



Introducing EReg and EUCARIS

Smart Production Network Webinar 1 December 2022
Roelof de Graaf, EUCARIS Manager Operations
(RDW, the Netherlands Vehicle Authority)



Who am I



Idske Dijkstra

- Secretariat EUCARIS
- Secretariat EReg Topic Group I and XII
- Senior Advisor at RDW (NL)

- Since 2003 involved in international data exchange

- idiijkstra@rdw.nl



Topics today

1. Introduction EReg (Idske)
2. Introduction EUCARIS (Roelof)
3. Introduction EReg/TAAM Topic Group XII – how it all started (Idske)
4. Overview of the eCoC and type approval information exchange model (Roelof)
5. Content and timeline legislation (Idske)
6. Status and next steps implementation of the model (Roelof)



But first: theory of conformity

IVI = eCoC

Initial **V**ehicle **I**nformation is the electronic format of the Certificate of Conformity

The **E**lectronic **C**ertificate of Conformity is the common name of the Initial Vehicle Information



INTRODUCTION EREG (IDSKE)

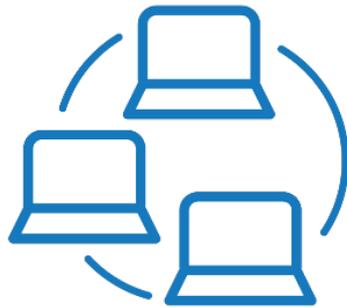
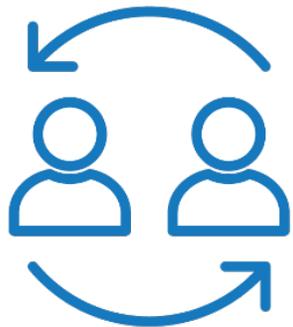
Association of **E**uropean Vehicle and Driver Registration Authorities

(AISBL since 2012)

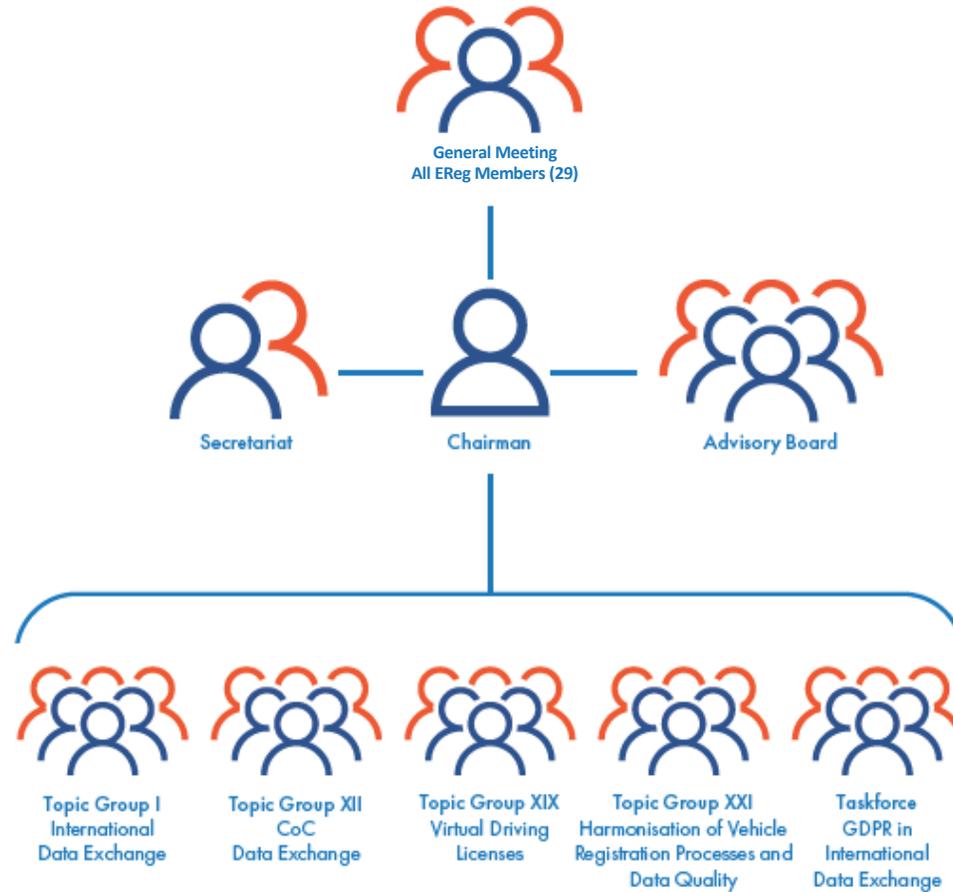
EReg

Better Executable Policy, Executed Better

- Exchanging knowledge, experience and best practices
- Identifying and following European developments
- Contributing to European laws and regulations and the EC
- Establishing cooperation arrangements with relevant third parties
- Promote effective and efficient data exchange



