Cefic views on transport and logistics digital collaboration and data sharing

Europe's Smart and Sustainable Mobility Strategy aims to reduce transport emissions with 90% by 2050.   Smart logistics solutions must help meet the environmental sustainability targets, by decoupling economic growth from transport growth.
Cefic supports Europe's ambition to create digital interoperability and data exchange in a shared, secured and trusted transport and logistics dataspace. The chemical industry needs a governance framework, that supports trusted and secure collaboration between all supply chain stakeholders, including national and European authorities.

eFTI Regulation

- Cefic welcomes the objectives of the EU Regulation on electronic freight transport information, the ambition of creating a common European mobility data space and calls upon the member states to support a swift European wide and uniform implementation.
  Freight transport digitalization will increase our chemical sector's efficiency, sustainability and safety, supporting the ambitions of the Green Deal.

- Therefore, Cefic urges the EU Commission to develop the required additional regulations to digitize transport **equipment information** (e.g. technical characteristics, certificates...) and **driver information** (e.g. licenses), enabling full transport process optimization and automation.

- Transport of dangerous goods demands a data model that is not restricted to legally required information only. Also additional data, currently shared on paper with the relevant transport partners, should be digitally shared to allow safe handling of the cargo and efficient emergency intervention & mitigation in case of an incident. This calls for close alignment of the EU transport data model with globally developed data models in UNECE.

- Cefic encourages its members to make full use of the possibilities created by digital business-to-authority communication, and to join trusted and secure digital collaboration and data sharing initiatives.

Cefic requirements for transport and logistics data sharing

Digitalization and data sharing starts with the creation of data management strategies by all stakeholders. This includes understanding and improving data quality, mapping out categories, properties and relations between the data concepts and determining which data types can be shared. Partners within a digital ecosystem should identify previously inaccessible data-sharing opportunities or

detect cumbersome data-sharing processes that may be suitable for redesign.

Data sharing concepts should allow for open innovation opportunities and ensure interoperability, while avoiding designing closed-in single platform structures.

The following requirements are essential for realizing trusted and secure digital collaboration in transport & logistics through the creation of connected platforms:

1. **Single Source of Truth**
   Data is entered at the source and only once by the party that creates/generates the data.

2. **Ownership**
   The party that provides the data remains data owner through the entire chain from initial creation to deletion of the data from the platform. Data cannot be (re)used or analyzed by any IT vendor or actor without a clear consent of the data provider.

3. **Control**
   The party that provides the data decides who can use the data for which purpose and can alter that decision at any time. Company subscribers pre-agree to "data sharing and visibility rules" to ensure the "end to end" Use Case process can function.

4. **Accountability**
   The party that owns the data is accountable for the correctness of the data. They also have the responsibility to update data if it was not accurate initially or at any time during the lifecycle of the data-element in question. Clear rules need to be established around liability and the limitation thereof in case data turns out to be incorrect, either in error or on purpose. In the latter case, sanctions should be agreed.

5. **Purpose**
   Protocol/standards/data-model/ontology & semantics for data-exchanges are driven by specific use cases that support transport and handling of chemicals in all its aspects and is supported through modern IT-infrastructure (APIs, federated platform, …). The purpose also drives the lifecycle of data-elements. When the data no longer serves a purpose, it needs to be deleted.

6. **Technology independent**
   A uniform "plug and play" connection to the IT-infrastructure platforms should be established that supports each individual use case best and without the risk of a lock-in vendor situation.

7. **Security**
   The IT-infrastructure chosen complies with best-in-class cybersecurity and privacy (GDPR compliant). Independent cybersecurity audits of the IT infrastructure need to be available on request. These audits need to be intelligible and follow agreed upon protocols. Under this condition individual chemical companies should be able to conduct an audit on their own ERP.

8. **Data-storage**
   Storage of transactional data on any common cloud services platform is limited and the amount of data storage can be defined per actor relative to the data storage risks and liabilities accepted by each actor. This will also drive and be driven by the lifecycle of the data-elements.

Governance

Trusted and secure data sharing also implies neutral control and supervision of the requirements as stated before. Therefore, appropriate governance structures need to be defined for:

- certification of service providers
- determining connectivity rules to data-sharing infrastructure
- record-retention: the data-owner has primary responsibility for record-retention, governance is needed to define what and how long data needs to be maintained for audit purposes
- to govern users, data-providers and data-processors
- to enforce the rules, including proper structures and mechanisms to do so
- to ensure data-ownership is always respected

Cefic stands ready to engage on how governance structure and sector collaboration initiatives could be shaped further. Ambition of the Chemical Industry

- The efficiency, safety, environmental impact and security of freight transport are crucial requirements for the competitiveness and sustainability of the chemical supply chains. Digitalization of chemical supply chains will increase industry's performance and reduce its external impact. It will facilitate cooperation between supply chain actors and enable better visibility and real-time management of cargo flows. It leads to the reduction of administrative burden and allows for a better use of infrastructures and resources. This will reduce costs, improve compliance and sustainability, and make service to the external customers faster and better.

- Unlike other sectors, chemical transport & logistics is highly regulated, requiring intensive checks and controls before, during and after (un)loading and transport of chemical goods. Many additional common safety requirements are expected from logistics service providers, but they are not harmonized within the chemical industry. This results in a variety of systems, formats & connections to be implemented and many duplications of information to be shared.

- Digitalization of supply chains including all stakeholders would enable collaborative projects and solutions, enhance availability, integrity, confidentiality and security of data. It would foster standardization of processes and data. During this digital transformation journey, there is a growing need to exchange business to business data via neutral platforms that respect individual company data.

- The Chemical Industry has the ambition to reap all benefits and avoid the pitfalls of digitalization by creating the trust required between all parties (business-to-business and business-to-authorities) to allow collaboration and help create the governance and the technical requirements and ecosystems to facilitate this.

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About Cefic
Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 16% of world chemicals production.