

DATAG

PACAGON®

ERIM REPORT

GROUP

"paragon's revenue increased by 7.3 % in H1 2023"

"Sale of paragon semvox to CARIAD closed"

"Debt reduced by over 50%. Net leverage ratio improved to 2.6"



paragon in a Nutshell

>20%

of 850 employees in R&D 85% Single-Source Pure Automotive! Independent from type of drive!

Market Leader

> 300 different electronic and electromechanical systems and products

Every

7th

vehicle is equipped with paragon technology

Globally

10

Locations worldwide

35yrs Expericence founded 1988 >30

OEMs served as Tier 1

> 220

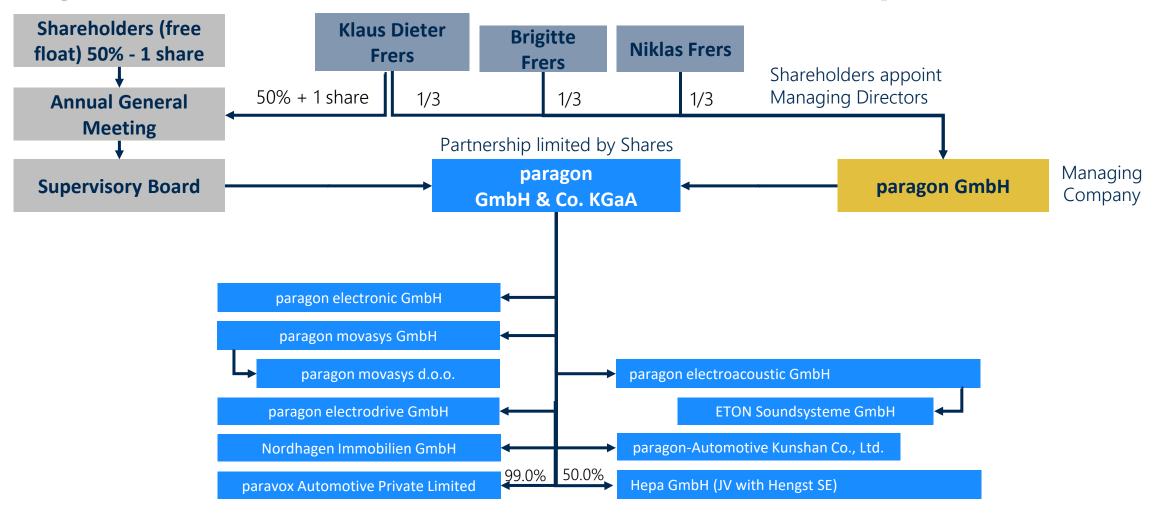
Vehicle Types with paragon technology

1st Tier Supplier



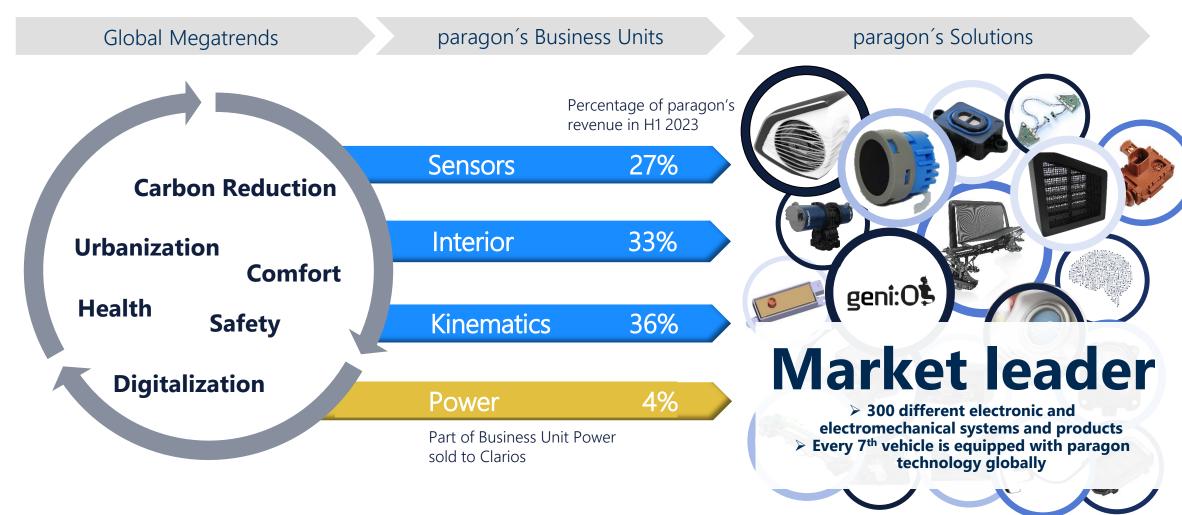


