



Life Is On



ECLASS AS PIVOT SEMANTIC MODEL

FOR SEAMLESS EXCHANGE OF PRODUCT DATA WITH
SCHNEIDER ELECTRIC PARTNERS

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Electric

CLASS

01

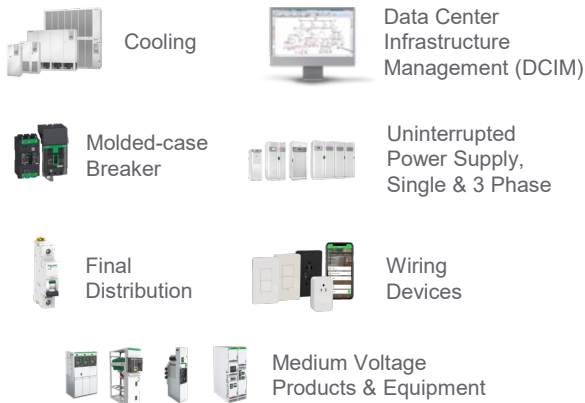
SCHNEIDER ELECTRIC IN NUTSHELL

The Equation for the Future

$$\begin{array}{c} \text{Digital} \\ \text{Automation} \\ \text{Software} \\ \text{Data} \end{array} + \begin{array}{c} \text{Electric} \\ \text{Energy} \\ \text{Decarbonization} \end{array} = \begin{array}{c} \underline{\text{Sustainable}} \\ \text{Green and Smart} \end{array}$$

Electrical & Automation technologies are converging with Software, Services & Sustainability as enablers for rapid acceleration

Energy Management



Software, Services & Sustainability



Industrial Automation



Data centers



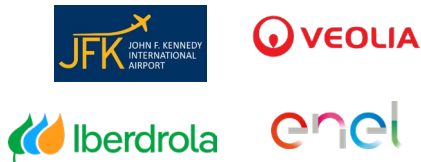
Buildings



Industry



Infrastructure



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02

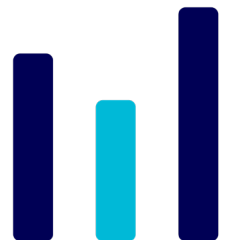
WHY SCHNEIDER ELECTRIC DECIDED TO USE ECLASS?



FINDINGS IN 2017



- Market is expecting seamless exchange of product data between stakeholders in the value chain and between devices (in the larger trends of Internet of Things and Industry 4.0) but **it was slowed down by the lack of standardized semantic.**
- Schneider Electric were facing with a booming demand for product data from all actors **in lot of different (too many) electronic formats.**



THE DATA STANDARDS IN 2017

ILLUSTRATIVE



► Identification standards

> Clearly identifying products and companies.

► DUNS®, EAN/GTIN, EPC, GRAI/GIAI, ILN/GLN, NVE/SSCC, PZN, UPIK

► Classification standards

> Describing products consistently.

► eCl@ss, ETIM, GPC, proficl@ss, UNSPSC, IDEA

► Catalogue exchange formats

> Providing electronic product data.

► BMEcat, cXML, Datanorm, Eldanorm, PRICAT, RosettaNet, xCBL

► Transaction standards

> Automatic exchange of documents

► EANCOM®, EDIFICE, GS1 XML, OAGIS, ODETTE, openTRANS, RosettaNet, UBL

► Process standards

> Automation of complex business processes.

► ECR, ebXML, RosettaNet, SCOR

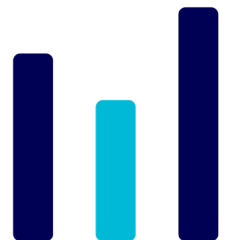
Too many standards!



