

PARAGON®



paragon GmbH & Co. KGaA
Investor / Analyst Presentation

ODDO BHF Forum, Jan. 10/11, 2019

Agenda

— Highlights

— Business Overview

— Financials

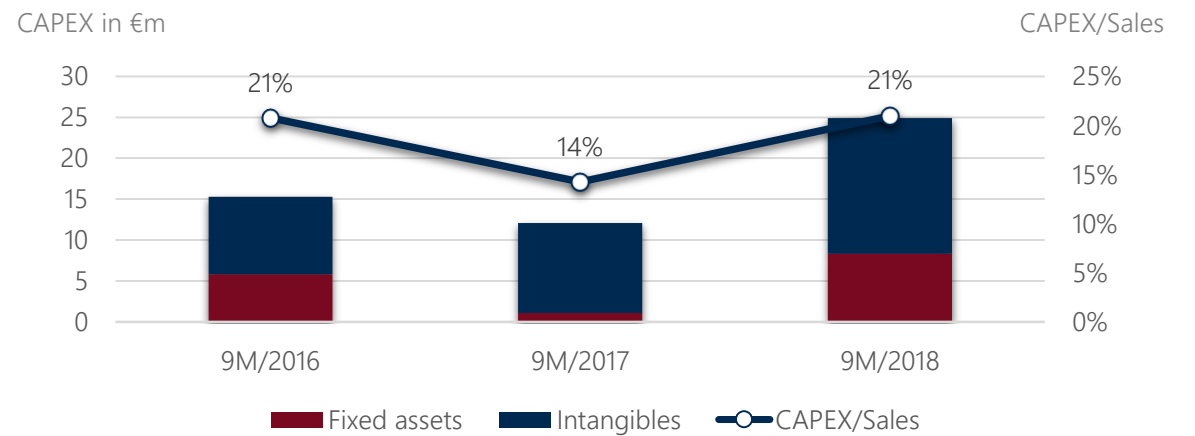
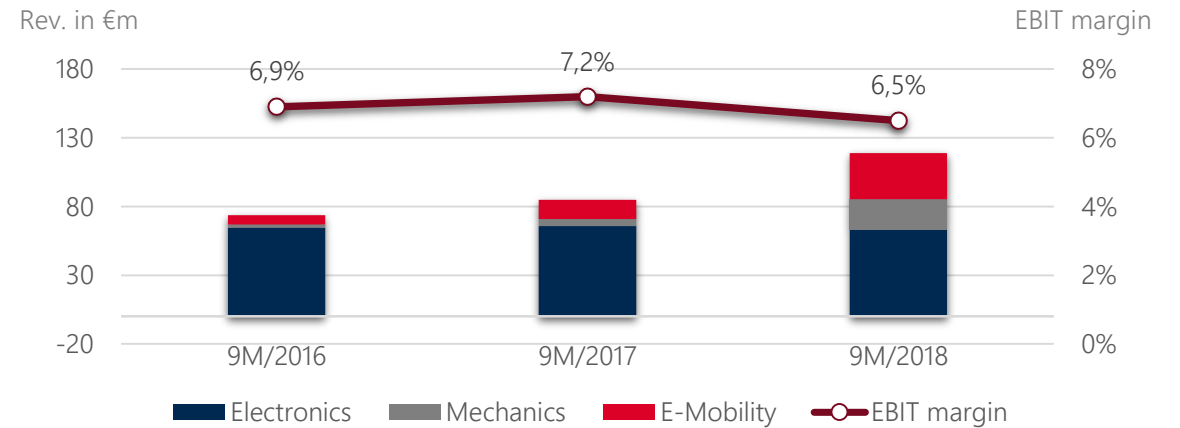
— Appendix

— Segments

— Financials in Detail

Key aspects and successes from nine months 2018

- Continued top line growth +40%
- Automotive sector sales up 20%
- No significant influence of current problems in the automotive sector (Diesel scandal, WLTP issue, trade war China <> USA, ...)
- Main driver E-Mobility and Mechanics sales almost tripled
- Group EBIT margin of 6.5%
- CAPEX € 25m / Available liquidity € 73.5m
- Revenue and profitability outlook confirmed for FY 2018 (rev.: € 180-185m, EBIT margin 8%)



Highlights



Group in figures (as of Sep. 30, 2018)*



Revenues:
€ 118.8m

EBITDA:
€ 17.2m

EBITDA margin:
14.5%

EBIT:
€ 7.7m

EBIT margin:
6.5%

Market cap:**
€ 169.1m



Employees:***
935

Global footprint:
12 sites, 3 countries, 3 continents



Foundation:
1988

Founder & CEO:
Klaus Dieter Frers



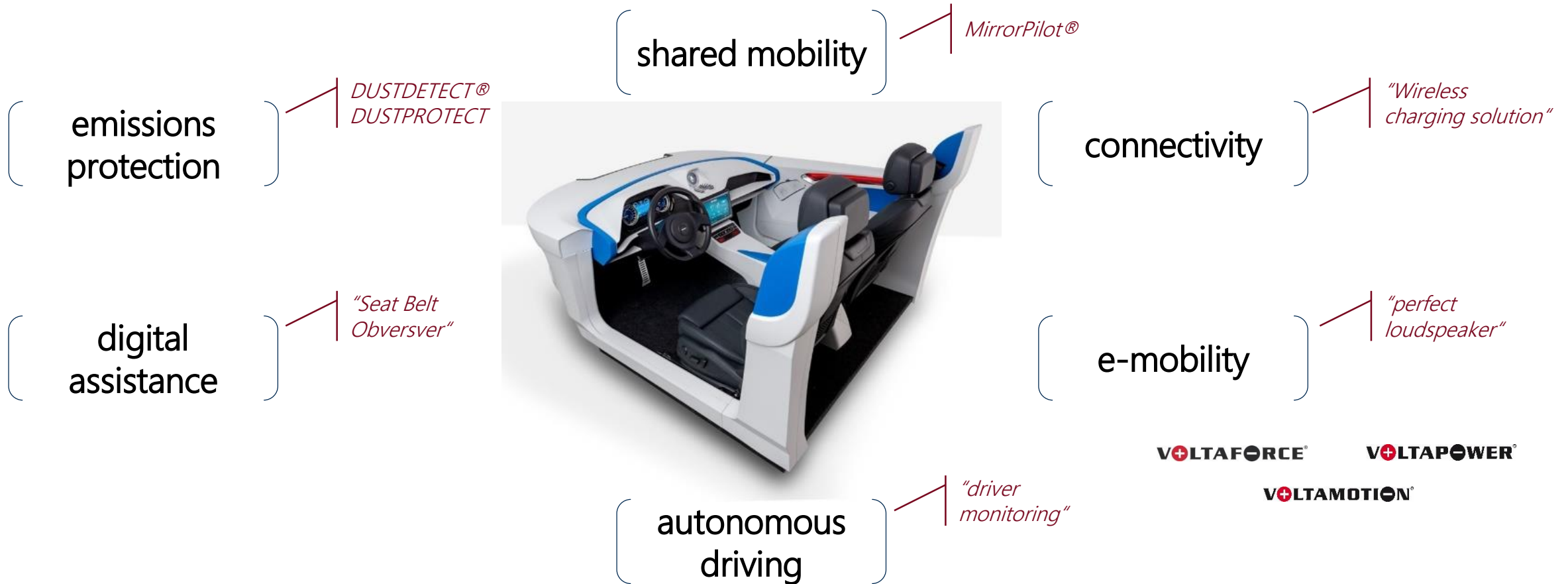
- 50% + 1 limited share held by Klaus Dieter Frers
- 50% - 1 limited share are in free float

* Unaudited interim report 2018.

** Xetra closing price as of Sep. 30, 2018.

*** Number at balance sheet date Sep. 30, 2018 (incl. 88 temporary workers).

Premiere at the CES – most recent innovations...



V+LTA FORCE® **V+LTA POWER®**
V+LTA MOTION®

Highlights

Corporate Development

- 1988 – Established as an electronics manufacturer in Delbrück by Klaus Dieter Frers
- 1994 – Development into an automotive Tier-1-supplier of electronics and electro-mechanics
- 2000 – IPO of paragon AG (now paragon GmbH & Co. KGaA) at Frankfurt Stock Exchange (now: Prime Standard)
- 2011 – Market entry into Lithium-Ion Batteries: E-Mobility launched as a new business segment of paragon AG
- 2017 – Establishment of three operating segments in Q1/2017
 – Carve out of Electromobility segment and IPO of Voltabox AG in Q4/2017
 – Acquisition of HS Genion GmbH and transfer of Body Kinematics unit into paragon movasys GmbH in Q4/2017
- 2018 – Acquisition of SemVox GmbH and renaming to paragon Semvox GmbH in Q3/2018
 – Acquisition of LPG Lautsprecher-Produktions-Gesellschaft mbH and renaming to paragon electroacoustic GmbH in Q4/2018



Latest M&A activities

New business unit “Digital Assistance”: SemVox GmbH (Saarbrücken, now: paragon semvox GmbH)

- Technologically leading software developer and technology supplier for proactive assistants based on AI and machine learning
- Developmental edge believed to be 3+ years
- In the future, the division will enable customers to develop their own intelligent assistants using the platform supplied by paragon
- Now beginning non-automotive business

Pioneer

First market launch of an empathic AI assistant - SemVox is the **leading B2B technology provider** for proactive, AI-based assistants

Technological depth

Significantly greater functional scope of SemVox technology than competitive solutions in the digital assistance market

USP

Unique combination of knowledge-based system and semantic representation of information (user <> background services)

Market penetration

Various orders from the German **automotive industry** have been received



Data control

All functions of the technology are **offered both embedded and cloud-based** - OEMs retain full control over the data

Perfect complement for paragon

SemVox **perfectly complements paragon's system provider approach**: OEMs get speech assistance systems from paragon as end-to-end solutions

Latest M&A activities

Acquisition of LPG Lautsprecher-Produktions-Gesellschaft mbH (Neu-Ulm, now: paragon electroacoustic GmbH) in order to expand the value chain in the Interior business unit and to enlarge the technology base for acoustics solutions.

