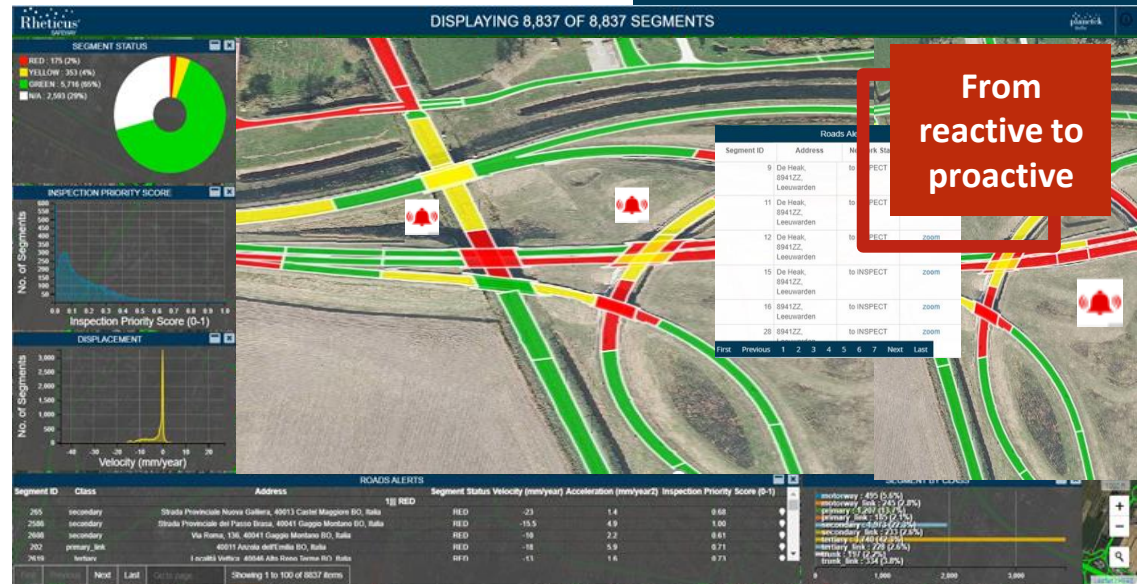


Rheticus[®]

PREDICTING LONG TERM TRENDS OVER THE ENTIRE ROAD AND BRIDGE NETWORK

Giuseppe Forenza
Business Development Manager - Rheticus



WWW.RHETICUS.EU

Planetek Italia – 28 years, one mission

Simplifying the complexity of Space



Bari



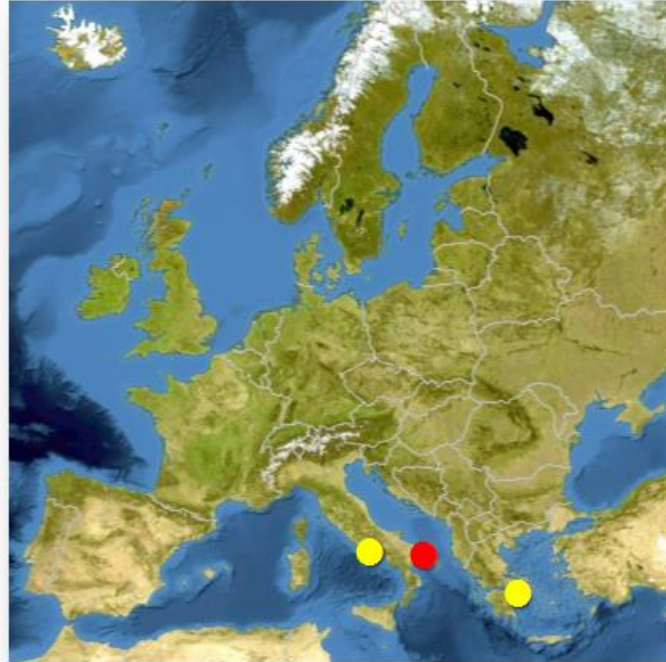
Athens



Roma



Bari



- Planetek Italia was founded in 1994
- 100+ employees, highly skilled in Geoinformatics, Space solutions and Earth sciences
- Rheticus® is owned and operated by Planetek

