

eECD Project Information Sheet



Project Information Sheet

Electronic European Cleaning Document or e-ECD

September 2017



Electronic European Cleaning Document

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I. Project Statement Summary

The objective of the electronic European Cleaning Document project also called “eECD project” is **to digitalize the current ECD paper document while sharing it “transactionally” using latest Cloud technologies and this to increase the overall operational efficiency, quality and safety** among the members of EFTCO, Essenscia-Cefic and ECTA.

While this sounds a straightforward objective, the complexity of an e-ECD collaborative cloud project is driven by the large number of players involved, the alignment of the business & system requirements, the different IT legacy systems already in use, the different operational processes and regulations and the required level of data security to build trust among all stakeholders. Related to the latter point of data security, one of the major barriers preventing stakeholders to enter in automated data exchange interactions concerns data confidentiality and unauthorized intrusion and usage of sensitive data. That in mind it is crucial that any ECD or any other related data which are stored and shared via this e-ECD application remain the sole property of the respective participating chemical, transport and cleaning companies in the way that they jointly agree upon. Further processing or use of these data in any way by the ICT service providers is strictly prohibited.

II. Project Overview

A. Problem statement

For companies active in the chemical industry, tank cleaning is a cornerstone in the logistics process for which safety, quality, operational efficiency and compliance needs to be safeguarded. In order to achieve this, a paper-only European Cleaning Document (ECD) has been launched in July 1st, 2005. This ECD has been developed by EFTCO in collaboration with ECTA and CEFIC, in order to satisfy the needs of the cleaning stations, transport companies and chemical, feed and food manufacturing companies and its customers.

Whilst this ECD was a giant leap forward, the current paper based process does not meet all current challenges and expectations anymore. At the same time, technological capabilities have evolved significantly over the past decade, allowing the stakeholders to address this gap.

An example ECD paper document can be consulted through the EFTCO website.

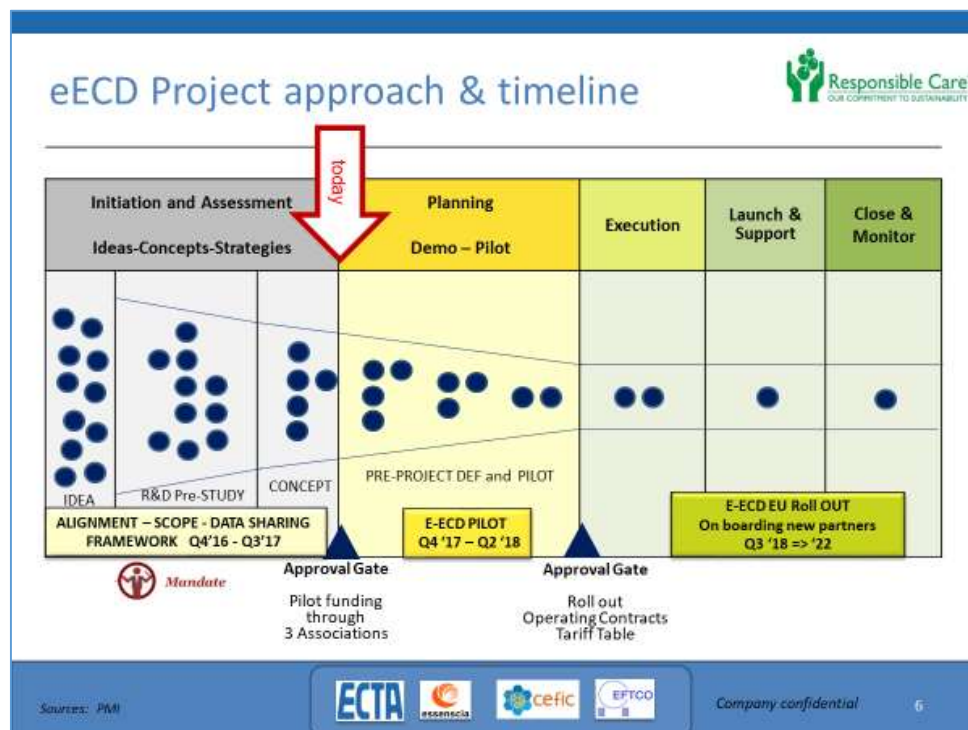
<http://www.eftco.org/european-cleaning-document/example-ecd>

B. Project Approach

To start the digitalization of the ECD document a project team was chartered through ECTA, essencia-Cefic and EFTCO and the eECD Project Approach got split in 3 project phases :