Close partner of
various automobile manufacturers,
such as BMW, Volkswagen, Opel and Rolls Royce
for many years

LPG's external sound speakers
address an **important**
safety aspect in the
mobility of tomorrow

The product portfolio mainly
includes tweeters and cone
loudspeakers that are used
especially in the
automotive industry



Latest M&A activities of Voltabox



Concurrent Design, Inc. (Austin, TX, USA)

- Engineering service provider with highly-skilled staff – facilitates development of complex battery systems



ACCURATE SMART BATTERY SYSTEMS GmbH (Korntal-Münchingen)

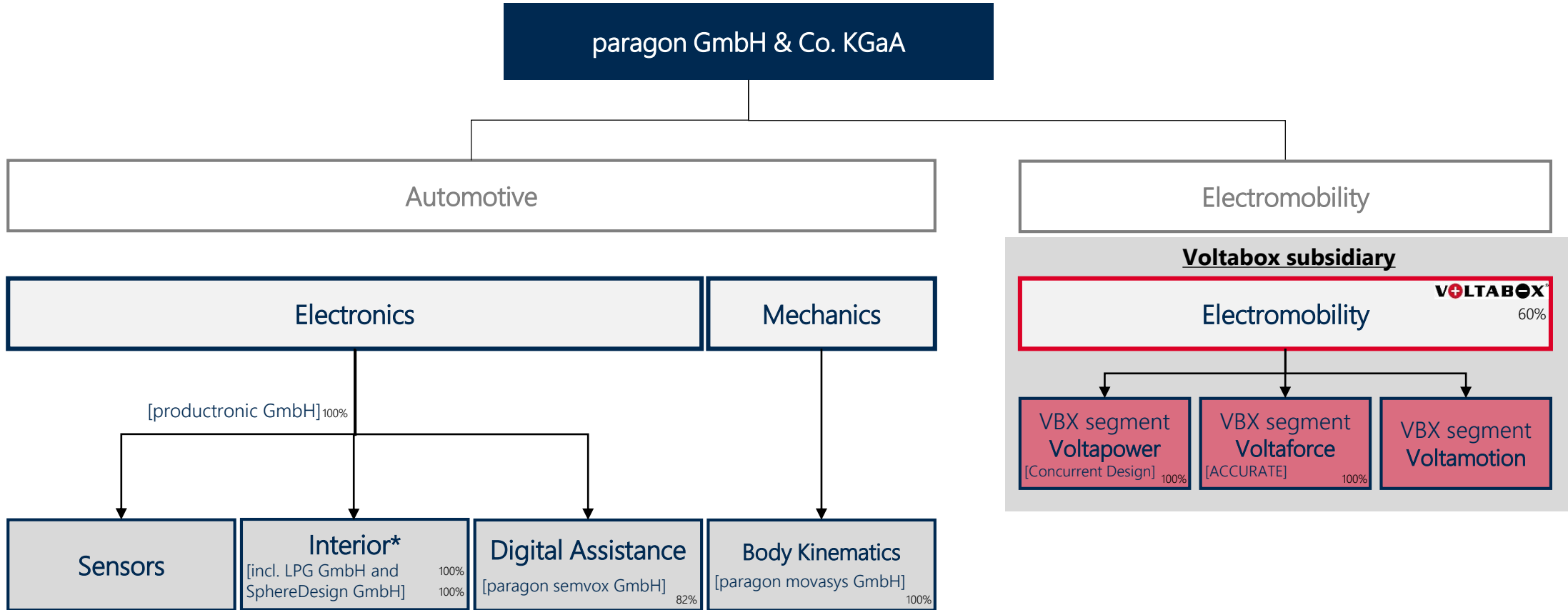
- Manufacturer of Li-Ion battery packs for several mass market applications (i.e. pedelecs) – facilitates horizontal diversification



Highlights

Group structure

Markets
Segments
Business Units

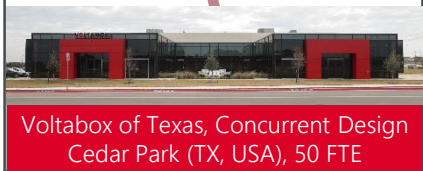
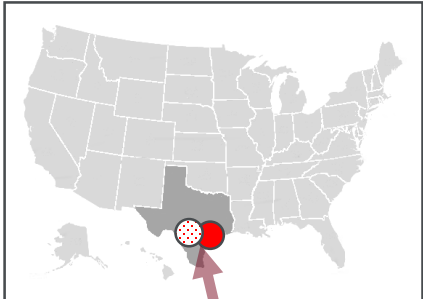


* Comprises former Cockpit and Acoustics business units.

Highlights

Group locations

- 935 Group employees* (as of balance sheet date Sep. 30, 2018)
- Thereof 212 in R&D (23%)



Voltabox of Texas, Concurrent Design Cedar Park (TX, USA), 50 FTE



paragon Automotive Kunshan, Voltabox Kunshan Kunshan (China), 23 FTE

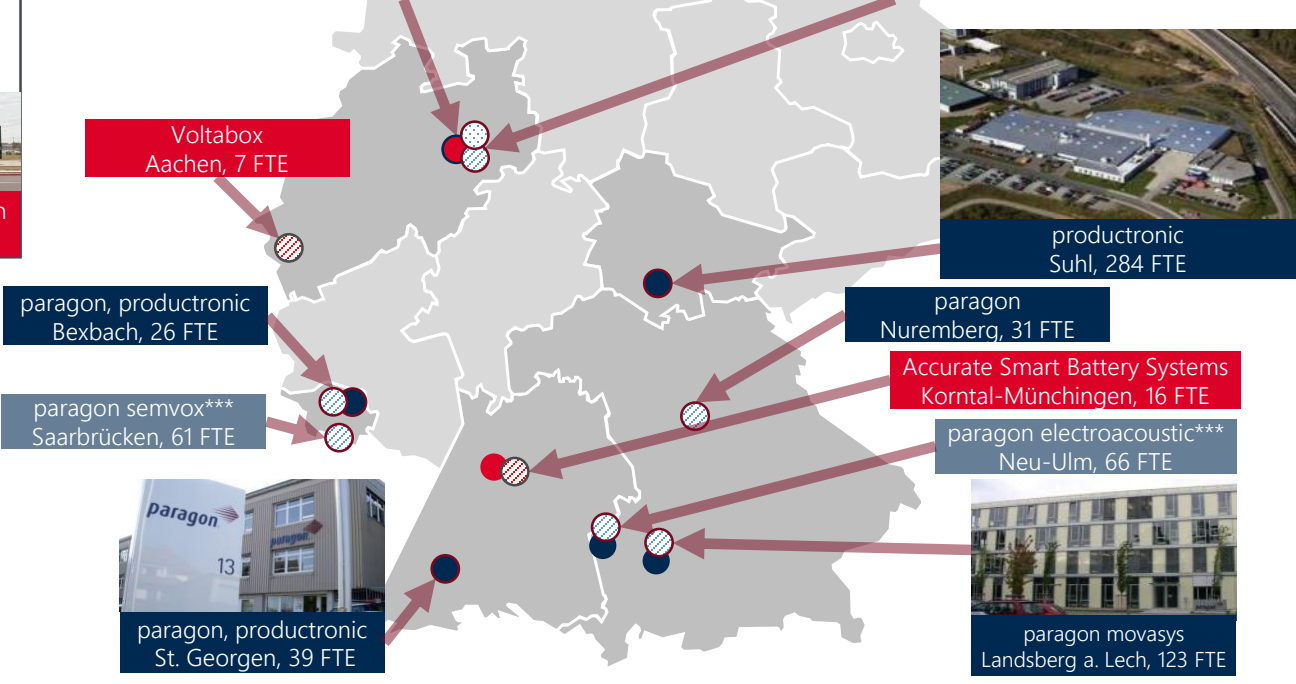


paragon GmbH & Co. KGaA



paragon, productronic Delbrück, 189 FTE

Voltabox Delbrück, 147 FTE



- Administration and sales
- Production
- R&D

* Incl. 88 temporary workers.
 ** Closing pending.
 *** Not consolidated as of balance sheet date.

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The paragon principle – business strategy

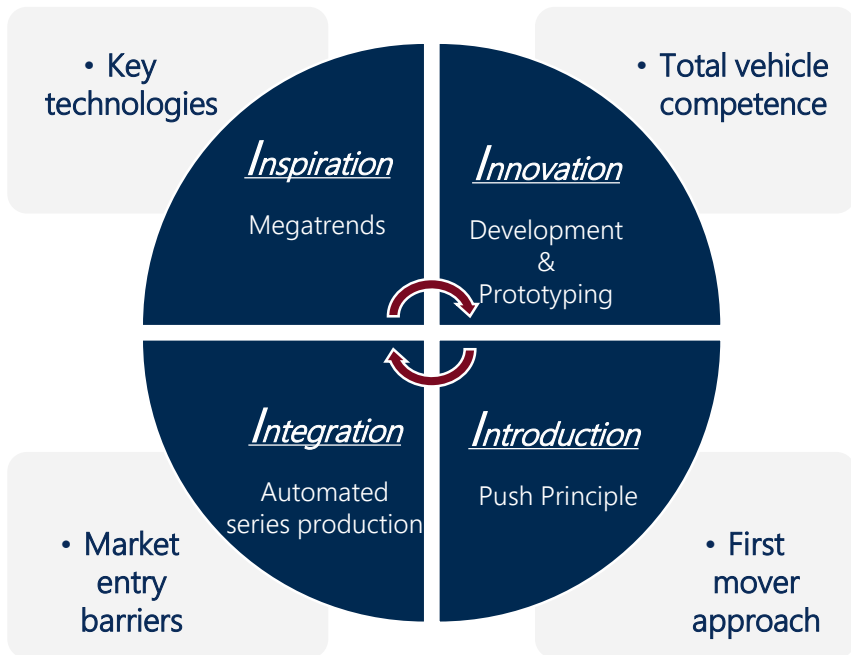
- Growth strategy: early entry into high margin/fast growing market segments
- Key technologies for and geared to megatrends
- Interdisciplinary team of experts (electronics, mechanics, chemistry, production technology)
- Pioneering and active product development
- Excellence in mass production (high degree of automation)
- Unique product portfolio and market position

Mission Statement

Early occupation
of **high-margin** niches
in **premium market**
segments with
enabling technology
for existing **megatrends!**

