



“Bosch Limited Q3 FY19 Post-Results Conference Call”

February 13, 2019



MANAGEMENT: **MR. SOUMITRA BHATTACHARYA –MANAGING DIRECTOR**
MR. JAN- OLIVER RÖHRL - EXECUTIVE VICE PRESIDENT
AND CHIEF TECHNICAL OFFICER
MR. S.C. SRINIVASAN – CHIEF FINANCIAL OFFICER &
ALTERNATE DIRECTOR, BOSCH LIMITED

MODERATOR: **MR. ANNAMALAI JAYARAJ – BATLIVALA & KARANI**
SECURITIES

Moderator: Ladies and gentlemen, good day and welcome to the Bosch Limited Q3 FY19 Post Results Conference Call hosted by Batlivala & Karani Securities India Private Limited. As a reminder, all participants' lines will be in the listen-only mode, and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference, please signal an operator by pressing '*' then '0' on your touchtone phone. Please note that this conference is being recorded. I now hand the conference over to Mr. Annamalai Jayaraj from Batlivala & Karani Securities. Thank you and over to you sir.

Annamalai Jayaraj: Thanks, Stanley. Good afternoon, everyone. On behalf of B&K Securities, welcome to 3Q FY2018-19 Post Results Conference Call of Bosch Limited. We are delighted to have with us today, Mr. Soumitra Bhattacharya -- Managing Director; Mr. Jan O. Rohl -- Executive Director and Chief Technology Officer, and Mr. S.C. Srinivasan -- CFO and Alternate Director.

I would now hand over the call to Mr. Soumitra Bhattacharya for the opening remarks to be followed by the Question-and-Answer session. Over to you sir.

Soumitra Bhattacharya: Thank you very much, Jayaraj. Before we look into the results of October-December 2018 quarter of our company, I would like to brief you about the overall domestic automotive market development in the last quarter looking at production volumes, excluding the two-wheelers. During the quarter ended December 2018, the Indian automotive market shown a marginal decline of 0.1% against the quarter ended December 2017. The highlight of the quarter was the Commercial Vehicles segment, which grew by 12%. Heavy Commercial Vehicles grew on account of increased infrastructure development, road construction, building of irrigation facilities and affordable housing projects across the country. Light Commercial Vehicles grew due to increased thrust in agriculture, FMCG as well as e-commerce sectors.

The Tractor segment increased by 19% mainly on account of farm equipments subsidy by government and minimum support price for agricultural crops.

Passenger Cars segment decreased by 9% mainly on account of higher fuel prices, higher interest rate and increase in insurance cost along with NBFC crisis affecting financial lending. This decrease has resulted in degrowth of the overall market by 0.1%.

Three-Wheeler segment grew by 8% backed by increased demand from SAARC countries especially from Nepal.

We now look at how the company Bosch Limited has performed in October-December 2018 Quarter: For the period October to December 2018, revenue from operations showed a muted growth of 0.8%. In absolute terms, the revenue from operations for the period stands at Rs.30,955 million as against Rs.30,719 million over the same period for 2017.

The Mobility Solutions segment declined by 0.6%. The business beyond Mobility Solutions witnessed an increase of 6.9%. The domestic sales for this quarter grew by 2.2% wherein the



BOSCH

Invented for life

*Bosch Limited
February 13, 2019*

Mobility Solutions declined by 1.1% and business beyond Mobility Solutions increased by 22.6%. Export sales show a decline of 14.4% mainly from business beyond Mobility Solutions segment, partially offset by increased automotive sales of 6.5%.

In Mobility Solutions, Powertrain systems showed a decline of 2.7%, mainly due to the weak automotive market. Aftermarket witnessed a growth of approximately 6% after recovering from the GST transition issues and increase in demand from SAARC countries.

The business beyond Mobility Solutions show a growth of 6.9% compared to the previous quarter. This is majorly due to our security division as well as our solar energy division, wherein the growth is in double-digit, which is partially offset by degrowth in the thermal technology division.

For the nine months period ended December 2018, revenue from operations increased by 11.4%. The Mobility Solutions grew by 10.5%, whereas the business beyond Mobility Solutions increased by 20.5%. Material cost as a percentage of revenue from operations has increased from 52.8% in October-December quarter in 2017 to 55.5% in the current quarter of 2018. This is mainly due to the negative effect of FOREX on material cost and product mix. For the nine months period ended December 2018, it has witnessed an increase from 54.1% to 55.5%, mainly due to the reasons which have been mentioned before.

