

INVESTOR RELATIONS PRESENTATION

November 2019

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TKH Group NV (TKH) is focused on high-end innovative technologies in high growth markets within three business segments: Telecom, Building and Industrial Solutions.

Through a combination of technologies, TKH offers superior solutions that support to increase the efficiency, safety and security of its customers. The technologies are offered together with software to create smart technologies and one-stop-shop solutions with plug-and-play integrated technologies.

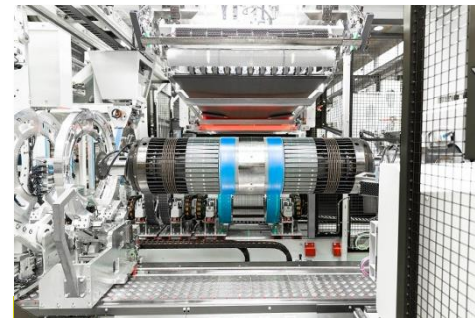
TKH operates on a global scale. Its growth is concentrated in Europe, North America and Asia.



TELECOM



BUILDING



INDUSTRIAL

PROFILE

2018

Turnover

1.5

€ billion

FTE

5.927

employees

Net debt

1.5

ratio

Innovations

21.9%

of turnover

Stocklisted

Euronext Amsterdam (TWEKA)

TELECOM SOLUTIONS

Indoor telecom & copper networks

Fibre network systems



ROS 14.5%

BUILDING SOLUTIONS

Connectivity systems

Vision & security systems



ROS 9.6%

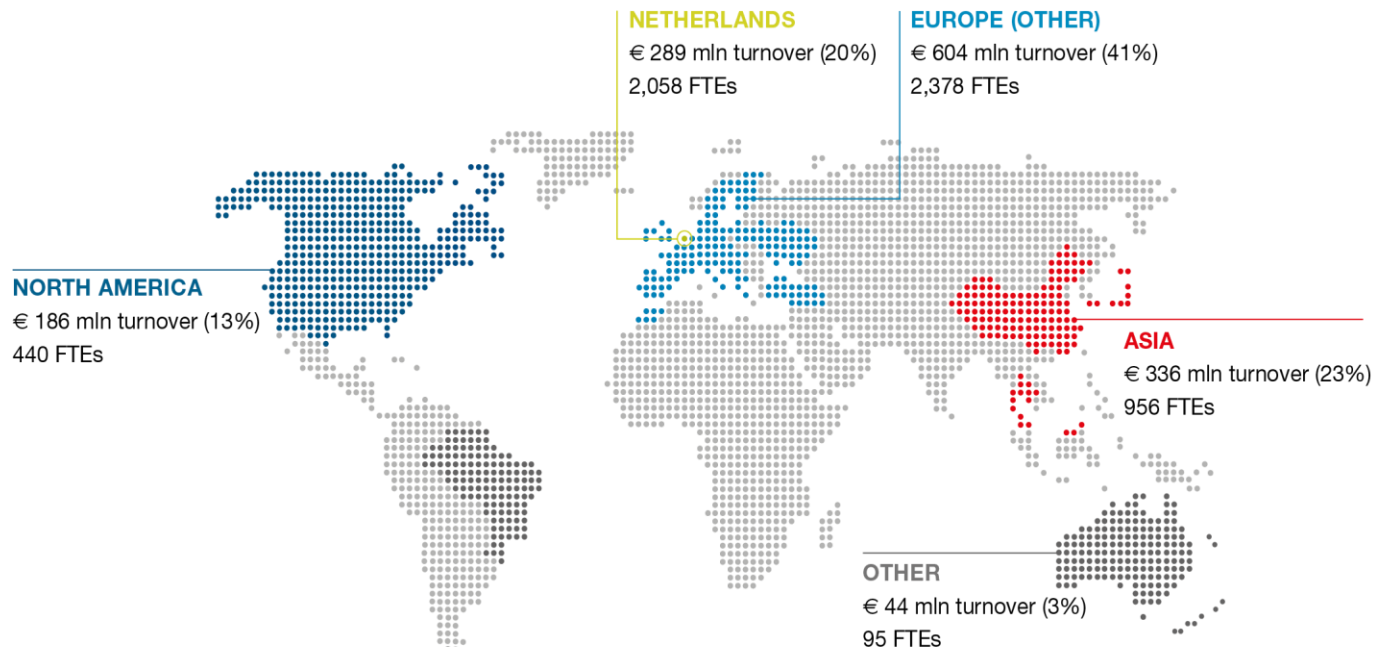
INDUSTRIAL SOLUTIONS

Connectivity systems

Manufacturing systems



ROS 16.3%



VALUE CREATION WITHIN TKH



TKH focuses on distinguishing potential for an above-average performance

- **Niche player** strategy – focus on high-grade solutions and relatively small markets with high margins
- High pricing power due to **innovative unique solutions**
- Selling **high return on investment** to customers
- Besides entering into partnerships, we focus on the development of advanced **proprietary technologies**
- High added value through **system integration**, service and solutions
- Commodity products used primarily as part of total solutions
- **Outsourcing** more than 70% of **capital intensive** production - flexible capacity is available and cost basis more variable
- Focus on **high-growth vertical markets** or **market share expansion** potential - optimal use of R&D-resources and investments to markets with largest potential
- **Spreading risk** across a large number of product/market combinations
- **Geographic focus for growth:** Europe, Asia, North America; limited number of export focus areas outside these territories
- **Acquisitions** in defined growth verticals

UPDATE STRATEGY & TARGETS



Goal:

- To bring TKH shareholders an above average **Return on Investment** with a limited risk on their investment, through a significant **above average performance of value creation** (share value development) and dividend yield

Ambition:

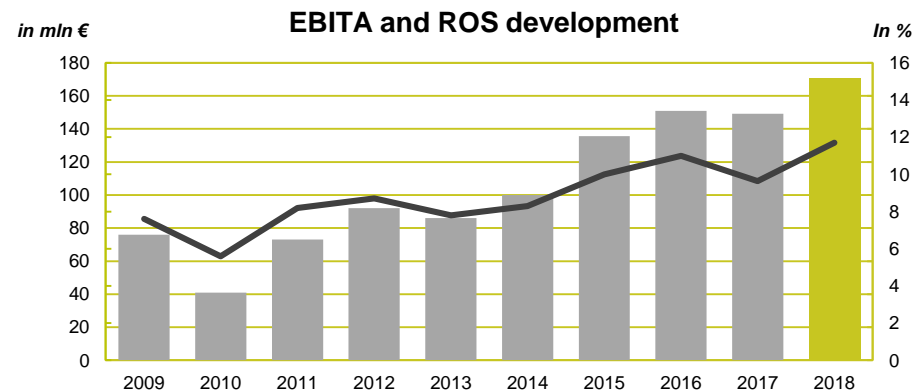
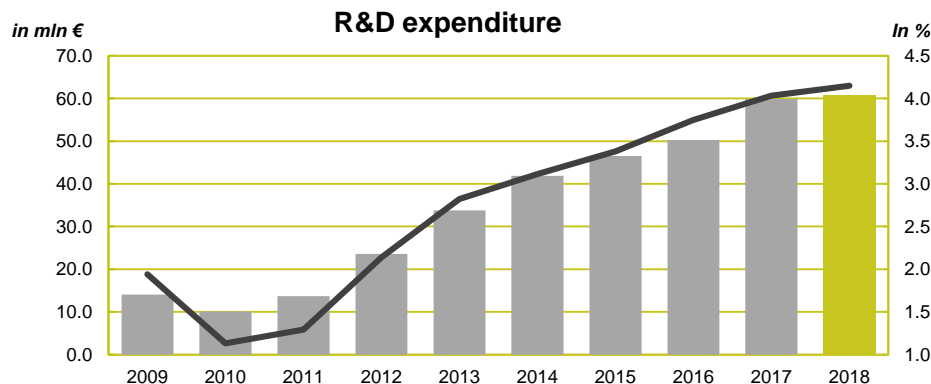
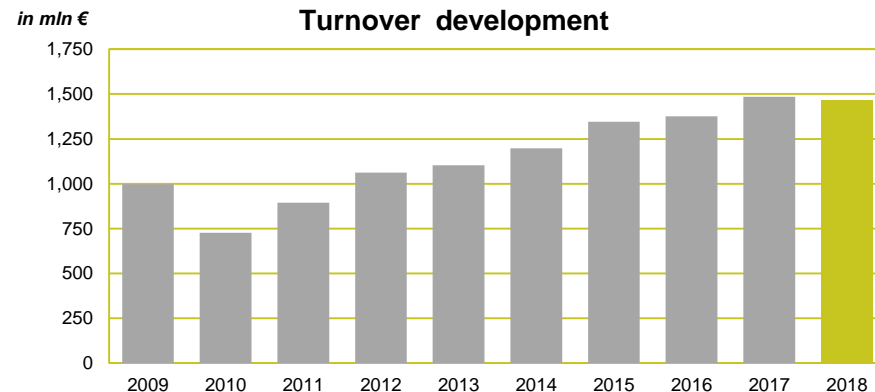
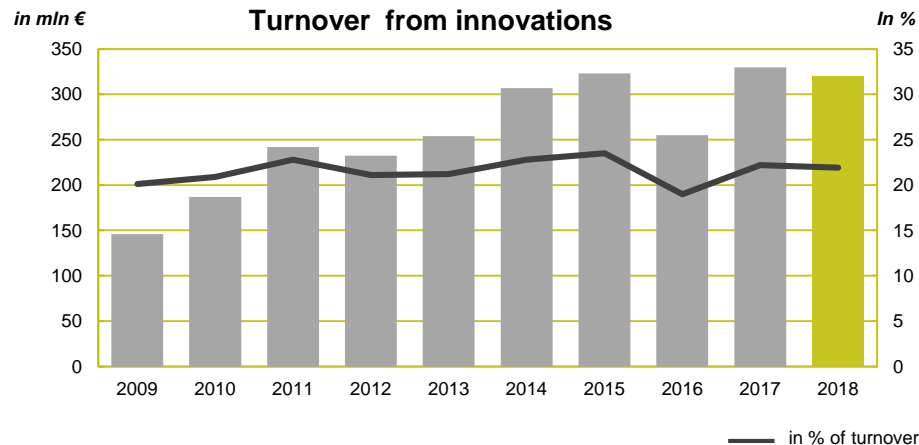
- The **ideal investment** opportunity

