



Safer vehicles

- Encourage the application of motor vehicle safety regulations
- Encourage the implementation of new car assessment programmes, seat belt and anchorage measures, the deployment of crash-avoidance technologies, and the use of fiscal or other incentives for vehicles with high safety standards
- Encourage government and private-sector fleet managers to use vehicles with high safety standards

Deployment of type approval procedures in Georgia

The steps of the process, requirements, planning, and decisions



Romanian Automotive Register

Romanian Type Approval Authority and Technical Service



- Since 1992, Romanian Automotive Register has been designated by the Ministry of Transport as technical authority for the following activities:
 - Type approval of vehicles, systems and components according to national, EU regulatory acts and UN Regulations;
 - National individual approvals for new, used and modified vehicles;
 - Management of the national vehicles technical database, in the purpose of registration;
 - PTI activities, including authorization and monitoring of the PTI Stations;
 - Market surveillance activities for vehicles, equipment and parts;

- Since 2007, Romanian Automotive Register has been designated as Approval Authority and Technical Service of Romania for the EU regulatory framework with regards to road vehicles, systems, components and parts approval.



Member of the International
Motor Vehicle Inspection
Committee – CITA



Member of EUCARIS
EUropean CAR and driving licence
Information System



Associate member of the
International Union of Road
Transports

Regulatory framework levels

UN 1998 Global Agreement:

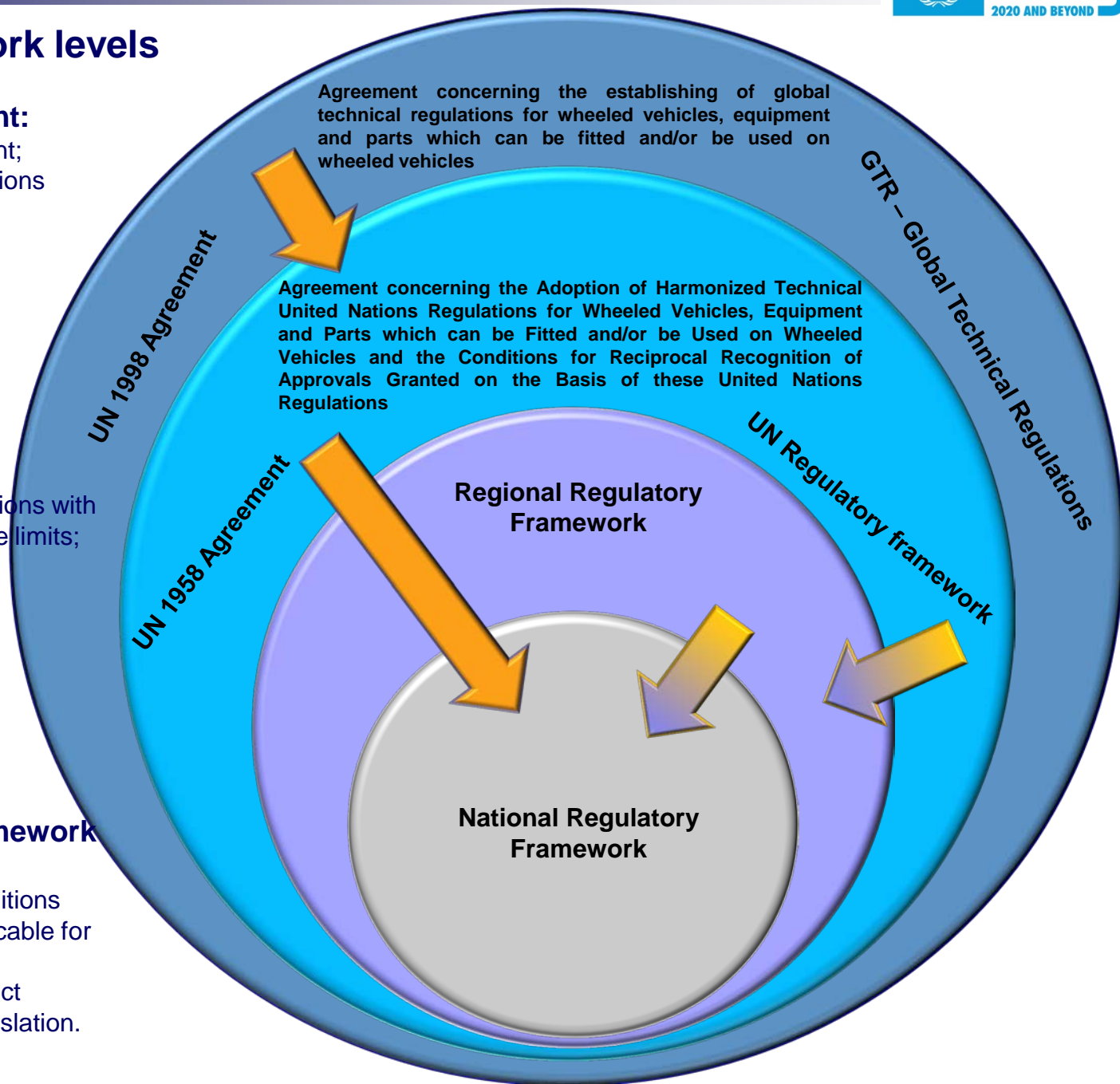
- known as parallel Agreement;
- establishes technical conditions without acceptance limits;
- need a transposition into regional/national legislation.

UN 1958 Agreement:

- establishes technical conditions with several levels of acceptance limits;
- need a transposition into regional/national legislation.

Regional Regulatory Framework (if any, e.g. EU):

- establish the technical conditions and acceptance limits applicable for a specific region;
- Need a transposition or direct application into national legislation.



