



Catena-X Pre-Launch Event North America

June 5th, 2023
Austin, TX

- Summary – Handout -

Catena-X Pre-Launch Event North America

June 5th, 2023
Austin, TX



Innovation through Collaboration



Welcome to Austin!

Your hosts of today's event



Oliver Ganser

Chairman of the Board Catena-X e.V.
Head of Industry Consortium
BMW Group



Jeff Schlageter

Member of the Board Catena-X e.V.
General Manager Global Manufacturing and Energy
IBM



Catena-X in a nutshell

Catena [origin latin]

Meaning: *chain; chain-links*

Catena-X started in 2021 as a initiative of a few key automotive partners to break through the traditional peer to peer limitations of todays business processes.

Catena-X Mission Tackle the industries most pressing business challenges by pioneering data driven value chains and offering the first open & collaborative data ecosystem.

We simply call this **Radical Collaboration**



Radical Collaboration

Time to value within just 24 months after start

- 152 global partner joined the initiative
- 110+ Mio EUR spend on R&D
- Anti-Trust & Compliance - clearance
- 10+ Strategic Partnerships - entered
- 1st Catena-X de-central Operating System - released
- 1st Catena-X Operating Model incl. Policies - released
- 1st ever GAIA-X compliant data space - confirmed
- 1st set of Catena-X Standards (43) and Business KITS – released
- 1st Operating Company (Cofinity-X) – established
- 2 local Catena-X Hubs – established; 3 more are planned for 2023 (NA, Asia)
- 1st Beta Operations - started 04/23
- Productive go Live - planned for 10/23

→ Pre-Launch Event



Innovation through collaboration

Agenda

- 12 – 1 pm Arrival & Lunch
- 1 – 3 pm **Welcome to Austin!**
Oliver Ganser & Jeff Schlageter (5min)
- Catena-X 101**
Oliver Ganser (30min)
- Catena-X KITS & Benefits**
PLM / Quality: Traceability – Oliver Ganser (15min)
Sustainability: CO₂ Reduction – Niels Angel (15min)
Sustainability: Circularity & Battery Pass – Thorsten Dikmann (15min)
- Catena-X KITS & Open Collaboration**
Maximilian Ong (15min)
- Q&A & Short Break (25min)
- 3 – 5 pm **Catena-X Global Adoption & onBoarding**
Partner Testimonials – Interview with Pramita Mitra & Jeffrey Schlageter (15min)
Catena-X's first Operating Company Cofinity-X – Thomas Roesch (30min)
Launch of Catena-X North America Hub – Frank Goeller & Christoph Schlueter-Langdon (20min)
- Catena-X Panel Discussion “Trust and Interoperability”**
Host: Frank Köster
Panelists: Lars Nagel, Roland Fadrany, Christoph Schlueter-Langdon and Thomas Roesch
- 5 – 6 pm Get together & buffet

Our Speakers

Oliver Ganser
Chairman of the Board, Catena-X
Head of Industry Consortium, Catena-X
BMW Group

Jeff Schlageter
Member of the Board, Catena-X
GM Global Manufacturing and Energy
IBM

Niels Angel
Sustainability: CO₂ & ESS, Catena-X
BMW Group

Thorsten Dikmann
Circularity: Digital Material Passport, Catena-X
BASF

Prof. Dr. Christoph Schlueter-Langdon
Product Manager, Catena-X
T-Systems

Prof. Dr. Frank Köster
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)
Institute for AI-Security

Roland Fadrany
COO
GAIA-X

Lars Nagel
CEO
International Data Spaces Association

Maximilian Ong
Business Architect KITS, Catena-X
Mercedes-Benz

Pramita Mitra
Supply Chain Digitization Strategy and Integration
Ford



Frank Göller
VP Internationalization, Catena-X
Head of Digital Production & Processes
Volkswagen

Thomas Rösch
CEO
Cofinity-X

Supported by



Catena-X



THE FIRST OPEN AND COLLABORATIVE DATA ECOSYSTEM

06/05/2023

AUSTIN, TX

Oliver Ganser

Chairman of the Board Catena-X e.V.
Head of Industry Consortium

Some of the most pressing issues of our industry are

TRUSTED SUSTAINABILITY / ESG



“Put targets into action with real PCF data to de-carbonize the value chain”

RESILIENT SUPPLY- & VALUE CHAINS



“Ensure material flow and availability across multiple value chain steps”

COMPLIANT / ADAPTABLE PLM



“Monitor field- / production environments, detect anomalies and contain affected parts”

and “close the loops for circularity”



...and they all share the same problems

- 1) Peer to Peer Networks no longer get the job done
- 2) Exchange of Data is a matter of Trust & Choice
- 3) "I don't know how to..." who can help me or my company?

TRUSTED SUSTAINABILITY / ESG

Calculate Product CF	Circularity / Product Pass	ESG Monitoring
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RESILIENT SUPPLY- & VALUE CHAINS

Demand / Capacity Mgt.	Master Data Services	Manufacturing as a Service
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COMPLIANT / ADAPTABLE PLM

Part / Material Traceability	Live Quality Loops/Analysis	Behavior Twin
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Business Process (aka UseCases) and their value creating prerequisites



Multi tier Exchange of Data

Global and/or Systematic Coverage

Trusted Business logic & -policies

Interoperability Multi vendor solution portfolio

Adoption: Small to large organizations

	Calculate Product CF	Circularity / Product Pass	ESG Monitoring	Demand / Capacity Mgt.	Master Data Services	Manufacturing as a Service	Part / Material Traceability	Live Quality Loops/Analysis	Behavior Twin
Multi tier Exchange of Data	essential	essential	essential	essential	no	essential	essential	essential	selected
Global and/or Systematic Coverage	essential	essential	essential	selected	essential	essential	essential	selected	essential
Trusted Business logic & -policies	essential	essential	essential	essential	essential	essential	essential	essential	essential
Interoperability Multi vendor solution portfolio	essential	essential	essential	essential	selected	essential	essential	essential	essential
Adoption: Small to large organizations	essential	essential	essential	essential	essential	essential	essential	selected	essential



Catena-X breaks through today's peer to peer limitations

Tackle the industries most pressing business challenges by pioneering data driven value chains and offering the first open & collaborative data ecosystem.

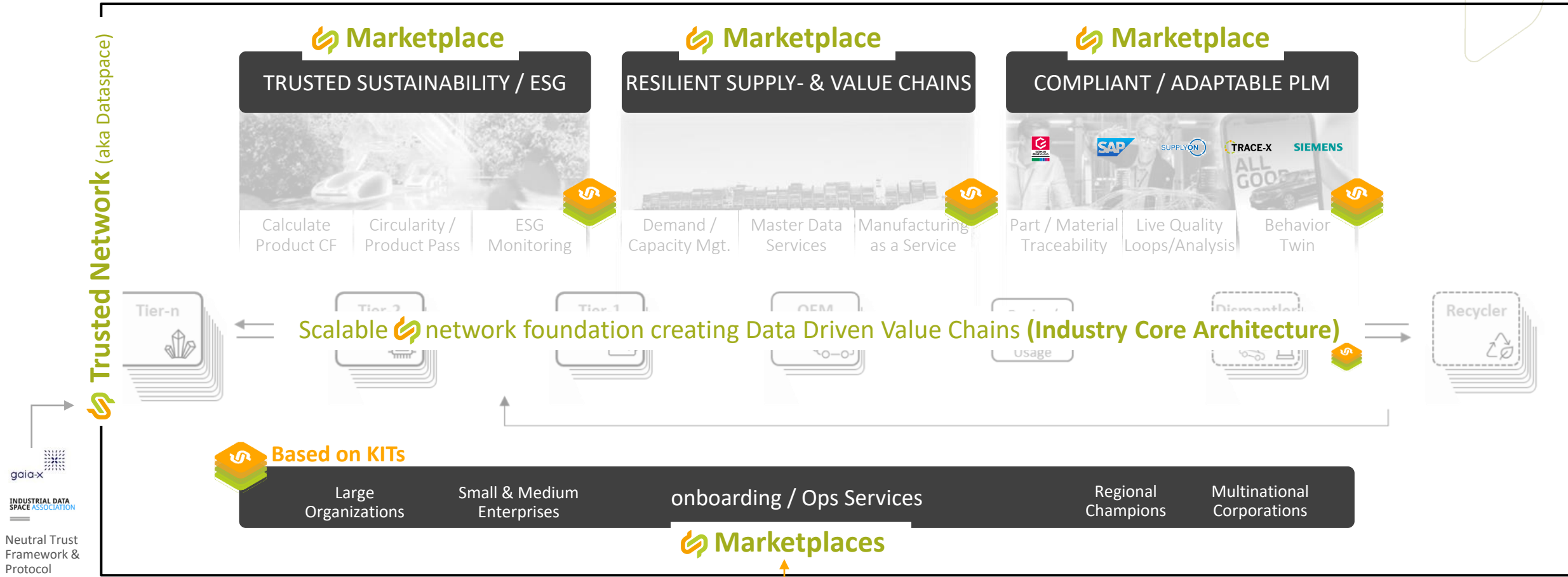


Phase I of Catena-X (10 Use Cases by Q1/2024) lays the foundation for a scalable network; for many more Use Cases to come



Catena-X USP for Businesses

- Interoperable, end to end **Catena-X Solution Portfolios**, creating and utilizing data driven value chains
- **Catena-X Industry Core Architecture (KITs)**, reducing run and build costs per Use Case and speed up time to value

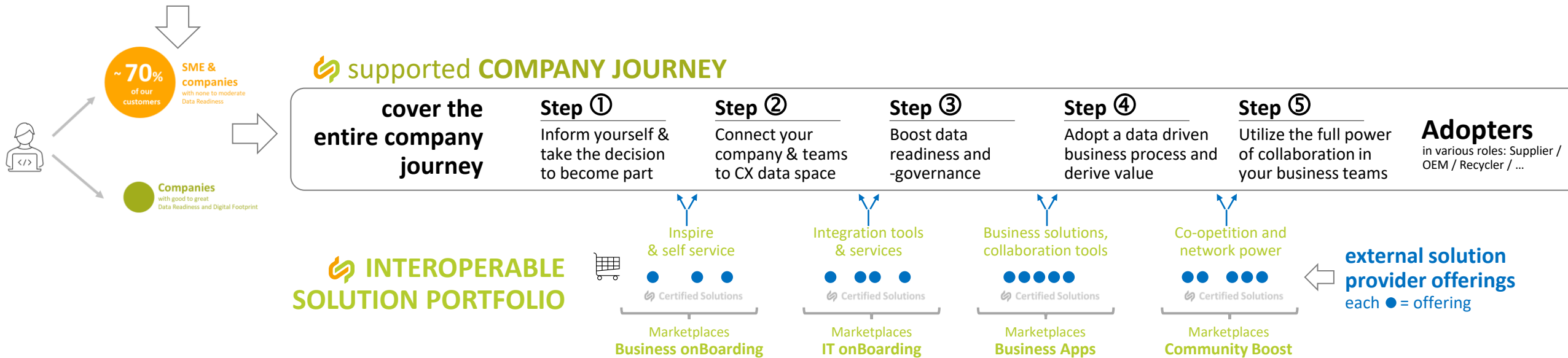




Core offering and value proposition for ADOPTERS

Support the individual adopter to become part of a dedicated Catena-X use case and create instant value by offering them a multi vendor and interoperable **SOLUTION PORTFOLIO** along their **COMPANY JOURNEY**.

Problem Statement per Use Case

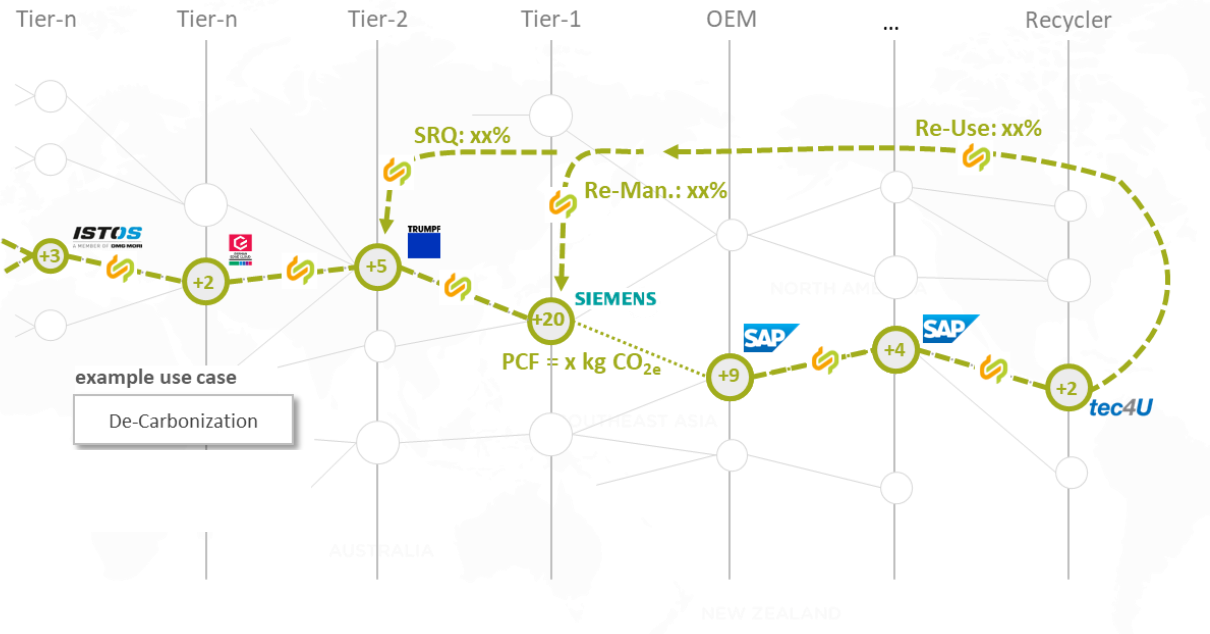




What's new & different about Catena-X?