Organizational Chart after Draw of 29.94% Call-Option



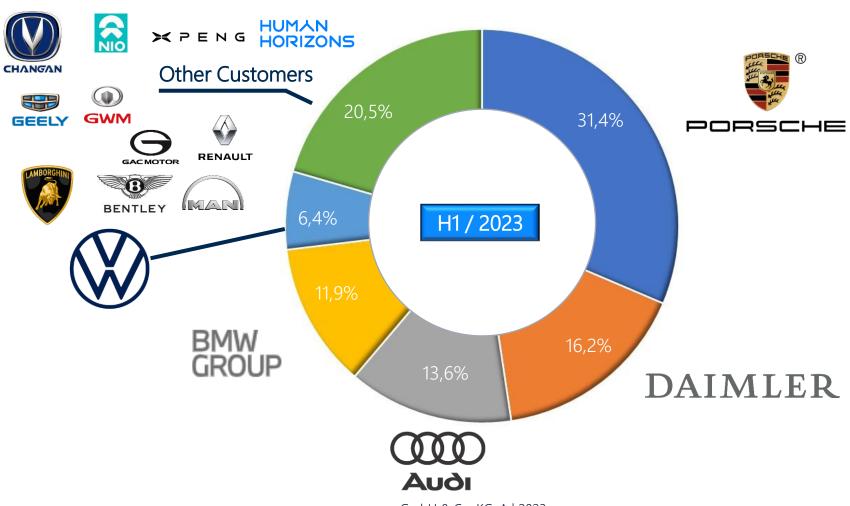


paragon addresses Global Megatrends





paragon's Premium Automotive Customers 2023





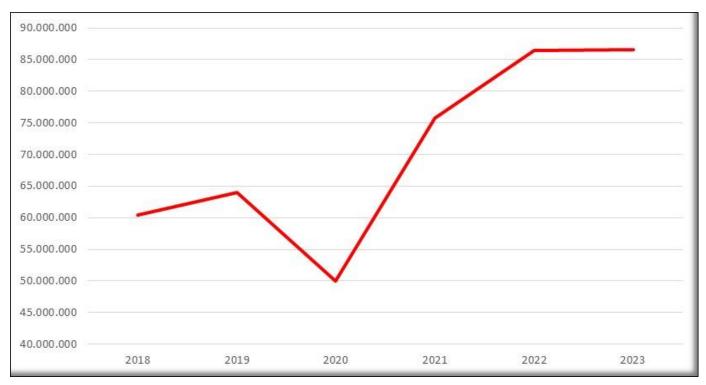
H1/2023: Financial Highlights in a Nutshell





Strongest H1 in paragon's History

H1 Revenues increased by 43% in the last 5 years



- H1 2023 was the half year with the highest revenues in paragon's automotive history
- Despite the loss of revenues due to the sale of paragon semvox in H1 2023
- Organic growth in all business units despite challenging headwinds in the last years
- Robust business model due to innovative products and solid customer base