Business overview

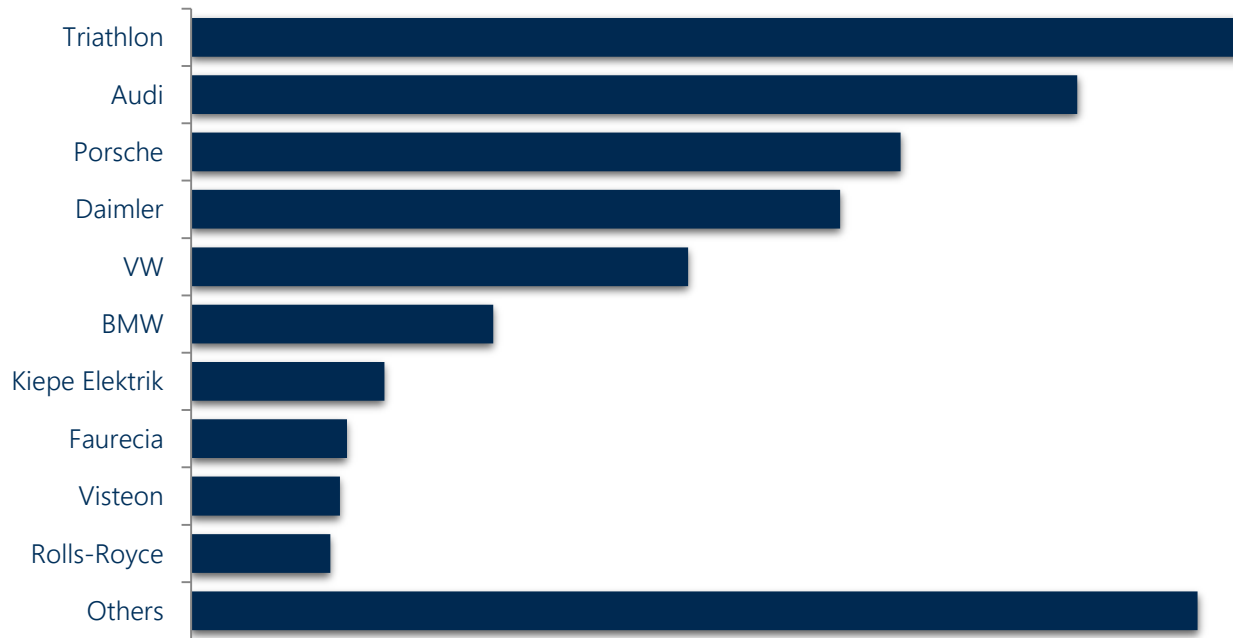
Successful business model



- Innovation-friendly corporate culture (open culture/diversity)
- Interdisciplinary team of experts (electronics, mechanics, chemistry, production technology)
- Independent development of proprietary products
- Excellence in versatile series production (high degree of automation)

Established Tier1 partner

Breakdown of sales by customer (as of Sep. 30, 2018)

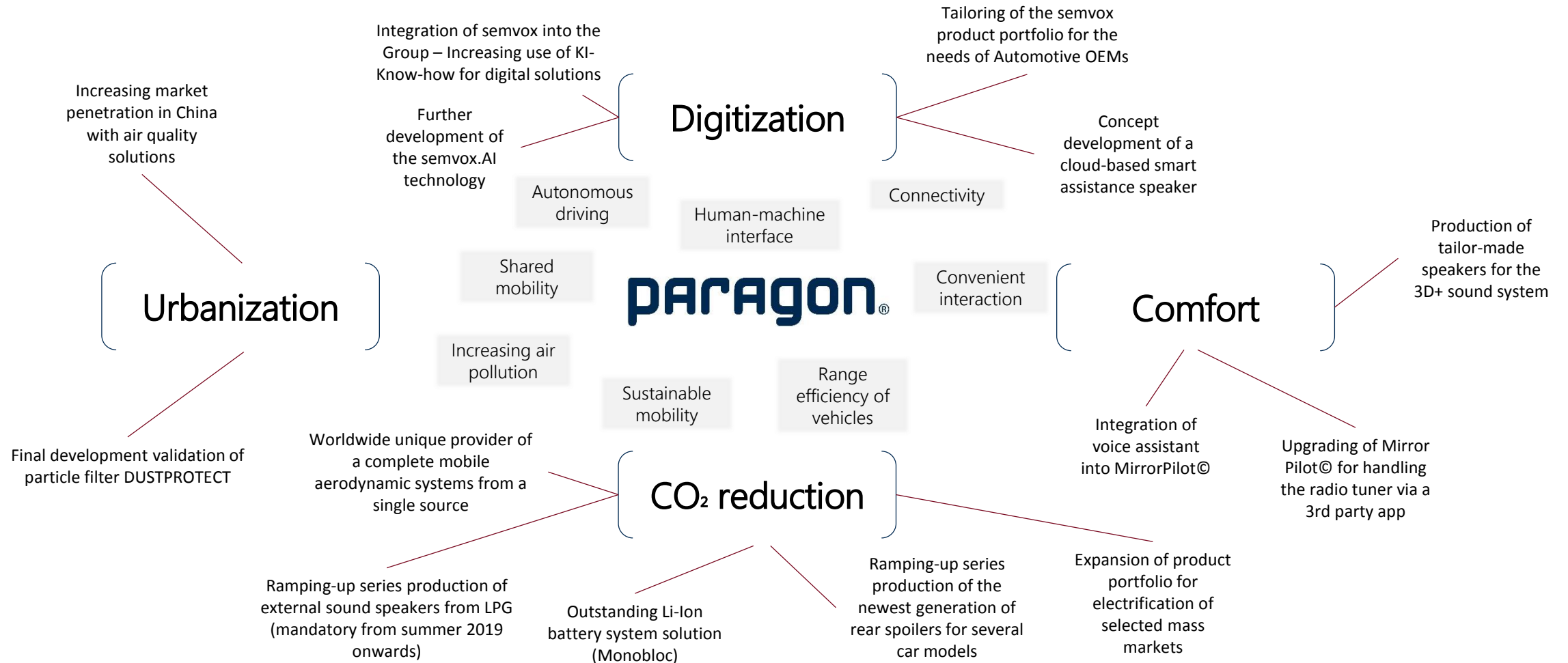


Selection of OEM customers:



— With the five largest automotive customers (Audi, Porsche, Daimler, VW and BMW) in 9M/2018, paragon generated more than half of Group revenue (approx. 53%).

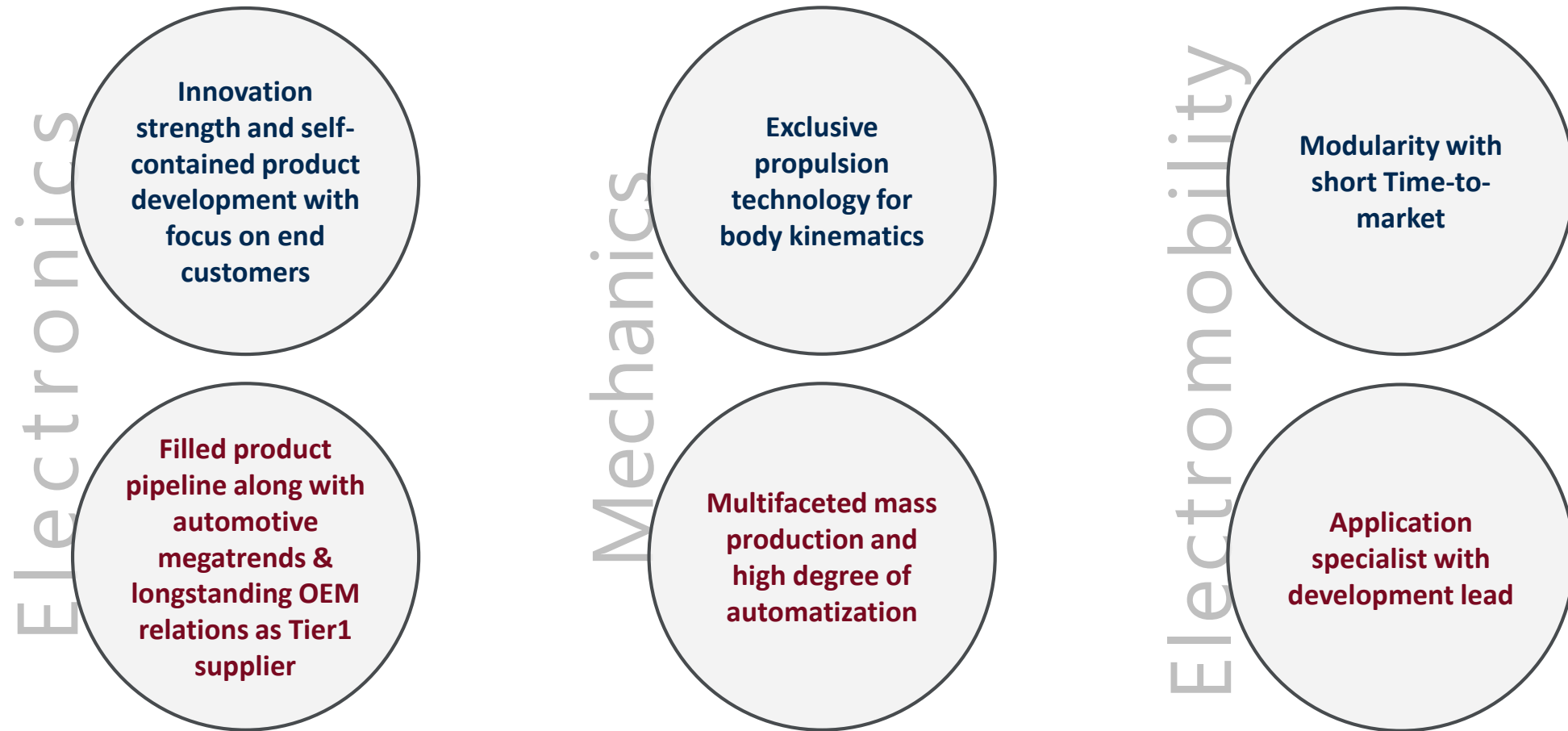
Push automotive mega trends



Current portfolio positioning

Segments	Electronics			Mechanics	E-Mobility
Business Units	Sensors	Interior	Digital Assistance	Body Kinematics	V+LTABOX®
Key products	AQS®, AQI®, DUSTDETECT	Analog luxury instruments, MirrorPilot®, Speech control & hands-free microphones, belt-mic®, ICC, (3D+ In-car-audio)	semvox.AI technology (ODP S3)	Active mobile aerodynamic systems	High performance battery systems, battery modules, starter batteries
Key customers	Audi, BMW, VW	Porsche, Daimler, Audi, VW	Porsche, Audi	Daimler, Audi, Porsche, Rolls Royce	Triathlon Batterien, Kiepe Electric, Komatsu Mining, BMW Motorcycles
Growth potential					
Competitive strength					
Market entry barriers	Patents & mass production	Quality, OEM relations, Know-how, mass production	Know-how	Quality & OEM relations	Modularity & specialization
Main markets	Automotive				Public transportation Industrial

USPs of paragon



Shifting from component to system provider



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Key figures I

Cost of materials ratio*
at 56.4%
slightly increased
(9M/2017: 52.7%)

- > Higher sales contribution of paragon movasys (with higher cost of materials ratio than Group average)
- > Lower share of development revenues in the Cockpit division

Personnel expense ratio
at 30.2%
remains stable
(9M/2017: 30.4%)

EBITDA
up 36.3%
margin now 14.5%
(9M/2017: 14.9%)

EBIT
up 25.4%
margin now 6.5%
(9M/2017: 7.2%)

- > (Decreasing) ramp-up costs in Mechanics segment
- > Upfront personnel expenses in E-Mobility segment

Increasing profitability expected in Q4/2018

** Defined as: cost of materials / (revenues + changes in inventories).*

Key figures II

Equity ratio

solid at 53.8%

(Dec. 31, 2017: 56.8%)