Catena-X enables all participants to compliantly join and collaborate within a shared global **DATA SPACE** to solve their business problems. Target State Time to Value: 3-6 months (launch 6-12months)

Shared DATA SPACE



for the GLOBAL AUTOMOTIVE INDUSTRY

- 275.000+** legal entities
- x # of production sites** (>1.000.000)
- x # of digital Twins** (>1.000.000.000)
- x # business processes** (initial 10)
- x # business users** (>10.000.000)

= **XXL**



Taking the right turn

Towards, we (the industry) share mutual and pressing issues which we only can solve together.



Adoption

We grew within just two years from 6 to ...



152

global partners

as of May 2023



Strategic Partnerships and Catena-X working model

Catena-X joins forces with established groups and focuses on execution → Network Integration and Industrialization

Catena-X closes gaps in the customer journey with partners to create end to end industry solution portfolios

Trust & Architecture

(always: de-central)

INDUSTRIAL DATA
SPACE ASSOCIATION



gaia-x



Semantics

IDTA

Industrial
Digital
Twin
Association

Sustainability



Automotive Associations

VDA

PF^A FILIÈRE
AUTOMOBILE
& MOBILITÉS

jama



ODETTE
SWEDEN

Working Groups, e.g. Verification



Deloitte.



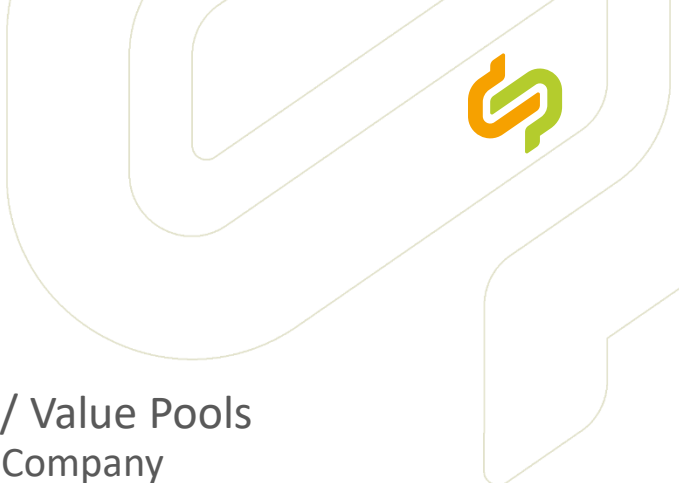
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Catena-X @ Hannover 2023



Value Pools



Forecast EU Data Spaces



€829 billion
value of data economy
in the EU27

from €301 billion (2.4%
of EU GDP) in 2018

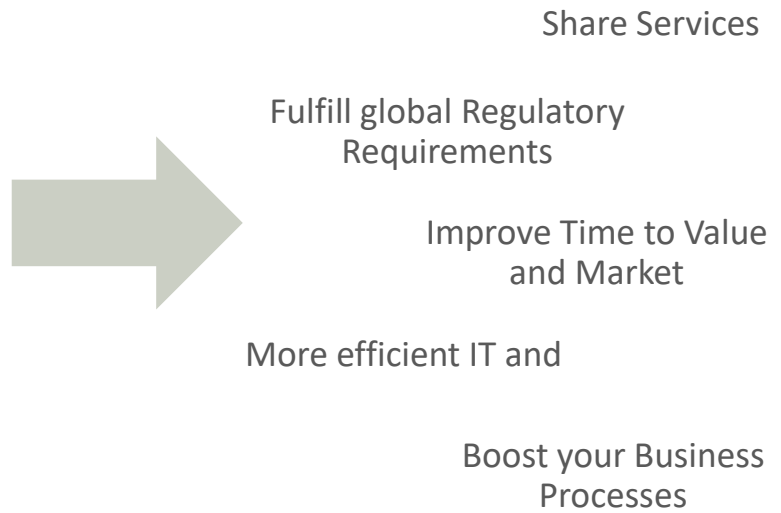
Forecast Global Automotive Industry Catena-X



EUR
50-60bn

total achievable annual value
from full implementation of effective data
ecosystems across the automotive value
chain

Forecast / Value Pools Individual Company





Catena-X
Automotive Network

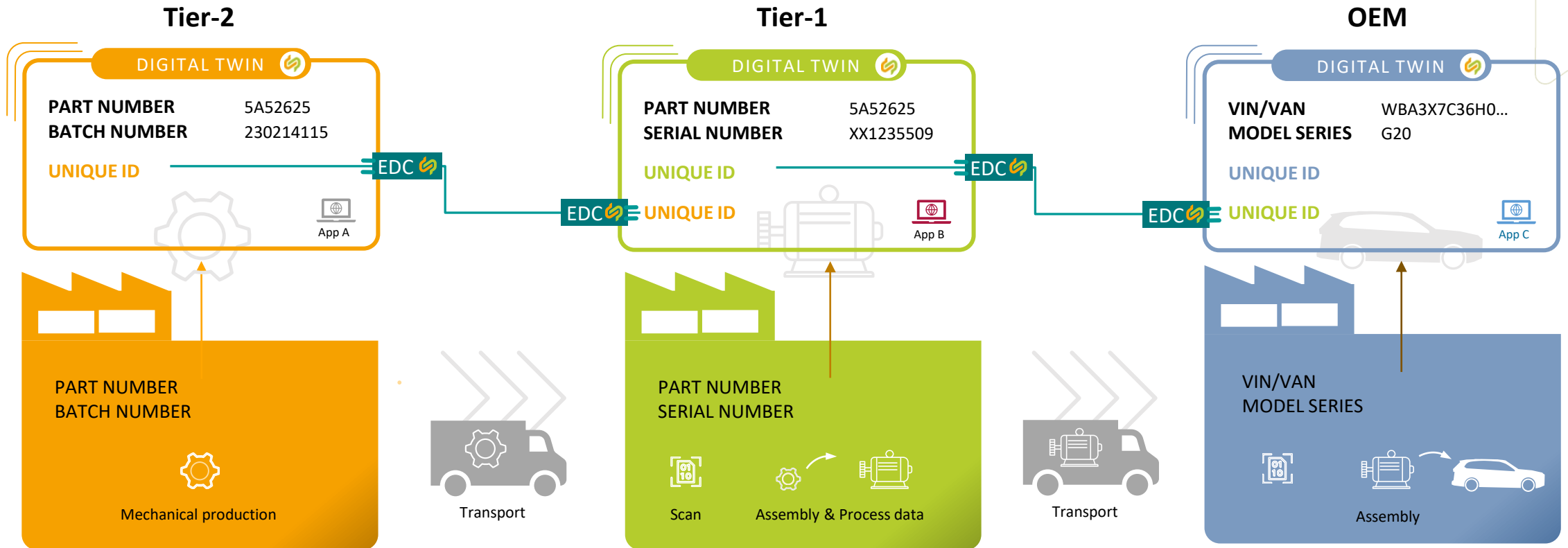
Oliver Ganser, BMW

Traceability & Quality



Traceability – How it works.

Building data chains without lengthy discussions on standards, IT changes or process adaptations.

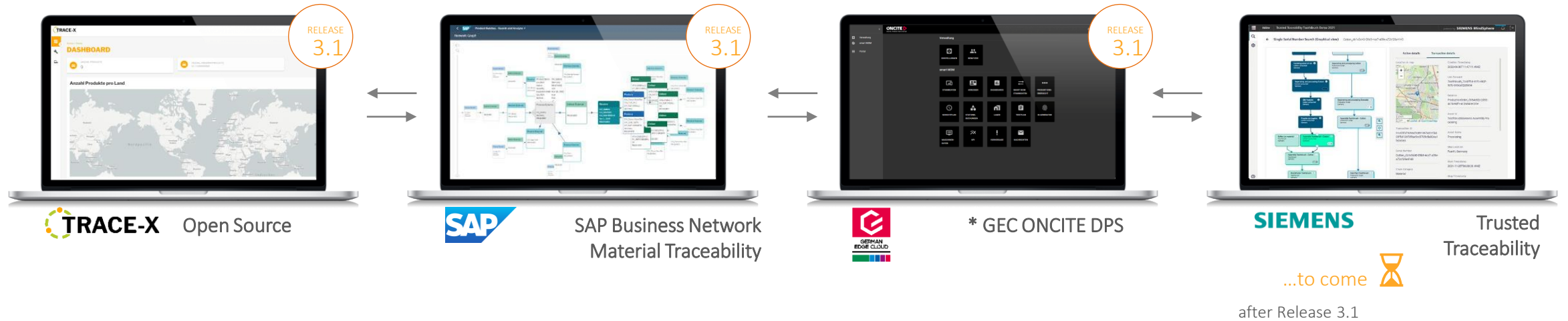


Data Chains and Digital Twins are key enabler and network builder for many other core use cases like circularity, CO₂ and LKSP / ESS.



Marketplace Traceability

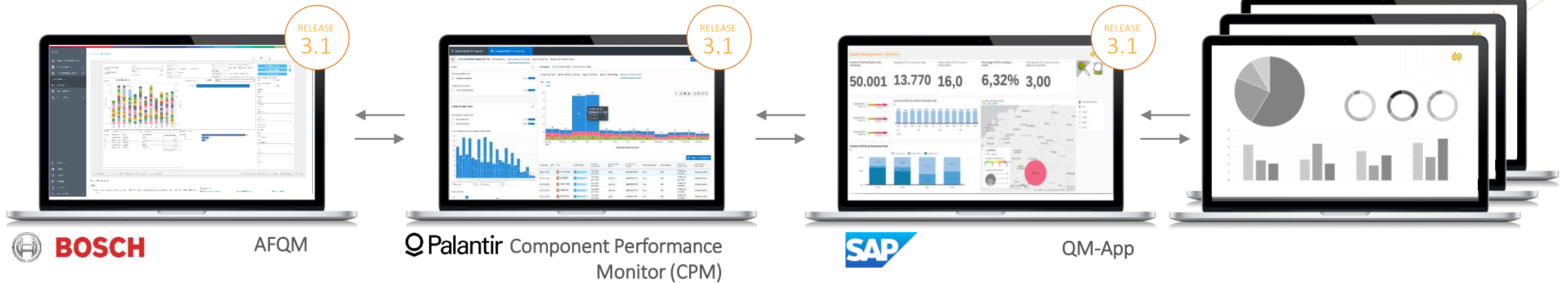
Initial strong portfolio of apps to enable and manage traceability of parts.





Marketplace Quality

Initial strong portfolio of apps to enable and manage quality of parts / vehicles.



...to come after Release 3.2

- Connect Data from Production and Field across multi tier levels
- Enabling Early Warning / Quality Alerts across multiple partners
- Precise Containment of affected parts / vehicles



Catena-X

Automotive Network

Niels Angel, BMW

Sustainability



There are two dimensions of sustainability in the automotive supply chain, both are growing in relevance.

Product Carbon Footprint

EV Customers (e.g. fleet managers)

Investors

Regulation in Europe affecting exporters
(e.g. CBAM)

International efforts to standardize:
UNECE-Auto-LCA

Environmental/Social Standards

Public awareness of public and customers about supply chain issues

- working conditions n-tier
- environmental/safety issues

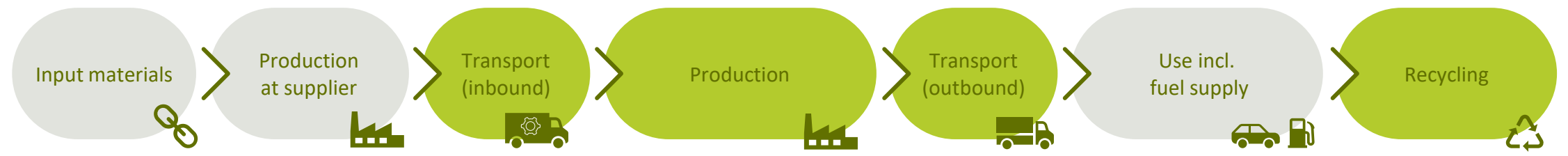
Regulation in all regions demanding supply chain due-diligence

- Dodd-Frank Act
- National Supply Chain Laws
- Uighur Forced Labor Act

Focus of Sustainability is increasingly on the n-tier Supply Chain



Supply chain carbon emissions matter. Their importance will go up.



Numbers refer to vehicle fleet with combustion vehicles

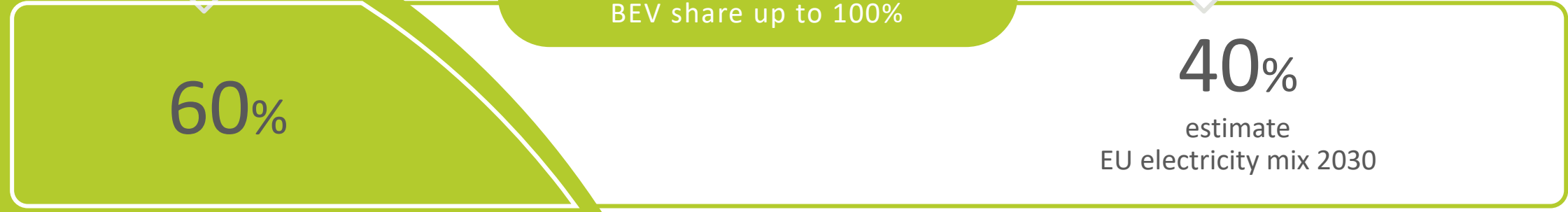
25%

3%

70%

2%

Significantly increasing BEV share up to 100%



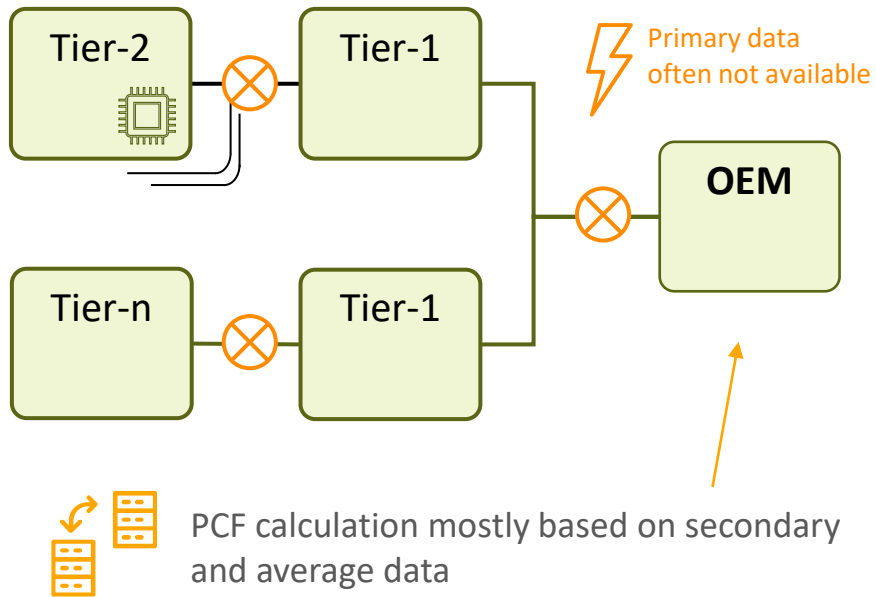
Numbers based on OEM estimation





No defined methodology in place for capturing Product Carbon Footprint in the supply chain.