Shareholder structure:

- Focus on developing a shareholders base that feel attracted to the above mentioned goal – with a **long term perspective on shareholder commitment**
- High commitment from shareholders to future development of TKH – to support capital requirements and continuity TKH

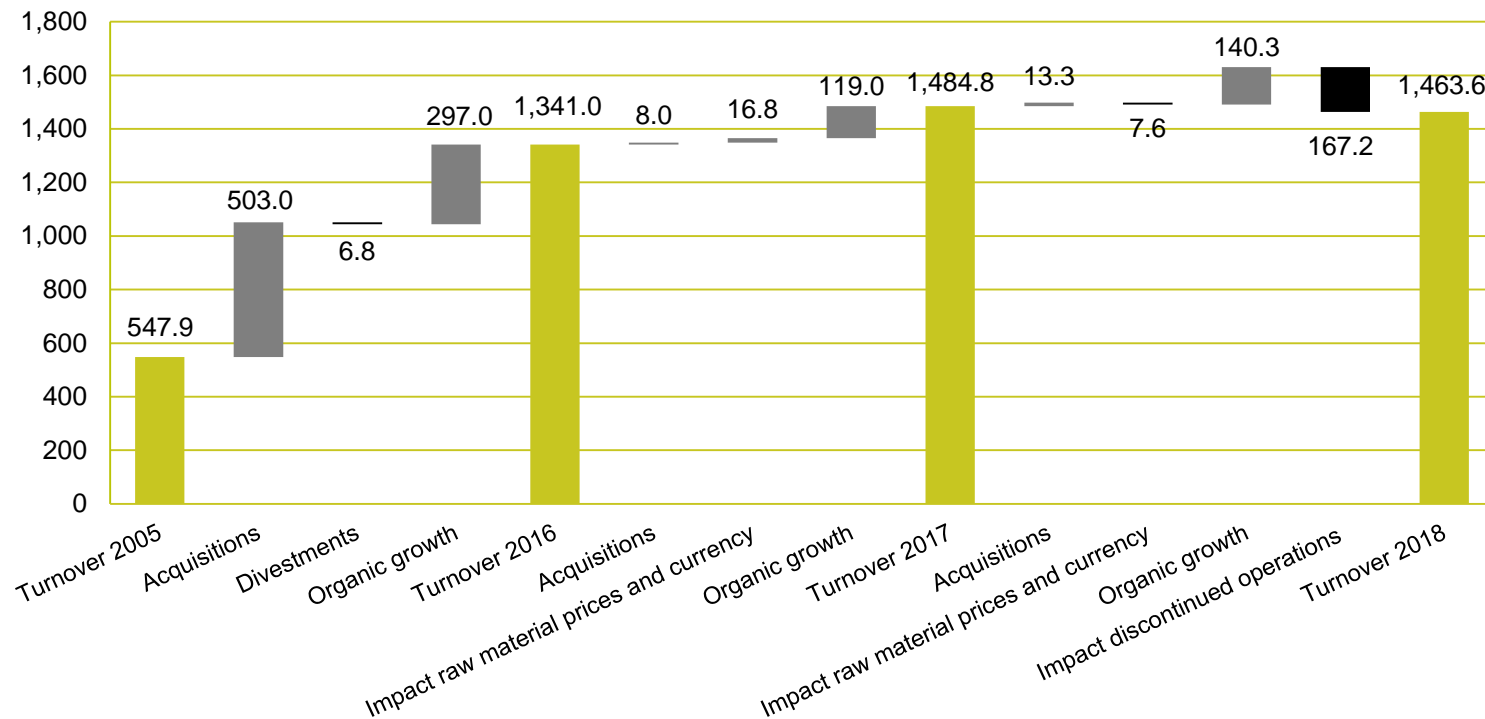
EVALUATING THE CURRENT SITUATION

GOOD PROGRESS PAST YEARS IN EXECUTION OF STRATEGY



INVESTMENTS IN R&D AND FOCUS ON VERTICALS RESULT IN A HIGH ORGANIC GROWTH

in mln €



GOOD PROGRESS IN STRATEGY EXECUTION IN 2018



› Investments in ongoing innovation, strengthening commercial and technical organization and expanding production capacity:

- › 3D smart sensor technology production capacity increased and commercial organization further expanded vision & security system
- › Acquisition of Lakesight Technologies – strengthening our position in Machine Vision and Tunnel & Infra – contribution to earnings per share as of 2019 vision & security systems
- › Acquisition of start-up Ognios GmbH (Austria) – certified mission-critical communication system for Marine & Offshore vision & security systems
- › Modernization and expansion facility for medical and industrial cable assemblies (Ukraine) industrial connectivity systems
- › Commissioning new factory for high-grade industrial cable systems (China) industrial connectivity systems
- › Doubling capacity in factory for tire building systems in Poland manufacturing systems
- › Expansion fiber-optic production capacity in progress – completed mid-2019 fiber network systems

› Good progress key innovations - such as: subsea cable systems - CEDD/AGL - UNIXX – materialization of turnover expected 2020

NEXT STEP IN VALUE CREATION

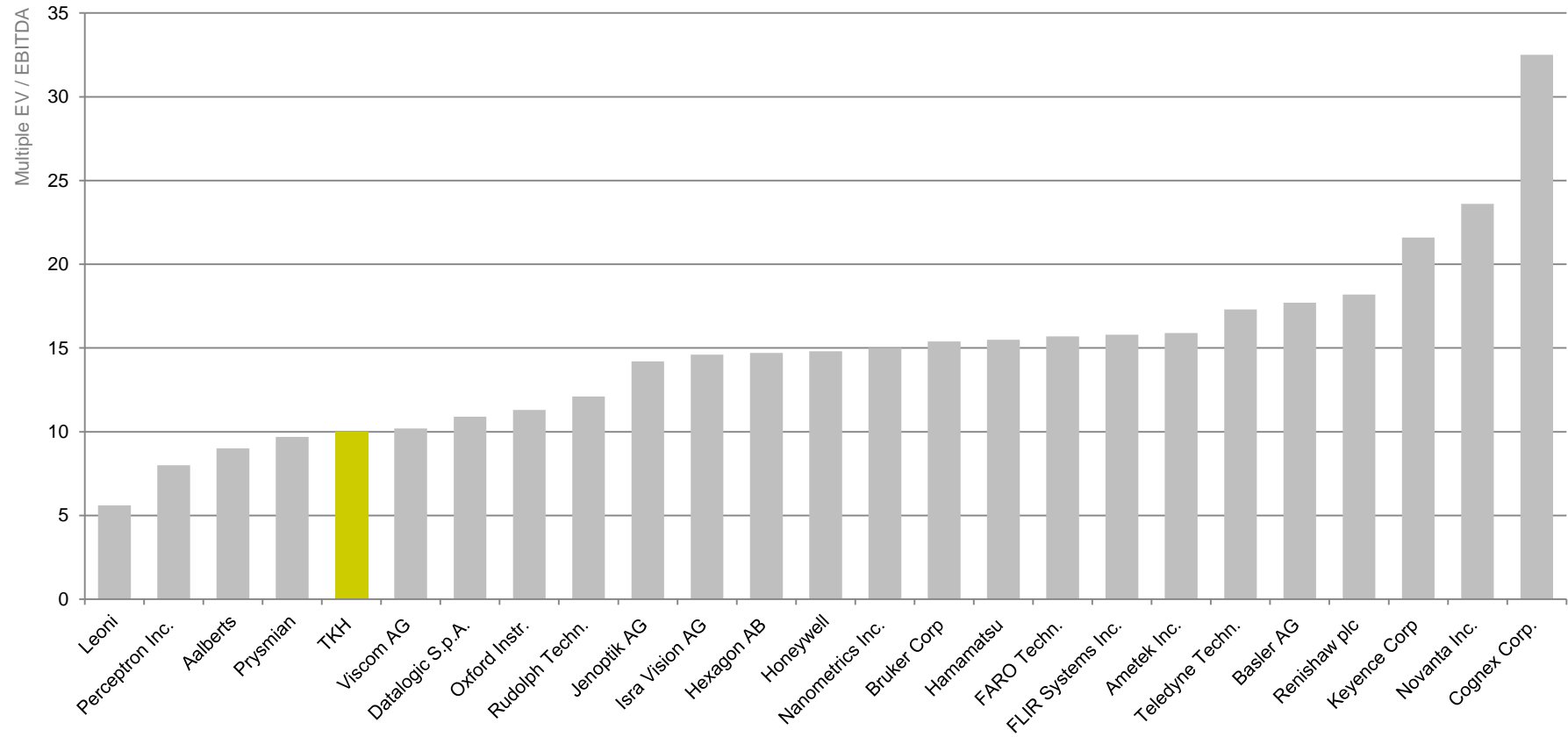
Complexity needs to be reduced

- TKH is seen as attractive investment opportunity – however complexity of activities leads to hesitation for investment and valuation
- Three solutions segments with 6 sub-segments - 4 core technologies - 7 growth verticals – and non vertical market - **needs to be simplified to gain more attraction for investment in TKH share**
- It takes too much time to explain the TKH story to attract new shareholders

Non- verticals negatively affect the growth story

- The non – vertical markets are related to GDP growth and the share of this part of the TKH activities is still substantial with a share of 46% in the turnover of 2018
- Although we communicate that the growth vertical will grow in share to >80% in the coming years – it challenges the patience of shareholders in relation to the limited growth perspective and limited margin attractiveness of the non-vertical activities

