

SAFER AND CLEANER USED VEHICLES



SAFER AND CLEANER
USED VEHICLES

Used Vehicles Information Sharing Systems with Data Support

Developed By:



UNECE





SAFER AND CLEANER USED VEHICLES FOR AFRICA



Export of used vehicles from Amsterdam ©ILT 2019

ACTIVITY 1 – ESTABLISH USED VEHICLES INFORMATION SHARING SYSTEMS WITH DATA SUPPORT

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EXECUTIVE SUMMARY

Investigation and analysis of best practice procedures and requirements for exporting countries as well as importing countries have been evaluated.

Amongst investigated procedures, the process for export of vehicles from Japan to New Zealand is analysed and found to be the best developed and most established procedure as it incorporates all steps in the export/import flow. The procedure starts with a thorough inspection before the vehicles even leave Japan and is followed with strict requirements and an inspection based on domestic legal requirements of the importing country, New Zealand.

This procedure would preferably act as a role model for best practice worldwide, with mutual responsibility for both exporting and importing countries.

It should be observed that in New Zealand, there are clear and distinct legal requirements regarding safety and environmental rules and regulations that must be fulfilled before a registration can be issued and the vehicle is ready for use in New Zealand.

As a part of the assurance of acceptable entrance of the vehicle into New Zealand, an inspection upon arrival in New Zealand is carried out.

The available information and data from the regulatory authorities in Japan for registration on a vehicle arriving in New Zealand is of high quality but so far not available for use on a broader international level.

For any country that has set the rules and requirements for import and registration of the vehicle aimed to be taken into traffic on public roads, data and information for inspection of the fulfilment of these rules must be available for the actual vehicle.

The type of information that should be available is related to Roadworthiness status as a requirement for registration, type-approval information, traffic safety and environmental classification and/or Certificate of Conformity, and a record if a vehicle has been possibly involved in any significant damage.

Of analysed Data-platform EUCARIS is found to be the most preferred platform on a broader international use to share registration data.

EUCARIS is a platform for data exchange within Europe concerning vehicles and vehicle owners and driver. The platform has the possibility to provide information that the recipient country may use to assess the compliance of the vehicles to its import requirements, like age, emission class. For all countries, the history of earlier roadworthiness in exporting countries should be of common interest.

EUCARIS intends to open the availability and access to the platform for countries outside Europe.

DETA, is the database on vehicle approval data hosted by UNECE. Once fully developed, it may provide detailed data about the approval of vehicles, i.e., which requirements fulfilled when designed and produced.



1. INTRODUCTION

Safer and Cleaner Used Vehicles for Africa is a project led by the United Nations Environment Programme (UNEP) and the United Nations Economic Commission for Europe (UNECE), and funded by the UN Road Safety Fund with the aim to improve the quality of second-hand vehicles reaching the continent. CITA, the International Motor Vehicle Inspection Committee, participates in the activity by providing its experience and knowledge on whole-life vehicle compliance in general and vehicle inspection.

CITA members are authorities and authorised companies involved in vehicle compliance to ensure road safety and environmental protection.

The increase of motor vehicles in Africa is, on the one hand, a basis for further economic development in African countries. However, the vehicle fleet is old and inadequate in low to middle income countries (LMIC); with the rapid number of motorised vehicles increasing, traffic safety and the environment are negatively influenced.

The fleet's growth in the concerned countries is mainly based on importing vehicles from developing countries, most of them used vehicles.

At many times this import of vehicles is of a non-safe and non-optimal environmental status. The reasons related to the unsuitability of vehicles may be related to their design or fitness. As an example, failures in the design may be the lack of safety belts in the rear seats of vans, and defects of fitness would be that those safety belts, when fitted, are no longer usable.

2. BACKGROUND

To improve the situation with a safer and more environmentally friendly vehicle fleet in African countries, requirements on the technical status of imported vehicles in the respective countries are essential. As support of these import regulations, it is also important to set up exporting countries' rules.

In the European Union (EU), a vehicles' legal life contains provisions for type-approval, roadworthiness, and vehicles' end of life, with the corresponding databases and information systems. It becomes essential to make vehicle-specific data available electronically to importing countries. Several different data sources are available on an international basis; however, coordination and access to the various sources are still under development, but there is a firm intention from the data providers to make these sources available for international use.

3. SCOPE AND LIMITATIONS

The CITA involvement in the project starts in December 2020 and is scheduled to finish in September 2021. This report is the deliverable of activity 1, "Establish used vehicle information-sharing system with data support".

The breakdown of this first activity consists of an analysis of information sources, reference and benchmarks, and a proposal for an information-sharing system at the conceptual level.



The analysis of best practice and sources of information has been carried out with the main focus on light duty vehicles, category M1¹. Principles, in general, are applicable to other types and categories.

4. MATERIAL AND METHODS

Earlier CITA activities have been evaluated as a background, particularly its Recommendation 21, “Port-of-Entry Inspections”.

An analysis of New Zealand’s System to import used vehicles from Japan as one of the benchmark models has also been conducted.

This deliverable considers the input retrieved from the UNECE webinars on December 18th, 2020 and February 20th, 2021, along with the one organised by CITA on December 16th, 2020.

Another essential source of information has been the web-meetings and interviews conducted with several experts in matters related to the used vehicles’ international movement. Details can be found in Annex 3.

The activity includes the analysis of current databases, examples of data availability, and enhancement of the scope to make more efficient control of used vehicles in the import/export process.

5. ANALYSIS OF THE BENCHMARK MODELS OF EXPORTING AND IMPORTING USED VEHICLES

5.1. GENERAL OBSERVATIONS AND INFORMATION

Many activities are ongoing on an international level to limit the export of non-roadworthy and high pollutant vehicles.

A successful approach requires a scheme based on three concepts:

- Requirements for the export of vehicles.
- Requirements for the import of vehicles.
- A reliable information system to transmit vehicle data.

Harmonisation in the three aspects mentioned above will facilitate their implementation and make more efficient the movement of vehicles. That harmonisation should be envisaged at least at a regional or sub-regional level.

This part of the report gives the perspective of how to accelerate activities to reach the overall goal and mission based on best practice and the present possibilities.

As a framework and introduction to the project’s overall mission, the following sections provide information about recommendations for inspection and registration procedures

¹ Passenger vehicles up to 9 seats, including the driver’s one, and up to 3.500 kg of maximum weight.



and as a base to describe the rules for international transport of hazardous waste and end-of-life vehicles.

5.2. PORT OF ENTRY INSPECTION

The recommendation "Port-of-Entry Inspections", developed by the CITA members, gives guidelines for a procedure of inspection and registration of imported vehicles. It considers requirements at two levels:

- Requirements regarding the conception of the vehicle.
- Requirements regarding the fitness of the vehicle.

Requirements regarding the conception of vehicles, when exported as used vehicles, are to be checked, taking into account the process necessary to register the vehicle in the country of origin. In other words, the recipient country may take into account what were the original requirements to register the vehicle as new and whether those requirements are sufficient for accepting it.

The CITA website has a utility to indicate the regulatory compliance of EU approved vehicles according to their date of first registration or approval². It has to be considered that vehicles may be built following higher standards, and therefore individual information about each single unit becomes useful to assess vehicles one by one.

The second aspect is the fitness of every individual vehicle. This requires an individual checking. From the point of view of exporting countries, it makes sense to consider that only those vehicles that have fulfilled the national periodic technical inspection (PTI) are entitled to be exported. This is a solid approach since the country should only allow exportation of those vehicles that would be accepted to circulate on its own roads. The possibility to limit the date of acceptance of the last PTI should be analysed. It is advisable to include at the point of shipping for export, an appropriate registration of the vehicle, to ensure that pieces and components are not dismantled on the way, for example essential components like catalytic converter, safety belts etc..

Another check is necessary on the arrival of the vehicle to the importing country to ascertain the vehicle is still in a good state and the statutory components are still there. Sampling procedures on the approach may only be considered when trade companies have enough volume of vehicles and the appropriate quality insurance systems. Whereas vehicle standardization consider statistical and sampling procedures for the conformity of production, the import of used vehicles has, by definition, a completely different statistical approach since the ensemble of imported vehicles are not the result of a production line.

5.3. GENERAL REGULATIONS CONCERNING EXPORT OF USED VEHICLES

5.3.1. BASEL CONVENTION

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on March 22nd, 1989 by the Conference of Plenipotentiaries in Basel, Switzerland, in response to a public outcry following the

² <https://citainsp.org/cita-wp29-search-engine/>



discovery, in the 1980s, in Africa and other parts of the developing world of deposits of toxic wastes imported from abroad.

Awakening environmental awareness and corresponding tightening of environmental regulations in the industrialised world in the 1970s and 1980s had led to increasing public resistance to the disposal of hazardous wastes – in accordance with what became known as the NIMBY (Not In My Back Yard) syndrome – and to an escalation of disposal costs.

This, in turn, led some operators to seek cheap disposal options for hazardous wastes in Eastern Europe and other LMIC, with much less developed environmental awareness and lack of regulations and enforcement mechanisms. It was in this context that the Basel Convention was negotiated in the late 1980s. The objective of the convention, at the time of its adoption, was to combat the “toxic trade”, as it was termed. The Convention entered into force in 1992. Currently there are 188 countries party to the convention³.

The provisions of the Convention are set around the following principal aims:

- the reduction of hazardous waste generation;
- the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal;
- the restriction of transboundary movements of hazardous waste except where it is perceived to be in accordance with the principles of environmentally sound management; and a regulatory system that applies to cases where transboundary movements are permissible.

5.3.2. END OF LIFE VEHICLE DIRECTIVE (ELV)

The End-of-life Vehicle Directive (ELV) of the European Union, obligatory for member states only, is one driving factor in ensuring that waste vehicles should neither be exported nor used on public roads in developing countries. The Directive 2000/53/EC on end-of-life vehicles (ELV) was adopted in 2000 to prevent waste from vehicles, promote reuse, recycling, and other forms of recovery of ELVs and their components. It also aims to reduce waste disposal and improve the environmental performance of all economic operators involved in the life cycle of vehicles, especially those treating end-of-life vehicles. To this end, the ELV Directive sets out measures relating to:

- The prevention of waste, introducing measures to limit the presence of hazardous substances in vehicles and encouragement for the Member States to take into account and facilitate the recycling and reuse of vehicles and their parts in the design and production stage.
- The collection of ELV, notably through the obligations of Member States to ensure that authorised treatment facilities (ATFs) are available within their territory that ELV are transferred to such ATFs, and that the delivery of an ELV to ATFs occurs without any costs for the last holders.

³ <http://www.basel.int/?tabid=4499>



- The environmentally sound treatment of ELVs. The set of targets for reuse and recycling (85%) and reuse and recovery (95%) of components from ELVs.
- The provision of information by producers on components and materials used in vehicles, to facilitate their identification for reuse and recovery.

The vehicle industry is a major sector of the European economy. It generates around 12 million ELVs every year in the EU, representing about 12 million tonnes of waste.

The production of vehicles has undergone important changes since the adoption of the Directive 20 years ago. This is the case notably with the increasing use of new technologies and components in vehicles, such as plastics, carbon fibre or electronics, which present specific challenges for their recovery and recycling from ELVs. The growing number of electric vehicles on the EU market will also bring considerable new challenges to the ELV sector in terms of adjusting to the new treatment processes.

The EU Commission is currently reviewing the ELV Directive and expects to present a legislative proposal for the review of the Directive in 2022.

5.3.3. CORRESPONDENT GUIDELINES, SHIPMENTS OF WASTE VEHICLES

The CORRESPONDENTS' GUIDELINES No. 9 aims to give guidance for shipment of Waste Vehicles but are not legally binding and needs much effort to evaluate vehicle by vehicle if it is waste or not. The Correspondents' guidelines represent the common understanding of all EU Member States on how Regulation (EC) No 1013/2006 on shipments of waste (Waste Shipment Regulation – WSR) should be interpreted.

The guidelines were agreed by the correspondents at a meeting on July 8th, 2011 organised pursuant to Article 57 of Regulation (EC) No 1013/2006. The guidelines apply from September 1st, 2011 and should be reviewed at the latest five years from the above date and, if necessary, revised.