- An eECD **DEFINITION – PHASE** were the project team defined and scoped the eECD project, got the mandate of the 4 associations, brought in the right subject matter expertise and the project team members, defined and selected the ICT technology data platform and created a project business plan to obtain pilot funding through the associations and its members.
- An eECD **PILOT - PHASE** project to demonstrate the digitalized e-ECD IT solution within a pre-defined and business realistic process scope and with the full pilot development, configuration & solution built in first half of 2018
- An eECD **EU ROLL OUT PHASE** that entails the further e-ECD solution roll out of the demonstration pilot towards all European stakeholders as of the second half of 2018 . In addition to the geographical Chemical roll out in Europe in 2019 & 2020, this phase will be extended with new developments and system enhancements specifically for food and pharma industry later on.

A schematic overview of the project approach is given in the picture below.



Today , the eECD project team has reached a new milestone and is reaching out to each of the large association groups being ECTA, EFTCO and essencia/Cefic to collect the project funds. With that fund, the defined digital eECD process will be demonstrated prior the EU roll out. To increase its success and

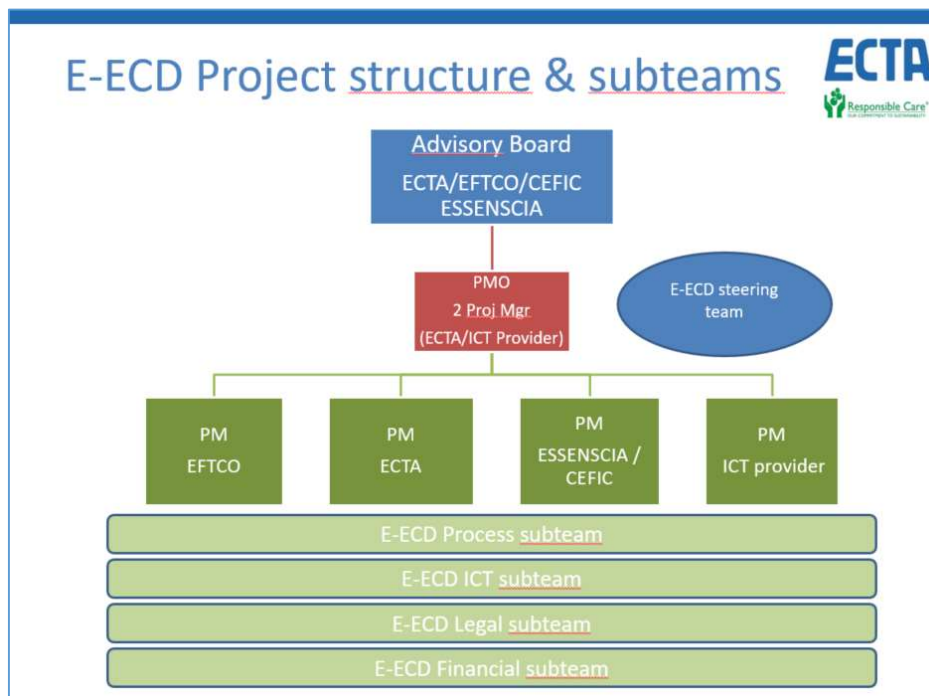
to manage the costs, the eECD Pilot phase itself will be geographically focused around the chemical clusters located in Belgium, Netherlands and Germany. The right skilled and interested pilot company logistics and ICT partners are already being searched for and this to start developing and demonstrating the eECD pilot process in Q4 2017.

C. Overview of the e-ECD Project Stakeholders & Team Structure

Up till now, the e-ECD project is being led by the ECTA association and this in close collaboration with EFTCO and essenscia-Cefic whereof:

- ECTA stands for European Chemical Transport Association and represents over 100 **transport company** members. www.ecta.com
- EFTCO stands for the European Federation of Tank Cleaning Organizations www.eftco.org and represents close to 485 **Tank cleaning companies**
- ESSENCIA is the Belgian Federation for Chemistry and Life Sciences www.essenscia.be and is a member of the European Chemical Industry council Cefic www.cefic.org. Essenscia represents the **chemical companies** in Belgium while Cefic represents the European Chemical Industry in Europe.

Together, these 4 associations form an Advisory Governance Board who define and steer the eECD project as per organizational structure below and are represented by individual company members from each association.



