

Proposal for a new UNECE regulation on recyclability of motor vehicles

Informal Document GRPE-65-21

Reply to the Comments of the Russian Federation



EU ELV-Recycling and Recyclability

In Europe Recycling of ELVs is regulated by two European Directives

- 1. Directive 2000/53/EC on End of life vehicles (ELVs)
 - This Directive is dealing with the <u>real recycling of ELV's</u> in the EU Member States which depends on the local situation in the different states
 - > Therefore, it cannot be harmonized globally!
 - Real ELV-treatment depends on the behavior of recycling companies and on other factors outside of the automotive industry.
 - Therefore it cannot be part of vehicle type approval!
- 2. Directive 2005/64/EC on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability
 - This Directive is dealing with the <u>theoretical recyclability</u> and recoverability of vehicles based on their material composition.
 - It is dealing with vehicle properties (basically their material composition) and with processes within the automotive industry and the supply chain.
 - These requirements should be globally harmonized and are therefore subject of this initiative to establish an UNECEregulation on recyclability.



Scope

Comments made by the Russian Federation Delegation to informal document GRPE 65-21:

- 1. "According to the proposed draft, its scope includes only vehicles of M1 and N1 categories..... It is necessary to provide for a possibility of extension of requirements to other vehicle categories."
- Due to their high metal content heavy trucks and busses will always have a very high recyclability and recoverability rate.
- Checking this in any kind of type approval would be only an unnecessary bureaucratic burden.
- If any contracting party wishes to extend the scope from M1 and N1 to for example M, N, O, this can easily be done in the respective national legislation.



Components - Reuse

"However the requirements to the components are not defined (except for restriction of their reuse on new vehicles)."

 The concept of recyclability of vehicles is defined in ISO 22628 and is calculated for the whole vehicle, not on components level.

(If a proven recycling technology exists for a part, it is recyclable and can be included into the recyclable mass of a vehicle under mD.)

"A reuse of the components which are able to reduce vehicle safety is also an important issue."

 This regulation shall only deal with new vehicle types. Any restriction on reuse of component parts should be regulated in the corresponding ELV-legislation.

(This has not lead to any problems regarding vehicle safety, which is ensured via the periodical technical inspections.)

Annex 6 of the UNECE draft regulation on recyclability only prohibits reuse of some component parts in the production of new vehicles.



IDIS

- 2. "In the proposed draft there is no list of the technical documentation to be provided by the manufacturer concerning technology of vehicle dismantling and recycling; the forms of technical documentation are neither included. The IDIS system applied in the EU is not standardized at ISO level."
- The requirement for OEMs to provide dismantling information is regulated in the EU ELV directive as it is not a vehicle requirement. Within type approval it is requested indirectly, as within the preliminary assessment the OEM has to provide a recycling strategy which of course includes how the OEM intends to provide the necessary information to dismantlers.
 - (IDIS has been started voluntarily by European vehicle manufacturers several years before any ELV-legislation was enforced.)
- So dismantling information should be requested not in type approval, but in the corresponding national ELV-legislation.
- To allow the necessary flexibility for future developments, details of how to provide the information should not be defined. The OEMs intend to use IDIS also in Russia, as it represents the worlds most comprehensive database supporting end-of-life operators.
 - It is already available in Russian language. Of course also Russian OEMs will be able to include information about their vehicles.



Proven Technologies

- 3. "According to the proposed draft, calculation of vehicle recyclability and recoverability rates is allowed to be made taking into account the technologies of recycling, which have passed only laboratory check."
- Yes, this is already defined in the foreword of ISO 22628.
- If new vehicle technologies and materials like carbon reinforced plastics are introduced in new vehicle types, no relevant material stream is available for recycling yet. Therefore recycling technologies cannot exist on an industrial scale yet, but only on laboratory scale.
- As such new vehicles will come back to the recyclers in 15 years the earliest, there is enough time to actually implement these technologies in the market
- ⇒ If technologies on a laboratory scale would not be accepted, progress in material development and use (e.g. for CO2-reduction) would be blocked.



Proven Technologies

"In a view of a difference in technical and technological level of vehicle recycling industry in different countries, reaching identical recyclability and recoverability rates may not be possible. This may limit a possibility of mutual recognition of the communications on the type approval pursuant to this Regulation."

- As mentioned before the purpose of this regulation is to check new vehicle types and not the existing national infrastructure for current ELV recycling
- Regional differences must not have any influence on a vehicle requirement as part of vehicle type approval
- For this reason European, Korean, Japanese and US-manufacturers have developed and agreed on a list of proven technologies including recycling technologies.
- This list is used as common basis for the calculation. Of course Russia is invited to add Russian technologies. However, typically the recycling technologies can be applied globally.
- Therefore, it is not relevant for the calculation, where in the world the technology exists.



Material Restrictions

- 4. "In the proposed draft there is no requirement for prohibition of use of ecologically dangerous materials as in the Annex II to Directive 2000/53/EU."
- The restriction of hazardous substances which requests intense research and development – may be different between contracting parties as the different potential of OEMs for research might be taken into account.
- ⇒ Therefore material restrictions should be part of the corresponding ELV-legislation, which is the case in Europe.
- The preliminary assessment within type approval recyclability and this draft UNECE regulation is looking into the processes, contractual agreement etc., which have been established by the OEMs to enforce the material restrictions along the supply chain.



Parts Marking

- 5. According to the proposed draft marking of plastic and rubber components is not obligatory; the list of the ISO standards for marking provided in the draft only. As a subsequence, that could complicate recycling of such components.
- Similar approach as for material restrictions:
 - ➤ The parts marking is a requirement laid down in the national ELV-legislation.
 - ➤ The preliminary assessment within type approval recyclability is looking into the processes, contractual agreement etc., which have been established by the OEM to enforce parts marking along the supply chain.



Conclusions

- The regulation on real treatment and recycling of current ELV's should be part of a different national regulation because this depends on the national infrastructure status. The vehicle related requirements are to be checked within the type approval process for new vehicles.
- This draft UNECE regulation is for the approval of new vehicles types regarding their recyclability, which should be harmonized on UNECE level similar to other type approval requirements.
- It might be an option for the Russian Federation to delete the relevant type approval requirements from the corresponding technical regulation (TR) on "..." and to regulate the open items only (Dismantling Information, Substance Restrictions, Parts Marking...) in this new TR. The related vehicle approval requirements could than be regulated by this new UNECE regulation in line with existing requirements in other parts of the world.
- We hope that we can clarify the comments made by the Russian Federation in bilateral discussions to avoid any further delay in the legislative process.