The employee cost has decreased to Rs.3,376 million in the quarter ended December 2018 from Rs.3,412 million in the corresponding quarter 2017. The decline of 1.1% is on account of productivity improvement and benefits of continuing or restructuring programs.

For the nine months period ended December 2018, employee cost stood at Rs.10,287 million as compared to Rs.10,268 million for the same period in 2017, showing a marginal increase of 0.2%.

Depreciation has declined by 18.6% in the quarter ended December 2018 as compared to the quarter ended December 2017 due to low additions in R&D assets which attract higher depreciation rate. However for the nine months period ended December 2018, there has been a decrease of 15% on account of lower base for the current year as compared to previous year as well as low additions in R&D assets.

Other expenses for the quarter October to December 2018 is Rs.6,173 million as against Rs.6,603 million in the same quarter 2017, a decline of 6.5% mainly driven by certain one-time accrual in the previous year quarter. For the nine months period ended December 2018, other expenses increased by 3.6%.

Operating profit stood at Rs.3,214 million as compared to Rs.3,233 million of October to December 2017, a marginal decrease of 0.6% mainly due to negative FOREX variation.

Nine months period ended December 2018, operating profits have increased by 28.8% driven by higher turnover productivity and cost reduction.

Other income has increased from Rs.1,022 million in the quarter ended December 2017 to Rs.1,786 million in the current quarter of 2018 on account of higher mark-to-market gains on marketable securities and increase in interest on investments in fixed deposits. For the nine months period ended December 2018, other income has increased by 19.9% from Rs.3,608 million to Rs.4,328 million for April to December 2018 against the increase due to MTM gain on marketable securities.

For the quarter ended December 2018, the company posted profit before tax of Rs.4,899 million as compared to Rs.4,229 million in the same quarter of 2017, an increase of 15.8%. As a percentage of revenue from operations, PBT stood at 15.8% in the current quarter of 2018 as compared to 13.8% in the corresponding quarter 2017. Consequentially, profit after tax or PAT increased by 19.3% for the current quarter of 2018 against the quarter ended December 2017. For the nine months period ended December 2018, PBT has increased by 26.1% and stood at 18.7% of revenue from operations against 16.5% during the previous year. Profit after tax also increased by 26.6%.

Bosch Limited has always committed to deliver best-in-class automotive solutions. We are helping our customers to meet the challenge of manufacturing vehicles, which are compliant with BS-VI emission standards from April 2020 as per the ruling of the Supreme Court. Bosch has also recently showcased its business beyond mobility offerings that are fast embracing the digital platforms and IoT services. Bosch India helped beyond Mobility 2.0 Event in our Adugodi Campus in Bangalore, on November 20th, 2018. The event was a showcase of smart solutions based on growing infrastructure and consumer demand in the market.

Now, regarding the outlook, considering particularly the weak market conditions in the overall automotive or mobility sector with low consumer sentiments and tight liquidity in the last quarter. There has been some amount of inventory pile up at our OEMs but also dealers inventory is expected to have gone up. However, with the pro-people budget expected to spur consumer spending and chances of BS-IV to BS-VI bike, our forecast for this year is a mixed bag which is a moderate forecast.

Thank you for your attentive listening and look forward to your questions.

Moderator: Sure. Thank you very much. We will now begin the question-and-answer session. The first question is from the line of Pramod Amte from CGS-CIMB. Please go ahead.

Pramod Amte: Hi, two questions: One to start with, the growth in aftermarket seems to be muted as just around 6% as compared to the low base benefit you might have had in the GST. Is it satisfactory as per your norms or something went wrong, can you explain that?



BOSCH

Invented for life

*Bosch Limited
February 13, 2019*

Soumitra Bhattacharya: Thanks for the question, Pramod. We were at a nearly a double digit till recently, this quarter we have had relatively low growth, but we expect to go back to double digit in the coming quarters. So, we are not doing too badly, we would go to further improve it and we would like to go back to double-digit.

Pramod Amte: Why is that confidence you have compared to the recent fizzling down of the growth -- Have you taken any corrective actions which will give you the confidence to come back?