EReg Organisational structure



EReg's Office



Rue Froissart 95, Brussels

Current Topic Groups



Topic Group I

International Data Exchange



Taskforce Data Protection

Implementation GDPR in International
Data Exchange



Topic Group XIX

Virtual Driving Licences



Topic Group XII

CoC Data Exchange

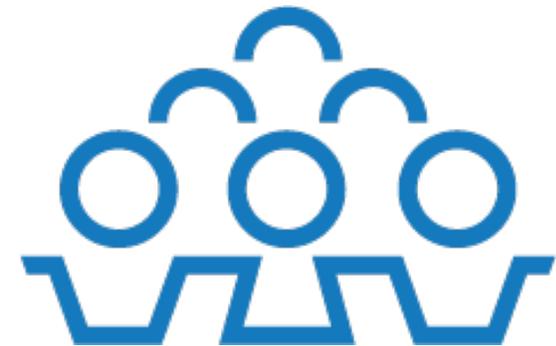


Topic Group XXI

Registration processes and data quality

Previous Topic Groups

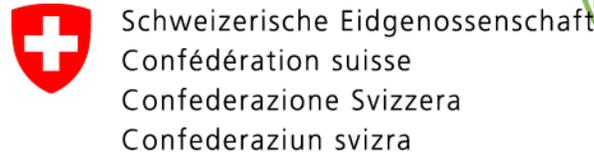
- II Transfer & Re-Registration of Vehicles in the Single Market
- III Vehicle end-of-life directive
- IV Harmonisation commercial and temporary plates and documents
- V Smart card vehicle registration certificate
- VI Vehicle registration procedures
- VII 3rd directive on driving licensing
- VIII Chip on driving license
- IX CO2 Data monitoring
- X Driving license tourism
- XI Tackling uninsured driving in Europe
- XIII Vehicle mileage registration
- XIV Normal residence
- XV Smart Card Standardization
- XVI Preventing and combating vehicle crime and fraud
- XVII Improving registration and licensing services through the use of digital services
- XVIII Working in public and private partnerships
- XX GDPR in International Data Exchange (now Taskforce)



EReg's network



EReg's Network



HM Government of Gibraltar



EReg's Stakeholders



European Parliament



Council of the European Union



European Automobile Manufacturers Association

ACEA



The Motorcycle Industry In Europe



UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE



Conférence Européenne des Directeurs des Routes
Conference of European Directors of Roads



European Traffic Police Network



CLEPA
European Association of Automotive Suppliers



Confederation of Organisations in Road Transport Enforcement

Partner Organisations



Alliance with AAMVA

- US & Canada - EU cooperation
- Revised in 2017



Austroads

Alliance with Austroads

- Australia & New Zealand - EU cooperation
- Signed in 2017
- The Vehicle Chain product as best practice



Alliance with CIECA

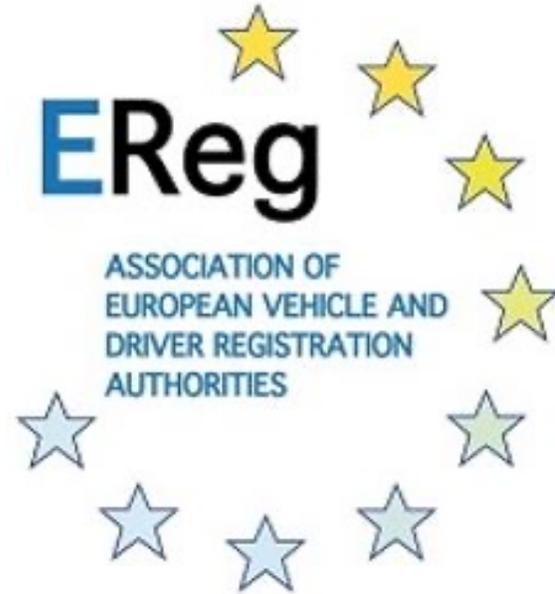
- Worldwide active in the fields of road safety and driver testing
- Signed 2020



Alliance with CITA

- Worldwide active in the field of vehicle compliance
- Signed 2021

EReg and EUCARIS





INTRODUCTION EUCARIS (ROELOF)



Who am I

Roelof de Graaf

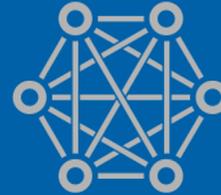
- Manager Operations EUCARIS
- IT Advisor at RDW (NL)
- > 30 years of IT experience but still young in mind
- Since 2006 involved in international data exchange
- rgraafde@rdw.nl





What is EUCARIS ?

| Legislation | Organisation | Application |



EUCARIS is a network of countries working together on the international exchange of mobility and transport related data. Based on the EUCARIS Treaty, the EUCARIS organisation governs the EUCARIS application which is used all over Europe to exchange data between registration authorities.