Operating cash flow

reduced to € -35.4m

(9M/2017: € -3.2m)

Available liquidity*

€ 73.5m

(Dec. 31, 2017: € 166.8m)

Sales financing support for main Voltabox partner (limited to FY 2018)

Increased inventory for ramping-up production

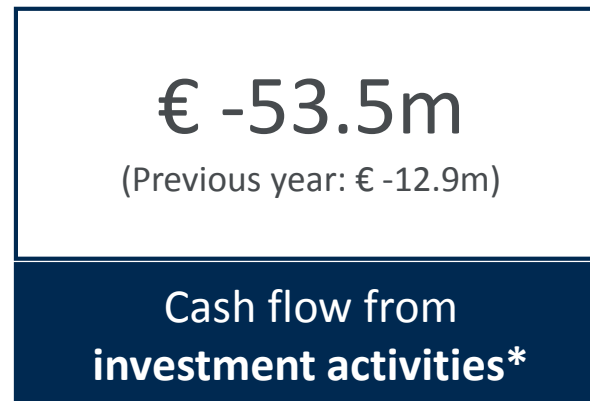
Subsequent to SemVox acquisition

** Defined as: cash and cash equivalents + unused credit lines with principal banks.*

Key figures III

- Large increase in trade receivables owing to very good business development in the Voltapower segment and sales financing support for main Voltabox partner (limited to 2018)
- Increase in inventories enabling fast deliveries to the intralogistics market in the Electromobility segment
- One-time increase in cash flow from investing activities due to M&A (Concurrent Design, Accurate and SemVox)

Free
Cashflow:
€ -88.9m
(Previous year:
€ -16.0m)



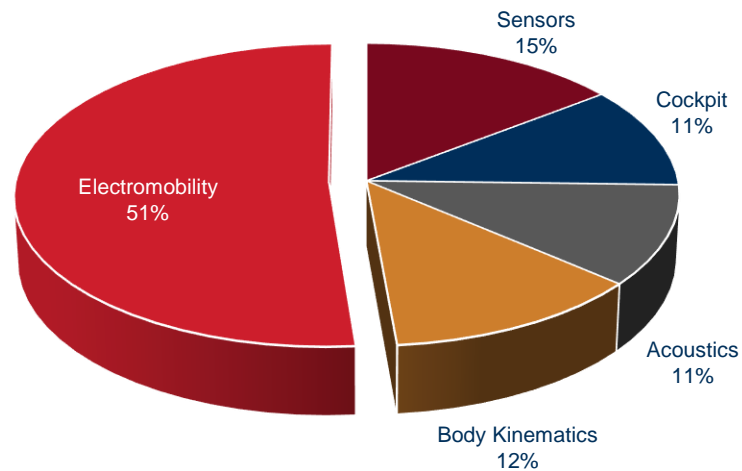
Financial status

Intended bond	Current financing
Refinancing of SemVox-acquisition	Done from other sources
Financing of growth in automotive	Expanded credit lines / leasing
Planned construction of buildings in Delbrück	Conventional real estate financing (H2/2019)
Refinancing of investment in real estate (Landsberg am Lech, Limbach-Kirkel)	Conventional real estate financing (favorable loan agreements ready for signing)
Further improvement of current financing structures	Not critical, but promising projects with banks and leasing companies
General corporate financing	Not critical

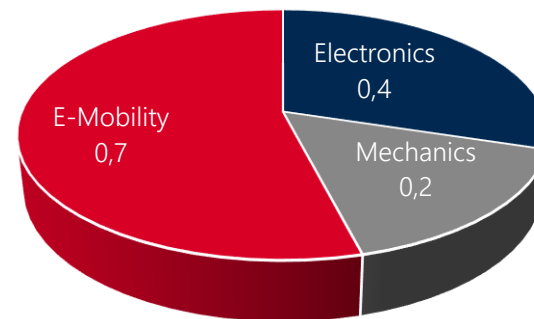
Financials

60-months order backlog

60-months order backlog
(€ 2bn) as of June 30, 2018 by
segments/units

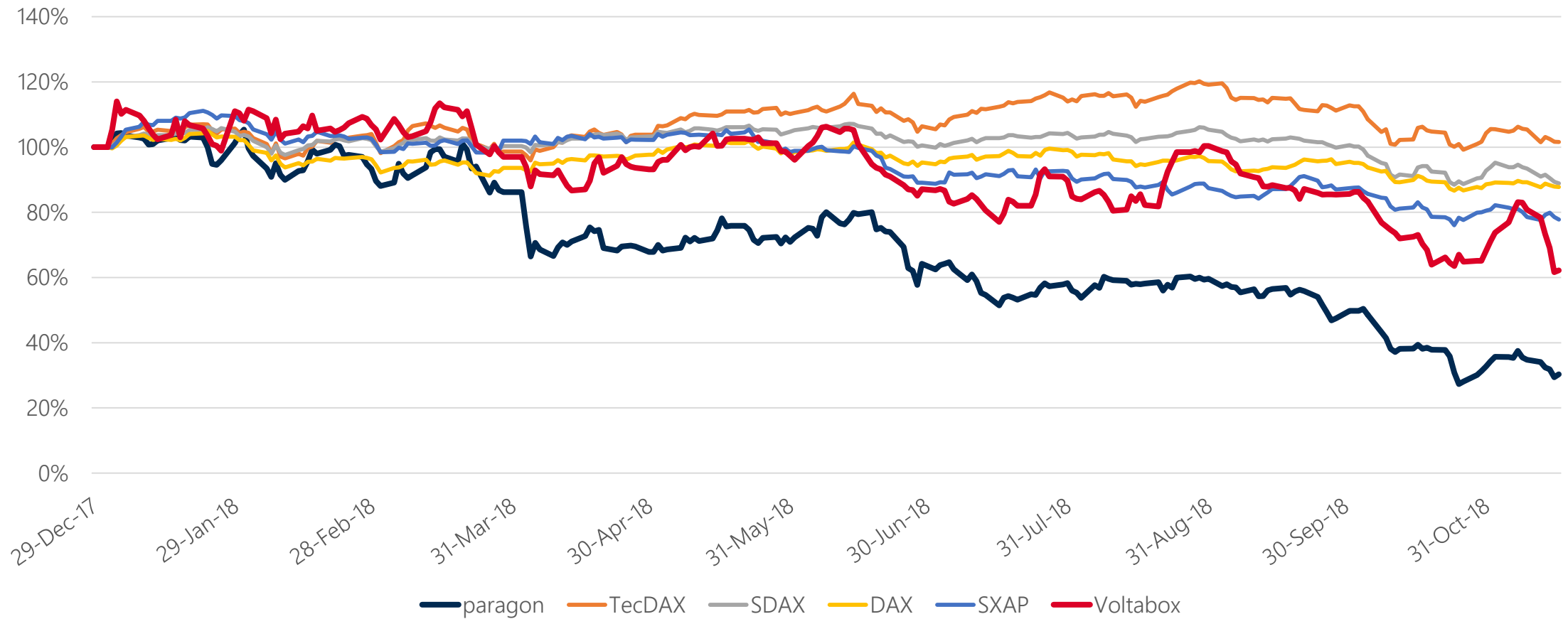


60-months order backlog with
100% weighting as of June 30,
2018 [in €bn]



- Approx. € 2bn total 60-month order backlog (H1/2017: € 1.6bn)
 - Estimated order backlog is weighted according to the expected lifetime and the probability of occurrence
 - Serves as base for planning
 - Evaluation system in place since IPO in FY 2000
- Thereof approx. € 1bn attributable to Voltabox (H1/2017: € 0.8bn)

Share performance in 2018



Current forecast

PGN	Result 2017	Year-to-date/	Forecast 2018	
	12 Months	H1/2018	As of Mar. 9, 2018	As of Aug. 21, 2018
Group revenue	€ 124.8m	€ 78.6m	Approx. € 175m	€ 180 – 185m
EBIT margin (unadjusted)	6.1%	6.1%	Approx. 9%	Approx. 8%*
Investments	€ 37.7m	€ 15.9m	Approx. € 35m	Approx. € 35m

VBX	Result 2017	Year-to-date/	Forecast 2018	
	12 Months	H1/2018	As of Mar. 9, 2018	As of Aug. 21, 2018
Group revenue	€ 27.3m	€ 18.1m	Approx. € 60m	€ 65m – € 70m
EBIT margin	2.1%	0.6%	Approx. 10%	Approx. 7%*
Investments	€ 6.3m	€ 3.5m	Approx. € 13.4m	Approx. € 13.4m

* Considering € 2m add. expenses from rearrangement of intralogistics partner agreement.

Summary

Much faster growth than automotive sector

paragon Automotive +20%

- Increasing disengagement of sector constraints
- No additional risks seen coming from e.g. US politics, Diesel scandal, WLTP bottlenecks

Robust order backlog

€ 2bn. (60 months)

- Thereof € 1.3bn. weighted with 100% (signed orders and framework agreements)

Significant growth in E-Mobility and Mechanics with economies of scale driving profitability

Operating leverage

- Upfront CAPEX (development and PP&E) facilitate sustainable profitability

Financial Calendar* 2019

- Jan. 10/11, ODDO BHF FORUM, Lyon
- Jan. 31, Bankhaus Lampe German Corporate Conference, London
- Feb. 19/20, ODDO BHF German Conference, Frankfurt am Main
- Apr. 1, Annual report 2018
- Apr. 3-5, Bankhaus Lampe German Conference, Baden-Baden
- Apr. 11, Solventis Aktienforum, Frankfurt am Main
- May 13, Interim release as of March 31 – First quarter
- May 13/14, Equity Forum Spring Conference, Frankfurt am Main
- May 15, Annual general meeting paragon GmbH & Co. KGaA, Delbrück
- May 16, Annual general meeting Voltabox AG, Delbrück
- Aug. 22, Interim report as of June 30 – Half year
- Sep. 2/3, Equity Forum Fall Conference, Frankfurt am Main
- Nov. 14, Interim release as of September 30 – 9 months

** Expected dates for paragon GmbH & Co. KGaA and Voltabox AG.*

APPENDIX

Management



Klaus Dieter Frers

- _ Chairman of the Board of paragon GmbH
- _ Chairman Supervisory Board of Voltabox AG
- _ Founder and major shareholder* of paragon GmbH & Co. KGaA



Dr.-Ing. Matthias Schöllmann

- _ Managing director of paragon GmbH (as of Sep. 1, 2018)
- _ Head of Automotive business
- _ Previous function: Managing Director at Hella GmbH