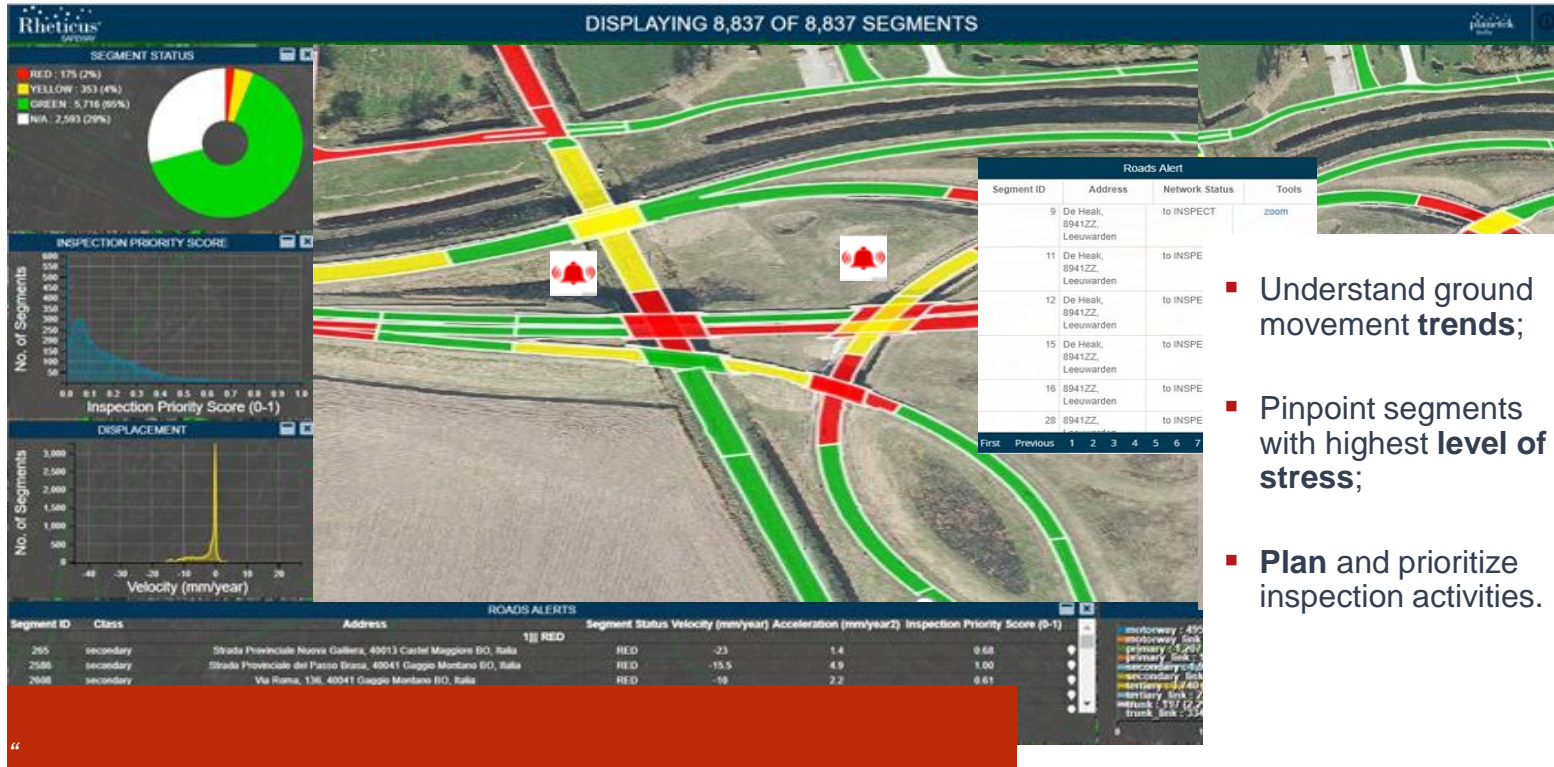
Instability and global challenge for maintenance



- Operators and authorities spend a lot of money fighting against **structural problems** due to natural or human-induced **land instability**;
- Land instability may cause structural damages and failures to roads and bridges, increased maintenance and repair costs, disruptions of service, accidents and casualties;
- **Ground displacement** is one of the best indicators for the likelihood of failure;
- The use of traditional techniques for periodic monitoring of wide networks requires **considerable economic and time resources**;
- The lack of predictive information about what/where to inspect requires **accurate and long-term trends analysis** over the entire territory and infrastructure operated.

