

SAFE STRIP 1st PAN-EUROPEAN WORKSHOP

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Co-operative systems in Infrastructure Operation

Bill M. Halkias, PE, MSCE, F. ASCE, F. ITE

Chief Executive Officer, Attikes Diadromes S.A.

President, HELLASTRON (Hellenic Association of Toll Roads Network)

1st Vice President, ASECAP (European Association of Toll Road Concessionaires)

HELLENIC ASSOCIATION TOLL ROAD NETWORK



Attiki Odos



Rio – Antirio bridge



Egnatia Odos



Nea Odos



Moreas



Aegean



Olympia Odos



Kentriki Odos

The Greek Toll Road Network



7 Private companies – Concessionaires

- Attiki Odos (Attica Tollway)
- Gefyra (Rion – Antirion Bridge)
- Nea Odos
- Moreas Motorway
- Aegean Motorway
- Olympia Odos
- Kentriki Odos

1 Public Company

- Egnatia Odos

Objectives and goals of HELLASTRON

HELLASTRON is a professional, scientific, educational and research association and operates on a non-for-profit basis. Indicatively, the objectives of HELLASTRON are:

- In relation to the users: the continuous improvement of the services provided to the users of toll roads.
- In relation to the research and public benefit: the investigation, promotion and development of the scientific aspects related to road transportation, road pavement, construction and maintenance of roads and networks.
- In relation to the promotion of road transportation: the participation in similar associations, worldwide.
- In relation to the interests of the members of the Company: the protection and promotion of the interests of the toll road infrastructures sector.

(Excerpts from the Association's Bylaws)

HELLASTRON - Key Figures (2016)

Code	2016 Data	Egnatia Odos	Attiki Odos	Olympia Odos	Moreas	Aegean Motorway	Kentriki Odos	Nea Odos	Gefyra	TOTAL
INFO 1	Total Network Length (km)	854	70	202,3	205	256,2	57	379,5	3,5	2027,5
STAFF 2	Staff in Concession & Operation	650	950	455	311	469	119	321	92	3.367
TOLL 11	Total Number of Toll Transactions (in millions)	29,09	77,04	34,29	16,42	21,26	7,17	24,18	3,46	212,91
SAF.4	Number of fatal accidents	13	2	13	1	5	0	6	0	40
SAF.6	Number of fatalities	16	2	15	1	6	0	6	0	46
SAF.3	Number of accidents with injuries	154	25	33	18	50	3	81	0	364
SAF.5	Number of injured persons	222	40	69	24	74	5	116	0	550
SAF.7	Number of property-damage only accidents	511	557	1.262	281	668	90	1.009	20	4.398

C-ITS

Cooperative Intelligent Transport Systems (C-ITS) for vehicles:

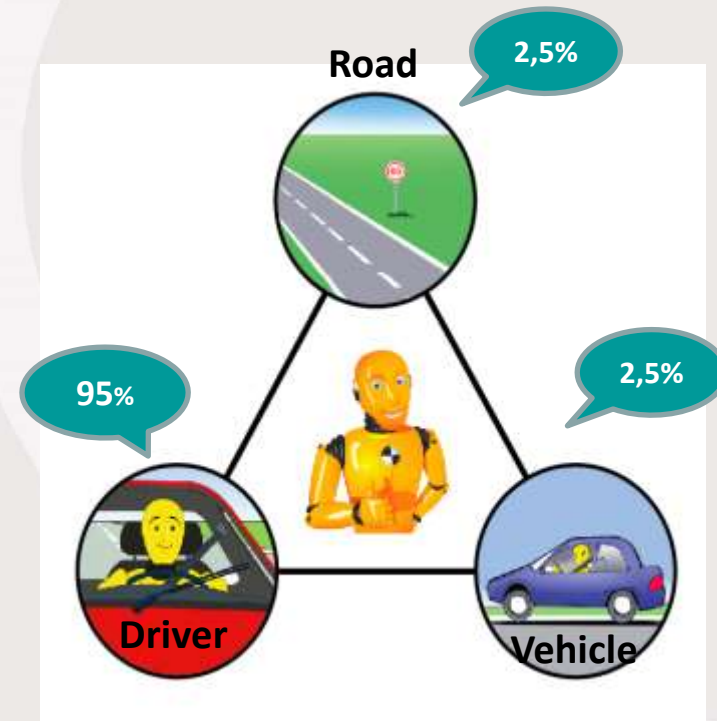
- vehicle-to-vehicle communications
- vehicle-to-infrastructure communications.



C-ITS for Road Safety

C-ITS applications to assist drivers
(responsible for 95% of accidents):

- Slow or stationary vehicle(s) & Traffic ahead warning
- Road works warning
- Weather conditions
- Emergency brake light
- Emergency vehicle approaching
- In-vehicle signage
- In-vehicle speed limits
- Signal violation / Intersection Safety
- On-street parking management
- Traffic information & Smart routing, etc.



Causes of Traffic Accidents

C-ITS Motorway Management

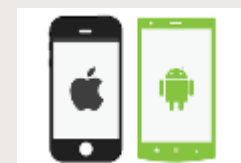
- enhanced traffic management based on floating car data
- safety related information for drivers, speed and distance proposal
- data exchange between operators for international seamless service handover
- monitoring of transport flows and information exchange for changing demands of transport
- facilitated toll collection
- fewer incidents/accidents/fatalities
- E-call

Issues that need to be addressed:

- Security & cyber security
- Interoperability of systems
- Liability
- Data protection
- Installation and maintenance of costly roadside equipment

Proposals for C-ITS applications for motorways

- National Action Plan development and implementation for TMC real-time data collection & dissemination (incidents, traffic, CCTV, meteo & pollutants)
- C-ITS Proof Of Concept (pilot applications, e.g. Road Work Warning, Improved Traffic management by Vehicle Data, Road Hazard Warning, In Vehicle Info)
- Virtual Tunnel Integration
- Speed limit control and fine submission



Transportation & mobility «think tank»

Participants: public administrations, entrepreneurs, producers of goods and services, manufacturers and infrastructure operators, professional and industry associations, researchers, clients/beneficiaries of services and social bodies.

The purpose of the think tank is:

1. Exchange of views and develop common positions;
2. Promotion of proposals for solving common issues;
3. Mutual support and identification of joint actions and projects to optimize “value for money”;
4. Finding common ways of implementation, adaptation and development of technologies, methodologies and best practices;
5. Participation in research projects and pilot applications;
6. Continuous and accurate information of the members of administration and society regarding progress, prospects and opportunities in the field of transport.

Thank you!



Bill Halkias, PE, F.ASCE, F.ITE
President, HELLASTRON
1st Vice President, ASECAP

Chief Executive Officer, Attikes Diadromes S.A.

bhalkias@hellastron.com ❖ www.hellastron.com

bhalkias@attikesdiadromes.gr ❖ www.aodos.gr