PRESS RELEASE
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New technology detects high emitters in real-time – but is Europe ready for it?

A groundbreaking European technology that accurately identifies high-emitting vehicles in traffic is now market-ready, signalling a potential game-changer in urban environmental management. But is Europe ready for a solution that allows cities to enforce low-emission zones highly effectively by detecting and targeting individual vehicles?

The advanced remote sensing technology is capable of detecting vehicular emissions and noise levels in real-time. This leap in environmental monitoring offers cities a powerful tool to combat air and noise pollution, directly addressing public health concerns. The consortium, consisting of industry experts and scientific researchers, has fine-tuned these solutions to meet the stringent demands of real-world applications.

> *“"NEMO’s new technology has been three years in the making and is now ready to be deployed in European cities. The solution, tested and validated by the JRC, enables cities to enforce low-emission zones and greener policies more effectively and accurately. When the EU harmonises the regulations across Europe, it will lead to healthier cities by improving air quality and reducing noise impact," says Dolores Hidalgo, Director of the Circular Economy Area, Fundación CARTIF”*

Despite the readiness of the technology, its widespread adoption across Europe is contingent upon regulatory evolution. Current policies do not fully support the use of such technologies for regulatory purposes, creating a bottleneck for commercial deployment. Nevertheless, the interest from end-users suggests robust market potential once these regulatory challenges are overcome.

The societal benefits of these technologies are clear. By pinpointing high emitters, cities can take targeted actions to improve air quality and reduce noise pollution, leading to healthier urban environments. Economic analysis indicates that the benefits of implementing these technologies far outweigh the costs, presenting a cost-effective approach to modern urban challenges.

The technology has been developed through the collaborative efforts of an EU-funded project called NEMO - Noise and Emissions Monitoring and Radical Mitigation, with strategies in place for technology transfer and a framework that respects the intellectual property contributions of each entity. This approach ensures a competitive market and fosters innovation.

As cities increasingly adopt vehicle access regulations to create low-emission zones, the acceptance of such technologies by the public and authorities is paramount. The growing interest in vehicle emissions remote sensing technologies suggests that societal and regulatory barriers are beginning to diminish.

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The technology for a cleaner, quieter urban environment is here. The question now is whether European policy will adapt in time to harness these innovations for the collective good of its urban populations and the environment at large.

Funded by the European Union's Horizon 2020 research and innovation programme, the new initiative brings together research institutes, corporations, local governments, and authorities from 11 of its member states to develop a turn-key solution for the integration of new systems into existing infrastructure to measure and mitigate emissions and noise levels.

The developed solutions were demonstrated in four cities: Madrid (road traffic), Valencia (ferry port and rail cargo), Florence (road traffic), and Haaren in The Netherlands (railroad line).

For more information about NEMO

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FACTS ABOUT NEMO (Noise and Emissions MOnitoring and Radical Mitigation)
NEMO is an EU-funded initiative to measure emissions and noise from vehicles and alert relevant authorities.

Partners
Fundación CARTIF, M+P Raadgevende Ingenieurs Bv, Mueller-BBM GmbH, Mueller-BBM Rail Technologies GmbH, Agenzia Regionale per la Protezione Ambientale della Toscana, Sintef As, Gate 21, Universite Gustave Eiffel, Universidad de Cantabria, Opus RS Europe SL, Comune di Firenze, Transport & Environment (T&E), Ricardo Aea Limited, Opus Technology Solutions Ab, Kapsch Trafficcom Ag, Fundacion de la Comunidad Valenciana para la Investigación, Promoción y Estudios Comerciales de Valenciaport, JRC -Joint Research Centre- European Commission, Audiotec Ingeniería Acústica S.A

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