P&L Development paragon – First six Months

Income Statement in MEUR	H1/2022	H1/2023
Revenues	80,7	86,6
Other own work capitalized	3,1	0,3
Change of finished goods	2,8	-1,3
Other operating income	1,8	2,8
Total operating performance	88,4	88,4
Costs of materials	-46,5	-46,9
Personnel expenses	-21,2	-22,8
Other operating expenses	-14,3	-10,6
EBITDA	6,4	8,1
Depreciation & amortization	-6,3	-6,9
EBIT	0,1	1,2
EBITDA paragon semvox	2,5	7,5
Group EBITDA	9,0	15,7

- P&L in accordance with IFRS 5 (top line does not include revenues of paragon semvox GmbH)
- Revenues increased by 7.3% to EUR 86.6m in the first six months
- Reduction of own work capitalized due to higher reimbursements of development costs from customers
- Reduced finished goods as a result of ongoing working capital management
- EBITDA:

Continued operations: EUR 8.1m (+26% vs. H1/22)

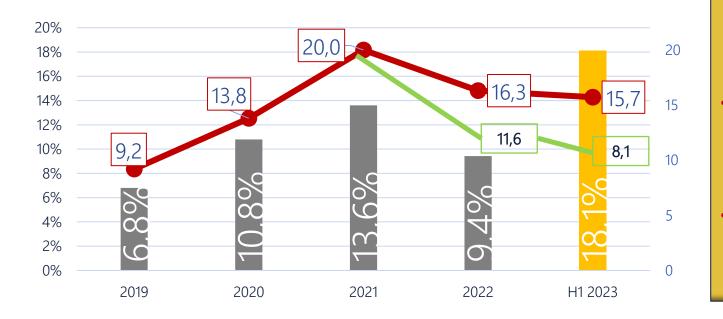
paragon semvox: EUR 7.5mGroup level: EUR 15.7m

- Depreciation & amortization include
 - EUR 0.4m PPA paragon movasys
 - EUR 2.8m IAS 38 amortization



P&L Development paragon – First six Months

EBITDA in EURm and in %



• EBITDA first six months 2023:

Continued operations: EUR 8.1m (+26% vs. H1/22)

paragon semvox: EUR 7.5mGroup level: EUR 15.7m

• EBITDA Full year 2022:

Continued operations: EUR 11.6m
 paragon semvox: EUR 4.7m
 Group level: EUR 16.3m

H1 2023: Achieved EBITDA of continued operations amounts to 70% of Full Year 2022 EBITDA



Bond Report

EUR-bond 2017/2027

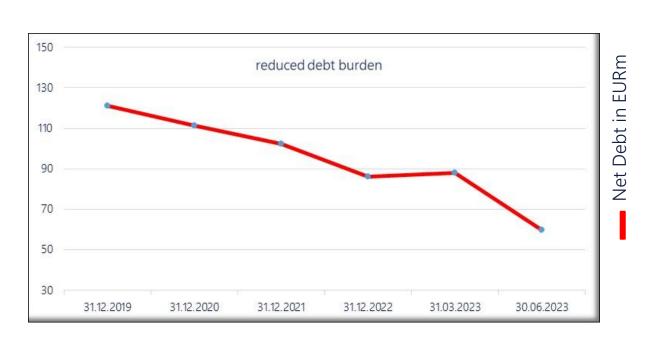
- _ March 2022: 99.9% vote for prolongation until July 2027 reached
- _ Terms and conditions improved for the bondholders Planning certainty achieved for paragon
- _ Volume reduced to EUR 45.2m in April 2023
- _ Interest rate dependent on EBITDA to debt level (bank loans plus bonds minus cash) "Net Leverage Ratio"
- _ Current interest rate of 9.25% is expected to decrease to 7.5% starting in January 2024
- _ Activities for further reduction (repurchasing program in compliance with Market Abuse Regulation and/or voluntary buy back offer) are progressing

CHF-bond paid back in full

- _ Instalments in 2021 (CHF 5.25m) and 2022 (CHF 8.75m)
- _ Open volume end of December 2022 was CHF 21.0m
- _ Final repayment conducted on April 23, 2023
 - CHF bond is history!



