Statement

Oliver Zipse
Chairman of the Board of Management of BMW AG

BMW Group Tech-Workshop: E-Mobility & Battery Cell Technology.
Wednesday, 20 November 2019, 11:00 a.m.

Ladies and Gentlemen,

Welcome to our new Battery Cell Competence Center and thank you for joining us today. I am pleased to be here for my first in-person dialogue with you.

In the last three months since my start as CEO of the BMW AG, we have been realigning our strategy. Going forward, our strategic work will be defined by continuous updates.

I know that analysts prefer concrete results rather sooner than later. At this point, it is important to me to provide you first-hand information about where we are going.

The Battery Cell Center is part of our electrification strategy. It is no coincidence that we are meeting at this place. It perfectly symbolizes the ability of the BMW Group to tackle the necessary transformations in mobility.

- It stands for our commitment to climate-friendly mobility.
- It stands for the technological prowess of the BMW Group.
- And it stands for our great advances in electric driving technology.

We build on a high degree of in-house innovation and value creation, especially where it allows us to gain an edge over the competition. This competence center is another element of our strategy.
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It secures our leading position in individual mobility in the years to come. Before we start into our dialogue, allow me and my colleague Nicolas Peter to share some insights with you.

Three points:

**First**: How do we see the transformation in the automotive industry?

**Second**: How do we position the BMW Group strategically?

**Third**: Why are we confident that we have the right answers?

**To my first point.**

Over the last months, we have carefully analyzed our business environment. And we will continue to do so. We will constantly update our inputs and act accordingly. This is crucial in a fast-changing environment. There is much talk about the ongoing transformation in the automotive industry. But not every trend happens as fast as supposed. And not every trend is relevant for the BMW Group.

What is important to us:

- We will concentrate on the relevant drivers of change.
- We will clearly distinguish between hype and real transformation.
- We will take our own decisions based on what we learn.
  And we will go our own way, even if that means to go against the mainstream.

Most significantly: We believe there is still much room for growth in the automotive sector. There is a long-term growing demand for individual mobility worldwide – especially in the premium segment.

The fundamentals behind it are much stronger than the current dip in the overall market, which is mainly due to economic slow-down.
And the segment of the BMW Group, the premium segment, is much more robust than the overall market. The main factors for having a car have been stable for decades:

- People need cars when they start a family,
- when the surrounding infrastructure is most conveniently reachable by car,
- and of course, when their income allows it.

There are potentially “disrupting” business models that rely on car usage rather than car ownership. But they are focused on very specific areas with high population densities to ensure high utilization rates. This is critical to achieve profitability there.

In our three main markets – Europe, China and USA – only a small fraction of people and of our customers live in these super-urban areas. For those who do, in the premium segment, owning a car remains a matter of convenience and privacy. This is our target group.

Mobility services – like parking or charging offers, and shared mobility – are highly relevant for many people. They are often used in addition to owning a car. They even tend to increase the number of car users. With our “Now” Joint Venture, we are involved in these developments and will keep looking for further opportunities.

**My second point is the strategic focus of the BMW Group.**

The future of mobility is not being made by adopting new business models. The future of mobility has to be focused on the car itself, to make it future-ready. A modern day car is not a commodity. It is the result of thousands of components, technologies and millions of lines of code working flawlessly together in a comprehensive system.
As product complexity continues to increase, the ability to manage and integrate all parts of the value chain becomes critical. It is one thing to design and build a promising concept car.

But it is another huge step to develop a market-ready product that can be produced in series, delivered to customers worldwide, comply with many different national standards and requirements, and be functional for ten or more years.

In fact, a premium car is one of the most complex series products in the world that is handed over to normal customers. It is the core competence of the BMW Group to integrate technology into functional products:

- Safety features,
- Climate friendly drivetrains,
- Advanced driver assistance systems,
- Connectivity with the outside world,
- Functional and emotional design,
- And affordability for customers and profitability for the BMW Group at the same time.

The deciding factor is the ability to develop and produce cars with all future-relevant functionalities. This competence of System Integration is still largely underestimated. For the BMW Group, progress in mobility is all about the high-tech product. We will further extend our leading edge.

We see much opportunity in the current transformation:

- The demand for premium cars will continue to rise.
- At the same time, the complexity of the car will also continue to rise.
- Not every manufacturer will be able to keep up.
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- New players are confronted with the major market entry barriers of a highly competitive and complex industry.

- For the BMW Group, this means much room for growth.

The BMW Group is one of the most advanced automotive companies in the world when it comes to managing complexity. Some examples:

- Our modern Diesel models meet the strictest European regulations.

- We managed the transition to the new consumption standard WLTP ahead of time.

- We are able to fulfill almost all individual wishes of our customers, thanks to our flexible production.

In fact, understanding the needs of our customers is more important than ever. We see a growing trend of diverse needs in the different world regions. To understand what is going on, we have different approaches:

- On the one hand, data-driven, through anonymized data, powerful analytic tools and unique customer IDs.

- On the other hand, expert-based, where we will enter in close dialogue with representatives from the different world regions.

All our findings are embedded into our continuous strategic work.

