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Digital Transformation of Partner Communication by hybrid solutions of classic EDI and API

Andrea Sümer KL-MD January 2023

PUBLIC

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… the resulting **challenges** are manifold

- Semiconductors
- COVID-19
- Raw material prices
- Transport capacities
- Sustainability
- Velocity

… the need to adapt to the new surrounding factors requires complex decisions

- Interconnectivity
- Alerting systems
- Processes for planning, prediction and simulation
- Collaboration

➡ We need to collaborate in a more **flexible** and **dynamic** way with our partners to address these challenges

Our vision is the digitization and interconnection of the entire supply chain in order to be able to act flexibly, directly and on a broad information basis

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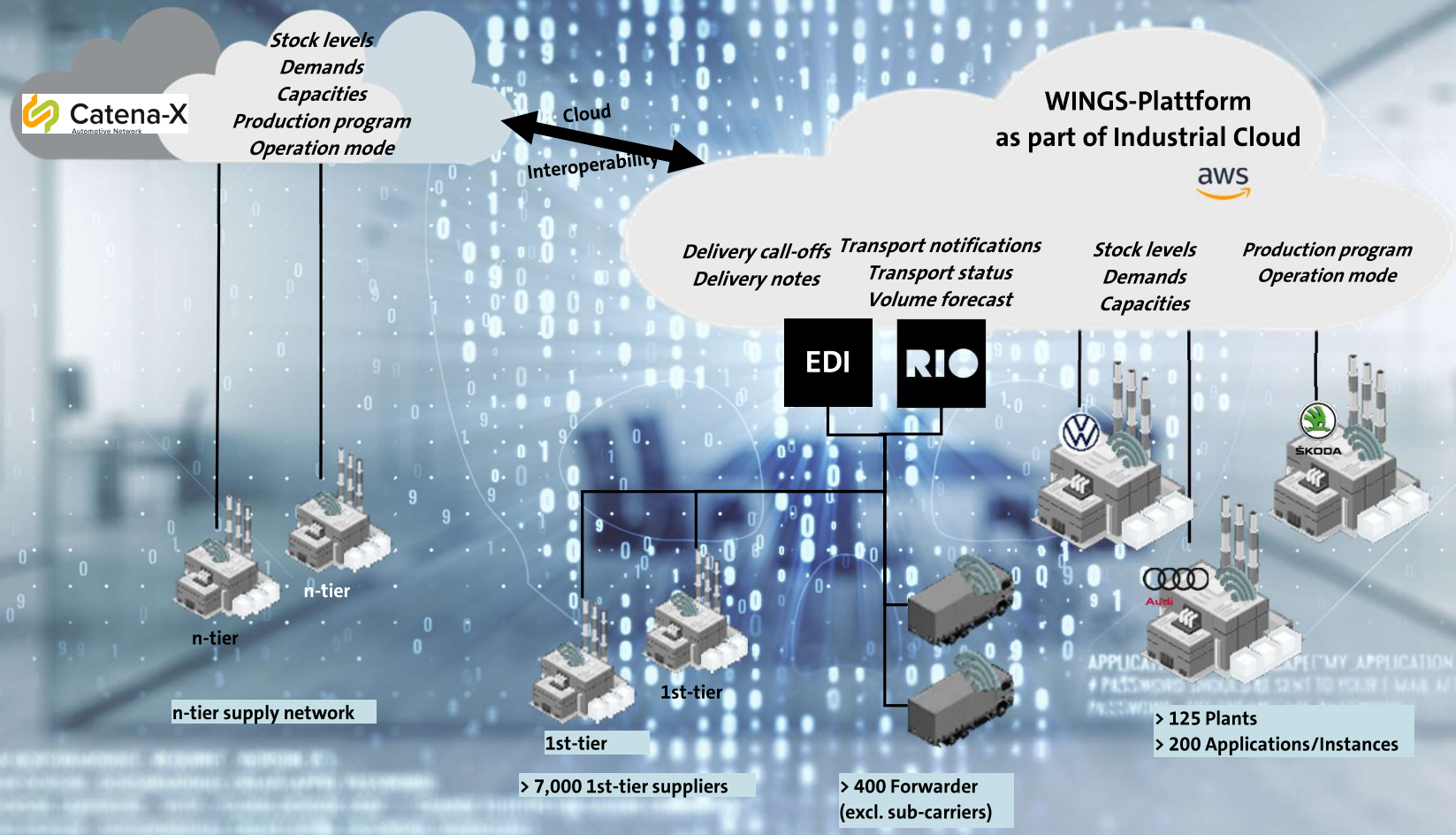

The global EDIFACT messages are the foundation of the communication with our partners