<https://www.eucarlis.net>



What

EUCARIS

| Legislation | Organisation | Application |



Data exchange has to be based on legislation

- EUCARIS Treaty
 - Actual Vehicle Information
 - Driving License Information
- EU legislation
 - Technical Vehicle data (eCOC, AVI)
 - Vehicle Owner Information (Prüm, CBE, VAT, TOLL)
 - Driving License Information (Resper, CPC)
 - Transport Undertaking Information (ERRU)
- Bilateral and Multilateral agreements
 - BeNeLux agreement (NSV data and Owner)
 - FIAtDeCh agreement (Owner)



What

EUCARIS

| Legislation | Organisation | Application |



- Peoples network of authorities
- Highest authority = the General Assembly
all connected countries represented
- Chairman (3 years)
- Tasks via nominated parties
 - ICT (5 years - currently NL)
 - Secretariat (3 years – currently NL)

Governance description in EUCARIS Treaty and in underlying Rules of Procedure



What

EUCARIS

| Legislation | Organisation | Application |



- Generic Data exchange system
- It's **NOT**
 - A database
 - A central repository
 - An EU system
- Application developed and maintained by the EUCARIS organisation for all users.

More info in the “How” section.



Which data is exchanged

One **generic framework** with **different services**, exchange based on **different legislation**

EUCARIS Treaty 1999/37	Prüm/ Council Decisions	Bilateral Treaties	eCall (ITS) eFTI	TACHO ERRU	RESPER	CBE Tolls	Motor Insurance Directive	EU Directive 2018/858	RSI/PTI	EU Regulation 904/2010 (VAT)
<i>Technical vehicle data</i>	<i>Vehicle-, Owner-Holder Insurance info</i>	<i>Personal and technical data (traffic fines)</i>	<i>Technical Vehicle Data Freight data</i>	<i>Tacho-graph Cards Transport Under Takings</i>	<i>Driving licence Data CPC</i>	<i>Vehicle-, Owner-Holder Info</i>	<i>Vehicle-, Owner Holder Insurance info</i>	<i>CoC-TA-data</i>	<i>Technical Vehicle Data Inspection Results</i>	<i>Vehicle-, Owner-Holder Info</i>

EUCARIS generic framework/technology/basic system:

authorisation, encryption, signing, logging, routing, MCI, queuing, retry, help files, translation, statistics