The UN 1958 Agreement:

- Has more than 160 annexed Regulations;
- Regulations are developed in six Expert Working Groups geared by WP29;
- The expert groups are organized to cover all the vehicle safety and environmental protection domains:
 - Passive safety;
 - Active safety including autonomous driving;
 - General safety;
 - Emission and powertrain control (chemical emissions, greenhouses gases, noise, power).

WP 29 World Forum for Harmonization of Vehicle Regulations

GRPE
Pollution
and Energy

GRBP
Noise and
Tyres

GRSG
General
Safety
Provisions

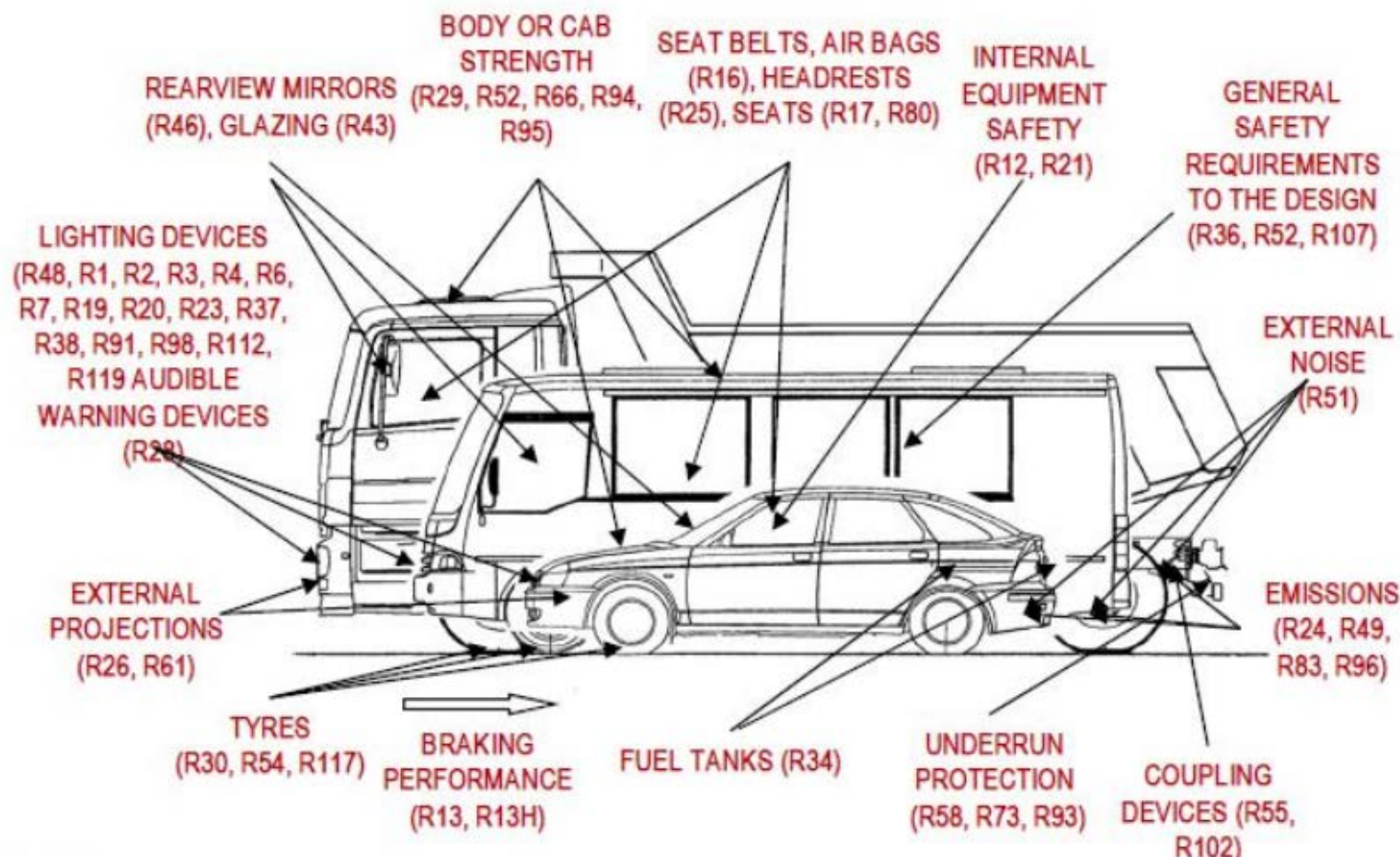
GRSP
Passive
Safety

GRE
Lighting and
Light-
Signalling

GRVA
Automated /
Autonomous
and
Connected
Vehicles

The UN 1958 Agreement:

- Covers all vehicle categories – M, N, O, L, T, R;
- Covers the main vehicle systems, components, parts and equipment.



PASSIVE SAFETY SYSTEMS

- Protect the occupants of a vehicle and other road users if a crash occurs
- Reduce the impact of an accident or the level of injury
- Mitigate the consequences of an accident **during and after impact**

