Russian Automotive Industry: Governmental Policies and Priorities

Alexey Rakhmanov
Director of the Department for Automotive and Agricultural Machinery Industries

November 2011
The Principles of Technical Regulation

- Assurance of vehicle safety at all stages of the life cycle: from design and production to recycling
- Equal requirements to domestic and imported vehicles
- Direct application of the international regulations (UNECE Regulations, GTRs)
- Establishment of the limited number of the national requirements considering specifics of vehicle operation in Russia
- Consideration of the national economy priorities and development
The Hierarchy of Technical Regulation

International Agreements with the participation of the Russian Federation

<table>
<thead>
<tr>
<th>Year</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>Geneva Agreement</td>
</tr>
<tr>
<td>1998</td>
<td>Global Agreement</td>
</tr>
<tr>
<td>1997</td>
<td>Vienna Agreement</td>
</tr>
<tr>
<td>1968</td>
<td>Convention on Road Traffic</td>
</tr>
<tr>
<td>1958</td>
<td>ADR</td>
</tr>
<tr>
<td>1970</td>
<td>ATP</td>
</tr>
</tbody>
</table>

Federal Legislation of the Russian Federation

<table>
<thead>
<tr>
<th>Category</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerning Technical Regulating</td>
<td>Concerning Road Traffic Safety</td>
</tr>
<tr>
<td>Concerning Protection of Environment</td>
<td>Concerning Protection of Atmospheric Air</td>
</tr>
<tr>
<td>Concerning Protection of Consumers’ Rights</td>
<td></td>
</tr>
</tbody>
</table>

Automotive Related Technical Regulations

<table>
<thead>
<tr>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerning Safety of Wheeled Vehicles (Adopted by the Governmental Decree of 10.09.2009 № 720)</td>
</tr>
<tr>
<td>Concerning Requirements to Emissions of Harmful (Polluting) Substances of Vehicles (Adopted by the Governmental Decree of 12.10.2005 № 609)</td>
</tr>
<tr>
<td>Concerning Requirements to the Automobile and Aviation Gasoline, Diesel and Vessel Fuel, Fuel for Jet Engines, and Fueling Oil (Adopted by the Governmental Decree of 27.02.2008 № 118)</td>
</tr>
</tbody>
</table>
Introduction of the International Requirements into the National Legislation

WP.29

1958 Geneva Agreement

UNECE Regulations

1998 Global Agreement

GTR

Before adoption of the UNECE Regulations

The Russian National Technical Regulations
The Application of the Vehicle Safety Requirements

The number of the requirements

- **Adoption of the original UNECE Regulations from 1987**
- **The number of the UNECE Regulations applied by the Russian Federation**
- **The number of the UNECE Regulations used in the Russian Vehicle Compliance Assessment System**
- **The total number of the requirements used in the Russian Vehicle Compliance Assessment System**
Continuity of a Technical Regulation Policy in Russia

The development of the technical regulations of the Customs Union started in 2009:

- Concerning Safety of Motor Vehicle (including vehicle emissions requirements) (TR)
- Concerning Requirements to the Automobile and Aviation Gasoline, Diesel and Ship Fuel ...
- Concerning Requirements to Safe Recycling of Motor Vehicles

Motor Vehicle and Trailer Certification System
1993
RF TR 2010
Customs Union TR 2013-2015

Belarus
Kazakhstan
Russia

The development of the technical regulations of the Customs Union started in 2009:
The Organizational Structure of the Vehicle Compliance Assessment System in Russia

Ministry of Industry and Trade

Federal Agency on Technical Regulation and Metrology

The State Authority on technical regulating

The Administrative Department in accordance with the 1958 Geneva Agreement
The State Inspection Authority

Technical Secretariat

State Research Center NAMI

Certification Bodies

Test Laboratories
Most of vehicle safety parameters are set at the design stage and…

...Implemented during manufacturing process

Such safety parameters are verified at the moment of release for free circulation

Safety parameters of vehicles in operation are also laid down at the design stage and maintained through regular servicing and monitoring of operational conditions

Safety parameters are verified regularly through periodic vehicle technical inspections
Compliance Assessment for Vehicle Types