MAJORITY OF PEERS - SHOW HIGHER VALUATION

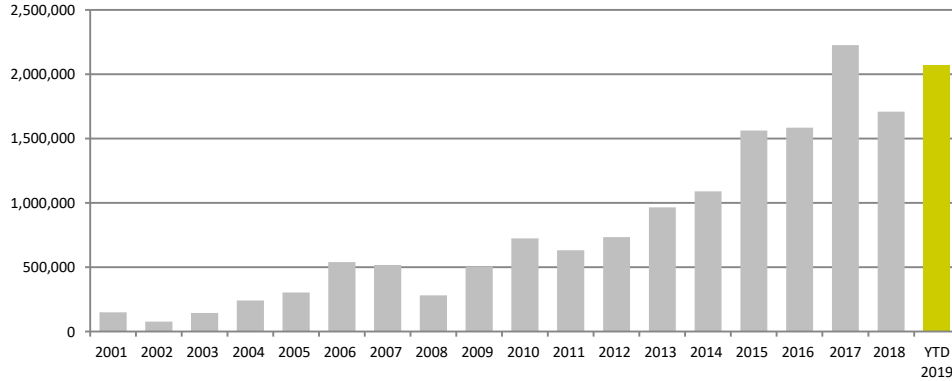


SUCCESSFUL PAST STRATEGY WORKED – NOW IT IS TIME FOR A NEXT PHASE



(x € 1.000)

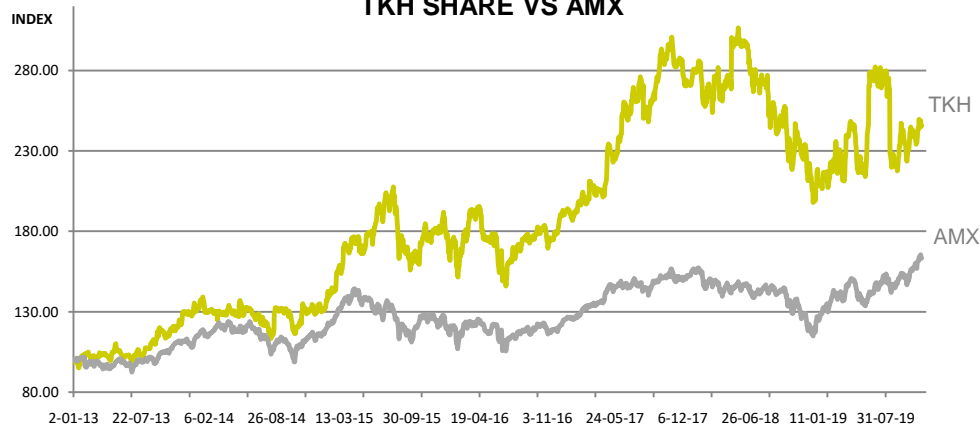
MARKET CAPITALISATION



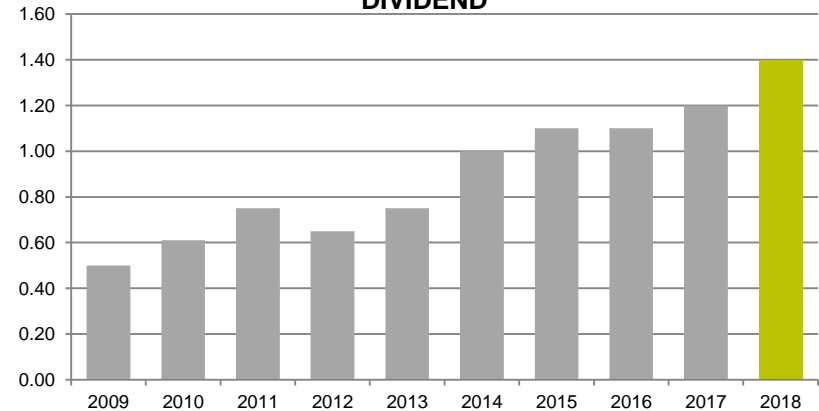
BROKER RECOMMENDATIONS

Broker	Rec.	Target price (€)
ABN AMRO	Buy	63.50
Berenberg	Buy	65.00
Degroof Petercam	Buy	56.00
ING	Hold	41.00
KBC Securities	Buy	62.00
Kempen	Buy	63.00
Kepler	Buy	54.00
NIBC	Buy	60.00

TKH SHARE VS AMX



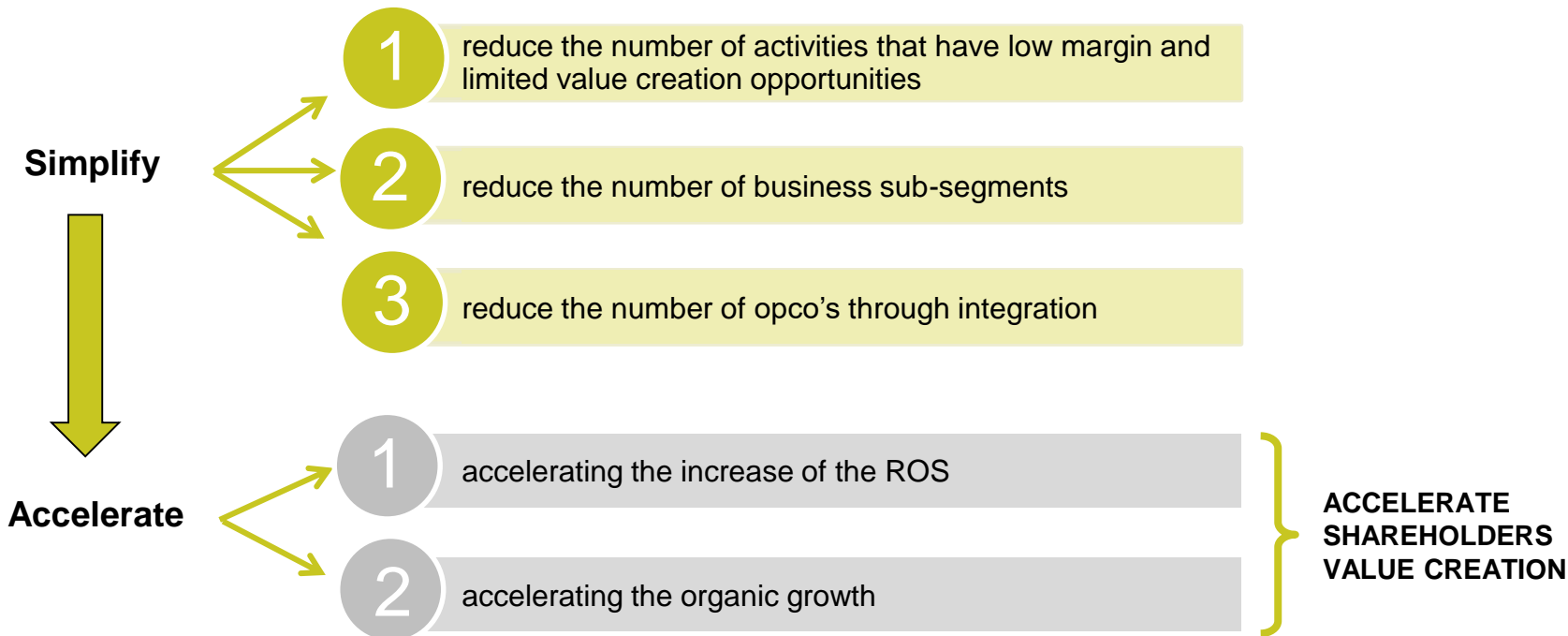
DIVIDEND



**FURTHER FOCUS THROUGH
“SIMPLIFY AND ACCELERATE” PROGRAM
WILL LEAD TO AN ACCELERATION
OF TKH PERFORMANCE**

INTRODUCTION “SIMPLIFY AND ACCELERATE” PROGRAM

Bring TKH to a next stage of performance



“SIMPLIFY AND ACCELERATE” PROGRAM – DIVESTMENTS

Simplify – Divestment program upgraded from up to € 75 million to € 300 – 350 million

- Reduce the number of activities that have limited value creation opportunities**
 - Low organic growth opportunities and relatively low gross margins
 - Not high-end technology oriented or positioned in an environment where a larger scale on the long term is necessary to support the continuity
 - Positioned mainly in non-vertical growth markets

- Companies identified for simplify program related to limited value creation**
 - Short term: ready for divestment and actions in place: € 200 - € 250 million
 - Medium term: being prepared for divestment with profit improvement program and short term high value creation potential, but non-core or low margin business

“SIMPLIFY AND ACCELERATE” PROGRAM – REPORTING

Simplify – Reporting Structure

- TKH will develop a less complex business structure and communication structure that will develop through the execution of the “Simplify and Accelerate” program
- First step is a more simplified profile

Technology firm TKH Group NV (TKH) is focused on high-end innovative technologies in high growth markets within three business segments: Telecom, Building and Industrial Solutions.

Through a combination of technologies, TKH offers superior solutions that support to increase the efficiency, safety and security of its customers. The technologies are offered together with software to create smart technologies and one-stop-shop solutions with plug-and-play integrated technologies.

TKH operates on a global scale. Its growth is concentrated in Europe, North America and Asia.

“SIMPLIFY AND ACCELERATE” PROGRAM - INTEGRATION

Simplify - through integration of companies

- Focus on integration - instead of coordination with strong local entrepreneurship
- Strengthen R&D, Sales and Marketing within the integrated companies with new leadership
- Strengthen and extend TKH branding
- Reduce number of opco's with at least 10 - 15 companies
- Economies of scale will have positive effect on ROS

“SIMPLIFY AND ACCELERATE” PROGRAM – ACCELERATE

Accelerate increase of ROS - Adjustment ROS target to > 15%

- Execution simplify program
- Acceleration divestments of low margin activities
- Profit improvement through bringing key innovations into maturity and highly profitable business
- Further focus vertical markets – brings additional growth opportunities in the vertical markets
- Proceeds from divestments to be invested in growth verticals
- Limit the number of new start-up projects in the coming 1-3 years

Organic growth acceleration through increase of the stake of the growth verticals

- Acceleration of divestment of low organic growth activities leads to increased average organic growth
- Invest proceeds coming from divestments into high growth verticals
- Intensify execution in accelerating the new business development building blocks

“SIMPLIFY AND ACCELERATE” PROGRAM – TURNOVER

BANDWIDTH – TURNOVER DEVELOPMENT PER IMPROVEMENT SEGMENT :

DIVESTMENTS



- € 300 UP TO € 350 MILLION

INNOVATIONS VERTICALS



+ € 200 UP TO € 250 MILLION

ACQUISITIONS



+ € 100 UP TO € 150 MILLION

“SIMPLIFY AND ACCELERATE” PROGRAM – ROS IMPROVEMENT

BANDWIDTH – ROS IMPROVEMENT PER SEGMENT – TARGET >15% - BASIS – ROS 2018: 11.3%

DIVESTMENTS



1.2 % - 1.6 %

INTEGRATION



0.8 % - 1.2 %

VERTICAL GROWTH MARKETS



2.0 % - 3.0 %

VERTICAL MARKETS – UPGRADE THREE VERTICALS TO HIGHER BANDWIDTH

Turnover (in € millions)	2012	2017	2018	Growth scenarios	
Fibre Optics Network	80	127	134	175	200
Parking	20	47	58	150	200
Tunnel & Infra ¹⁾	30	78	98	150	200
Marine & Offshore	20	58	69	150	200
Care	30	52	58	70	100
Machine Vision	95	128	129	250	300
Tire Building Industry	175	295	333	450	550
Growth verticals	450	785	879	1,395	1,750
Other vertical markets	652	700	752	450	500
Total	1,102	1,485	1,631	1,845	2,250

- > Growth target verticals : € 300 - € 500 million coming 3-5 years
- > Divestment non- vertical markets : minus € 300 - € 350 million - growth at GDP within non-verticals
- > Upgrade of growth bandwidth verticals:
 - > Parking: addressable market increased – new technology smaller garages
 - > Tunnel & Infra: potential increased for CEDD /AGL and energy infra projects
 - > Marine & Offshore - upgrade: potential Sub-sea market increased and positive feedback USPs

¹⁾ In 2017, revenue of € 29.9 million related to energy cable has been reclassified from Other vertical markets to Tunnel & Infra.

