DSRC-RP Technology for Remote Enforcement of Smart Tachograph

Italy

GENERAL INFORMATION	
Name of the organisation	Continental Automotive Trading Italia S.r.l.
Type of organisation	Private sector (companies)
Address	Via Giacomo Matteotti 62, 20092 Cinisello Balsamo (MI), Italy.
Web page	www.continental.com
Contact person	Alessio Sitran alessio.sitran@continental.com Business Development and Institutional Relations Manager
Member State	Italy
GOOD PRACTICE - GENERAL INFORMATION	
Title of the good practice	DSRC-RP Technology for Remote Enforcement of Smart Tachograph
Topic of the good practice	Information provision in Road Transport
Geographical focus	Cross-country (please specify) EU plus UK
Duration	March 2020 - ongoing
Summary of the good practice	Through this project a solution has been designed and is currently under deployment for allowing authorities to access in “one click”, directly and in real time, all relevant information required under the different pieces of social legislation applicable to road transport.
OBJECTIVES AND ACTIVITIES	
Background/context	The DSRC-RP Enforcement technology is applicable to the analysis of the 25 RTM tachograph data as defined by Section 5.4.5 of Commission Implementing Regulation (UE) n. 2016/799 and as being consolidated after the entry

	into force of the normative acts embodied by the Mobility Package I.
Objectives	The DSRC-RP Enforcement project implements a technology that analyses RTM data from the Smart. Tachograph with the goal to improve cost-effectiveness of roadside checks.
Main activities	▶ The DSRC-RP Enforcement solution consists of two components. ▶ The first part is an antenna that sets the dialogue between the DSRC Module of the Smart tachograph and the enforcers' device where a software is installed to read out the 25 RTM data. The DSRC-RP antenna is certified IP66 (protection against water and dust) and is supplied with three different mounting features: a thread for mounting the antenna on a tripod, suction, and magnetic supports to mount it on the roof of the enforcement car. It has two power sources, one external through car cigar lighter or wall-mount adapter, one with internal battery to allow a standalone usage of the antenna up to four hours. The user interface displays an ON/OFF button along with specific LEDs that indicates battery charging status, residually available battery charge and type of communication. On the latter, the DSRC-RP antenna can mainstream the RTM data through BT, Wi-Fi or GPRS. The DSRC-RP antenna is interoperable with Smart Tachograph brands currently in the market and can be integrated with third-party tachograph software, as well as with solutions that enable infrastructure-based installations. ▶ The second part is the software that decrypts the dataset transmitted by the DSRC-RP antenna and displays the corresponding information in a readable format. The software is fully configurable. Each layer of information is accompanied and complemented by a "green/red" button that returns an easy-to understand indication of the correct or altered functioning of the tachograph compared to the applicable legal requirements. Subsequently, it suggests whether the vehicle shall be stopped or not for the traditional control activities. The red button is accompanied by an audible

	alarm that facilitates the identification of the vehicle to be stopped. ▶ The DSRC-RP antenna may offer two distinct enforcement scenarios. A first, static roadside check when the antenna is mounted on a tripod, hence enabling multiple targets reading within a distance of up to 40 meters from the vehicle. Depending on the communication channel that is selected, the DSRP-RP antenna can set up a dialogue with the enforcer's device within a distance of up 10 meters (should BT be selected), or up an indefinite distance should Wi-Fi or GPRS be selected. Moreover during the static use the system can be integrated also with a camera to better recognise the vehicle that need to be stop. A second, dynamic roadside check when the antenna is mounted on the roof of the enforcement vehicle that approaches and overtakes the truck under scrutiny. The DSRC-RP antenna can be integrated with a camera. Purpose is to make easier for enforcers to visually identify vehicles. The camera is mounted on top of the DSRC-RP antenna and is cabled to a computer that combines the RTM-data and the picture to be subsequently transmitted to the enforcer's device. The communication between the enforcer's device and DSRC-RP antenna and camera is possible both using WiFi and cable. The camera always remains passive compared to the DSRC-RP antenna, hence a picture is solely taken when the DSRC-RP antenna triggers an RTM request from the Smart Tachograph.
Did you previously provide information about this particular good practice under the European Platform tackling undeclared work? (if yes, is it possible to provide the year and the title of good practice or a link of the good practice in ELA Virtual library)	NO