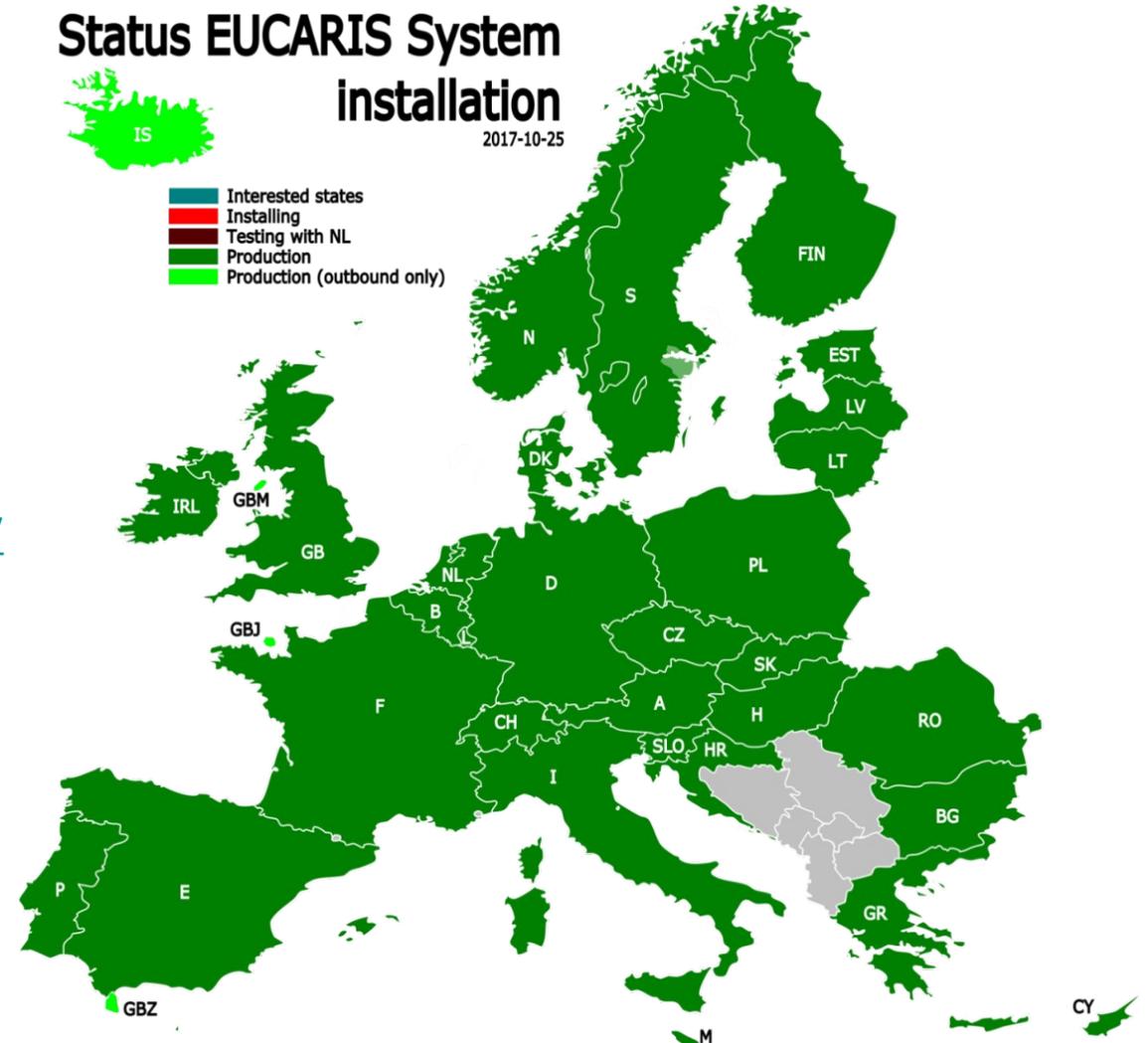
Where is EUCARIS used

41 connections in total (1- and 2-sided)

36 countries

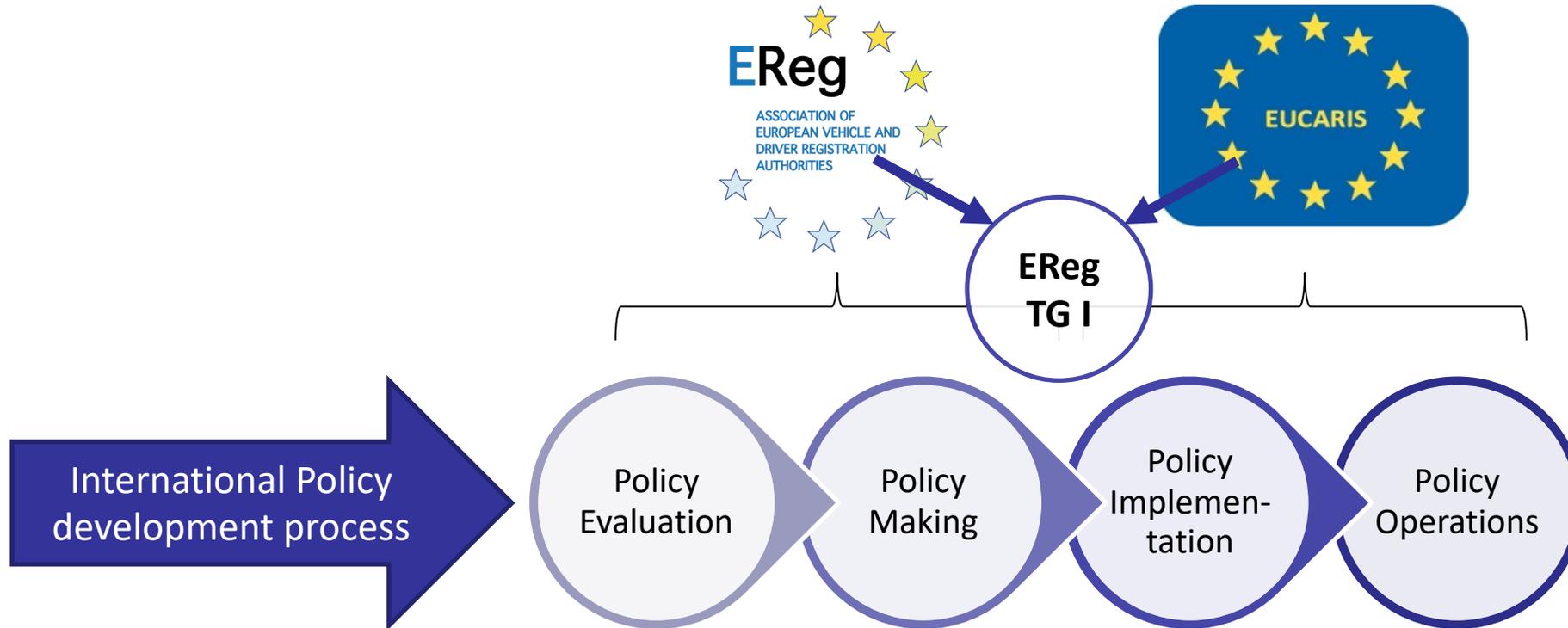
> 150 million messages per year

On <https://www.eucaris.net/dashboard/availability-per-service/> you can see which countries are connected to each functional service





How do EReg and EUCARIS work together?





