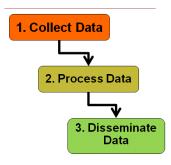


### The Latest Developments in Promoting Intelligent Transport Systems (ITS) in Cyprus

Aristotelis Savva, Executive Engineer Public Works Department

### Ελλάδα-Κύπρος Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης δ step2smart











- Since the first feasibility study for the Introduction of ITS in Cyprus in 2008 which
  was co- funded by the EU TEN-T by 80%, a number of actions have been taken to
  introduce integrated telematic systems with the objective to:
  - Collect, analyze and provide information to network users regarding the current conditions
  - Improve co-operation between the responsible agencies
  - Meet our obligations under the EU Directive 2010/40 which was transposed to Cyprus Legislation in November 2012.
- Commission Delegated Regulation (EU) No 886/2013 of 15 May 2013 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users
- Commission Delegated Regulation (EU) 2015/962 of December 2014 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to provision of EU-wide real-time traffic information services
- Commission Delegated Regulation (EU) 2017/1926 of 31 May 2017 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services
- EU EIP and TISA published the harmonised Declaration of Compliance for Safety-Related Traffic Information
- EU EIP and TISA published the harmonised Declarations of Compliance for Real-Time Traffic Information

https://www.cestrin.ro/web2014/nap\_eueip/





### ITS Developed in the Last 5 Years (1)















### ITS Systems that can be used for Traffic Monitoring & Management:

- The project DIAVLOS was created in 2014 and uses the traffic monitoring & management platform OMNIA – MISTIC.
- Was co-funded by the EU Cross-boarder Cooperation Programme Greece —Cyprus 2007-2013 by 80%.
- ▶ The system collects and analyses traffic information from 120 devices installed in the primary roads of Nicosia and the interurban network.
- Best Practice Project 1<sup>st</sup> European Territorial Cooperation conference – May 2014









Η Πράξη συγχρηματοδοτείται





### από πν Ευρωπαϊκή Ένωση (ΕΤΠΑ) και από Εθνικούς Πόρους της Ελλάδας και της Κύπρου



# DIAVLOS Sensors Nicosia & Interurban Network







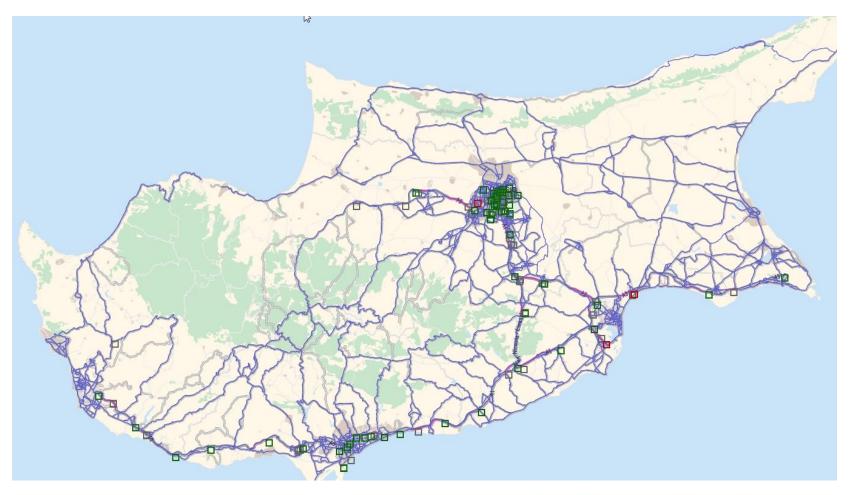






Η Πράξη συγχρηματοδοτείται από την Ευρωπαϊκή Ένωση (ΕΤΠΑ) και από Εθνικούς Πόρους της Ελλάδας και της Κύπρου

# DIAVLOS Sensors Nicosia & Interurban Network















Η Πράξη συγχρηματοδοτείται από την Ευρωπαϊκή Ένωση (ΕΤΠΑ) και από Εθνικούς Πόρους της Ελλάδας και της Κύπρου

### Developed in the Last 5 Years (1)

### ITS Systems that can be used for Traffic Monitoring & Management:

Traffic and incident information is available to the public and other interested agencies (police, port Community, universities etc). The information is also disseminated through the webpage:

www.traffic4cyprus.org.cy

▶ Data from that system is shared for research purposes and steps are under way to make that public for private web services developers.

https://www.cestrin.ro/web2014/nap\_eueip/





### Developed i Last 5 Years









από την Ευρωπαϊκή Ένωση (ΕΤΠΑ) και από Εθνικούς Πόρους της Ελλάδας και της Κύπρου