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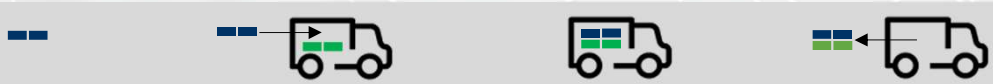
1 VDA 4984	2 VDA 4933 T1	3 VDA 4933 T3	4 VDA 4987	5 VDA 4945
▪ Based on message type: DELFOR ▪ Used for Call-off	▪ Based on message type: Global DESADV ▪ Used as Transport Order	▪ Based on message type: Global DESADV ▪ Used as Transport Order Confirmation	▪ Based on message type: Global DESADV ▪ Used as Despatch Advice	▪ Based on message type IFTSTA ▪ Transport status

Interaction of classic EDIFACT Messages for Tracking and Tracing

Transport process

Message type	Global DELFOR Call off	Global Transport order	Global Despatch Advice	Global Transport-Status Message	Receipt at ship to
Message creator	*OEM ship from*	*Supplier/ ship from*	*Supplier/ ship from*	*Forwarder*	*OEM ship to*
Process Step	*Demand Forecast*	*Planned to be despatched*	*Actually despatched*	*All events of the transport chain*	*Actually received*
Message Content		**Shipment header data** Transport loading unit License plate Transport loading unit content details	**Shipment header data** Transport loading unit License plate Transport loading unit content details	**Transport Leg/ Means of transport** Shipment header data Transport loading unit License plate	
		1:1		n:1	

Happy Flow ☺



Sad Flow ☹

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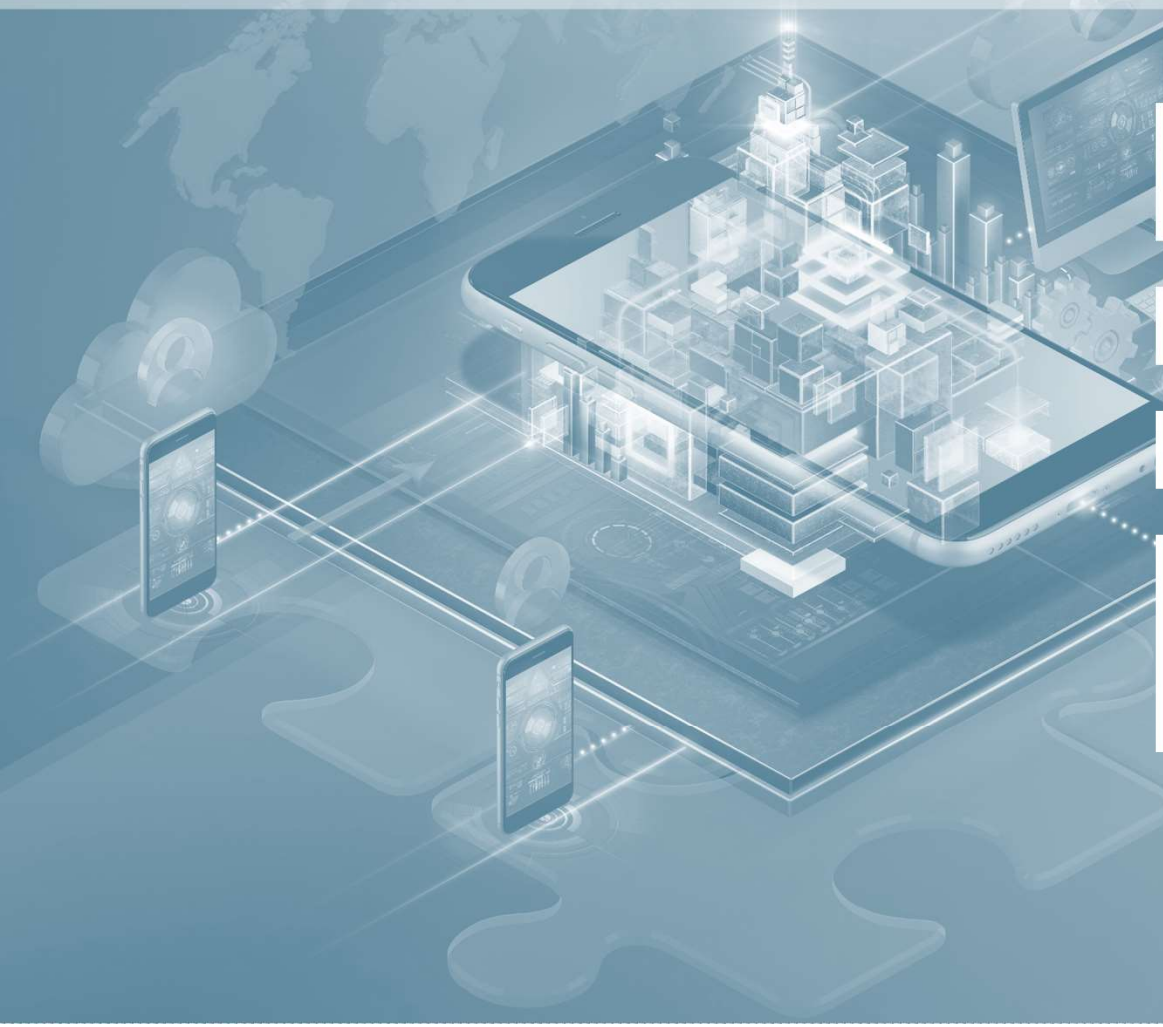
APIs will facilitate a quick and lean information exchange between Volkswagen, our suppliers and logistics service providers



