



Bundesministerium  
für Verkehr und  
digitale Infrastruktur

# Architecture for the exchange of the electronic Dangerous Goods Transport Document

Christian Lüpkes on behalf of the Federal Ministry of Transport and  
Digital Infrastructure

Connecting DINA and DTLF - Initiative by IWT Platform and INE  
5th June 2020

# Background and important Milestones

- 2007** The informal **WG on Telematics** was mandated by the **UNECE Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods (Joint Meeting)** to elaborate the use of telematic for the carriage of dangerous goods
- 2010** Presentation of the “Who Does What”-Table to the Joint Meeting
- 2012** Dangerous Goods Data Model
- 2013** Architecture for the exchange of the electronic Dangerous Goods Transport Document
- ...** Pilot Projects GeotransMD (FR) and CORE (IT), Data Model improvement
- 2019** The WG on Telematics has prepared a guideline for the application of RID/ADR/ADN 5.4.0.2

The Joint Meeting adopts the guideline, which can now be applied

Publication of the guideline on the UNECE and OTIF websites

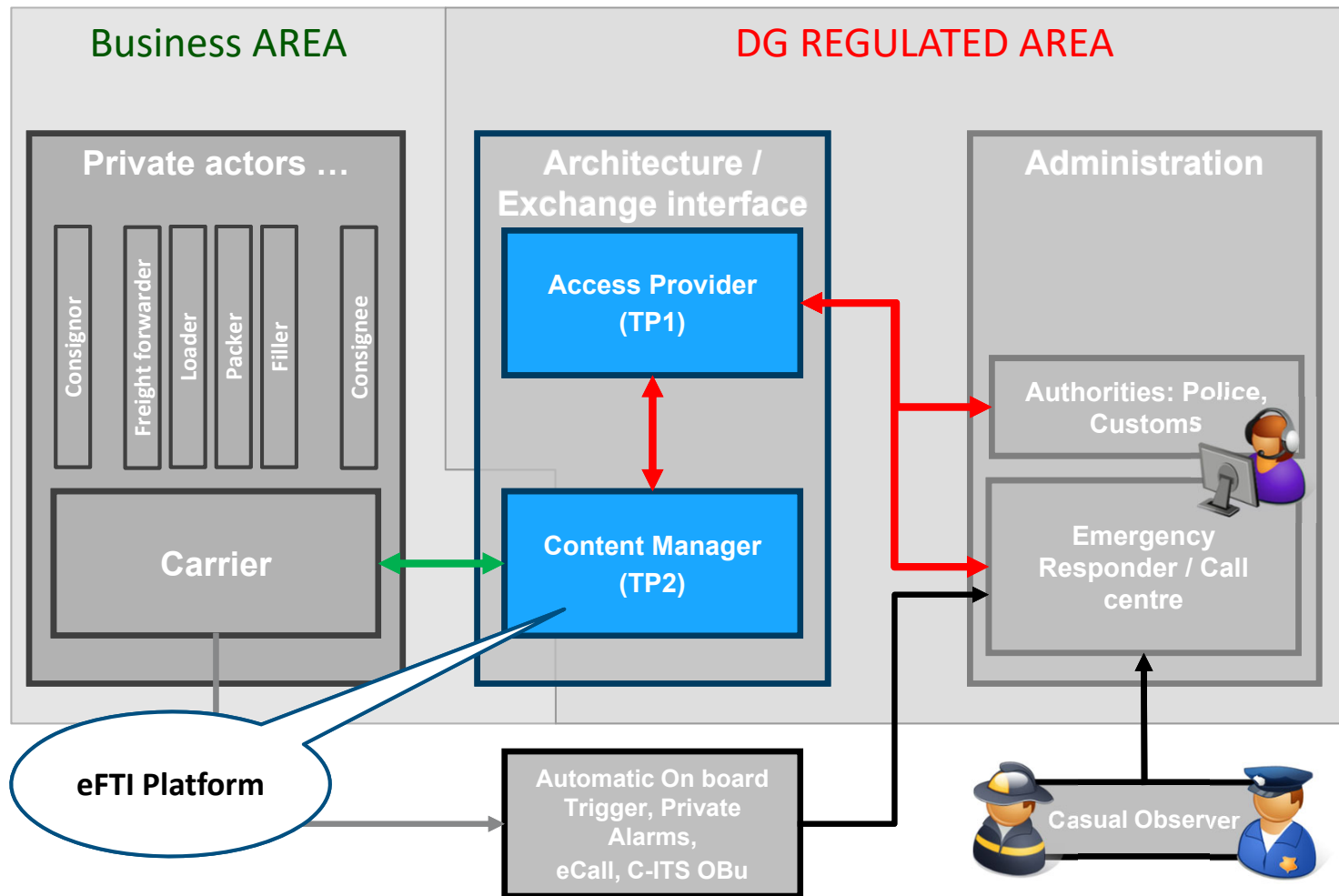
[http://otif.org/de/?page\\_id=1103](http://otif.org/de/?page_id=1103)