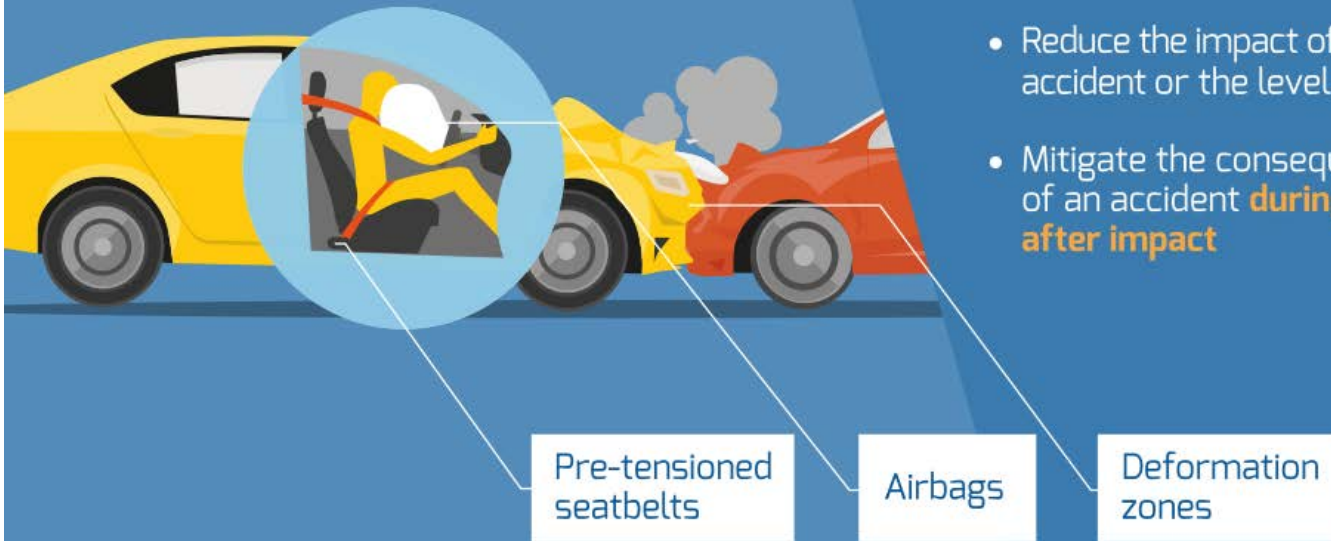


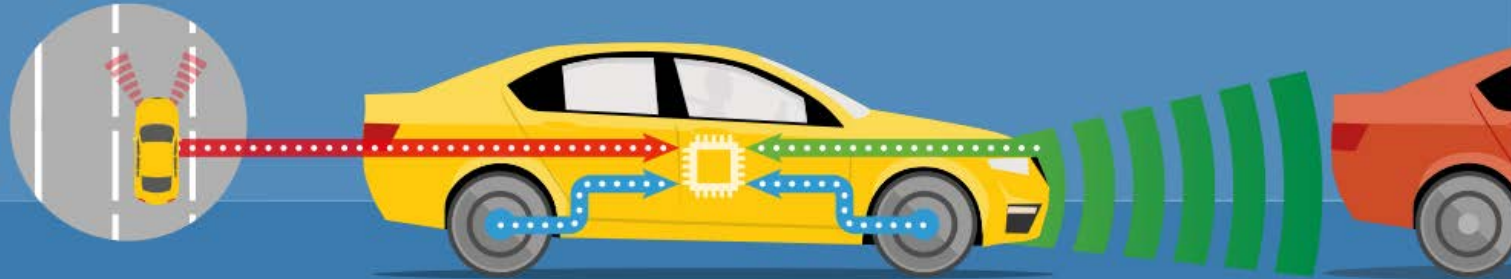
Image from ACEA, <https://roadsafetyfacts.eu>

The UN passive safety Regulations examples:

- Regulation no.14 and 16 regarding the safety belts and their anchorages;
- Regulations no. 94 and 95 regarding the frontal offset and lateral collision protection;
- Regulation no. 135 regarding the pole side impact;
- Regulation no. 137 regarding the frontal impact focused on restraint systems;
- Regulation no. 153 regarding the rear-end collision protection for Ev's.

ACTIVE SAFETY SYSTEMS

- Constantly monitor the performance and surroundings of a vehicle
- Can prevent accidents from happening altogether ...or actively help the driver to reduce the impact
- Avoid or mitigate an accident **pre-impact**, so before it happens



EXAMPLES OF ACTIVE SYSTEMS THAT GIVE THE DRIVER MORE CONTROL IN DANGEROUS SITUATIONS:



Anti-lock braking (ABS)



Electronic stability control (ESC)



Autonomous emergency braking (AEB)



Lane departure warning (LDW)

Image from ACEA, <https://roadsafetyfacts.eu>

The UN active safety Regulations examples:

- Regulation no.13 and 13H regarding the braking system for heavy duty vehicles and passenger cars;
- Regulation no. 130 regarding the Lane Departure Warning System (LDWS);
- Regulations no. 131 and 152 regarding the Advanced Emergency Braking Systems (AEBS);
- Regulation no. 140 regarding the Electronic Stability Control (ESC) Systems;
- Regulation no. 157 regarding the Automated Lane Keeping Systems (ALKS).

What is a TYPE APPROVAL ?

- **‘type-approval’** means the procedure whereby an approval authority certifies that a type of vehicle, part, equipment, component or system satisfies the relevant administrative provisions and technical requirements of the UN Regulations annexed to the 1958 Agreement.
 - it results a conformity certification procedure.
- **‘type-approval certificate’** means the document whereby the approval authority officially certifies that a type of vehicle, part, equipment, component or system is type-approved;
- **‘parts’** means goods used for the assembly, repair and maintenance of a vehicle, as well as spare parts;
- **‘equipment’** means goods other than parts that can be added to or installed on a vehicle;

Which are the ACTORS ?