- Definition of standards with OEMs, suppliers and forwarders within the VDA
- Complementing existing EDI infrastructure
- Reduction of complexity for data supply
- Potential users:
  - Non-EDI partners
  - Third-party web portals

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The Group Tower provides supply chain managers with complete transparency and decision support

Transition of existing EDIFACT Message standards into JSON Schemas to support a hybrid communication model

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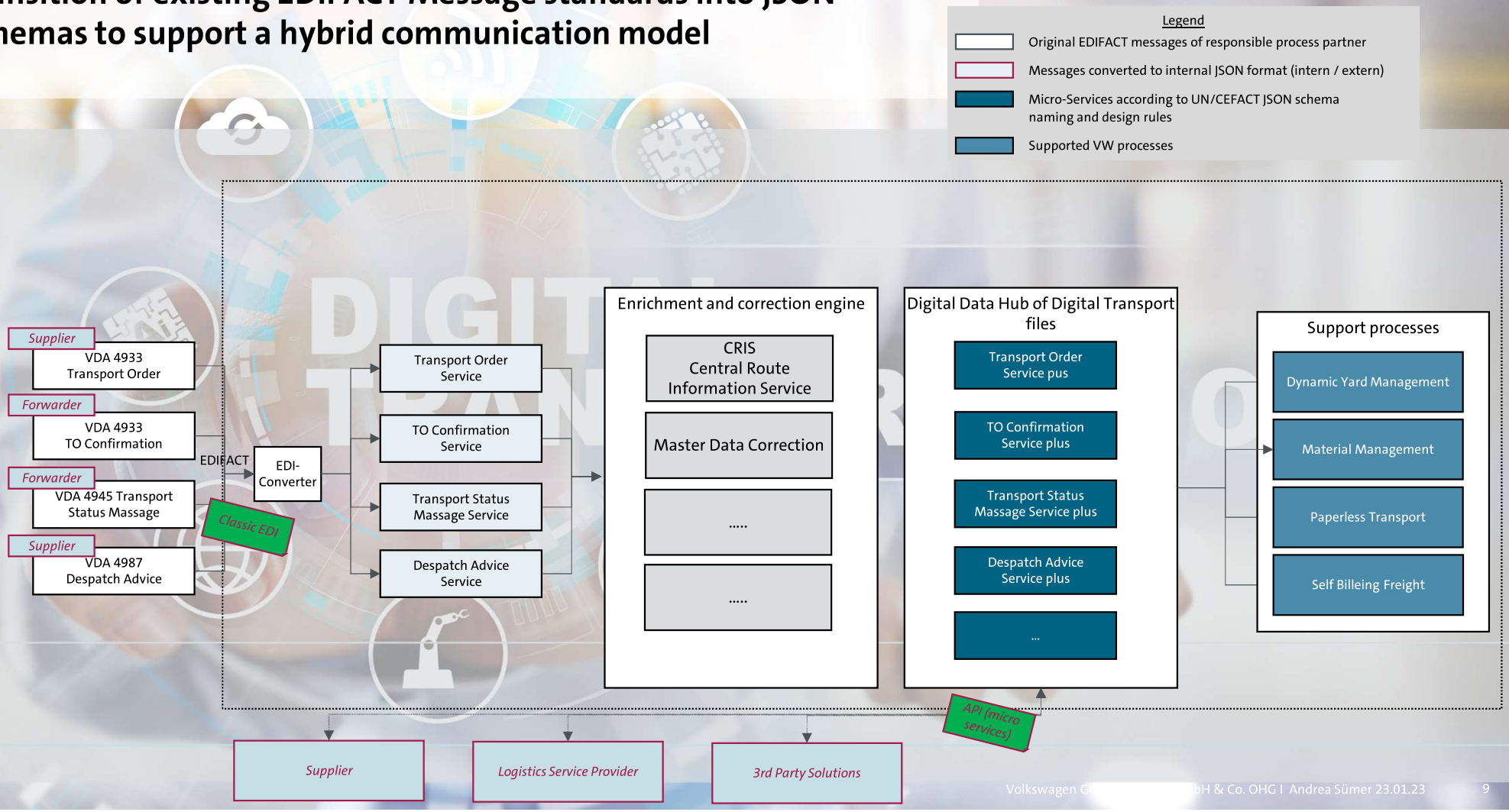
