

Road safety in Algeria : state of art

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▶ **To cite this version:**

Farès Boubakour, Antonino Tripodi, Michel Parent, Jaime Salom Gracia, Laura Fantini, et al.. Road safety in Algeria : state of art. 2009, pp.39. halshs-01352274

HAL Id: halshs-01352274
https://shs.hal.science/halshs-01352274

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SEVENTH FRAMEWORK PROGRAMME

CALL PART IDENTIFIER: FP7-SST-2007-RTD-1

Project acronym: *ESTEEM*

Project full title: Enhancing Safety and security aspects in Transport rEsearch in the EuroMediterranean region

Grant agreement no.: *218584*

COORDINATION AND SUPPORT ACTION

A project funded by the EUROPEAN COMMISSION

Directorate-General for RESEARCH

Workshop report n° 1

Batna, 9-10 June 2009

Deliverable no.	3.1 – 3.2
Dissemination level	Public
Document Identification Code (DIC)	ESTEEM/WP3/D3.1-D3.2/V1.0
Document Type (D: Deliverable, WD: Working Document)	Deliverable
Work Package	WP3 Workshops
Author(s)	Farès Boubakour
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Quality control evaluators	Omar Drissi-Kaitouni
Status (F: final, D: draft, RE: Ready for Evaluation)	Final
Project Start Date	01/04/2008
Project Duration	20 months
Version Control	
Version No.	1.0
Date	05/10/2009

Executive summary

The general objective of ESTEEM is to enhance and strengthen the links between the Maghreb and EU transport related research systems, focusing on the specific theme of transport safety and security.

The objective of the Workshop of Batna, in relation with work package 3, is to bring technical experts, researchers, institutions and companies, dealing with the selected sub areas, in contact among them. Especially the first workshop focused on the first two sub-areas selected in the work package 1 of ESTEEM:

- Sub-area 1 - Road safety
  - Accident data collection and analysis
  - Road safety management process
- Sub-area 2 - Human factors in road safety
  - Road users education and training
  - Enforcement

Both European and Mediterranean institutions and companies have been invited to actively participate to the workshop and to join the network to be created by the project.

The goal initially planned in WP3, by organizing workshops, is to bring together stakeholders and experts from Maghreb and Europe around the thematic priority of ESTEEM to confirm the choice already done in terms of sub-areas but also and especially to invite them to discuss about the results obtained until now (preliminary results of ongoing investigations).

To maximize the utility and increase the benefits of the meeting, the way of organizing the workshop have been knowingly changed slightly so that it also responds to a number of waiting. Indeed, it was chosen to opt for a meeting more similar to a "seminar" bringing together different stakeholders while providing the opportunity for participants to present a communication on the priority themes selected (sub-areas 1 and 2). The objective was, after the presentations, to exchange and debate giving to everyone the opportunity to express a point of view, make comparisons, develop analogies, identify problems. The ultimate objective was to highlight key issues for each partner in Maghreb and the best practices and successful experiences in Europe.

The deliverables 3.1 and 3.2 provide an overview of the first workshop organised in the framework of the project.

The workshop of Batna was hosted by the Algerian partner of ESTEEM (University of Batna) and was opened to the participation of local and regional stakeholders, which was invited to present their remarks about the topics treated.

The discussions with the participants to the workshop evidenced as the numbers and cost of road accidents in Maghreb are still very high. The human factor is the most important cause of accident, due mainly to the non-respect of the driving rules. A trend was reported in Algeria concerning the use more and more important of private car, while urban public transports are not yet sufficiently attractive in terms of quality of service despite the fact that many efforts were made. Regarding transport infrastructures, there is a need to review how to design, adjust and control them. There is also a real problem to enforce the law against not disciplined drivers. This also seems to be the result of social, psychological and cultural factors.

On the other hand, the comparative approach between European and Maghreb countries has identified a number of points in notable contrast in the field. These differences can be naturally explained by the economic, social and technological levels of development. For European countries, it is clear that there is some convergence on treatment of road safety in the three countries involved with the project. This is obviously consequence of the integration

into the European Union based on the adoption of common strategies and directives and the commitments made by each other. So, the practices tend ultimately to be the same everywhere. Globally, there is a greater struggle for the respect of road rules, a fight against the high speeds of vehicles, better training, better planning, and implementing stricter controls (e.g. against alcohol, drugs and vehicles). It should be also noted that the implementation of ITS in Europe have an impact on reducing road accidents.

In terms of comparison, an obvious conclusion was obtained: the problem of road safety is a step that every country, whether developed or developing, must pass. European countries have experienced the same problems some years ago. In the Maghreb countries things are under construction and Europe can help significantly in this regard. A large potential of know-how, experiences and best practices which can be transferred have been identified during the workshop in Batna.

The discussions in Batna provided useful indications for elaborating, after the surveys and the second workshop, the roadmaps for the future researches on these topics. Indeed, the work of the workshop of Batna, in relation with the future workshop in Rabat, is one of the most important as it allows face-to-face between various stakeholders, direct exchange or a debate between the political actors in road safety. Concerning this last point, in Batna, the main decision makers in road safety (especially “La Gendarmerie Nationale”, police, civil protection and hospitals) and as well as researchers were involved. This issue, witch is in relation with activities of WP4 dedicated to Networking and Dissemination, was treated in Batna with particular attention. The meeting was very useful to exchange information and data on the topics treated as well as e-mail addresses for future contacts (e.g. through newsletters). The principle for the creation of an Algerian Road Safety Framework, which could be carry out by the University of Batna, was also discussed. Some stakeholders were very interested to exchange experiences with similar organisations on other countries. So, a very fruitful flow of information can be established. This flow must be supervised and recorded within the project in order to support the networking process in the future.

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1 Introduction

This document is prepared for the Directorate-General for Research of the European Commission as deliverable of the project ESTEEM (Enhancing Safety and security aspects in Transport rEsearch in the EuroMediterranean region).

The general objective of ESTEEM is to enhance and strengthen the links between the Maghreb transport related research system and three Mediterranean neighbouring EU countries (namely France, Italy and Spain), focusing on the specific theme of safety and security of transport systems and infrastructures.

In order to do this, it is deemed necessary to implement a strong coordination action among the relevant actors in the two regions, ensuring that their future research policies on transport are defined at regional level and not only at the level of the individual countries.

The specific objective of the project is to bring the partners to share the identification of priority common research themes, responding to identified needs, which should be investigated in future research actions to be carried out at the regional level. Thus, the project will contribute both to the definition of the future research roadmaps for both the FP7 Transport programme and the Mediterranean Partners Countries (MPCs) governments and to the coordination of high quality research and policies on transport in the countries involved in the project in the area of safety.

The strategy implemented to achieve these objectives foresees four main Work Packages, as follow:

1. identification and selection of thematic sub-areas to be investigated (WP1);
2. analysis of the above mentioned sub-areas in the form of structured surveys (WP2);
3. exchange of results and sharing of the knowledge acquired, in the form of workshops and production of roadmaps for future research actions (WP3);
4. creation of a Network among stakeholders and the project participants and a series of Dissemination Activities (WP4).

This deliverable relates with the activities of the Work Package 3 (Workshops).

The workshop organized in Batna (Algeria) aimed at carrying out essentially an inventory of road safety in Algeria and in the other Maghreb countries (members of the project) in order to complete the vision already built through the phase of the literature review (desk analysis realized in WP2), to compare results and to meet by the way some of the key stakeholders (policy makers, researchers, practitioners, associations, etc.) interviewed during the surveys (WP2). All these entities were invited and participated to the workshop.

In addition, the goal, *in fine*, was to exchange a maximum of views on the issue of road safety (sub-area 1 of the project) but also to discuss about the human factor and its role in road accidents (sub-area 2 of the project). Indeed, it should be noted that this factor accounts for the Maghreb statistics (over 80% of the causes of road accidents). For this reason, this topic was identified as relevant during the WP1 of ESTEEM.

Then, the sub-areas concerned with the workshop were:

- Sub-area 1 - Road safety management aspects
  - Accident data collection and analysis
  - Road safety management process
- Sub-area 2 - Human factors in road safety
  - Road users education and training
  - Enforcement

The basic assumption from which started the Scientific Committee of the workshop is that there is an alarming and widespread situation in road safety in the Maghreb countries. In addition, the strong involvement of European partners, through their presentations, which has been also a target of the workshop, allowed to know clearly how the results have been obtained in Europe. The idea is to identify guidelines and the best practices to enable improving road safety in the southern region of the Mediterranean Sea.

Finally, the workshop in Batna was an occasion to put the basis for the roadmaps to be prepared as final result of ESTEEM.

The present document refers to both the sub-area 1 and 2 analysed in ESTEEM and then refers to both the deliverable 3.1 and 3.2 of the project.

The choice of developing simultaneously two deliverables was mainly due to the strong correlations between this sub-areas. In fact both refer to road safety, even if from different point of view (the first sub-area refers to the management aspects while the second refer to the influence of road users on safety aspects).

The workshop referred mainly to road safety aspects in general. In fact, when organising the workshop, it was not possible to limit the arguments treated only to sub-areas 1 and 2. Some useful presentations also concerned the other sub-areas (relating with road infrastructure safety and impact of ITS on road safety). The workshop was seen as a unique opportunity to listen to everyone about on the Algerian case. The two arguments are very closely related and it is not easy to treat them separately.

Besides this, the choice was made to have one European expert for each “atelier” and then to present all sub-areas together rather than to organise several “ateliers” for each sub-area. This type of organization has the advantage to have in all work session one European reference making easiest to compare how things are done and identify eventual best practices.

As logical consequence, this report was organised including together both the deliverable 3.1 and 3.2 and distinguishing in the text the arguments treated and the finding obtained for each sub-area. Whenever possible, the necessary distinction between the two sub-areas have been made within the document in order to highlight the specific features.

2 Workshop program

The workshop was organized in several sessions, as described in the workshop program (see annex I).

Two categories of guest and participants were present at the workshop, as follow.

- Decision makers and agencies at central and local levels in Algeria
  - Directorate of National Police (Haut Commandement de la Gendarmerie Nationale);
  - Directorate General of National Security;
  - Directorate General of Civil Protection;
  - Ministry of Transport;
  - Directorate of Transport of the Wilaya of Batna;
  - Directorate of Public Works and Highways;
  - Municipality of Batna;
  - National Association “Tarik Es Salama”;
  - Urban transport company of Batna;
  - CAAR Insurance national company.