‘Manufacturer’ means a legal person who is responsible for all aspects of the type-approval of a vehicle, equipment, part, system or component, for ensuring conformity of production and for market surveillance matters regarding that vehicle, system, component or part, irrespective of whether or not that person is directly involved in all stages of the design and construction of that vehicle, system, component, equipment or part concerned;

‘Approval authority’ means the authority of a Contracting Party, notified to the UN, with competence for all aspects of the type-approval of a vehicle, system, component, equipment or part, for issuing and, if appropriate, for withdrawing or refusing approval certificates, for acting as the contact point for the approval authorities of the other Contracting Parties, for designating the technical services, and for ensuring that the manufacturer meets its obligations regarding the conformity of production;

‘Technical service’ means an organisation or body designated by the approval authority as a testing laboratory to carry out tests, or as a conformity assessment body to carry out the initial assessment and other tests or inspections;

Who is doing what ?

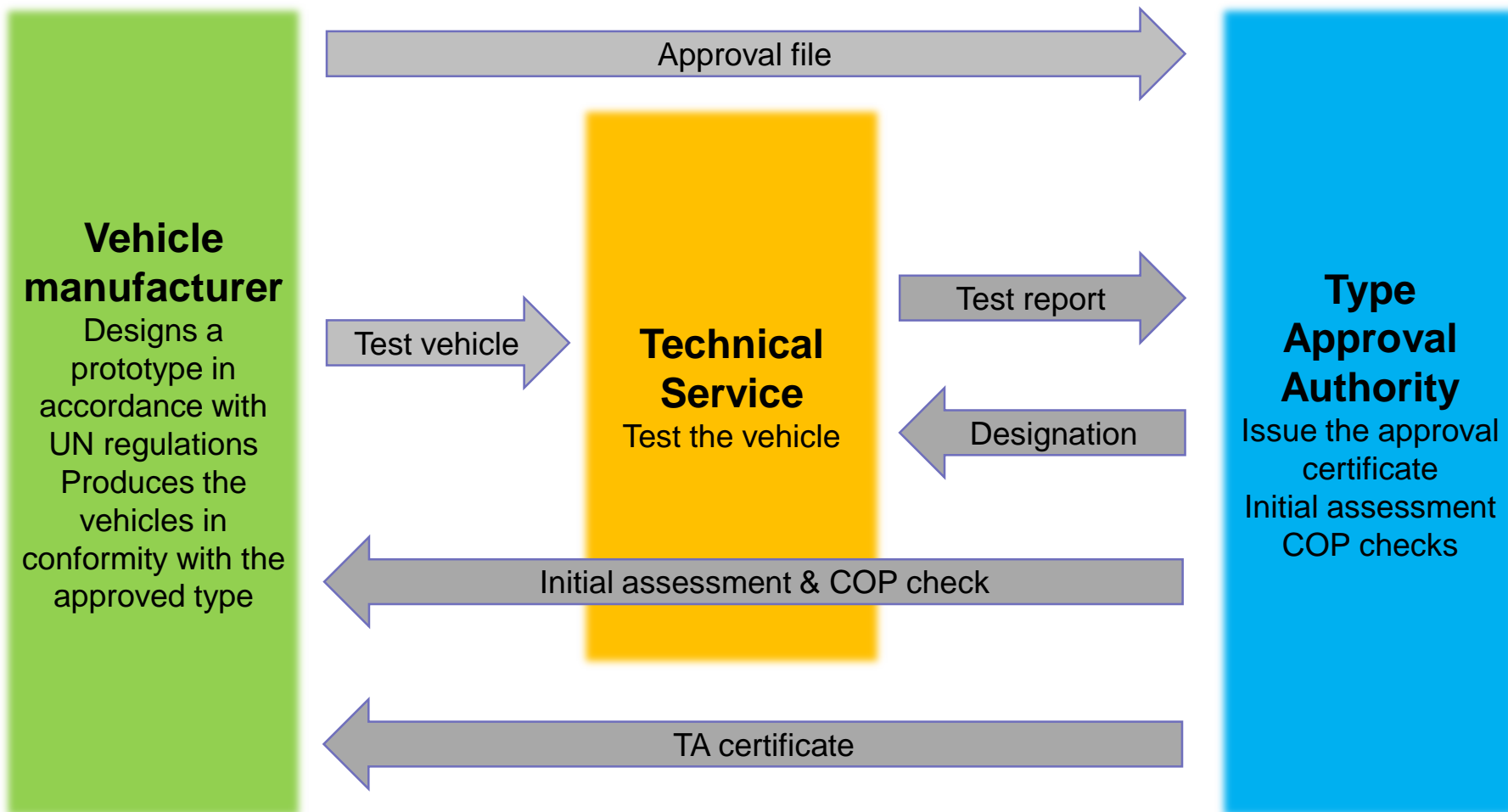




Image from <https://mechanical.engineeringtalks.com>

- Type approvals are granted for:**
- Parts and their installation on vehicles;
 - Equipment and systems
 - Whole vehicle.

Advantages of the Type Approval system

- Reducing of technical barriers to international trade by the reciprocal recognition of type approvals;
- Minimizing the design and construction costs for manufacturers due to the same requirements;
- Increasing of safety level due to the application of the same requirements and faster implementation of new technologies;
- Global market access for the manufacturers;
- Rapid delivery of products;
- Increasing of brand reputation for manufacturers;

The 1958 Agreement – A Road Map for Implementation

- **Challenges:** Identify the main aspects and issues for the transposition the 1958 Agreement at the national level.
- A **“Building Blocks”** arrangement is used to illustrate the general picture of the process



The Legal and Regulatory Framework – “The Core of the Process”