STATUS QUO



CHALLENGE



Limited specific information on Product Carbon Footprint in the supply chain. No transparency regarding actual process efficiency or actual energy usage.

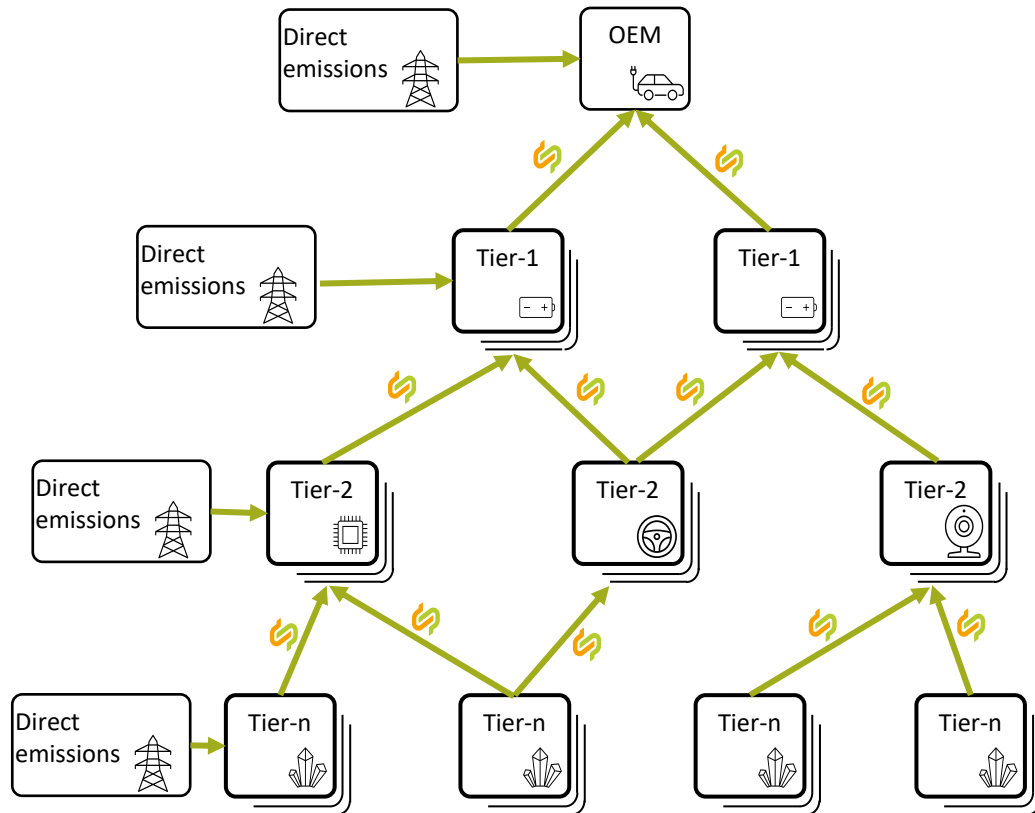


Inconsistent methodology/ standards for PCF¹ calculation.

¹ PCF = Product Carbon Footprint



Catena-X captures PCF along the supply chain by recording and aggregating primary data.



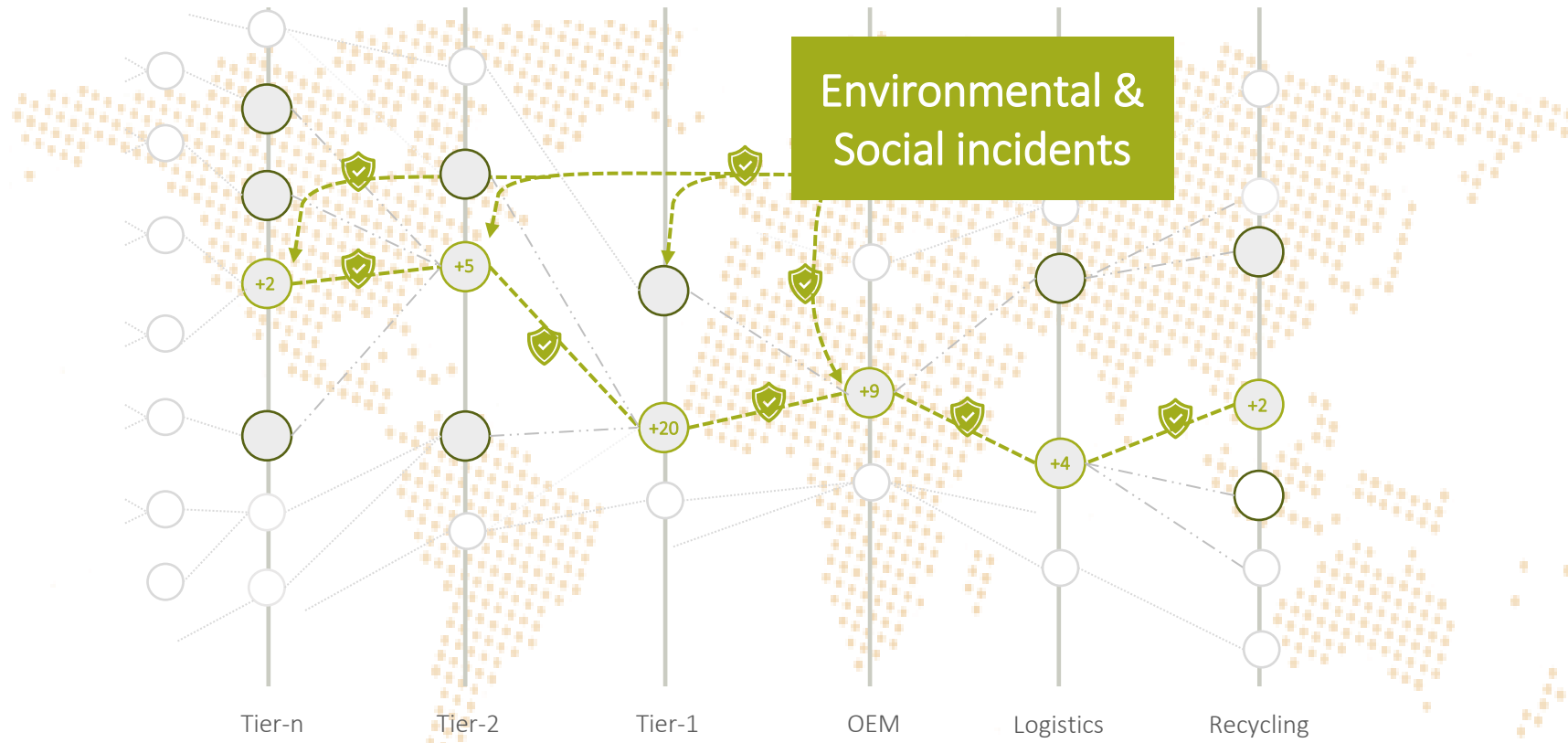
Measure: Capture GHG emissions data based on real processes and site data


Reduce: define reduction measures in the n-tier chain

Report: Efficient and credible reporting of PCF values and achieved reductions



Catena-X can support supply chain due-diligence without full upstream visibility, e.g. for incident tracking



 **30.000-40.000 parts & most complex supply network**

STATUS QUO

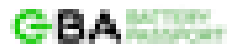
- Mainly manual effort
- Low network collaboration
- Long processing time
- Large number of intermediaries
- Varying information quality & sources

Future: Incident matching and incident management enabled by Catena-X network functionality

Catena-X collaborates with relevant stakeholders. We don't want to duplicate best practice work in sustainability.



Existing Collaboration



Greenhouse Gas Rulebook

General Rules - Version 1.0

Pending/planned



Responsible Business Alliance

Advancing Sustainability Globally



An ecosystem is required to best use a decentralized network

Methodology & Governance

Application, Platform & Infrastructure

Catena-X Sustainability Ecosystem

Audit & Verification Systems

Multi-Stakeholder Credibility





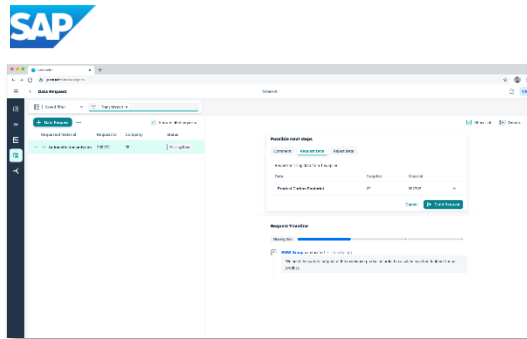
Marketplace CO₂

Initial portfolio of apps to calculate and exchange PCF is available.

CO₂ - Exchange-Apps (interoperable)

CO₂ - Calculation-Apps (interoperable)

SIEMENS



In pipeline - targeted for Q4/2023

In pipeline - targeted for Q4/2023



...



...



Catena-X
Automotive Network

Thorsten Dikmann, BASF

Circular Economy



The pressure is on to rethink the line.

GLOBAL WASTE
IN 2050

>3.4

BILLION TONS

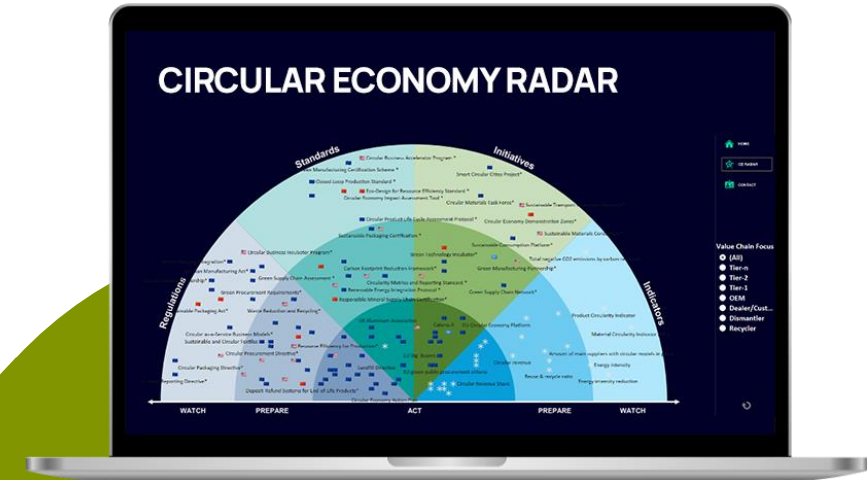
EUROPEAN CLIMATE
CHANGE ACT

CLIMATE NEUTRALITY

2050

NUMBER OF PLANET EARTHS
NECESSARY TO MEET RESOURCE
NEEDS

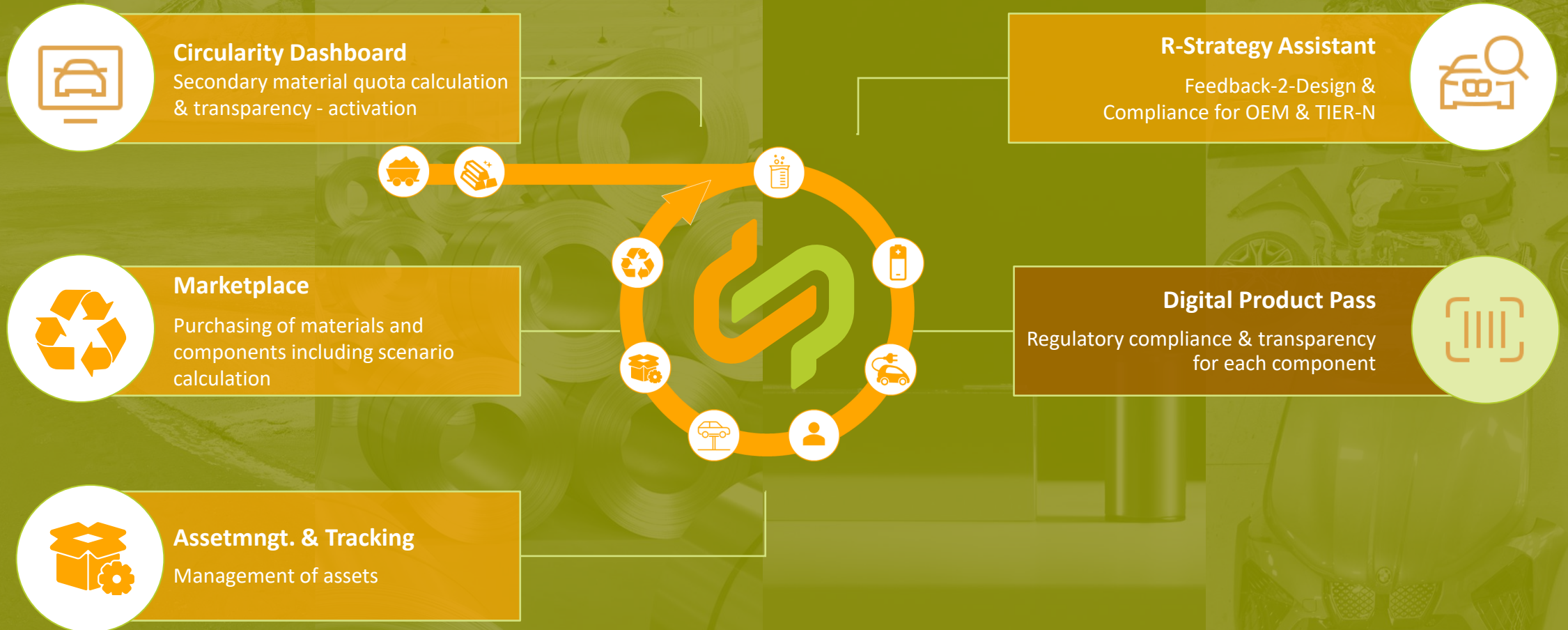
1.6



Catena-X is a key solution
enabling a Circular Economy in
the automotive value chain



Building products to industrialize circular economy.





