Standardization in the area of Cooperative systems in the MENA region

SAFE, SMART and SUSTAINABLE TRAFFIC VIA COOPERATIVE ITS
4th ETSI TC ITS Workshop
07 - 09 February 2012, Doha, Qatar

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Outline

ITS Arab & the Future Vision of Mobility

Cooperative Systems Adaptation in MENA
  - Requirement & User Needs
  - Standards & Interoperability
  - Applications & Support

The Future: Regional Outlook
ITS Arab & My Role

Transport systems infrastructure is still in the early stages of development thus providing an existing infrastructure that is open to a smoother process of change whilst avoiding the barriers of legacy systems, thereby providing the means to test & implement the Future Vision of ‘Seamless Travel’

- ITS awareness,
- ITS regional requirement,
- PPP approach,
- Identify synergies,
- Knowledge Transfer & Training
ITS Arab & the Future Vision of Mobility

To Develop the a **Strategy** that ensures the deployment of sustainable, integrated, cost effective **ITSS** that supports a growing economy & takes advantage of rapid changes in Transport Technology.

Special emphasis will be given to the definition & adoption of a **ITS framework architecture** addressing long term multimodal infrastructure requirements & possible organisational structures that enables larger scale implementation in future.

Intelligent Mobility
**Future Vision**
[www.hud.ac.uk/imfv/](http://www.hud.ac.uk/imfv/)
Cooperative Systems Adaptation in MENA
Arab Interests & Working Groups

ISTA Arab facilitates **Interest & Working Groups** comprising of National & International experts:

- ITS Standards Committee & ITS Arab Architecture WG.
- MENA iMobility Teams: Research & Implementation Roadmap as part of the **iMobility: Future Vision Virtual Research Centre**
  - Future applications of cooperative systems in the MENA region (Qatar, Tunisia, UAE, Algeria...)
  - Arabic Road Message signs & Travel information presentation
  - Intelligent Mobility & Smart Urban Environment

**Members of the Group** will participate on a voluntary basis with administrative support provided by ITS Arab.

Utilising a voluntary approach will provide impartiality and fairness as for example a Working Group will effectively share the risks and issues that will inevitably be encountered.

Membership of the Working Group is open, but not limited, to:

- Members of National ITS Organisations
- National, Regional and Local Government
- Research, Industry & others stakeholders
Examples of Arab Research Teams

Professor Yaser E. Hawas, Director, Roadway, Transportation and Traffic Safety Research Centre, UAE University

- V2V routing algorithms
- Real-time route guidance
- One of a kind simulation tool for assessment
- Collaboration with the Canadian National Research Foundation

Professor Farouk Kamoun, Professor Emeritus ENSI, President SESAME University, Tunisia

- Access points detection, deployment & positioning strategies capable of ensuring a minimum quality of service in terms of regularity of access & availability of resources.
- Design & development of handover protocols for seamless V2I2V communications
- Optimization of routing for the interconnection of Vehicular networks with the Internet in order to provide better quality service for Internet applications (e-communications and entertainment).
- Development of geonetworking protocols for V2V communications
- Security & privacy in vehicular communication
Open Data Strategy by the EC:
Data, Information & Reliable Decision Support

New world of mobile technology

To understand the Transport network behaviour it is essential to transfer these data to useful & reliable information.

To predict systems behaviour, user & market acceptance, related social & economic changes..etc.

SMART 2020 report found that Information and Communications Technologies (ICT) could save 15% of global emissions in 2020
The Future

To identify requirements, problems & appropriate solutions in line with international standards, for the adaptation & support of cooperative systems & services deployment in the MENA region,

For example to generate guidelines with regards to:

- Gradual implementation of cooperative systems with consideration to social, economic & cultural needs- (Infrastructure, Personal & Commercial)

- Multimodal Information Management, Presentation & Choice .

- What are the required & applicable future travel applications and services in the MENA region
MENA Cooperative Architecture

Unified Regional Strategy
The Future is in Cooperation

Thank you

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