Clear Strategy to Reduce Debt Burden



1

Net debt reduced from EUR 121.3m end of 2019 by over 50% to EUR 59.9m end of H1/2023

2

This is a reduction of EUR 61.4m in the last three and a half years.

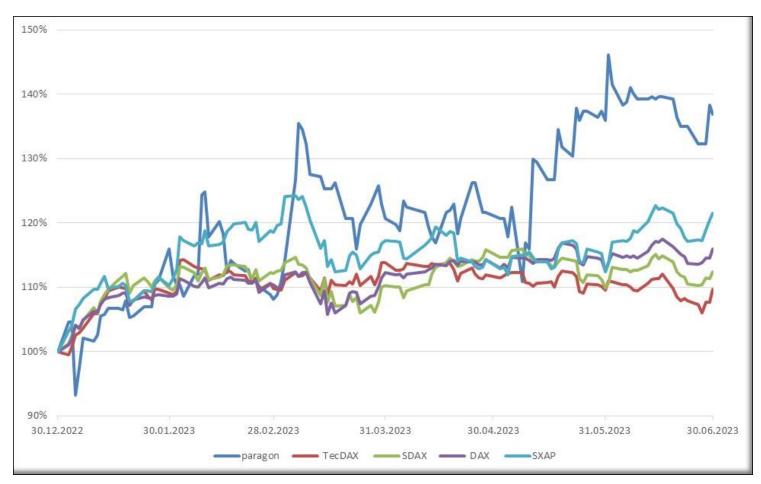
Average monthly reduction in the last 42 months was EUR 1.46m

3

paragon will use the improved net leverage ratio of 2.6 to restructure the debt in the upcoming months incl. bond repurchasing programs / voluntary offer

paragon_®

Share Performance



Highlights:

- Closing price March 31, 2023: 5.20 EUR
- Closing price June 30, 2023: 5.90 EUR
- Market capitalization: EUR 26.7m
- +36.9% in first half 2023
- Further increase necessary

paragon's path since 2020



Strengthening Core Business and Massively Reducing Debt

- _ 2021: Shares in Voltabox AG were sold, but carve out of future automotive business to paragon
- 2022: Joint Venture HEPA GmbH together with Hengst SE (Münster) to combine paragon's innovative electronic antivirus filter DUSTPROTECT with Hengst's polarizing filter as system for faster world-wide offering
- 2023: Full repayment of CHF-bond and partial reduction EUR-bond
- 2023: Sale of paragon semvox GmbH to CARIAD SE; CARIAD has incomparably greater opportunities to leverage paragon's industry-recognized expertise in AI worldwide

Now: Cooperation agreement with Clarios, the world's largest supplier of starter batteries, to enable much faster scaling effects

- Clarios takes over part of paragon's business unit Power (purchase of cells and assembly)
- paragon to deliver the key element of Lithium-Ion batteries, the electronics for battery management (BMS)
- paragon will participate on future sales success of Clarios
- Expected Closure Date October 1, 2023