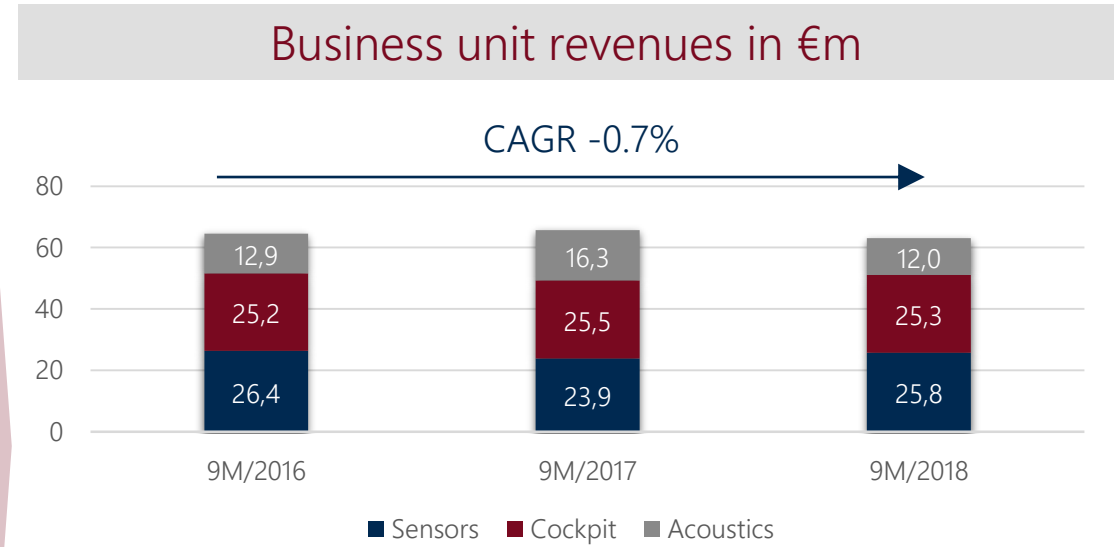
Dr.-Ing. Stefan Schwehr

- _ Managing director of paragon GmbH
- _ Focusing on digital issues and corresponding collaborations; responsible for the integration of SemVox
- _ Previous function: Head of series development controls and displays at Daimler AG

** 50% plus one share; Incl. attribution acc. to section 34 securities trading act.*

Electronics: high growth potentials

		Products ahead of market launch
Sensors	 <p>Sensors</p> <ul style="list-style-type: none"> - Air quality sensor AQS® - Air improvement system AQI®/IONAIR - A/C-purifier AQC© - CO₂ sensor - Particle sensor DUSTDETECT© 	<ul style="list-style-type: none"> Particle filter DUSTPROTECT Contactless capturing of vital data
	Interior	 <p>Cockpit</p> <ul style="list-style-type: none"> - Display instrumentation - Camera and monitor systems - Charging trays / Cradles - Connectivity solutions / Media interfaces - Controls and stepper motors
 <p>Acoustics</p> <ul style="list-style-type: none"> - Hands-free microphones - Noise measurement microphones - belt-mic® seat belt microphone - Vehicle sound systems 		<ul style="list-style-type: none"> 3D+ sound system Active road noise cancelling
Digital Assistance		 <p>Software</p> <ul style="list-style-type: none"> - Technologies and solutions for voice control (proactive assistants) - Hard- and software in the field of virtual assistance systems



New

Mechanics: world market leader in active aerodynamics

Body Kinematics

Movable body components

- Active aerodynamics
- Actuators for rear spoilers

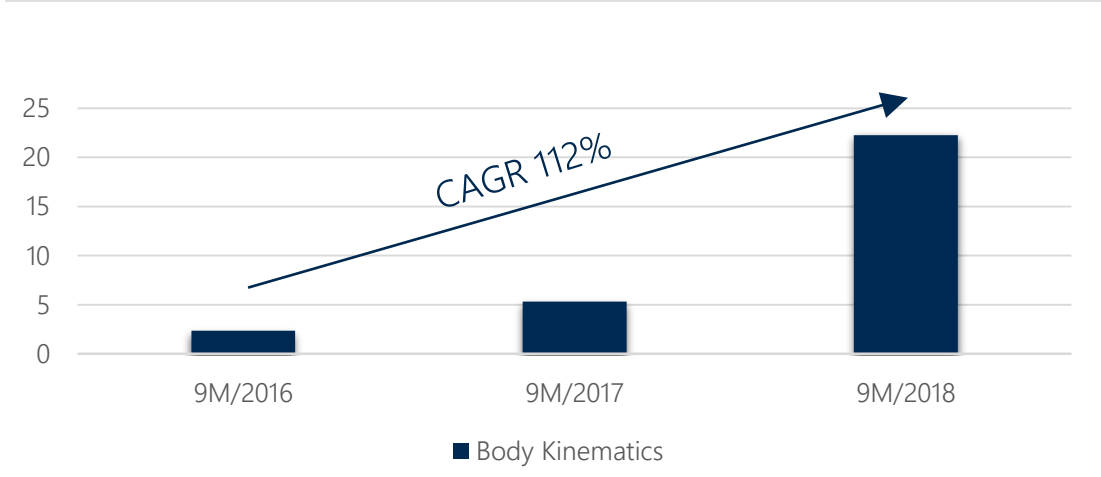
Movable interior comfort

- Rear folding tables for Mercedes S-Class et al.

Products ahead of market launch

- Plug and play spoiler systems
- Organic winglet
- Sound design of spoiler drives
- Innovative door and trunk components

3rd party business unit revenues in €m



TOP customers (as of Sep. 30, 2018)



E-Mobility: leading market positions in fast growing niches



Public transportation
_ Trolley buses



Intralogistics
_ Forklifts & Automated Guided Vehicles (AGVs)



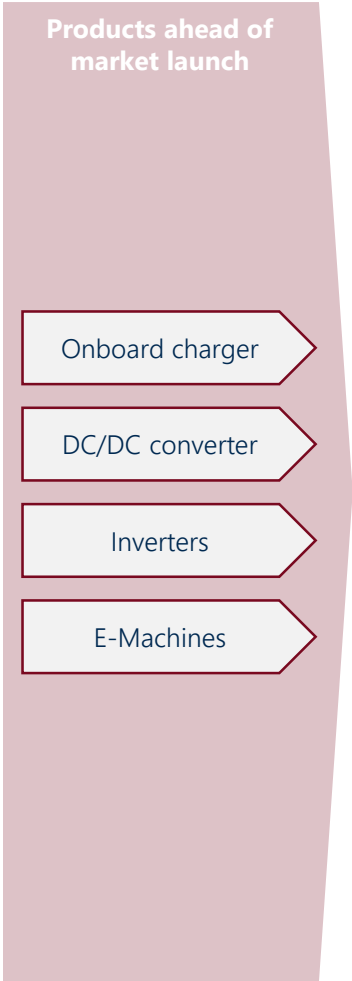
Underground mining
_ Battery Hauler & Big Bertha



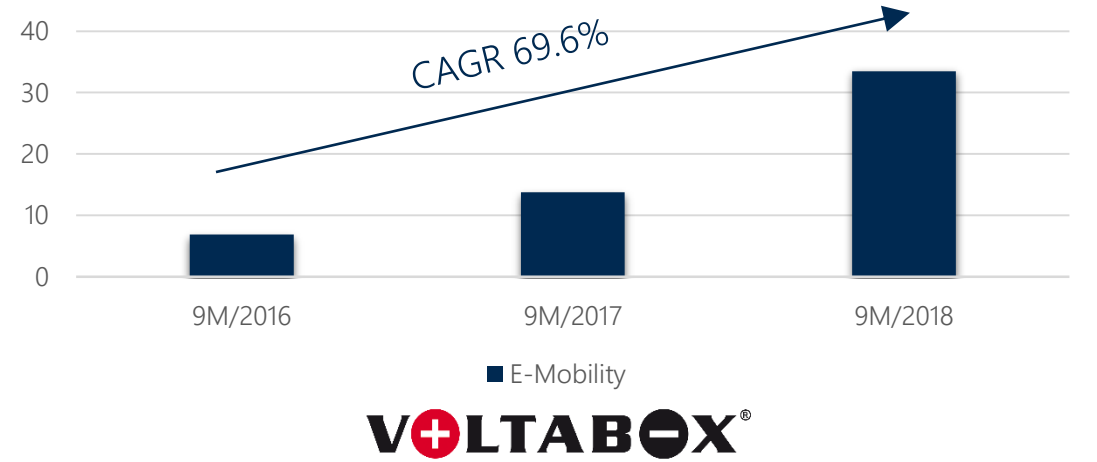
Agriculture & construction
_ Schäffer front wheel loader



Starter batteries
_ BMW motorcycles (HP4)