[http://www.unece.org/trans/danger/publi/adr/adr\\_guidelines.html](http://www.unece.org/trans/danger/publi/adr/adr_guidelines.html)

# Legal Basis

- 5.4.0.2 RID/ADR/ADN allows electronic data exchange providing that the procedure complies with the legal requirements concerning the evidential value and availability during carriage at least equivalent to the procedure with written documents ("equivalence")
- The guideline provides necessary elements of data communication to achieve equivalence – communication architecture, web services, data model

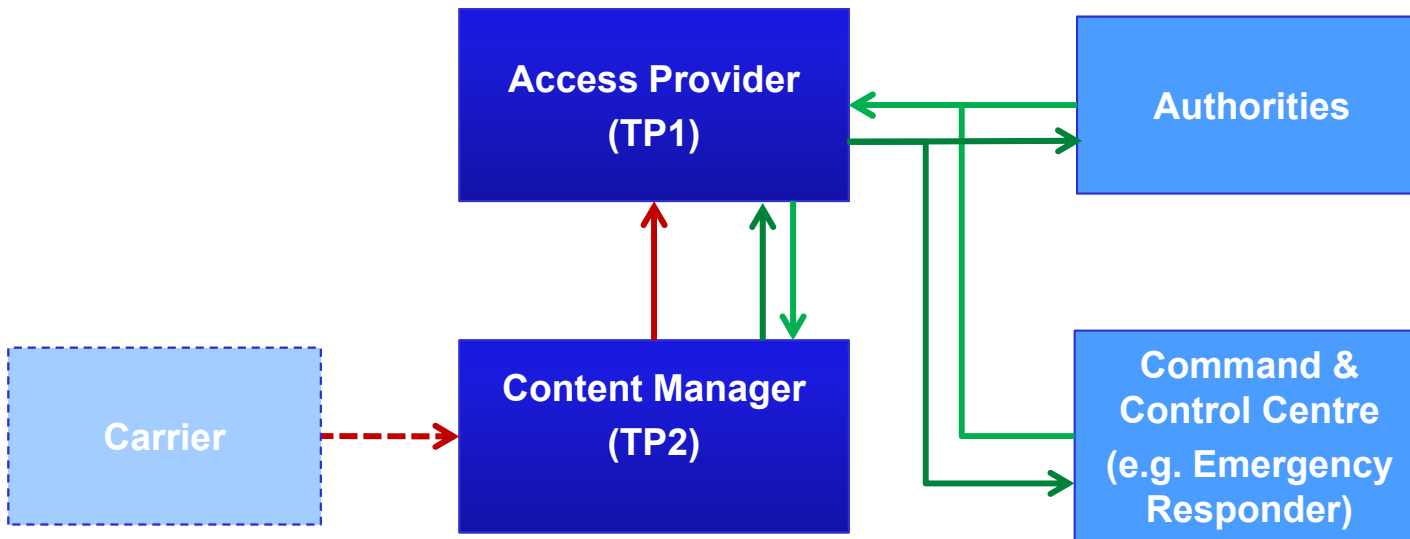
# Overview on the system architecture



# Responsibilities of the important components as written in the guideline

- TP1 is a webservice and access provider for authorities to ...
  - connect every registered TP1
  - register public bodies candidates and listed by public authorities to the architecture
  - receive and transmit the requests and the responses of the public body for a DG transport
  - register and agree TP2
  - register the ID of an ongoing DG Transport during all its journey
  - a TP1 can be either a public body, or a private company notified & certified by an authority
- TP2 is a webservice and content manager for a transport company to ...
  - use the eDGT Information format to digitalise the description of Dangerous Goods
  - ensures the availability of information during the journey
  - transmit the start and the end of the journey of a transport unit
  - provide the document on request of TP1

# The eDG Transport Document – National Data Exchange



Registered company indicates ...

- Start of transport (including characteristics such as number plate),
- Access to the record of the transport document,
- End of transport