- Researchers from several universities and institutions (Algerian and foreigners)
  - University of Batna (Algeria);
  - “Sapienza” University of Rome (Italy);
  - IMED – Mediterranean Institute (Italy);
  - INRIA – National Institute for research in computer science and control (France);
  - Ecole des Mines (France);
  - Trakteplan (Spain);
  - National School of Land Transport (Algeria);
  - University Paris 7 (France);
  - University of Lumière 2 - Lyon (France);
  - Secretariat of Transports at the Municipality of Rio de Janeiro (Brazil);
  - University of Annaba (Algeria);
  - University of Setif (Algeria); School of Architecture and Urbanism of Algiers (Algeria);
  - University of Abderahmane Mira - Bejaia (Algeria);
  - University of Blida (Algeria);
  - University of Boumerdes (Algeria).

For the reasons already mentioned above, the workshop was organized in two plenary sessions and four ateliers. A balance between the two sub-areas was also searched. The Table 2.1 shows the distribution of stakeholders / presenters in each field in which they are more involved (sub-area 1 or/and sub-area 2).

Table 2.1 - Possible sub-areas and analysis levels

Stakeholder / presenter	**Sub-area 1**	**Sub-area 2**	**Nature of topic**
Prof. Farès Boubakour	X	X	General presentation
Prof. C. Chanson-Jabeur	X	X	Management / data
Mr. Mohamed Tatachek		X	Enforcement
Mr. Heddadji Mohamed		X	Education / enforcement
Dr. Antonino Tripodi	X	X	General presentation
Dr. Lylia Bahmed	X		Management
Miss Bencherif Houria	X		Data collection
Prof. Claude. Laurgeau	X	X	General presentation
M. Dermal and Prof. N. Kaïd-Tlilane	X	X	Management /data
Dr. Tahar Baouni and Ph.D. Mohamed Bakour			Infrastructures (sub-area 4)
Dr. Jaime Salom Gracia	X	X	General presentation
Dr. Lila Guettaf	X		Management/data

Mr. Tazrouti			Infrastructures (sub-area 4)
Dr. Altair Torres	X	X	General presentation
Salim Bouguenna		X	Education/training
Mr. Lazouni		X	Training / Enforcement
Dr. Ouannes	X	X	Management process
Prof. Chebira	X		Management process
Com. H. Farouk	X	X	Data/training
Prof. Grainat	X	X	Management/Training
Mr. Amokrane			ITS (sub-area 3)
Prof. Benoudjit	X	X	Management/training

The remaining stakeholders have not submitted papers but they were present, reacted to the different presentations and participated in debates. Basically, these stakeholders are more or less involved in both sub-area 1 and 2. Main officials or representatives institutions were:

- General Secretary of the Wilaya of Batna.
- The DTW, representing the Ministry of Transport.
- Director General of the National School of Transportation.
- Chief of passenger transport service of the Wilaya of Batna.
- Directorate of Public Works and Highways.
- Municipality of Batna.
- Urban transport company of Batna (ETUB).
- CAAR, National Insurance Company.
- Algerian Red Crescent.
- Chairman of the transport union operators of Batna.
- Various journalists and columnists (locally and nationally).

Concerning the organization of the work done in Algeria, the following paragraphs report chronologically the synthesis of the presentations done at the workshop and the main discussions with the participants.

2.1 Opening session

After the official welcome, the opening session introduced the main topic of the workshop: a state of the art of the road safety in the Maghreb countries.

An excursus of the road safety situation in Algeria and Tunisia was presented during this session, together with considerations on the human factors influencing the road safety and two other presentations focused on the main accident causes with recommendations given by the two important public authorities in Algeria: the Directorate of national security for the urban transport and the *Haut commandement de la gendarmerie nationale* for the inter-urban transport.

Professor Farès Boubakour (head of the project ESTEEM for the University of Batna) opened the workshop presenting a synthesis of the road safety situation in Algeria. He described the rapid growth of the number of private vehicles; in Algeria 90% of the

displacements are done through by road. From 1990 to 1999 the number of train passengers decreased of about 63%. The growth of vehicles is due to various factors:

- facilitated purchase;
- low gasoline cost;
- strong sociologic factor (the people want to own a car);
- low quality of the public transport modes.

The road safety data in Algeria are not encouraging. The number of accidents is too great compared to other countries. It also appears that the fight against the non safety is not producing sufficient results to date.

Anyway, several measures have been undertaken to improve the road safety:

- regulation of the circulation (law edited in 1987 and operations launched in 2001);
- transport planning action (1996 – set up of urban transport plans in all the cities);
- creation of the National Department of Technical Control of cars (1998);
- training for drivers (2001);
- enforcement (2004).

The proposition of the Prof. Boubakour are to establish a hierarchy and a logic for using the car, in order to impose the use of public transport modes at least for the commuting travels.

For the non urban travels, the rail transportation should be developed and completed by a system of high quality buses.

Mr. Mohamed Tatachek of the Directorate General of National Security of Algeria presented an evaluation of the influence of the human factors on the road safety. The main problems evidenced were:

- even if new legislations were adopted for the road management, circulation and safety, with stronger enforcement measures foreseen, the wrong driving behaviours did not reduced significantly;
- the accidents mainly occur in rural roads, due to the high speed allowed on that roads;
- the accidents in urban areas are less dangerous but involve mainly the vulnerable users (pedestrians, elderly people);
- in Algeria about the 94% of the accidents are to the human factors. The first cause of accident is the excess speed (about 23%), while the second one is the non use of pedestrian crossings;
- the motorcycles are one the main preoccupation in term of accident as the use of this transport mode is growing rapidly;
- the plans for mobility and infrastructures do not take in consideration prevention measures and the users safety.

According to the Directorate General of National Security the enhancement of the road safety in Algeria could be obtained:

- placing the road safety as a national priority;
- creating a ministerial delegation charged for following and evaluating the operations and the propositions about the prevention and the road safety;
- fostering the establishment of the organs foreseen in the law “01-14” (National Centre for the driving licenses, National database for the traffic offences, National database for the log books, National database for the driving licenses);

- introduction of road education in the scholastic programs;
- enhancing the road infrastructures (especially their devices and maintenance);
- creating the Centres of rescue and intervention on the national highways and roads;
- creating a national fund for road prevention and safety;
- involving the researchers and the experts to find solutions to the road safety problems.

Mrs Chanson-Jabeur, of the SEDET Laboratory of the University Paris VII – Denis-Diderot, presented a synthesis about accidentology and prevention in Tunisia. The number of death per day in Tunisia is about equal to four persons compared with 10 deaths per day in Morocco and Algeria.

The main legislative measures adopted in Tunisia relate with the publication in 1999 of a new road code (introducing new violations) and the reform of the driving license in 2000 which modified the permit categories, introduced a license for mopeds and introduced the “point system” (actually suspended).

The main preventions measures concern the technical verifications, the creation of a fund for financing all the actions relating with road safety, awareness campaigns, seminars and other events organised by the ATPR (Tunisian Association for the Road Prevention), education in schools organised by the ANSR (National Association of Road Safety).

Mr. Heddadji of the *Haut commandement de la gendarmerie* considers that despite the overall coercive measures introduced, the number of fatalities is always growing in Algeria. Given the figures provided by the government, Mr Haddadji said that we can talk about a real carnage. Victims and costs remain high. Regarding the causes of accidents, the report prepared by the *Haut commandement* evidenced essentially a behavioral problem, characterized by human carelessness and non-compliance of the circulation rules.

A set of recommendations was proposed:

- to review the content of training in the driving schools and the conditions to become driving instructor;
- to integrate the road safety education in the training programs if primary schools and all educational institutions;
- to increase communication, information and membership in order to remind, reinforce and complement the measures to change the behavior of pedestrians on the road;
- to continue all efforts for strengthening the system of controls and sanctions by making available the necessary human and financial resources;
- to improve the conditions of the road network especially in regard to the black spots;
- to develop the infrastructure according to the requirements of different user categories: disabled, pedestrians and drivers;
- to monitor the market of vehicles and of the spare parts imported (in order to reduce the counterfeit of spare parts).

The main discussions arose after this session related with the proposition of fostering the introduction and the use of public transport modes in order to limit the use of the private modes. Some stakeholders consider the possession of a car as a mean to socially improve the Algerians quality of life.

Anyway all the experts agree that the growth of the number of vehicles (even if with recent and safer cars) will contribute to increase the number of road accidents.

The solutions proposed to reduce the number of accidents relate with:

- improving the driving behaviours through education, training and enforcement;
- applying the existing rules (application of the law);
- improving the infrastructures conditions.

2.2 Atelier n° 1

The first “atelier”, realised in parallel with another, was divided in two parts, each one including three presentations. Each of these two parts was opened by a presentation from a non Algerian expert, dealing with the road safety situation in its country.

The following paragraphs relate with these two parts.

2.2.1 First part

The first presentation in the first part of atelier n° 1 of Dr. Tripodi dealt with the road safety situation in Italy. The considerations exposed are based on the experience acquired at CTL - Research Centre for Transport and Logistic - at “Sapienza” University of Rome and on the results of the surveys done in Italy in the framework of the work package 2 of ESTEEM.

The presentation highlighted for first situation of the road accident in Italy, also comparing the trends with the European ones. A reduction of the number of accidents and deaths on the road was registered in the last years, even if several gaps still exist (the main gaps were listed concerning the topics analysed in ESTEEM).

Also the main developments and best practices in Italy have been exposed showing their positive influence on the road safety.

The main aspect evidenced through this presentation is that the issues related with the road safety are similar in Italy and in the Maghreb countries, even if the level of accidents is different. Some best practices was also considered transferable by the local experts, like the adoption of more restrictive driving rules, the increase of the number of controls, the awareness campaigns, the development of specific tools for the road safety planning and monitoring.

Dr. L. Bahmed, of the Laboratory of Engineering of Traffic and Transport nuisances at the National school of application of transport techniques, presented a study about the contribution to the adaptation of a management system, integrating the quality, safety and environmental aspects, for the urban transports in Algeria.

The study shows as several objectives can be attained through the adoption of specific management techniques, like the protection of the transport companies personnel, travellers and freights, the reduction of the transport costs and of the performance techniques, as well as the improving of the quality of services and the environment conservation.

H. Bencherif of the ENATT (National School of Application of Terrestrial Transport Techniques) presented a summary on the data collection process in Algeria, from the production to the use.

The accident data collection in Algeria is realised by the police forces in the sites where the accidents happen. The data collection is realised through a verbal procedure and filling in a statistical form.

The quality of the national data is low due to the specificity of the data and the great number of persons involved with the data collection process. This lead, like in many other countries, to an under-reporting of the data.