For example: In Europe, brand loyalty is one of the deciding buying factors. In China, it is connectivity. With 35 years, the average age of our customers in China is more than 15 years lower than in Europe or USA. Our Chinese customers are mostly digital natives.

- They have high expectations for the connectivity of their car.

- Their entire buying process is different.
- The way they choose and use their car is different.

- We cater to these customer needs in our single biggest market with our extensive local R&D capacities in China.

We have set the clear goal to further strengthen our software competence throughout the entire company. From a customer perspective, we want to seamlessly integrate the digital world with the car.

I myself come from an IT background. It is one of my personal goals to effectively use digital innovations throughout the entire company – be it in development, production, sales, product functionalities or lifecycle-management.

**This brings me to my final point – our confidence to have the right answers.**

With the rising complexity in our industry, the right timing of strategic decisions is crucial. Currently, this is especially relevant for automated driving and electromobility. Regarding automated driving, fully autonomous vehicles are far more off in the future than expected by many forecasts.

This is due to different factors: Technological complexity, regulatory uncertainties and the cost of the required systems. In this field, pooling capacities and generating synergies through cooperation is crucial. In our cooperation with Daimler, it is much about

- the affordability of automated driving systems,

- creating industry-wide standards for the required platforms

- and enabling systems that match the needs of our target groups and their willingness to pay for it.
A different story is electrification and climate-friendly drivetrains. This field of transformation is accelerating year by year. We are committed to fulfill all regulatory requirements worldwide. Paying CO\textsubscript{2} fines is no option for the BMW Group. And we are committed to the targets of the Paris Climate Agreement.

This is reflected by our goals for electric vehicle sales in Europe: In 2021 a quarter of our sales, 2025 a third, 2030 half.

Already today, we have a broad portfolio of EVs in the market. Our sales of Plug-in Hybrids and fully battery-electric cars in 2019 will account to more than 140,000 units, thereof 80,000 in Europe. In 2020, we will see further significant growth here, supporting our CO\textsubscript{2} target achievement in the European Union.

Thanks to our long-term electrification strategy, which started back in 2008, we are ahead of the competition. Therefore, the financial headwind in 2020 from our required CO\textsubscript{2} measures will be less than what you hear from some other OEMs.

Going forward, by 2023, we will have 25 electrified models on the market, more than half of them fully electric. We have prepared very thoroughly for that ramp-up over the last years. The BMW Group is ready as several key factors regarding electro mobility are converging at the same time:

- The energy density of battery cells allows for greater range.
- Customer demand has risen to a significant level.
- And regulatory requirements are starting in 2020.

For the BMW Group, the most effective way to achieve climate protection is to do it in line with customer demand. We believe in the Power of Choice of our customers. For that purpose, we have created flexible car architectures that can be fitted with all sorts of drivetrain variants. The main benefits are:

Our customers can choose their needed segment first, and then in the next step their preferred drivetrain.
The differences in functionality compared to single-purpose platforms are not noticeable. But we are able to flexibly scale our electric sales according to market demand, and harness the capabilities of all of our major production plants.

We can offer our customers:

- Plug-in Hybrids in almost all segments that allow for local e-drive. An example is the new BMW X5 Plug-in Hybrid, which has impressed test drivers with its 80 km real electric range and its straight six cylinder engine.

- Fully electric cars like the MINI Electric, the upcoming iX3, the iNEXT or the BMW i4.

- We are also continuing to develop highly efficient combustion engines, as they will remain the only suitable option for customers in many world regions.

Regarding hydrogen fuel cells, we see a relevance for it in certain markets like Japan, and in some upper segments. We will launch a small fleet in 2022.

One of the most important topics for customers and OEMs alike is the cost of electrification. We are working very hard on this. We have gained deep knowledge of battery cells, their chemistry and design.

For example: The amount of Cobalt in the cathodes of our latest battery cells in the MINI Electric has been reduced by two thirds. We will further expand on our knowledge in this Competence Center. We will double the energy density of battery cells until 2030 by optimizing current lithium ion technology.

At the same time, we are constantly checking whether new battery innovations are suitable for automotive use and for efficient industrialization.
A major innovation is our fifth-generation electric drivetrain. We have developed it ourselves and will produce it in-house: A very capable electric engine, integrated in a compact design together with the gearbox and power electronics. It does not use any rare earth materials. It will have its premiere in the iX3 next year.

The electrification of drivetrains has a great impact on our industry. The BMW Group has mastered the entire value chain:

- We have flexible architectures.
- We have developed outstanding electric drivetrains and will produce them in-house.
- We are also producing our high voltage batteries in-house.
- And now, we are extending our competence in understanding battery cells and their industrialization.

Ladies and Gentlemen,

Let me sum up briefly: The goal of the BMW Group is to offer the world’s best premium cars. With all relevant functionalities and services for our customers, with a strong appeal and outstanding product substance.

The rising demand for premium mobility and the rising complexity in our industry present a great opportunity for the BMW Group, as System Integration is our core competence. We are very confident to expand our leading position in the premium segment. We will master the big tasks of individual mobility while maintaining high profitability and a strong financial position.

A corridor of eight to ten percent EBIT margin in the automotive segment remains our long-term strategic target.

On that note, I will hand over to my colleague Nicolas Peter. Thank you.