Soumitra Bhattacharya: Look, if you see the aspect of aftermarket, you have to first delink it directly from the OEM growth because there is a very big park out there, Pramod. We cater to aftermarket with the white menu card of our products and services including servicing and the aftermarket park has grown tremendously, whether it is 4-wheeler, 3-wheeler, 2-wheeler and we have a lot of Bosch car services, we have a lot of Bosch diesel services across the country and we are very strong in different parts of our portfolio. Basically, we have also made our dealer network more transparent, we have ensured that the policies for them are simplified, and in a very strong way we are going to put a very strong digital footprint. So, we expect that we will do double-digit based on these boundary conditions.

Pramod Amte: And the second question is with regard to BS-VI opportunity. Do you see more opportunity in the after-treatment for vehicles with the BS-VI than the engine components, and following to that is how you plan to address it from your listed entity versus the non-listed entities which you have?

Soumitra Bhattacharya: So first part of the question I will answer then I will ask our Chief Technical Officer to also give a feedback on that. You must remember that the Powertrain is completely delivered from the public listed company, #1. And when I say Powertrain it means diesel, gasoline, and later when electrification in India comes in a big way. Everything including electrification will be delivered from the listed companies. By the way, Powertrain or Mobility Solutions also will be delivered from this listed company. Second part is that the BS-VI solutions which are being provided by us will not only facilitate to meet the target in a tight stretch timeline, the after-treatment we are doing with some partners which is the right thing to do but we take responsibility for system integration. How much of that after treatment will require BS-VI we will not be able to give a number. But, over to our CTO.

Jan-O. Rohrl: First, it is all in the hands of the public listed companies, so it is not only related to equipments but also the necessary sensors that are going along with the after treatment systems in case of reduction process. Hence all is in the hands of the public listed companies and if you speak of the business and business opportunities coming along with BS-VI we will share with you on acquisition perspective we were over achieving our targets by big extent and also improving from that to the year 2017, the acquisitions and they are all related to now, what I am speaking about the upcoming emission norms effective from April 2020 all on highway market, whether it is two-wheeler, three wheeler, four-wheeler, passenger cars, commercial vehicles and



BOSCH

Invented for life

*Bosch Limited
February 13, 2019*

depending on the technological set up you have let us say different options there but lot of the acquisitions are related of course to the after-treatment systems, be it sensors, be it components around UA dooring or be it around the system integration and finally the system solution that we provide to the customers.

Soumitra Bhattacharya: So just to clarify, last year means fiscal year '18-19. That means that still continues. For this year or this fiscal because one more quarter left, and if I am not wrong all-time high acquisition, and for both the new systems but also the after-treatment.

Pramod Amte: If I can do a follow up since you talked about the customer acquisition, is there metrics you want to provide us to get a handle of what these acquisitions, do you mean more in terms of order book or client acquisitions, any color to that would be helpful?

Soumitra Bhattacharya: Pramod, we have given enough color. So we do not add further color, no numbers, but you can take all-time high acquisitions by Bosch is all-time high acquisitions. So that is a very positive statement from our CTO.

Moderator: Thank you. The next question is from Sonal Gupta from UBS Securities. Please go ahead.

Sonal Gupta: Just a couple of points again around the same thing; one is like when you say all-time high customer acquisitions, do we see that our potential market share in the overall market is improving, is that the way you would look at it?

Soumitra Bhattacharya: We do not give numbers, but if you get all time high acquisitions then things are improving.

Sonal Gupta: Given that like even on the CNBC you commented that compact car diesel may not be a very viable proposition, so I just wanted to understand, from you, obviously you have been gaining market share on the petrol side, and potentially also on the gasoline direct injection side, so if we see the market really the passenger vehicles segment as a whole shift away from diesel to petrol, how does that impact you on overall basis? Do you still think that you are largely neutral because you are gaining share on the petrol side, just your thoughts there?