Key financial targets	2017	2018	Targets (mid-term)
ROS	10.1 %	11.3 %	> 15 %
ROCE	19.7 %	21.3 %	22 % - 25 %
NET debt / EBITDA	0.9	1.5	< 2.0

HIGHLIGHTS – BUSINESS UPDATE

H1 2019

STRATEGIC HIGHLIGHTS 2019

Introduction 'Simplify & Accelerate' program with focus on further value creation – Capital Markets Day (June)

› Acquisitions to strengthen vertical market propositions

- › Commend AG – mission critical communication (April)
- › ParkEyes – vision & security (April)
- › SVS-Vistek – vision & security (July – closing expected in Q3)

› Divestments – target € 300 - € 350 million

- › Agreement reached for divestment majority of industrial connectivity activities (8 companies), accounted for as "discontinued operations" – turnover 2018: € 183.7 million

› Reduction of number of business segments

- › Elimination of industrial connectivity segment
- › Remaining industrial connectivity activities integrated into sub-segment manufacturing systems

› Integration of companies – good progress

- › Legal merger and rebranding of security companies in the Netherlands into TKH Security
- › 2D vision companies brought under one roof and leadership – further integration steps planned

(in million € unless stated otherwise)	HY1 2019	HY1 2018	Δ in %
Continued operations: ¹⁾			
Turnover	753.2	728.0	+3.5%
EBITA	77.6	85.1	- 8.8%
ROS	10.3%	11.7%	
Net profit before amortization ²⁾ and one-off income and expenses attributable to shareholders	45.9	55.0	- 16.6%
Earnings per ordinary share before amortization and one-off income and expenses	€ 1.09	€ 1.31	
ROCE	18.7%	20.8%	
Order book per 30 June	463.7		

- Turnover growth 3.5% – organically +0.1%.
 - Telecom Solutions +3.3%
 - Industrial Solutions +1.4%
 - Building Solutions - 1.9% – low investment level at producers of consumer electronics and lower number of larger projects
- EBITA decreased 8.8% – due to higher costs in anticipation for expected growth in H2 2019 and integration costs
- Net profit before amortization and one-off income and expenses attributable to shareholders decreased 16.6%
- Order book as at 30 June 2019 increased organically 13.0% compared to 31 December 2018
- Well positioned for growth of turnover and especially the result of H2 2019 due to strong order book and project pipeline

1) The turnover, EBITA, ROS, normalized net profit and normalized earnings per share concern the results of the continued operations, so excluding results of the discontinued industrial connectivity activities. The comparative figures for 2018 are restated accordingly.

2) Amortization of intangible non-current assets related to acquisitions (after tax).

BALANCE SHEET 30 JUNE 2019



(in € million)	30-06-2019	31-12-2018
Intangible non-current assets	545.5	544.1
Tangible non-current assets	241.3	245.4
Tangible right-of-use assets	74.3	0
Investment property	0.3	0.3
Other associates	12.3	12.0
Receivables	2.0	2.0
Deferred tax assets	18.0	17.1
Total non-current assets	893.7	820.9
Inventories	253.2	255.0
Receivables	236.2	223.5
Contract assets	147.3	140.1
Contract costs	2.2	3.6
Current income tax	0.8	1.1
Cash and cash equivalents	74.3	83.2
Total current assets	713.9	706.4
Assets held for sale	93.9	0
Total assets	1,701.5	1,527.3

- Tangible right-of-use assets relate to recognition of user rights from lease agreements in the balance sheet – non-current liabilities increased for payment obligation under these agreements
- Cash and cash equivalents includes € 19 million (2018: € 22 million) that are part of a balance and interest compensation schemes
- Solvency of 36.9% (2018: 43.1%). IFRS 16 effect (-1.8%) and higher dividend

(in € million)	30-06-2019	31-12-2018
Shareholders' equity	625.8	646.5
Non-controlling interests	1.2	1.2
Total group equity	627.1	647.6
Non-current liabilities	399.8	238.5
Deferred tax liabilities	63.4	60.4
Retirement benefit obligation	5.3	8.0
Financial liabilities	3.6	0.6
Provisions	5.5	5.2
Total non-current liabilities	477.5	312.7
Borrowings	158.4	170.6
Trade payables and other payables	302.3	314.6
Contract liabilities	69.2	57.0
Current income tax liabilities	5.9	6.9
Financial liabilities	3.3	4.8
Provisions	13.8	12.9
Total current liabilities	552.9	566.9
Liabilities directly associated with assets held for sale	44.0	0
Total equity and liabilities	1,701.5	1,527.3

- Financial covenants:
 - Net debt, based on financial covenant as agreed with banks, of € 406 million (2018: € 327 million)
 - Net debt/EBITDA of 1.9 (31 December 2018: 1.5), well below agreed covenant of 3.0

MARKET UPDATE

18-11-2019

MARKET UPDATE – HIGHLIGHTS Q3 2019

- Turnover and results increased in all three business segments – Telecom, Building and Industrial Solutions – compared to the third quarter of 2018.
- Good progress achieved with the innovations in the vertical growth markets, leading to the targeted improvement in returns of these growth markets.
- Slight deterioration of the market circumstances in industrial end markets leading to some delay in the delivery of orders for machine vision and industrial connectivity.
- Divestment activities well on track. Activities with a turnover of € 250 million of the targeted € 300 to € 350 million have been divested so far.
- Existing committed credit facility increased from € 350 million to € 500 million, which repaid the bridge financing of € 100 million concluded last year to finance acquisitions. The conditions and term (January 2024) remain unchanged.

MARKET UPDATE – DEVELOPMENTS OF THE BUSINESS

During the third quarter, most activities developed positively and in line with our previously communicated expectations, with the exception of deterioration of the market circumstances in industrial end markets

- Fibre Optic Networks - developed well, in line with the outlook.
- Marine & Offshore - for the subsea cable activities the contract was signed and production commenced to deliver the array connectivity systems for the Windpark Fryslân wind farm in the Netherlands. In addition, an LOI was signed for a second wind farm and the quotation portfolio grew further, confirming the substantial growth potential of these activities in the coming years.
- Tunnel & Infra - various large quotations are outstanding for CEDD and airfield ground lighting (AGL) and the total quotation portfolio has increased significantly, putting us on the right track to realize the growth we foresee.
- Machine Vision - the vision technology developed for new applications in the consumer electronics industry relating to 5G networks has resulted in initial orders and deliveries. We are well-positioned for the expected strong increase in the demand for these applications in the coming year, with the potential to generate a substantially higher turnover in this segment.
- Tire Building Industry - contributed to growth. The first UNIXX-integrated tire-building machine (new tire-building platform) was delivered to a launching customer.

MARKET UPDATE – PROGRESS ‘SIMPLIFY & ACCELERATE’ PROGRAM



Good progress was made on the actions announced on 12 June 2019 aimed at improving the Return on Sales (ROS) to at least 15%. The first results will already be visible in the second half of 2019, with an improvement of the ROS to at least 12%.

Progress is mainly achieved by:

- Focus on investments in segments with above-average margin and growth potential, which has resulted in the completion of two acquisitions in the vertical growth market Machine Vision. This further strengthens the position of this important TKH segment, in line with our long-term growth objectives.
- Completion of the majority of the intended divestments.
- Several integration projects aimed at simplifying the organization and benefitting more from economies of scale, have been completed. In addition, some integration projects have been further substantiated, including the intention to discontinue part of the underperforming activities of the industrial connectivity portfolio and to implement a strong return improvement on the building connectivity portfolio of at least € 5 million, partly to be realized in 2020 and fully in 2021.
- Additional measures to improve returns within the context of the simplify program are expected to have a positive impact on results of € 2 - € 3 million spread out across various companies within the group.