Why we need a Digital Product Passport



Maximize
Product Transparency



Fulfill
Regulatory Compliance



Improve
Circularity Potential

How Catena-X supports Digital Product Passes



Standardized data model that specifies the content of a passport



Infrastructure for providing and consuming data



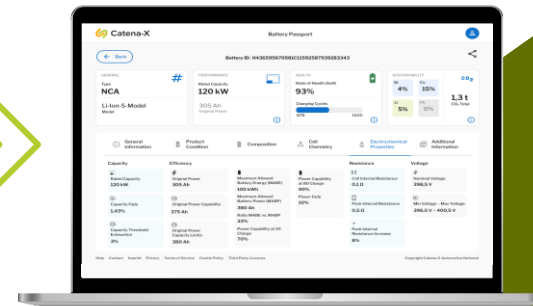
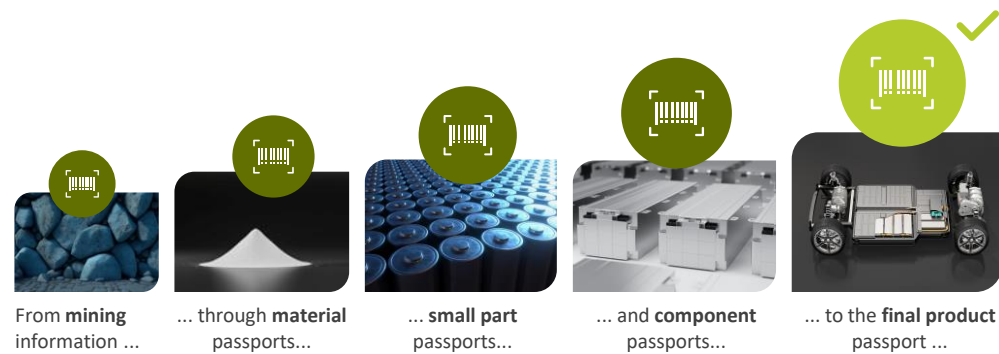
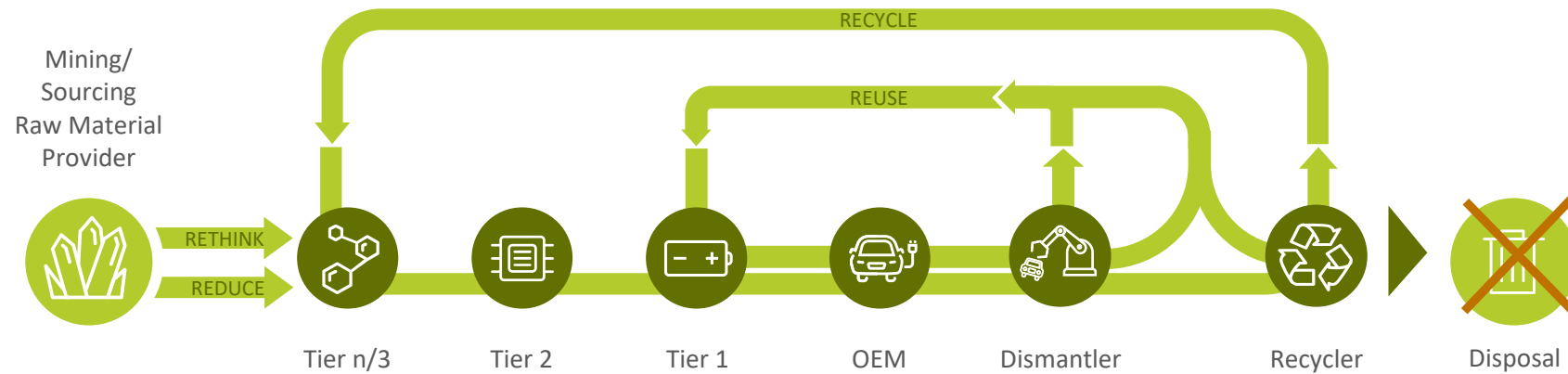
Application for accessing and viewing the passport



Started with a “Battery Passport”



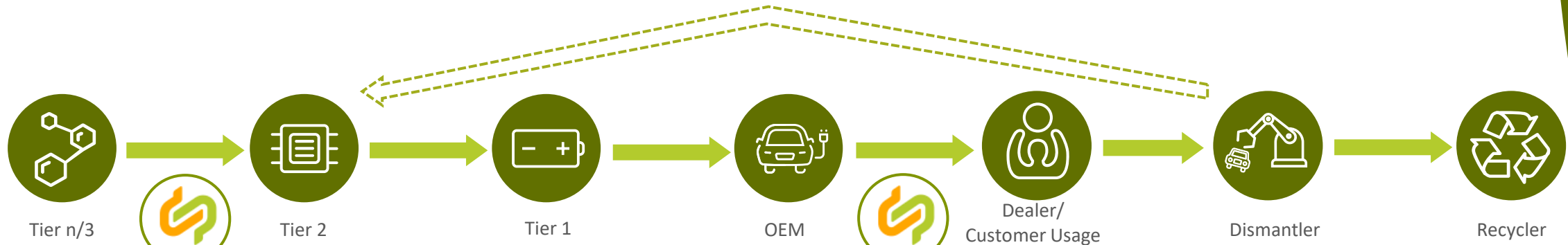
Generate a product passport by aggregation along the value chain



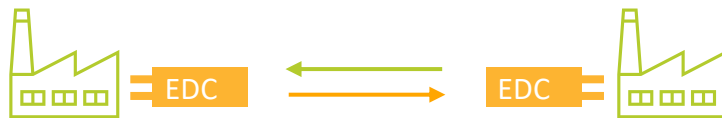
... which can then be provided by the OEM.



The value. First time value derivation is made possible by the trusted Catena-X data space.



Harmonized infrastructure



Your data is your data. Always.

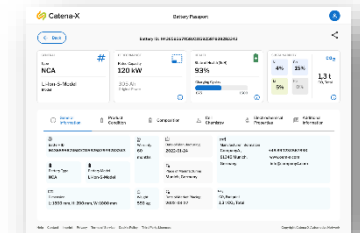
Standardized data exchange



Catena-X Standard Library
Catena-X DataModel



BatteryPass Viewer App





“Battery Pass Viewer”. Digital Product Passes, but tangible

The screenshot displays the Catena-X Battery Passport interface. At the top, the Catena-X logo and 'Battery Passport' title are visible. A 'Back' button and a share icon are present. The main content area is divided into four panels: GENERAL (Type: NCA, Model: Li-Ion-S-Model), PERFORMANCE (Rated Capacity: 120 kW, 305 Ah Original Power), HEALTH (State of Health: 93%, Charging Cycles: 675/1500), and SUSTAINABILITY (Ni: 4%, Co: 15%, Li: 5%, Pb: 0%, CO₂ Total: 1,3 t). Below these panels is a navigation bar with tabs for General Information, Product Condition, Composition, Cell Chemistry, Electrochemical Properties, and Additional Information. The General Information tab is active, showing details such as Battery ID, Warranty (60 months), Date of Manufacturing (2022-01-24), Manufacturer Information (Company A, 81345 Munich, Germany), Battery Type (NCA), Battery Model (Li-Ion-S-Model), Place of Manufacturing (Munich, Germany), Dimension (L: 1800 mm, H: 200 mm, W: 1000 mm), Weight (550 kg), Date of Market Placing (2022-03-27), and CO₂ Footprint (1,3 t CO₂ Total). The footer contains links for Help, Contact, Imprint, Privacy, Terms of Service, Cookie Policy, and Third Party Licences, along with the copyright notice for Catena-X Automotive Network.

Catena-X Battery Passport

Back Battery ID: H436595670581C11592587939283343

GENERAL #
Type: **NCA**
Li-Ion-S-Model Model

PERFORMANCE [Icon]
Rated Capacity: **120 kW**
305 Ah Original Power

HEALTH [Icon]
State of Health (SoH): **93%**
Charging Cycles: 675 / 1500

SUSTAINABILITY CO₂
Ni: 4% Co: 15%
Li: 5% Pb: 0%
CO₂ Total: **1,3 t**

General Information Product Condition Composition Cell Chemistry Electrochemical Properties Additional Information

Battery ID: H436595670581C11592587939283343
Warranty: 60 months
Date of Manufacturing: 2022-01-24
Manufacturer Information: Company A, 81345 Munich, Germany
+49 89 1234567893
www.oem-a.com
info@companyA.com

Battery Type: NCA
Battery Model: Li-Ion-S-Model
Place of Manufacturing: Munich, Germany

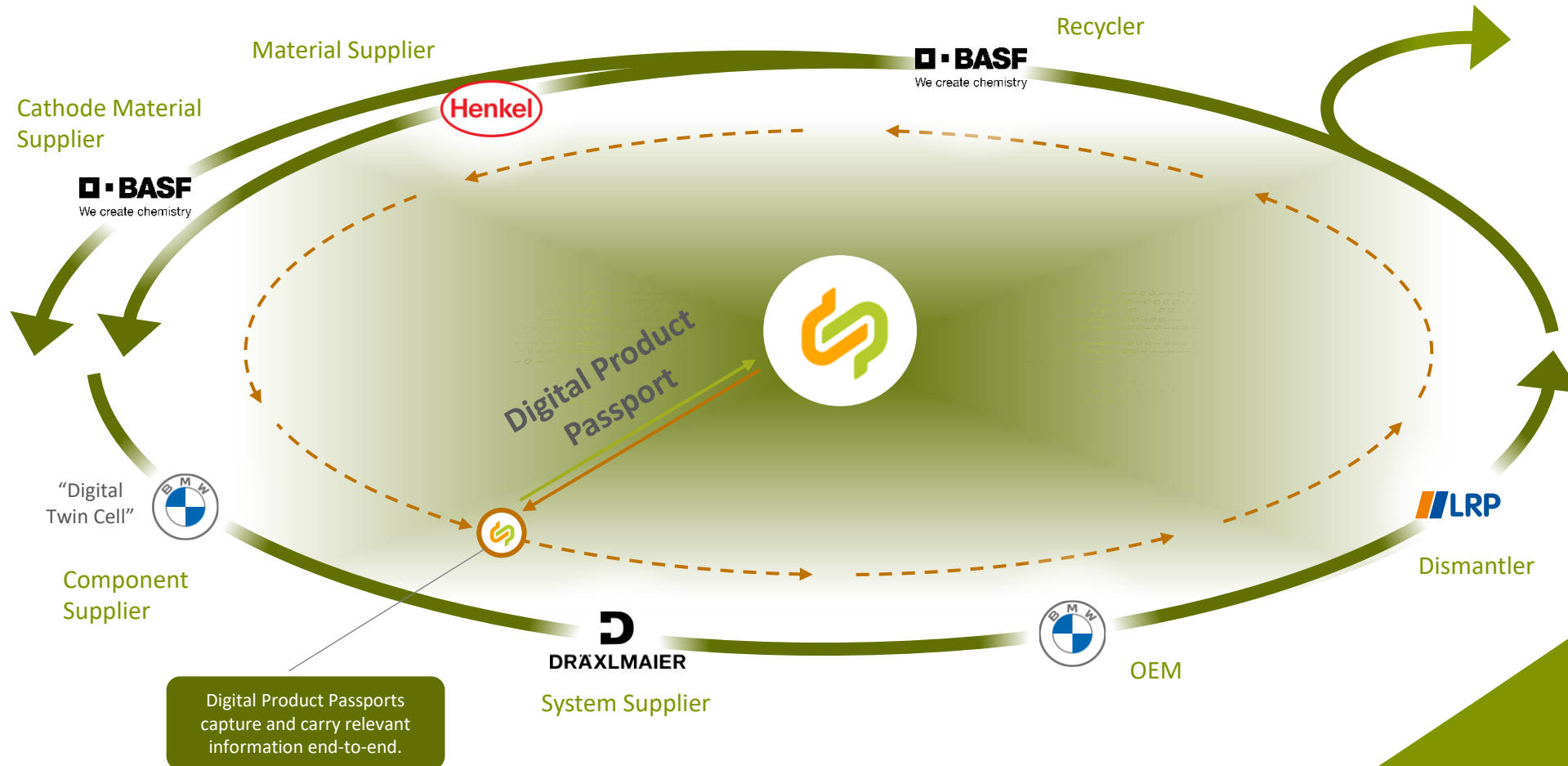
Dimension: L: 1800 mm, H: 200 mm, W: 1000 mm
Weight: 550 kg
Date of Market Placing: 2022-03-27
CO₂ Footprint: 1,3 t CO₂ Total

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It works.

If you choose to share your data, the material composition of your components can be kept in the cycle.