The main problems with the accident data are:

- the quality of the data recorded on sites;
- the storage conditions and the data transmission;
- the insufficient data exploitation;
- the condition in which the data are collected;
- the insufficient number of human resources charged for the data collection;
- the absence of training for the data collectors;
- the low level of financing for the data collection;
- the reluctance of the police forces to use the data collection forms;
- working procedures focused on the juridical aspects, instead of on the causes.

Also in this session the opportunity for the Maghreb Countries of adopting a different life style compared to the European one was highlighted. Especially the emphasis was put on the possibility of fostering the development and the use of the public transport modes by limiting the increase of the number of private vehicles.

Other questions concerned the possible solutions to be adopted to improve the road safety. Most of the questions concerned the new roads conception (for instance what kind of guardrail (flexible or rigid) should be adopted or have the speed humps to be used on the highways) as well as the maintenance of the existing roads.

Also the accident data collection process has been considered by the stakeholders a priority topic. Some aspects on which to focus the attention in the near future are:

- the training of the institutions charged for the data collection;
- the standardization of the data collection process and of the data collected;
- the adoption of a rule for including in the reporting also the persons not died immediately (following of the accident);
- the coordination of the data collection process (through a specific institute);
- to make the data collection computerised.
- to adopt a methodology to understand and record the causes of the accidents.

2.2.2 Second part

In the second part of the atelier n° 1, three papers were presented: the first concerning the French situation on road safety and two others relating with road safety in Algeria.

Concerning France, a synthetic presentation of some road traffic data has been given by Professor Laurgeau (Ecole des Mines of Paris); it highlights the statistics of the different categories of vehicles (cars, buses, coaches, goods vehicles and two-wheeled engines) and roads (motorways, main and secondary roads and other roads). Also, some road traffic rules are recalled (i.e. speed and alcohol limitations). Accidentology data (results for 2007 are given), show that most of the fatalities occur in national and regional roads (they represent 73,7% of the fatalities) as these two categories absorb 51,5% of the traffic. Also, most of the accidents occur in the “other” category of roads, meaning city streets and rural roads (56% of the accidents and 25,6% of the traffic).

Efforts have been deployed by the authorities to reduce the fatalities and the accidents since 2001 as one of the major directives of President Chirac. They consist in new or adapted regulations aimed for example at improving the training of the drivers, increasing the safety of the infrastructures and improving the reliability of the vehicles. Repression was also a key

element since it has a direct impact on behaviours modification. The driving license point system has been improved with automatic speed enforcement and this has been a key element of the system.

Consequently, French roads are now much safer than in the past years: A comparison of the road fatalities in Europe shows that France has the best results of the years going from 2001 to 2007 concerning the reduction of the deaths.

M. Dermal and Prof. N. Kaïd-Tlilane (University of Abderahmane Mira, Béjaïa, Algeria) presented the results of a survey realised in the wilaya of Bejaïa. The study aims to calculate the total cost of road accidents in the wilaya and the average cost per one killed and one injured. The following costs were considered:

- care for victims of road accidents in the hospital Khelil Amrane,
- compensation paid by automobile insurance companies (SAA, CAAR, 2A) and by the "Caisse Nationale des Assurances Sociales" (CNAS) to repair the harms and injuries of traffic accidents.
- in addition to the materiel damages, also the loss of potential production was included.

The figures obtained are:

- the average cost of a victim is equal to 5,481,835.82 DA (about 54,000 Euros);
- the average cost of an injured person, regardless of the degree of gravity and not including the cost of disfigurement, is equal to 145,369.01 DA (about 14,500 Euros).

The presenters believe that the results are still underestimated.

Concerning the proposals, Mr Dermal and Prof. Tlilane think that two main aspects are important:

- establishment of a standardized method for calculating the costs of road accidents;
- to adopt a strategy of zero tolerance against the traffic offences and to continue the policy of withdrawal of license and vehicle immobilization.

Dr. Tahar Baouni and Ph.D. Mohamed Bakour of the Laboratory of Town Planning and Sustainable Development at the High National School of Architecture of Algiers, according to their experiences (through the development of several studies on the urban circulation plans), noted that the urban accidents represent the main percentage with over 67% accidents on the national territory. The majority of casualties in urban areas are pedestrians, mostly children (30% of those killed were under 14 years) and elderly (26% killed). They concluded that:

- the concept of road safety in cities seems inexistent in practice of the city design, planning and management of urban space;
- there is a delay in Algerian cities in the field of road safety in urban areas even more for the vulnerable users;
- there is a responsibility of managers of the city concerning the integration of security among the urban projects. Then the local authorities must take such aspects in their projects with a real expertise in road safety.

2.3 Atelier n° 2

The second "atelier", realised in parallel with the first one, was divided in two parts. The first part was opened by a presentation about the road safety in Spain, while the second part was opened by a presentation about evolution of the road accidents in the world according to the motorization.

The following paragraphs relate with these two parts.

2.3.1 First part

In the first part of the Atelier n° 2, the following three communications were presented.

Mr. Jaime Salom Gracia, presented a synthesis of the road situation in Spain. The approach was to deal with the key matters like evolution of the number of fatalities and accidents and identify the tools applied and the targets of the road safety plans as well as the convergence with EU strategies.

In addition to this quantitative information provided in a historic view showing the positive results achieved in fatalities reduction, the presentation analyses the main causes of accident and the measures applied in the fields of the enforcement, education, infrastructure showing their effectiveness and the future plans to continue decreasing the impacts of the traffic accidents.

The presentation is focussed in the two environments of the road safety: road networks and urban areas, including the special attention to vulnerable users.

Dr. Lila Guettaf (University of Ferhat Abbes - Setif - Algeria) analyzed road accidents in Algeria during 40 years (from 1970 to 2008). Dr Guettaf found that the number of accidents and their severity increased very rapidly from 1970 to 1979. Stability is observed in the late 1980s while an important decrease of accident is observed between 1991and 1999 (night traffic reduced to zero caused by a political situation and troubles in Algeria).

From 2000 to 2006, in contrast with previous years, an important number of accidents are observed that we can explain by the growth of the vehicles park after the introduction of car dealers from the year 2000. The presenter considers that the road network is not actually compatible with the park development and traffic.

Despite the efforts of the government, much remains to be done. In Algeria there is a need for the development of new devices (ITS, radars) to reduce the number of accidents.

The communication of Mr. Tazrouti of the University of Boumerdes has emphasized the importance of the use of statistical and process modelling as a fundamental element in road safety policy. There is a need to obtain a better understanding but also to predict accident risks.

Based on the Poisson law, Mr. Tazrouti made an estimation of the number and type of vehicles involved in road accidents in the wilaya of Boumerdes in 2007. The main results, obtained by the statistical method, are:

- vehicles (by type) involved in accidents vary by month;
- the general trend shows that over two thirds of road accidents involve a collision between two cars and about one third of them is generated by a single vehicle;
- there are very few accidents involving three or more vehicles (less than 2%).

2.3.2 Second part

During the second part of the atelier n° 2, two papers were presented: the first of Mr. Altair Torres (Brazil) and the second of Mr. Salim Bouguenna (Algeria).

Dr. Altair Torres of the Secretariat of Transports at the Municipality of Rio de Janeiro presented a study about the evolution of the road accidents in the world according to the motorization level.

The main findings show a tendency to the reduction of the fatal accidents in the cities when there is a increase of motorization. The best situation is that of the Japan where the

motorization level is high and the fatal accidents are low (two deaths every 10.000 vehicles). In the African countries and in Asia la motorization level is low but the rate of fatal accidents is very high.

Examining the evolution of the accidents, a great reduction of accidents is registered due to the intervention of the governments through actions of enforcement and of improvement of the infrastructures. In Japan, for instance, in order to decrease the rate of fatal accidents, the government pointed the attention on the professional training and on the education. Such long term action has produced significant results.

Salim Bouguenna (Ph.D. student of the Faculty of Economics and Management Science of the University Hadj Lakhdar - Batna) presented a communication about the role of the social and cultural aspects in causing accidents and in consequence their importance in prevention.

After quickly presented figures on road accidents in Algeria which are in growth, Mr. Bouguena considers that the causes are multiple and complex. The social, psychological and cultural aspects have a big importance in terms of driving, risk taking, sharing the public space, respect or not of the rules of the road. The presenter gave many examples and anecdotes that illustrate his thesis.

Mr Bouguenna proposes to give priority to psychological and sociological studies in order to better understand motivation and finally making a typology of these causes. The aim is to prepare an efficient and innovative prevention campaign.

2.4 Plenary session

The plenary session was held the second day of the workshop and was divided in two groups of presentations.

In the first presentation Mr. Lazouni of the Association for the road safety prevention “Tarik Essalama” exposed the role of the road prevention in Algieria. The gaps of the actual Algerian legislation have been highlighted, such as the non application of some important existing laws (the Decree n° 67-91 of the 1967 about the creation of a permanent committee of Road Safety). The important role of the associative movement for the road prevention was also explained (i.e. what is done actually, what are the road safety campaigns, etc.).

According to Mr. Lazouni the most important aspect on which to focus the attention in the near future is the training, the education, to foster a change of mentality, instead of focusing on the enforcement of the rules. Also the creation of a national association of road prevention is one of the main topic on which to focus in the future.

Dr. Ouannes of the University “Lyon 2” (France) presented a study on the link between safety and richness of a country (case of Tunisia). The study demonstrated has the number of accidents has a non linear behaviour according to the GDP (gross domestic product). In a first phase the number of accident growth with the GDP and, once a maximum is reached, it decreases. The higher is the GDP and the lower is the number of road accidents.

Some of the recommendations of Dr. Ouannes for improving the road safety in Tunisia are:

- to make the road safety a political priority;
- to change the mentality and the habits;
- to increase the controls on the road;
- to enrich the road code with new measures (lower alcohol rate, seat belts obligation, introduce automatic radars on the road, .ecc.);
- to systematically improve the road infrastructures (re-built the roundabouts according to the safety rules, maintain and enlarge the roads, protect the highways, put

barriers in front of the scholastic buildings, built adequate sites for buses and for cycle lanes);

- to improve the recovery services;
- to educate the scholars to a road safety culture;
- to promote the research in the universities;
- to improve the qualifications of the personnel working in the circulation services;
- to encourage the partnership between the actors;
- to improve the cooperation between the Countries of the two Mediterranean shores.

Prof. Chebira of the University “Badji Mokhtar” of Annaba (Algeria) presented a study about the possible role of the ICT systems (i.e. their applicability and effectiveness) related with road safety in Algeria.