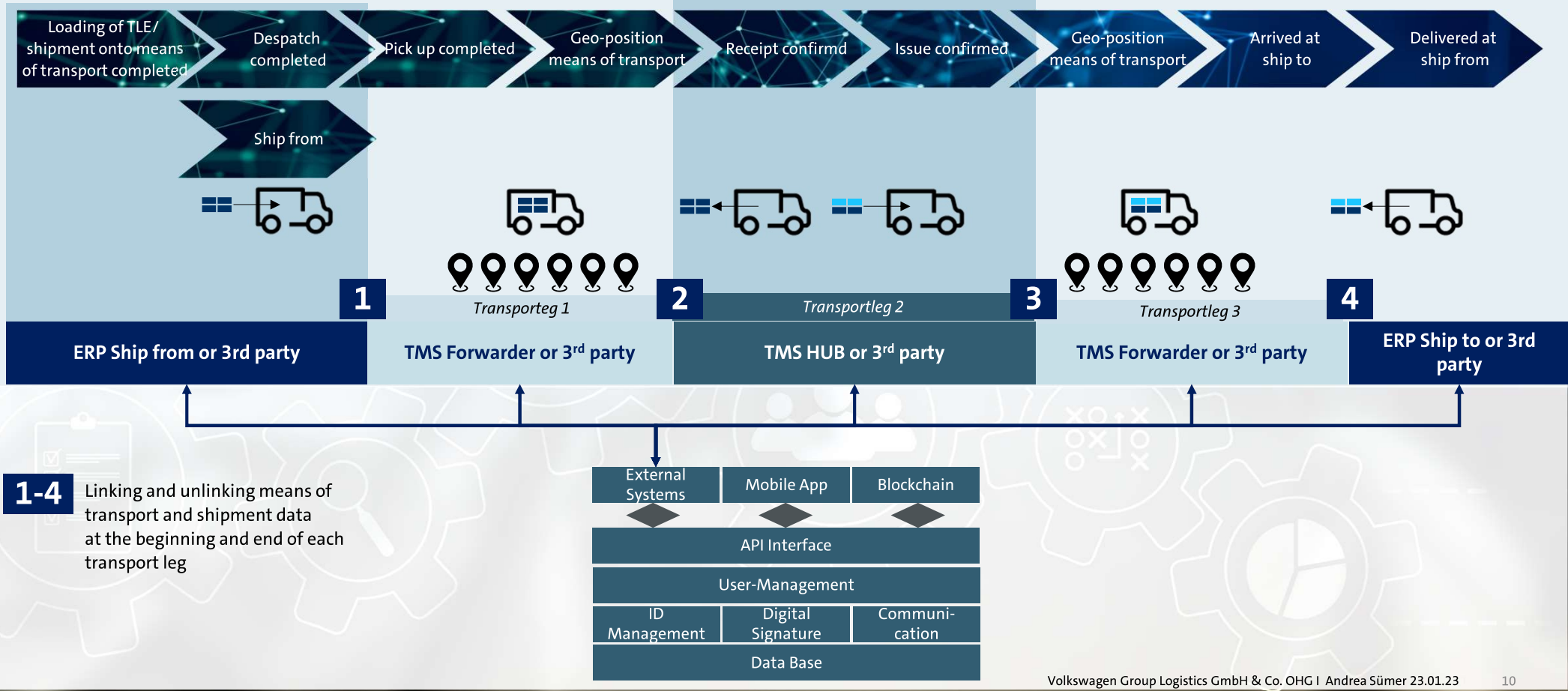


MVP events of the transport chain!



1-4 Linking and unlinking means of transport and shipment data at the beginning and end of each transport leg

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Thank you for your attention!

Andrea Sümer
Center for Digital Collaboration (CDC)

Cluster Digitalization and Concept Development
Material Logistics

Volkswagen Group Logistics GmbH & Co. OHG
38436 Wolfsburg

Phone: +49 5361 9-81780
mailto:andrea.suemer@volkswagen.de