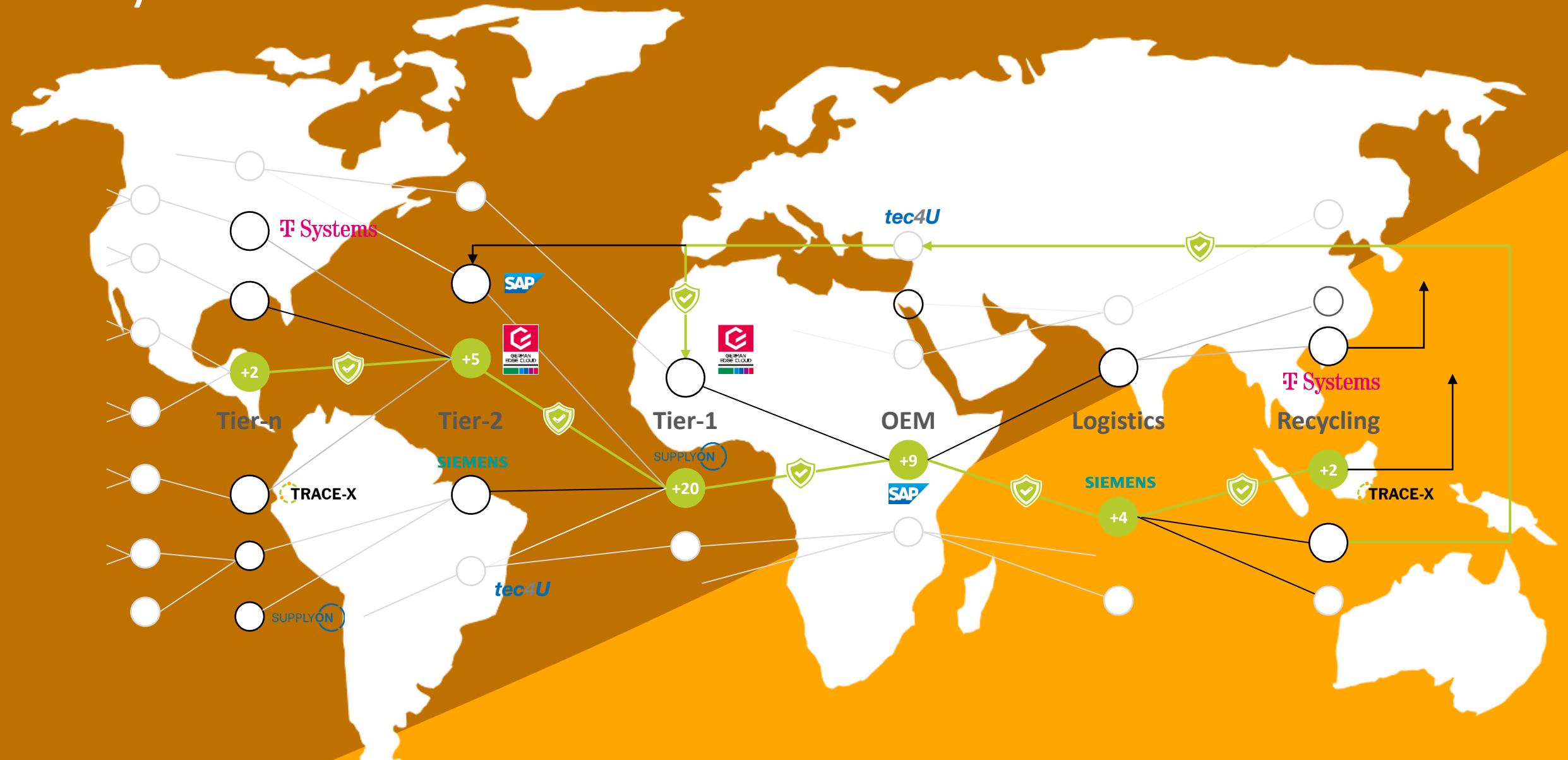
Catena-X KITs

5. May 2023 North America Pre-Launch Event

Maximilian Ong
Business Domain Architect
Ecosystem & Kits

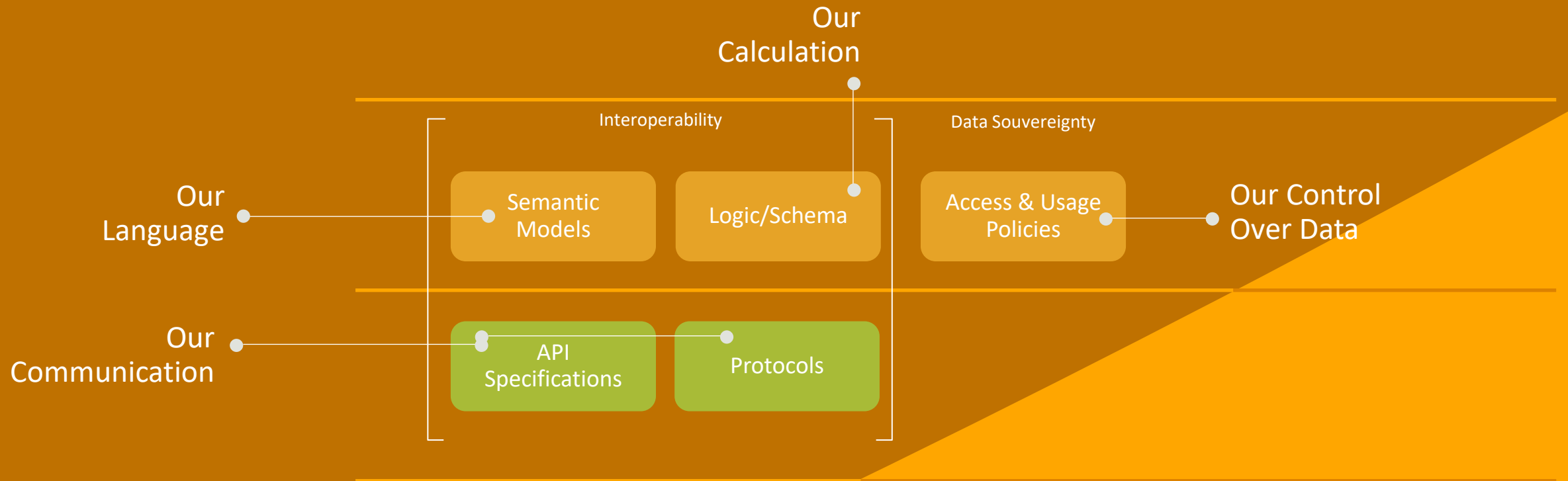


Why KITs?





What keeps it (us) together?



The minimal setup for a data driven value chain



CATENA-X KITS

provide software components, standards, policies, and deployment scripts to accelerate the adoption and development of Catena-X use cases.

The key customer of our KITS is the solution developer.





ADOPTER

- Connect to the Catena-X data space
- Boost your data readiness and governance
- Provide and consume data
- Be part of the community
- Adopt data-driven business processes



SOLUTION PROVIDER

- Create interoperable solutions
- Profit from developer resources
- Accelerate development with open source
- Be inspired by innovative solutions





Our initial Catena-X Business Domains

**NETWORK &
CORE SERVICES**



SUSTAINABILITY



RESILIENCY



PLM & QUALITY





Our KITs toolbox

Vision/Mission

Business Value(s)

Tutorials/ Videos

Whitepaper (e.g., Context)

Scope for Standardization/Certification

Semantic Models

Logic/Schema

Business Processes

Access & Usage Policies

API Specifications

Protocols

Sample Data

Reference Implementation

Architecture

Conformity Assessment Criteria

Quick Setup Guide

Deployment Scripts



Catena-X offers a dedicated set of tools to empower and stimulate interoperable solutions for each step of the customer journey.





Traceability KIT

Vision/Mission

Business Value(s)

Tutorials/ Videos

Whitepaper (e.g., Context)

Semantic Models

BoM as planned

BoM as built

Access & Usage Policies

BPN Access Policy

Purpose-based Usage Policy

API Specifications

Notification API

Sample Data

As Planned Submodels Sample Data

As Built Submodels Sample Data

Reference Implementation

Trace-X App

Simple Data Exchange App

Architecture

Building Block Architecture

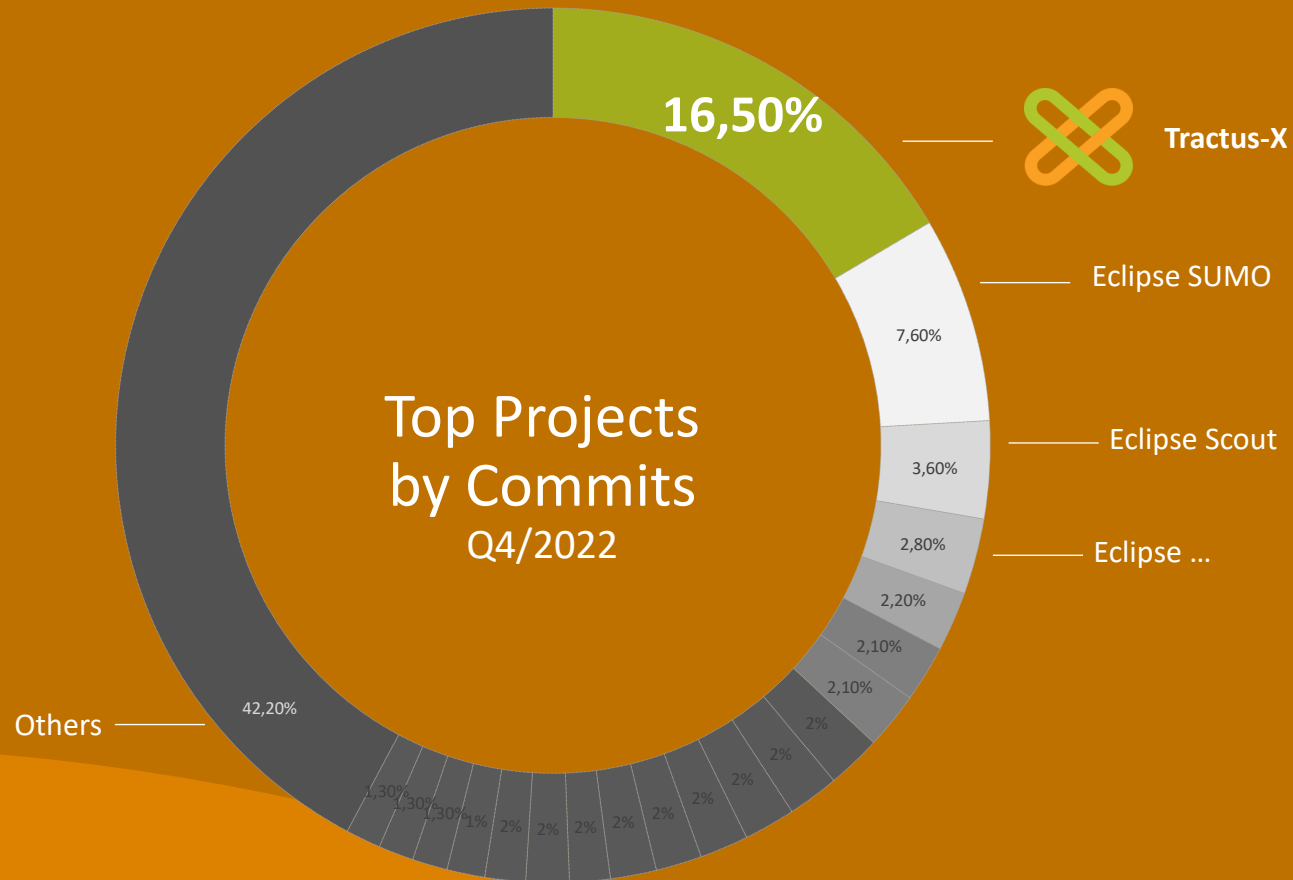
Quick Setup Guide

Deployment Scripts





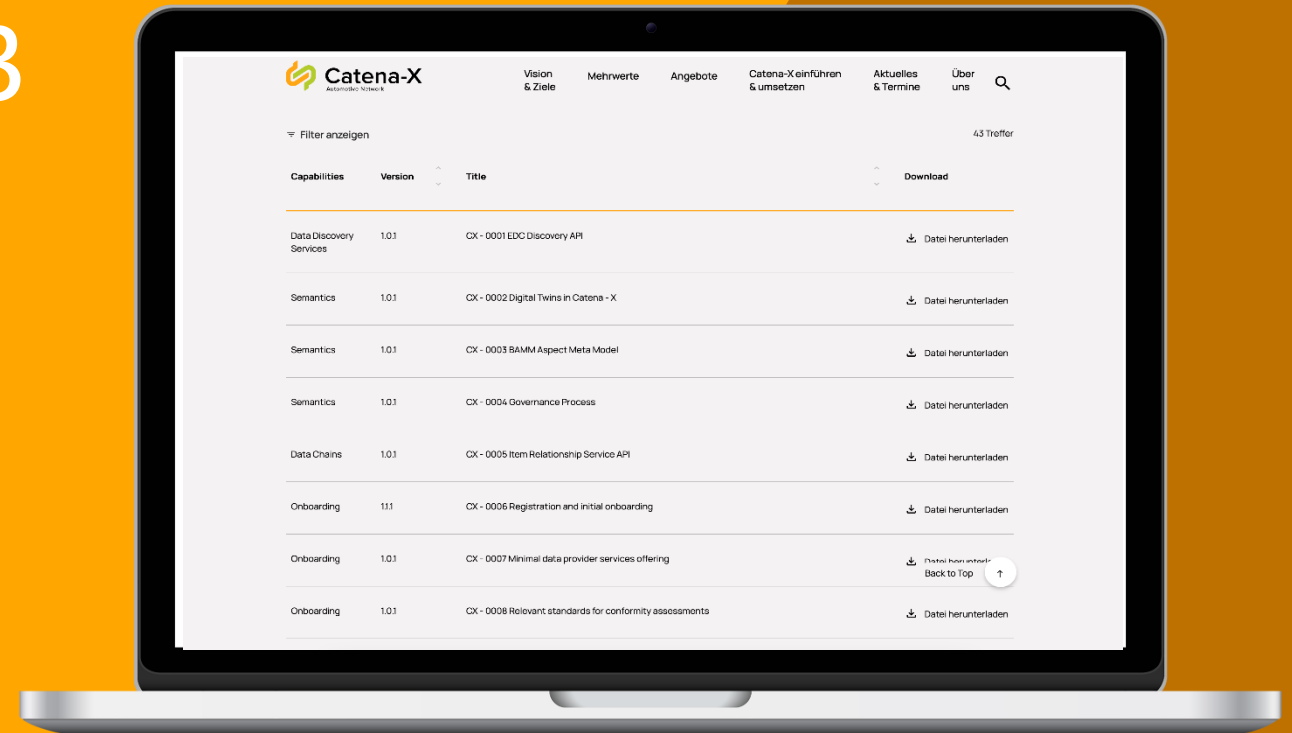
What we achieved so far?