### **Parking Management:**

A system for calculating the available parking spaces has been installed in 5 central parking areas of Nicosia under the project DIAVLOS. The information is available to road users via electronic signs on the road and the web application:

www.traffic4cyprus.org.cy

- The data from DIAVLOS was made available for the development of a smart phone application by the Municipality of Nicosia
- It can be expanded to cover more parking areas in the whole of Cyprus.
- **Best Practice Project** 1st European Territorial Cooperation conference - May 2014





### S Developed in the Last 5 Years (3)





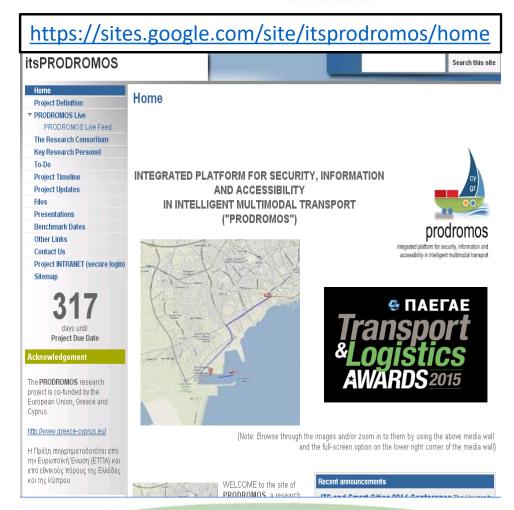




Η Πράξη συγχρηματοδοτείται από την Ευρωπαϊκή Ένωση (ΕΤΠΑ) και από Εθνικούς Πόρους της Ελλάδας και της Κύπρου

### **DANGEROUS GOODS - PRODROMOS Project**

- The goal of **PRODROMOS Project** was to improve the cooperation between responsible agencies for the management of dangerous goods, oversize and/or overweight vehicles in Cyprus.
- An intensive consultation process has taken place with the responsible agencies examining current procedures and practices.
- Systems were being deployed on the motorway network to provide more accurate information regarding traffic conditions and incidents (as an expansion of the existing system created under DIAVLOS).
- Co-operative systems were developed by our partners in the project – Cyprus Ports Authority and Cyprus University – for being able to exchange information regarding dangerous goods and their routes.
- The project was co-funded by the EU Cross-boarder Cooperation Programme Greece —Cyprus 2007-2013 by 80%.
- Transport & Logistics Award Athens May 2015



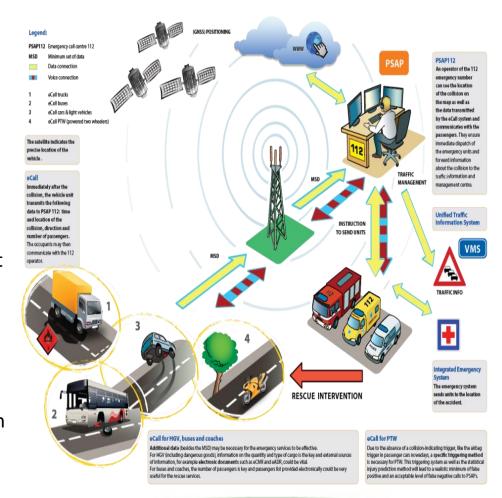




## TS Developed in the Last 5 Years (4)

### **eCall PROJECT:**

- ➤ eCall is an initiative with the purpose to bring rapid assistance to motorists involved in a collision anywhere in the European Union.
- ➤ It's introduction was managed by the Department of Electromechanical Services of MTCW and was completed in 2017.
- > Cyprus Participated, as Member State in the I-HeERO Project and pursued:
  - The upgrade of 2 Public Safety Answering Points (PSAPs) for e-calls to 112 & pursue PSAP data integration and dissemination
  - Investigation of the implementation of eCall DGV with the usage of external sources of information (notably the PRODROMOS database)
  - Investigation of using eCall on motorbikes.