Maintenance: from reactive to proactive

Red: Inspect **Yellow:** Monitor **Green:** Ok



- Understand ground movement trends;
- Pinpoint segments with highest level of stress;
- Plan and prioritize inspection activities.

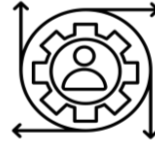
How it works



Satellite-derived
ground motion
map



GIS data of the
infrastructure



ML/AI algorithms
classifies roads
and bridges



Rheticus® Safeway
defines the priority
list



Field Inspections
report the current level
of damage


Rheticus®

End user

Bridging the gap between geo-specialists and operations

- Geospatial interactive dashboard with **key indicators** and alerts
- **Historical** time-series analysis and **continuous updates**
- **Predictive** analytics, actionable information
- Cloud-hosted info-as-a-service **subscription**



Transportation



Utilities



Insurance / Property Management



Natural Risk Management

Rheticus Services

Use cases



REGIONE AUTONOMA
FRIULI VENEZIA GIULIA

“Rheticus provides different levels of information, from the territory to each building and transportation infrastructure. It gives us invaluable assistance with stability analysis of the slopes, tracking emerging trends and anomalies, and damage prevention”.

Antonio Bratus, Dept. of Soil Protection, Friuli Venezia Giulia Region, Italy



Città
metropolitana
di Milano

“The Rheticus Safeway service gives us the opportunity to monitor in real-time the dynamics of ground movements and identify the most critical points on roads, viaducts and bridges”

Chiara Gardini, Responsabile Area Infrastrutture Città Metropolitana di Milano (metropolitan city of Milan)



“Rheticus Safeway to improve the management of the complete cycle of design, maintenance and control of the highways and roads”.

Q&A



 www.rheticus.eu

 www.planetek.it

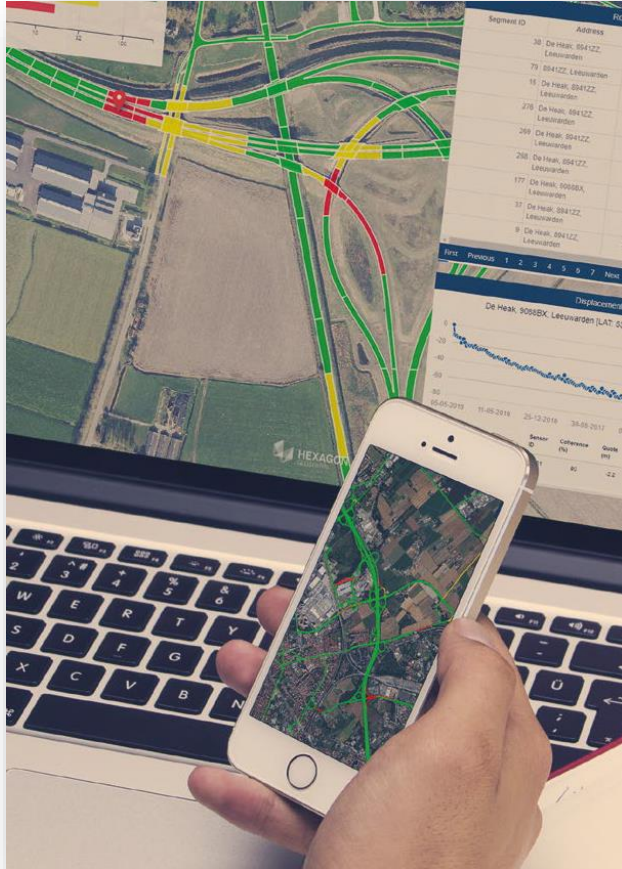
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 [/rheticus.eu](https://facebook.com/rheticus.eu)

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Let's start monitoring your infrastructure from space, today!



Rheticus[®]
monitoring the evolution of our earth

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Thank you!