D. Overview of the e-ECD Project Objective and Benefits

All 4 Association Partners mentioned above are equally supporting the digitalization of the ECD document and share the common project objectives and benefits which can be summarized in 3 categories being:

✓ **Quality & Compliance : accurate product information**

The basis for a seamless collaboration between the chemical, transport and tank cleaning companies is to ensure that accurate & timely information is being exchanged throughout the tank cleaning, loading and customer delivery process. Converting the manual ECD document to a digitalized e-ECD form and related process will help to make this communication process between all parties less error prone, more transparent and real time which in turn helps to deliver a high quality product & service to the end Customer.

✓ **Responsible Care & Safety**

The aim for more safety and higher responsible care standards is a cornerstone within the strategy of each stakeholder. Misinformation due to non-transparency of product data, inconsistent safety data information or data delays, can cause dangerous situations for all stakeholders in their specific operations. Accurate product & cleaning information combined with the right skilled people and the appropriate technical installations are the essential elements to guarantee a safe & sustainable cleaning process.

Given the current weaknesses in the paper process, Responsible Care is overall the main core objective and driver of this eECD project.

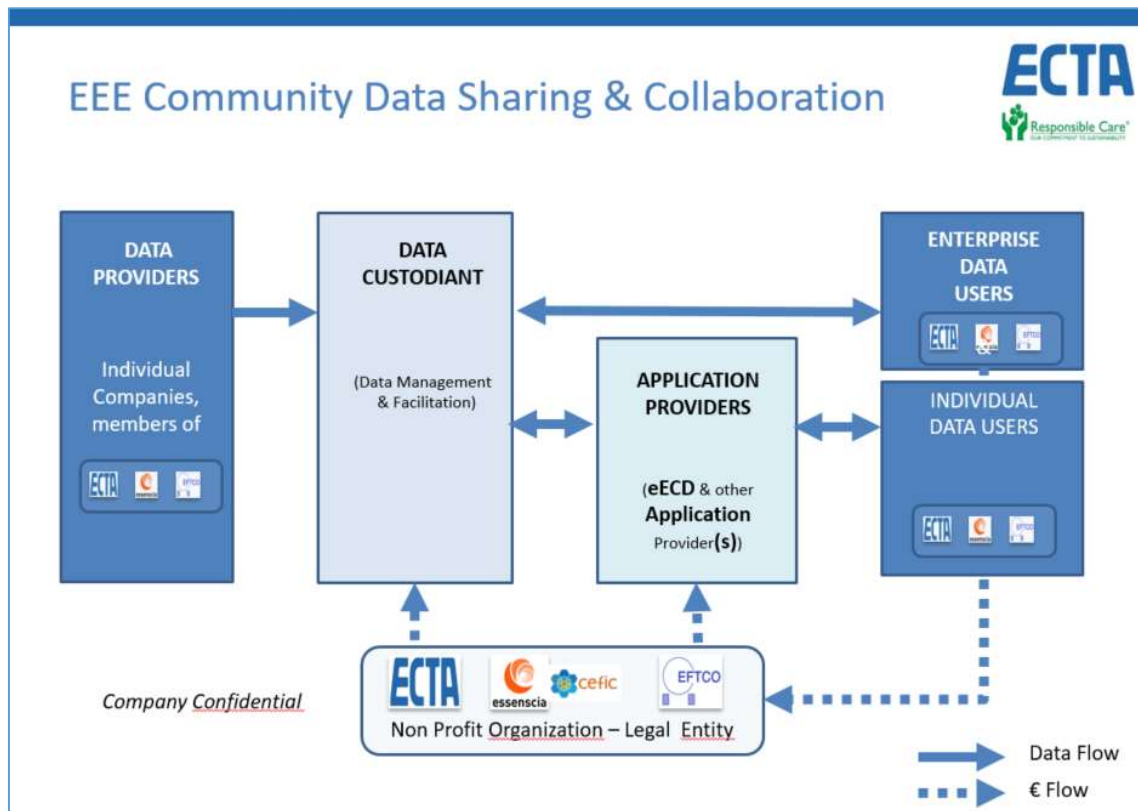
✓ **Operational excellence**

Automating the capturing and digitalizing the exchange of ECD information could mean less manual work, faster site entrance & loadings, less rework & checks and reduced waiting times for truck drivers especially when digital cleaning information can be exchanged prior truck arrival at the loading site. Shortening the historical product blacklists leads to higher asset availability, which reduces costs and increases efficiency. Besides, increased accessibility of data and an elevated trust and compliance level in the e-ECD information is a precursor for a spot checks driven process where companies with a positive track record and complete information can be given access to fast lanes.