The number of fatal accidents in Algeria has increased constantly from 1970 to 2008; the population increased of about 250% while the number of fatal accidents increased of about 331%. In 2005 Algeria accounted for about 112 deaths on the road per million of inhabitants, higher than most of the countries.

The main causes of accidents are the human factors (about 88% in 2008), while the vehicles are responsible for about the 7% and about the 5% are due to the environment (e.g. road infrastructure).

The main measures adopted in Algeria, relating with the ICT systems, are capturing techniques (e.g. radars) mostly used for the enforcement (never used for providing information to the drivers). The strategy in Algeria is oriented versus the dissuasion but does not provide information to the users.

Com. Farouk of the Directorate of Civil Defence presented the point of view of the civil defence about the road safety, showing especially what is done by this public body in Algeria.

In 2008 the Civil Defence made 24.718 interventions for road accidents, corresponding to about 34.400 injured and about 2.100 deaths.

The main contribution of the Civil Defence consists in:

- risk studies;
- information;
- awareness campaigns;
- training;
- quality of recovery services.

To improve the road safety conditions, according to Com. Farouk, the approach has to be multi-sectorial based essentially on the prevention to the citizens, on the continuous training to the personnel of the recovery services and on the promotion of the massive first aids.

Also the continuous information to the population through awareness campaigns is a major topic, as well as reinforcing the education about road safety in the schools.

Prof. Grainat of the Department of Anaesthesia at the Hospital Centre of the University of Batna (CHU) presented a study about the traumatism of the road accidents. The road accidents are the eleventh cause of death in the world and correspond to the 2,1% of deaths.

The data about the injured arrived at the CHU, from July 2008 to April 2009, show a decrease of injured (from about 225 injured in July 2008 to about 125 injured in April 2009). The large part of the accidents occurs to male (74%) and to adults (72%).

The main factors influencing the risk exposition are:

- economic and demographic factors;
- ground occupation,
- transport modes;
- road conception.

The main risk factors influencing a collision are:

- speed, alcohol, drugs, tiredness;
- vulnerable users;
- factor related with the vehicles.

The main risk factors influencing the severity of a collision are:

- human tolerance;
- speed, alcohol, drugs, tiredness;
- use of sea belts, chairs for children, helmets;
- insufficient protection of the vehicle in case of collision;
- dangerous object on the road side.

Some recommendations of Drs. Grainat to improve the road safety conditions are:

- to create an central organism in the government to lead the national effort for road safety;
- to evaluate the problem, the politics and the institutional management staffs;
- to prepare a strategy and a national action plan for road safety;
- to affect the necessary financial and human resources;
- to take precise measures to prevent the road accidents, minimise the traumatisms and their consequences and to evaluate the effects of these measures.

The intervention of Mr. Amokrane had been scheduled with the objective to have an idea about the intelligent transportation systems that are being developed in Algeria. Mr. Amokrane developed a system to manage the traffic of vehicles with a remote device for the collection, storage and telecommunication browser settings.

Mr. Amokrane presented how the system works and its usefulness for the road safety improvement. Basically, the system consists of a white box and a telecommunication GSM (which may evolve to UMTS). Stakeholders who may be interested in the system are the police, civil protection, customs and border police, the gendarmerie, the directions of transport and town halls.

The system allows to obtain in real-time the traffic density (to change route), to prevent accidents, to provide alerts and to localize vehicles in real-time.

Prof. Benoudjit of the ENATT (National School of Application of Terrestrial Transport Techniques) presented a study about road safety, transport and sustainable cities.

In 2008 the number of vehicles in Algeria was about equal to 5,6 millions of vehicles, the 60% of these being private cars and only 2% being collective transport modes. The about 40.500 accidents occurred in 2008 have also caused a loss of more than 100 billions of Dinars.

Some characteristics of the road safety in Algeria are listed below:

- the vulnerable users (pedestrians, bicycles, carts towed by animals) are the main victims, especially in the urban areas;
- the use of the road is mixed and causes problems between rapid and slow circulation (crossing of agglomerations by rapid roads, highways, ecc.);
- the drivers more involved in the accidents are professionals (heavy vehicles, public transport modes, taxis, ecc.). The accidents are mostly due to multiple tasks, high number of driving hour, rest time often done in bad conditions;
- the collective transports are not sufficiently safe, due to:
    1. drivers: lack of specific information, effort, risky behaviours, competition between operators;
    2. vehicles: ancient, absence of maintenance by the safety bodies, overloading of passengers and freights;
    3. politic of transport liberalisation: many low companies increasing the risk factors, weak services offered.

The main difficulties and weaknesses, according to Prof. Benoudjit, are:

- for the basic actions
    4. production of incomplete and not reliable statistics;
    5. too slow updating of the circulation rules;
    6. insufficient training of the professional drivers;
    7. education in schools few developed;
    8. not sufficient technical controls (not rigorous and not for all the parts of the vehicles);
- for the corrective actions
    9. the problem diagnostic is difficult due to the not reliable statistics;
    10. the actions for the infrastructures are implemented difficulty (bureaucracy);
    11. the identification and treatment of the black points is not sufficient;
    12. in the urban areas the actions are mostly oriented towards the collective transport modes and the improvement of mobility, instead of at solving the road safety problems.

The proposed solutions relate with:

- consolidating the specific training of professional drivers;
- developing the road safety education in the schools;
- promoting research projects;
- elaborating national statistics complete and coordinated between the various services;
- updating the road circulation rules;
- consolidating the technical controls of the vehicles;
- identifying and solving the black points.
- Promoting the collective transport modes in the urban areas and discouraging the use of the private vehicles.

2.5 ESTEEM project session

This group of presentations has concerned the ESTEEM project itself. The workshop was an opportunity to present the project ESTEEM to a larger number of participants directly involved in the issue of safety and security of transports.

This session was chaired by Prof. Farès Boubakour (University of Batna) who hosted Drs. Maria Luigia Calia of IMED and Dr. Antonino Tripodi of CTL.

Dr. Tripodi (project manager of ESTEEM) presented the main aspects of the project: objectives, work plan and specific activities, partners involved, results achieved to date and expected outputs.

The presentation of Drs. Calia focused on the dissemination and networking aspects of the project. Especially the network is one the main task planned in the project, having the objective of involving European and Maghreb stakeholders with the project discussions and consequently of collecting useful information for the roadmaps for future researches, to be prepared at the end of the project.

Through this presentation all the participants to the workshop were invited to join the network in the web site of ESTEEM (www.esteemproject.eu).

3 Main results of the workshop

Several kinds of results of the workshop can be enumerated.

3.1 Maghreb countries

As the workshop has been organised in Batna, most of the information concerned Algeria and in lower measure the other Maghreb countries.

Concerning the **sub-area 1** (road safety management aspects), the first result is that the theme of road safety is a topical research issue in all the Maghreb countries. At least two reasons can be identified. The first is the interest felt with the communications, discussions and exchanges of idea (indeed, this sentiment was expressed by all the stakeholders). The second is that the numbers and cost of road accidents are still, relatively, very high. It should be noted here that the selected components namely data collection and data analysis in one hand and the management of road safety in general, in the other hand, have been widely mentioned in the debate by stakeholders.

There is also an interesting phenomenon to be noted in Algeria. A trend was reported concerning the use more and more important of private cars (with an increase in car ownership and mobility in the recent years). Urban public transports are not yet sufficiently attractive in terms of quality of service despite the fact that many efforts were made (creation of public companies for urban transport, tram projects in the eight largest cities, etc.). In terms of inter-urban transport, a significant decrease of the rail transports (about 63%) was observed. In this regard, in term of good practice, the European stakeholders have highlighted the dangers of an excessive use of private cars related with the increase of the number of accidents (and of the related costs), the environmental problems and more broadly of the sustainable development issues.

Concerning the sub-area 2 (human factors), given its redundancy in the discussions but also in term of cause of accidents, the human factor appeared fundamental for all the Maghreb countries. Most of the communicants confirmed this issue. In Maghreb the failure is related with the non-respect of the driving rules and with the low driving training. Despite the existence of the withdrawal of licenses, which has yielded good results but is still limited, there is a real problem to enforce the law by some drivers not disciplined. This also seems to be the result of social, psychological and cultural factors.

Concerning the others sub-areas (ITS and infrastructures), the interventions (especially of Mr. Baouni, Mr. Bakour, Dr Guettaf) showed that there is a need to review how to design, adjust and control the infrastructures and, more generally, rethink the road environment both in urban and in inter-urban areas. Concerning the implementation of intelligent transport systems (ITS) and their interest in improving road safety, it seems that the need is expressed in the Maghreb countries and especially in Algeria, which is realising the east-west highway (about long 1,200 kilometres).

Even if not considered prioritary in Maghreb, due to its innovative nature, the concept of intelligent transport systems has been a theme which gave risen to an interesting debate. The Maghreb countries are interested in setting up such systems. These topics will be reviewed more in detail during the second workshop in Rabat.

The Table 3.1 shows a summary of the results obtained concerning the three Maghreb countries according to the main road safety items.

Table 3.1 – Summary of results for Maghreb countries

Items	**Algeria**	**Tunisia**	**Morocco**
Legislation Sub-area 1	The texts exist. Regulation is rather well done. The problem is the difficulty of its application. A recent law (August 2009) which is more severe but has not led to extensive information in advance.	The national policy on road safety has received three five-year plans: the first (1992-1996) was marked by the creation of the National Observatory of Traffic in 1992. The second plan (1997-2001) was marked by the creation of the Board of Road Safety in 1997 and the National Association of Road Safety in 1999. The objective of the Third National Plan (2002-2006) was to reduce by one quarter the number of deaths. Other important laws are: Consolidation of steady traffic (1995 and 1997 and 1999). Need to introduce new offences. Reform of drive license in Tunisia (2000). The law exists. The problem is in its application. There is a need to review and revise some measures to fill the existing gaps.	The legislation exists and it is very well done. The difficulty is the enforcement and to achieve on the ground. A new highway code, more severe and contested by the unions, is being validated by the second chamber of parliament.
Education & training Sub-area 2	Inadequate training of drivers. The drivers take risks (due to social, cultural, psychological raisons). Learning methods are archaic and must be reviewed and modernized. Insufficient training of instructors driving school. Difficulties and failures in automobiles schools.	Organization of awareness campaigns and information sent to users of the road. Trainers and instructors are sometimes seen as intolerant. It has been proposed by the National Observatory of traffic in 2006, introducing the program in elementary or secondary education course entitled "Education Road" which will be mandatory.	Tools theoretical increasingly sophisticated and computerized. Practical training much less advanced.