- **Must be flexible to cover the continuous changes** of the technical requirements legislation (UN Regulations amendments). Two or three legislation levels are recommended.
- **On the first level, (Parliament Law level)**, strategical prescriptions must be included:
 - The 1958 Agreement Accession Law;
 - The equipment, parts and vehicle Approval Laws:
 - Define approval types and the national documents issued;
 - Designate the TAA and give the rights and methods to designate the TS's;
 - Define the structure dealing with surveillance issues on the market and establishing the enforcement activities;
- **On the second and third level (Government Decision or Minister Order)**, UN Regulations applied, their level and technical requirements are included;
 - Equipment and parts UN type approval prescriptions;
 - National and/or UN vehicle type approval prescriptions;
 - New or used vehicle Individual approval prescriptions ;
 - Other national certification procedures, if any;



Administrative and Institutional Aspect – “The Road Ahead”

Define the approval activities that need to be regulated according to the national market structure:

- **Create** the type and the organizational structure of **the Type Approval Authority (TAA)**:
 - It must be designated by the law and empowered with the legal right to grant approvals;
 - It must be independent in front of the stakeholders;
 - It must to be controlled and audited by the government;
 - The scheme of the approvals fees must be designed depending on the way of financing (budgetary or self financed);
 - All the activities planned must be covered in the organizational structure with specific tasks and specialists.
 - TAA can be designated also as Individual Approval Authority;
- **Assess the** status of the laboratories capable to be designated as **Technical Services (TS's)**:
 - Designate existing TS's already notified by other CP's;
 - Find, assess, designate and notify local or area located laboratories;
 - Create and equip laboratories belonging to the TAA organization;
- **Define the** structure dealing with **Surveillance and Enforcement (S&ES)**:
 - Can be the a part of TAA working together with another organizations (consumer protection authority, vehicle registration authority).



Procedural Aspect – “The Real Implementation”

Having decided about the organization of the TAA, TS’s and S&ES, these structures must apply the processes required by the 1958 Agreement and national laws and write their internal level procedures:

- **UN Type Approval procedures**, according to the 1958 Agreement, Rev. 3:
 1. **Manufacturer initial assessment & COP compliance**, according to schedule 1:
 - Manufacturers QMS and COP procedures assessment;
 - Certify the quality of manufacturer for the applicant;
 2. **General type approval process**, according to Schedule 3 and with the specific UN Regulation prescriptions:
 - Assessment of the information folder, manufacturer declarations and technical interpretations depending on the approval type: component, components installation, equipment, new type or extension of the type;
 - Worst case selection algorithm and technical negotiations with the applicant;
 - Approval number assignment and methods for granting the certificates;
 - Methods for informing the other CP’s (now the DETA way);



Procedural Aspect – “The Real Implementation”

3. **Continued COP verification arrangements**, active during the product approval lifetime, according to schedule 1:
 - Establishing risk assessment methods for continued verification (periodicity, complexity and risks);
 - Methods to assess the manufacturers tests or inspections reports;
 - Reactions and decisions in case of nonconformities discovered during inspections or claimed by other CP's;

4. **Assessment, designation and notification of the TS's**, according to schedule 2:
 - Methods to assess the competence of a laboratory to become a TS:
 - Direct audit;
 - Recognition of the QA accreditation in compliance with the TS category;
 - Methods for surveillance and reassessment of the TS's.
 - Methods for TS's notification to UN (now online through the unique focal point);





Technical Capability – “The Level of Knowledge”

- **Human skills:**

- TAA and TS’s specialists and coordinators must have good skills in automotive and parts manufacturing and in the administrative, technical and procedural homologation issues;
- All the TAA and TS’s specialists must follow a continuous training process according to their tasks:
 - Auditors and inspectors for ISO 9000, ISO 17021, ISO 17020, ISO 17025;
 - Homologation coordinators for 1958 Agreement prescriptions, WP29 procedures, UN Regulations prescriptions (administrative and technical, transitional dispositions);
 - Testing engineers and inspectors for ISO 17025, ISO17020, UN Regulations prescriptions;
- TAA’s and TS’s designated specialists to follow the evolution of the UN Regulations, their amendments and to participate in WP29 and GR’s meetings;

- **Testing capability :**

- Need to develop a network of testing facilities;
- Technical centers to verify the compliance for NIVA and NWVTA needs to be deployed;
- Find the domain for developing your own testing facilities, according to the national conditions:
 - Safety (general, passive, active), Environment protection (emissions, sound level).

Surveillance and Enforcement – “Collecting Information to Ensure the Compliance”

- **Surveillance:**

- **Collecting information** about whether an action or item meets the relevant requirements, it will then form a judgment and the possible related intervention;
- Ensures that vehicles, equipment and parts available on the market are comply with the applicable regulatory acts;
- Surveillance is basically done through inspections (programmed, risk assessment, claimed);
- It is recommended to designate a surveillance structure for the vehicle market (part of TAA, consumer protection authority or others);

- **Enforcement :**

- **All actions needed to ensure compliance with the rules;**
- Enforcement acts are results of the surveillance activities and must be clearly described in the law;
- Can be applied during the lifetime of the vehicles;
- Can be applied also through vehicle registration legislation and Periodical technical inspection legislation;
- Examples: apply fines, sale prohibition decisions, recall campaigns, withdrawal of approval, PTI refusal;



Social Impact – “Happy people vs Worried people”



- **Happiness:**

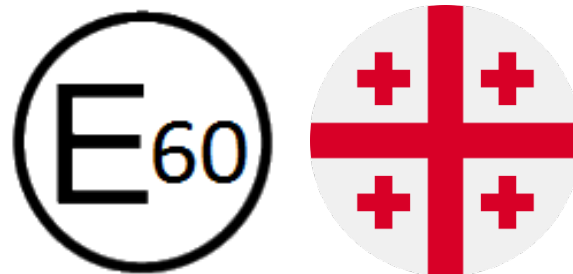
- Significantly increase the road safety and decrease the number of accidents, injuries and fatalities;
- Reduce the government costs for emergency interventions;
- Improve population health level through emissions control legislation;
- Organize the vehicle market on equal and sustainable bases;
- Align the local manufacturers to the international requirements;

- **Worries:**

- Increase of the administrative and technical burdens for local manufacturers and importers;
- Increased final cost of vehicle, equipment and parts;
- Difficult adaptation to legal requirements can lead to some business lost.

