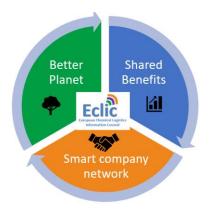


ECLIC Digital Collaboration Charter

Improve safety, sustainability, compliancy and efficiency within chemical logistics by trusted data sharing across an ECLIC engaged company network of actors, using "state-of-the-art" technologies & services.



This ECLIC Digital Collaboration Charter is addressed to all stakeholders performing (petro)chemical logistics activities, willing to become a voluntary member of the ECLIC company network. By signing the ECLIC Charter, the company supports the ECLIC vision and the creation of ECLIC specific digital Use Cases that support improved safety, sustainability, compliancy and efficiency within the chemicals logistics community.



Digital Supply Chain Context

Chemical 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 among industry. This results in a variety of systems, formats & connections to be implemented and many duplications of information to be shared.

To meet customer and society needs, current logistics supply chains will transform into globally hyper-connected, agile logistics networks. The existing linear logistics supply chains need to be enriched with real time data from many different sources and actors. New technological inventions (cloud platforms, AI, IOT, portals, market places...) are expected to solve these business requirements, however the problem is highly complex.

The classic linear logistics value chains shift to value networks and new digital business models are created at the crossroad of vertical and horizontal collaborations. Market places emerge and



asset driven companies run the risk of being disrupted. This causes an imminent need to re-think our vision on supply chain models and bring in new elements like industry process standardizations, data sovereignty rules & policies, protection of market intelligence and the need for neutral orchestration. Also new EU regulations are being developed to support industries and logistics operators in digital collaboration. But EU and national authorities are also pushing to have digitalized information on logistics processes, to create efficiency in supervision and enforcement. We cannot leave the design of a regulatory "digital economy" framework to platform providers only. With the support of other industry associations, we should ensure that digital benefits from smart transport & logistics solutions return to the stakeholders, including authorities, who share their data by securing an appropriate governance and technical/functional framework.

ECLIC Introduction

ECLIC VZW, the European Chemical Logistics information Council, is a "not for profit" association based in Brussels Belgium and was founded by the industry associations essenscia, ECTA and EFTCO, back in 2018. ECLIC brings companies together with the same vision and foresights on digital collaboration, facilitates data sharing and has no commercial or profit intentions. The funds collected through the participating company network are 100% re-invested into the ECLIC operating model and the ECLIC financials are made transparent via an open book financial principle.

The digital collaboration journey of ECLIC started by turning the "electronic EFTCO Cleaning Document" or "eECD" into a paperless, interoperable data stream. Meanwhile, ECLIC has 48 subscribed companies¹ and paved successfully the way to invite more chemical logistics actors across Europe and is ready to start with new use cases. The digital transition from logistics paper driven processes to more digital, real time and collaborative shared data streams, remains one of the biggest challenges for the next decade. Today, several tens of millions of logistics paper documents are being exchanged annually within the chemical industry sector, causing waiting times, efficiency losses, control costs,...

The objective of ECLIC is to let companies further embrace the digital logistics way of working while creating an interoperable, more standardized and trustful way of working without any commercial intentions. This objective is impossible to be reached by individual companies and therefore ECLIC wants to support neutral collaboration and co-creation of innovative use cases.

This digital collaboration across the network leads to more safety, sustainability, compliancy and efficiency by :

1. Faster move to digital and paperless logistics processes based upon Chemical Industry proven best practices and standards



- 2. Increase transport and logistics asset utilization compared to paper driven processes whereby subsequent process steps can receive immediate triggers of automation (e.g. proof of delivery, proof of cleaning,...)
- 3. Increase sustainability & administrative efficiency by eliminating paper archives and chasing of lost papers
- 4. Improve accuracy & compliancy though elimination of manual paper errors and paper fraud
- 5. Enhance transparency and interoperability based upon "real time" event management across an "end to end" multi-modal transport and logistics process.
- 6. Increase visibility and allow pro-active responses to unexpected events via real time notifications and alerts to the operational decision takers
- 7. Improve the customer and societal product quality and health (e.g. Covid-19, less cross contaminations, waste, etc.)
- 8. Paving the way to highly automated, compliant logistics processes delivering higher quality and safety services at a lower overall cost
- 9. Enabling a pan-European and even global connected ecosystem while ensuring that the benefits are equally shared and reviewed via the ECLIC "not for profit" entity and orchestrator.
- 10. Unlocking the power of sharing data across a network of Logistics stakeholders without losing ownership, accountability or value of the data through proper data-security, ownership models and governance.

ECLIC neutral and trusted collaboration principles

The smart company network is supported by its ECLIC governance model, the general and specific Use Case legal Terms and conditions and is powered by cloud platform & infrastructure services, to secure controlled data sharing.

Therefore, the following collaboration and data sharing principles form the key elements of ECLIC's governance :

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



- **Control** the party that provides the data decides who can use the data for which purpose and can alter that decision at any time. For ECLIC Uses cases, company subscribers pre-agree to "data sharing and visibility rules" to ensure the "end to end" Use Case process can function.
- **Accountability** the party that owns the data is accountable for the correctness of the data. They also have the responsibility to update data if they were not accurate initially
- **Purpose** protocol/standards/data-model/ontology & semantics for data-exchanges are driven by specific ECLIC use cases that support transport and handling of chemicals in all its aspects and is supported through modern IT-infrastructure (APIs, federated platform, ...)
- Technology independent the intention is to allow for a uniform "plug and play"
 connection to the IT-infrastructure platforms that supports each individual use case best and
 without the risk of a lock-in vendor situation
- Security the IT-infrastructure chosen complies with best-in-class cybersecurity and privacy.
 ECLIC Use Case subscribers can ask for an independent cybersecurity audit of the IT infrastructure at their own costs
- **Data Storage** Storage of transactional data on the cloud services platform is limited and the amount of data storage can be defined per actor in relation to the data storage risks and liabilities each actor wants to take.

How to get engaged with the ECLIC business network and support the ECLIC digital collaboration charter?

Chemical companies and logistics service providers can voluntarily join the ECLIC business network via the **ECLIC participation model.** By participating at one of the levels of the ECLIC participation model, the companies agree to:

- The principles of the ECLIC digital collaboration Charter and support the engagement to move to more digital & paperless logistics interactions amongst all chemical logistics actors.
- Promote and support the use of the ECLIC Use Cases. The ECLIC Use Cases being developed so far are the eECD, ePPL and eECO. The signee agrees to support and co-create more of such ECLIC Use Cases going forward.
- Expect that these ECLIC open source Use Cases API's are to be supported by vendors and system integrators to encourage harmonization and reduce IT complexity and costs.

The ECLIC participation model details are described in a separate document.