5.4. BENCHMARK OF RULES AND PROCEDURES FOR EXPORTING COUNTRIES

5.4.1. JAPAN

Japan is the second largest exporter of used vehicles after the EU. Over the period 2015-2018, Japan exported around 3,8 million used light-duty vehicles. Japanese exports of used vehicles averaged 963.000 per year from 2015-2018. In 2015, Japan exported over one million vehicles, which had slightly dropped to 940.000 used vehicles by 2018. In general, the share of used vehicle exports has declined year-on-year since 2015, except for a slight rise of 9.000 units between 2017 and 2018.

From 2015 to 2018, New Zealand and the United Arab Emirates (UAE) accounted for the bulk of used LDV imports from Japan. In Asia, Myanmar, Sri Lanka, and Pakistan account for the largest share of used LDV imports from Japan. In Africa, the major markets are Kenya, South Africa, and Tanzania. Exports to South Africa have grown significantly from 2015 to 2018, an increase of nearly 40.000 vehicles; these exports are destined to neighbouring countries as South Africa bans used vehicles.

Similarly, Chile is one of the top 10 importers of Japanese used vehicles; however, they also ban used vehicles. Instead, Chile serves as a gateway to South America as these vehicles are re-exported to countries including Bolivia, Paraguay, and Peru.



Russia, Kyrgyzstan, and Georgia are major markets for Eastern Europe. In the United Arab Emirates, Dubai serves as a key transit point for used vehicle imports to African countries.

Japan predominantly supplies countries with a requirement of right-hand-drive vehicles. This includes most markets in Asia-Pacific, East and Southern Africa. However, Japanese vehicles are exported to many countries where vehicles are left-hand drive such as the UAE, Russia, Georgia, and Paraguay through Chile. In these countries, the steering wheel is shifted from the right to the left-hand side, which creates many doubts about the vehicles' behaviour in a crash.

Steering conversion is a vibrant industry in these transshipment destinations before re-exporting to the third country (GAT, 2017). Most countries mandate pre-shipment conversion or provide a timeframe in which the opposite steering is allowed. In 2018, the average Japanese used vehicle was estimated to cost US\$5,000 (¥541,903), with the total value of exports to the top 50 countries being valued at around US\$4.8 billion. The value of used vehicles differs greatly between export destinations. In Singapore, an average vehicle is valued at US\$21,000, almost 16 times more than one to Lesotho at US\$1,300. The price differential denotes the quality of the vehicle (level of safety and emission features). All countries that qualify as having a 'very weak' regulatory environment towards importing high-quality used vehicles receive low-valued and low-quality (below the average value) Japanese used vehicle exports.

Japan exported around 169,000 electric and hybrid electric used LDVs in 2018 (mainly hybrid electric vehicles), this is a growth of 41,000 vehicles from 2017. This figure is expected to rise as more and more (hybrid) electric vehicles enter the used-vehicle market.

Source: UNEP report "Used Vehicles and the Environment".

5.4.2. EUROPE'S PRESENT SITUATION

About 60 per cent of the EU trade in used light duty vehicles takes place within the EU, the remaining 40 per cent mainly goes to developing and transitional countries (Lovo, 2015). The EU is the largest exporter of used vehicles to middle- and low-income countries. Over the 2015 to 2018 period, the EU exported around 7.6 million used vehicles to countries outside of the European Union. The principal destinations for EU exports are to West Africa and the EECCA block (Eastern Europe, Caucasus, and Central Asia). In 2018 alone, the EU exported slightly more than 1 million used light duty vehicles to Africa (out of a total import in Africa of about 1.5 million used light duty vehicles that year).

Source UNEP "Used Vehicles and the Environment" report.

Another reference is the ILT research carried out in 2020 in The Netherlands. The report describes the situation of the vehicle exported from that country to Africa.

From January 2021, over 80% of the used vehicles currently exported from the Netherlands to Africa will no longer be allowed into 15 West African countries. They are closing the borders for these vehicles to improve air quality because many are of poor



quality. This is the outcome of the "Used Vehicles Exported to Africa" report⁴ from the Netherlands Human Environment and Transport Inspectorate (ILT).

ILT's comprehensive review shows that many of the cars and vans shipped from Dutch ports to African countries are older vehicles. They have low European emission standards and do not hold a valid roadworthiness certificate. Additionally, testing showed that there are often technical issues with their emission control systems. ILT is sharing its findings with the UN Environment Program (UNEP), leading a new global initiative to improve emission levels and roadworthiness in Africa.

Source: Summary of findings in the Used Vehicles Exported to Africa, by ILT.

A presentation by DG-ENV on the theme ongoing review of the ELV Directive at the UN-webinar of the 18th of December 2020 summarised the situation with implementation of the ELV Directive as below:

- A major problem in the implementation of the ELV Directive is the large number of “missing vehicles”, 35% of estimated ELVs each year are not reported (approx. 4 Million). Typically exported (as used vehicles or illegally as ELVs), with this export not being reported or dismantled as ELVs.
- The inadequate link between registration and deregistration or re-registration and variation between EU Member States.
- Only a part of deregistered ELVs receives a certificate of destruction (CoD). Not all last owners of the end-of-life vehicles deliver them to an Authorised Treatment facility (ATF) in exchange for a CoD.
- Neither the ELV Directive nor any other EU regulation provides a definitive and exhaustive list of possibilities for deregistering a vehicle (ex. temporary cancellation).
- Lack of good quality data (registrations, exports etc.).
- The scope of the Directive leaves out 25% of vehicles (e.g., trucks above 3.500 kg and motorcycles).

Source: DG ENV, UN-webinar on the 18th of December 2020.

5.4.3. USA

The USA is a major exporter of used light duty vehicles to middle- and low-income countries, with the leading regions being the Middle East, West Africa, Central America, and the Caribbean. The USA exports a significant number of used vehicles to Europe, specifically Eastern Europe. The UAE serves as a transit point for used LDV exports to other Middle Eastern countries and to Eastern Europe. Major national markets for the USA used LDVs are Nigeria, Jordan, Mexico, and Georgia. In contrast, the top five markets for USA exports of new light duty vehicles during the same period was Canada, China, Germany, Mexico, and Saudi Arabia.

Over the period 2015 to 2018, the USA exported around 2.6 million used light duty vehicles with an export value of US\$24.5 billion. Between 2009 and 2013, used vehicles made up 34 per cent of the total volume of the USA new and used LDV exports (Coffin,

⁴ <https://www.ilent.nl/documenten/rapporten/2020/10/26/rapport--used-vehicles-exported-to-africa>



Horowitz, Nesmith, & Semanik, 2016). Between 2014 and 2018, used LDV exports made up 24 per cent of total USA LDV exports by volume (and 10 per cent by value). In 2018, used vehicle exports totalled 31 per cent of total USA passenger vehicle exports (and nine per cent by value).

Source UNEP “Used Vehicles and the Environment” report.

There are no general rules like the ELV-Directive for the export of scrapped or junked vehicles from the USA. Vehicles not considered fit in the USA are classified as “Export Only”, which does not allow any further use in that country.

See also, Data platforms and registration documents in the USA – section 7.4.

5.5. BENCHMARK OF RULES AND PROCEDURES IN IMPORTING COUNTRIES AND REGIONS

5.5.1. GENERAL COMMENTS

All procedures and requirements for import must be based on national requirements for the respective country, whereas regional or sub-regional approaches may be convenient where conditions and requirements for import are similar. The regional approach would be convenient in areas with important international road transport, as in the countries of the Lagos-Abidjan corridor, to avoid that different requirements for registering and using vehicles may create unfair competition between countries. In all cases, information and data to inspect the fulfilment of these requirements is a must.

The relevant information is roadworthiness status, and precise data on the ground used to approve the vehicle for earlier use and registration. Besides, information about the vehicle history in terms of ownership and possible severe damages is essential. In addition to that, producer responsibility, recall activities, etc. make part of also valuable data.

5.5.2. NEW ZEALAND

Japan is the biggest supplier of used cars for New Zealand representing 95 % of the import. The certification procedure for the import of used vehicles destined for New Zealand begins in the country of origin. In the case of Japan, most used vehicles are sold through B2B Auctions which are not open to the public, where the vehicles are carefully inspected as basis for an appraisal before selling. After the auction, a New Zealand approved inspector takes over at the shipping point and initiates the official import and certification procedure. This procedure includes two main points, Biosecurity and Structural Condition (Border Inspection), the latter one includes:

- Identification of the vehicle.
- Odometer reading.
- Water / Fire damage.
- Structural damage.
- Rust.

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) gives export clearance by Japanese Customs through the Export Certificate from the MLIT. This Japanese regulatory process is separate from the process by Waka Kotahi New Zealand Transport Agency (NZTA).



The Border Inspection findings are reported on-site in Japan directly to the NZTA database, and if the car passes this test, the exporter will deregister the vehicle in Japan, ready to go.

The vehicle must then undergo a border inspection in Japan prior to leaving a New Zealand Customs Controlled area (so either offshore or before leaving the port environment). This is to prevent modifications of the vehicle. Japan Customs are in charge of the export clearance employing the MLIT's Export Certificate. That is a Japanese regulatory process, separate from the NZTA's one.

After New Zealand Custom clears the vehicle, the entry certification procedure starts. There are several Service Providers available for the Entry Certification, e.g., AA, Drive Sure, VINZ and VTNZ) all of them approved by the responsible authority. The entry inspection consists of two main parts, Documents and Physical Inspection.

The Physical Inspections consists of the following principal components:

- Check of structural repairs and damages.
- Brakes.
- Emissions.

A New Zealand VIN will also be stamped in the frame. If the vehicle is found to be in a roadworthiness condition, it could then be certified and registered in New Zealand.

<https://vehicleinspection.nzta.govt.nz/virms/border-inspection/introduction/the-border-inspection-process#heading3-for-tab1>

5.5.3. EUROPE

5.5.3.1 REGISTRATION DOCUMENTS IN THE EU

As described above, the data and information available on vehicles that show up for registration are necessary to complete their registration. Registration is the process undertaken by authorities to grant a registration plate to each vehicle to allow it to be used on the public road.

Directive 2014/46/EU defines the process to register a vehicle in the European Union, including registration documents. The act also indicates how the data should be stored and made available to other EU countries. It should be possible for Member States to use an electronic network, including data from national electronic databases, in order to facilitate the exchange of information. They may exchange information at bilateral or multilateral level in particular so as to check, before any registration of a vehicle, the latter's legal status. This is a base for open access and good data availability and information exchange between the countries within the EU.

Source: Directive 2014/46/EU

5.5.3.2 COMMON RULES

In the EU, there are rules for vehicles import and export between member countries, with some differences, though.

As a general rule, citizens are required to register their vehicle in their country of residence. Whereas it may vary from country to country, the documents to submit shall cover:



- Roadworthiness certificate and proof of roadworthiness when applicable.
- Registration certificate.
- Proof of ownership.
- Proof of value-added tax payment.
- Proof of insurance cover.
- Certificate of conformity.

Roadworthiness certificate and proof of roadworthiness: As a vehicle owner, you are responsible for keeping your vehicle in a roadworthy condition as well as presenting it for roadworthiness testing four years after the first registration and every two years after that⁵.

When registering a used vehicle in another EU country, it is necessary to prove a roadworthiness test in the former country of registration according to the established periods.

The testing frequency may differ significantly from one EU country to another. The proof of roadworthiness should be visibly displayed in the vehicle and include the test results, the identity of the vehicle, and the next testing date. The validity of the roadworthiness certificate should be recognised even if the ownership of the vehicle changes.

Registration certificate: when registering a vehicle in the EU for the first time, the authorities will issue a registration certificate. The registration certificate may consist in one or two parts; this varies according to national rules in each country.

Registration certificates must be recognised by another EU Member State when re-registering vehicles there. The re-registration process requires providing all the parts of the initial registration documents. Precise procedures, and the possibility of additional papers, depends on each country.

Proof of ownership: owners must prove the legal possession of the vehicle.

Invoices used as proof of purchase should clearly state the VAT number of the vehicle dealer.

Certificate of conformity: vehicle manufacturers issue the Certificate of Conformity (CoC) that shows that the vehicle's technical characteristics meet safety and environmental standards at the time of manufacturing.

The Certificate of Conformity is valid in all EU countries. In principle, national authorities shall not request any additional technical documentation. That may not apply if the vehicle has been modified, and the treatment of that differs in each country since there is no harmonised EU legal frame for vehicle modifications after registration.

For older vehicles, the Certificate of Conformity may be national instead of EU.