What we achieved so far?

Published 43 Standards On Catena-X.net

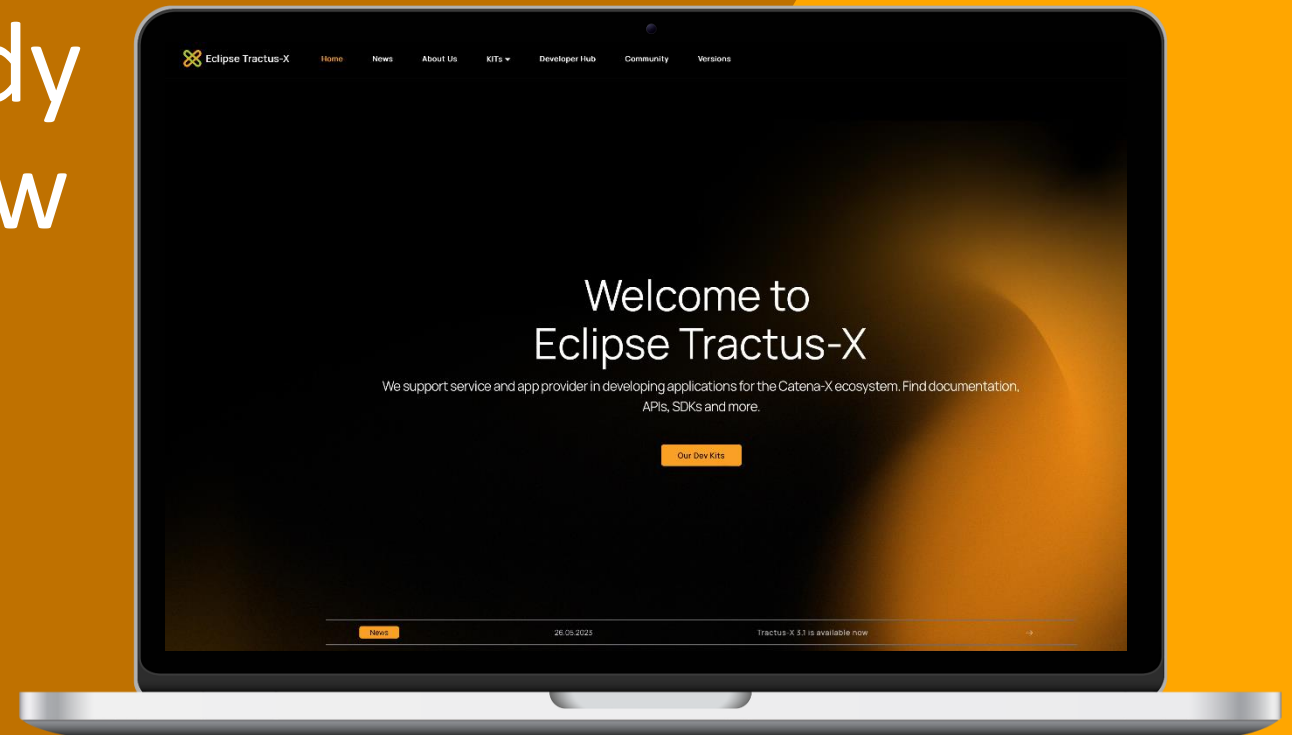




What we achieved so far?

4 KITS already available now

On Tractus-X.com



And there is a lot
more to come..





Catena-X KITs offering in 2023



PLM & QUALITY



RESILIENCY



NETWORK & CORE SERVICES



SUSTAINABILITY

RELEASE 3.0
03.03.2023

RELEASE 3.1
17.05.2023

RELEASE 3.2
18.08.2023

RELEASE 3.3
17.11.2023



Traceability
KIT V 0.1



Traceability
KIT V 0.2



Behavior Twin
KIT V 0.2



Quality
KIT PREVIEW



DCM
PREVIEW



DCM
KIT V 0.1



OSim
KIT V 0.1



Connector
KIT V 0.1



Connector
KIT V 0.2



Connector
KIT V 0.3



Digital Twin
KIT V 0.1



Connector
KIT V 0.4



Business Partner
KIT V 0.1



DataChain
KIT V 0.2



Business Partner
KIT V 0.2



DataChain
KIT V 0.1



DataChain
KIT V 0.3



Eco Pass
KIT V 0.1



Circularity
KIT V 0.1



PCF
KIT V 0.1

Q1

Q2

Q3

Q4



Why are KITS so important?



INNOVATION

Kits are part of the Eclipse project Tractus-X, which is open for use and collaboration within a community of developers.

Let's share ideas and expertise!



TRANSPARENCY & SECURITY

Mutually developed standards and artifacts foster trust and collaboration governed by the association.

We share the same interests.



ECOSYSTEM

Kits development is the foundation for further use cases, business applications, and services.

Collaborate & create partnerships!





 Tractus X



Let's work
together

tractus-x.com



Testimonials Why Catena-X



Pramita Mitra

Ford



Jeff Schlageter

IBM



June 2023

Cofinity-X™

Thomas Rosch



Cofinity-X

BASF, BMW Group, Henkel, Mercedes-Benz, SAP, Schaeffler, Siemens, T-Systems, Volkswagen and ZF jointly founded Cofinity-X.

We develop and operate applications, core services and a marketplace for Catena-X

Founded: 2023

Location: Cologne, Germany



Cofinity-X within the Catena-X ecosystem

Cofinity-

Easy & Fast On-boarding

Core Services

Marketplace, Applications & Services

First operating company
to kick-start the ecosystem

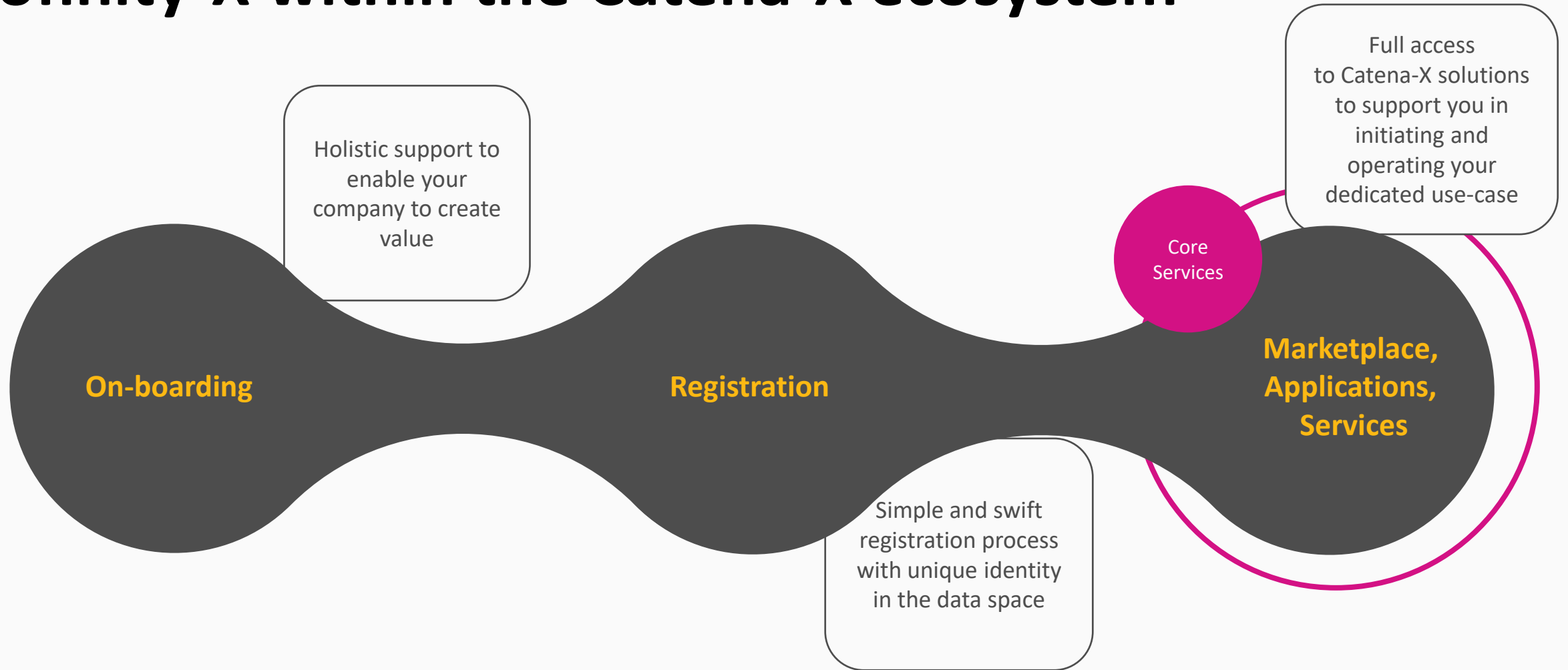


- Defines the governance for the data space
- Sets standards for the data exchange
- Certifies solutions
- Activates the industry

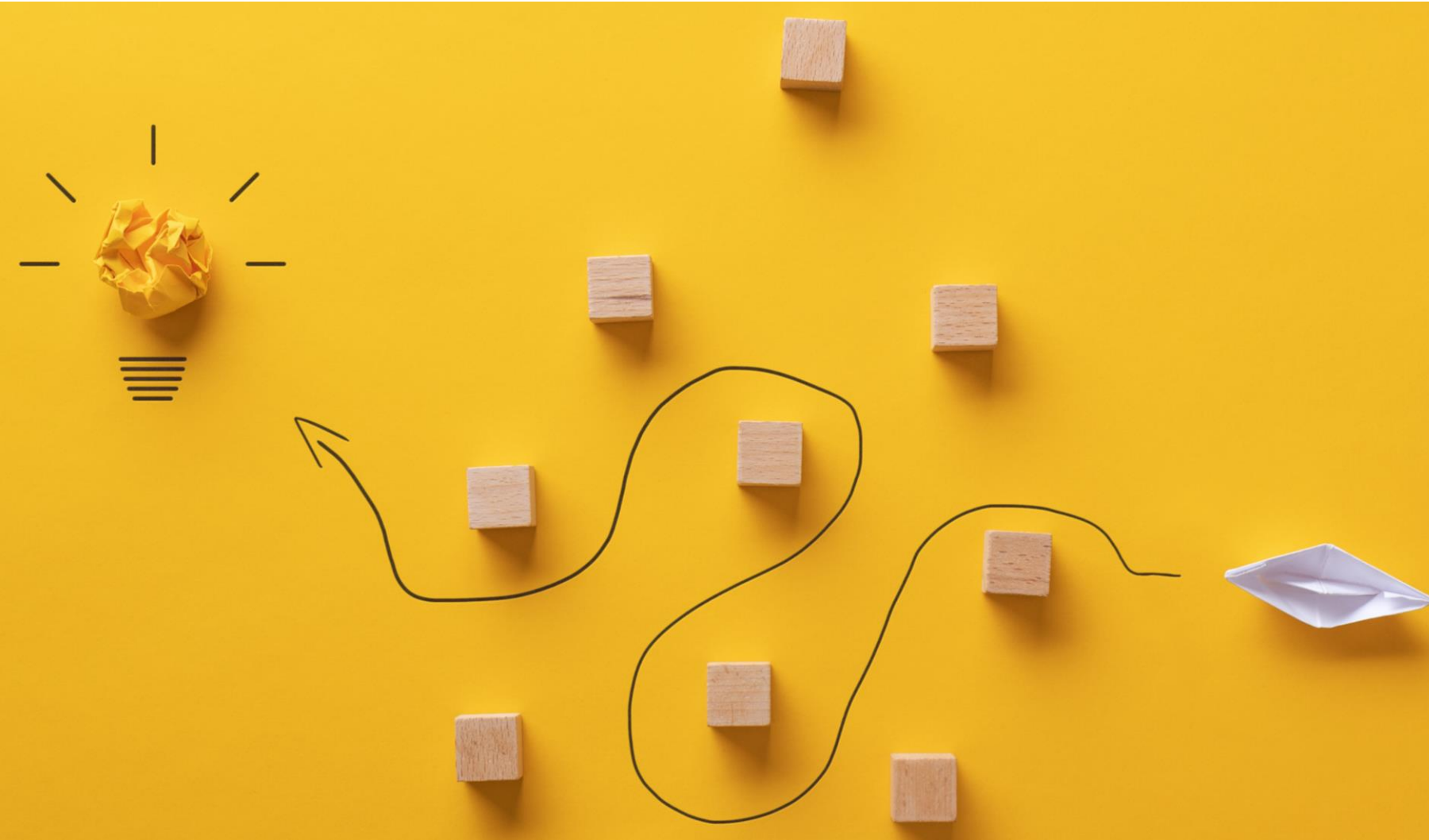
- Develops initial solutions for the network (Open Source)
- On-going development of solutions (proprietary)