**INTRODUCTION EREG/TAAM TOPIC GROUP XII – HOW
IT ALL STARTED (IDSKE)**



Why a CoC Topic Group



HISTORICAL CONTEXT

- ◆ Vehicle registration based on Type Approval data
 - = TVV data ≡ data ranges for numerous vehicles
 - ≠ CoC data ≡ data of one unique vehicle
- ➔ vehicle registers contain a lot of inexact data
- ➔ negative consequences: calculation of road taxes, CO₂ monitoring, road traffic enforcement, etc.



What has EReg done?



SET UP a Topic Group

EReg Conference May 2011 ➔ **TG XII**

- **establish harmonized (internat.) CoC data exchange**
- **improve quality of CoC data**
- ◆ **Cooperation between **EReg** – **TAAM****
(**TAAM** = Type Approval Authorities Meeting)



TG XII members



Active members (21):

- Austria
- Belgium
- Bulgaria
- Czech Republic
- Germany
- Estonia
- Finland
- France
- Iceland
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- the Netherlands
- Norway
- Portugal
- Slovakia
- Spain
- Sweden
- Switzerland

Reading members (7):

- Denmark
- Greece
- Hungary
- Poland
- Romania
- Slovenia
- United Kingdom

Participate in meetings:

- Manufacturers - ACEA and ACEM
- EC - DG Grow
- EC - DG Clima (reading)



OVERVIEW OF THE ECOC AND TYPE APPROVAL INFORMATION EXCHANGE MODEL (ROELOF)



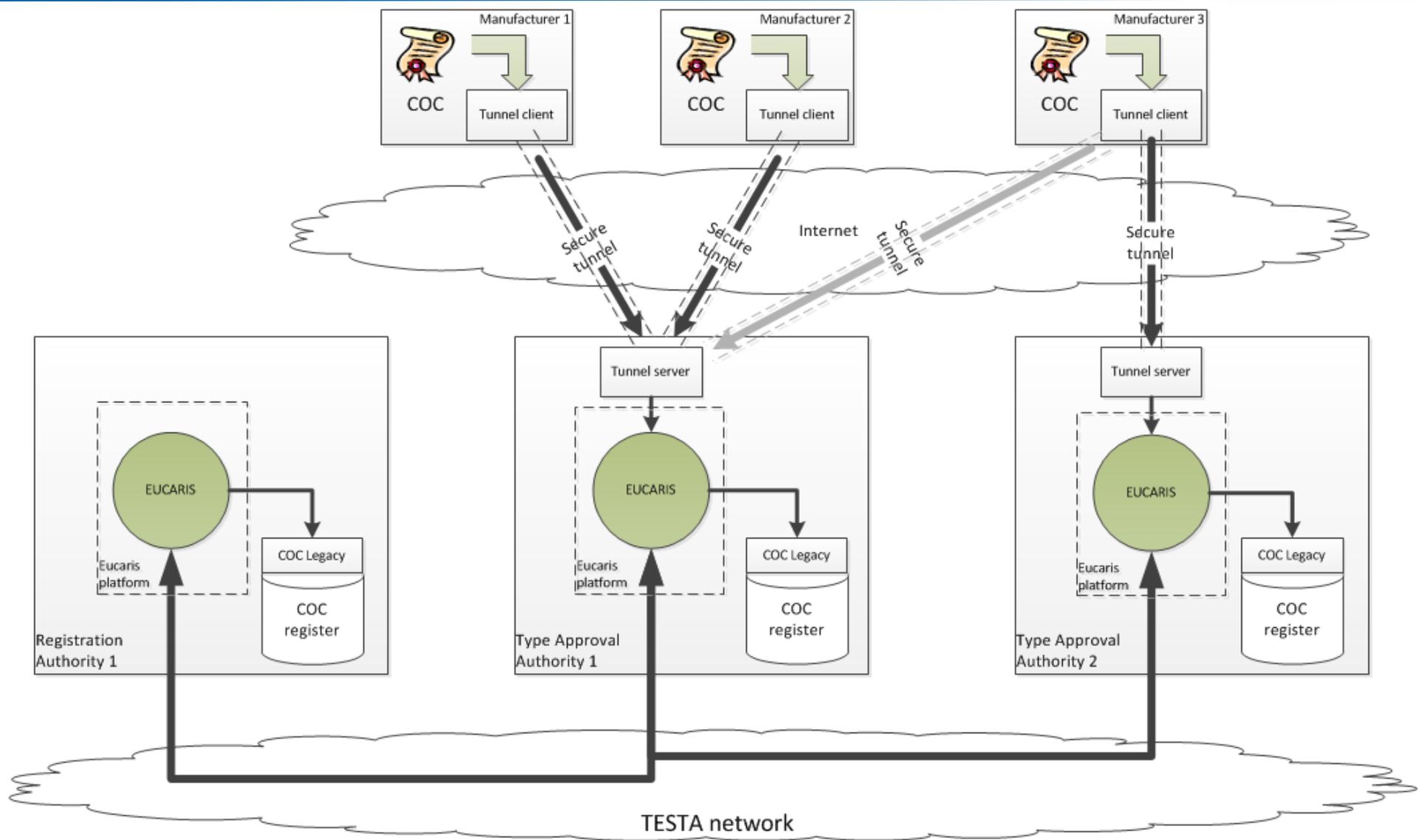
Model

- Each Type Approval Authority (TAA) has its own eCoC register
- Manufacturers send the eCoc to the TAA after production of the vehicle
- TAA's should make the eCoC available to the public, but its not clear how yet (t.b.d. by EC)

