

Order form for performing tests

Track and Tracing systems for passenger cars

Details of the client		Automotive
Name of the undersigned	_____	Steenovenweg 1-A Postbus 756 5700 AT Helmond
Company name	_____	www.tno.nl
Contact (can be the undersigned or somebody else within the company)	_____	T +31 15 269 63 85 F +31 40 265 27 77 homologations@tno.nl
Postal address	_____	
Visiting address	_____	
Phone	_____	
Fax	_____	
E-mail address	_____	
VAT number (EG member states only)	_____	

The undersigned hereby commissions TNO Science and Industry to perform tests on the following product:

Details of the product (please also fill in the parts list in Appendix 3)

Manufacturer	_____
Trade mark	_____
Type	_____

Execution and conditions

The tests will be executed according to SCM TT-03 and according to the “General Terms and Conditions for research assignments to TNO”. As deviation from the above-mentioned conditions applies, that from article 3.2 “Secrecy” is excepted making copies of the report for the certifying body in case of positive results only (if applicable). By signing this order form the client agrees with all obligations which result from the above-mentioned standard/directive and the General Terms and Conditions of TNO.

The tests will result in an inspection report or a test report in the English language.

In case of European type approval of road vehicles and vehicle components according to E(E)C Directives and/or ECE Regulations, the client declares, by filling in this order form, that he applies for this international approval in the Netherlands only (if applicable).

Your assignment will be executed within approximately 8 weeks after receipt by TNO of all required documents, statements, samples etc. (and after receipt of an advance payment, if applicable). TNO will confirm the starting date of the activities by fax or e-mail.

The price of the executed activities shall be based on cost accounting, in accordance with the rates as specified in Appendix 1 (if applicable). All amounts mentioned in this appendix are excluding all taxes and duties, unless mentioned otherwise.

Appendix 2 gives an overview which items have to be submitted for type approval tests.

The final invoice will be send to you together with the results. Payment will have to take place within 30 days after the date of the invoice. The company that has given this order to TNO, will at all times be responsible for payment of the costs as invoiced by TNO, also in case the order is given on behalf of a third party.

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Your contact person at TNO

Name	<u>Mr. Vincent Clarijs</u>	Direct dialling	<u>+ 31 15 269 7684</u>
Direct fax	<u>+31 15 262 00 15</u>	E-mail address	<u>Vincent.Clarijs@tno.nl</u>

For approval

Signature and company stamp of
the client

Date _____ Order number _____

Authorisation by the manufacturer (if applicable)

Directives, regulations, standards etc. can indicate that an application for homologation, with the aim to obtain an approval number and/or certificate, only could be asked for by the manufacturer or by his duly accredited representative. In many regulations, as manufacturer is regarded the owner of the trade mark or trade name and the one who is responsible for all aspects of the homologation process, including the responsibility for the Conformity of Production procedures.

It is the responsibility of the client, if authorisation by the manufacturer is applicable or not.

Signature and company stamp of
the manufacturer

Date _____

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Appendix 1 Rates for standard measurements concerning Track & Tracing Systems

We offer complete type approval testing according to the Directive, Regulation or Standard for which you will find rates below. However we also offer the possibility of so called pre-tests. In these pre-tests only a certain part of the total approval test programme will be carried out. These pre-tests give an indication, against a reduced rate, about the possibility of having the product approved in a full type approval test.

Results may sometimes be used for a type approval afterwards.

Pre-tests will be invoiced directly after finishing the tests.

Execution of	Notes	Rate [EUR]
Type approval tests TT-03 on a stand alone system	Class 4 or 5 including report	10,715
Type approval tests TT-03 on a system integrated with a class 3 alarm system	Class 5 including report	14,280
Production control test	Per inspection including report	800
Separate tests		
Inspection installation- and users manual	95/56/EC § 6	120
Sabotage evaluation	95/56/EC § 3	120
Connecting / functional tests	95/56/EC § 5.2.1.2	1,195
Low temperature test	95/56/EC § 5.2.2.1	445
High temperature test	95/56/EC § 5.2.2.2	445
Condense test	95/56/EC § 5.2.4	505
Current consumption test	95/56/EC § 5.2.7	120
Vibration test	95/56/EC § 5.2.8	1,225
Voltage reduction test	95/56/EC § 5.2.14	570
Power supply test	ISO 7637	895
Shock test remote control	TT-03 § 7.4	85
Endurance test on complete system	TT-03 § 7.4	855
Corrosion test siren	TT-03 § 7.4 (class 5)	365
Sound level test siren	95/56/EC App. 4 (class 5)	715
Positioning test	TT-03 § 7.4	650
Vehicle inspection at TNO	Half a day	285
Vehicle inspection at location	Half a day	595
Interior protection test	95/56/EC § 5.2.11 (class 5)	855
Impact against false alarm tests	95/56/EC § 5.2.13/15 (class 5)	435
Various		
Project administration & management	Per order	900
Additional reports	Per report	500
Additional activities	Per hour	125
Witness testing	Per day, excluding costs of travel and stay	1,300

These rates are basic prices (excluding report unless indicated otherwise), based upon standard test and homologation activities, without interruptions caused by the client or the product under test.

The rates are effective from 1 January 2009 and they are excluding all taxes and duties.

Subject to change without prior notice.

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Appendix 2 Items to be submitted for type approval testing

- 1 A completely filled in TNO-Application form for security system measurements (the assignment)
- 2 Commercial documentation including all programming modes.
- 3 Users- and installation manuals in the Dutch language (at least English to start up the testprocedure).
The users manual shall at least include: operating instruction, operating conditions, prevention of unnecessary alarm, actions to be taken in case of malfunction, a summary of system components

The installation manual shall at least include: plan of the system components, installation and wiring diagrams, testing with checklist, trouble shooting, periodic maintenance with checklist, a summary of the system components.
- 4 Complete technical documentation including the following items:
 - PCB-lay-outs of all the components;
 - Electrical diagrams of all the components;
 - Part lists of all the components;
 - Mechanical drawings of the housing of all the components;
 - Assembly drawings of all the components.All the drawings will have to be documented in an information document and will have to be numbered properly.
- 5 Two (2) complete security systems. This product must be representative for the serial production, therefore prototypes are not allowed for type approval testing.
- 6 Declaration about the following items (if applicable):
Remote control, Pincode panel, Electronical key, Mechanical keys, Coded signals, Private Alarm Centre (PAC), Self-diagnoses including registration by the PAC.
- 7 During the execution of your order, you will be asked to hand in a vehicle with a complete system installed. The vehicle has to be ensured (all risks) and will be used for sabotage evaluation and positioning test.
All system parts should be visible / accessible for inspection purposes.

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Appendix 3 Parts list

Classification of the system Class 4 _____
 Class 5 _____

The system is composed of the following components:

- Central control unit _____ Type number _____
- GSM module _____ Type number _____ Approval number _____
- Movement sensor _____ Type number _____

- Immobiliser unit _____ Type number _____
- Siren _____ Type number _____ Battery back-up Yes No
- Ultra Sonic sensors _____ Type number _____
- Micro wave sensor _____ Type number _____ Approval number _____

- Remote control _____ Type number _____ Approval number _____
- Electronical key _____ Type number _____
- Key pad _____ Type number _____
- Mechanical lock _____ Type number _____
- _____ Type number _____
- _____ Type number _____

Remarks