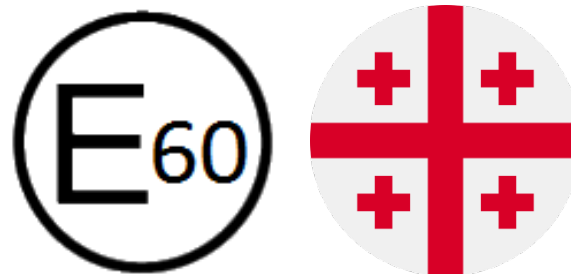
- **Actions:**

- Step by step approach is required;
- A transparent implementation is recommended;
- Guidelines explaining the approval processes are needed;
- A positive flexibility in the approval process is recommended on behalf of the TAA and TS's specialists;
- Stakeholders to be convinced that type approval is a problem of mutual trust between the authorities and the manufacturers.



Project of implementing the UN 1958 Agreement in Georgia 2019-2020

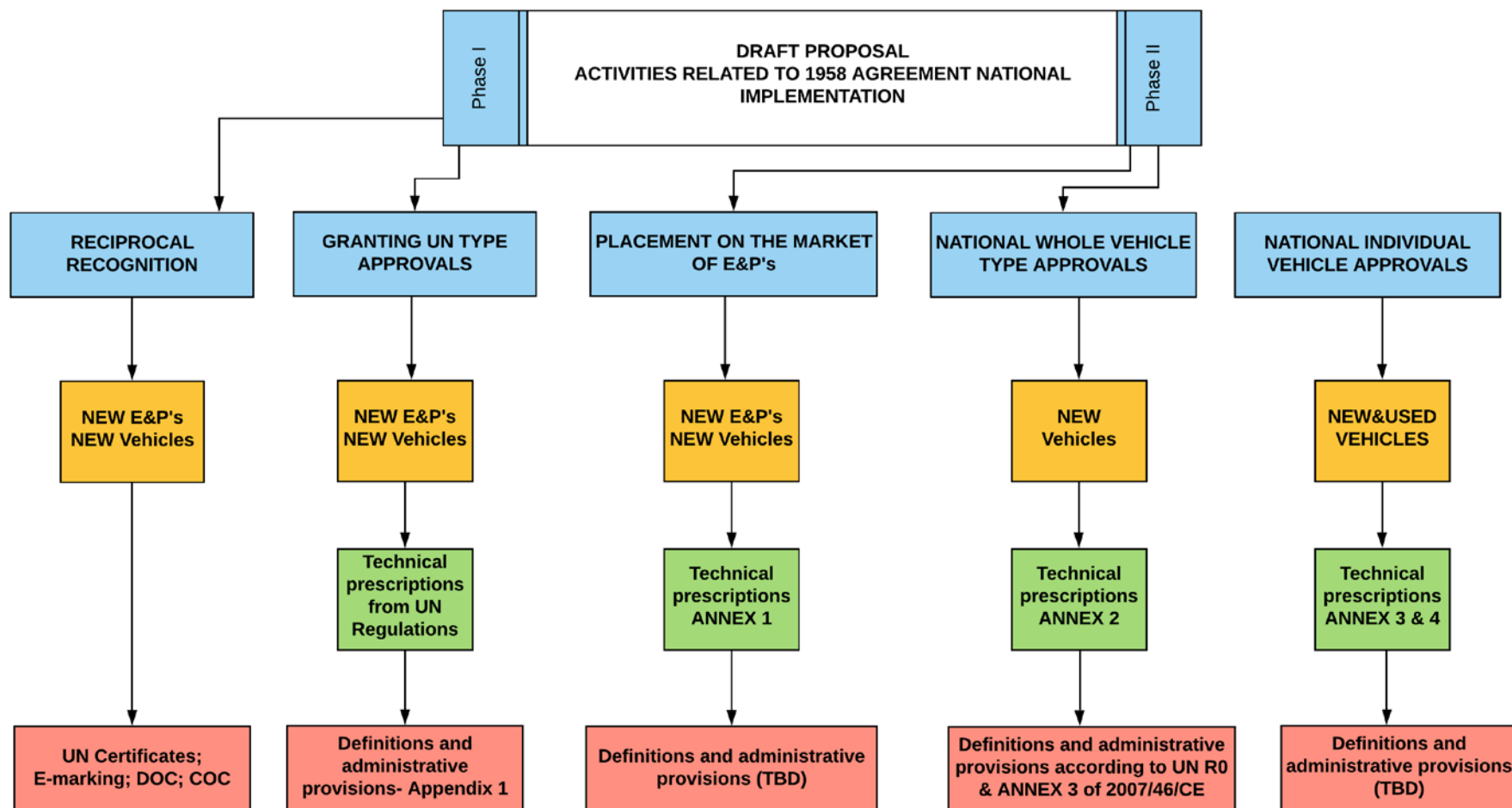
- Being a Contracting Party of the UN 1958 Agreement since 2015, Georgia has decided to start the implementation process of the administrative and technical vehicle safety requirements into the national legislation.
- Requested support from the UNECE Sustainable Transport Division.
- In response, in the second part of 2019, an expert was designated by the UNECE for the Georgian project who was commissioned to elaborate:
 - an Action Plan for the efficient implementation of the UN 1958 Agreement in Georgia;
 - the draft of the Technical Regulation implementing the administrative and technical provisions of the UN 1958 Agreement.



