LOW-COST TECHNOLOGIES FOR THE ASSESSMENT OF TRAFFIC FLOWS & OF ROADWAY PAVEMENTS, BY USE OF VIBRATION AND MOTION SENSORS, PARTICIPATORY SENSING, UAV, MACHINE LEARNING/VISION, DECISION SUPPORT SYSTEMS AND GIS

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Research Promotion Foundation

2016-2020 RESTART SEARCH
ΠΡΟΓΡΑΜΜΑΤΑ ΕΡΕΥΝΑΣ, ΤΕΧΝΟΛΟΓΙΚΗΣ ΑΝΑΠΤΥΞΗΣ ΚΑΙ ΚΑΙΝΟΤΟΜΙΑΣ

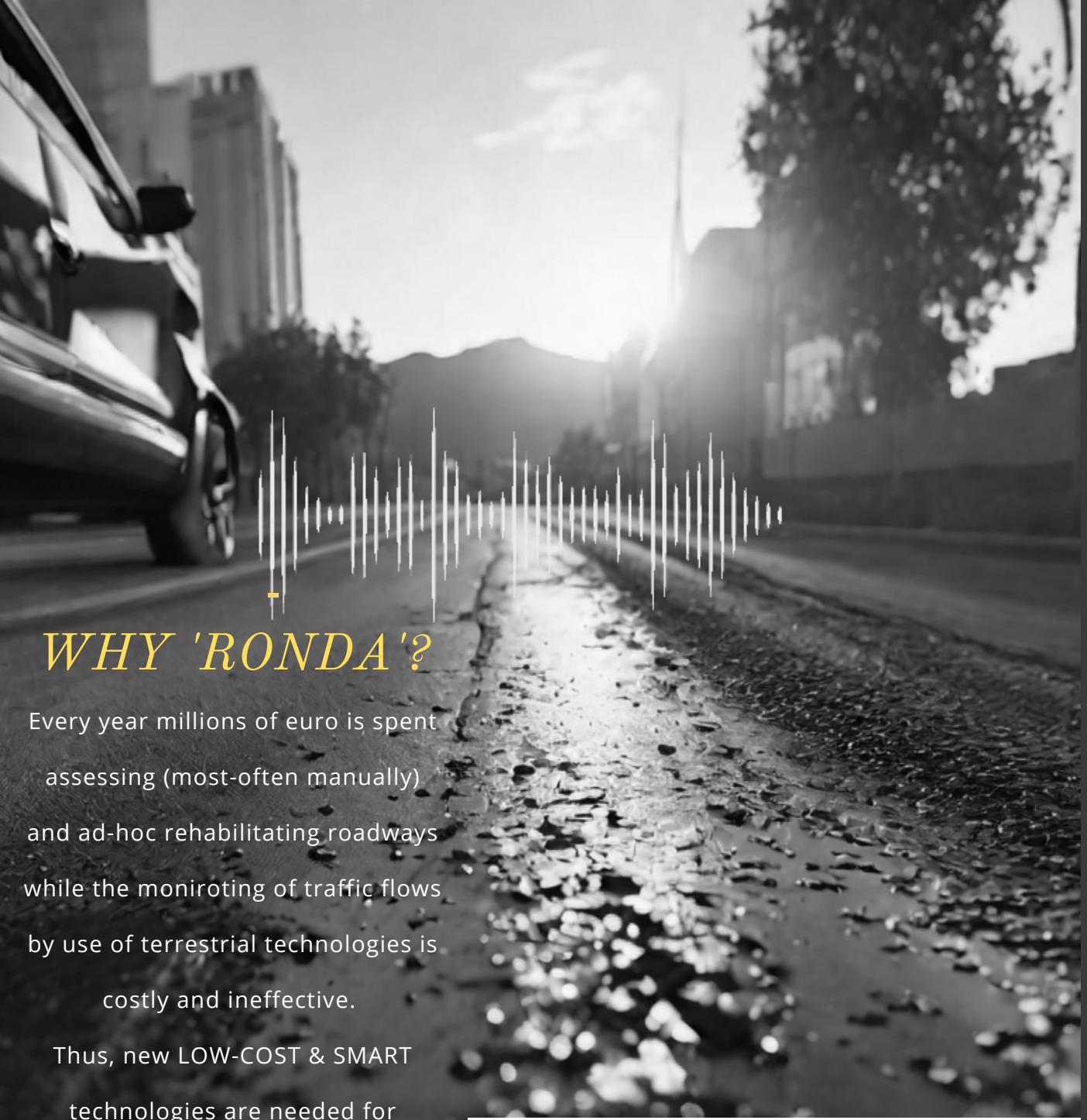
RONDA

ROadway **N**etwork **D**istress **A**ssessment

Ευρωπαϊκή Ένωση
Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης

Κυπριακή Δημοκρατία

Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο



WHY 'RONDA'?

Every year millions of euro is spent assessing (most-often manually) and ad-hoc rehabilitating roadways while the moniroting of traffic flows by use of terrestrial technologies is costly and ineffective.

Thus, new LOW-COST & SMART technologies are needed for improving our roadway networks.

University of Cyprus
Department of Civil and Environmental Engineering

KOÏOS
Research and Innovation Center of Excellence

SignalGeneriX
ADVANCED SIGNAL SOLUTIONS

Geo imaging

Ministry of Transport, Communications and Works
Republic of Cyprus

ΔΗΜΟΣ ΛΑΡΝΑΚΑΣ

KEY PROJECT OBJECTIVES

LOW-COST SENSOR DEVICES

DEVELOPMENT OF LOW-COST SENSOR DEVICES FOR THE CONDITION-ASSESSMENT OF ROADWAY PAVEMENTS, USING VIBRATION AND VIDEO SIGNALS.

PARTICIPATORY SENSING

USE OF PROBE-VEHICLES AND PARTICIPATORY SENSING FOR THE AUTOMATED ASSESSMENT OF ROADWAY PAVEMENTS

TRAFFIC-FLOW ASSESSMENT BY USE OF DRONES

USE OF DRONES AND MACHINE VISION FOR THE AUTONOMOUS MONITORING OF TRAFFIC FLOWS

GIS-BASED DSS & PMS

DEVELOPMENT OF GIS-BASED DECISION SUPPORT SYSTEMS (DSS) AND PAVEMENT MANAGEMENT SYSTEMS (PMS) FOR THE ASSESSMENT AND MANAGEMENT OF TRAFFIC AND OF ROADWAY INFRASTRUCTURE