Tools for planning and implementation & control Sub-area 1 & 2	Transport planning tools are required to be developed for each chief town of the Wilaya. There are some problems in their implementation. There is also a lack of coordination between national and local plans. Quality tools are relatively weak. Effectiveness of controls are scarce or non existent.	Lack of planning with a disparity between the Tunisians. Discussions are under way to program the mobility of population and economic agents by the flow of vehicles and pedestrians. There is a lack of coordination between national and local plans.	No law imposes municipalities to develop a plan of urban transport. However all major cities have initiated such studies and present their schematic director of transport and traffic. The medium-sized cities also want those plans. The policy aimed for real implementation of these plans.
Enforcement Sub-area 2	This is the main challenge. There are obvious problems in implementation and compliance by drivers. Also the difficulties in collecting fines exist. Computerized tracking system must be implemented for report of fatalities.	Problem of social acceptability and regulatory resistance to law enforcement: no awareness of the danger of traffic accidents and non-compliance with the law. Disciplinary inefficient and sometimes not adapted to the Tunisian context. Defects of the system of checks and sanctions: a laxity and tolerance of the forces of order are observed. Amnesty on fines and driving offenses.	Although the implementation and enforcement of rules by the drivers are not perfect yet, efforts in this area have demonstrated their effectiveness and discipline is really noticeable on a few years ago. Computerization policy accompanied by the introduction of electronic records will improve the situation.
Accident registration criteria Sub-area 1	Problem of homogeneity of data and methods for recording accidents. Information not detailed. There is an issue tracking concerning injuries in road accidents in hospitals.	The data in terms of injuries due to road accidents are collected by the National Guard and the National Observatory which focuses on two areas: accident analysis and communication between actors. The information is not detailed enough.	Computerization policy made for several years ensures now consistency of data and information which are detailed. In urban areas, geo-location data is poor as well as qualitative data.
Key figures & evolution (fatalities data) (Year 2007) Sub-area 1	Number of accidents: 39.010 Killed: 4.177 Injured: 64.708	Number of accidents: 10.681 Killed: 1.497 Injured: 15.147	Number of accidents: 58.924 Killed : 3.838 Injured : 89.264
Infrastructure Sub-area 4	Fairly good infrastructure in general. Need for regular maintenance. A report of major construction program underway. Review black spots. (ongoing program of treatment over 500 points). Recent establishment of “maisons contonnières” for road maintenance.	New roads and highways were built, others have been renovated. Identification and elimination of periodic spots. However: gyratory poorly constructed. narrow roads, unpaved and poorly maintained. Lack of specific sites for public transit and bike paths. Highways poorly protected. Barriers virtually nonexistent before the schools and the largest places.	Infrastructure in good condition in general. Important development programs and strong growth (roads, highways, ports, logistics, airports, railway, tramway).
Vulnerable	Vulnerable users are not protected. The road	Vulnerable users are not protected. We must put	Vulnerable users are less protected and are rarely

users Sub-area 4	environment is very hostile to this category. Everything is to review at this level including information and communication.	more effort to protect pedestrians in Tunisia since a large number of pedestrian victims of road accidents. Cyclists and motorcyclists are also inadequately protected.	taken into account in the design and management of the transport system. They represent the majority of those killed and injured in road accidents.
Urban road safety Sub-area 1	As the transport plans, traffic plans are mandatory for chief city of the Wilaya. But there is not really an assumption of safety in road traffic plans (or very little). There is also a lack of coordination between different stakeholders (local and national).	Lack of partnership between all stakeholders in the transport field. No synergy and coordination between actors. A communication must exist between the different actors in the system of road safety.	Security is not directly reflected in the circulation plans that are also not mandatory.
Research lines	The themes of research in the field of transportation safety are not currently sufficiently numerous. They will be probably taken in the future PNR (National Research Project) which will be launched soon. The key themes will cover all facets of the problem but especially the human factor, compliance with regulations, control technologies, etc.	Much work is needed in the field of research. He is directing the work in the field of human factor. There is a great gain to be realized.	There is more studies on safety in transport then research. It remains to strengthen the research aspect and the integration of universities in research on the safety and security in transport.
Other aspects	It should be noted the great difficulty in coordinating the efforts of stakeholders in the fight against road safety.	It is true that Tunisia has taken some steps to remedy the current situation and the mortality rate tends to decline in recent years, however, it remains almost too high.	It should be noted the complexity of data analysis of urban safety and the lack of geo-location data in urban areas.

3.2 European countries

Concerning safety on the French roads, since 1970, the number of fatalities and injuries has regularly decreased whereas traffic has significantly increased. As a result, the risk of being killed has been divided by ten.

Political will (i.e. laws adaptation / enforcement), education (i.e. starting in the primary schools), formation (e.g. young drivers have a probationary licence of six months) and usage of new technologies (e.g. speed cameras) contribute to these results.

Considering the accidentology data, infraction to speed limitations is the rule that is most violated. The large deployment of speed cameras is then one of the responses of the authorities to reduce these infractions. It is not the only one to reduce the impact of the accidents. Thus safety equipments (seatbelt, helmet) are more controlled and vehicles are more frequently checked.

Improving security on the roads is clearly a continuous effort. What is then of great importance, beside the elements mentioned above (going from the actions of the authorities to the impact of the technologies) remains the accidentology data since these allow to identifying the priorities to tackle first. Improving safety on the roads requires then also the development of a reliable and efficient accident data collection process.

Regarding the case of Spain, the situation can be summarized as follows:

- Fatalities in Spain has been reduced from 2000 by close to 35% in 2007 in line with EU objective of 50% in 2010. In the same period number of vehicles and drivers grown close to 30%. Accidents in 2007 reached 3823 fatalities with more than 32 million vehicles and round 100.000 accidents.
- Situation with respect to other EU countries has been improved from position 17 to position 11, just below the EU mean value.
- Speed, alcohol and distractions as well as the lack of self protection measures has been the main causes of accidents.
- Safety plans are implemented in Spain at national level and in the biggest cities; measurable objectives has been achieved.
- Management tools to collect, analyse and disseminate traffic accident data are also implemented.
- Enforcement measures have also been implemented like points driving license, speed radar control and alcohol & drugs control. In urban areas red light enforcement has also been successfully implemented. Penalties are increased, specially for most strong accidents which drivers are subject to criminal prosecution.
- Infrastructure maintenance expenditure is very close to optimal value of 2% of the value of the infrastructure.
- Education and training programs are improved and targeted to the most sensitive groups (elderly, teens, professionals, etc.).
- Labour conditions of professional drivers are not good in effective terms, but the applications of European directives are improving the situation.
- ITS applications are mainly related to enforcement, but also informative systems are available with positive effects. Systems related to vehicle safety are slowly introduced in new cars and cooperative traffic (V2V) is just starting, as well as V2I systems.

In Italy, a reduction of the number of accidents and deaths on the road was registered in the last years, even if several gaps still exist and the fatal accidents are still too highs.

The main issues on road safety are related with:

- accident data collection:
  - the data are not sufficiently homogeneous;
  - the accident causes are not sufficiently detailed;
  - the data are not available soon (at least after one year);
  - the data are not fully reliable (e.g. the percentage of accidents caused by drugs or alcohol is underreported);
- road safety management process:
  - few coordination between the bodies responsible for the road safety management;
  - few tools or guidelines realised for specific topics;
  - absence of legislation for road safety management;
  - few financing to improve road safety (compared with other EU Countries);

- training & education:
  - low level of training of the road users;
  - the users are not aware of the risks on the road;
  - low training standards;
  - periodic verifications on knowledge and behaviors don't exist;
  - road safety education (e.g. in schools) can be improved;
- enforcement:
  - few controls are done for seat belts, use of phone while driving, etc;
  - a body for coordinating the enforcement measures in Italy (to improve homogeneity) is missing;
- vulnerable road users:
  - vulnerable users are generally few protected in urban areas;
  - absence of laws in favor of the vulnerable users safety;

The most successful actions for improving the road safety realized in the last years in Italy are:

- increase of BAC controls (from about 300.000 in 2006 to about 1,5 million in 2008);
- large scale implementation of section control systems (so called "Tutor" system);
- more restrictive laws against driving under effect of alcohol or drugs;
- application of the points system for driving license.

A further measure under development by the Italian Parliament is the application of a zero limit for use of alcohol for young drivers.

In terms of sub-areas, in the three countries in Europe, the Table 3.2 summarises the situation. It is noteworthy that the sub-areas 3 and 4 have not been treated thoroughly because they were not the main purpose of the workshop of Batna. The latter has focused on sub-areas 1 and 2.

Table 3.2 – Summary of results for each European countries

Sub-area	**Spain**	**France**	**Italy**
Sub-area 1	Good results were obtained in Spain. In terms of number of road fatalities, it was realized a reduction of 31% from 2001 to 2007. Management tools to collect, analyse and disseminate traffic accident data are also implemented. Safety plans are implemented at national level and in the biggest cities; measurable objectives has been achieved. Implementation of ARENA application in DGT to improve and make accident data collection more systematic and ease	French roads are now much safer than in the past years. From 2001 to 2007, the number of deaths on the roads has been reduced by about 43%. Tools for the management of the accidents on the roads include accidentology data collection; deployment of ITC based road traffic surveillance; coordination of the interventions (of both police forces and emergencies teams). As a result, the risk of being killed has been divided by 10. A comparison of the road fatalities in Europe shows that France has the best	Despite the decline in the number of accidents showing a better grasp of insecurity, the results are worse in Italy than the other two countries. The reduction in fatalities was -25% from 2001 to 2007. Italy is, roughly, in European average. Regarding the road safety management process : - few tools or guidelines done for - absence of coordination - absence of legislation for road safety management