OUTLOOK

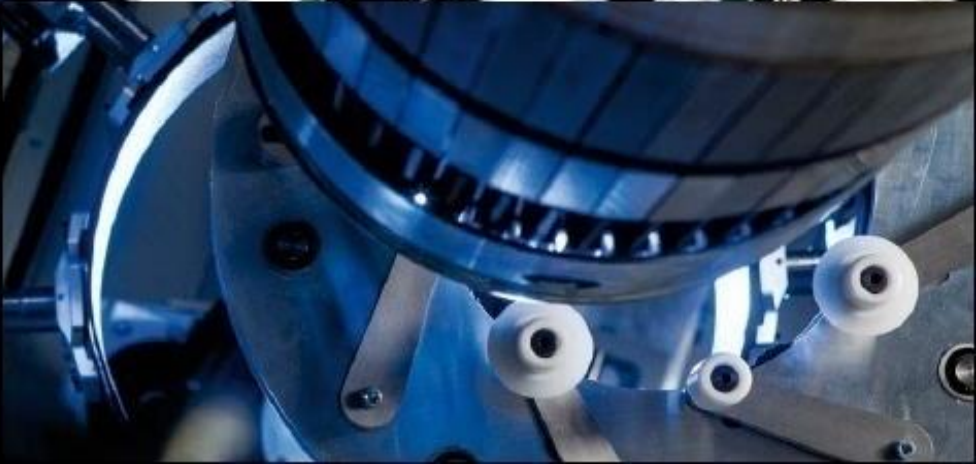
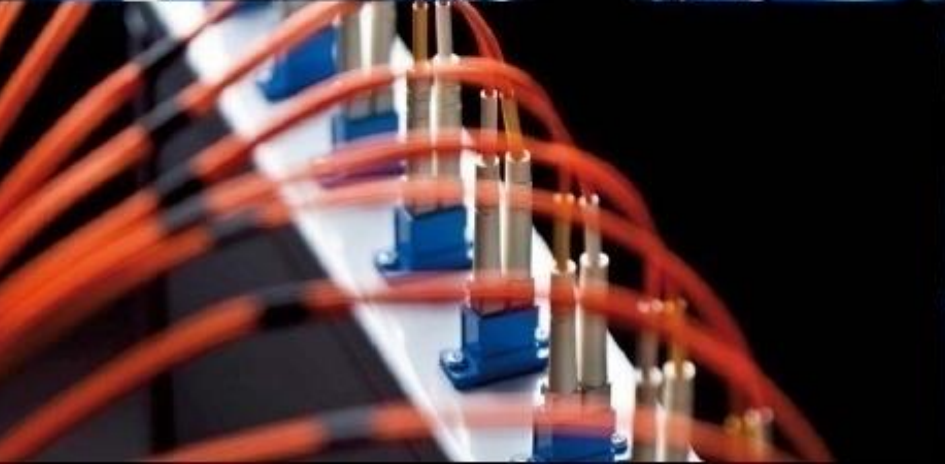


- The circumstances in the industrial end markets that have been deteriorating in the past few months, mainly in Germany, impact the industrial connectivity activities and the growth of the machine vision activities. The nitrogen and PFAS issues also impact the construction & infrastructure sector.
- The activities in most other segments are developing positive and in line with the expectations we previously announced. We are well-positioned for orders and have a strong pipeline for our innovations, enabling us to realize the growth plans for the vertical growth markets.
- A provision will be taken in the fourth quarter for the execution of our 'Simplify & Accelerate' program, the amount of which will be substantially below the one-off gain from the divestments.
- We continue to expect a significant outperformance of our results during the second half of the year, compared to the first half of 2019. Taking into account some further delays of the deliveries, we slightly adjust the bandwidth for net result before amortization and one-off income and expenses downwards to € 102 to € 108 million (FY 2018: € 110.3 million) out of precautionary considerations.

ANNEX I: CORE TECHNOLOGIES



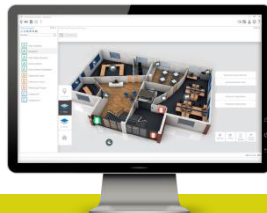
Innovative technology makes the difference





Vision & Security

- 2D and 3D camera sensor technology
- 3D laser scan technology
- Intelligent traffic systems via camera technology
- Video surveillance systems
- Video management and -analysis
- Parking guiding and control systems
- Access control & registration systems



Mission Critical Communication

- Mission critical communication
- Intercom systems
- (Personal) alarm systems
- Evacuation systems
- Emergency systems
- Building management & monitoring
- Public address
- Audio systems



Connectivity

- Subsea & marine cable systems
- Optical fibre connectivity
- Contactless energy & data connectivity
- Specialty cable systems
- Drag chain systems
- MultiMediaConnect
- Energy, building & Infra and installation connectivity



Smart Manufacturing

- Medicine distribution
- Tire assembling
- Tire component systems
- Passenger & Truck tire systems
- Vision inspection
- Product handling
- Production automation

ANNEX II: VERTICAL GROWTH MARKETS



TKH – VERTICAL GROWTH MARKETS – FIBRE OPTIC NETWORKS



Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Fibre Optics Network	80	127	134	175	200

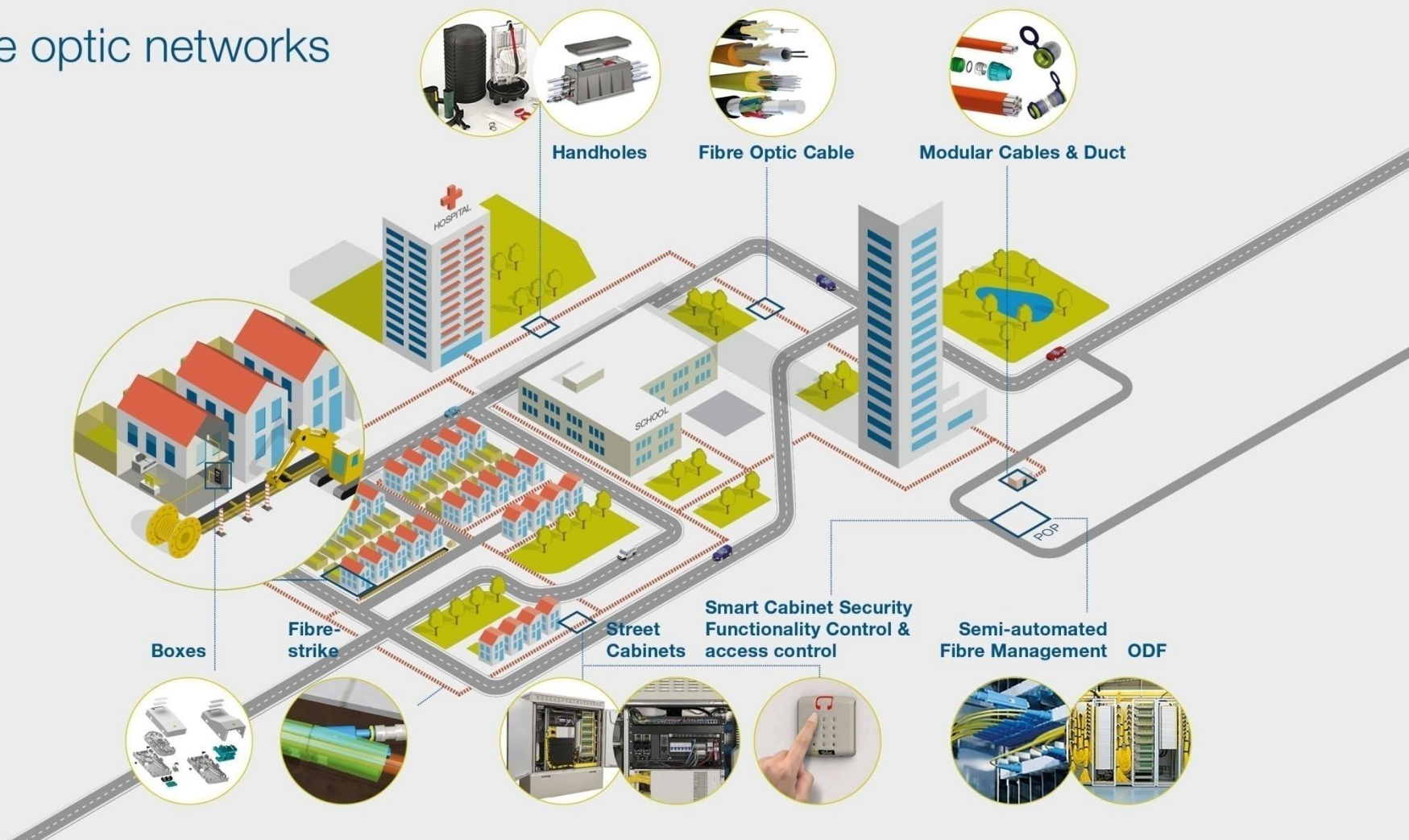
Growth drivers

- › Data use through the impact of information and communication technology on the way we live our lives continues to grow
- › Internet has become a basic service, like gas, water and electricity
- › Developments such as the 'Internet of Things', 'Industry 4.0' and 'Internet of Vehicles' will require a high (mobile) internet speed - emergence of 5G internet
- › 24-hour availability is becoming more established and accepted
- › Several European countries have announced investment plans for rollout of FttH projects to meet the strong increasing need for bandwidth

Position

- › Integrated solutions – connectivity – security
- › High knowledge level of network requirements customers
- › Cost leadership
- › Strong innovative power
- › Resources prepared for growth with available and exiting capacity

Fibre optic networks



Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Care	30	52	58	70	100

Growth drivers

- › Life expectancy is continually increasing and healthcare spending will increase sharply due to more and better, but also more expensive care – therefore, the demand for technologies for care solutions is increasing
- › Changing healthcare funding: shifting from the government to the institutions and healthcare insurers
- › Innovation in the field of domotics, diagnostics, e-health and self-testing for prevention and screening, provide new business in the sector.
- › Shortage of skilled workers
- › Informal caregivers play an important role and, together with the client and the healthcare professionals, are equal partners - technology support is necessary for the required information exchange
- › The demand for medicines (volume) has been growing as a result of demographic developments, while the cost of care will have to be lowered
- › Increase central task of preparing medicines in a remote location - acceptance of robotics in pharmacy wholesale

Position

- › Smart Care concept with centralized management and community platform
- › End to end, modular care platform including service concept with data hosting to increase care efficiency and quality
- › Viedome is leading care concept in NL with increasing service model – selected international roll-out (Germany, France)

