

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

# What **UNECE** does for you



**...UNECE**  
works for safe and  
clean vehicles

The UNECE aims at increasing your safety on the road as well as in your own vehicle. It is also deeply concerned with environmental issues like noise and pollution. Romain Hubert, of the Technology Section, UNECE Transport Division, explains how the UNECE works for the development of clean and safe vehicles.



## What does your work consist of?

I am the Secretary of two of the working parties subsidiary to the World Forum for Harmonization of Vehicle Regulations (WP.29) dealing with pollution and energy (GRPE) and general safety provisions (GRSG). The other 4 concern noise (GRB), lighting and light-signalling (GRE), brakes and running gear (GRRF), and passive safety (GRSP). These groups are very active and are responsible for a set of UNECE Regulations on the active and passive safety of motor vehicles and their trailers, and for environmental protection by limiting their emissions of noise and gaseous pollutants.

In 1958, WP.29 adopted an Agreement to serve as the legal framework for vehicle regulations. These regulations contain uniform technical conditions of approval and the reciprocal recognition of

approval for motor vehicles. The 1958 Agreement aims at ensuring a high level of safety and environmental performance of motor vehicles and reducing vehicle trade barriers by harmonizing the technical requirements for the construction of vehicles.

## Why are there two very similar agreements both dealing with the construction of vehicles?

The 1958 Agreement was revised in 1995 to open it to the whole world and to give countries the possibility to join the agreement independently from their certification procedure (type approval or self-certification). Nevertheless, the United States of America was not in a position to accept the mutual recognition under the 1958 Agreement. For that reason, they proposed a new

agreement without administrative procedures, which became the 1998 Global Agreement.

In fact, the 1998 Global Agreement does not replace the 1958 Agreement, but is a parallel to it. For that reason, it is also called the Parallel Agreement.

Both contain technical provisions specifying the test method for vehicles, their parts and equipment as well as performance requirements (e.g. limit values for the emission of pollutants from the engine). These technical requirements have in general the highest level of stringency worldwide.

However, there is an important difference between the two Agreements. In the UNECE Regulations annexed to the 1958 Agreement, administrative procedures are defined in addition to the technical provisions. These administrative procedures deal with the certification (or type approval) procedure, the conformity of production (COP) procedure and the mutual recognition of type approvals by the contracting parties. In the 1998 Agreement, these administrative procedures are omitted and have to be determined by each contracting party.

The 1958 Agreement currently has 46 contracting parties, the 1998 Agreement has 27.

## Why do some countries adopt the 1958 and not the 1998 Agreement, like Australia for example?

Most countries prefer to have administrative procedures in addition to the technical prescriptions and the performance requirements. Furthermore, the 1958 Agreement has been well developed since it was originally established. There are, at present, 125 Regulations annexed to it, while only 5 global technical regulations (gtrs) have so far been established under the 1998 Agreement. Consequently, most countries prefer to adhere to the 1958 Agreement or to both.

## So why do countries that have already signed the 1958 Agreement sign the 1998 Agreement?

When there is a need to develop a new regulation, the World Forum draws up, if appropriate, as a first step, a gtr with technical prescriptions including performance requirements to be established under the 1998 Agreement. As a further step, these prescriptions will be adopted, together with administrative procedures, as a new Regulation under the 1958 Agreement.

It is an advantage and a privilege to become a contracting party to the 1998 Agreement in order to be directly involved in the early stages of the development of new regulations. In this respect, contracting parties are in a position to influence the future regulations under development in the different working parties subsidiary to the World Forum.

## How do you prepare or adopt regulations under these agreements?

On the basis of national proposals, the working parties elaborate

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new draft regulations or amendments to existing regulations. Amendments are necessary so as to adapt the regulations' existing provisions to technical progress incorporating new technologies and more stringent requirements for vehicles. These new draft regulations or amendments are then submitted to the World Forum for consideration and adoption. Final adoption or establishing of a regulation is done by formal voting of the administrative or executive committee according to the provisions of the agreement concerned.

### **Does it take long to elaborate and adopt a new regulation?**

It depends on the priority of its subject matter and the availability of data (i.e. existing national regulations, scientific research studies etc.). For example, the 1998 Global Agreement entered into force in 2000. Then the working parties started to work on the elaboration of gtrs. The first gtr on door lock and door retention components (gtr N° 1) was established in November 2004, and gtr N° 2 on the Worldwide Harmonized Motorcycle Test Cycle in June 2005. At its November 2006 session the World Forum established 3 further gtrs (emission of pollutants of heavy-duty vehicles, on-board diagnostic systems and motorcycle brake systems).