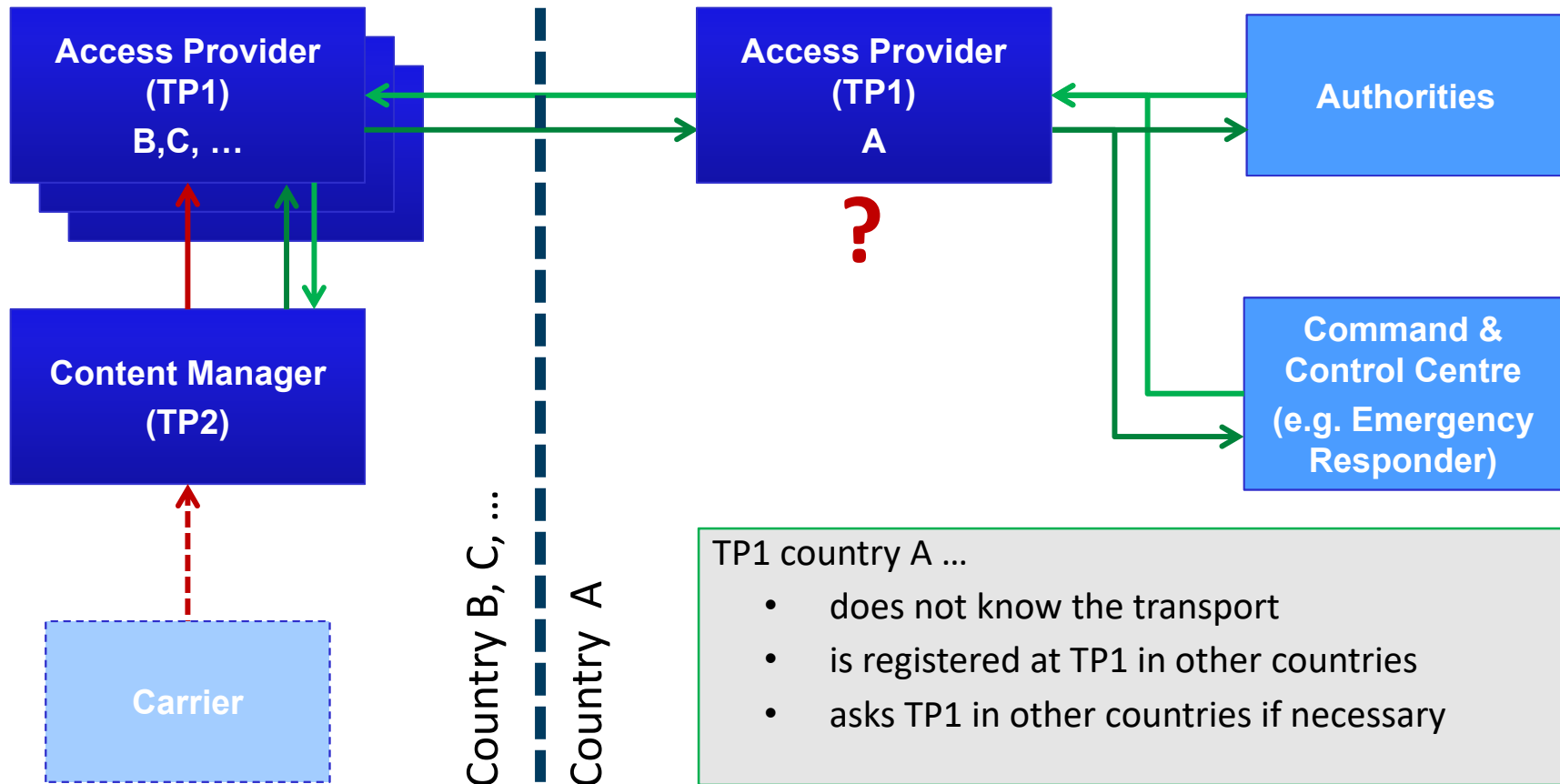
1

Authorities and emergency responders...

- have registered with TP1
- ask TP1 if necessary

2

# The eDG Transport Document – International Data Exchange



# What's planned for 2020?

- TP 1 candidates join forces and founded the **Dangerous Goods Transport Information Network Association (DGTINA)**
  - DE (GBK and DGM Group), FR (NeoGLS and Novacom Services), IT (Ministry of Transport and UIRNet ), UK (RICARDO) and AT (DiGiDO)
  - provision of TP 1 services
  - possible pilot for 4th quarter 2020
- **At DG regulators level:**
  - Update of the UML data model (DATEX II Version 3, legal update) and Web Services (WSDL)
  - Definition of the certification process
  - Cooperation with DTLF with regard to eFTI-Regulation
- **At national level: Identification of the entitled authorities and their digital certificates**



# Many thanks for your attention!

## Contacts

AlbrechtConsult GmbH  
Theaterstraße 24  
52062 Aachen

Christian Lüpkes  
C.Luepges@albrechtconsult.com  
[www.albrechtconsult.com](http://www.albrechtconsult.com)

Federal Ministry of Transport  
and digital Infrastructure (BMVI)  
Department Dangerous Goods (G16)  
Robert-Schuman-Platz 1  
53175 Bonn

Gudula Schwan  
ref-g16@bmvi.bund.de  
[www.bmvi.de](http://www.bmvi.de)

Federal Ministry of Transport  
and digital Infrastructure (BMVI)  
Department Waterway Infrastructure (WS12)  
Robert-Schuman-Platz 1  
53175 Bonn

Birgitta Schäfer  
ref-ws12@bmvi.bund.de  
[www.bmvi.de](http://www.bmvi.de)