Funding/organisational resources	Not from external sources. The project is funded with internal, own budgeted resources solely.
PARTICIPATION	
Stakeholders involved	Road transport actors
Target groups	Truck drivers/road transport stakeholders
Final beneficiaries	Truck drivers
GOOD PRACTICE CRITERIA	
Achievements/ Results and outcomes (Alignment of good practice with the priorities of the Call (if not applicable, alignment with the field of EU labour mobility)	▶ This solution is innovative and enables more efficient and resilient enforcement mechanism through the direct, contactless availability to real-time digitized information on vehicle and driver by competent authorities. ▶ In terms of social impacts, the DSRC-RP technology has the potential to enable enforcement approaches based on the "compliance by design" concept where compliance becomes a driver of competitive advantage. ▶ Consequently, this contributes to foster fairer market competition and improve working conditions of drivers by reducing the pressure put on them as the main subjects responsible for law compliance. ▶ The solution has the further advantage to optimize the use of human and economic resources, and increased productivity for both control authorities and transport operators due to reduced administrative burden and time ▶ Finally, there is a positive impact on road safety, as the solution may contribute to decrease the number of road accidents and casualties through higher levels of compliance with road transport legislation.
Recognition (has this good practice been recognised on regional, national or EU level)	The practice has been recognised on a European level for its innovative approach.

Cost effectiveness (the degree to which the practice was successful in reaching objectives and producing clear and measurable outcomes at the lowest possible cost)	A quantitative assessment is not yet available. Qualitative feedback received from the enforcement community suggests an improvement in the cost-effectiveness of the roadside checks, as it was generally found that for vehicles stopped following a DSRC-scrutiny, infringements (namely most serious infringements) were detected to a greater extent and, therefore, sanctioned.
Transferability (how the experience from this practice could be transferred to other contexts i.e. what would another Member State/group/sector need to have or put in place for this measure to be successful in their country/group/sector)	The DSRC system creates and makes the meaning of Smart Enforcement more concrete. In addition to DSRC data, in the practice of smart enforcement other types of data-driven controls may prospectively be included in the future, such as documentary or weight controls, which could be transmitted by the smart tachograph via DSRC technology.
Sustainability (how the practice is sustainable from a social, financial or environmental perspective)	The sustainability of the DSRC system is to be understood as social sustainability by allowing easier pre-selection of vehicles, allowing for easier identification of those that are not in compliance with driving times, rest periods as well as the tachograph regulation. Non-compliant vehicles pose a societal risk in terms of worse road safety. The DSRC technology helps foster a control approach where risk-based targeting and responsive enforcement can detect with greater effectiveness operators where the aggregated risk to public welfare are most estimated and identified.
Innovativeness (innovative features of the good practice)	DSRC is not so much a novelty as a communication protocol. The novelty from this point of view is the introduction of the smart tachograph that allows, through the DSRC protocol, the sharing of a set of parameters to the competent authorities, which are equipped with this technology. Moreover, also the introduction of enforcement practice outside the tachograph environment (such for instance eFTI and weight control) can improve consistently when interlinked with the DSRC data for a targeted and more cost-effective roadside check.
Digitalisation (Design, development and/or utilisation of digital tools, policies or plans for digitalisation, business processes and data digitalisation, data sharing digital initiatives, the use of digitalisation to	Under the meaning of Smart Enforcement it is possible to create a series of good practices, interconnected, that allow to obtain more accurate and certain results in shorter timeframes than in the past. Through the use of some unequivocal values with a simple query it could be possible

facilitate the access to data in real time and detection of fraud and error, etc.)	to have a clear understanding of the vehicle and the company that manages it. Moreover, the introduction of system such as the eFTI or posting through the IMI interface heads even more to the direction to digitalize the entire process and make easier the activity both for the transport company and for the authorities.