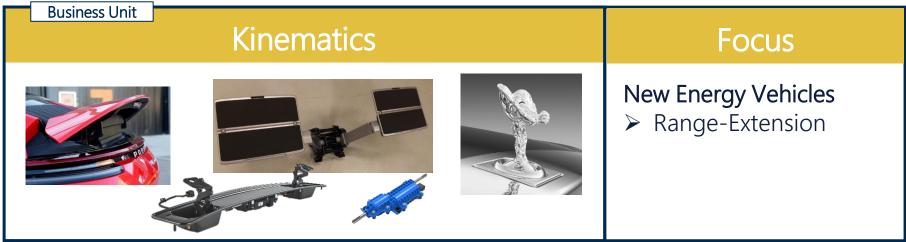


Clear Focus for Business Units

Segment Electronics



Segment Mechanics



paragon's path since 2020



Clarios releases Forces for paragon's fast-growing Business

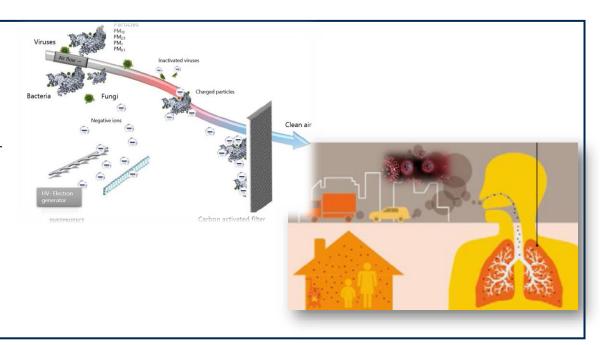
Attractive product portfolio for protecting health, more comfort, and use in electrical and autonomous vehicles

- _ Sensors:
 - ➤ Growth driver: DUSTPROTECT, the electronic anti-virus filter
 - ➤ New products: Sensors for the fuel cell market



Electronic Filter DUSTPROTECT

- The paragon DUSTPROTECT HV plasma filter cleans the vehicle interior by filtering particles and viruses with the efficiency like a HEPA filter
- Particles, viruses, bacteria and pollen are electrically charged and afterwards captured in an electrostatic fiber filter
- The filtration efficiency is enhanced without increasing the pressure drop in the HVAC. This saves energy (extremely important for E-cars) and improves the acoustic comfort in the interior



USPs

- ♣ Different custom-made integration solutions
- ♣ Very low pressure drop
- **★** Competitive costs in comparison with HEPA filters

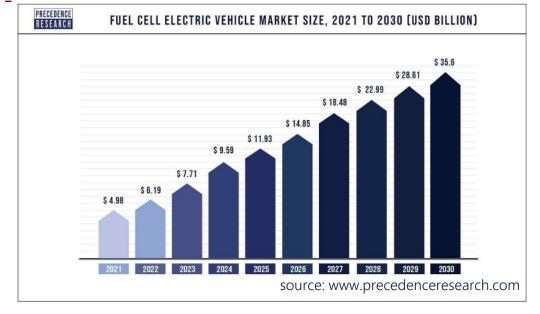
History/Status/Timeline:

2019	Proof of concept (at FIATEC)
2020	Prototypes for several OEMs
2021	1st series contract booked
2023	1st automotive SOP

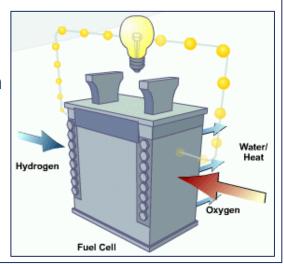


Fuel Cell Market grows while Major Challenges remain unsolved

- Fuel cells (FC) enable carbon neutral mobility for long haul and heavy duty applications (trucks, buses, mining,...), as well as larger passenger cars (SUV, pickup)
- CAGR of >50% foreseen until 2030



- FC converts hydrogen (from hydrogen fuel tank) and oxygen (from surrounding air) to electricity for the powertrain with exhaust being only pure water
- Robustness of FC is lower than ICE, so it needs to be protected even from low concentrations (1-digit ppb's) of various harmful gases to avoid irreversible damage (severe loss of power), such as...
- NH₃ (from agriculture or urea injection)
- NO_x or SO₂ (exhaust from ICE and industry)



paragon's path since 2020



Clarios releases Forces for paragon's fast-growing Business

Attractive product portfolio for protecting health, more comfort, and use in electrical and autonomous vehicles

- Sensors:
 - > Growth driver: DUSTPROTECT, the electronic anti-virus filter
 - ➤ New products: Sensors for the fuel cell market
- Interior:
 - ➤ Growth driver: Wireless charging for cell phones
 - > Growth driver: Innovative premium speakers
 - ➤ New products: Hybrid on-board instruments



