laws and regulations that might lead to serious accidents, injury or possible death of third parties is nevertheless an important step in the prevention phase.

In the case of NEMIS, the deterrent is mostly financial because unfortunately practice and experience has shown that the only way to deter irresponsible driving behavior is to financially penalize the offending driver in terms of increased third party liability motor insurance (compulsory) premium penalties. The existence of such penalties (or incentive discounts in the reverse case) have proved to be very effective in instilling responsible driving behavior in the USA and Europe where motor insurance premiums take into consideration a multiple of factors such as the type and class of car, the age of the designated driver and details of his/her driving record. Consequently, drivers go out of their way to keep their driving records clean in order to minimize their insurance premiums.

As far as the prevention of other types of crimes common to large metropolitan areas with a high density of population of mixed backgrounds, the intelligent application of technology could provide a well needed boost to the crime prevention efforts of police forces with overstretched resources. Certain types of crimes such as car theft, breaking and entering, vandalism, organized burglaries of residences and offices often remain unsolved indirectly encouraging criminals to strike again. Intelligent implementation of technology could positively impact crime prevention efforts. Identifying and apprehending suspected criminals quickly and prosecuting them to the full extent of the law is even a stronger deterrent.