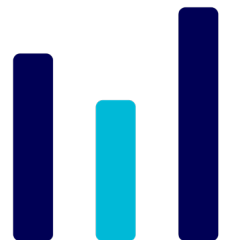
SCHNEIDER ELECTRIC VISION AND STRATEGY FROM 2017



1. Commit to invest in selected Classification / Description formats:
ECLASS (+ ETIM & IDW format to support our distributors in their eCommerce activities)
2. Consider **ECLASS** as the “best” standard for the future due to its advanced capabilities for “design” and because it is the “only worldwide ISO/IEC-compliant data standard for goods and services”



3. Support “merging/convergence” of ETIM, IDW & ECLASS thanks to the “**IEC Common Data Dictionary**” initiative.
4. But also, keep our own company ontology to be able to value our offer and ensure differentiation (even if SE try to reinforce alignment with ECLASS to ease automatic mapping)



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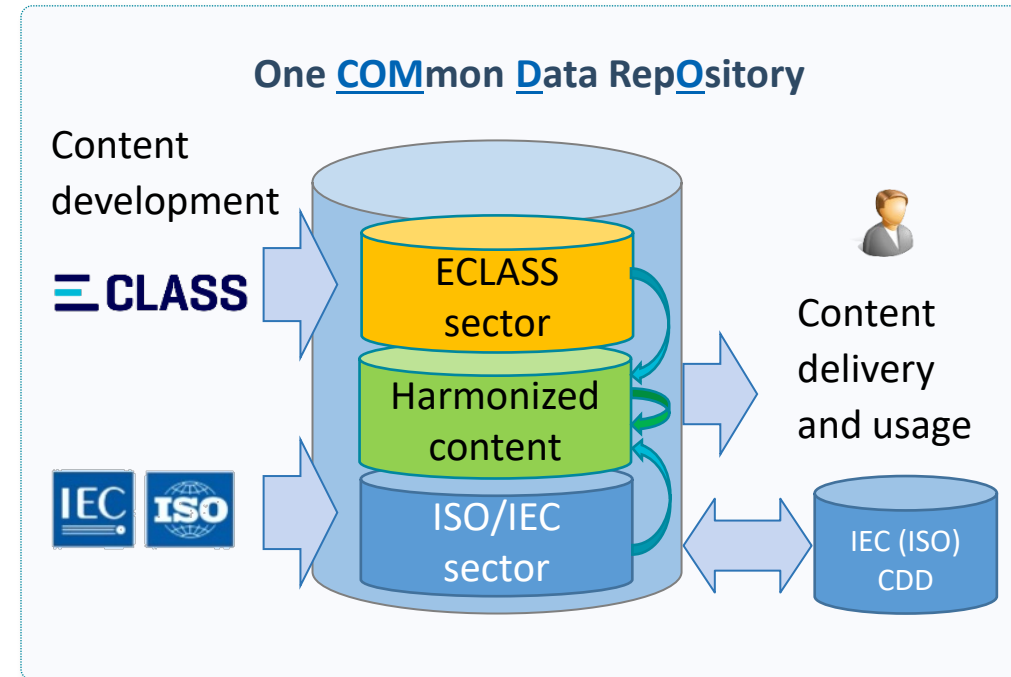
 **ECLASS**

03

**HOW SCHNEIDER ELECTRIC SUPPORTS
AND PROMOTES ECLASS?**

WHAT SE DOES TO SUPPORT AND PROMOTE ECLASS?

- Schneider Electric is actively promoting a convergence between ECLASS and the IEC CDD, especially in the IEC/ISO/ECLASS COMDO project.
- SE also promote ECLASS by contributing to the CAPIEL (European Coordinating Committee of manufacturers of electrical switchgear and controlgear) whitepapers on [Electronic Product Data](#), [Industry 4.0](#), etc.



Electronic Product Data –
Too many formats!

1 INTRODUCTION

Business processes in all domains and especially in electric/electronic industries are increasingly being conducted electronically, which has significant impacts for manufacturers in CAPIEL's scope.

Delivering electronic data describing our offers is becoming mandatory to support e-commerce activities of distributors, design activities where CAPIEL products are used, and also to ~~provide information~~ ~~exchange~~

WHAT SE DOES TO SUPPORT AND PROMOTE ECLASS?



- Schneider Electric pushed his PIM provider (Stibo System) to support ECLASS Advanced in its solution.
- More globally, SE promoted ECLASS in multiple events. For example, SE organized an “ECLASS day” in France in 2019.
- And SE is an active member of ECLASS organization through representatives in the board, Operating Arm and CRD!