⁵ Minimum requirements set in Directive 2014/45/EU for M1 vehicles in private use. Member States may increase frequency



5.5.3.3 NATIONAL EXAMPLE EUROPE-SWEDEN

General description

The volume of used-vehicle imports to Sweden varies between years but has for many years been approx. 30.000 vehicles yearly which are ca. 10% of new vehicle registration. The most popular countries to import used vehicles from are Germany, the USA and Italy.

VEHICLES THAT HAVE EU VEHICLE TYPE-APPROVAL

Type-approval for passenger vehicles, tractors, motorbikes, and mopeds is completely harmonised within the European Union. That means that when a manufacturer has received such approval of the type, the approval is valid in all EU countries.

EU type-approval. From and including January 1st, 1998, all new vehicles that are registered for the first time must have a type-approval according to the base Directive 70/156/EEC, later amended by Directive 2001/116/EC and others. Vehicles with European type-approval usually have a model year of 1995 or later. A vehicle with an EC type-approval is supplied with a manufacturer's plate that contains the vehicle's approval number. Furthermore, the manufacturer will certify with a CoC that an EU type-approval covers the vehicle at the moment of manufacturing.

A CoC is required for a newly manufactured vehicle and it is required when the vehicle is new and has not been registered in another country of origin.

If the vehicle is new, no technical check of the vehicle will be made at the registration inspection. On the other hand, the vehicle and document will be identified.

VEHICLES PREVIOUSLY REGISTERED IN ANOTHER EU COUNTRY

For used vehicles, the CoC may be used to verify that the technical and environmental requirements have been met. However, some technical checks are made besides the identification of the vehicle and document. This applies to both private individuals and professional importers.

For a vehicle that does not have a CoC but is nationally approved in an EEA country a registration certificate from the previous country is now sufficient to show that the vehicle meets Swedish safety requirements. The registration certificate or corresponding document must have been issued in an EEA country. This applies to serial-produced vehicles of a standard design with a total weight of no more than 3.500 kg that are or have been registered and approved in another EEA country, and that has been used in that country.

If there is no valid CoC, but a type-approval is shown by the registration document and manufacturer plate on the vehicle, the vehicle is approved without having to apply the Swedish Transport Agency's exemption for own use. The same applies if there is a valid CoC, regardless of whether the vehicle has previously been registered in another EU country or whether the vehicle is new or used. There is no restriction on the number of used vehicles that may be brought in. The vehicle must be in its original design and correspond with the documents provided.

The table below summarises the application of standards for the registration of used vehicles in Sweden.



| Case | Requirements |
|---|--|
| Used vehicles from EEA | Approval requirements at the moment of the first registration in the EEA country |
| Used vehicles from a non-EEA country | Approval requirements at the moment of the first registration in Sweden. See also “Used vehicles for own use” below |
| Change of residence | Exemption of approval with the enforcement of some aspects: weights and dimensions, lamp colours and numbers, RHD adaptations. |
| Diplomat vehicles | Exemption of approval: weights and dimensions, lamp colours and numbers, RHD adaptations. |
| Used vehicles for own use | Exemption of approval: weights and dimensions, lamp colours and numbers, RHD adaptations |

Details about ownership of the vehicle and other administrative aspects can be retrieved via EUCARIS.

5.5.3.4 NATIONAL EXAMPLE EUROPE-SPAIN

The regulatory framework for the registration of used vehicles coming from abroad in Spain is indeed referred to the EU law and the requirements arising from the Directives for type-approval.

The main principle is the same as for new vehicles: only units with valid approval shall be registered for the first time. That basis guarantees that imported used vehicles will keep the safety and environmental level of the new ones.

There are, nevertheless, some aspects to take into consideration depending on the origin and the status of used vehicles:

- Vehicles previously registered in the EEA⁶.
- Vehicles previously registered out of the EEA.
- Change of residence.
- Diplomat vehicles.
- Vintage vehicles

The first case contemplates vehicles already registered in the EEA. Since that group of countries is considered an internal market, the date of first registration to count is when the vehicle was registered for the first time in the EEA country of origin. That is consistent with the fact of granting a new registration to a vehicle already registered in Spain.

EEA countries also apply to the EU type-approval scheme, and therefore any type-approved vehicle previously registered in an EU country might be registered in Spain. Limitations may apply in the case the vehicle has been modified.

⁶ European Economic Area: EU countries plus Iceland, Liechtenstein, and Norway.

If vehicles are not type-approved, which is rare, it is necessary to analyse the details and clauses of mutual recognition of individual approval and type-approval exceptions.

Details about ownership of the used vehicle and other administrative aspects can be retrieved via EUCARIS.

The second case refers to those used vehicles previously registered out of the EEA. In that case, the approval criteria shall be applied when registering the vehicle for the first time in Spain. In practice, that is the limitation to avoid the import of used vehicles jeopardising the quality of the fleet. The options to demonstrate the fulfilment of the approval requirement are the assimilation to a type-approved one or an individual approval, always applying the criteria at the moment of registration in Spain.

The next cases are exceptions to the main principles explained before:

Change of residence: private-owned vehicles of those moving to Spain, even if the country of origin is out of the EEA, are exempt from demonstrating most of the approval requirements. Some details may be enforced like weights and dimensions, the colour of the turning lamps, which shall be orange, the installation of a rear fog lamp and some additional modifications in case of right-hand-drive vehicles.

Vehicles owned by Spanish diplomats abroad or by foreign diplomats in Spain, with diplomatic or consular plates, may request a regular registration without the need of being type approved.

Regarding vintage vehicles, they follow a particular procedure before registration with exemptions regarding approval and the possibility of use limitations related to their original features.

The table below summarises the application of standards for the registration of used vehicles in Spain:

| Case | Requirements |
|---|--|
| Used vehicles from EEA | Approval requirements at the moment of the first registration in the EEA country |
| Used vehicles from a non-EEA country | Approval requirements at the moment of the first registration in Spain |
| Change of residence | Exemption of approval with the enforcement of some aspects: weights and dimensions, lamp colours and numbers, RHD adaptations. |
| Diplomat's vehicles | Exemption of approval: weights and dimensions, lamp colours and numbers, RHD adaptations. |
| Vintage vehicles | Exemption of approval with the possibility of driving limitations |

5.5.4. ORIGIN REGIONS FOR EXPORT OF USED VEHICLES: FOCUS IN AFRICA

The three largest exporters of used vehicles, the European Union (EU), Japan, and the United States of America (USA), exported 14 million used light-duty vehicles (LDVs) worldwide between 2015 and 2018. The EU was the largest exporter with 54% of the total followed by Japan (27%) and the USA (18%).

The major destinations for used vehicles from the EU are West and North Africa, Japan exports mainly to Asia and East and Southern Africa, and the USA primarily to the Middle East and Central America.

Seventy per cent of exported LDVs head to developing countries. Africa imported the largest number (40%) in the studied period, followed by Eastern Europe (24%), Asia-Pacific (15%), the Middle East (12%) and Latin America (9%).

The UNEP report “Used Vehicles and the Environment” developed a scaled ranking of used vehicles regulations for the 146 countries analysed based on policies to restrict vehicles’ age and/or vehicle emission standards as adopted by the governments.

This ranking categorises national measures from “very good” to “very weak”. Countries that ban used vehicles are included but not ranked on this scale; while some can consider a total ban on used vehicle imports as a ‘very good’ approach, this measure can also limit a country to access more advanced vehicle technology.

TOOLS FOR RESTRICTION OF IMPORT/REGULATORY ENVIRONMENT FOR USED VEHICLES

Used LDV Importing Country Policies, Used Vehicle Import Bans, Age Limit, Vehicle Emission Standards, Fiscal Instruments, Selective bans.

REGULATORY ENVIRONMENT RANKING

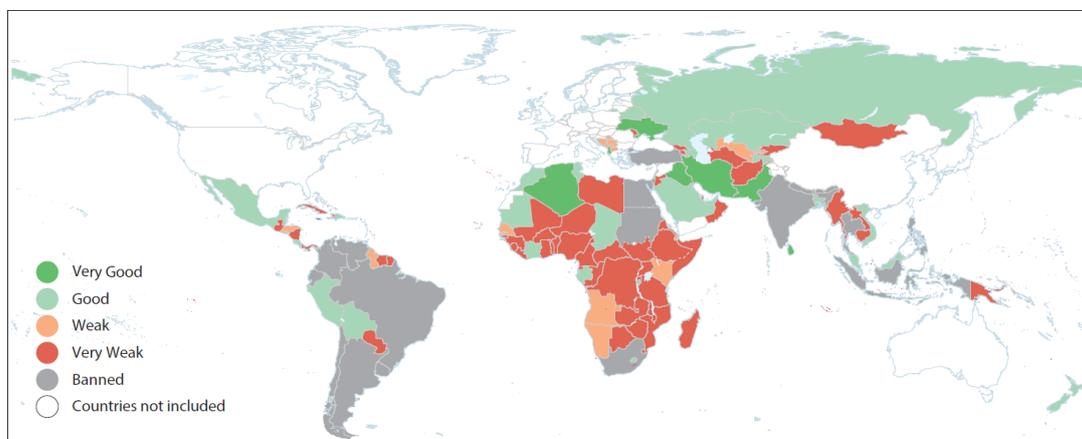
Very Good – a used LDV Euro 5/V or more emissions standard adopted and/or age limit of 3 years or below.

Good – a used LDV Euro 4/IV emissions standard adopted and/or age limit of 4 or 5 years.

Weak – a used LDV Euro 3/III emissions standard adopted and/or age limit of between 6-8 years.

Very weak – No used LDV Euro emissions standard adopted and/or age limit of 9 years plus or no age limit.

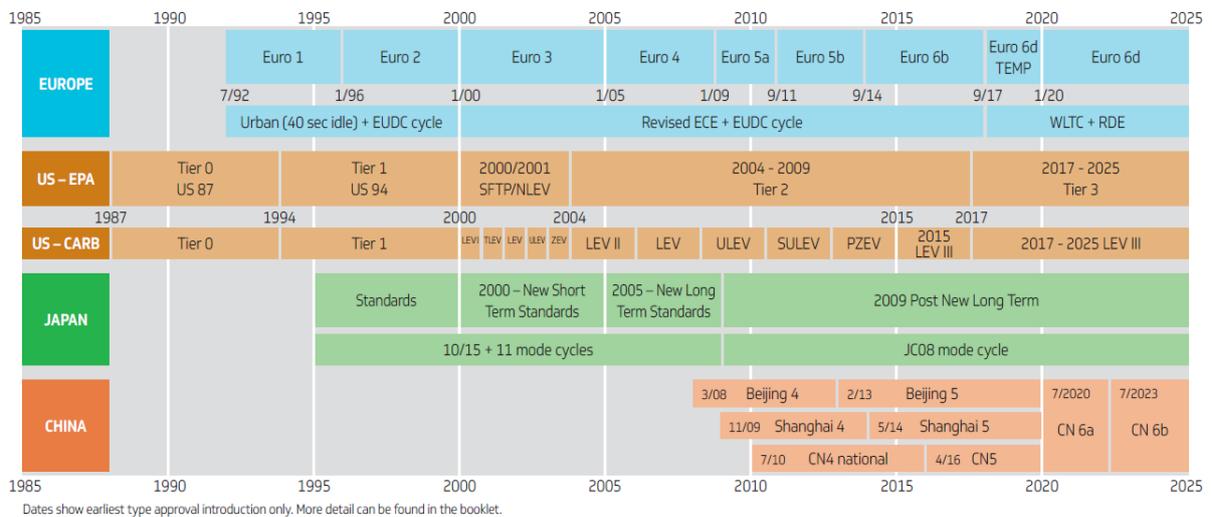
Banned – represents a complete restriction on used vehicle imports.



UNEP report, 2020



The table below gives an overview of the application of emissions standards in some of the highly regulated markets:



TIMELINE – TOXIC EMISSIONS STANDARDS PASSENGER CARS

Source of the table: Delphi Worldwide Emission Standards 2020–2021 Passenger Vehicles and Light Duty Vehicles

The UNEP 2020 report gives a unique overview of the Africa regulations. Pre-shipment inspection programs for used vehicles are run in several countries, for the Japanese pathway, notably East Africa and Southern Africa. These are run by the Standard Bodies, such a KEBS – Kenya, TBS – Tanzania, UNBS – Uganda.