Project of implementing the UN 1958 Agreement in Georgia 2019-2020

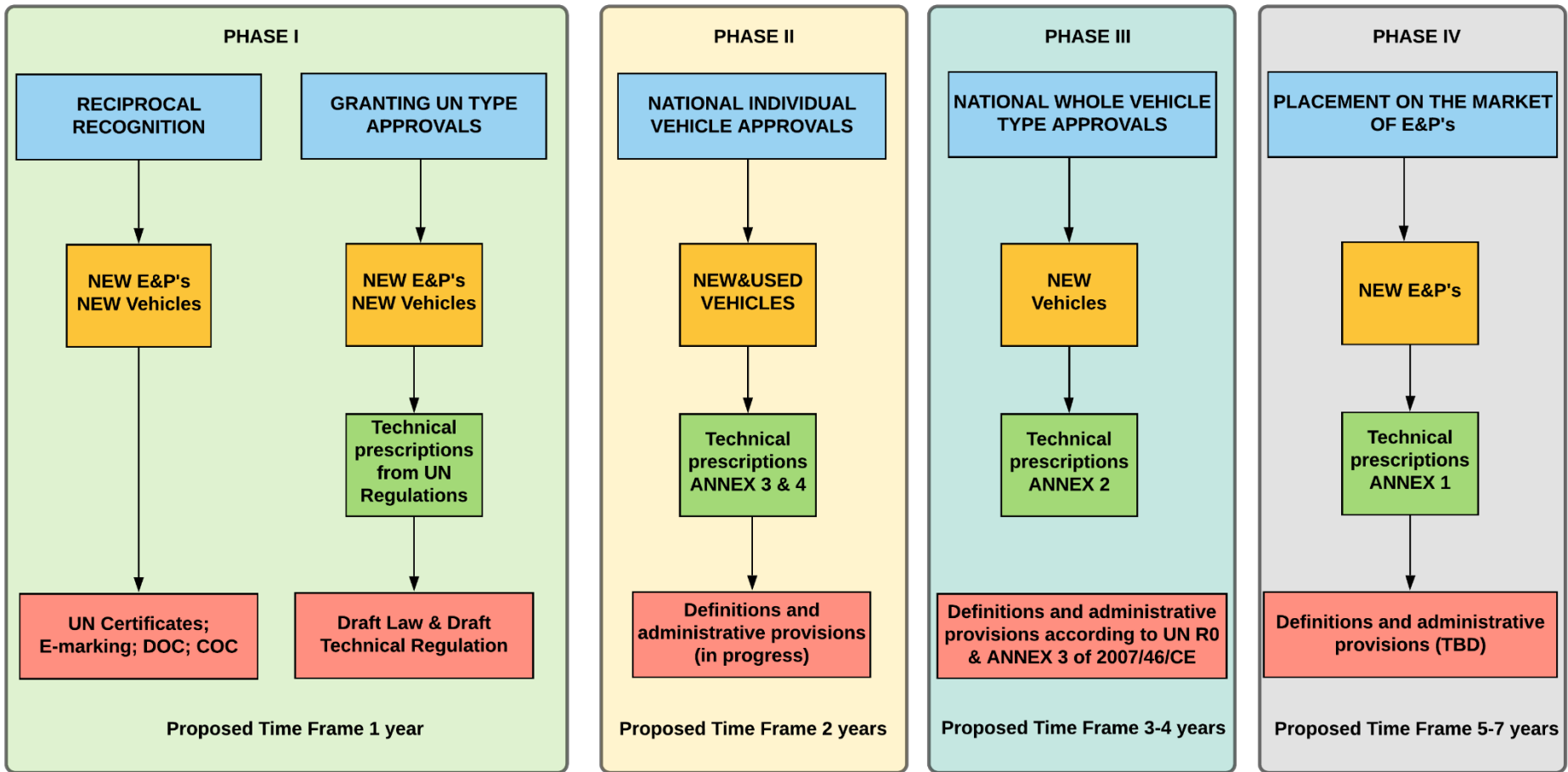
- The most important goal was the completion of the Georgian Action Plan for an efficient implementation. The document projects for the next five to seven years the legislative, administrative and procedural processes required to be performed at the national level in order to deploy all the vehicle safety and environmental protection legislation linked with the prescriptions of the UN 1958 Agreement.
- The most important success of this project is considered to be the knowledge and information transfer towards the Georgian working group specialists. All the questions, answers, discussions and analyses done during this period have led to an increase in the level of understanding of vehicle approval activities. In the end, the proposed technical regulation could be elaborated by the Georgian specialists, being ready at the same time to develop the prescriptions of the following phases.
- The project included two on-site visits by the expert to the Land Transport Agency in Tbilisi and ended with a visit by LTA specialists to the Romanian Approval Authority at Bucharest.