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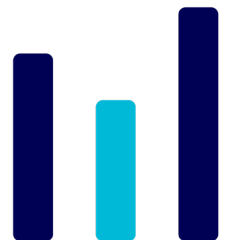
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HOW SCHNEIDER ELECTRIC USES ECLASS?

HOW ECLASS IS USED IN SE?



- Starting in 2017, our investment in ECLASS has been selective.
- Among the 3 potential use cases, SE have focussed his investment on ECLASS Advanced product description for independent software vendors (ISVs).
- The first step was to convince our PIM supplier (Stibo System) to support “ECLASS advanced” and make specific development (thanks to other manufacturers which have also act with us to push Stibo System to support ECLASS advanced)



THREE SCHNEIDER ELECTRIC USES CASES

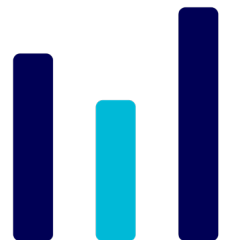


1. ECLASS basic: Product Classification 😐

- SE was expecting to use “ECLASS Class code” as a pivot format to provide other classification such UNSPSC or even ASIN classification (for Amazon Business) but the usage is still limited

2. ECLASS basic: Product Description 😐

- In our industry, the eCommerce standard in B2B is ETIM. As around 50 % of our business is flowing through distributors, SE must provide ETIM data first.
- Around 17 000 commercial references have been described in ECLASS basic