- Vehicle Registration Authorities can get the eCoC from the TAA:
 - By subscription on:
 - All
 - Intended registration Country in the eCoC
 - TAA id (e4) in the eCoC
 - On request

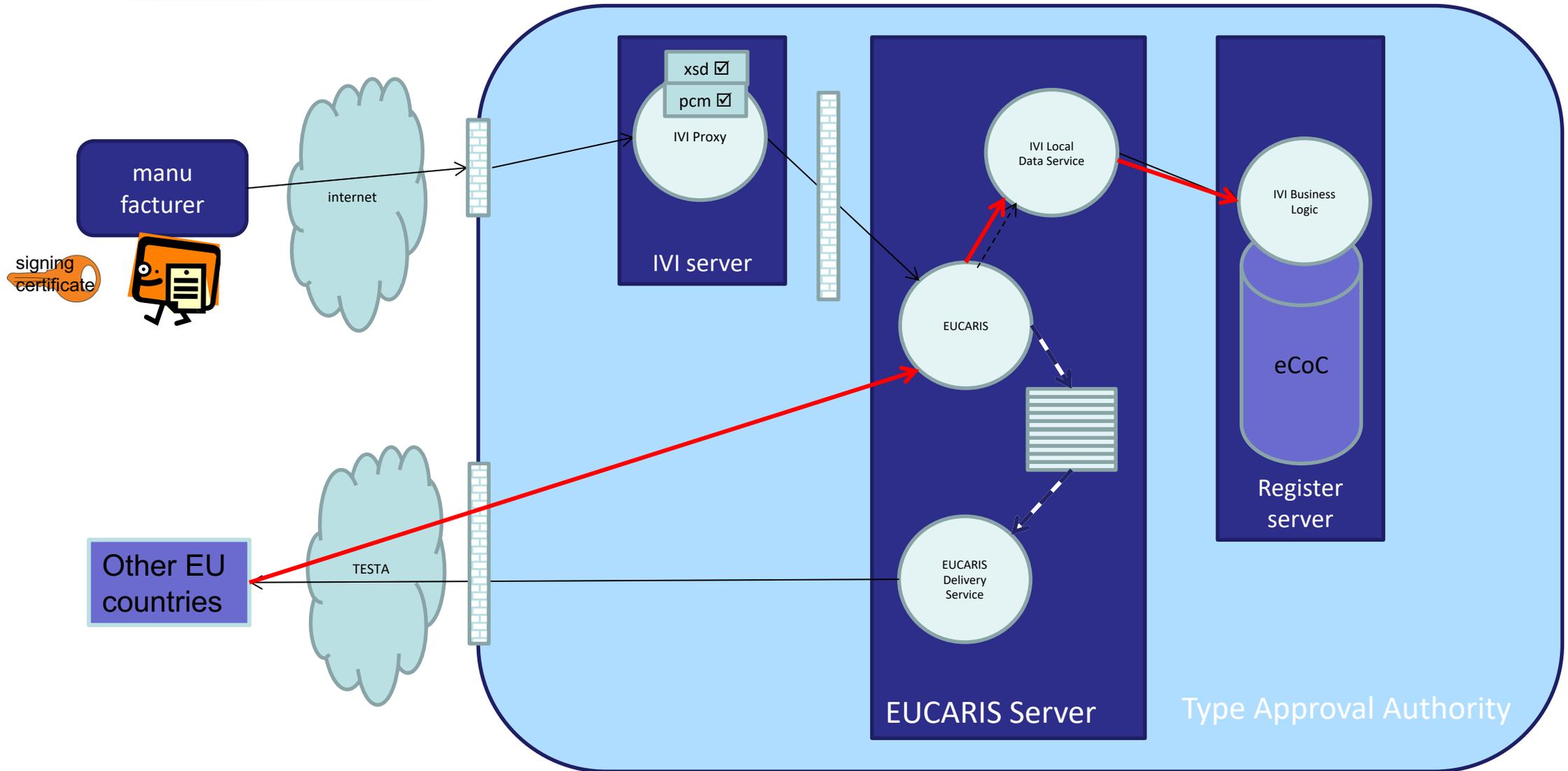


Data distribution using Eucaris





eCoC Register Reference implementation components





EUCARIS Functionality

Retrieval of initial vehicle information

- This service handles the message dialogue IVIInitialVehInfoRequest and IVIInitialVehInfoResponse.