Care

Connectivity



Nurse call systems



Automated dose dispensing



Tele care: social alarm
audio/video & smart
sensors



Mission critical
communication
systems



2D and 3D Vision technology
for medical imaging, dental &
endoscopy applications



Alarm
management



Access control
systems



Tele care: personal alarm,
wandering system



Turnover developments and targets

Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Parking	20	47	58	150	200



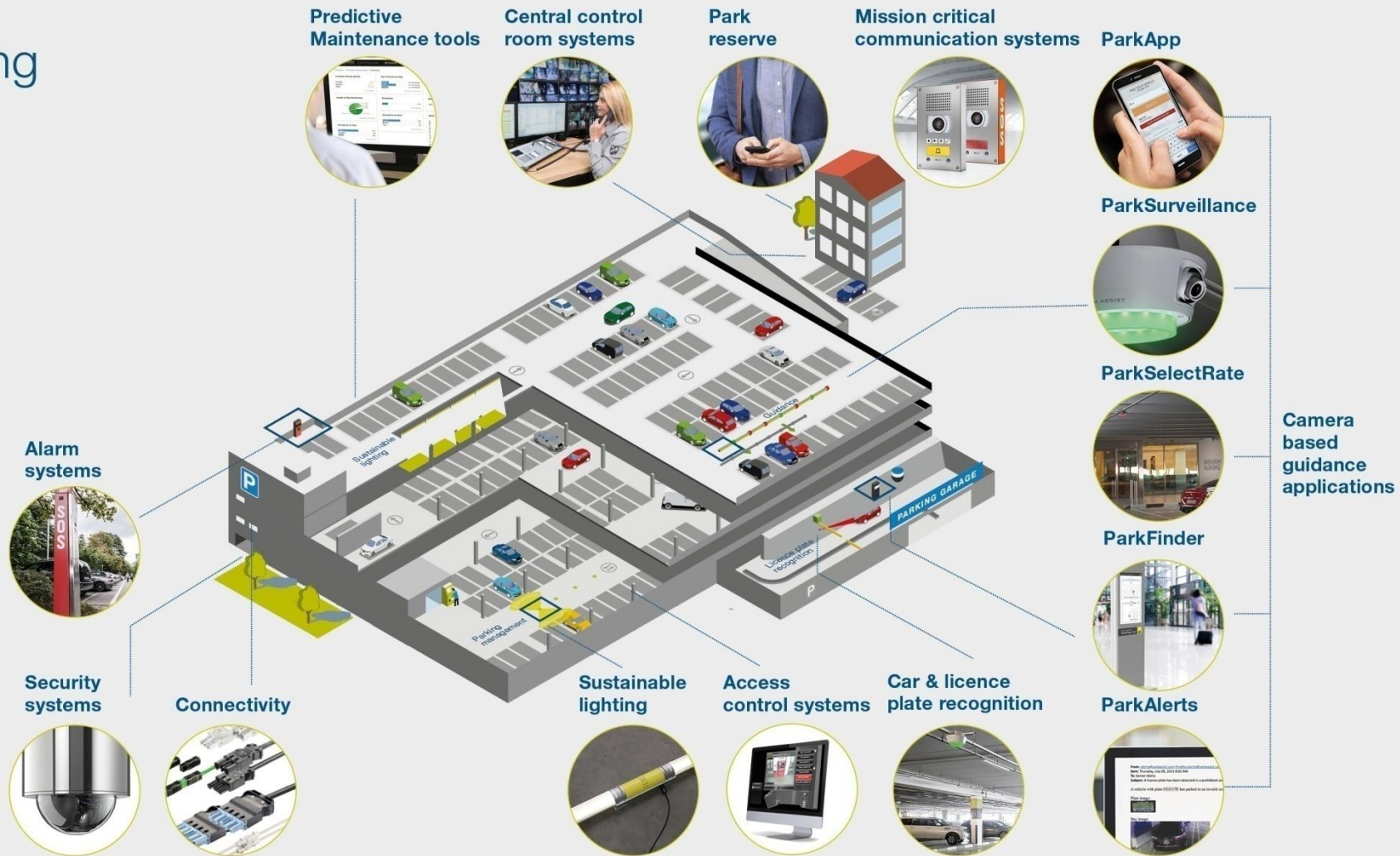
Growth drivers

- Frictionless parking is a key trend for the future of parking which needs new technology
- The addressable market for the TKH technologies is growing fast because technologies become efficient for smaller parking
- High priority for parking owners and operators to increase the in general low utilisation rate of parking garages
- High priority to work with revenue enhancing technologies related to differentiated and variable pricing per parking space
- Increased level of security to cope with the increased level of thefts – communication and video based monitoring systems
- Need to reduce the Co₂ footprint – through efficient guiding systems that streamline the traffic in the parking garage
- Preparation for autonomous driving cars ask for sensor infra structure and guiding
- Demand for efficiency solutions to lower the OPEX – central control rooms and automatic call handling
- Demand for more comfort and convenience for parkers to improve the parking garage competitive position

Position

- Strong worldwide installed base with parking operators as well as hospitals, airports, shopping malls, retail and event locations
- Available disrupting technologies that meet the requirements of today and the future in parking
- Technologies available that drive efficiency through centralization, smart maintenance, yield management and modular parking solutions
- Strong worldwide sales organization – with especially strong position in the segment of bigger parking garages >2,000 spaces

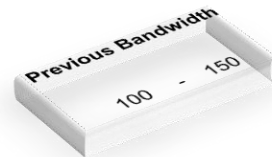
Parking



Turnover developments and targets

Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Tunnel & Infra ¹⁾	30	78	98	150	200

¹⁾ In 2017, revenue of € 29.9 million related to energy cable has been reclassified from Other vertical markets to Tunnel & Infra.



Growth drivers

- › Sizable investment in tunnel technology in Europe for new and existing tunnels planned for the next few years
- › Increasing demand for technologies due to strict legislation, regulations and requirements: evacuation - communication - detection - identification - security
- › Principals are shifting responsibilities to the contractors - formation of alliances between principals and contractor so that parties have a common interest in cost control
- › Availability is paramount (reduced down time) for infrastructure: tunnels, airports and roads.

Position

- › Highly integrated security solutions, designed for infrastructure and tunnels
- › Total security concepts (video and communication) – number 1 position in Benelux
- › Disruptive airfield lighting solution based on CEDD technology
- › TKH advanced technologies require less maintenance and deliver more efficiency

Tunnel & Infra

Mission critical communication systems



Central control room systems



Video management systems



Sustainable lighting



Evacuation systems



CEDD



Emergency telephone



Alarm systems



Leakage detection



Access control systems



Video surveillance



Connectivity



Traffic control systems



Tunnel & Infra Airport

Airfield
Ground
Lighting

Vision based
process control

Central control
room systems

Facial
recognition

LANDSIDE

Access
control systems

Security
systems

Connectivity

Parking
management

Mission critical
communication
systems

AIRSIDE

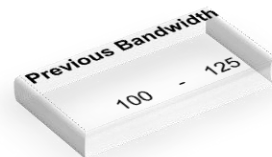


TKH – VERTICAL GROWTH MARKET – MARINE & OFFSHORE



Turnover developments and targets

Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Marine & Offshore	20	58	69	150	200



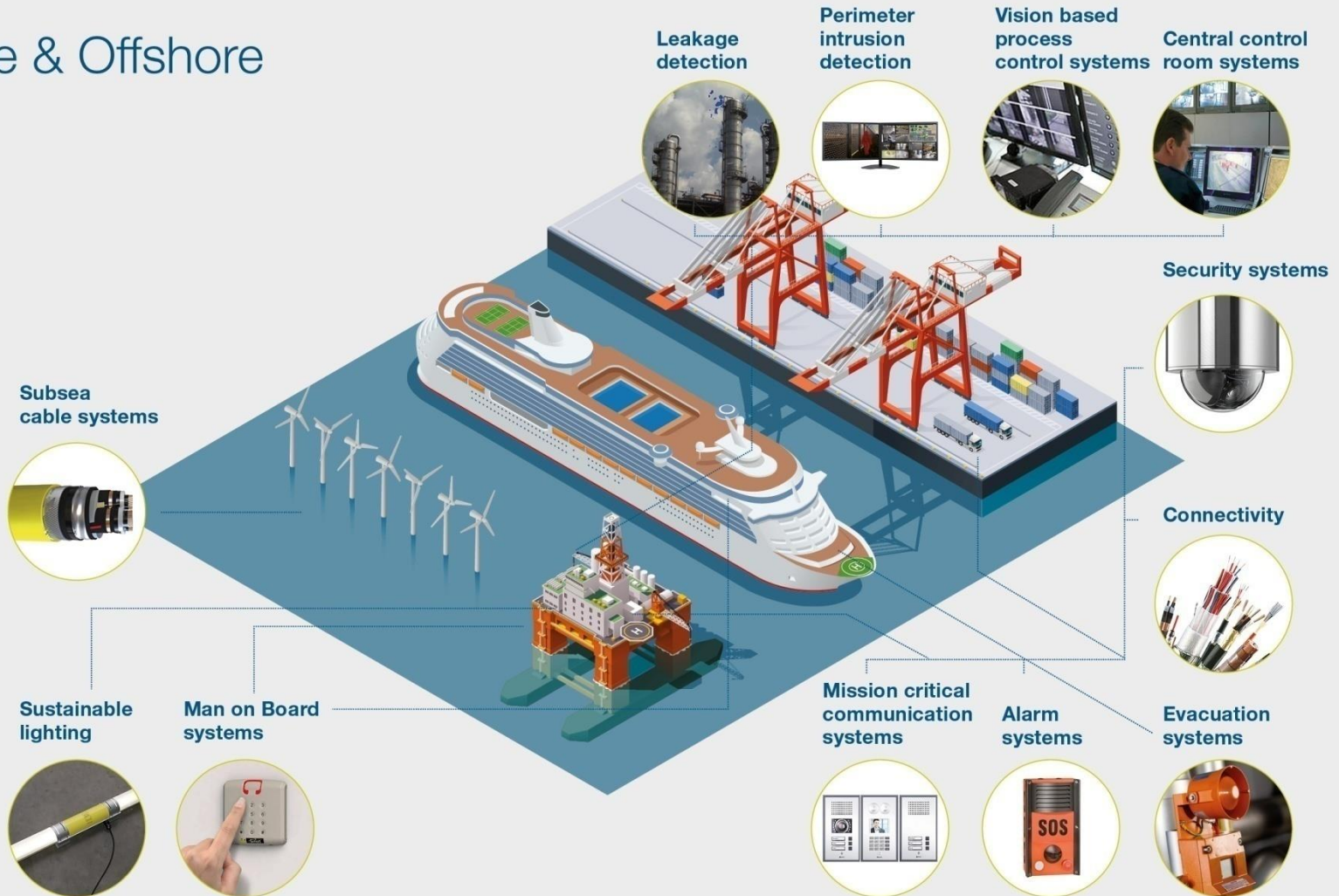
Growth drivers

- › Large increase global generated power by wind power
- › Demand for larger cargo ships and need for efficient external site management
- › Increase in the building of quality ships, cruise liners and luxury yachts
- › Increase of remote control and secure of unmanned operations on platforms
- › A lot of attention for safety on platforms via special 'zone' certification.
- › Modification of supply chain due to limited storage capacity on shipyards and platforms and high cost of downtime
- › High demands on system availability under various environmental conditions, such as extreme temperatures, humidity, oil, salt water