	the data accessibility.	results of the years going from 2001 to 2007 concerning the reduction of the deaths.	- few financing to improve road safety (compared with other EU Countries).
Sub-area 2	National Road Safety Agency (DGT) has issued a framework plan of road safety. Other administrations are committed to develop their own plans (already done). Concerning training & education of users. This is a permanent effort carried out at all educational levels from children and teens to elderly. Other support actions are carried out periodically (mass media campaigns). Regarding enforcement:, points license is the key issue jointly with the changes in the law which allow to apply criminal prosecution to severe infractions. Also, special campaigns for alcohol, drugs tests, use of helmets, belts and mobile phones.	In France, repression is also a key element since it has a direct impact on behaviours modification. The driving license point system has been improved with automatic speed enforcement and this has been a key element of the system. New regulation and enforcement related to : drink driving, drunk pedestrians, driving under the influence of drugs. Reinforcement of controls for seatbelt, helmet, safety equipment, vehicle inspection. Education and information. School exam on road safety: it is compulsory to succeed the 2nd level before the driving licence exam. Road safety exam mandatory to drive a moped.	Application of the points system for driving license. Many enforcement measures have been adopted. But few controls are done for seat belts, use of phone while driving. Concerning training & education: - The level of training of the road users is very low. - Users are not aware of the risks on the road. - The training standards are low. - Periodic verifications on knowledge and behaviors don't exist. - The road safety education (e.g. in schools) can be improved. A body for coordinating the enforcement measures in Italy (to improve homogeneity) is missing.
Sub-area 3	ITS applications are mainly related to enforcement, but also informative systems are available with positive effects. Systems related to vehicle safety are slowly introduced in new cars and cooperative traffic (V2V) is just starting, as well as V2I systems. Regarding the Speed Radar Control, by 31.12.2007, there are 500 fixed points and 300 mobiles radar.	A good experience in the field of ITS in France. The automated control system (mainly based on the deployment of speed camera) has been well combined with the repression. The 10 first speed cameras were installed in October 2003. At the end of 2007, there were 1950 speed cameras. For more details, see paragraph at the end of the table.	Several ITS applications exist in Italy in different transport fields. The most developed one, especially for security aspects, is the rail transport. For road some application exist relating on-board vehicles. Other good practices concern automatic enforcement systems for highways which provided very effective results. Despite this, a clear legislation on the type of systems to be implemented is missing.
Sub-area 4	For vulnerable users, a regulation improvement in this way has been included in the law as well as in the practice at urban level and interurban. Protection elements for motor bikers in roads are good example. At cities level self protection measures as well as ITS and infrastructural ones are applied in a regular basis. Concerning infrastructure,	The French road infrastructure is well developed, but is mainly devoted to the vehicles with engines. Much has to be done for instance to develop bike paths. The strategy towards improving the safety of the infrastructure includes the adaptation of the legislation. Regulation texts are regularly adopted or already existing ones are	For vulnerable road users insufficient efforts are done : - Vulnerable users are still few protected. - Problems with road crossings, bicycle lanes. - Absence of laws in favor of vulnerable. New infrastructures are well developed, with

	are noted : - the increment of 60% of investments in new infrastructures and conservation; - an auditory of safety in the 100% of road network.	adapted (e.g. case of tunnels, rail crossing, roads intersections). The development of studies, reports, guides and recommendations are produced. These actions concern both the occupants of vehicles with engines and vulnerable users.	attention to safety aspects. Existing infrastructures are not systematically maintained and the safety aspects are not often revised. The situation of rail crossings is excellent, with plans for their total elimination.

Some convergence on treatment of road safety in the three European countries were registered. This is obviously consequence of the integration into the European Union and the commitments made by each other. So, the practices tend ultimately to be the same everywhere. It is however noted that the Italian case is particular. Indeed, findings and practices in Italy can be seen as worse than France and Spain. In Italy, the situation will be better placed in the European average as above.

There is globally and across the three countries a greater struggle for the respect of rules of the road, a fight against the practice of speed, better training, better planning, implementing stricter controls (e.g. against alcohol, drugs, etc.).

On other hand, it should be noted that the implementation of ITS in Europe have a significant impact on reducing road accidents. In this regard, as good practice, the French experience is particularly interesting. In the frame of mind of automated control system (ACS), main ITS application in France consists in the deployment of speed cameras (both mobile and fixed ones). ACS dedicated to inter-vehicle distance measurement is under development and experiments. This system should be installed in the single-lane tunnels. Concerning ACS for the red-lights, first experimental deployments have been launched in the spring of 2009. The ACS system, since its implementation in 2003 contributed to the reduction of the speeds. In fact, drivers have to avoid both the fines and points withdrawals. Behaviours concerning over speeding has been changed drastically since otherwise, a driver can easily loose his/her driving license.

Concerning traffic information, there has been a rapid deployment in France of on-line services, mostly offered by the state but some offered by private companies. These services give fairly accurate traffic information and advices on the best routes. Some of these services are available inside the vehicle either through the vehicle equipment (very rarely), or through add-on navigation units or through smart phones. It is generally thought (although no data on this seems available) that such information services can contribute to the safety of roads.

4 Dissemination aspects

In terms of media coverage, all measures have been taken to make an as large coverage as possible of the event. Many contacts and exchanges have been taken with the media before the event. These efforts were successful because all partners were present and especially the Algerian National Television for complete coverage of the scientific event on both days.

Media coverage of the workshop is synthesised as follow.

- Newspapers:
  - El Watan, 14 June 2009. Article Title: "Meet of the Experts" (page 11).
  - The Republican, 13 June 2009. Title: "International Seminar on road safety." (page 9).
  - The Quotidien, 11 June 2009: Title: "The road safety at the university" (page 22).

- APS: Agence Presse Service (the official Algerian press) has relayed the event.

- Local Radio of Batna (Radio Aurès)
  - The workshop was covered in the newsletter of 12h and 20h during the two workshop days (9 and 10 June 2009).
  - Four reports devoted to the workshop with interviews to several stakeholders and particularly to European experts.
  - Radio of Batna has scheduled a dedicated emission (registered) during 1h30.
- National Radio (Algiers, Chanel III)
  - The newsletter of 20 pm the 9 of June 2009 spent 4 minutes in the event. Prof. Farès Boubakour, local project manager of ESTEEM, was interviewed by telephone.
- Algerian National TV
  - Friday 17 July, the programme “Tarik Es Salama” of 30 minutes was devoted to the workshop of Batna.

5 Networking

In relation with Work Package 4, the workshop has been a very important moment for launching the networking activities planned within ESTEEM. The workshop was an occasion to introduce, promote and spread ESTEEM IT tool (website and network) and through it interested people had the chance to get further information about ESTEEM project, to get in contact with ESTEEM working group and, finally, to be an active member within website.

With Reference to ESTEEM website, workshop participants had the chance to be informed about the possibility to join the network, to take part in forum discussion, to consult the repository of project reference material. They had the opportunity, through the website, to be informed and updated with links to include newly projects and financing channels as well as new up coming events of particular interests for the network. Moreover, the workshop was an opportunity to explain to all participants, in the sessions but also aside, the goals of the project, as well as results and activities, and especially the fundamental objective to establish a Euro-Mediterranean framework on the theme of safety in transport.

This meeting involved a large number of everywhere stakeholders concerned in transports and it served as tool of creating visibility, exchanging experiences, information and data on the subject, email addresses and contacts, as well as gaining knowledge of significant activities related to this issue. Consequently, the network widened especially with regard to transport security and coordination of activities and some future collaborations in the prospective of new projects implementation or researches in transport sector have been outlined.

The principle of the constitution of an Algerian road safety framework that the University of Batna could handle was also discussed. Some stakeholders were very interested to exchange experiences and create liaison among the network with similar organisations on other countries and a very fruitful flow of information can be established. This flow must be supervised and recorded within the project in order to support the networking process in the future.

In the working session called "dissemination”, participants were also invited to join the network by registering on the website dedicated to the project namely: www.esteemproject.eu.

Secondly, and lastly, it is noted that the workshop of Batna was also an opportunity to present the project to a wider audience through the announcement of the event of workshop

of Batna through different frameworks via Internet. The information was relayed heavily on the websites of various national and international institutions.

See bellow websites:

- ESTEEM project website :

http://esteemproject.eu/ESTEEM/index.php?option=com_content&view=article&id=58%3Aroad-safety-state-of-the-art-in-the-maghreb-countries&catid=3%3Anews&lang=fr

- Website of the ministry of Higher Education and Scientific Research of Algeria:

http://www.mesrs.dz/Manifestations.php

- Website of the University of Batna:

http://www.univ-batna.dz/index.php?option=com_content&view=article&id=95&Itemid=43

- Centre for Transport and Logistics of "Sapienza" University of Rome (Italy):

www.ctl.uniroma1.it

- National Agency of development of university research, Algiers:

http://www.andru.gov.dz/actBatna.htm

- Personal web site of the Local Project manager in Algeria:

http://fares.boubakour.free.fr/articles.php?lng=fr&pg=113

- CIRPS web site:

http://www.cirps.it

- IMED web site:

http://www.imeweb.eu

- National Study and Training Centre of the Ministry of Public Administration and Innovation web site:

http://cooperazione.formez.it/sections/eventi/batna-workshop-transport/

6 Conclusion

6.1 Objectives

This document summarises the organisation and outcomes of the first workshop organised in the framework of the work package 3 of ESTEEM. The workshop was held in Batna (Algeria) the 9 and 10 June 2009, hosted by the University of Batna (partner of ESTEEM).

The workshop of Batna allowed to gain a better understanding of the situation of road safety as a whole in the Maghreb. It helped then to make a parallel with the situation and practices in Europe. The workshop was opened to the participation of local and regional stakeholders, which were invited to present their remarks about the topics treated. Several decision makers and agencies at central and local levels in Algeria and researchers from several universities and institutions (Algerian and foreigners) participated to the workshop.

The workshop focused on two of the four sub-areas defined in the work package 1 of the project, especially:

- Road safety management aspects (Accident data collection and analysis - Road safety management process).
- Human factors in road safety (Road users education and training – Enforcement).

The most important conclusion is that the workshop of Batna allowed to consolidate the choices made during the pre-consultation for the sub-areas definition (WP1). Indeed, the four key points selected for the sub-areas relating with road safety (mentioned above) have been largely confirmed by the various discussions established with different stakeholders (policy makers, researchers, associations, practitioners, etc.).

The workshop of Batna was an opportunity to refine the knowledge about the transport safety situation and particularly about the road safety in the Maghreb countries. Through the papers presented in both plenary sessions and in the ateliers, it became clear that the need to control the road safety in the Maghreb countries is vital. The road unsafety in these countries is really important and its control is seen as a national priority by the government. Moreover the problem appears also more complex because several social and cultural aspects influence the road safety issues. The results of the workshop will be further refined by the expected results of other ongoing work.

6.2 Table of conclusions by sub-areas

The discussions provided useful indications for elaborating the roadmaps for the future researches on these topics. Regarding the sub-areas treated in priority at the workshop, the following main conclusions can be retained. The aspects indicated in Table 6.1 should be considered during the preparation of the recommendations and roadmaps for future researches.