Forwarding initial vehicle information

- This service handles the message IVIInitialVehInfoNotification.

Validation of initial vehicle information

- This service handles the message dialogue IVIValidateInitialVehInfoRequest and IVIValidateInitialVehInfoResponse.

Forwarding a validation result

- This service handles the message IVIValidationResultNotification.

Sending a notification of correction

- This service handles the message IVICorrectionNotification.

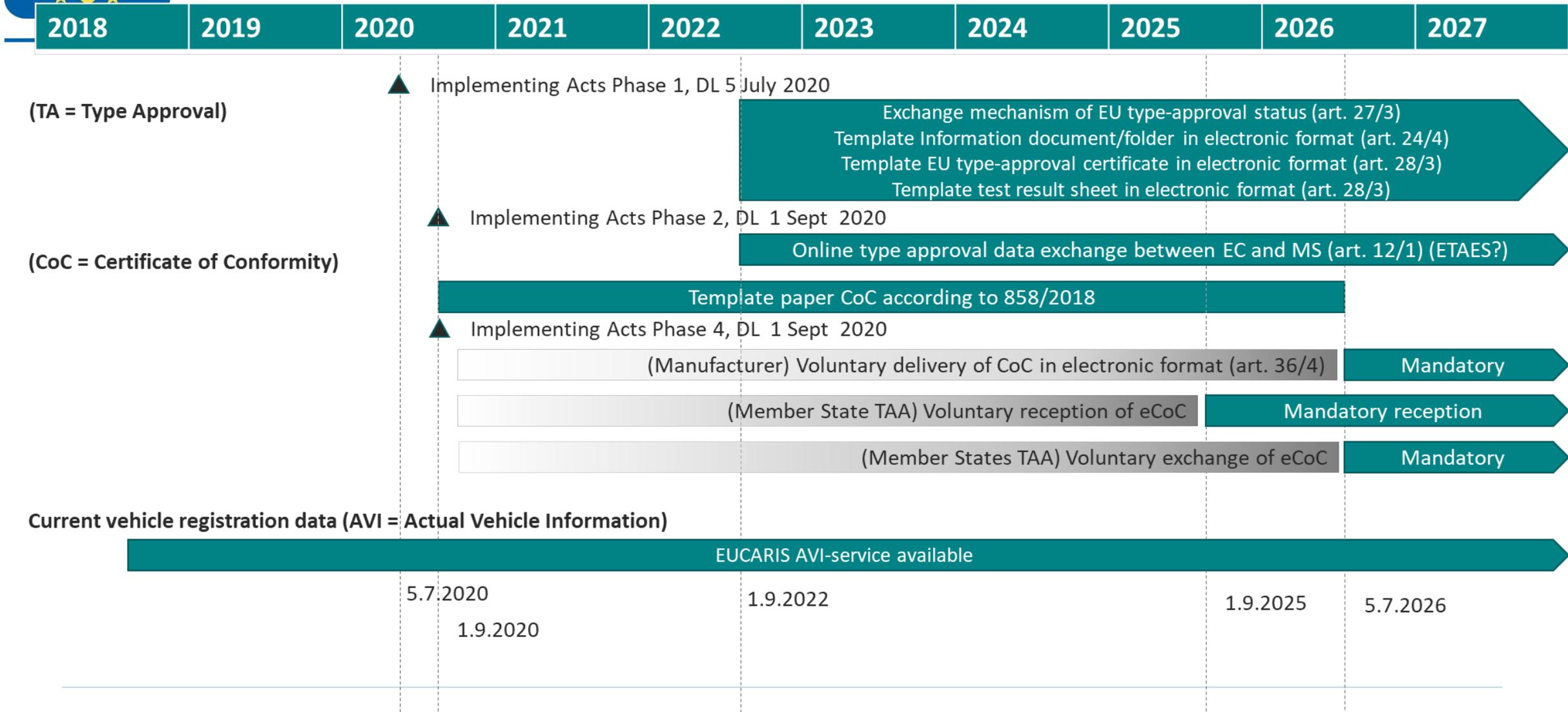
See <https://www.eucaris.net/kb/ivi/>



CONTENT AND TIMELINE LEGISLATION (IDSKE)



Timeline eCoC





1/133/EU First implementing act

- Designate EUCARIS for the exchange of data between authorities
 - eCoC in a uniform way: XML structure/technology
 - eCoC = IVI message (Initial Vehicle Information)
 - Different times to be kept in case of changes
 - 1st of January 2023
-



Second implementing act



- Draft published for feedback
 - To be discussed in MVWG of 15 December 2022
 - and to be decided by TCMV (Technical committee)
 - Entry into force 1 January 2024 (?)
 - Requirements for secure data exchange
 - Validation procedure
-