COMPARISON KENYA, UGANDA, AND RWANDA

The East African sub-region has no harmonised approach to regulate the import of used vehicles (largely from Japan). Most used vehicles are imported through Mombasa in Kenya and, to a lesser extent Dar es Salaam in Tanzania, before they are transported to landlocked countries of Uganda, Burundi and Rwanda.

While Kenya has a maximum used vehicle import age limit of eight years, other countries in East Africa do not. In 2018, the average age of imported used vehicles in Rwanda and Uganda was above 15 years, while the average age of imported used vehicles in Kenya was 7,2 years. Over the years, the average age of used vehicles imported in Uganda has increased from 8,1 to 15,4 years. In 2018 Uganda adopted a 15-year age limit for used light-duty vehicles, and in 2019 Rwanda adopted Euro 4/IV vehicle emission standards. (UNEP, 2020, Chapter 3: Case studies page 68.)

Source: UNEP, 2020 report

5.6. SUMMARY ANALYSIS OF BEST PRACTICE PROCEDURE

The export of used vehicles from Japan to New Zealand and from Europe and the USA to Africa have been analysed. The most qualified procedure is found for the export of vehicles from Japan to New Zealand. The system is well established for more than 30 years and ensures that uncompliant vehicles will not even leave Japan.



This principle is a solid idea. Of all examined procedures for exporting and importing used vehicles, the Japan-New Zealand one is undoubtedly the most developed and established concept. This procedure includes a process that begins in the exporting country to avoid the shipment of uncompliant vehicles by carefully examining them as a base for appraisal and export clearance.

The procedure is then followed with an inspection when the vehicle arrives at the destination port in New Zealand, where the registration process starts. Vehicles are checked based on strict safety and emission requirements. When fulfilled, they can be registered and used on public roads.

The Japan-New Zealand system is the most complete. The scheme relies on decades of experience of all stakeholders: exporting and importing authorities and a network of service providers who participate in the different steps in the process. The procedure includes various physical inspection levels, depending on the status and condition observed in the first test stage e.g. if the vehicle shows signs of severe damages, it must be examined with a more careful and deeper inspection and be repaired when necessary before registration.

The general summary of the Japan-New Zealand procedure should be the long-term vision for the African countries as it includes a well-developed process with activities in the whole chain from Japan to New Zealand.

6. ANALYSIS OF EXISTING VEHICLE DATA PLATFORMS ON AN INTERNATIONAL LEVEL

6.1. INTRODUCTION

The first step of the project's activity 1 aims to identify and analyse existing data platforms for information exchange of vehicle-specific data. The VIN is the key to accessing the necessary information as the unique Vehicle Identification Number.

6.1.1. VIN MARKING, VEHICLE IDENTIFICATION NUMBER

In most countries, each vehicle must be identified with a 17-character number before leaving the factory. That identification is referred to on the vehicle registration document. The VIN (Vehicle Identification Number) is a standardised serial number used to trace each unique vehicle and some of its parts throughout its lifespan. It is marked on various vehicle components during its assembly so that it can be identifiable at every "stage" of its existence, including registration, insurance, inspection, import and resale on the second-hand market.

6.2. DATA PLATFORMS IN JAPAN AND NEW ZEALAND

Vehicle data platforms in Japan and New Zealand have not been evaluated as they are not intended for foreign use.

6.3. DATA PLATFORMS IN EUROPE

The analysis includes the following data platforms: EUCARIS, ETAES, DETA and Electronic CoC.



6.3.1. DETA

DETA is the “Database for the Exchange of Type-Approval documentation” and is currently hosted by Germany on behalf of the UNECE. Access to DETA is currently limited to Contracting Parties (CP) having signed the 1958 agreement (for the time being and until this decision is revised by WP.29) and manufacturers as approval holders. The DETA database is currently under development.

Technically, the system is not very complex from the user side. Basically, it is a document management tool that links “parameters” with PDF files together with an elaborated access rights structure. It serves the purpose of Type-approval, so the “parameters” defined are those that can identify a manufacturer, a vehicle type, approval numbers and dates.

As the Type-approval System is evolving, DETA is used for additional purposes that will increase in the near future:

- DETA is in operation for the exchange of type-approval among countries for two years already.
- Access to DETA is organised via the national Single Point of Contact notified to the UNECE secretariat by the Contracting Party.
- DETA started to be used by the Type-approval Authorities (very recently) for the exchange of information and methodology regarding UN Regulation 155 on Cyber Security.
- Parts and vehicles holding type-approval under various UN Regulations are marked with mandatory approval marks. The Regulators together with the industry, discussed the idea to replace many of these numerous marking by a reference number called “Unique Identifier”. Having access to DETA will allow more information about a vehicle, once this feature is used.
- WP.29 took over the concept of whole vehicle type-approval from Europe with Regulation 0. It is the Regulation of the International Whole Type-approval for vehicles, and it will be advantageous and important for non-European countries in the very near future. In that context, the database will contain the Declaration of Conformance (DoC document) that includes, for a vehicle type, all approval numbers and the concerned VINs. It will allow non-European countries to gain access to VIN related information.
- Software Numbers were very sensitive issues in the past because they were not very transparent. UN Regulation 156 developed a concept called RxSWIN which is a Software Number for a given regulation (Regulation No. X). So R152SWIN is the software number for the AEB system. R83SWIN is the software number for emissions, etc. It is currently discussed how to store RxSWIN in DETA and if this is optional. That will allow verifying the right software is installed in used imported vehicles.

The setup and the further developments of DETA at UNECE are a very complex and slow process because it involves funding by the United Nations Member States and regulatory amendments. In any case, DETA is invaluable and will be even more; once it is fully operational, it will be a unique source of information.

6.3.2. EUCARIS

EUCARIS European Car and Driving Licence Information System.



The legal basis for the exchange of vehicle information is the EUCARIS Treaty (WWW-2) and the Directive 1999/37/EC. This legislation allows vehicle information to be requested by the Member State of Registration of the vehicle. Registration authorities may need that information in the context of re-registration of vehicles, and enforcement authorities may do this to carry out their enforcement tasks.

Objectives for the exchange of information are:

- Ensure that vehicles are correctly licenced and/or registered for use on the road;
- Holding accurate vehicle data that can be used in relation to the investigation and prosecution of offences.
- Fight vehicle-related crime.
- Exchange information rapidly (online, real-time).

EUCARIS has been developed by and for governmental authorities. It provides opportunities for countries to share their vehicle and drive licence registration information and other transport-related data within multiple judicial frameworks.

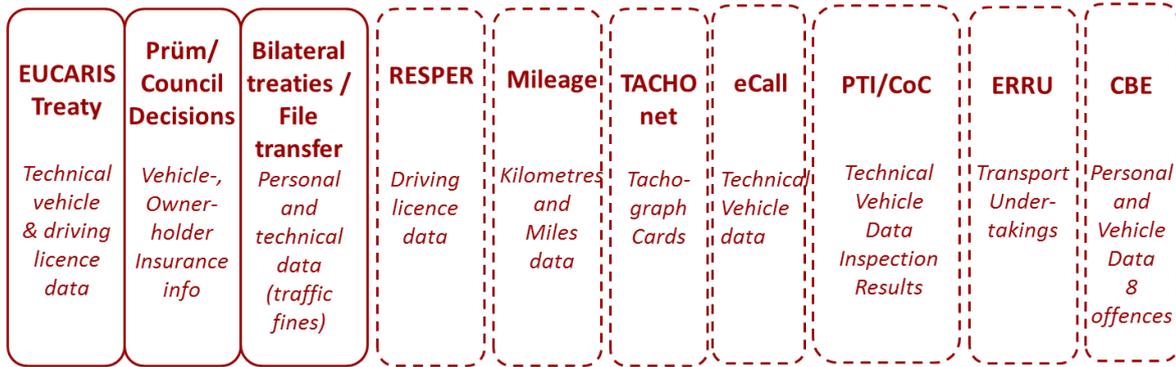
It started in 1994 as a cooperation among national registration authorities to fight international vehicle crime and driving licence tourism utilising exchanging vehicle and driving licence information between its members. This cooperation has been formalised in the multilateral EUIS Treaty. EUCARIS has been a success as up to 6.000 stolen vehicles have been retrieved yearly, with a relatively low Member States' administrative load.

EUCARIS offers countries that have concluded bilateral treaties related to road safety the possibility to exchange information on traffic violations.

The recent discussions about internationally providing data for the execution of the periodical technical vehicle inspection (PTI), the international information collection about inspection results and supporting the exchange of Certificates of Conformity (CoC) and mileage data will benefit from the economies of the EUCARIS technology.

EUCARIS is ready to facilitate more forms of international information exchange within the transport and mobility sector. New applications running on the existing EUCARIS technology can be developed, as long as they fulfil the goals set out in the appropriate legal frameworks – whether bilateral, multilateral, European Directives or Council Decisions. This prevents the Member States from investing in building new systems and creating new networks. It also allows Member States to rapidly anticipate new developments and extend their data exchange with other countries in a secure, cost-efficient, and centralised manner.

EUCARIS wants to avoid that new systems must be developed every time a new agreement, treaty, Directive, or other measure comes into force or whenever a new user group or functionality is created.



EUCARIS generic framework/technology/basic system:
 authorisation, encryption, signing, logging, routing, MCI, queuing, retry, helpfiles, translation, statistics

The general layout of modules and content in EUCARIS.



Countries connected to EUCARIS.

VHInfo



Countries connected to module VHInfo of EUCARIS

EUCARIS does not make use of a central European database. Instead, each country is responsible for its own register and registration procedures. As such, other governmental institutions should request vehicle-related information from other countries to their national registration authority.

Therefore, the national registration authority becomes a central hub in the information exchange with other EUCARIS member states. EUCARIS only facilitates communication between national registration authorities and helps coordinate the international demand for information from and for public instances such as police, customs, tax offices, registration offices, and others.

A member state can, for example, check in EUCARIS if an imported vehicle has been reported stolen in another country; or if the vehicle should not have been scrapped, or have another colour.

The main advantages of EUCARIS:

- Combating vehicle crime and driving licence tourism since 1994.
- A proven system that operates very well.
- Central role for registration authorities on national and international level.
- One basic system facilitating different flows of information.
- System in use in all 27 EU member-states as of 2013.
- A secure system that can easily be implemented in new Member States.
- Low investments to join.
- New applications and functionalities are easy and fast to deploy.
- Through joint peer development EUCARIS offers a lower-cost route to the capability than other options.



The system's technical side: EUCARIS facilitates and secures all exchange of information through different applications that run on one basic technology. A multilingual web client enables administrative personnel, police officers, and others to send their enquiries to other countries via their web browser. It is also possible to make a customised application that can, for example, be directly built-in police vehicles.

The so-called core application of EUCARIS is responsible for the secure handling and communication of the messages. EUCARIS makes use of the European Union's s TESTA network and is compliant with the European Commission IDABC requirements.

As of 2013, all 27 Member States of the European Union will be using EUCARIS within the framework of Council Decisions 2008/615/JHA and 2008/616/JHA and therefore dispose of the basic EUCARIS technology. Countries wishing to use EUCARIS for international information exchange within a different legal framework can ask the EUCARIS Participants' Board to allow them to use EUCARIS technology. New utilities can be added to the basic EUCARIS system, and the unique, joint funding of new developments guarantees users a lower-cost solution than can otherwise be obtained.

The EUCARIS service with which vehicle technical and registration information is exchanged is called the Actual Vehicle Information (AVI) service.

The AVI service supports three different search requests to identify a vehicle:

- Request by Vehicle Identification Number (VIN).
- Request by licence plate number.
- Request by vehicle registration certificate identification number (is also called 'document id').

All requests result in a response message containing the vehicle technical data and vehicle registration data of the vehicle found. Basic vehicle information consists of the following data:

- Vehicle registration data.
 - First registration date or age of the vehicle.
 - Start date and end date of registration.
 - Registration certificate information.
 - Information about PTL.
 - Vehicle signals (or vehicle status), such as 'Stolen', 'Destroyed', or 'Seriously Damaged'.
- Vehicle technical data.
- Vehicle mileage data.

Member States must provide the minimum set of vehicle technical data as listed in Directive 1999/37/EC. They may also include additional information. A Member State shall strive to provide all data it has recorded in its national vehicle register.