Position

- › Addressing Safety & Security in certification rich environment
- › Vessel attendance system, smart camera solutions incl. thermal, leakage detection, ATEX housing and mission critical communication
- › Subsea cable solutions - completing portfolio in data connectivity, power cables and safety
- › Expanding in international large accounts

Marine & Offshore



Turnover developments and targets

Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Machine Vision	95	128	129	250	300

Growth drivers

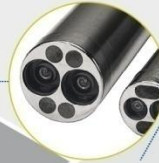
- › Demand for vision technology is increasing due to trend towards industrial automation and robotics need
- › Continued increased demand for more productivity and improvement of quality of products and manufacturing processes
- › Vision technology is a superior alternative for the control of production systems and for detection, inspection and identification that cannot be seen by the human eye
- › Strong increase of new applications where vision technology will be applied and adopted
- › Data from the camera can be decentral stored and computed in real time through embedded technology
- › Because of strict regulations to the quality of food and medicines, vision technology offers the solution because of the 100% traceability and 'fail / pass' application

Position

- › Technology leadership in many application areas
- › Market leader for high-end systems and one stop shop solutions
- › Strong innovation and R&D competence with breakthrough technology for 3D inspection and embedded technology
- › Strong worldwide sales organization with key account structure for individual customer management
- › Recognized by leading Industrial application companies worldwide as key supplier

Machine Vision

Surgery robot



Medical 3D imaging



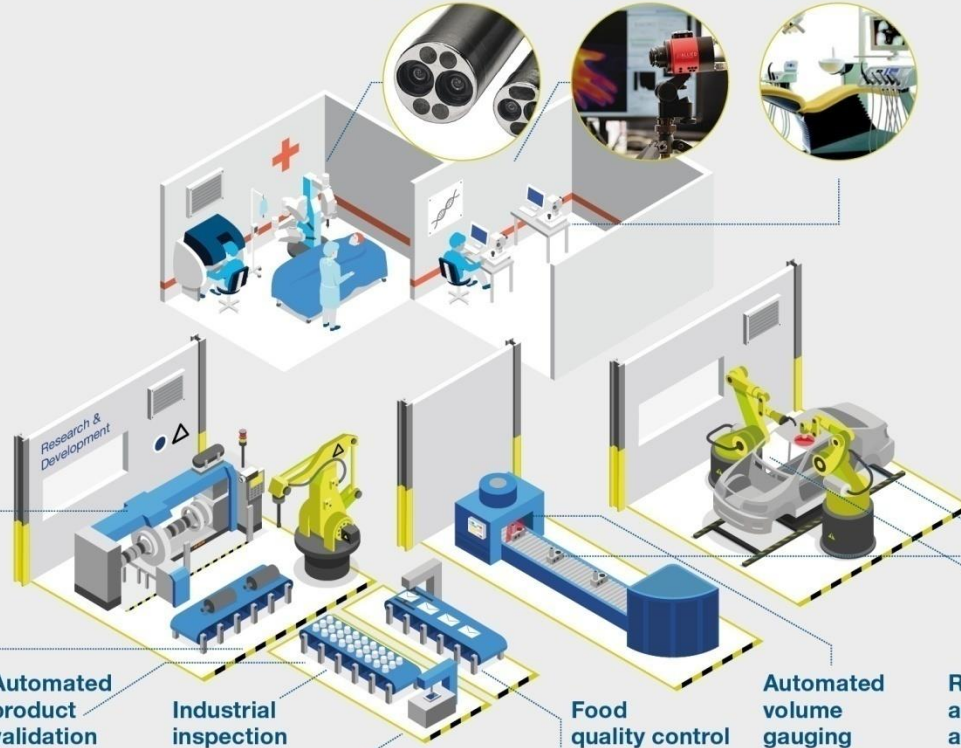
Medical Inspection



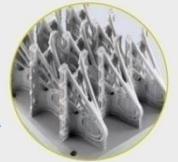
Area & agricultural scanning



Tyre scanning



Additive manufacturing:
high-speed monitoring



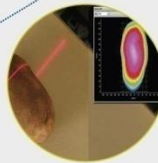
Wood processing



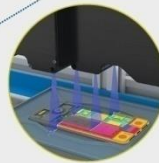
Quality control



Automated product validation



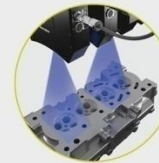
Industrial inspection



Food quality control



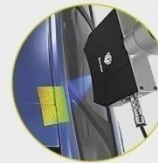
Automated volume gauging



Robotic automotive assembly



Automotive assembly



TKH – VERTICAL GROWTH MARKETS – TIRE BUILDING



Turnover (in € millions)	2012	2017	2018	Bandwidth growth scenario	
Tire Building Industry	175	295	333	450	550

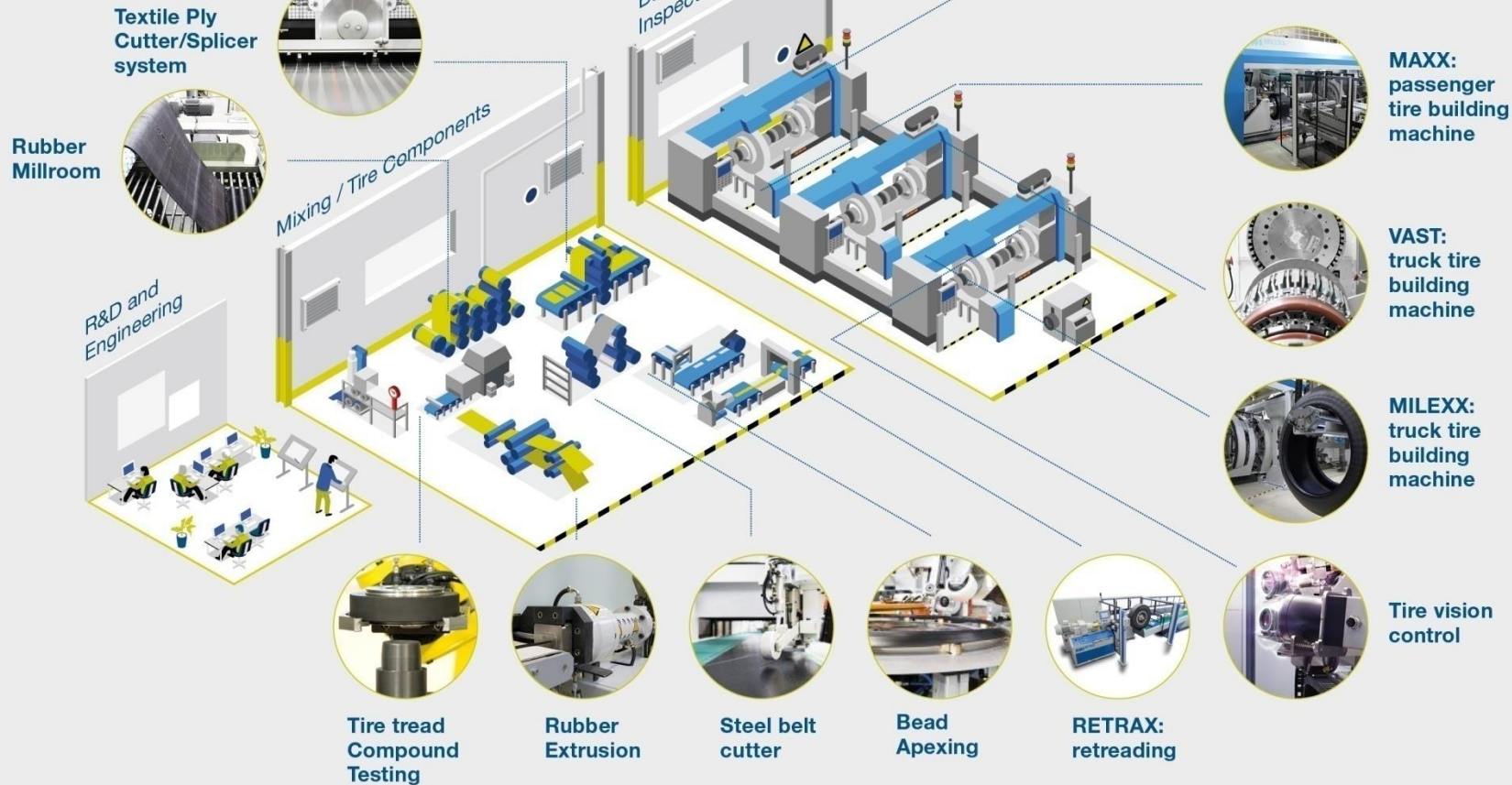
Growth drivers

- High priority of the tire manufacturing industry to replace existing technology with an emphasis on high productivity, efficiency, waste reduction, quality improvement and smaller batches
- The number of types of tire for passenger cars has increased more than tenfold in recent decades. This calls for more flexible production methods
- The trend towards ever larger tire dimensions and towards safer, better-quality tires requires technological developments
- Local production - innovations have become essential to reduce the working capital requirement in the supply chain of the tire manufacturing industry
- Over 70% of the existing tire manufacturing systems are older than 15 years
- Due to the high prices of raw materials, there is a need for a more efficient use of materials in the production of tires which asks for high tech manufacturing systems
- Due to rising labour costs, demands for manufacturing systems with higher productivity and high operator independence – ‘eyes & hands off’ manufacturing

Position

- Market share TKH in outsourced market: > 70%
- Total market share including top five tire manufacturers: > 20% – target >50%
- Technology leadership through high level of R&D - protected with patents and high innovation level
- Proprietary vision technology strong differentiator for the technology leadership