New vehicle type

- Conducting certification tests of the representative samples
- Analysis of production conditions of the manufacturer
- Issuance of the certificates of compliance for separate provisions
- Issuance of the Vehicle Type Approval
- Inspection checks of the manufacturer (every two years)

- The type approval number is included into the vehicle passport document
- The Road Police and Customs Service are informed about the type approval issuance
Introduction of the Perspective Requirements in the Russian Federation and the Customs Union

Automatic Electronic Braking Systems.
Lane Departure Warning Systems.
Hydrogen and Fuel Cell Vehicles.
Pole Side Impact.
Vehicle Crash Compatibility.
Additional requirements for the Cold Climate Conditions.
Infrasound.
Requirements to Air Quality Assurance in a Dense Traffic.

Tyre noise (UNECE Regulations № 117)

<table>
<thead>
<tr>
<th>Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
</tbody>
</table>

Electronic stability control and brake assist systems for vehicle categories M1, N1 (UNECE Regulations № 13-H)
Uniform measurement technique of the fuel economy and CO\(_2\) emissions (UNECE Regulations № 101)
Daytime running lamps (UNECE Regulations № 48-04, 87)
Fire-prevention properties of an interior of buses (UNECE Regulations № 118)

Tyre rolling resistance (UNECE Regulations № 117-02)

Electronic stability control for vehicle categories M2, M3, N2, N3 (UNECE Regulations № 13-11)
Tyre pressure monitoring systems (UNECE Regulations № 64-02)
Pedestrian protection (GTR № 9)

Tyre wet grip performance (UNECE Regulations 117-01)

Vehicle heating systems (UNECE Regulations № 122)
Front underrun protection (UNECE Regulations № 93)
Windshield defrosting and demisting systems (TR, annex 3, chapters 7-8)
Initial Industrial Assembly (IA1) regime was introduced in 2004 and changed the landscape of the Russian Automotive Industry:

- new factories were built, new cars introduced to the market
- new manufacturing process and approaches were widely spread even at the domestic plants
- new component manufacturers were investing in Russia

However, IA1 regime with the required 25 000 capacity although universal for various brands and price categories was not serving the strategic goal

Strategy of the Russian Automotive Industry development was prepared in 2009-2010 and was approved by the Government in April 2010

Main purpose of the Industrial Assembly Regime modification (IA2) was to ensure the key strategy tasks achievement through deeper foreign car components localization and development of the component industry in Russia

Key OEMs with diversified product portfolios who intends to view Russian plant as part of the global manufacturing footprint can be key beneficiaries of the new regime
Key Principles of the Modified Industrial Assembly Regime

- **Legal Basis** – signature of the amendments to the existing “industrial assembly” agreements for the term of 8 years (but not later than until 31 December 2020) for the companies that are in full compliance with the terms and conditions of the current agreements

- **Volume Requirements** – new or modernized capacity of 300/350 thousand units (including available full scale production capacity) shall be built within 36 – 48 months after the entry into force of the amendment

- **Engines and Transmissions** - production in Russia (no volume threshold) provided that 30% of the vehicles produced in Russia are equipped with engines manufactured locally in 36-48 months after the date of amendment

- **Local Content Formula** - $L=(1-V/P)*100\%$, where
  - $L$ – average value added for the model range
  - $V$ - total customs value of all imported parts
  - $P$ – total value of cars sold (net of VAT, excise tax, dealer bonuses/rebates and internal revenues)

- **Localization schedule for new capacity builders**

- **Localization schedule for companies modernizing capacity**

- **Limitation of SKD** – Duty free importation of SKD kit is allowed for first 36 months in amount not exceeding 5% of available full production cycle capacity in any given year. The quota is defined and confirmed annually.