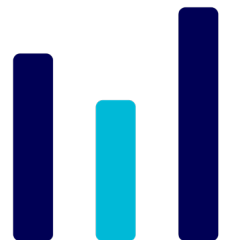


THREE SCHNEIDER ELECTRIC USES CASES

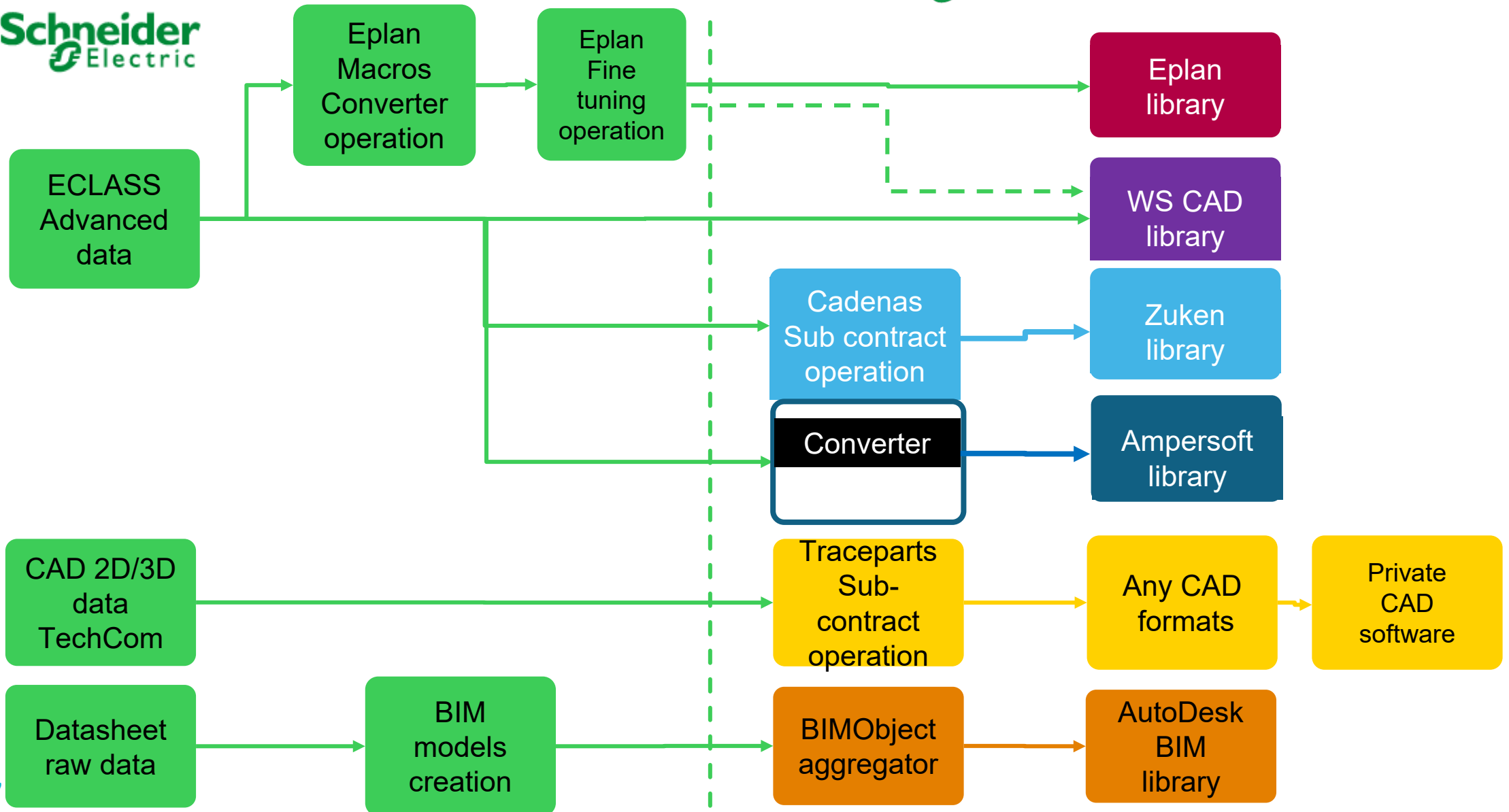


3. ECLASS Advanced: Product Description 😊👍

- ECLASS Advanced allows us to support internal and external engineering software.
It is our main use case today!
- For design firms, the only way to deliver some technical advanced data in digital structured way is ECLASS structure.
- Schneider Electric provide directly ECLASS advanced data to ISVs
- or SE uses ECLASS advanced data as a pivot format to generate “proprietary format” (e.g.: “Accelerated Delivery and Certification of ePlan Macros for Snap-In”)
- Now, thanks to ECLASS Advanced, SE is delivering data for new launches which can be integrated in few weeks in their software compared to months before!



ISV / DATA FORMAT PROCESS



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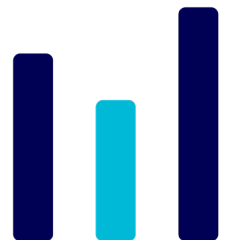
VISION OF THE FUTURE WITH ECLASS?

VISION OF THE FUTURE WITH ECLASS



Even the “adoption” of ECLASS by our market is quite limited today, **Schneider Electric is still convinced that “ECLASS Advanced” is the best standard for our Industry**, especially with a stronger convergence with IEC CDD

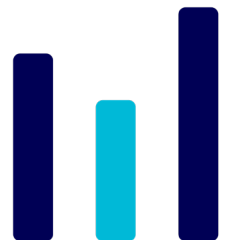
1. eCommerce: ECLASS as “pivot format” to generate by mapping product classification or product description in eCommerce formats such as ETIM
2. CAD ISV: ECLASS Advanced as a standardised format for engineering software including electrical calculation thanks to the concept of block of properties and cardinalities



VISION OF THE FUTURE WITH ECLASS



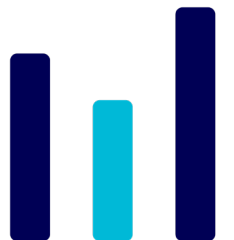
3. **Industry 4.0:** ECLASS should be the standardised semantic for the “Industry 4.0 Asset Administration shell” providing data which can be electronically exchanged, interpreted without error every time, and easily integrated into existing systems
4. **EU Digital Product Passport:** ECLASS is well positioned to be the best standardised product data dictionary to support DPP



TO SUM UP



- Schneider Electric is still convinced that “ECLASS Advanced” is the best standard for our Industry
- But, ECLASS needs to be more internationalized worldwide with more countries adopting this promising standard.
- Without a clear and common standard, Schneider Electric will miss the business opportunity of being able to exchange electronic data in a smart way!





THANK YOU FOR YOUR ATTENTION.

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