Tire building industry



ANNEX III: INNOVATIONS



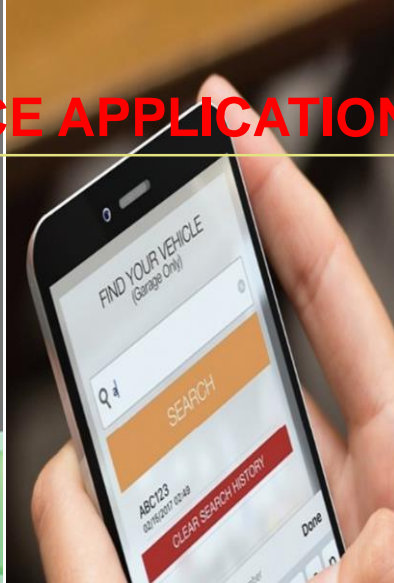
PARKING – CAMERA BASED GUIDANCE APPLICATIONS



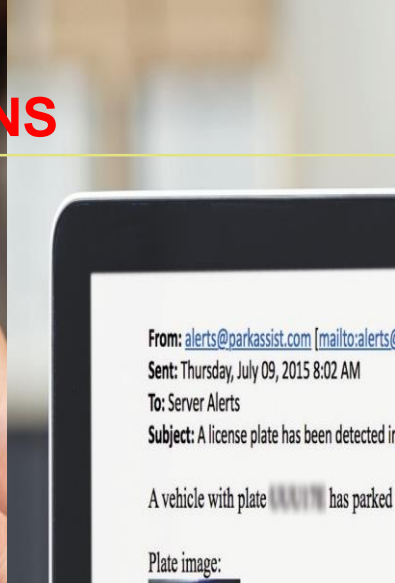
Park**Finder**



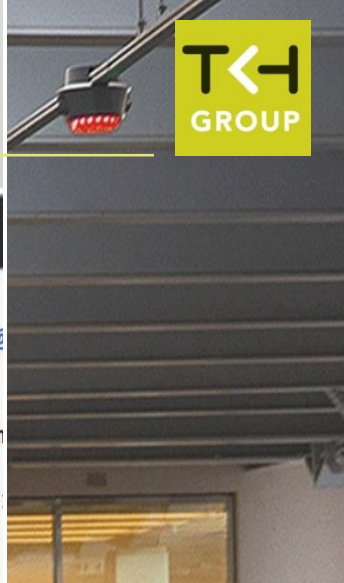
Park**Surveillance**



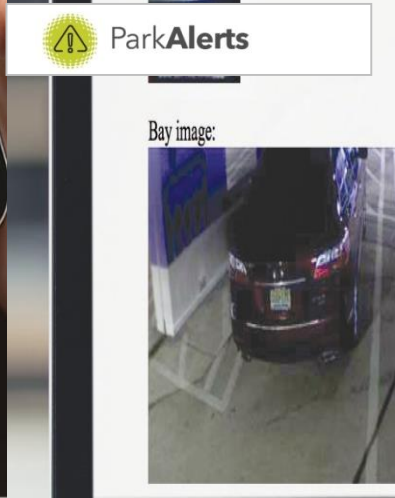
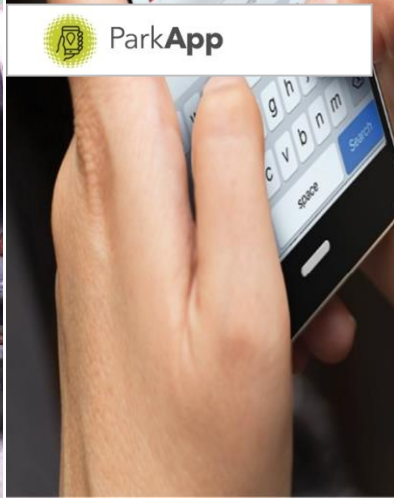
Park**App**



Park**Alerts**



Park**SelectRate**



TUNNEL & INFRA – CEDD / AGL AIRPORT TECHNOLOGIES



- Increased efficiency
- Increased sustainability
- Increased safety
- Easy installation
 - No ducting with optional direct-buried cable
 - No secondary cabling
 - No transformers or transformer pits
 - Click-on lights; easy replacement and re-configuration
 - Small base stations
 - Plug & play



MARINE & OFFSHORE – SUBSEA CABLE SYSTEMS

- Excellent mechanical design for high risk environments and operations
- Double crush load resistance without compromising on bending stiffness
- Coilable design for optimal mechanical handling
- 100% watertight full dry design by using a closed aluminium water barrier
- Excellent hang-off air tightness blocking corrosive and toxic gases
- Quality control during all stages
- Installation advantages



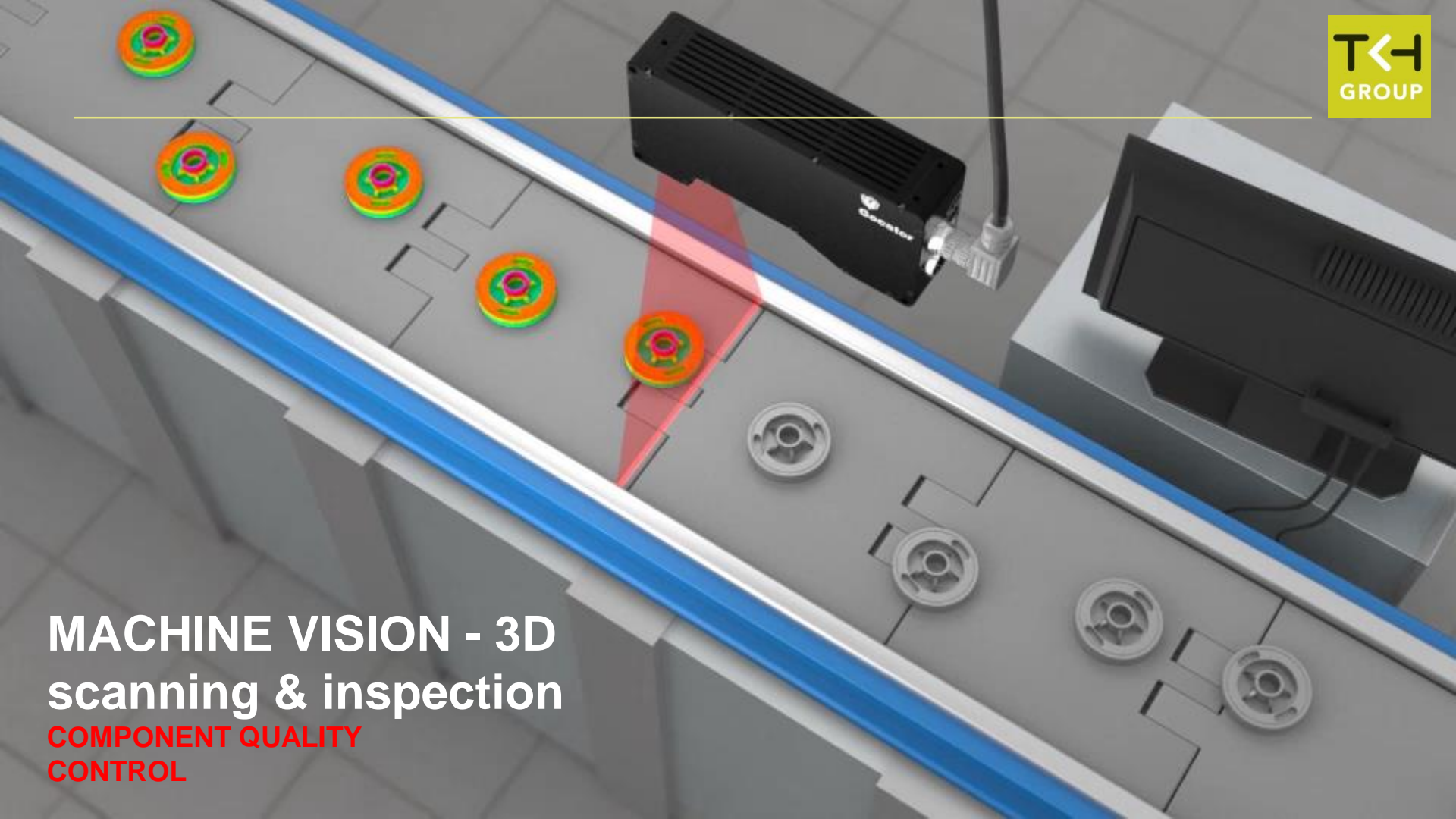
MACHINE VISION – 2D SCANNING & INSPECTION

FOOD INSPECTION



MACHINE VISION - 3D scanning & inspection

COMPONENT QUALITY
CONTROL



MACHINE VISION - 3D scanning & inspection

CELLPHONE ASSEMBLY AUTOMATION



MACHINE VISION – MOBILITY

EXTERNAL-SIGHT ON-BOARD SYSTEM



Identify
obstacles

Passenger safety

Track
checking

TIRE BUILDING INDUSTRY

- MAXX



- > All new developments to fit on the MAXX tire building platform
- > Benefits for R&D:
 - > Develop modules, not complete machines, quicker to market, lower costs
 - > Standard software approach, better utilization of resources
- > Benefits for production
 - > Increased standardization - fewer errors
 - > Flexibility in production location
 - > Lower training requirements
 - > Lower costs due to series effect
- > Benefits to the customer
 - > Future-proof their investment – tied into VMI
 - > Simplified homologization process
 - > Lower training requirements





TKH Group the solution provider <

Disclaimer

Statements included in this press release that are not historical facts (including any statements concerning investment objectives, other plans and objectives of management for future operations or economic performance, or assumptions or forecasts related thereto) are forward-looking statements. These statements are only predictions and are not guarantees. Actual events or the results of our operations could differ materially from those expressed or implied in the forward-looking statements. Forward-looking statements are typically identified by the use of terms such as "may," "will," "should," "expect," "could," "intend," "plan," "anticipate," "estimate," "believe," "continue," "predict," "potential" or the negative of such terms and other comparable terminology.

The forward-looking statements are based upon our current expectations, plans, estimates, assumptions and beliefs that involve numerous risks and uncertainties. Assumptions relating to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond our control. Although we believe that the expectations reflected in such forward-looking statements are based on reasonable assumptions, our actual results and performance could differ materially from those set forth in the forward-looking statements.