Wireless Charging

- Patented active cooling system
- High efficiency wireless changer based on Qi-Standard for automotive industry
- Integrated Near Field Communication (NFC) for FOD
- _ Self-diagnostic
- _ Free choice of vehicle interface, CAN/LIN/discrete interface
- _ Antenna coupler possible
- One-coil and multi-coil possible
- _ Member of Wireless Power Consortium (WPC) since 2013



USPs History/Status/Timeline:

♣ Series production for premium motorcycle	2008	First projects
♣ Flexible platform architecture	2016	SOP of motorcycle charger 5W
→ Demonstrated highly capable and patented cooling concepts	2018	Start of Pre-Engineering of 15W
♣ Inhouse expertise for advanced multimaterial mould assemblies	2021	Final release of Qi standard 15W



High-End Sound Systems

- Highly sophisticated speakers in terms of selected materials, acoustic performance and optical design appearance
- _ Full speaker sets including subwoofers, woofers, midranges, tweeters
- _ Dedicated special solutions available such as exciters or shakers
- _ Various brandings possible, e. g. B&O, Bespoke Audio, Eton, ...
- DSP and mutlti-channel class-D amplifier solutions to match every demand
- paragon's audio expertise utilizable for OEM sound system tunings



USPs

- ♣ Highly sophisticated material for superior acoustics
- ♣ Customizable design including kinematics or lighting
- ♣ Sophisticated sound system

History/Status/Timeline:

2011	SOP Bang & Olufsen/BMW
2016	SOP Bespoke Audio System/

Rolls Royce

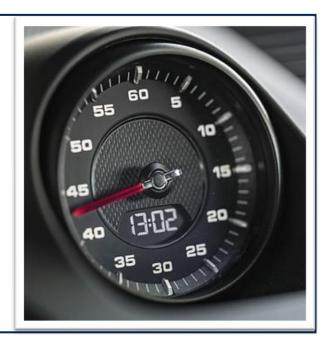
2023 SOP Bespoke/

Rolls Royce RR25



Instruments

- _ paragon is the market leader in the automotive auxiliary instruments industry
- _ Standard offering includes clock, chronometer, compass, pressure indicator functions and many more analog instruments
- _ Displays can be single or double mix in analogue (ex. Chrono and Clock) or even triple by mixing an LED display with analogue display
- _ Ability to meet any customer requirements thanks to paragon's design and manufacture know-how and inhouse stepper motor development and manufacturing
- Strong expertise in Backlighting and dissipation effects
- _ Multiple visualization (Customer) options are possible thanks to the screen



USPs History/Status/Timeline:

♣ Modular building block principle	1925	Instruments business established
◆ Very fast development of new design	1982	Established in Porsche cars
♣ Inhouse stepper motors + internal light measurement laboratory	2001	Direct supplier of VW group

different types of interfaces possible: e.g., LIN or CAN Bus

Audi, Bentley, Porsche, VW

Partner of Rolls Royce for over 15 years

paragon's path since 2020



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- Sensors:
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- Interior:
 - ➤ Growth driver: Wireless charging for cell phones
 - > Growth driver: Innovative premium speakers
 - ➤ New products: Hybrid on-board instruments
- _ Kinematics:
 - > Growth driver: Spoiler systems, key for longer range of electrical vehicles
 - > New products: Integrated seat technology for more comfort and autonomous driving

Spoilers Systems

- Spoilers, sun roofs or loading space covers: The number of moving, electrically driven parts in and on a vehicle is constantly growing.
- They are used for convenience but also improve handling. That's because front and rear spoilers, grill shutters, wind screens and wind deflectors reduce the air resistance and thus reduce the CO₂ emissions on combustion engine vehicles and help electric cars achieve a longer range.
- We have a unique competitive edge: we build on our expertise in production technology and the superior acoustics knowledge. This way, we cater for even the highest demands quickly and flexibly.