With the benefits listed above, the eECD project is uniquely placed to lift the Responsible Care levels across the 'end to end ' chemical logistics supply chain and this by embracing the latest ICT technologies. What's remaining is explaining how to do it which is addressed in the next paragraph describing the data sharing and collaboration model.

E. eECD data sharing & collaborative operating Model

The eECD cloud architectural data sharing and collaborative operating model has been defined within the eECD project team supported with some specialized consultancy firms and it can be summarized as per picture below.



Within this architecture and for the very valid reasons of data safety and security, a clear distinction is being made on purpose between an ICT company dealing company business data and the ICT companies providing (web) applications services and establishing the business process functionality. The eECD data and information exchanges between the chemical, transport & logistics and cleaning companies will run over a central data platform operated by a data custodian which can be considered as a specialized ICT partner that is responsible for safeguarding a firm’s individual data assets in the cloud. In such set up, each company providing eECD data can define which eECD related process data are being exchanged as private, community or public data and each data provider can monitor the downstream usage of its own data within the eECD digitalized process.

Furthermore, within the context of the eECD project, the data platform is considered as a “transactional data pass through” platform where only limited transactional history will be kept to enable the exchange of data & collaboration between the parties. In other words, there is no risk the data hub is used to store historical, sensitive business data and no historical data analysis and business intelligence will be possible on the platform.

Considering the financial flow, investment and cost to operate such digitalized process, it's also important to add that the data platform will be operated by a 'nonprofit organization' who is not entitled to monetize any data being exchanged and is not meant to make any profit. Therefore, the stakeholders who want to use the eECD process and exchange their data via the platform and applications will be asked a market conform membership fee and cost per eECD document that is market conform and without markup from any partners along the supply chain. The tariff structure will be public, 100% financially transparent, equally shared amongst each stakeholder group to ensure an equal level playing field and market conformity.

This cloud based data architectural design has been chosen to allow a trustful and safe horizontal and vertical data sharing and collaboration across the logistics chemical supply chain. The paper ECD will co-exist as backup process (and to serve any business continuity plans) within the new digitalized eECD process.

F. In Conclusion

Over the last 10 months, the eECD project team has worked very hard to reach this eECD project milestone. As of October, the eECD project team will initiate the funding collection process and will reach out to the 3 association groups and respective boards to co-fund the initial eECD project investment. Each association will decide together with their members on how to collect the funds in the best possible way. We count on your individual company appreciation and support to help the project team shaping up this digitalized eECD process and to further improve Responsible Care within the chemical transport and logistics operations. Besides, the team did evaluate the latest ICT technologies to safeguard and secure the individual company data given this was a very important pre-requisite agreed upfront by each of the associations and members in order to gain trust. Through the open, association driven project approach, we ensure a fair level playing field amongst the logistics stakeholders allowing for closer collaboration now and in the future. Any other alternative could be much more disruptive within our industry and your support and sponsorship is a unique opportunity to work this solution out while learning together as we move forward. Needless to add, that this eECD project can serve as a leading digital example for other important & future logistics "Use Cases" however, our focus is move step by step starting first with the eECD project.

On behalf of the associations and the eECD project team, we thank you upfront and remain available for any questions you might have by reaching out to your respective association contacts below.

With best regards,

Peter Devos	ECTA Project contact – info@ecta.com
Peng Paternostre	Cefic Project contact
Laurence Baudesson	essencia Project contact
Lutz Harder	EFTCO Project contact

III. APPENDIX

A. Appendix 1: Terminology/Glossary

CEFIC	“European Chemical Industry Council”
CMR	Convention on the Contract for the International Carriage of Goods by Road
ECD	“European Cleaning Document” – The ECD is a support document for every single tank cleaning in the supply chain process. It is not a certificate but proves which cleaning steps have been performed.
ECTA	“European Chemical Transport Association”
EFTCO	“European Federation of Tank Cleaning Organizations”
ESSENSCIA	Belgian national Federation for the Chemical Industry
PMO	Project Management Office. A PMO coordinates the overall project administration tasks together with all stakeholders and covers both the technology and functional project requirements. It organizes the project steering meetings.
PM	Project Manager who is responsible to represent the project team and manage his specific knowledge part of the project.