Development Environment

Cofinity-X within the Catena-X ecosystem



Cofinity-X: Vision On-Boarding



**EVERY
JOURNEY
STARTS
WITH
GETTING
ABOARD.**

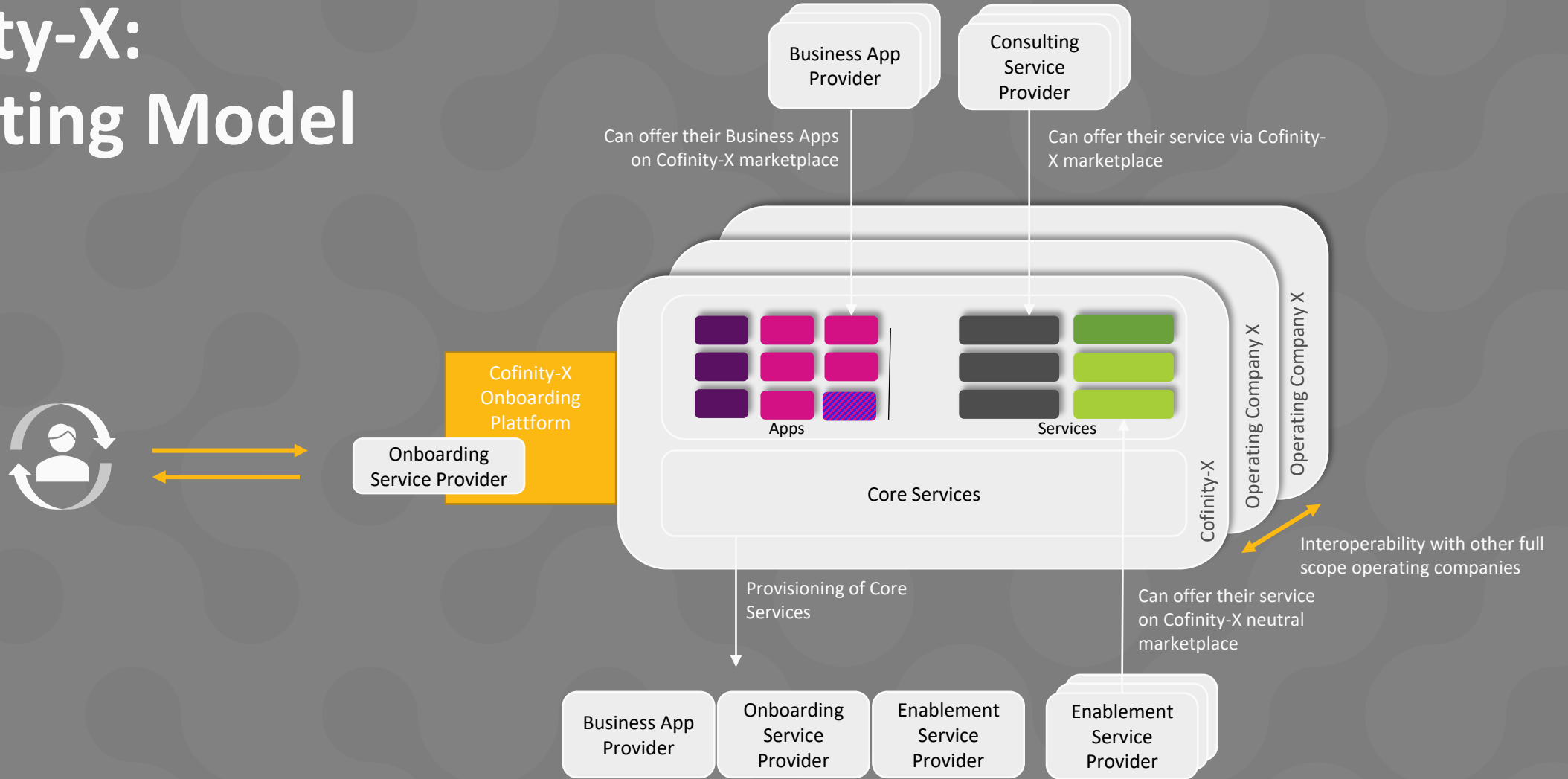
Cofinity-X™

The onboarding vision

Our modular onboarding experience will allow all our future partners to join in the way and pace they want to



Cofinity-X: Operating Model



■ Cofinity-X Business Application
■ 3rd Party Business Application

■ Cofinity-X Enablement Service (e.g. EDCaaS)
■ 3rd Party Enablement Service

■ 3rd Party Consulting Service
▨ 3rd Party Business Application operated by Cofinity-X

Portal App Marketplace - Overview

The screenshot displays the Cofinity-X Portal App Marketplace interface. On the left is a navigation sidebar with categories: HOME, MARKETPLACE (with 'App Marketplace' highlighted), DATA MANAGEMENT (Semantic Hub, Digital Twins), USER MANAGEMENT (App Access Management, Identity User Management, Technical User Management), and PARTNER NETWORK. The main content area features a search bar and utility icons (notifications, help, profile). Below are two rows of application cards. The first row includes a 'Traceability' category card, a 'SAP Business Network Mat...' card (enabling relationship information exchange), an 'ONCITE Digital Production ...' card (German Edge Cloud GmbH), and a 'Trace-X' card (Cofinity-X, Open Source). The second row includes a 'Sustainability' category card, a 'Siemens AG' card, and a 'SAP' card, both marked 'Coming soon'. A horizontal scrollbar is visible between the two rows.

Marketplace – Third Party Provider - Apps

Cofinity-X Search for apps, users, partners... 2 ? 👤

HOME
MARKETPLACE
App Marketplace
DATA MANAGEMENT
Semantic Hub
Digital Twins
USER MANAGEMENT
App Access Management
Identity User Management
Technical User Management
PARTNER NETWORK

App Marketplace / SiGREEN

Siemens AG
SiGREEN
Use Case: **Sustainability**
Language: **german, english, chinese, spanish, japanese, portuguese, Korean**
PCF CarbonFootprint

Requested

Description Features Pricing Privacy Policy Relevant Documents Provider Information

Description

SiGREEN is a full-featured Product Carbon Footprint (PCF) management SaaS application for exchanging and aggregation of PCF from the supply chain and own operations. With SiGREEN companies can pursue their decarbonization goals with targeted emission management on product level. SiGREEN can be operated standalone enabling fast supplier onboarding as well as integrated in OT/IT-landscape for high level of automation.

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Marketplace – Cofinity-X Apps based on Catena-X

Cofinity-X

🔔 ? 👤

- HOME
- MARKETPLACE
 - App Marketplace
- DATA MANAGEMENT
 - Semantic Hub
 - Digital Twins
- USER MANAGEMENT
 - App Access Management
 - Identity User Management
 - Technical User Management
- PARTNER NETWORK

App Marketplace / Digital Battery Pass

Cofinity-X

Digital Battery Pass

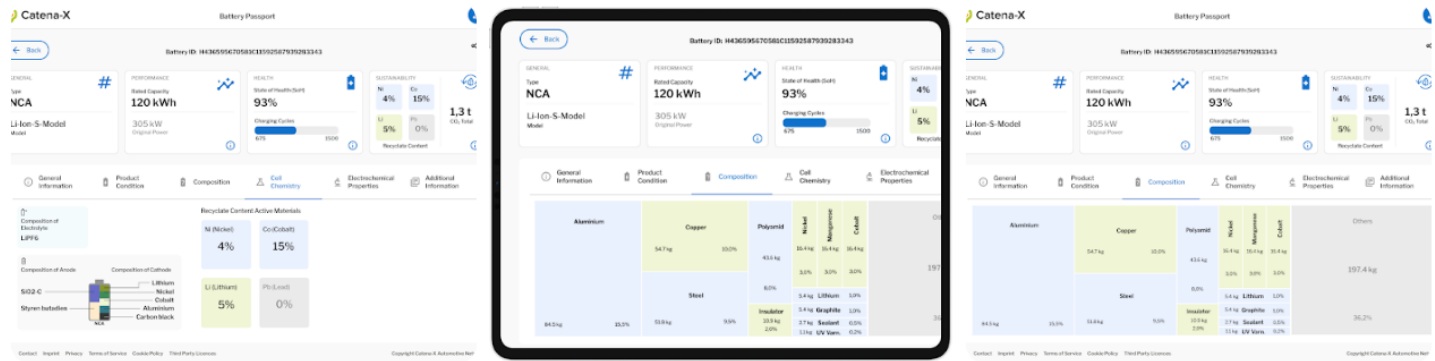
Use Case: **Circular Economy**
Language: **german, english**

Subscribe

Description
Features
Pricing
Privacy Policy
Relevant Documents
Provider Information

Description

The application Digital Product Pass visualizes the information from a digital product passport and thus offers the possibility for further processing and analyzing the data. The information is provided in a standardized and data-sovereign format, thus offering a new basis for secure data transfer. Hence, the benefits include both the fulfillment of regulatory requirements for compliance with sustainability standards as well as the utilization of transparency to improve several business processes.



Marketplace - Technical Enablement Services

The screenshot displays the Cofinity-X App Marketplace interface. On the left is a navigation sidebar with categories: HOME, MARKETPLACE (with sub-items: App Marketplace, DATA MANAGEMENT (Semantic Hub, Digital Twins), USER MANAGEMENT (App Access Management, Identity User Management, Technical User Management), and PARTNER NETWORK. The main content area shows the 'ZF DOS' application by ZF Friedrichshafen AG. The application card includes a 'Subscribe' button and details: 'Use Case: Technical Enablement' and 'Language: german, english'. Below the card are tabs for Description, Features, Pricing, Privacy Policy, Relevant Documents, and Provider Information. The 'Description' tab is active, containing the text: 'ZF DOS (Dataspace Operating System) is your door opener to the Catena-X dataspace. ZF DOS seamlessly provides you the EDC connections you need to interact with other Catena-X partners. Furthermore, it supports you in connecting your backend systems, in data harmonization and in providing your digital twins. ZF DOS is offered as a 'On Premise' as well as 'As a service' solution.' Below the text are two preview images: one showing a table of EDC providers and another showing a 'Dataspace Integration' process flow diagram.

Cofinity-X Search for apps, users, partners...

App Marketplace / ZF DOS

ZF DOS ZF Friedrichshafen AG
Use Case: **Technical Enablement**
Language: **german, english**

Subscribe

Description Features Pricing Privacy Policy Relevant Documents Provider Information

Description

ZF DOS (Dataspace Operating System) is your door opener to the Catena-X dataspace. ZF DOS seamlessly provides you the EDC connections you need to interact with other Catena-X partners. Furthermore, it supports you in connecting your backend systems, in data harmonization and in providing your digital twins. ZF DOS is offered as a 'On Premise' as well as 'As a service' solution.

Edc url	Owner	Name	Description
https://example.com/	zf	dp-edc-provider.html	dp-edc-provider.html

Dataspace Integration

ZF DOS Process Steps

- Use Case Advice
- Identify Data Sources
- Backend Integration

Portal – Semantic Models

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Search for apps, users, partners...

- HOME
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Data Management / Semantic Hub

Semantic Data Models

Semantic models are used to structure data. As a concept, they make it possible to give fundamental meaning to data and their relationships. In the context of data modeling and data organization they realize the development of applications as well as the maintenance of data consistency.

Create new data model

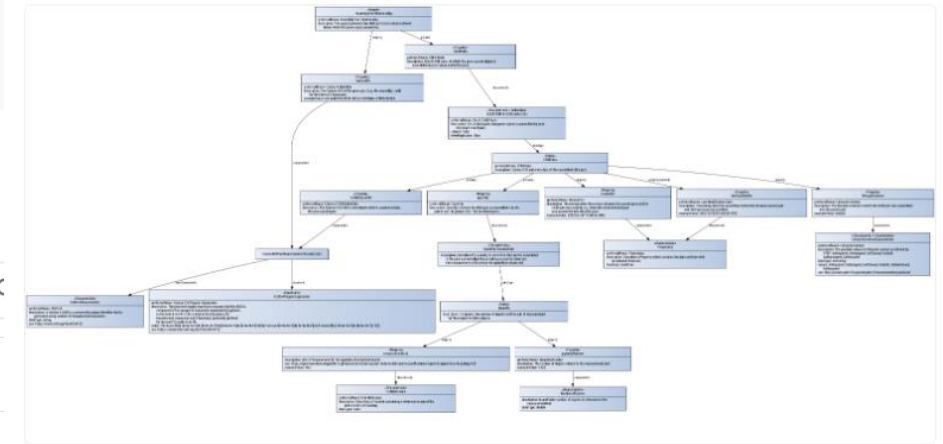
All Released Draft Deprecated

Name	Vocabulary Type	Version
AssemblyPartRelationship	BAMM	1.1.1
Batch	BAMM	1.0.1
Batch	BAMM	1.0.2
BatteryPass	BAMM	2.0.0

AssemblyPartRelationship

Version: 1.1.1
 Status: RELEASED
 Aspect model URN: urn:bamm:io.catenax.assembly_part_relationships:1.1.1#AssemblyPartRelationship

Diagram of the aspect model



Download options related to this aspect model

- [TTL file](#)
- [Documentation](#)
- [JSON Schema](#)
- [Example Payload JSON](#)

RELEASED →

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Portal – Registered Partners

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Search for apps, users, partners...