The vehicle technical data section contains all vehicle data, defined in legislation on Certificate of Conformity and/or type-approval. The amount of data a Member State is able to provide, depends on the amount of data it records and keeps up to date during the lifecycle of the vehicle registration.



6.3.3. ETAES

ETAES: European Type-approval Exchange System. It is the database that contains the information of the European Union type-approval.

ETAES is currently under revision; the European Commission has published a draft implementing regulation on the European Type-approval Exchange System. It lays down rules on the online data exchange and EU type-approvals notification under Regulation (the EU) 2018/858 (the new European vehicle type-approval framework regulation).

The expected launch date of the new system is September 1st, 2022. The draft Commission Implementing Regulation implementing the system is available in the footnote⁷. Point 29 of the draft Regulation requires that Member States should provide type-approval documentation in electronic format.

ETAES may be considered as the EU version of DETA.

6.3.4. ELECTRONIC CERTIFICATE OF CONFORMITY

According to the framework Directives 2007/46/EC, 2003/37/EC and 2002/24/EC vehicle manufacturers have the obligation to deliver, at first registration of a vehicle in one of the EU countries, a so-called certificate of conformity (CoC). This CoC currently is a paper document, specified in the framework Directives, which proves that the vehicle is produced in conformity with an issued type-approval and eligible for a first registration.

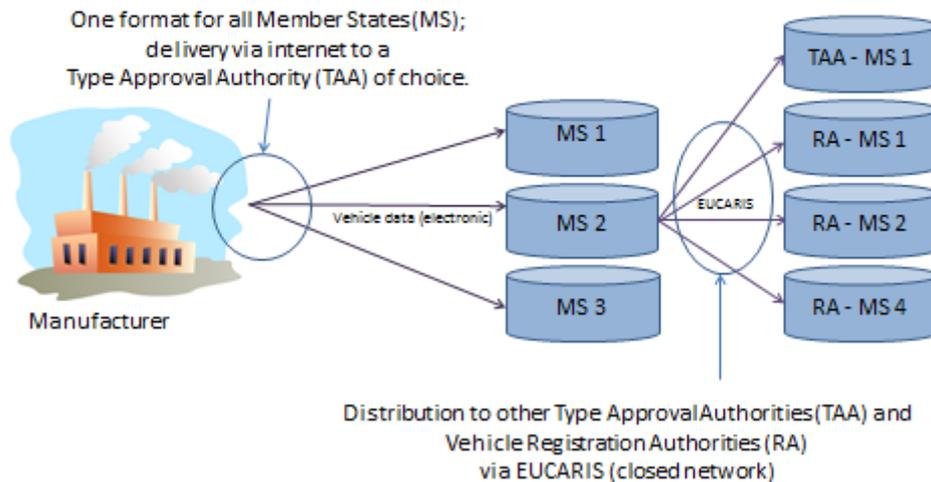
Several years ago, the EReg⁸ member states, in cooperation with the Type-Approval Authorities Meeting (TAAM) and ACEA/ACEM (manufacturers), started a pilot project to implement the CoC's electronic delivery.

The overall concept is simple. First of all, to undertake the CoC data exchange between manufacturers and member states using one harmonised digital layout. In addition, manufacturers are allowed to deliver their digital CoCs to their choice's European type-approval authority. From there, the information is forwarded to the type-approval authority that issued the underlying type-approval and to the registration authorities of the country of destination of the vehicle. For the information exchange, authorities use the EUCARIS system, which already is operational in all EU countries for several purposes.

⁷ https://members.wto.org/crnattachments/2020/TBT/EEC/20_4185_00_e.pdf

⁸ EUCARIS = European CAR and driving licence Information System (<https://www.eucaris.net/>)

Delivery and distribution of the electronic Certificate of Conformity



The benefits of an electronic CoC are multifold. First of all, it is expected a substantial reduction of costs for the EU registration authorities since electronic delivery allows for fully automated processing of the CoC data. Automated processing of electronic certificates will also allow for storage of more data than those needed to fulfil the requirements of Directive 1999/37/EC (the data of the vehicle registration document), creating more flexibility and the possibility to transfer the data of the certificate to another member state at re-registration.

Moreover, as a result, there is no need for the citizens to save the paper certificate for a possible future export of their vehicle. The administrative burden for the EU citizens is expected to decrease even further in the near future since electronic data availability allows for the set up of e-services enabling the vehicle owner to apply for a vehicle licence.

It is also expected a substantial reduction of costs for the industry, where the costs for the production of paper documents, including measures to prevent forgery and the costs coming with the logistics needed for the distribution of the document, is estimated at several euros per certificate.

Next to that, the security and irrefutability of the CoC data are improved by the use of electronic certificates. Manufacturers will have to add an electronic signature that can be preserved integrated into the stored CoC. The signature guarantees the integrity of the data, e.g. for CO₂-monitoring and tax purposes.

Finally, the use of electronic CoCs will allow type-approval authorities to check the delivered data and, if applicable, reject the certificate and ask for a corrected version. By this, the quality of the vehicle registrations in Europe will increase.

Source: www.ereg-association.eu

6.3.5. EXAMPLES OF SOME EUROPEAN COUNTRIES

Some European countries already share available data on their registered vehicles. This section gives examples for The Netherlands, Poland, and Latvia.

THE NETHERLANDS

The Netherlands makes available data on their registered vehicles through the website of the public agency RDW⁹. Scrolling down on the main webpage¹⁰, it is possible to include the registration plate number of any Dutch vehicle in the appropriate field:



The available data in the system, in Dutch so far, are comprehensive:

| | | | |
|----------------------|---------------------------|---------------------------------|--|
| MITSUBISHI | | Vul hieronder uw kenteken in: | |
| MITSUBISHI OUTLANDER | | <input type="text" value="NL"/> | <input type="button" value="Gegevens opvragen"/> |
| 4-TLZ-23 | | | |
| Basis | Motor & Milieu | Technisch | Fiscaal |
| Algemeen | | | |
| J | Voertuigcategorie | Personenauto (M1) | |
| | Carrosserietype | Stationwagen (AC) | |
| | Inrichting | stationwagen | |
| D.1 | Merk | MITSUBISHI | |
| D.2 | Type | CW0 | |
| D.2 | Variant | GGP21 | |
| D.2 | Uitvoering | ATABRRA5AAAA | |
| R | Kleur | Zwart | |
| D.3 | Handelsbenaming | MITSUBISHI OUTLANDER | |
| K | Typegoedkeuringsnummer | e1*2001/116*0406*19 | |

It is possible, among others, to obtain the approval number that leads to the technical features of the vehicle when manufactured, the emissions level, data of first registration,

⁹ www.rdw.nl

¹⁰ Screenshots of this section taken on Feb 5, 2021

date of the first registration in The Netherlands, whether the vehicle has been stolen or exported, recall campaigns, emissions level, and date of inspection.

POLAND

Poland also makes available data related to the vehicles registered in that country¹¹. The website is in English and requires three data to access the information: registration plate number, VIN, and date of first registration.



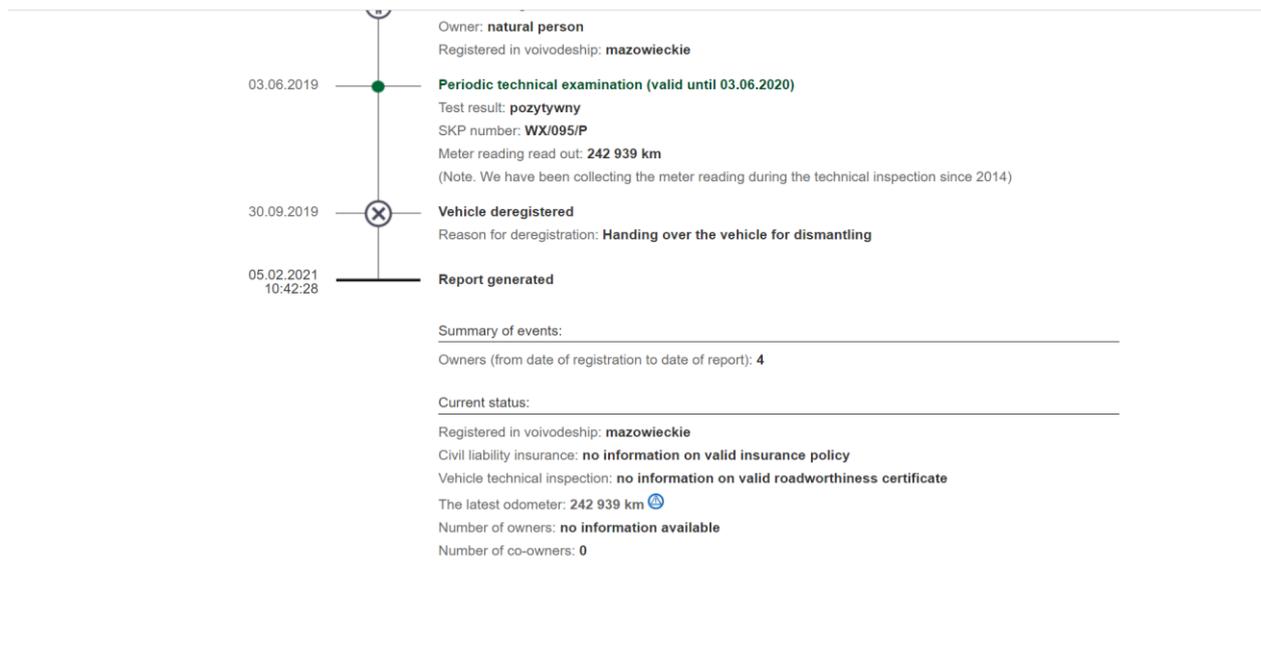
The screenshot shows the website interface for entering vehicle registration data. The browser address bar displays <https://historiapojazdu.gov.pl/strona-glowna>. The page title is "HistoriaPojazdu.gov.pl Free Report from the Central Vehicle Register".

The main form area contains the following fields and options:

- Registration number:** Input field with "AB1234" and a link "Where can I find this?".
- VIN:** Input field with "ABC123456789DEF" and a link "Where can I find this?".
- Date of first registration:** Input field with "dd.mm.rrrr" and a link "Where can I find this?".

A large blue button labeled "Check the vehicle »" is positioned below the form fields. To the right of the form, there is a video player showing a thumbnail for "BAZA CEPIK" and several links: "See a sample report »", "About this service »", and "Use our other online services »".

The following snapshots show the kind of available information:



¹¹ <https://historiapojazdu.gov.pl/>



LATVIA

In Latvia, the public agency CSDD has information available online¹². Access is only possible with a Latvian national identification number and using their national language.

6.4. DATA PLATFORMS AND TITLE DOCUMENTS IN THE USA

Reference meeting: American Association of Motor Vehicle Administrators (AAMVA)

In the United States, what is called a “Title” is a document issued, either maintained electronically or printed on secure title paper, by each jurisdiction displaying information about the vehicle, ownership, lienholder information, and brand, or designations.

The content of the “title” is relatively standard but AAMVA published a best practice to support jurisdictions in the process of increasing consistency in branding and designations on titles between the US jurisdictions. It is an important document for importing countries to obtain information about the vehicle’s status. The title describes whether the vehicle was exposed to, for example, a collision, fire, flood or the like that may affect its ability to continue to be used for traffic.

Today, there is no unified public service that gives third parties access to this information, and the only option is to rely on the vehicle’s paper documents. Nevertheless, various private service providers may provide some access to data.

The National Motor Vehicle Title Information System (NMVTIS) is designed to protect consumers from fraud and unsafe vehicles and keep stolen vehicles from resold. NMVTIS is also a tool that helps states and law enforcement deter title fraud and other crimes.

NMVTIS Contains:

- Vehicle Identification Number (VIN)
- Title Information (Current/History).
- Current State of Title (CSOT).
- States of title’s historic (SOT).
- Title Issue Dates (Current/History).
- Odometer reading (when titled) (Current/History).
- Brand History (NMVTIS brand codes).
- Whether the vehicle has been reported by an entity (other than a state) as being junk/salvage under NMVTIS regulations¹³.
- Name/address/contact information of entity that submitted the report on the VIN
- Date the vehicle was obtained by the entity.

¹² <https://e.csdd.lv/>

¹³ The NMVTIS definitions for junk/salvage/total loss vehicles are not necessarily the same as those of a state.