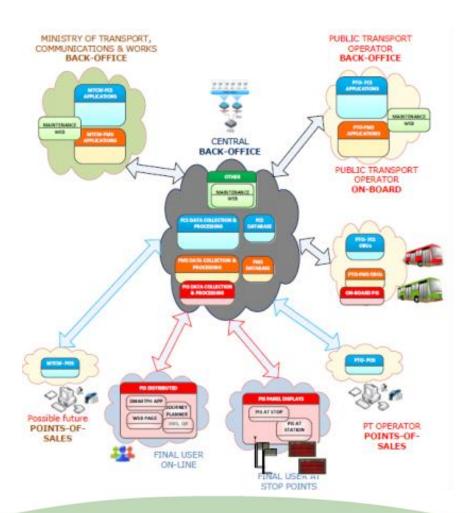
### TS Developed in the Last 5 Years (5)







- > Automated Fare Collection System with the use of Smart Cards,
- Bus Fleet Management &
- Passenger Information
  - The contract was signed with GMV Sistemas S.A. in May 2016 with implementation period of two years and eight years of maintenance.
  - The project goal is to promote sustainable mobility using buses and removing problems in basic public transport infrastructure.
  - Project Budget: € 10m
  - Cohesion Fund contribution: 85%





### TS Developed in the Last 5 Years (5)

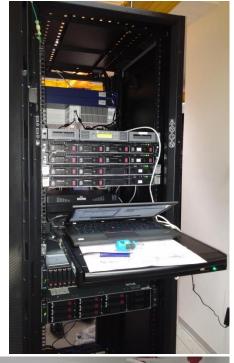






- the design and delivery of the central system software,
- Creation of the primary and disaster and recovery central sites, plus a backup site,
- High Security Client Access















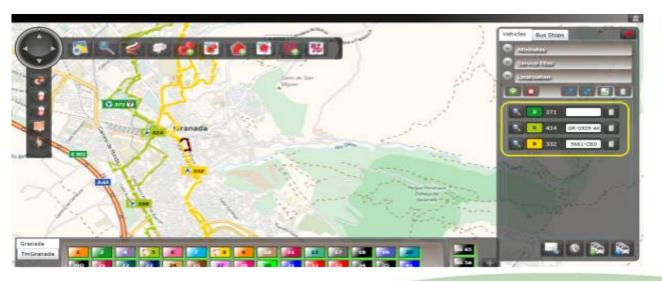
### TS Developed in the Last 5 Years (5)

- Bus Fleet
  Management
- Installation in 803 buses across
  Cyprus (7
  Operators)



















## ITS Developed in the Last 5 Years (5)

### **Public Transport Telematics:**

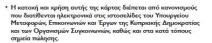
 Automated Fare Collection
 System with the use of Smart Cards











The ownership and use of this card is governed by rules available electronically on webpages of Ministry of Transport, Communications & Works of the Republic of Cyprus and Bus Operators, and at Local Points of Sales.

 Εξυπηρέτηση Πελατών: παρακαλούμε επικοινωνήστε με τον Οργανισμό Συγκοινωνιών της περιοχής σας
 Customer Service: contact your Local Bus Service Provider



UID: 1234567891234567891 www.motionbuscard.org.cy





### TS Developed in the Last 5 Years (5)







- > Passenger Information
  - Integrating with third parties such as Solomou Square Passenger Information System
  - 30 more LED Displays at central locations









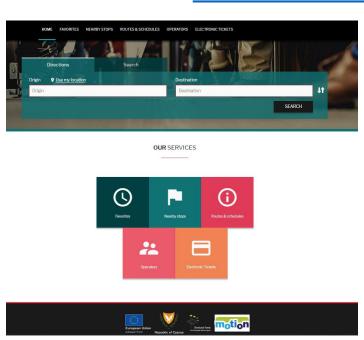


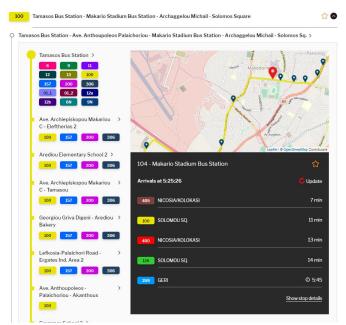




### S Developed in the Last 5 Years (5)

- > Passenger Information
  - Cyprus Bus Mobile App
  - Web: www.motionbuscard.org.cy











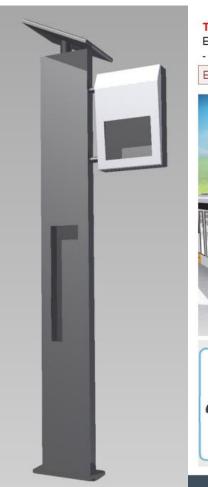


PART B / Page: 46



### **Public Transport Telematics:**

- Passenger Information, Infrastructure, Accessibility
  - Partnership with:
  - Municipalities & Local Communities across Cyprus
  - Partnership with Tourism
     Development and Promotion
     Company of Limassol (ETAL) for delivering Telematic Bus Stops
     & Information displays within Buses in Limassol under Civitas and EY-KINHΣH Projects.