Challenges



- Change procedure IVI in line with legislation
 - Versioning and backwards compatibility of the messages
 - Multi-stage vehicles
 - Harmonization acceptance procedure manufacturers
 - Good quality of the data
-



Data quality



- Digital signature
 - Technical control: XSD check
 - Plausibility control: ICM (centrally developed)
 - Optional: Type approval check
(made by the countries in cooperation with EUCARIS)
-



Next steps



- Give input for the legislation
 - Introduce version 1.9 of the IVI message
 - Get the eTA message in production
 - Make the validation of the eCoC against the TA possible
 - Further develop the change procedure of the IVI together with TAAM/Forum
 - 3rd Implementing Act?
-
- Next meeting TG XII 15 and 16 March 2032 in Brussels



**STATUS AND NEXT STEPS IMPLEMENTATION OF THE
MODEL (ROELOF)**



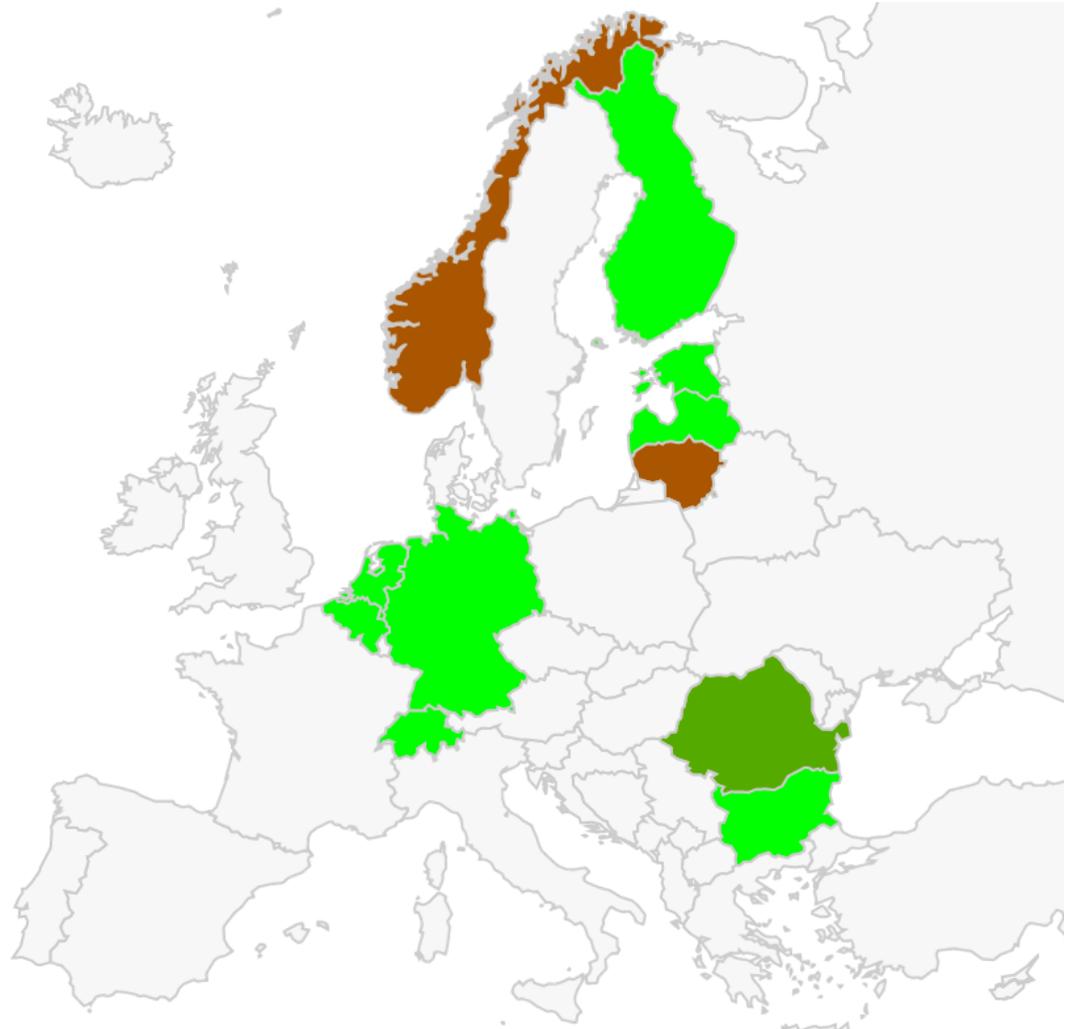
EUCARIS Connected countries

- Production:

- Germany
- Netherlands
- Belgium
- Bulgaria
- Estonia
- Switzerland
- Finland
- Latvia

- Acceptance testing: Romania

- Working on: Norway, Lithuania





There is still some time to go

- TAA's should be ready to receive eCoC's by the end of 2026
- Some countries indicated to work on it in 2023
- Most countries start by implementing a eCoC register locally and connect it to EUCARIS later on
- Many countries visited RDW to look at our implementation.