- The disposition of the vehicle once it came into the possession of the entity (Scrap/Crush/Salvage (insurance, total loss only) or sold - If Sold – the name/address/contact information of the purchaser.
- Whether the vehicle was intended for export Y/N.

AAMVA published a best practice, Salvage and Junk Vehicle Best Practice¹⁴, to assist the jurisdictions in gaining additional consistency as it relates to branding and designations. An excerpt from the document states:

“Through years of input and discussion with members and stakeholders, the Vehicle Standing Committee of the American Association of Motor Vehicle Administrators (AAMVA) identified inconsistencies across US jurisdictions in the way vehicles are identified and branded as salvage or junk.

The broad variances in the current jurisdictional laws and rules may create opportunities for unsafe vehicles to be titled, rebuilt, or repaired in jurisdictions with fewer requirements.

As a result, these vehicles can go unbranded in accordance with one jurisdiction’s laws and may or may not be properly repaired or rebuilt following another jurisdiction’s laws. As such, these vehicles may be susceptible to safety risks and fraud.

Furthermore, financial repercussions may impact consumers and financial institutions when title brands do not properly get carried forward, are removed, or not honoured when a vehicle moves to a new jurisdiction.

In response, AAMVA empowered a working group of jurisdiction members to develop a best practice for the titling and branding of damaged, wrecked and totalled vehicles to support and encourage consistency in this process, deterring and impeding consumer fraud and deceptive practices while enhancing roadway safety.

Consistent titling and branding of damaged, wrecked, and total loss vehicles can reduce consumers’ risk. Vehicle purchasers may encounter less unexpected safety or fraud risks when jurisdictions have implemented the standards for consistent titling and branding of these vehicles outlined in this best practice.”

The best practice document was developed to provide consistent and standard terminology, beginning with recommended definitions, which are a foundational component of the best practice.

Source: AAMVA Salvage and Junk Vehicle Best Practice Recommendations for Jurisdictions on Branding and Handling Salvage, Rebuilt Salvage, Junk, and Flood-Damaged Vehicles.

AAMVA SALVAGE AND JUNK VEHICLE BEST PRACTICE DOCUMENT

The best practice document indicates the recommendations within the document are intended to:

¹⁴ <https://www.aamva.org/SalvageJunkVehicleBP-December2019/>



“enhance existing laws and rules or to assist with creating laws and rules for use by jurisdictions. Full participation in NMVTIS is encouraged and may foster creative solutions to capture vehicle damage history information from other sources when vehicles are uninsured, self-insured, or covered by liability-only insurance. The objectives of this best practice include:

- *Establish consistent salvage, junk, flood-damaged, and rebuilt salvage definitions.*
- *Gain consistency with the terminology used for salvage, junk, flood damage, and rebuilt salvage vehicles in all jurisdictions and the vehicle industry.*
- *Encourage the appropriate branding of vehicles as salvage (repairable) or junk (non-repairable).*
- *Increase consumer protection and awareness.*
- *Increase the safety of repaired and rebuilt salvage vehicles through adequate inspections.*
- *Increase the detection of stolen vehicles and stolen parts in repaired and rebuilt salvage vehicles.*
- *Promote the use of NMVTIS.*
- *Promote the use of consistent branding and reporting practices across jurisdictions and industries.*

Encourage jurisdictions to discontinue allowing junk (non-repairable) vehicles to be repaired for on-road use.”

The following definitions are recommended within the best practice for all jurisdictions to adopt to establish and gain consistency across the US. This may require jurisdictions to make statutory or regulatory changes to implement the recommended definitions and recommendations within the document. The published document states *“the recommendations within this best practice are based on these foundational recommended definitions.”* The definitions published in the AAMVA best practice are shown below, but it should be noted that all US jurisdictions do not have consistent definitions in place:

SALVAGE VEHICLE

“That has sustained sudden damage, capable of being safely repaired, to the extent the vehicle: is declared a total loss by an insurance company, or repairs exceed 75% of the value of the vehicle immediately before the damage occurred; or has damage to the body, unibody, or frame to the extent it is unsafe for operations. That is obtained as a source of parts or for the purpose of scrapping or dismantling. Brand or Designation

The term “salvage” should be applied to a salvage vehicle.”

JUNK OR NON-REPAIRABLE

“A vehicle that is damaged or wrecked to the extent that it cannot be repaired for operation on a public road; or only of value as a source of parts or scrap metal, or flood damaged (as the term is defined later).

For the purposes of this document, “junk” and “non-repairable” are synonymous.

A vehicle that has been branded junk cannot be repaired or rebuilt for on-road use. The Vehicle Identification Number (VIN) is null and void for the purposes of titling for on-road use.”



FLOOD- OR WATER-DAMAGED

“A vehicle that has been submerged in water to a point the level of the water is higher than the door sill of the vehicle or had water enter the passenger, trunk, or engine compartment of the vehicle, and had water come into contact with the electrical or computer components of the vehicle.

Flood-damaged vehicles should be considered junk. In addition to applying “junk,” the term “flood damage” should be applied to a flood- or water-damaged vehicle.”

REBUILT SALVAGE VEHICLE

“A vehicle, previously branded or designated “salvage”, which has been repaired or rebuilt and has passed applicable inspections and requirements to ensure the vehicle was repaired or rebuilt to required standards. For the purposes of this document, “rebuilt salvage” and “prior salvage” are synonymous.

The term “rebuilt salvage” should be applied to a rebuilt vehicle. Using this term makes it evident to a consumer that a vehicle was subject to a salvage event and has been repaired.”

FOR EXPORT ONLY VEHICLE

“A vehicle that is a salvage or junk vehicle that has been sold for export outside of the United States; or reported as exported outside of the United States.”

The NMVTIS report content is explained below¹⁵

“A NMVTIS Vehicle History Report is intended to only provide data on five key indicators associated with prevention auto fraud and theft.

1. Current State of Title and Last Title Issue Date

Verifying the validity of the paper title document helps prevent auto fraud and theft.

2. Brand History

Brands are descriptive labels (applied by the state motor vehicle titling agencies) regarding the status of a motor vehicle, such as “junk,” “salvage,” and “flood.” NMVTIS keeps a history of brands that have been applied to the vehicle by any state or US. Department of Transportation. Brand information helps protect consumers from purchasing a damaged vehicle that is presented for sale without disclosure of the vehicle’s real condition. Without knowing the brand history, a consumer may pay more than a vehicle’s true value or purchase a vehicle that has not been adequately repaired and is not safe to drive.

¹⁵ https://vehiclehistory.bja.ojp.gov/nmvtis_understandingvhr#yaunhd

3. Odometer Reading

The crime of odometer fraud may result in a consumer paying more than the vehicle's fair market value or cause the consumer to purchase an unsafe vehicle. Also, checking the odometer reading helps consumers to identify discrepancies in the vehicle's history.

4. Total Loss History

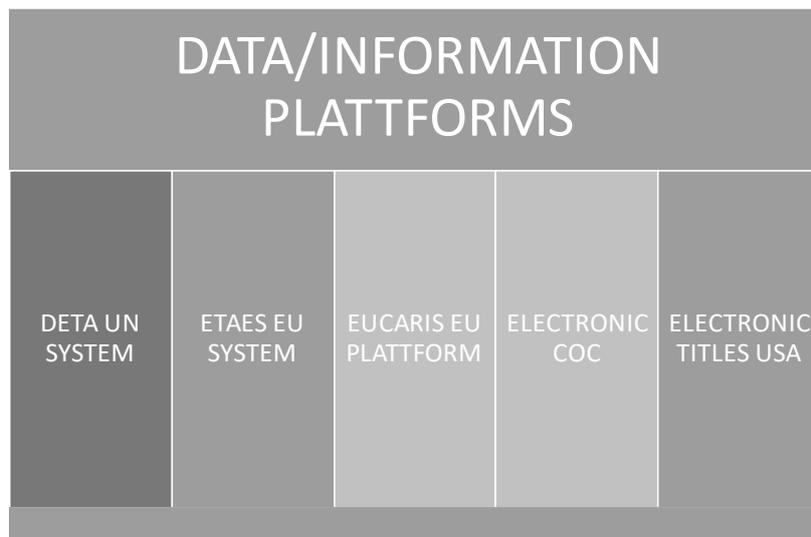
When a vehicle has been deemed a total loss, generally the vehicle has had severe damage. Knowing whether a vehicle has been declared a total loss helps consumers avoid purchasing a potentially unsafe vehicle."

5. Salvage History

Like a vehicle with a total loss history, a vehicle that has a salvage history has had severe damage. Salvage history helps consumers avoid purchasing a potentially unsafe vehicle.

6.5. ANALISIS AND SUMMARY OF EXISTING PLATFORMS

All of the following platforms are of the interest on an International Level, based on their content and availability over a broader use than only national use.



Analysis of best practice procedures and data/information system: The analysis approach is the requirements that importing countries may place with support for information from exporting countries.



In the following table the content of different data platforms are summarised

| Information content | Roadworthiness PTI | Technical Registration data | No. of Type-approval | Type-approval details | COC | Vehicle history damages etc., |
|---------------------|--------------------|-----------------------------|----------------------|-----------------------|-----|-------------------------------|
| EUCARIS | * | * | * | (*) | * | |
| DETA | | | | * | (*) | |
| ETAES | | | | * | (*) | |
| Electronic COC | | | | (*) | * | |
| Electronic Titles | | | | | | * |

: Present content (): Planned content

Of the systems described, the focus of the analysis has been on DETA, EUCARIS and the electronic CoC supplemented with the information on the USA's electronic title. Other national systems are not considered to be a basis for broader international use.

The proposed information system should be able to meet the individual needs of various African countries.

As previously mentioned, there are already several different national requirements, such as the age of the vehicle, emission class and safety aspects.

A proposed system should meet the needs of different countries in a simple and easily accessible way.

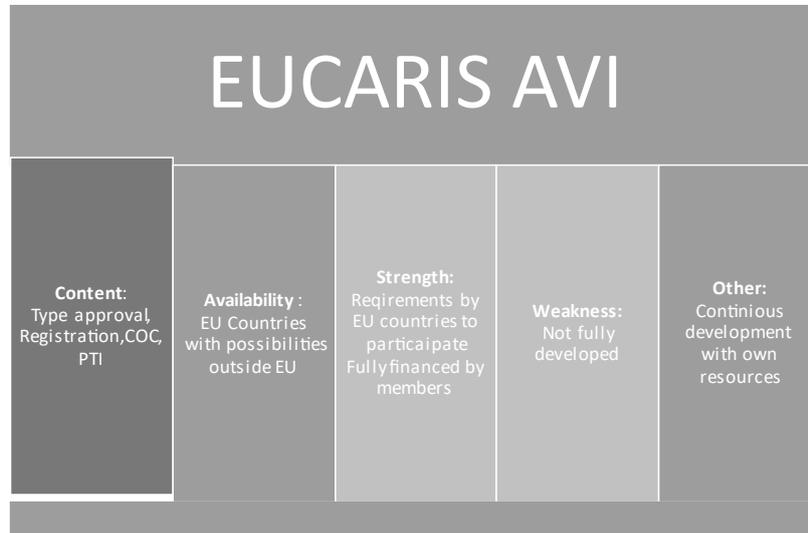
Of the systems studied that can be provided access to a wider range of users on an international level in the near future, EROCARIS appears to be the closest and most accessible, and it may be completed with the information contained in DETA or the electronic CoC.

The main reasons to propose an EUCARIS-like platform are:

- It is a platform designed to facilitate the interchange of information between registration authorities, and therefore aiming to the purpose of this project.
- The availability of vehicle data for EU vehicles is satisfactory: the scheme is proven.
- The platform would very well be suitable for a broader use from an international perspective, which is fully in line with EUCARIS intentions.
- EUCARIS is not a system but rather a platform or hub for data integration wherever it comes from.



- At the moment of registration, DETA may be linked to EUCARIS to make sure that vehicle approval information will be available in later stages



7. SWOT ANALYSIS OF A PROPOSED INFORMATION SYSTEM

This section includes four of the information systems identified that may be considered in developing a worldwide frame to facilitate reliable information of used imported vehicles: EUCARIS, ETAES/Electronic CoC, DETA and private data supplier.

Other sources of information, like those at a national level described in section 6.3.5 are referred to as illustrative examples of what might be available with the exporting country's commitment. Their operability is limited since the scope of those sources of information is restrained in the country. An international proposal based on exploring the availability of data at the national level would become very complex.