The 2019 draft proposal for the implementation phases



The 2020 Action Plan Phases

ACTIVITIES RELATED TO 1958 AGREEMENT IMPLEMENTATION for GEORGIA



Phase I - Recognition

1. Provisions:

a. UN 1958 Agreement, Rev.3, art.1

“However, Contracting Parties shall accept, as an alternative to the relevant part of their national/regional legislation, UN type approvals granted pursuant to the latest version of UN Regulations applied in their country/region. The rights and obligations of Contracting Parties applying a UN Regulation are detailed in the various articles of this Agreement.”

b. UN 1958 Agreement, Rev.3, art.3

“Contracting Parties applying UN Regulations shall, by mutual recognition, accept for the placement in their markets, and subject to the provisions of Articles 1, 8 and 12 as well as any special provisions within these UN Regulations, type approvals granted pursuant to these UN Regulations, without requiring any further testing, documentation, certification or marking concerning these type approvals.”

c. Georgian legislation;

2. Measures for implementation: Reciprocal recognition provisions must be established in the Georgian Law for components and parts UN approved and for the vehicles covered by IWVTA (as partial approval) or EUWVTA;

3. Applicability:

- a. New equipment and parts placed on the market in Georgia and covered by UN Regulations ;
- b. New wheeled vehicles placed on the market in Georgia and approved according UN IWVTA Regulation, considered as part of the Georgian national type approval procedure;
- c. New wheeled vehicles placed on the market in Georgia and approved according EUWVTA Directive;

Phase I - Granting UN Type Approvals

1. Provisions:

a. UN 1958 Agreement, Rev.3, art.2, line 1, 2 and 3

“1.Each Contracting Party applying UN Regulations largely through type approval shall grant the type approvals and approval markings described in any UN Regulation for the types of wheeled vehicles, equipment or parts covered by the UN Regulation, provided that it has the technical competence and is satisfied with the arrangements for ensuring conformity of the product with the approved type. Each Contracting Party which grants type approval shall take the necessary measures as set out in Schedule 1 annexed to this Agreement to verify that adequate arrangements have been made to ensure that wheeled vehicles, equipment and parts are manufactured in conformity with the approved type.

2.Each Contracting Party issuing type approvals pursuant to a UN Regulation shall specify an approval authority for the UN Regulation. The approval authority shall have the responsibility for all aspects of type approval pursuant to the said UN Regulation. This approval authority may designate technical services to carry out on its behalf the testing and inspections necessary for the verifications required in paragraph 1 of this article. Contracting Parties shall ensure that technical services are assessed, designated and notified in accordance with the requirements set out in Schedule 2 annexed to this Agreement.

3.The type approvals, approval markings and identifiers for the types of wheeled vehicles, equipment and parts shall be specified in the UN Regulation and granted in accordance with the procedures set out in Schedules 3 to 5 annexed to this Agreement.”

b. Georgian Legislation;

2. Measures for implementation:

- a) TAA designation and notification must be established in the Georgian Law;
- b) The right of TAA to assess and designate TS's must be established in the Georgian Law;
- c) The Initial assessment, COP and administrative procedures must be established in the Georgian Law;

3. Applicability:

- a) New equipment and parts covered by UN Regulations, manufactured to be placed on the market in the Contracting Parties applying the UN Regulations;
- b) New wheeled vehicles, manufactured to be placed on the market in the countries applying UN Regulation no.0;

Phase II - Granting National Individual Vehicle Approvals

1. Provisions:

- a. Georgian Legislation;

2. Measures for implementation:

- a. NIVAA designation and notification must be established in the Georgian Law;
- b. The right of NIVAA to assess and designate TS's must be established in the Georgian Law;
- c. Technical requirements listed in Annex 3 and 4 (of the report) must be implemented in the Georgian Law;
- d. Definitions and administrative provisions can be transposed from UN R.E.3, UN Regulation no.0 and other best practice cases;

3. Applicability:

- a. New and used wheeled vehicles placed on the market and intended to be registered in Georgia, as individual or very small series, with the exceptions of the ones EUWVTA or UN IWVTA approved (the last as part of the Georgian national type approval procedure);



Phase III - Granting National Whole Vehicle Type Approvals

1. Provisions:

a. UN 1958 Agreement, Rev.3, Preamble

“DESIRING to establish an International Whole Vehicle Type Approval scheme (IWVTA) within the framework of the Agreement to increase the advantages of individual UN Regulations annexed to the Agreement and so create opportunities to simplify implementation by Contracting Parties and the wider adoption of mutual recognition of type approvals for whole vehicles.”

b. Georgian Legislation;

2. Measures for implementation:

- a. TAA designation and notification must be established in the Georgian Law;
- b. The right of TAA to assess and designate TS's must be established in the Georgian Law;
- c. Technical requirements listed in Annex 2 (of the report) must be implemented in the Georgian Law;
- d. The initial assessment, COP and enforcement procedures must be established in the Georgian Law;
- e. Definitions and administrative provisions can be transposed from UN R.E.3, UN Regulation no.0 and EU Regulation 2018/858;

3. Applicability:

- a. New wheeled vehicles placed on the market and intended to be registered in Georgia with the exceptions of the ones EU-WVTA or UN-IWVTA approved (the last as part of the Georgian national type approval procedure);

Phase IV - Placement on the Georgian market of new equipment and parts for wheeled vehicles

1. Provisions:

•UN 1958 Agreement, Rev.3, Preamble:

“DESIRING to apply these UN Regulations whenever possible in their countries or regions.

DESIRING to reduce technical barriers to international trade by defining harmonized technical UN Regulations that it will suffice for certain wheeled vehicles, equipment and parts to fulfil in order to be used in their countries or regions.”

•Georgian Legislation;

2. Measures for implementation:

- a)The Georgian Law must provide the mandatory usage in or with vehicles of the approved components and parts listed in Annex 1(of the report);
- b)Minimum series of amendments accepted for the Regulations listed in Annex 1 (of the report) must be established;
- c)Enforcement measures and procedures must be established in the Georgian Law (workshops responsibility, PTI verifications, road side inspections, market surveillance authority establishment ;
- d)Must be underlined in the public communication channels the road safety benefits won by reducing at the same time the technical barriers to international trade due to the implementation of harmonized technical Regulations.

3. Applicability:

- a)New equipment and parts placed on the market in Georgia and covered by UN Regulations according to Annex 1 (of the report);



Thank you!