Table 6.1 – Conclusions per sub-areas

Sub-area	Conclusions
SA1	In Maghreb countries, concerning the management aspects of road safety, the need for data collection on accidents appeared as fundamental as well as the data treatment and their availability. Another important issue, also common to several countries all over the world, is the lack of coordination between the various parties involved in road safety. There is also a problem in managing and collecting the fines and in enforcing the traffic offences in short time. In European countries, things are better. Legislation in EU is more harmonised and similar among countries. Application criteria are also similar and the tools for a strict application exist. In MCP countries Law is sometimes similar but not yet harmonised and the application is doubtful in some cases. Here is no tools to ensure enough enforcement. Accident data from urban areas are not included in the accountancy with the same criteria since depends on different Administrations. This also happens in EU but a higher level of harmonisation is reached and some efforts are oriented to improve the situation with technical and financial support. As integrated conclusion, information system has to be improved in all countries and harmonise the tools and criteria of accountancy. Urban and interurban must be also harmonised. Experience from EU is transferable in this field in terms of harmonisation and implementation of law.
SA2	In Maghreb, human factor is considered as the dominant issue (i.e. it represents the 85% of the accidents in Algeria). This factor should be considered as the most important lever to reduce accidents and casualties. Several aspects are included in this field: driver training, qualification of driving instructors, examiners and all the communication aspects. Also some difficulties in enforcing the driver behaviours and in respecting the rules have been evidenced several times during the workshop. This lack of discipline is the cause of most of the accidents involving vulnerable users. In Europe, control of accidents has gone through considerable effort in terms of regulation, training, communication, enforcement, etc.. All these aspects can be transferred to the Maghreb countries but with taking into account certain institutional, social and cultural constraints including compliance with the rules of conduct and behavior on the road (enforcement). But that being said, the methods of training and assessment in schools cars, the level of skills required for instructors examiners, etc. are easily transferable.
SA3	Innovation both in the field of transport safety as well as innovations in other fields are developed in the North. Thus, European countries are naturally better equipped for ITS as the Maghreb. Very good results are achieved through the implementation of these techniques in European countries including the establishment of information systems and speed cameras. The Maghreb countries are now evaluating the benefits of implementing intelligent transportation systems (embedded on cars or not). While the embedded systems depend mainly from the car manufacturers, more interest was given to others systems like those for information to users and traffic management. The ITS are easily transferable.
SA4	While in Europe the infrastructure is far better than in Maghreb. They are in Maghreb in average quality. In Maghreb countries, the infrastructure and their relationships with road safety was also a topic largely discussed during the workshop. There are some mismatches between the capacity of actual infrastructure and the fleets of vehicles, especially in urban area. Problems related with

	black spots were repeatedly reported. Sur un autre plan, et il s'agit là des aspects transférables, la protection des usagers vulnérables avec la mise en place d'aménagement et de mobilier urbain adéquats et des manière de les concevoir et de les mettre en place.

There are of course many good practices transferable to the Maghreb countries. But some problems of implementation and transferability that maybe appears given the different environments should be taken into account.

6.3 Results application for the future work

The volume of information collected through the workshop of Batna allows to extract preliminary results to be used as basic guidelines of roadmaps and criteria for its development. They can give also an idea on future actions to be undertaken. The current findings are based on partial results and can not be applicable immediately. They are expected to be completed, consolidated and refined by other work in progress (i.e. the desk analysis, interviews, the workshop in Rabat dedicated to ITS and infrastructures). At the same time, the results obtained in the workshop of Batna, added to those expected at the workshop in Rabat, contribute in large part to a better overall understanding of the situation in individual countries and thus the work of synthesis including the upcoming "Local integrated analysis".

Concerning these partials results, the human factor in all its components appears as the most important for the Maghreb countries (85% of cases on average). Considering this issue, the following priorities can be proposed:

- an assessment of the current training of drivers, ways of doing the trainings, with proposals for introducing new approaches to promote ICT introducing interactivity in training;
- the training of driving instructors, including arrangements for accessing to the profession;
- road safety education in schools, prevention campaigns and their impacts (their relevance, assessment, etc.).

In addition to human factors, other important aspects concern the accident data collection, the logic of actors and the coordination problems, the results achieved, the assessment of the existing good practices, etc.

The actions to be undertaken in the field of road safety in Maghreb countries are finally numerous. The first is to conduct a comprehensive assessment of the situation by countries (Algeria, Morocco, and Tunisia) because significant differences can be defined. This could be done in the call for independent research projects by country. Topics of future research would be to carry out specific audits on the different components and aspects of transportation safety, with the key proposal of solutions by subject. The goal is to get a coherent whole that can contribute to the building an overall national strategy.

The transfer of European know-how through future researches is fundamental. Future research projects once completed, closed and implemented, even in a localized area, will contribute to enhancing safety in transportation directly or indirectly, and generally will help to the development of local skills.

Annex I - Workshop program

Time	First day		
9:30–10:00	Welcome and official opening		
Chairman: Prof. Azzeddine Bennoudjit			
Time	**Full name**	**Communication's title**	**Organism**
10:15–10:30	Prof. Farès Boubakour	"Conference opening" Road safety in Algeria	UHL BATNA
11:00–11:15	Mr. Mohamed Tatachek Mr. Aïssa Naïli	Road safety: Human being as main factor	High commandment of gendarmerie nationale – Alger-
11:15–11:30	Prof. Chantal Chanson-Jabeur	Road Safety road unsafety: Accidentology and prevention in Tunisia	Paris VII university - FRANCE-
11:30–11:45	Mr. Noureddine Heddadji	Safety and road accidents	Gendarmerie
Atelier N° 1			
Chairman: Dr. Kamel Zidani			
14:30–14:45	Dr. Antonino Tripodi	Road Safety situation in Italy	CTL - "Sapienza" University of Rome
14:45–15:00	Dr. Lylia Bahmed	Contribution to the instauration of the quality safety environment integrated management system in the Algerian urban transport system	UHL BATNA
15:00–15:15	Melle. Houria Bencherif Mme. Fadhila Agli	Road accident data in Algeria: from production to use	ENATT - Batna
Chairman: Prof. El-Hadi Rahal-Gharbi			
16:00–16:15	Dr. Michel Parent	Road safety security in France	INRIA, Paris - FRANCE
16:15–16:30	Mr. Ali Dermel Pr. Kaïd Tlilane Nouara	Road safety cost estimation in the wilaya of Béjaia	Abderrahmane MIRA University - Béjaï
16:30–16:45	Mr. Mohamed Bakour Dr. Tahar Baouni	The road safety in the Algerian cities: Experiment synthesis	Higher Grant Ecole for Architecture (eg. EPAU) - Algiers
Atelier N° 2 :			
Chairman: Prof. Farès Boubakour			
14:30–14:45	Dr. Jaime Salom Gracia	Road safety situation in Spain	TRAKTEPLAN , Madrid - ESPAGNE
14:45–15:00	Dr. Lila Guettaf	Analysis of the evolution of road accident in Algeria	University of Sétif
15:00–15:15	Mr. Moussa Tazerouti	Vehicles involved in road accidents in Algeria	University of Boumerdès - Algeria
Chairman: Dr. Lylia Bahmed			
16:00–16:15	Dr. Altair Torres	Accident evolution with respect to world motorization	Municipality Transportation Secretariat of Rio de Janiero - Bresil
16:15–16:30	Mr. Salim Bouguenna	About some cultural aspects and their role in reducing road accident: Algerian case	UHL BATNA

End of the first day			
Second day: plenary session			
Chairman: Dr. Aïssa Merazga			
9:00–09:15	**Mr. Mohamed Lazouni**	The role of road prevention in Algeria.	**Tarik Es Salama Association - Algiers**
9:15–9:30	**Mr. Mohamed Souleïmen Ouannes**	Road safety and country's wealth : what link ? The example of Tunisia	**University of Lyon 2 - FRANCE**
9:30–9:45	**Dr. Boualem Chebira**	Road safety: what role for ICT?	**Badji Mokhtar University - Annaba**
9:45-10:00	**Commandant A. Farouk**	Prevention road accident and handling	**Civil defence- Algiers**
Chairman: Prof. Tahar Haroun			
11:00–11:15	**Dr. Nadia Graïnat**	Traffic accident traumatism	**UHL BATNA**
11:15–11:30	**Dr. Hocine Amokrane**	Traffic integral telemanaging system: It's interest for the road safety	**Mohamed Saddek private hospital - Batna**
11:30–11:45	**Pr. Azzeddine Benoudjit**	Road safety Transport and Sustainable Cities	**UHL BATNA**
Esteem project: Goals and Dissemination			
Chairman: Prof. Farès Boubakour			
11:45–12:00	**Dr. Antonino Tripodi**	Esteem project presentation	**CTL - "Sapienza" University of Rome**
12:00–12:15	**Dr. Maria Luigia Calia**	Dissemination	**IMED - Rome -Italy**
12 : 45	**End of the workshop**		

Annex II - Participants list

Name	Organization	Function	Contacts
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Annex III - Articles

El Watan N° 5660 du 14 juin 2009, page 11.

COLLOQUE INTERNATIONAL SUR LA SÉCURITE ROUTIÈRE À BATNA

Rencontre avec les experts

Dans le cadre du projet de recherche de la promotion des aspects de la sécurité routière dans la région euro-méditerranéenne (Esteem), financé par la commission européenne dans son 7e programme-cadre, ce dernier vise à contribuer à la coordination des activités et des politiques de recherche entre l'Espagne, la France, l'Italie et certains pays voisins, l'Algérie et le Maroc.

En vue du développement de la sécurité et la sûreté des systèmes de transport, l'université de Batna, à l'initiative du professeur Farès Boubakour, chef de projet Esteem Algérie, en partenariat avec l'université la Sapienza (Rome), a organisé un colloque international sur la sécurité routière sous le thème «*État de l'art et état des lieux dans les pays du Maghreb*», avec des conférences présentées à la salle des actes de l'université de Batna par des professeurs venus de France, du Brésil et du Maroc.

La première journée a été entamée par les thèmes principaux, «*L'insécurité routière en Algérie*» et « *la qualité de service non attractive dans le transport public collectif*». Le professeur Boubakour fera savoir que durant l'année 2006, 40 885 accidents ont été enregistrés, se soldant par 60 120 blessés et 4 120 morts, précisant que l'Algérie enregistre chaque jour plus de 11 victimes de la route avec 5 accidents par heure. Le professeur Francesco F., coordinateur du projet européen (Esteem) a indiqué que concernant la sécurité routière, le thème «*Etat des lieux en Algérie*» est d'actualité mondiale. Dans la soirée, l'évolution et la prévention du risque routier s'est taillé la part du lion avec 9 communications, entre autres, «*Evolution des accidents par rapport à la motorisation dans le monde*» du Dr Altair Torres du Brésil, en parallèle avec celle présentée par Dr Mohammed Ouannes de l'université de Lyon. Il a précisé que le nombre d'accidents mortels devrait augmenter de 67% d'ici 2020, ajoutant qu'il faudrait prendre au sérieux la prévention routière à moyen et long terme en aménageant systématiquement l'infrastructure routière.