7.1. EUCARIS

STRENGTHS

- VIN based.
- Platform for integration of new applications and users.
- In use since a long time and therefore proven.
- Many daily users.
- Quick response time.
- A self-financed consortium.
- Strategic decision to invite members outside the EU.
- Vehicle data may be updated: modifications and validity of inspection.

WEAKNESSES

- All EU countries do not supply all types of information yet.
- EU conceived, access to third parties still to be developed.



- The linkage to the Prüm Treaty may difficult the expansion out of the EU.

OPPORTUNITIES

- Platform for further development of XML-applications: expandable by conception
- Many paying users and new paying users will increase the possibility for further development.
- Already used for other kinds of communication, like driving licenses or fining of foreign drivers.
- Potential for additional benefits: control of stolen vehicles.
- The information may be parametrised to obtain automatic assessments, i.e., the system may automatically determine whether the vehicle intended for registration fulfils the requirements by the importing country.

THREATS

- Objections and arguments that it is just a European platform.
- The role of non-EU countries in the governance of the platform to be defined.
- Since it is the EU-based, the fulfilment of the General Regulation of Data Protection – GRDP.

7.2. ETAES/ELECTRONIC COC

STRENGTHS

- In use within the EU.

WEAKNESSES

- EU focused on the conception.
- Information arranged according to the definitions of the EU type-approval scheme.
- The information is available by vehicle types, not by VIN.
- Information arranged for approval, not for registration.

OPPORTUNITIES

- Under revision thanks to the electronic CoC.

THREATS

- Objections and arguments that it is just a European platform.
- The role of non-EU countries in the governance of the platform to be defined.

7.3. DETA

STRENGTHS

- Within the UNECE: worldwide by definition.
- With the input of WP.29 that hosts the two international Agreements for new vehicles: 1958 and 1998, and the one for vehicle inspection: 1997.
- Well defined governance for all UN countries.

WEAKNESSES

- Information arranged for approval, not for registration.



- Under development: not yet fully proven.
- Whereas DETA is the most worldwide scheme, it cannot yet be considered universal.

OPPORTUNITIES

- Under development: it may be adapted to the needs of used-vehicle importers.
- Possible to be developed and fine-tuned along with the UNECE Regulation 0 – international whole-vehicle type-approval.

THREATS

- Difficulties for financing and managing the development.

7.4. PRIVATE DATA SUPPLIERS

Jurisdictions like the United States do not currently foresee arrangement governmental entities to provide vehicle data in the case of used exported vehicles. Nevertheless, their systems allow private providers facilitate provision of data on vehicles, including the exported ones.

STRENGTHS

- Already up and running.
- Proven efficiency.
- VIN based.

WEAKNESSES

- Not a governmental source.
- Tuned for commercial aspects of vehicles rather than compliance.

OPPORTUNITIES

- If the right business case is set, expandable to other regions in the world.
- If the right business case is set, the adaptation to the requirements of the international movement of used vehicles may be undertaken in a fast and efficient way.

THREATS

- Risk of non-affordable costs.
- Quality assurance.

8. CONCEPTUAL PROPOSAL OF AN INFORMATION-SHARING MODEL

Sources for information on an international basis for both short-and long-term use by African countries have been investigated and analysed. Information and data needed to fulfil all countries' needs, independently of their own standards and requirements, have three main origins:

- Initial data and information at the time for approval or equivalent in the origin country.
- Actual Vehicle Information about the present status: roadworthiness/PTI.



- If possible, a historical record including information about vehicles eventual severe damages during its lifetime.

A platform that is available and fulfils the three main criteria above is EUCARIS, completed with new vehicles' input of DETA.

EUCARIS has the intention to open the platform to access countries outside the European Union. There is no other system among the analysed schemes that are so close and ready for use. With an established organisation, finances for maintenance and development in place, the authors recommend a more detailed and in-depth discussion of a conceptual proposal to develop the possibility of providing access to countries outside the EU, e.g., African countries.

Key concepts to consider:

- The information is to be managed electronically. Paper documents are not reliable.
- The ideal model:
 - DETA or similar makes available the data of new vehicles.
 - Registration authorities take data from DETA in the moment of the first registration, with the addition of electronic CoC if necessary (too early to define).
 - Registration authorities keep data updated, i.e., in the case of transformation of vehicles that are no longer the responsibility of the OEM.
 - When vehicles are sold abroad, a EUCARIS-like scheme is used to communicate data from the registration authorities of the origin country to the recipient one.
 - To use the last bullet point when the vehicle is further exported.

With the investigations and analyses carried out, it seems evident that there is an excellent potential for creating a better situation and status of imported vehicles to Africa. One should consider that the situation varies a lot in the different regions and countries in Africa, but in general, there is an overall possibility to improve the situation.

To make progress and result in a stepwise approach of implementation would be the way to facilitate acceptance by as many countries as possible. The African countries are non-homogeneous in their requirements regarding the import of used vehicles. Therefore, a step-by-step improvement should be based on the current status of requirements and regulations for the actual county. As a fundamental requirement, it must be considered that used imported vehicles must be traffic-safe with acceptable environmental impact and in roadworthiness condition.

Fundamental requirements regarding, for example, crash safety and emissions are basic information needed to check in the exporting countries. Regardless of the approach and current circumstances, the availability of vehicle data in terms of information for registration and the vehicle's road safety condition is crucial. It is therefore vital to enable better access to information for all importing countries.

There is a potential for improvements in both short- and long-term sight. Best practice of processes, routines, and data access is the base for progress.



The most obvious first step for general improvement, specifically in importing countries where requirements are low or non-existent, is to ensure that every exported vehicle has a valid roadworthy certificate and a certificate of conformity, not today's situation.

The following summary of measures aimed to improve safety and environmental requirements of used vehicles for Africa.

- It is desirable to establish a dialogue on joint responsibility for exporting and importing countries on the vehicles' condition and technical documentation on the vehicle in question.
- In support of shared responsibility, there are general regulations regarding the transport of dangerous goods, the Basel Convention and the ELV Directive.
- With this support, the export/import of vehicles with dubious possibilities to meet safety and environmental requirements can partly be avoided from being subject to shipping.
- The next level is to determine, regardless of the country of origin of the export, whether it is in a condition of roadworthiness and acceptable emissions. This can be done through an available protocol from the last inspection or equivalent inspection of the vehicle in question. It is advisable to limit the validity of such inspection in the time.
- If the vehicle can be deemed roadworthy, an inspection should occur prior to registration in the specific country. When registering, it is important to determine that the vehicle meets the formal requirements for road safety and the environment issued by the country. This refers to the characteristics the vehicle fulfilled when it was once put into service in the country of origin or the exporting country. Particular attention shall be paid to verify that the vehicle has not been modified since the export inspection.
- For the assessment of roadworthiness condition, as well as the basis for assessment on what grounds once the vehicle has been approved, and registered, access to detailed data is required in addition to what appears from the vehicle's registration certificate.
- To ensure reliability, the information should be made available in an electronically secure form.
- There are currently no comprehensive international systems that can meet this today.
- However, there are systems that could form the basis for this, e.g. EUCARIS and DETA.

SUMMARISED PROPOSAL FOR A GENERAL A PROCEDURE FOR FURTHER IMPROVEMENTS

- Eliminate/minimise exports of scrapped vehicles ELV.
- Set minimum requirements for roadworthiness for export PTI.
- Ensure control of the above at the export point.
- Ensure control above at import point.
- Set minimum requirements for import and registration, road safety and the environment.
- Establish electronic access to vehicle data as a basis for registration and thereby take the vehicle into use.
- Establish requirements for periodic technical inspection PTI.



ANNEX 1 – GLOSSARY OF ACRONYMS

AA: New Zealand Automotive Association

AAMVA: American Association of Motor Vehicle Administrators

ACEA: European Automobile Manufacturers' Association

ACEM: European Motorcycle Manufacturers' Association

ATF: Authorised Treatment Facility

AVI: Actual Vehicle Information system

B2B: Business to Business activities

CITA: International Motor Vehicle Inspection Committee

CoD: Certificate of Destruction

CoC: Certificate of Conformity

CoP: Conformity of Production

CP: Contracting Party of any of the WP.29 agreements

CSDD: Ceļu Satiksmes Drošības Direkcija, Latvian Road Traffic Safety Directorate

CSOT: Current State of Title

DG ENV: Directorate-General for Environment of the European Commission

DG MOVE: Directorate-General for Mobility and Transport of the European Commission

DoC: Declaration of Conformity

DTC: Diagnostic trouble codes (OBD)

EC: European Commission

ECOWAS: Economic Community of West African States

EU: European Union

EEA: European Economic Area

ELV: End of Vehicle Life

GAT: Global Auto Trading Co., Ltd

GRDP: General Regulation of Data Protection (EU law)

IDABC: Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens.

ILT: De Inspectie Leefomgeving en Transport, The Netherlands

JEVIC: Japan Export Vehicle Inspection Center

KEBS: Kenya Bureau of Standards



LDV: Light-Duty Vehicle

LHD: Left Hand Drive

LMIC: Low- and Middle-Income Countries

MLIT: The Ministry of Land, Infrastructure, Transport and Tourism, Japan

MS: Member States of the European Union

NIMBY: Not In My Back Yard syndrome

NMVTIS: National Motor Vehicle Title Information System

NL: Netherlands

NZ: New Zealand

NZTA: Waka Kotahi NZ Transport Agency

OBD: On Board Diagnosis

OEM: Original Equipment Manufacturer

PTI: Periodic technical inspection

RDW: Rijksdienst voor het Wegverkeer, State Road Administration of The Netherlands

RHD: Right Hand Drive

SOT: States of title's historic

TAAM: Type-Approval Authorities Meeting

TBS: Tanzania Bureau of Standards

TESTA: Trans European Services for Telematics between Administrations

UN: United Nations

UNBS: Uganda National Bureau of Standards

UNECE: United Nations Economic Commission for Europe

UNEP: United Nations Environment Programme

UNEPA: United Nations Economic Commission for Africa

USA: United States of America

VAT: Value-Added Tax

VIN: Vehicle Identification Number

VINZ: Vehicle Inspection New Zealand

VTNZ: Vehicle Testing New Zealand

WP.29: The UNECE World Forum for Harmonization of Vehicle Regulations

WSR: Waste Shipment Regulation



ANNEX 2 – REFERENCES

CITA RECOMMENDATIONS

Recommendation 19: Anti-Fraud Measures

Recommendation 20: White Paper: Introduction of Periodic Technical Inspection

Recommendation 21: Port-of-entry Inspections

Recommendation 22: Guidelines for Performing an Initial Roadworthiness Roadside Check, with CORTE

Recommendation 23: Guidelines on what Should Lead to more Detailed Technical Roadside Inspections, with CORTE

PROJECTS

Safer and Cleaner Used Vehicles for Africa

<https://www.unep.org/explore-topics/transport/used-vehicles-and-environment/safer-and-cleaner-used-vehicles>

Economic and Safety Considerations: Motor Vehicle Safety Inspections for Passenger Vehicles in Texas

<https://citainsp.org/wp-content/uploads/2019/07/safteyInspectFullStudy-TX.pdf>

Reducing the death toll of road accidents in Costa Rica through the introduction of roadworthiness inspections by the government

<https://citainsp.org/wp-content/uploads/2019/08/SSRN-id3420341.pdf>

Impact study to estimate the economic effects of the introduction of PTI in Turkey

<https://citainsp.org/wp-content/uploads/2017/01/BP159-5.2-v1- Impact-analis-PTI-Turkey-draft-162212.pdf>

Study on the inclusion of light trailers and two- or three-wheel vehicles in the scope of the periodic roadworthiness testing

<https://citainsp.org/wp-content/uploads/2019/02/LO.pdf>

REGULATORY REFERENCES

REGULATION (EU) 2018/858 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of May 30th 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018R0858>

DIRECTIVE 2014/46/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of April 3rd 2014 amending Council Directive 1999/37/EC on the registration documents for vehicles

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2014_127_R_0004



COMMISSION IMPLEMENTING REGULATION (EU) 2020/1812 of December 1st 2020 laying down rules on the online data exchange and the notification of EU type-approvals under Regulation (EU) 2018/858 of the European Parliament and of the Council