- HOME
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- DATA MANAGEMENT
 - Semantic Hub
 - Digital Twins
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 - App Access Management
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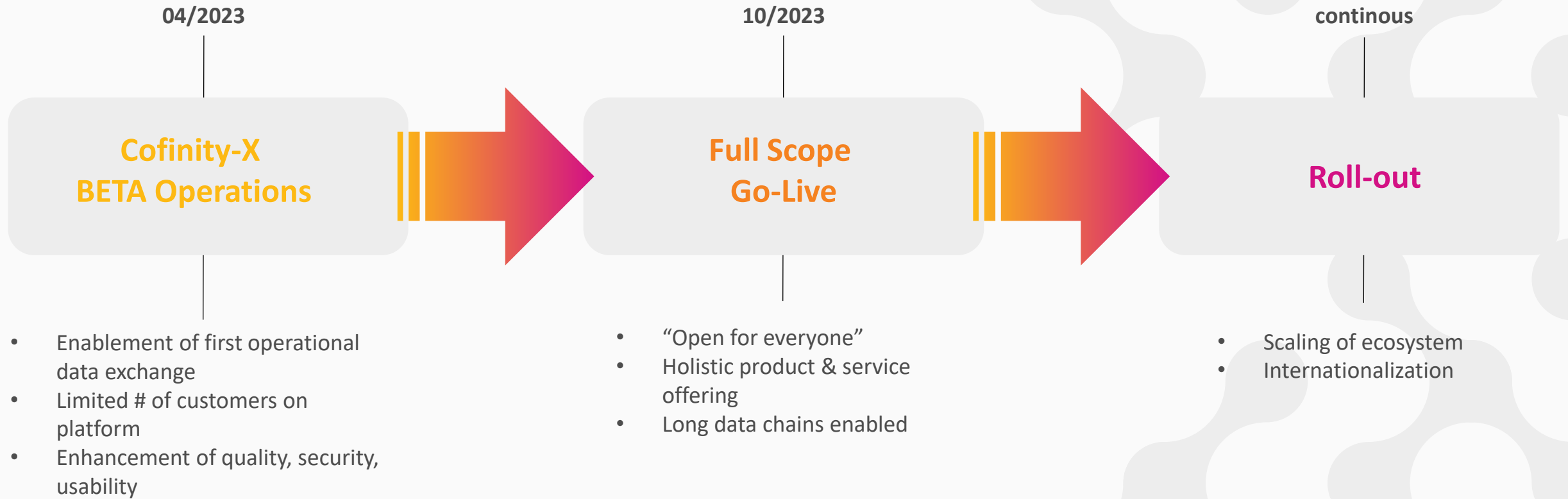
EndToEndTest	BPNL000000000IMU	Germany	Non-Member	→
BMW AG	BPNL000000000SFW	Germany	Member	→
P3 group GmbH	BPNL00000000128Y	Germany	Non-Member	→
New Tech Ltd	BPNL000000000JM5	Germany	Non-Member	→
Lisa Dräxlmaier GmbH	BPNL000000000TF7	Germany	Member	→
Schleicher GmbH	BPNL000000000KLG	Germany	Non-Member	→
ZF Friedrichshafen AG	BPNL000000000UEI	Germany	Member	→
Mech Tech LTD	BPNL000000000ASE	Germany	Non-Member	→
TaKa Mech	BPNL000000000LKR	Germany	Member	→
Siemens AG	BPNL000000000VDT	Germany	Member	→

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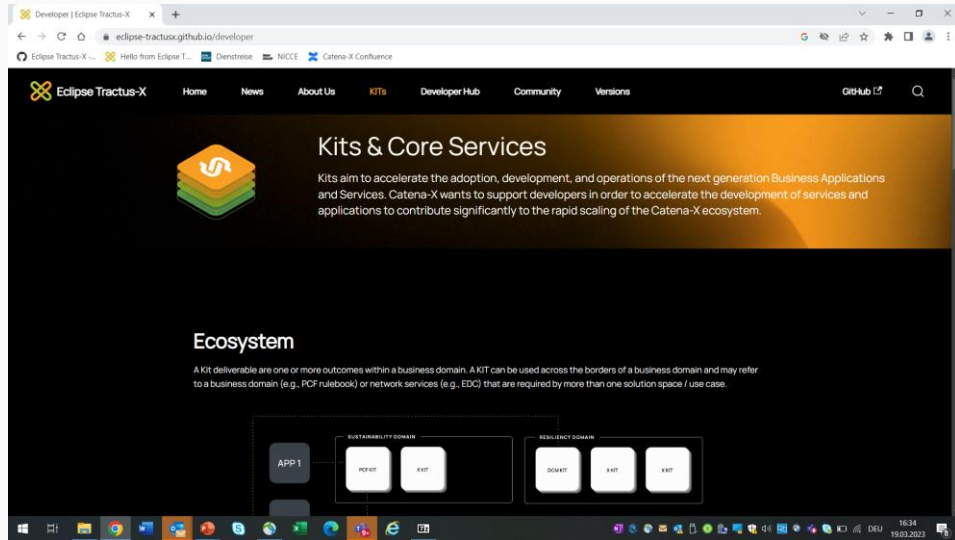
[Imprint](#) [Privacy](#) [Contact](#)

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Cofinity-X Roadmap to kickstart the ecosystem



Cofinity-X Summary



- From Open Source to Beta Phase within 3 Month
- All needed components available in Open Source on Tractus X with great support from Catena-X Association
- Focus on Security and Operational in the next months
- We see a big potential for app and service provider adapting the solutions for local requirements and market
- Catena-X core services and marketplace are available and running !

Thank you

Let's **connect** and
start a great
journey together



info@cofinity-x.com or www.cofinity-x.com



Innovation through collaboration

Agenda

- 12 – 1 pm Arrival & Lunch
- 1 – 3 pm **Welcome to Austin!**
Oliver Ganser & Jeff Schlageter (5min)
- Catena-X 101**
Oliver Ganser (30min)
- Catena-X KITS & Benefits**
PLM / Quality: Traceability – Oliver Ganser (15min)
Sustainability: CO₂ Reduction – Niels Angel (15min)
Sustainability: Circularity & Battery Pass – Thorsten Dikmann (15min)
- Catena-X KITS & Open Collaboration**
Maximilian Ong (15min)
- Q&A & Short Break (25min)
- 3 – 5 pm **Catena-X Global Adoption & onBoarding**
Partner Testimonials – Interview with Pramita Mitra & Jeffrey Schlageter (15min)
Catena-X's first Operating Company Cofinity-X – Thomas Roesch (30min)
Launch of Catena-X North America Hub - Frank Goeller & Christoph Schlueter-Langdon (20min)
- Catena-X Panel Discussion “Trust and Interoperability”**
Host: Frank Köster
Panelists: Lars Nagel, Roland Fadrany, Christoph Schlueter-Langdon and Thomas Roesch
- 5 – 6 pm Get together & buffet

Our Speakers

Oliver Ganser
Chairman of the Board, Catena-X
Head of Industry Consortium, Catena-X
BMW Group

Jeff Schlageter
Member of the Board, Catena-X
GM Global Manufacturing and Energy
IBM

Niels Angel
Sustainability: CO₂ & ESS, Catena-X
BMW Group

Thorsten Dikmann
Circularity: Digital Material Passport, Catena-X
BASF

Prof. Dr. Christoph Schlueter-Langdon
Product Manager, Catena-X
T-Systems

Prof. Dr. Frank Köster
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR)
Institute for AI-Security

Roland Fadrany
COO
GAIA-X

Lars Nagel
CEO
International Data Spaces Association

Maximilian Ong
Business Architect KITS, Catena-X
Mercedes-Benz

Pramita Mitra
Supply Chain Digitization Strategy and Integration
Ford



Frank Göller
VP Internationalization, Catena-X
Head of Digital Production & Processes
Volkswagen

Thomas Rösch
CEO
Cofinity-X



Frank Goeller

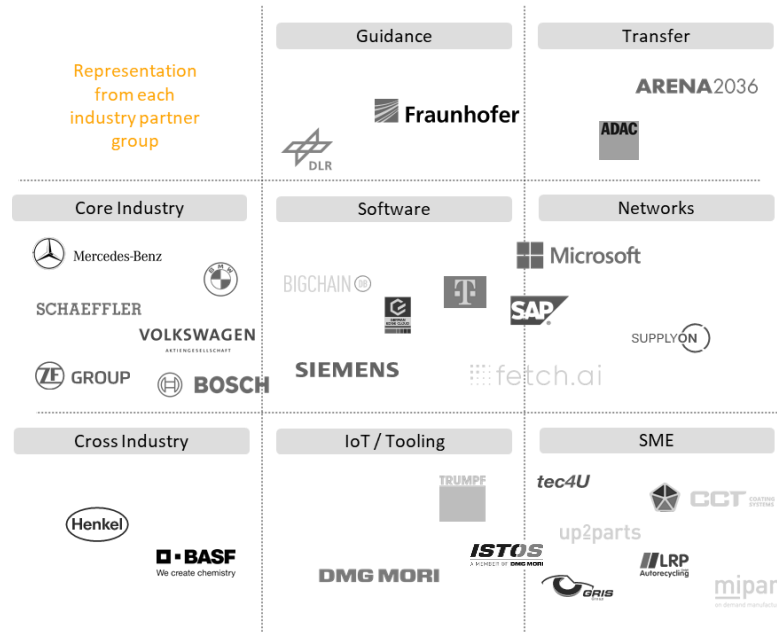
Head of Digital Production Volkswagen AG
VP Internationalization Catena-X



Starting and scaling the Catena-X data ecosystem

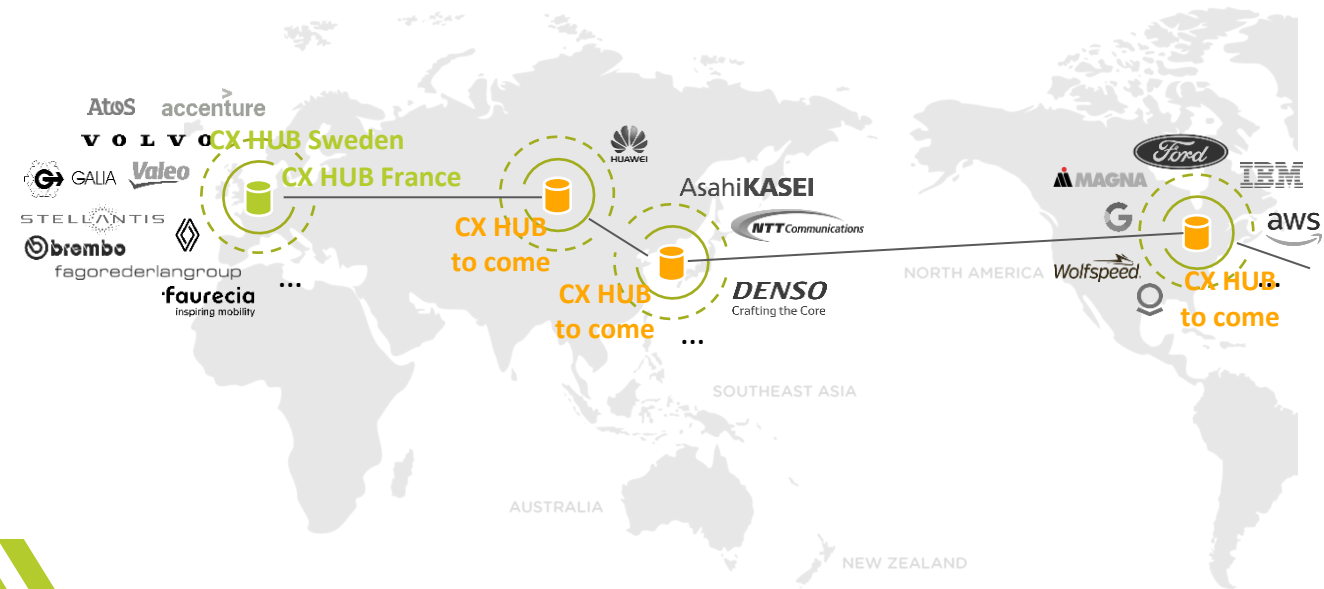
Catena-X is a global initiative which targets to allow flow of information between all regions worldwide

KICK START - TEAM to build and launch the initial foundation; all interest groups are represented



28 initial development partner started in 08 / 2021

Implementation of the **CX HUB-CONCEPT** empowers regional adoption and ensures flow of data across regions



152 global partner in Catena-X association (04/2023)

examples of international Catena-X members; for a complete list click [here](#)



Catena-X Hubs are the local booster of the Catena-X global network

Think global - Act Local - Scale beyond traditional boundaries



The Catena-X Hub acts as a **local embassy** representing Catena-X



The Catena-X Hub **connects key stakeholders &** shares knowledge



The Catena-X Hub fosters **local adoption** & scales Use Cases & local solutions

Mission: Build a global network with strong local involvement

France started the first Catena-X Hub

which is hosted by GALIA (French Industry Automotive Association)

All main stakeholders gathered in the French automotive network (PFA) to express their wish to be part of Catena-X

Organizational structure of the Hub

- The “French Industry Catena-X Hub” is hosted by GALIA, chaired by the PFA and key roles are shared between them
- All PFA/GALIA members are Hub France members
- Members of the Hub Core Team are PFA/GALIA & Catena-X members

Timeline of first international Catena-X Hub creation

- ✓ November 18th 2022: MoU signature during GAIA-X summit in Paris
- ✓ December 14th 2022: Hub core team kick off and roles repartition
- 📅 July 2023: Agreed on Hub contract signing



Catena-X Domain



Hub France



Five phases to kick-start a Catena-X Hub and become an operational organization

Phase	Key Milestones
0. Pre-candidate	Sharing the vision, values & overall good fit
1. Application	NDA is signed
2. Candidate	MoU is signed
3. Onboarding/ Ramp-up	Hub is founded and contract is signed
4. Operationalization	Hub is operational

Hub Roles to organize the local movement (template)

Chief Executive Officer	Chief Financial Officer
Chief Information Officer	Communication Manager
Portfolio Manager (UC Leader)	Stakeholder Manager
Use Case Member	Legal Topics Owner

We invite you to take on the pioneering role to launch the Catena-X Hub for North America
4-6 companies: 50% Automotive Partners / 50% Tech Companies



Contacts for Starting a Catena-X Hub North America

In case you are interested in supporting this activity please reach out to by
End of June 2023:

Jeff Schlageter
Member of the Board Catena-X e.V.

jschlage@us.ibm.com

Frank Goeller
VP Internationalization Catena-X e.V.

frank.goeller@volkswagen.de

Panel Discussion

Trust & Interoperability

- Getting the Show in the Road -

Host: **Prof. Dr. Frank Koester**, DLR

Panelists: **Roland Fadrany**, COO GAIA-X
Prof. Dr. Christoph Schlueter-Langdon, T-Systems
Lars Nagel, CEO International Data Spaces Association
Thomas Roesch, CEO Cofinity-X



We hope to work with you soon!

Summary of today, presentation and Flyer can be found here