3rd party business unit revenues in €m

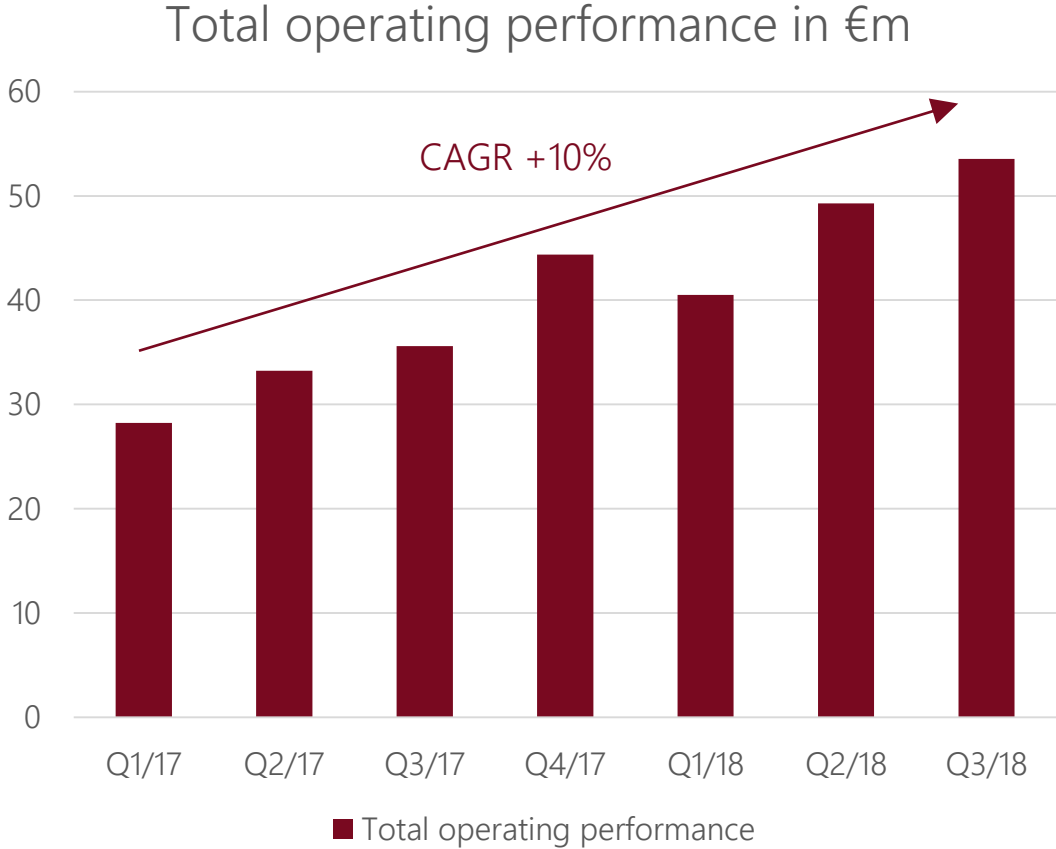
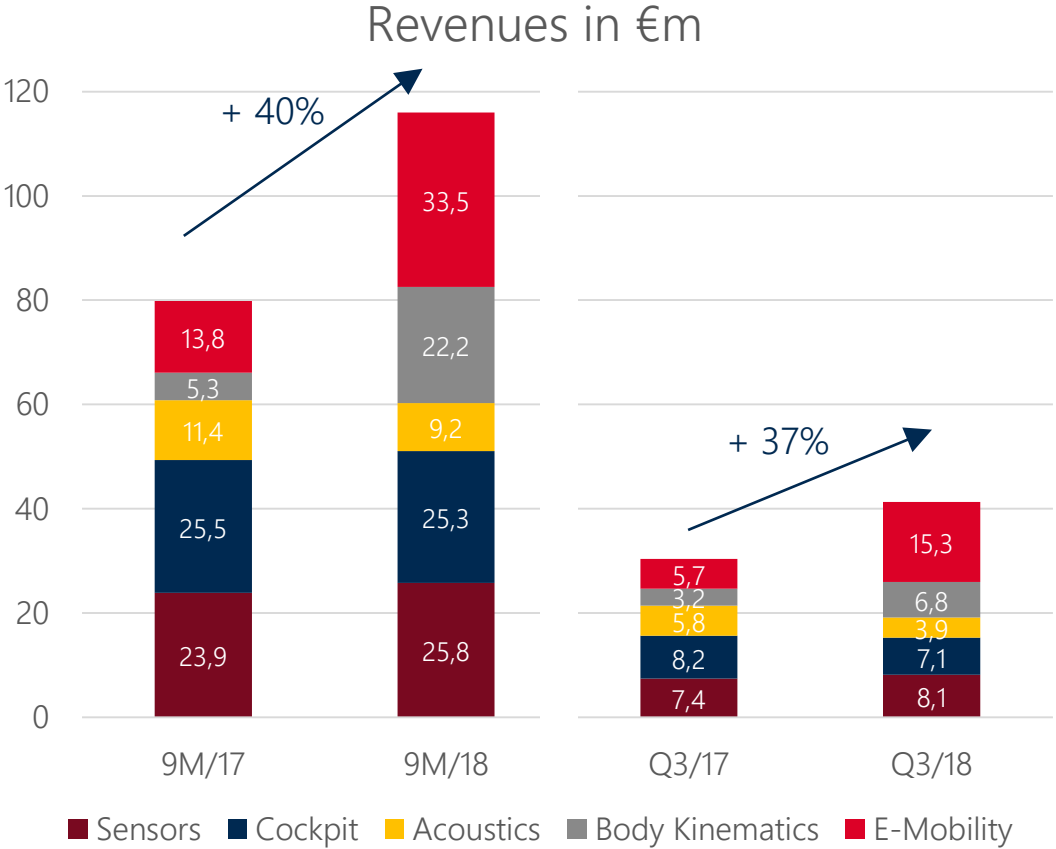


TOP customers (as of Sep. 30, 2018)



Appendix – Financials in Detail

Continued top line growth



Appendix – Financials in Detail

Key P&L figures

Key developments in FY 2017:

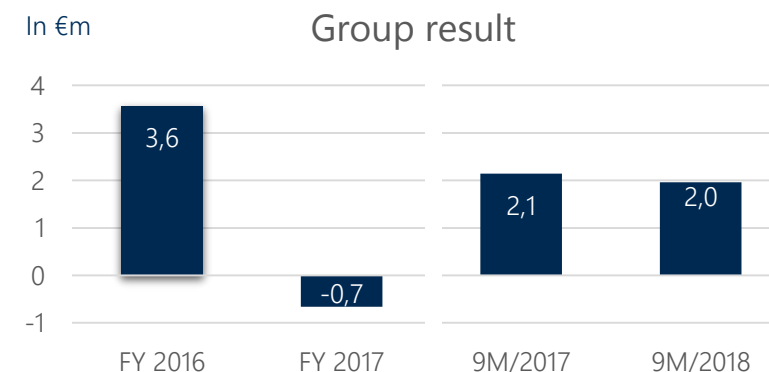
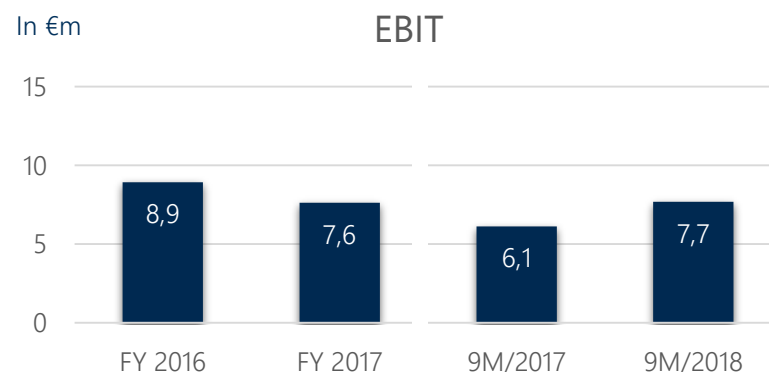
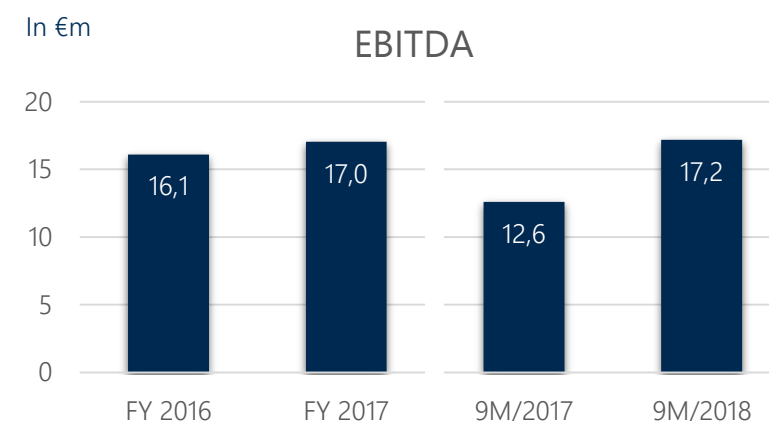
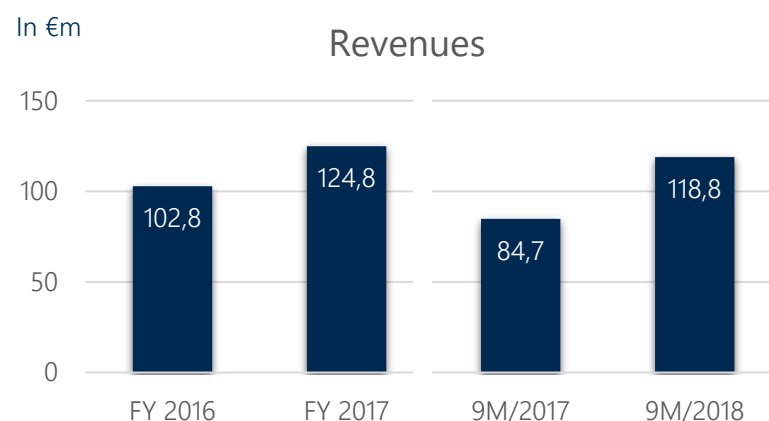
- Revenues increased >20%
- Successful emission of a € 50m corporate bond
- 10-times subscribed IPO of the subsidiary Voltabox

Key developments in 9M/2018:

- Revenues increased 40% at an EBIT growth of about 25%
- Implementation of the change of the company's legal form as preparation for the next growth phase
- Completion of several acquisitions in Automotive and Electromobility

Forecast 2018:

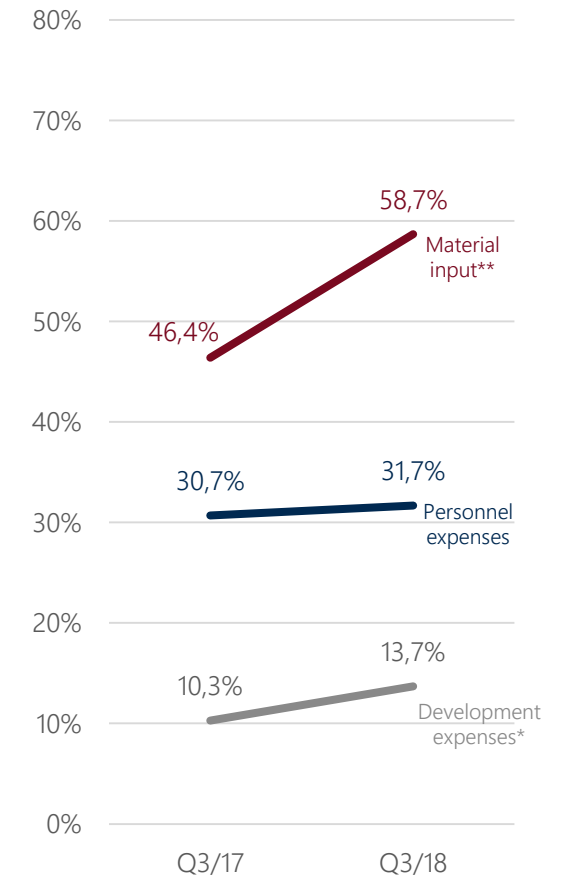
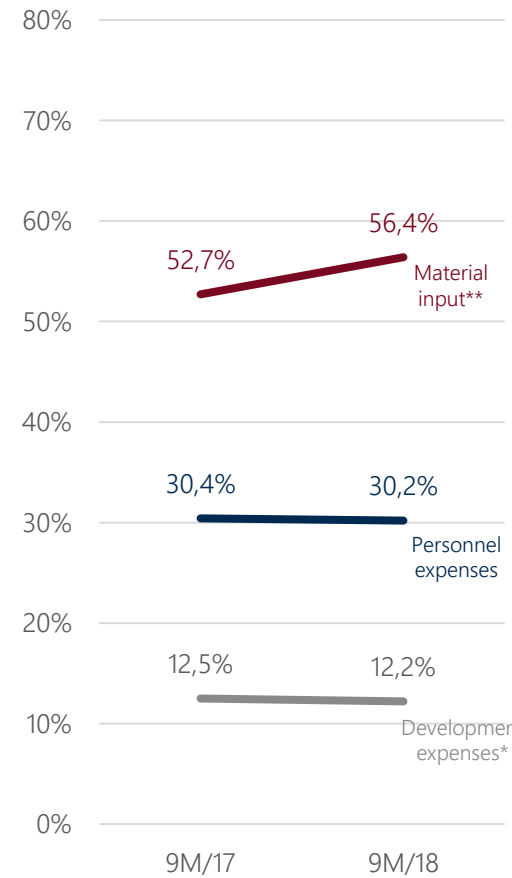
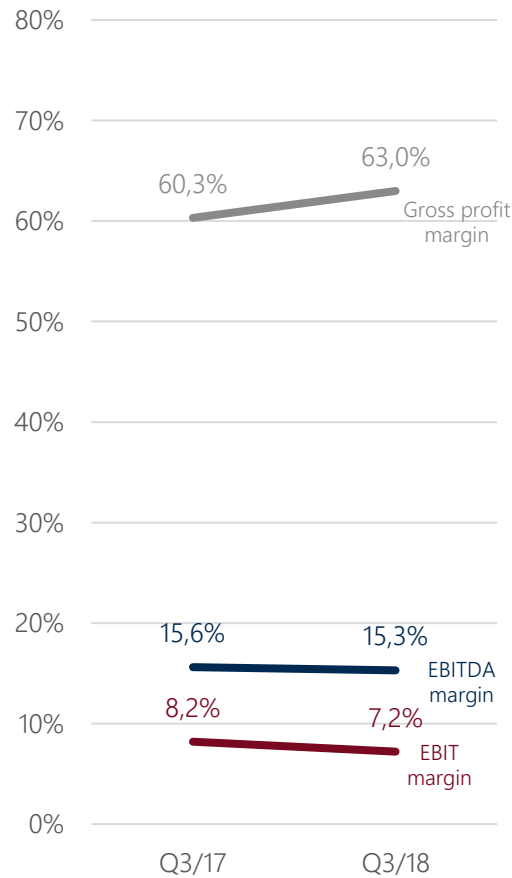
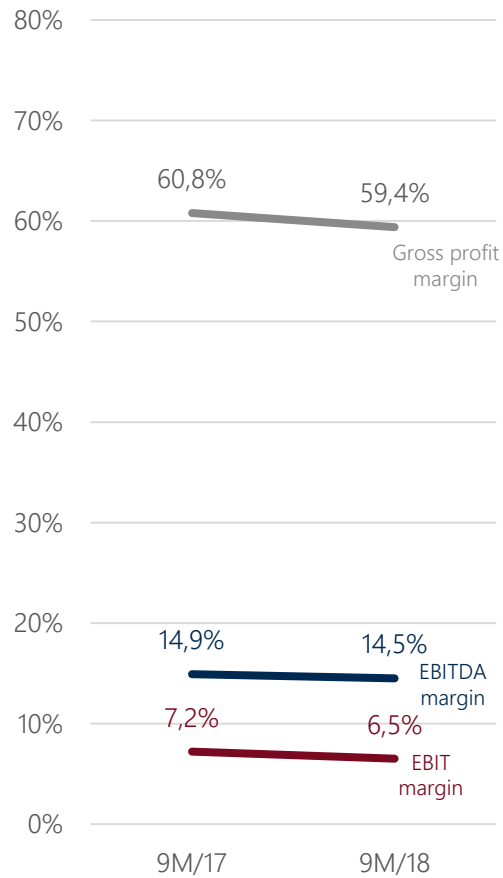
Group revenues € 180m - € 185m
 EBIT margin approx. 8%*



* Originally approx. 9%; Adjusted in H1 due to partnership rearrangement in the Electromobility segment to pursue market leadership goal in Intralogistics.

Appendix – Financials in Detail

Key figures profitability and expense ratios



* IAS 38.

** Cost of materials / (total operating performance – own work capitalized).

Key developments of Group assets

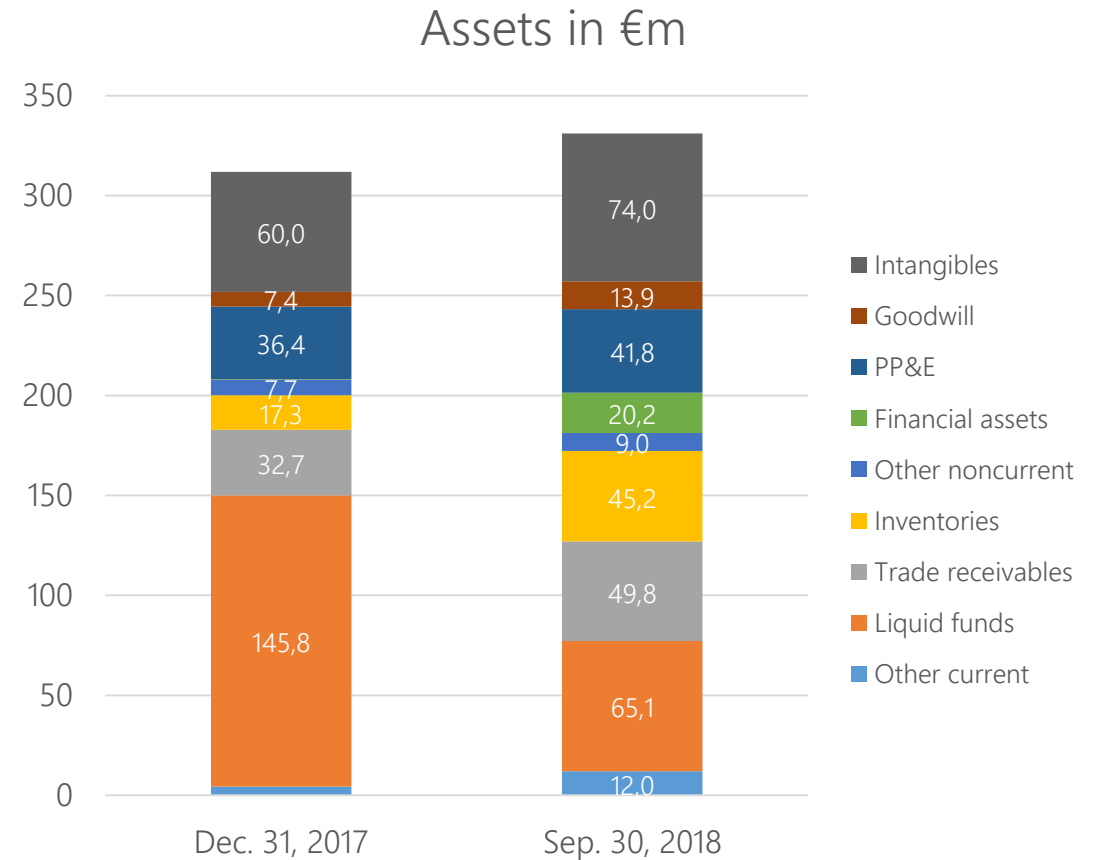
– Increase in noncurrent assets by € 47m

- Intangible assets + € 14.0m – own work capitalized
- Goodwill + € 6.5m – acquisition of Concurrent Design and ACCURATE Smart Battery Systems by Voltabox
- Financial assets + € 19.9m – acquisition of SemVox by paragon (not consolidated as of Sep. 30, 2018)

– Decrease in current assets by € 27.9m

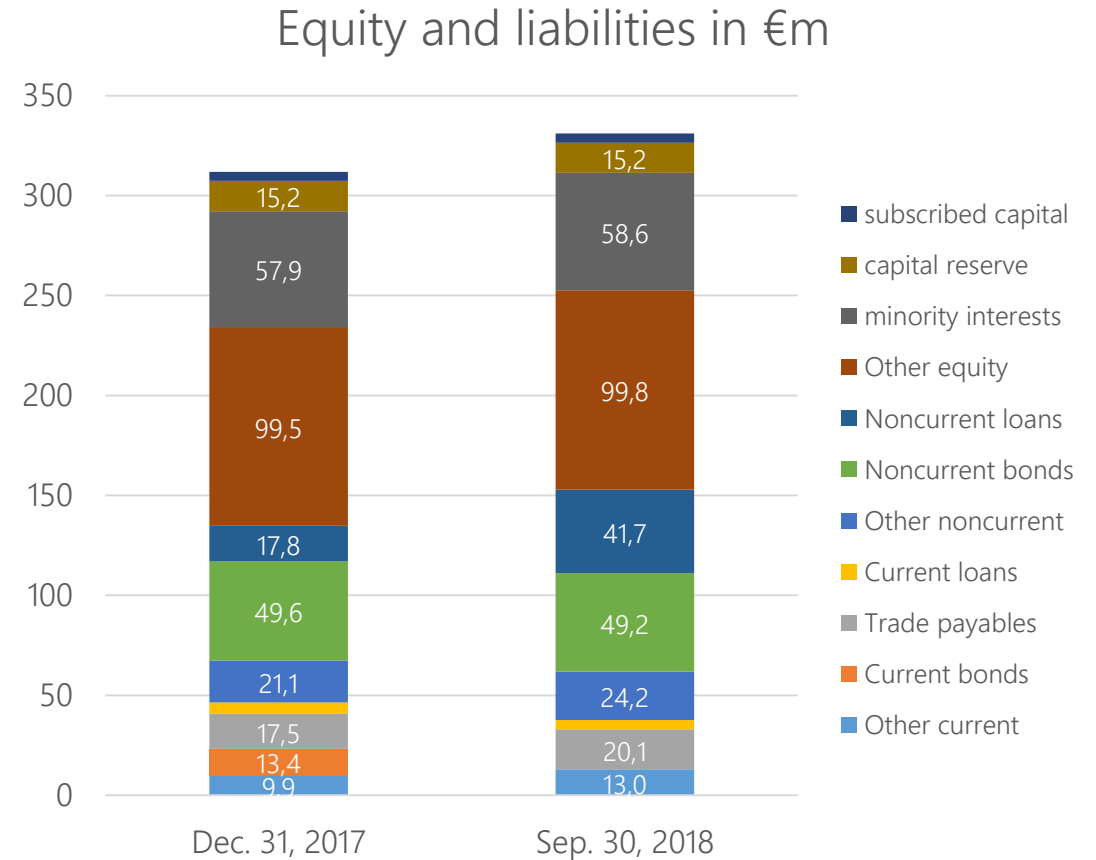
- Inventories + € 27.9m – further business growth
- Trade receivables + € 17.1m – mainly because of Voltabox sales supporting activities in intralogistics
- Other assets + € 7.8m – capitalization of one-time investment subsidy granted by Voltabox to Triathlon
- Cash and cash equivalents - € 80.7m – mainly for organic growth of new units and M&A activity*

* Concurrent Design, Inc., ACCURATE – SMART BATTERY SYSTEMS – GmbH, SemVox GmbH.