### **Technical Specifications**

Electronic Systems / Telematics / Security Systems

- Intelligent Bus Telematics System

**BUS STOPS - Technical Specifications** 















### **CROCODILE II & III PROJECTS & TN-ITS GO ((€2.0m aprox):**

### **Seeing Beyond Borders:**

- > International "door to door" corridors supported by modern infomobility services are extremely important to Europe, but also to Cyprus.
- > The Project CROCODILE was launched in 2013 to establish a trans-national framework to collect and exchange data for putting into place concrete improvements for EU network users. It is co-financed by the European Union's TEN-T programme
- > PRODROMOS & DIAVLOS open and expandable architecture allows the co-operation to exchange information and develop unified-seamless services on a corridor basis.
- > Under the Crocodile & TN-ITS Go Projects Cyprus shall use DIAVLOS Central System to develop its Single Access Point, an obligation under EU ITS Directive (2019-2020).
- > The Cyprus Single Access Point shall collect information regarding traffic and other related data, and through analysis shall provide Key Indicator Traffic & Environmental Data. Relevant information shall be made available to third parties for developing Infomobility Services.
- > Project CROCODILE won freight award for smart use of data May 2016

### CROCODILE - CORRIDOR(S)







## Developed i Last 5 Years (

### STEP 2SMART (€1.8m aprox):

### Key Project Objectives include actions that will:

- improve management of traffic at key junctions and corridors,
- reduce environmental impact and
- o promote public transport
- ➤ It will collect information from existing systems traffic loops, Bluetooth detectors, floating car data, but also environmental sensors
- ➤ Introduce Public Transport Telematics Systems and priority measures at traffic lights.
- ➤ It builds on existing systems (DIAVLOS, PRODROMOS, PT Telematics System, Air Quality Platform)

### **Project Partners:**

- ➤ Public Works Department MTCW
- > The Department of Labour Inspection of the Ministry of Labour, Welfare and Social Insurance
- ➤ University of Cyprus
- ➤ Municipality of Chania Crete
- Municipality of KOS

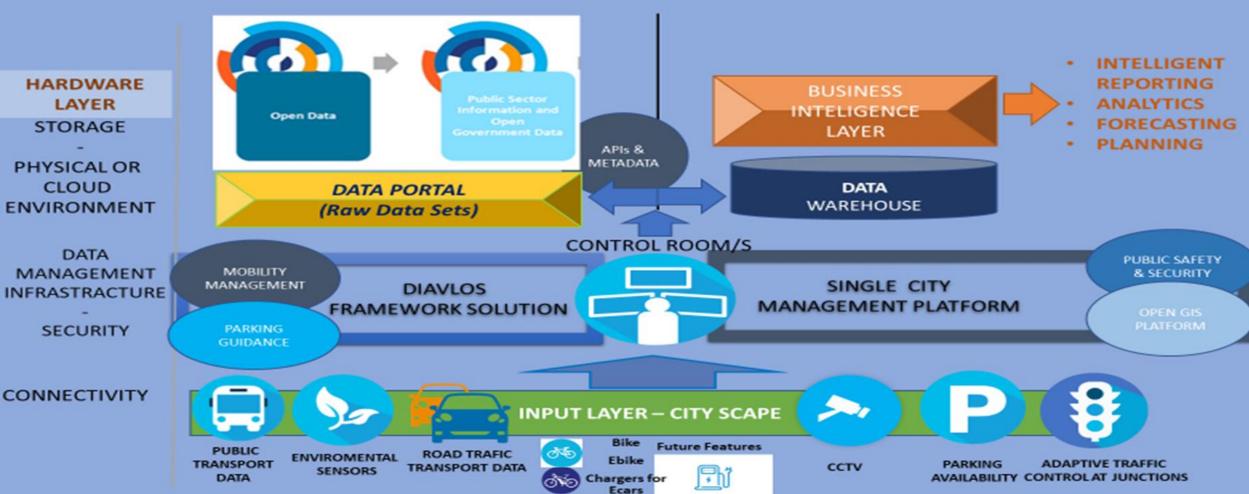
2+ years implementation period – by 2020.















- The Public Works Department pursues close co-operation with all responsible agencies for the implementation and further development of the above projects.
- Important role will also have the private sector in using information from ITS systems deployed and developing services for wider public and/or specialised uses.

Look how ITS
connects all
stakeholders across
the country to
bring intelligence
into mobility





### Thank You

Aristotelis Savva
Executive Engineer
Public Works Department
Ministry of Transport Communications & Works