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R1812&from=EN>

Waka Kotahi NZ Transport Agency, Importing a Vehicle

<https://www.nzta.govt.nz/vehicles/importing-a-vehicle/>

Swedish Transport Agency Import of Vehicles

<https://www.transportstyrelsen.se/en/road/Vehicles/Vehicle-import-and-verification-of-origin/>

Spain's "Handbook of inspection procedures of PTI inspection sites" – "Manual de Procedimiento de Inspección de las Estaciones ITV." https://www.aeca-itv.com/wp-content/uploads/2021/01/Manual_de_procedimiento_de_inspeccion_de_estaciones_ITV_v7_4_1_COVID19_Rev1.pdf

The Basel Convention

<http://www.basel.int/TheConvention/Overview/TextoftheConvention/tabid/1275/Default.aspx>

The End of Life Vehicle Directive

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02000L0053-20130611&qid=1405610569066&from=EN>

REGULATION (EC) No 1013/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of June 14th 2006 on shipments of waste

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32006R1013>

OTHER SOURCES WITH LINKS:

Used Vehicles and the Environment, UNEP Report, 2020

<https://www.unep.org/resources/report/global-trade-used-vehicles-report>

Used vehicles exported to Africa, ILT, The Netherlands

<https://www.ilent.nl/documenten/rapporten/2020/10/26/rapport--used-vehicles-exported-to-africa>

NMVTIS National Motor Vehicle Title Information System

<https://vehiclehistory.bja.ojp.gov/>

WEBINARS

<https://www.unep.org/explore-topics/transport/used-vehicles-and-environment/safer-and-cleaner-used-vehicles>

CITA Webinar December 16th, 2020

Safer and Cleaner Used Vehicles, 1st Exporters Meeting Webinar December 18th, 2020

Safer and Cleaner Used Vehicles, 2nd Exporters Meeting UN Webinar February 22nd, 2021



ANNEX 3 – MEETINGS WITH STAKEHOLDERS

JEVIC – VINZ, December 15th, 2020.

RDW – EUCARIS. January 13th, 2021.

ILT January 13th, 2021.

DG Enviro -ELV, January 19th, 2021.

UNECE, January 19th, 2021.

UNEP, January 19th, 2021.

FSD-DETA January 21st, 2021.

UNECE, January 25th, 2021.

AAMVA, January 26th, 2021.

RDW-EUCARIS, February 1st, 2021.

Swedish Transport Agency, February 2nd, 2021.

RDW-EUCARIS, February 15th, 2021.



ANNEX 4 – OVERVIEW OF THE TYPE-APPROVAL SCHEME IN THE EUROPEAN UNION

The European Union legal scheme for new vehicles is based on type-approval and mutual recognition between Member States. This annex provides an overview of the process.

Please, notice that this text aims to facilitate the understanding of the process. In some cases, the definitions and concepts are modified for easier comprehension. The explanations have been simplified to describe the most common cases. The complete formal approach can be found in the appropriate legal texts. This summary does not contain the requirements regarding CoP – Conformity of Production or Market Surveillance.

For the purpose of vehicle approval, Norway, Iceland and Liechtenstein, are considered EU countries since they are members of the EEA – European Economic Area.

The approval of a vehicle is the process to guarantee that the “product vehicle” fulfils some technical requirements, primarily related to safety and environmental provisions, that shall be fulfilled to register a vehicle in the European Union.

It is necessary to consider some definitions:

- **Manufacturer:** the person or entity responsible for the approval process in front of authorities.
- **Approval authority:** the governmental body that grants the approval and, therefore, clears the way to register and use the vehicle.
- **Technical service:** organisation appointed by any approval authority to conduct the necessary tests to demonstrate that the vehicle fulfils all the requirements for type-approval.
- **Type-approval:** the approval of a type of vehicle, understanding “type” as a range of vehicles. How to define a type will depend on each of the tested aspects. For instance, a vehicle model with the option of a gasoline engine and a diesel engine may be considered the same type for the crash test but a different type for emissions purposes.
- **Individual approval:** the approval of a single vehicle.
- **Regulatory acts:** the piece of legal text that defines the requirements for a given vehicle’s system, device or component. In the EU context, these are EU Directives, EU Regulations or UNECE Regulations.

HARMONISATION AND MUTUAL RECOGNITION

Type-approval is fully harmonised within the European Union, which is the essential foundation for mutual recognition. That means that type-approvals granted by any approval authority is recognised around the whole European Union.

Each of the approval authorities has the right to appoint the technical service that they consider appropriate. In practice, Member States can recognise technical services from the other Member States or even from abroad.

That is important, in particular, for those countries not having a strong vehicle industry and may not have developed by themselves the necessary facilities for testing.



The main advantages of this approach are:

- Vehicle manufacturers only need a design to fulfil the legal requirement for a large market, as the EU's.
- A type of vehicle is only approved once.
- Countries following this scheme can decide by themselves the level of involvement they want to take from developing the complete testing infrastructure to taking advantage of the work already done in other countries.

APPROVAL ACCORDING TO REGULATORY ACTS

The first part of the process is the approval of a vehicle regarding its regulatory acts. Regulatory acts cover aspects as breaks, emissions, crash behaviour, lamps, rear-view mirrors, noise, electromagnetic compatibility, lamps, glasses, seats, etc.

The legal requirements for those subjects are EU Directive, EU Regulations and UNECE Regulations. Since those last UNECE Regulations are included, that means that the mutual recognition applies beyond the European Union in the case of the approval according to regulatory acts.

In practice, the vehicle manufacturer approaches a technical service and supplies them with the necessary number of units and descriptive documents, which are defined in each of the regulatory act.

Vehicles models may be grouped by type. For instance, vehicles with different bodies but keeping the same powertrain may be considered as belonging to the same type for the approval of brakes. That means that only representative vehicles within that range will be tested after the selection of the “worst-case model”.

Once tests are conducted and fulfilled, the technical service issues a test report that is forwarded to the approval authority. Only those approval authorities that recognise the technical service may be engaged at this stage.

The approval authority, after the necessary administrative checking, releases the approval certificate.

In the case of EU Directives or Regulations, that Certificate shall be admitted by all EU countries. In the case of UNECE, all contracting parties which adhered to the referred Regulation shall accept it.

The process of approval according to regulatory acts shall be repeated for each of the vehicle system, devices and components included in the relevant Regulation. Each of those approvals may be conducted in different technical services or through different approval authorities.

Regulatory acts evolve with time and oblige vehicle manufacturers to improve the performance of their products. They used to have a mandatory date for approval and another one for registration.

TYPE-APPROVAL

Once the vehicle has obtained all the necessary approval according to the regulatory act, it is time for the type-approval. In a nutshell, type-approval is the administrative process by which an approval authority, after the request of the vehicle manufacturer, puts



together all the regulatory act approvals and grants the type-approval to the whole vehicle.

Manufacturers are free to choose the type-approval, irrespectively of the technical services or approval authorities involved in the previous process.

Once the vehicle obtains the type-approval, it can be registered at any European Union country plus Norway, Iceland and Liechtenstein. Third countries are free to recognise the EU type-approval.

REGISTRATION

Vehicle manufacturers issue a document called Certificate of Conformity – CoC for each unit they produce according to the EU system. That document states that unique vehicle fulfils the requirements of the approval at the time of production.

The images on the following page show a sample of actual CoC.

Whereas the precise procedure may change, the registration authorities of each country take into account that CoC for registration.

Registration authorities may require additional information to that shown in the CoC to ensure that the vehicle fulfils all the requirements. That may happen, for instance, when the vehicle has spent some months between manufacturing and registration.



El abajo firmante

Dr. N. Peter

certifica por la presente que el vehículo:

| | |
|--|---|
| 0.1 Marca: | BMW |
| 0.2 Tipo: | 1K4 |
| Variante: | 1C91 |
| Versión: | SH000 |
| 0.2.1 Denominación comercial: | 1er Reihe |
| 0.4 Categoría del vehículo: | M1 |
| 0.5 Nombre y dirección del fabricante: | Bayerische Motoren Werke AG, D-80788 München |
| 0.6 Localización y forma de colocación de las placas reglamentarias: | En el pilar B izquierdo o derecho, remachada, opcionalmente pegada |
| Localización del número de identificación del vehículo: | en el compartimento motor lado derecho |
| 0.9 Nombre y dirección del representante del fabricante: | - |
| 0.10 N° de identificación del vehículo: | WBA |

se ajusta en todos los aspectos al tipo descrito en la homologación e1*2007/46*0283*05 expedido el 2012-02-06 y puede matricularse definitivamente en los Estados miembros en los que la circulación se efectúe por la DERECHA y en los que se utilicen unidades del sistema METRICO DECIMAL para el velocímetro.

MÜNCHEN (Localidad) 30.04.2012 (Fecha)

 Sales Manager (Firma) (cargo)

Cara 1

Constitución general

1. Número de ejes: 2 y ruedas: 4

3. Ejes motores (número, localización e interconexión):

| | | |
|---|-------|---|
| 1 | Eje 2 | - |
|---|-------|---|

Dimensiones principales

4. Distancia entre ejes: 2690 mm

5. Longitud: 4324 mm

6. Anchura: 1765 mm

7. Altura: 1413 mm

Masas

13. Masa del vehículo en orden de marcha: 1385 kg

16. Masas máximas técnicamente admisibles:

16.1 Masa máxima en carga técnicamente admisible: 1840 kg

16.2 Masa técnicamente admisible en cada eje: 1: 875 kg 2: 1055 kg

16.4 Masa máxima técnicamente admisible del conjunto: - kg

18. Masa máxima remolcable técnicamente admisible en caso de:

18.3 Remolque de eje central: - kg

18.4 Remolque sin frenos: - kg

19. Masa vertical estática máx. técnica admisible en acoplamiento: - kg

Unidad motriz

20. Fabricante del motor: Bayer. Mot. Werke AG

21. Código marcado en el motor: N47D16A

22. Principio de funcionamiento: Autoencendido/4 tiempos

23. Eléctrico puro: No

23.1 Vehículo [eléctrico] híbrido: No

24. Número y disposición de los cilindros: 4; en línea

25. Cilindrada: 1598 cm³

26. Combustible: Gasóleo

26.1 Monocombustible

27. Potencia máxima neta: 85.00 kW a 4000 min⁻¹

o potencia continua nominal máxima (motor eléctrico): - kW

Velocidad máxima

29. Velocidad máxima: 195 km/h

Cara 2

Ejes y suspensión

30. Vía de eje/ejes: 1: 1521 mm 2: 1555 mm

35. Combinación de neumático y rueda:

| | | |
|----|----------------|------------|
| 1: | 205/55 R16 91V | 7Jx16/ET40 |
| 2: | 205/55 R16 91V | 7Jx16/ET40 |

Frenos

36. Conexiones de freno del remolque: -

Carrocería

38. Código de la carrocería: AC

40. Color del vehículo: BLANCO

41. Número y disposición de las puertas: 4;2 izquierda, 2 derecha

42. Número de plazas sentadas (incluido el conductor): 5

Eficacia medioambiental

46. Nivel sonoro

Parado: 75.00 dB(A) a velocidad del motor: 3000 min⁻¹

En marcha: 72.00 dB(A)

47. Nivel de emisiones de escape: Euro 5 J

48. Emisiones de escape:

Nº acto reglamentario base y última modificación aplicable: 715/2007*566/2011J

| procedimiento de ensayo | 715/2007*566/2011J | | |
|-------------------------|--------------------|--|-----------------------|
| | Tipo I | Tipo I (Euro 5 J) | Tipo I (Euro 5 J) |
| | Gasóleo/gasolina | | GLP |
| CO: | g/km | 447.3 mg/km | mg/km |
| HC: | g/km | mg/km | mg/km |
| THC: | g/km | mg/km | mg/km |
| NMHC: | g/km | mg/km | mg/km |
| NOx: | g/km | 169.7 mg/km | mg/km |
| HC + NOx: | g/km | mg/km | mg/km |
| THC + NOx: | g/km | 191.0 mg/km | mg/km |
| Partículas (masa): | g/km | 0.13 mg/km | mg/km |
| Partículas (nº): | km ⁻¹ | 0.39 * 10 ¹¹ km ⁻¹ | * 10 km ⁻¹ |

48.1 Coeficiente de absorción de humos corregido: 0.500 m⁻¹

Cara 3