- **Alliances establishment** - new obligations can be implemented by a group of cross-owned affiliated entities producing vehicles on common platforms with clear joint responsibility of all entities. One reporting entity can be appointed for this purpose

- **R&D center with certain capabilities shall be established in Russia**
1. Average value added calculation example for the model lineup manufactured by a candidate:

<table>
<thead>
<tr>
<th>Production volume, K units</th>
<th>10</th>
<th>45</th>
<th>150</th>
<th>95</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle price level</td>
<td><img src="image1" alt="Car" /></td>
<td><img src="image2" alt="Car" /></td>
<td><img src="image3" alt="Car" /></td>
<td><img src="image4" alt="Car" /></td>
<td><img src="image5" alt="Car" /></td>
</tr>
<tr>
<td>Model value added, %</td>
<td>10%</td>
<td>40%</td>
<td>80%</td>
<td>45%</td>
<td>60%</td>
</tr>
</tbody>
</table>

2. The target is to reach an average value added of 60% within 6 years after the date of the amended agreement.

3. OEMs will be held accountable for localization of powertrain, axles and stampings

4. Component localization requirements and schedules are set in a separate annex to the Decree covering all major groups of parts: in general OESs will have a target localization rate of 45% within 6 years calculated the same way as for OEMs

Local content requirement for components suppliers is split into three phases:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>the level of production localization is not less than 15%</td>
<td>the level of production localization is not less than 30%</td>
<td>the level of production localization is not less than 45%</td>
</tr>
</tbody>
</table>
Three Tiers of OEMs in Russia

Strategic Alliances and Partnerships

- Renault-Nissan-AVTOVAZ (2)
- JV KAMAZ-Mercedes-Fuso (2)
- JV Sollers-Ford (2)

OEM Projects

- Volkswagen Group (2)
- General Motors Group (2)

License Production and Contract Assembly

- Free Economic Zone Regime
- Duty Paid Production
- To be reconsidered as OEM Project
What is it?
- On-board communication terminal for automatic emergency calls/messages, deceleration transducer unit, data recording, communication through networks GSM 900/1800 and UMTS; automatic data transmission and ability of voice communication

Open Issues
- Necessity of adaptation to a vehicle design and compatibility with the original on-board electronic control units and signaling systems
- Infrastructure for responding to emergency calls shall be established and verified
- Alignment and harmonization with the EU system ‘e-Call’
- Timing of enforcement of the requirements should be agreed by the stakeholders
The Means of Detection of Ethanol in the Exhaled Air (Alcolocks)

- The Legislator’s decision is pending
- Potential installation of “alcolocks” initially in the commercial passenger and dangerous goods transportation vehicles
- Installation of alcolocks in the vehicles of the persons, who incurred liability for drunk driving
- Alignment and harmonization with the EU requirements
- Enforcement of the requirements should be agreed by the stakeholders

Number of accidents caused by drunk drivers

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thousand accidents</td>
<td>250</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>
The Technical Regulation Concerning Requirements to Emissions of Harmful (Polluting) Substances of Automotive Vehicles, Released for Circulation on the Territory of the Russian Federation → Technical Regulation of the Customs Union Concerning Safety of Motor Vehicles

Customs Union

Russia

EU

New vehicles built on chassis of other vehicles

New vehicles

New vehicle types

'13 '14 '15 '16 '17 '18 '19 '20

'98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17 '18 '19 '20
Draft Technical Regulation of the Customs Union concerning the requirements to motor vehicles in regards to the provision for their safe recycling is now being discussed by three parties: Russia, Belarus and Kazakhstan.

**Vehicle Types**
- Category M
- Category N
- Category O

**Components**
- New types delivered as replacement (spare) parts
- Re-used vehicle components

**Recycling Processes**
- Collecting, storage
- Disassembling and recycling
- Restoration of components
The provisions of the Draft Technical Regulation have been harmonized with the legislation of the EU and the ISO International Standards.

The Vehicle of categories M₁ and N₁ shall have the recyclability rate of at least 80% and the disposal rate of at least 85%; for the other vehicle categories the recyclability rate shall be at least 85% and the disposal rate of at least 90%.

The requirements to the marking of the parts and providing information concerning the vehicle disassembling order for the disposal enterprises.

The expected enforcement of the Technical Regulation for vehicles of categories M₁ and N₁ in 2014; for the rest vehicle categories in 2020.

Arrangement for financing and administrative matters to be agreed between different models: fund (Netherlands), individual schemes, collective schemes.
Thank you for your attention!

Ministry of Industry and Trade Website:
http://minpromtorg.gov.ru