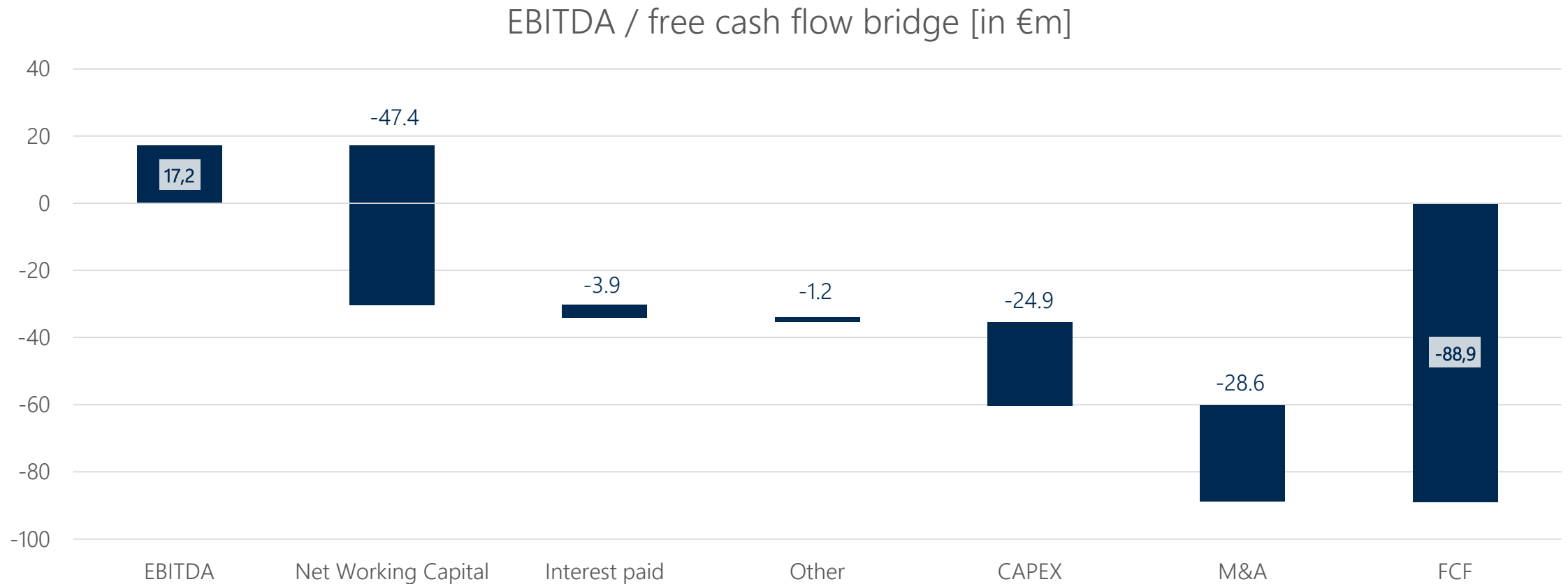


Key developments of equity & liabilities

- Increase of noncurrent provisions and liabilities by € 26.8m
 - Increase in noncurrent loans of € 24.4m
- Decrease of current provisions and liabilities by € 8.8m
 - Repayment of current bond (€ 13.4m)
 - Increase in trade payables of € 2.6m and
 - Increase in other provisions of € 1.0m while
 - Short-term loans decreased by € 0.8m
- Equity remained almost unchanged at € 178.2m
 - Equity ratio down to 53.8% (December 31, 2017: 56.8%) as a result of the higher balance sheet total

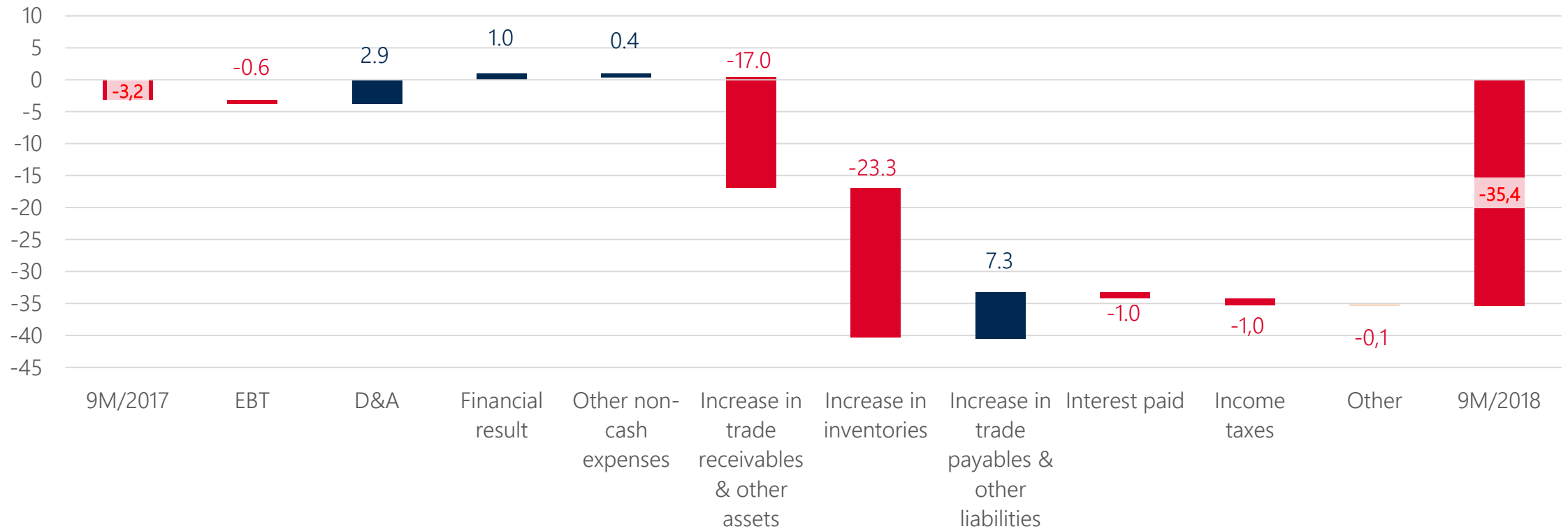


Key cash flow developments in 9M/2018



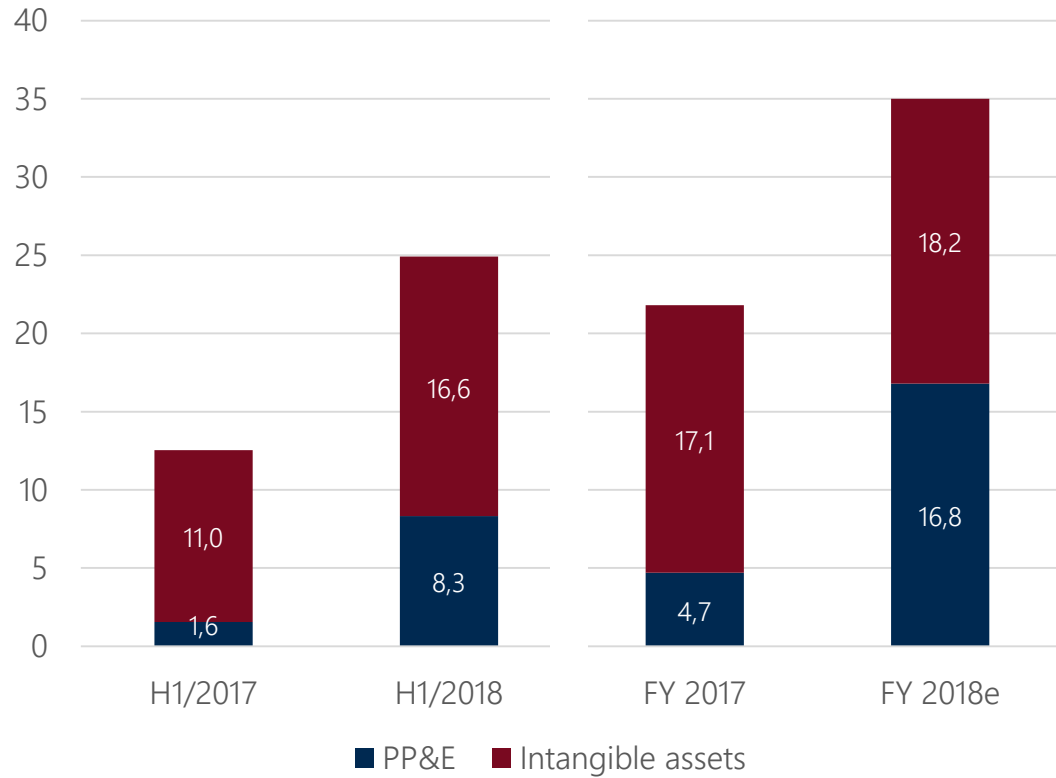
Development of operating cash flow (y-o-y)

Operating cash flow bridge [in €m]

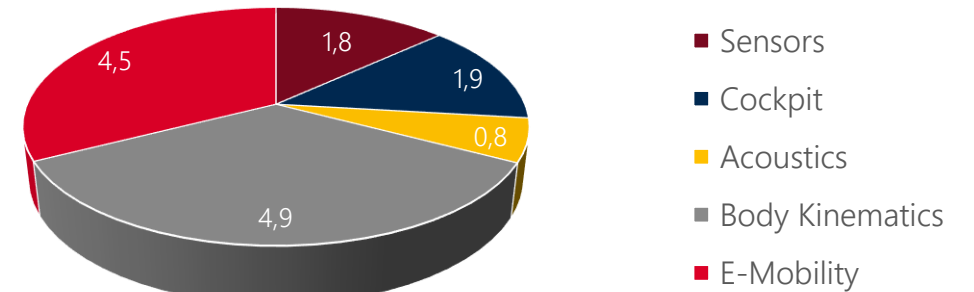


Investments 2018

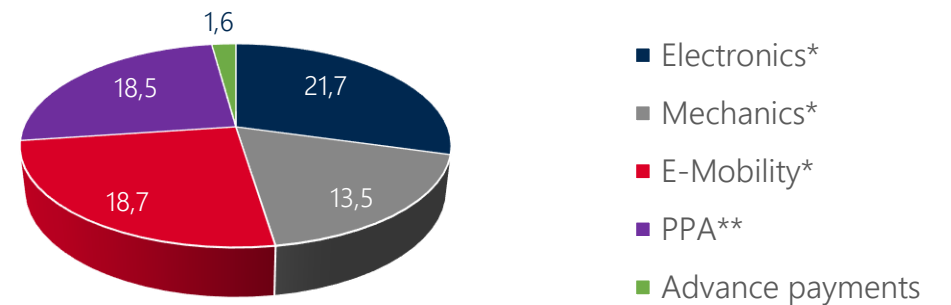
CAPEX



Own work capitalized 9M/2018 [in €m]



Intangible assets 9M/2018 [in €m]



* IAS 38.

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