USPs

- ♣ Spoiler system for high variety of applications Sports Cars, E-Vehicles, Trucks, etc.
- ♣ Global market leader thanks to high innovation and realization competence

History/Status/Timeline:

2012	Foundation of the business unit
2017	1st million spoiler produced
2023	SOP spoiler in china





Integrated Seat Technology

- Queens lounge / Captain chair: folding table with wireless charging, active noise cancellation including headrest speaker, shaker for massage
- Working station: folding table with wireless charging, cup holder, USB connection, pen, light and make-up mirror
- Communication station: wireless charging (5W, 15W, Qi), extended info display for navigation, remaining range, make-up mirror etc.





USPs

- ♣ Premium chair/station for feel & relax, queens lounge experience
- ♣ Pre-save function for autonomous driving, mobile office
- Cutting edge Know how on wireless charging, acoustics, connectivity, actuators
- ♣ Crash test adapted integration

History/Status/Timeline:

2016	First concepts table+WLC
2018	Est. seating experts on board
2019	World premiere @CES + IAA
2020	First projects

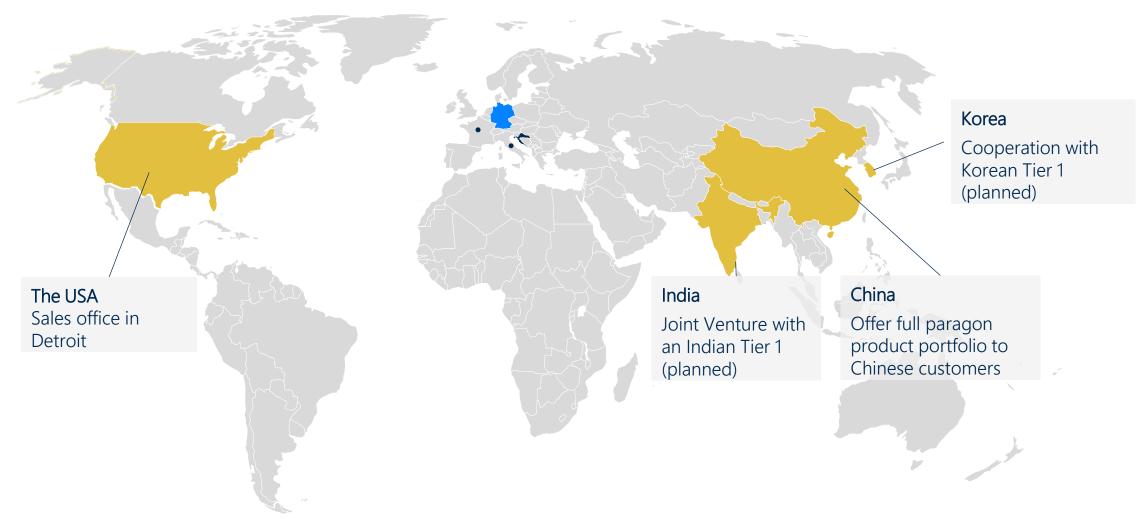


Global Footprint - today





Global Sales Initiative







Substantial Change of Situation since last Year

	June 2022		June 2023
Revenues first six months:	EUR 86.4m	\rightarrow	EUR 86.6m
EBITDA continued business	EUR 6.4m		EUR 8.1m
EBITDA discontinued business	EUR 2.5m		EUR 7.6m
Goodwill	EUR 21.9m		EUR 5.7m
Intangible assets	EUR 54.6m		EUR 33.5m
Outstanding CHF Bond	CHF 21.0m	1	CHF 0.0m
Outstanding EUR Bond	EUR 50.0m		EUR 45.2m
Net debt	EUR 91.1m		EUR 59.9m
Shareprice	4.61 EUR		5.90 EUR



Forecast for 2023 confirmed

Revenues 2023e

approx. EUR 170m (revenues 2022: EUR 160.3m)

+6.1%

EBITDA 2023e

EUR 20 to 25m

(at group level)



Thank you for your attention.

Please do not hesitate to directly contact Dr. Martin Esser or Klaus Frers in case of further questions.

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