Pour conclure, le professeur Boubakour insistera sur la nécessité de multiplier ces rencontres pour connaître les récentes recherches technologiques dans le domaine de la protection contre les accidents de la route. Il ajoutera que cette occasion s'inscrit dans le rôle prépondérant de la recherche scientifique pour l'amélioration du niveau de formation des étudiants et chercheurs.

Houda Hamdouche

Journal : l'Est Républicain n° 2708 du 13 juin 2009, page 9

L'Est n° 2708 13 juin 2009 P. 09

L'EST

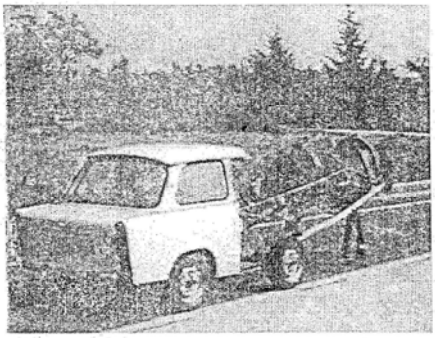
BATNA

Séminaire international sur la sécurité routière

L'Université de Batna, a organisé du 9 au 11 juin 2009, un séminaire international sur la Sécurité routière dans les pays du Maghreb, projet piloté par l'Esteem (Enhancing Safety and Security aspects in Transport research in the Euro Mediteranean région).

Bourki Messaoud

Outre la présence d'universitaires venus de tout le pays à l'invitation du chef de projet pour Batna, le professeur Fares Boubakour,l'on notait la présence en force d'officiers supérieurs des Services de Police et Gendarmerie qui ont suivi,assidûment les nombreuses communications. Ce séminaire rentre dans le cadre du 7ème programme cadre de l'Union Européenne (U.E) et est cofinancé par la Commission éponyme, partenaire des pays du Maghreb, l'Algérie, le Maroc et la Tunisie. D'éminents experts d'Italie, d'Espagne, de la France, du Brésil, de Tunisie et du Maroc ont animé de nombreuses conférences traitant,outre les statistiques macabres d'accidents de la circulation des dispositifs mis en place par leurs pays pour réduire le cataclysme où l'Homme demeure le facteur principal. « Son objectif vise à contribuer à la coordination des activités et des politiques de recherche entre l'U.E (Espagne, France et Italie) et certains pays voisins de la rive opposée (Algérie, Maroc) sur les questions de la sécurité et de la sûreté des transports « a déclaré l'invité de la capitale des Aurès, le Chef de Projet pour l'Algérie, Antonino Tripodi, de l'Université « La Sapienza » (Italie). Sincères, nos amis européens du projet Esteem souligneront, à l'unanimité que l'analyse de la problématique des accidents routiers incombe en premier lieu aux pays victimes et la méthodologie ESTEEM se résume à l'échange expeiences pour des applications spécifiques à chaque région .Autrement dit, chaque pays se doit d'élaborer une politique compatible aux données nationales (Routes, Vehicules et facteur humain). Le sympathique Lazouni de la DGSN (Circulation Routière) connu des Algériens à travers son émission télévisée «Tarik Es Salama» s'est essayé à intimider «les chauffards par la données statistiques effarantes à travers le monde et l'Algérie, classée quatrième selon une étude du professeur Benoudjit de Batna avec 40 481 Accidents/an, causant le décès de 4422 personnes et faisant plus 64 708 blessés dont 6 000 handicapés à vie. Le coût de la bêtise humaine est de l'ordre 100 Milliards de DA/An. L'hécatombe se poursuit dés lors que les statistiques font ressortir pour l'Algérie la circulation d'environ six millions de Véhicules dont 60 % de catégorie légère… Les transports collectifs ne sont que de 2 % du parc national. Pollution, accidents, deuils, pertes en argents et dépendance en pièces de rechange contrefaites ne sont que le résultat d'une inculture dans la possession de moyens de transport. Et le retour au vélo n'est pas pour demain à moins d'adhérer à la mixité comme l'illustre la photo du cheikh Lazouni.



BISKRA

Le quotidien N° 4441 du 11 juin 2009, page 22

maritime de l'ancien Port de Skikda. Placée sous l'égide de l'UGTA, ces élections ont connu une forte affluence de travailleurs dès les premières heures.

D'ailleurs, l'ouverture des l'EPS, il y a eu pas moins de 1.100 votants.

A l'issue du dépouillement, on a retenu 15 membres parmi une liste de 48 candidats proposés au vote. La nouvelle équipe composera tardive de la nuit de lundi à mardi 9 juin 2009. Quant au bureau exécutif et son président, ils seront installés ultérieurement en attendant les éventuels recours.

A. B.

La prévention routière à l'université

Un Colloque international sur la sécurité routière dans les pays du Maghreb s'est ouvert mardi, à l'Université de Batna, en présence d'experts maghrébins et européens.

Qualifiée de première du genre dans le Maghreb arabe, cette rencontre de deux jours a regroupé des universitaires algériens aux côtés de spécialistes tunisiens, marocains, italiens, français et espagnols. Elle s'inscrit, a-t-on indiqué, dans le cadre du projet ESTEEM (Enhancing Safety and security aspects in Transport research in the EuroMediterranean region), financé par la Commission européenne et visant «la coordination des activités de recherche sur les questions de la sécurité des transports entre des pays de l'UE et les pays voisins, notamment le Maroc et l'Algérie».

Le Dr. Antonino Tripodi, chef du projet ESTEEM et chercheur à l'Université La Sapienza à Rome (Italie), a indiqué que l'objectif de ce projet est «la sûreté des transports et la sécurité routière». Il a estimé dans ce contexte, que ce colloque permet de «confronter les résultats des travaux menés dans les pays européens avec les situations actuelles dans les pays maghrébins dont l'Algérie». Le même chercheur a indiqué que le travail est en cours pour tracer une «carte des routes» pour les futures recherches à mener dans les pays maghrébins, affirmant que cette rencontre sera suivie par une autre à tenir en fin d'année au Maroc.

Le Dr. Farès Boubakour, chercheur en économie de l'Université de Batna et représentant du projet ESTEEM en Algérie, a souligné que les communications retenues porteront sur les moyens susceptibles de rendre le transport dans la région de la Méditerranée «plus sécurisé». La rencontre permet également, a-t-il noté, aux pays maghrébins de «tirer avantage des expériences européennes dans le domaine», notamment l'Algérie et le Maroc qui enregistrent «des niveaux élevés» d'accidents routiers comparativement à la Tunisie.

Le Dr. Boubakour a indiqué, en outre, que l'approche de la sécurité routière aborde les trois éléments fondamentaux à savoir «l'homme, le véhicule et la route». Les travaux de la première journée de cette rencontre ont analysé les «normes définissant une politique de sécurité routière» en tenant compte des «spécificités» de chaque société, de sorte à parvenir à une réduction effective des accidents routiers dans la région méditerranéenne. Des communications ont présenté la problématique de la sécurité routière en Tunisie, au Maroc et en Algérie, désignant le facteur humain comme «cause principale des accidents». Il a été aussi souligné la place primordiale accordée dans les expériences européennes à «la culture de la sécurité routière» dont la diffusion doit prendre le pas sur les mesures coercitives.

Les intervenants ont également appelé à tirer avantage des expériences européennes dans «le management de la sécurité routière», estimant que la route ne sert pas uniquement au transport mais constitue «un facteur de développement local».

National Radio 1 (in Arabic). On the website the information about workshop and sound recording. http://www.radioalgerie.dz/?p=10095

BATNA - La sécurité routière dans les pays maghrébins en débat

Ecrit par APS Algérie Presse Service (The Algerian official organ of information)

Un colloque international sur la sécurité routière dans les pays du Maghreb s'est ouvert avant-hier à l'université de Batna en présence d'experts maghrébins et européens.

Qualifiée de première du genre dans le Maghreb arabe, cette rencontre deux jours a regroupé des universitaires algériens aux côtés de spécialistes tunisiens, marocains, italiens, français et espagnols. Elle s'inscrit, a-t-on indiqué, dans le cadre du projet ESTEEM (Enhancing Safety and security aspects in Transport research in the EuroMediterranean region), financé par la Commission Européenne et visant "la coordination des activités de recherche sur les questions de la sécurité des transports entre des pays de l'UE et les pays voisins notamment le Maroc et

l'Algérie".

Le Dr. Antonino Tripodi, chef du projet ESTEEM et chercheur à l'université La Sapienza à Rome (Italie), a indiqué que l'objectif de ce projet est "la sûreté des transports et la sécurité routière". Il a estimé dans ce contexte, que ce colloque permet de "confronter les résultats des travaux menés dans les pays européens avec les situations actuelles dans les pays maghrébins dont l'Algérie". Le même chercheur a indiqué que le travail est en cours pour tracer une "carte des routes" pour les futures recherches à mener dans les pays maghrébins, affirmant que cette rencontre sera suivie par une autre à tenir en fin d'année au Maroc.

Le Dr. Farès Boubakour, chercheur en économie de l'université de Batna et représentant du projet ESTEEM en Algérie, a souligné que les communications retenues porteront sur les moyens susceptibles de rendre le transport dans la région de la méditerranée plus sécurisé. La rencontre permet également, a-t-il noté, aux pays maghrébins de tirer avantage des expériences européennes dans le domaine, notamment l'Algérie et le Maroc qui enregistrent des niveaux élevés d'accidents routiers comparativement à la Tunisie. Le Dr. Boubakour a indiqué, en outre, que l'approche de la sécurité routière aborde les trois éléments fondamentaux à savoir "l'homme, le véhicule et la route". Les travaux de la première journée de cette rencontre ont analysé les "normes définissant une politique de sécurité routière" en tenant compte des "spécificités" de chaque société, de sorte à parvenir à une réduction effective des accidents routiers dans la région méditerranéenne. Des communications ont présenté la problématique de la sécurité routière en Tunisie, au Maroc et en Algérie, désignant le facteur humain comme cause principale des accidents. Il a été aussi souligné la place primordiale accordée dans les expériences européennes à la culture de la sécurité routière dont la diffusion doit prendre le pas sur les mesures coercitives. Les intervenants ont également appelé à tirer avantage des expériences européennes dans le management de la sécurité routière, estimant que la route ne sert pas uniquement au transport mais constitue un facteur de développement local.