### **When a regulation is adopted, what kind of obligations does it create for the countries?**

If a new regulation has been adopted under one of the agreements, the contracting parties have to initiate, according to the provisions of that agreement, the transposition of the new regulation into their national or regional law. The procedure for transposing a regulation is different for the agreements and depends also on the contracting party's national or regional legislation.

### **So governments control the application of the regulations?**

Yes, application of the regulations or rules under an agreement administered by the

World Forum is under the full responsibility of the contracting parties to that agreement. Each contracting party can decide either to adopt or not to adopt a regulation or a rule. If a contracting party decides to adopt a regulation, it is a binding act and it has to apply the regulation.

### **How many regulations, on average, do you produce per year?**

In 2006, in addition to adopting the 2 new regulations under the 1958 Agreement and establishing the 3 new gtrs under the 1998 Global Agreement, it also considered and adopted about 150 proposals for amendments to existing regulations.

### **And do you prepare the same regulation for all countries or do they differ from one country to another?**

Under each of the agreements administered by WP.29, a regulation is the same for all the contracting parties to the agreement. However, some regulations (e.g. gtrs) may have options for specific technical requirements with an equivalent level of safety or stringency, mainly to take into account the needs of developing countries. In such a case, the contracting parties have to choose one of these options when transposing the regulation into their national law.

### **Does it often happen that countries don't sign a regulation?**

Prior to 1995, contracting parties to the 1958 Agreement had to notify the Secretary-General, after adoption of a new regulation, that they had transposed the regulation into national law. At that time, usually about 10% to 20%

of the contracting parties did not sign a new regulation. After the revision of the 1958 Agreement in 1995, the notification procedure for the application of a new regulation by the contracting parties was simplified. As a result, now only about 5% of the contracting parties do not want to apply a new regulation after its adoption by WP.29.

### **Do all companies or manufacturers have to follow your regulations?**

The vehicle manufacturers have a vested interest in following the requirements of the UNECE Regulations annexed to the 1958 Agreement. By doing so, they have access to the worldwide automotive market thanks to the mutual recognition of type approvals. If the vehicles, their parts and equipment are type approved according to the provisions of the UNECE Regulations, they are marked (E marking) and can be put on the market in all countries applying these Regulations without any need for further testing. This is a considerable advantage derived from the mutual recognition of type approvals in the 1958 Agreement.



### **There is a close link with environmental protection, isn't there?**

Most of the vehicles in service worldwide are propelled by internal combustion engines fuelled with diesel or petrol. The emission of pollutants by these vehicles' engines is one of the main sources of pollutants in the atmosphere. A second environmental issue is the emission of noise by these engines. Consequently, there is a close link between the World Forum's activities on the reduction of pollutants as well as noise emissions and environmental protection. The Working Parties on Pollution and Energy (GRPE) and on Noise (GRB) are particularly involved in these subjects. Both are always well represented by governmental experts from the transport and environment ministries.

Recently the World Forum adopted new noise test measurement methods for motor vehicles. GRB is currently working on the same subject for motorcycles as well as on the insertion of new limit values for the reduction of noise emissions by these vehicles.

GRPE has developed regulations on technical prescriptions for vehicles using liquefied petroleum gas (LPG) or compressed natural gas (CNG) in their propulsion system. It has further developed the test methods for the emission of gaseous pollutants and has reduced considerably the emission limit values for all categories of vehicles. In parallel, the UNECE Regulations enable the use of non-conventional fuels. They allow the construction of electric and hybrid vehicles, which use electricity as alternative or complementary energy.

The successive amendments of these UNECE Regulations have resulted in substantial abatements – 95-97% – of the emission limits of CO, HC and NO<sub>x</sub> for new private cars as compared with the limits established in the 1970s. This means that the latest emission limits established by UNECE Regulations for these pollutants are more than 20 times lower than those established 30 years ago.

The next important step by GRPE will be the development of new requirements for hydrogen and fuel cell vehicles under the 1998 Agreement. However, due to the complexity of this subject, a draft global technical regulation is not expected to be finalized before 2012.

For more information:  
[www.unece.org/hlm/welcome.html](http://www.unece.org/hlm/welcome.html)

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