2011 ROAD SAFETY EVENT
ASECAP TOLL ROADS:
A SAFE JOURNEY IN EUROPE

“Knowledge of roads and its features.
A technical background for road safety”

Roberto Arditi - AISCAT-SINA
White Paper proposed in 2001: halving the number of road fatalities by 2010

July 20th 2010: Kallas: “we want to cut road deaths in half by 2020”
Road operators and causes of accidents
Road operators and causes of accidents

- Design and construction (mainly new roads)
- Technological improvement
- Serviceability and maintenance
Serviceability and maintenance

Knowledge of the road & related features

Planning and organization

Intervention means

Operation

How?
“Le bon Dieu est dans le détail”
(the mercy God is in the detail)

Gustave Flaubert

“The devil lays hidden in minute details”

“To fire road safety risks we need to know minute details of our roads”
HOW TO ACHIEVE THIS KNOWLEDGE?

high-speed inertial profilers
Some example of technologies for in-motion measuring and high-speed road profiling.
A NEW SINECO LASER ROAD PROFILER

Global Positioning System (GPS)

Distance Measurement Indicator (DMI)

Inertial Measurement Unit (IMU)

Light Detection and Ranging (LIDARs)
Survey of a Greek Highway with Lynx
Survey of a Greek Highway with Lynx
Achievements

Today

We have a better knowledge of the road
We are able to feed services with valuable info
We have a reduced impact on traffic

Tomorrow

The way ahead
A lot of info – are we able to use it all?
Tech goes ahead. Can we have more?
Target a HQ overall asset management
MATRIX OF PARAMETERS

ROAD INFRASTRUCTURE

P1
P2
P3
P4
P(n-1)
P(n)

IMPROVE SAFETY

LONG-LIFE SAFETY SERVICE ABILITY

INNOVATIVE TRADITIONAL

P1
P2
P3
P4
P(n-1)
P(n)
Thanks for your attention

roberto.arditi@sina.co.it