

Annex 4: Proposals for the control of Replacement Exhaust Silencing Systems at the point of sale and powered two-wheelers in service.

1. Introduction

The objective of the proposals outlined below is to establish a series of measures which, taken together, should prevent all but the most determined lawbreaker from obtaining an illegal exhaust or using it on the road.

In view of the national differences in law enforcement practices, it is not possible to do more than indicate the type of measures which need to be taken. It is up to the industry at national level to develop precise plans with the relevant national agencies so that existing procedures can be reinforced or, where necessary, modified. To assist the reader in relating these proposals to the administrative structure in his/her country, terms in **block type** have been explained in a glossary.

2. Preparatory measures

There are several pre-requisites to establishing an effective system of control at the point of sale and for PTWs in service. For these proposals the following measures are necessary:

A) Legal powers:

- a liaison should be established between the police/**environment protection officers** and the **trading standards inspectors** in order to identify sources of illegal exhausts.
- the trading standards inspector should have the legal powers to remove replacement exhaust silencing systems (RESS) from shops for testing
- the trading standards inspector should have the legal powers to investigate suppliers of illegal exhausts in-depth.
- the police or environment protection officers should be empowered to stop vehicles for testing at the road-side.
- the police/environment protection officers should be empowered to require the vehicle to be presented for inspection/re-testing within one week.

B) Legislation:

General:

- to make effective roadside enforcement possible, the ECE 41 stationary noise test should be introduced into national legislation
- the RPM and value recorded during the ECE 41 stationary noise test should be printed on the vehicle's registration papers.
- the packaging and labelling of replacement exhausts should be a requirement
- only type-approved vehicles/exhausts or those sold with a certificate of conformity to national requirements should be used on the road.
- the ECE 41 stationary test should be included in any national periodic inspection scheme.
- roadside test equipment should be widely introduced and the results from such tests made admissible in court. The equipment should consist of:
 - a noise meter
 - a microphone holder
 - a device for measuring the engine revolutions
 - a data recorder

(An integrated example of such equipment has been developed by the Amsterdam police (annex))

The vehicle:

- all PTWs should be plated by the manufacturer with the RPM and the reference value recorded. during an ECE 41 stationary noise test, whether derived from type approval or a manufacturer's own testing.
- In the case of vehicles first sold in markets in which the legislation in force is different to that in the country of re-sale, the vendor should be required to supply a certificate stating:
 - that it meets the current national requirements
 - the value recorded during the drive-by test
 - the RPM and value recorded during the ECE41 stationary noise test.

After-market (AM) exhaust systems:

- to clarify the legislation for AM exhausts it should be a legal requirement that any AM exhaust offered for sale, with the exception of "for race use only" systems, should meet the drive-by requirements for the original equipment (OE) system fitted to the vehicle at the time of its first registration in the country in question.
 - in the case of AM exhausts without an approval mark (e.g. type approval doesn't exist/it is an old vehicle), each system should be sold with a certificate stating:
 - that it meets the appropriate national requirements
 - the value recorded during the drive-by test
 - the RPM and value recorded during the ECE41 stationary noise test.
- Alternatively**, there should be a sticker with the information about the RESS, which has to be put on the PTW . (The sticker has to been designed such that once attached to the vehicle it cannot be removed without being damaged.)
- the rider should be required to carry the certificate of national conformity when the vehicle is fitted with a non-approved AM exhaust.
 - for non-approved AM systems, the dealer should maintain a file of manufacturer statements of conformity for each type of exhaust sold. (Note: manufacturers of AM exhausts in this category would have to supply copies of the necessary statements to the dealers.)

"For race use only" exhausts

- [manufacturers of racing exhausts should be registered with the FIM]
- the dealer should maintain photocopies of the invoice and the rider's competition licence for each sale
- the dealer should be required to send photocopies of the invoice and the rider's competition licence for each sale to [the FIM's national body.]
- [The FIM's national body should monitor the number of "for race use only" exhausts purchased by the rider and if considered unreasonable institute disciplinary proceedings.]

PTW manufacturer co-operation/legislation:

- Vehicle manufacturers should help the authorities establish their central enforcement database by supplying as much background data as possible to complete the basic data set.

3. The vehicles on the road

Whatever the country and whatever the system of checking vehicles before they enter service, the PTWs in service will be equipped with one of the following exhausts:

- the OE from the vehicle manufacturer
- an AM exhaust
- a “race only” exhaust

Any of these could have deteriorated in performance since being fitted to the vehicle due to a lack of maintenance.

There are two main possibilities for controlling the supply and use of these exhausts:

- in the shop
- on the road

4. The shop

4.1. Markings and documentation

For controls at the point of sale to be effective, the enforcement agents (e.g. trading standards inspectors) must be able to identify the manufacturer of the product clearly and to establish which legislation applies to the product.

For the vehicles themselves and the manufacturer’s replacement units, the exhausts are marked with the manufacturer’s trademark, the part number and, where appropriate, an approval mark.

In the case of a vehicle first sold in another market the trademark does not guarantee legality. This case is covered by the requirement that the vendor supply a certificate of conformity to national requirements

For the AM exhausts in countries with a type approval system the exhausts should be marked with the approval mark. (Trading standards inspectors require education in recognising marks and some of the common abuses.)

“For race use only” exhausts should be marked in letters at least 15mm high stating “For race use only”.

4.2. Enforcement action in the shop

For OE exhausts the inspector checks the trade mark of the vehicle manufacturer and the certificates of conformity to the national requirements.

For AM exhausts the inspector checks:

- the approval marks, where relevant
- the part numbers of non-approved systems against the dealer’s file of manufacturer statements of conformity for each type of exhaust sold.
- the packaging and labelling of the exhaust.

For the “for race use only” exhausts the inspector checks:

- the photocopies of the invoice and the rider’s competition licence maintained by the dealer
- the sales and stock records of such systems

Where necessary the inspector takes samples for testing. RESS should be tested in accordance with the requirements for the Original Equipment (OE) in force in the country at the time the relevant vehicle was sold. Where a second-hand vehicle has to be used for testing, a suitable adjustment e.g. + 3dB(A) should be made to allow for the condition of older vehicles.

4.3. Sanctions

Fines have to be set in accordance with the legal policies of the country concerned. However, it is clear that to be effective the level of fines has to be high and related to the offender's ability to pay.

5. In Use

5.1 Enforcement activities

Conduct road-side inspections of the approval marks and testing whenever necessary, using the appropriate equipment, and publicise the results as widely as possible in the media to alert others to the possibility of being caught.

For PTWs manufactured before the application of marking requirements for RESS, e.g. EU 89/235, there will be a legal problem because the AM exhaust's stationary test result might not have had to equal that of the OE. For this an additional tolerance of 3dB(A) should be added.

5.2. Sanctions

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Similarly the issue of on-the-spot fines has to be decided at national level.

Glossary

Environmental protection officers are those officials who are responsible for monitoring and enforcing legislation designed to protect the environment, e.g. noise from factories, public entertainment venues etc.

Trading standards inspectors are those officials who are responsible for ensuring that products offered for sale meet the relevant legislative requirements, e.g. for health, safety etc.

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