

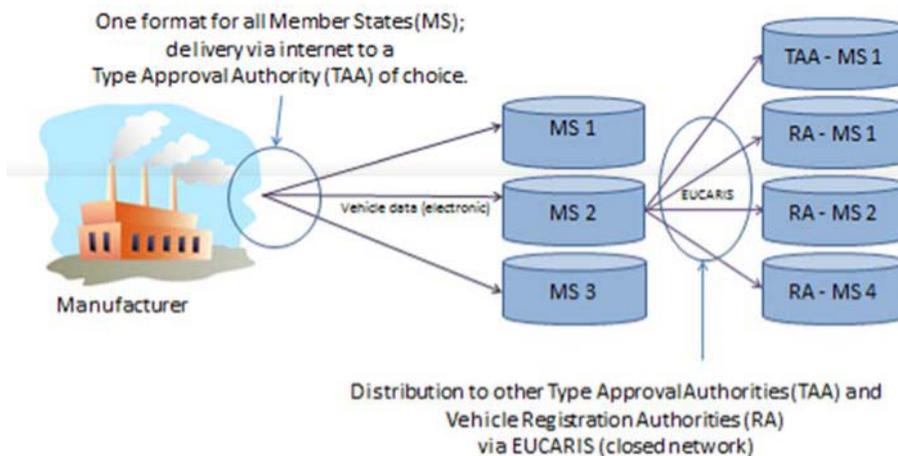
Electronic delivery of the Certificate of Conformity

Introduction of the concept

According to EU legislation (Regulation (EU) 2018/858 and 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. This document proves that the vehicle is produced in conformity with an issued type approval and it is intended to support the first registration.

Several years ago the EReg¹ members, in cooperation with the TAAM (Type Approval Authorities) and ACEA/ACEM (manufacturers), started a pilot project to implement the electronic delivery of the CoC. The overall concept is simple. First of all the exchange of CoC data between manufacturers and Member States is realised by using **one** harmonised digital layout. In addition manufacturers are allowed to deliver their digital CoCs to the European type approval authority of their choice. 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 cross-border information exchange the authorities use the EUCARIS² system, which already is operational in all EU countries for several purposes.

Delivery and distribution of the electronic Certificate of Conformity



¹ EReg = European Association of Vehicle and Driver Registration Authorities (<https://www.ereg-association.eu/>)

² EUCARIS = European CAR and driving licence Information System (<https://www.eucaris.net/>)

Benefits of electronic CoC delivery

The benefits of an electronic CoC are multifold. First of all there is a substantial reduction of costs for the EU registration authorities, since electronic delivery allows for fully automated processing of the data contained in the CoC. Automated processing of electronic certificates also allows for storage of more data than those needed to fulfill 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 anymore, for the citizen to save the paper certificate for the sake of a possible future export of his vehicle. The administrative burden for the EU citizens is expected to decrease even further in the near future, since the availability of electronic data allows for the set-up of e-services enabling the vehicle owner to apply for a vehicle licence.

There is also a substantial reduction of costs for the industry, where the costs for the production of paper documents, including the 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 data contained in the CoC are improved by the use of electronic certificates. Manufacturers will have to add an electronic signature that can be preserved integrated in the stored CoC. The signature guarantees the integrity of the data e.g. for CO₂-monitoring and for tax purposes.

Last but not least the use of electronic CoCs will allow type approval authorities to check the delivered data and if applicable to reject the certificate and to ask for a corrected version. By this the quality of the vehicle registrations in Europe will increase.

The legal base: revision of Directive 2007/46/EC via Regulation (EU) 2018/858

Directive 2007/46 has been revised. For the Member States this was an opportunity to ask for a legal base for electronic delivery of CoCs. As from 2026 the use of electronic certificates will become mandatory. EReg proposed to consider electronic delivery as the rule and to regard paper certificates only as an exception.

The new concept in more detail

The new concept is basically simple. The eCoC system consists of the following elements:

1. CoC database: type approval authorities have set up or will set up a CoC database, able to contain the CoCs of vehicles for the EU market, for which they have issued the underlying type approval. The database has to be able to contain millions of CoCs. Type approval authorities may decide to physically share a database, hosted by one of the parties.
2. Web service for access: type approval authorities give access via internet to this database by means of a web service.
3. Web service for delivery: manufacturers have to set up a web service for electronic delivery of their CoCs. They may choose the type approval authority (address) to which they want to deliver their CoCs.

This is not necessarily the authority responsible for the underlying type approval.

4. Distribution mechanism: the type approval authorities all have a connection to EUCARIS, the European system for the exchange of vehicle and transport related information. A type approval authority that receives a CoC will forward it immediately to the type approval authority that has issued the underlying type approval. For example: all CoCs based on a type approval issued by Germany will be forwarded to KBA, to be stored in the CoC database over there.
5. Local storage: the CoCs will also be forwarded to the registration authority in the country of destination of the vehicle. Registration authorities may store the received CoC, as a copy of the original one in the database of the type approval authority, but they may also incorporate some of the data in their vehicle registration and throw the CoC itself away.
6. Retrieval facility: if the destination is not known (yet) and consequently is lacking in the electronic CoC message, it will always be possible to make an inquiry later on in the CoC database of the type approval authority involved, e.g. during the application for a registration for the vehicle.

The IVI message and versioning

To deliver a digital CoC an EReg/TAAM working group has defined a message, the so-called IVI message. IVI stands for Initial Vehicle Information. The message contains some additional technical vehicle information next to the CoC data. The message may also be used to communicate information on vehicles with an individual approval instead of a type approval.

The dataset included in the CoC and consequently in the IVI message is changed and expanded frequently (at least once a year), due to new technology and new demands reflected in EU legislation. Each change results in a new version of the IVI message, which is indicated in the message itself. The eCoC system will be able to deal with different message versions simultaneously, to guarantee a smooth implementation of changes. More information on the messages used and the data they contain can be found on the website of EReg.

For discussions on future versions of the message and FAQs a forum will be set up.

Digital signature

The IVI message is to be signed with a digital signature (class III certificate). This digital signature guarantees the integrity of the data, meaning that during transport and storage the COC data have not been changed and can be traced back to the responsible person.

Validation and standard error messages

Messages delivered by the manufacturers evidently may contain errors. Therefore different checks are carried out. First of all the structure and format of the IVI message is checked (a so-called XSD check). Moreover EReg/TAAM has developed a plausibility check to examine the content of the message, especially for the relation between certain data elements. Invalid messages are immediately rejected and cannot be delivered at the web service of the recipient authority. All authorities will use the same validation service and will return a standard message to the manufacturer, to enable him to correct the message and send it again a.s.a.p.

Apart from these checks EReg/TAAM is currently developing a service to check a delivered digital CoC with an electronic type approval database. For instance: the exact mass of an individual vehicle, as indicated in the CoC, should be within the mass range indicated in the type approval. A check like this is sometimes carried out some time after the message was received, because in some cases it takes some time before the data of a new vehicle type have been included in the type approval registration. Moreover before a CoC is rejected the type approval authority has to be absolutely sure that the error is in the CoC and not in the type approval database used as a reference.

Not all EU type approval authorities will be able to carry out a check with an electronic type approval registration. The EUCARIS system, however, offers the possibility for both type approval authorities and registration authorities to have an eCoC checked at another authority, that has the facilities to do so.

Implementation

A series of EU countries is involved in the EReg initiative. The status of July 2020 is indicated underneath:

Country	Involvement in the EReg/TAAM working group	Position and status implementation
Austria	Reading member	Unknown
Belgium	Actively participating	Already using IVI, migration will probably be ready in 2021
Bulgaria	Actively participating	EReg/TAAM format nearly implemented
Croatia		Unknown
Cyprus		Unknown
Czech Republic		Interested
Denmark	Reading member	Unknown
Estonia	Actively participating	Implementation EReg/TAAM format planned for 2020
Finland	Actively participating	Implementation EReg/TAAM format planned for 2020/2021
France	Actively participating	Implementation EReg/TAAM format planned for 2020
Germany	Actively participating	Already using IVI since 2019. Most manufacturers already deliver IVI files.
Great Britain	Reading member	Unknown
Greece		Unknown
Hungary	Reading member	Unknown
Iceland	Actively participating	Implementation EReg/TAAM format planned for 2020/2021
Ireland	Actively participating	Already using IVI since 2017.
Italy	Actively participating	Has its own electronic solution based on IVI. Discussions on a migration to come in line with EREG IVI in the near future.
Latvia	Actively participating	Using IVI since 2020.
Lithuania	Actively participating	Position discussed with the ministry
Luxembourg	Actively participating	Interested, but no concrete steps yet.
Malta		Unknown
Netherlands	Actively participating	Already using IVI since 2015.
Norway		Has its own electronic solution; intends to migrate to EREG IVI in the near future.
Poland	Actively participating	Interested, but delayed for financial reasons
Portugal	Actively participating	Interested
Romania		Interested
Slovakia	Actively participating	Implementation EReg/TAAM format planned for 2020
Slovenia	Reading member	Unknown
Spain	Actively participating	Interested, but has its own electronic solution; current position unclear
Sweden	Actively participating	Already receiving some electronic CoC data; implementation EReg/TAAM format planned for 2021
Switzerland	Actively participating	Started implementation EReg/TAAM format. Prototype ready in September/October 2020. Mandatory in 2023

More information

The support team of EUCARIS can help with the set-up of a CoC database, the installation of the EUCARIS services and the implementation of the messages and web services, the digital signature and the communication certificates. For concrete support please contact: eucaris2help@rdw.nl