Soumitra Bhattacharya: So I think we have to look at this matter in a very holistic way. In India if you take about 8 to 10-years ago we were in diesel only about 20-22% and we grew to a peak of 48% as compared to gasoline. Second, when you look at current market share wherein 32% plus, etc., now this percentage is bound to come down after BS-VI for very small cars. I want to clarify. I mentioned in CNBC today that from 1.5L onwards diesel at the TCO level makes less sense. And there is a lot of 1.5L cars and 2L cars in India and more. At 1L of course the 1.2, the delta in relation to BS-VI, in terms of cost becomes affordability for some of the customers. So we have to remember that it is not a go, no-go, it is a segment of the pas car which may not be financially viable from customer expectation on a very low base on pricing. This we have to understand. We have to remember also that there are two types of segments – one is the owned car and one is the taxi jeet. For the taxi jeet, which runs lots of kilometers is also a viable proposition. When

I said about segmentation, I talked about three points – I said, first, you have to understand it is for personal use; second, you have to understand very few countries like India have 1, 1.2 litres. There is a lot of 1.5 and 2 and other. Third, you have to remember the ecosystem beyond pas cars which is tractors, ECV, LCV, three wheelers and all these Bosch play a very major role. Lastly, you are right, we have grown at a very high CAGR on our gasoline. We came into India with gasoline far later than diesel, but we have today a pretty good market share on gasoline and we want to continue to grow at a very good pace. That is different segments in gasoline. And do not forget, there is a huge two-wheeler growth coming up and Bosch will play a very important role where you need engine management systems.

Moderator: Thank you. The next question is from the line of Ronak Sarda from Systematics Group. Please go ahead.

Ronak Sarda: Sir, two questions: One was you indicated that you have gained substantially new orders. But can you help us understand how the cost of acquiring these orders been -- do you think your historical profitability can be maintained? And in the initial few years with BS-VI, what would be the import content and the localization plan?

Soumitra Bhattacharya: I think you attended many of our conferences to know that we go from import or trading to localization in a systemic way and which makes sense based on the volumes and need. So, just going for localization without doing a holistic look and survey, does not make sense, so that is one. The second part, we do acquisitions to ensure profitability, and profitability comes in different ways – on running a tight ship, on ensuring that our operations are optimized in ensuring we are kicking at the localization at the right time to focus on productivity. So you will have noticed that over the years, we have kept tight control over our cost, we have improved on our personal cost, we do a lot of work on engineering; Bosch India and Bosch Limited has a huge engineering capability and there are thousands of engineers working on this and we do a lot of selling of engineering services. So right now, we work round the clock for our engineering services especially. So, it is a combination of various things. You need to meet optimal profitable targets while ensuring that customers get innovative and affordable solutions.

Ronak Sarda: Just a follow up, I understand localization would be in a phased manner but given the volumes are not going to change much, we could be supplying similar volumes in BS-IV regime as well, does that come into consideration when we decide BS-VI and content on the realization plans or there is some other way to look at it?

Soumitra Bhattacharya: We have a different way of looking at it. Many a times you can do localization on relative lower volumes anyway intelligent localization. So you can do certain part of your work inside the house, you can do some amount of outsourcing, you can do lines which are flexible or you can do lines which are smaller. So it is not that one fit for all. So we have been in India for the last 97-years and we have been manufacturing for the last 65-66-years. So we understand what would

have the right mix and our objective is always to create an ecosystem where we meet optimal cost while meeting customer expectations on QCD.

Ronak Sarda: The question is on two-wheeler ABS module. Will that be part of the public listed entity? And if yes, can you just help us understand how you are looking at the market as such given OEMs have gone for a single channel ABS as well, how do you look at the opportunity size and growth there?

Soumitra Bhattacharya: We have the two-wheeler project house which looks into the business of two-wheelers inside the Bosch Limited or the listed entity and I told also before that we have the project house electrification also inside Bosch Limited. Our components for the two-wheeler can come from our sister companies in India. So we have different types of business models, some business models where we have the business inside and we do the customer management and fund raising and we also have business models where the manufacturing is sometimes of making this. So in this case we have the two-wheeler house inside Bosch Limited and our supplying components do come from our legal entity sister in India.

Ronak Sarda: Last question was on your electric vehicle solutions. Can you help us understand how is the technology advancement has happened over the last two years? Where do you see EV penetration increasing in India and what is your thought process?

Soumitra Bhattacharya: I will answer very quickly in two parts, I will just take a minute to give you a background and then ask our chief technology officer to fill in because he has electrification project here. First, you have to remember that our parent has been spending over the last 10-years €400 million every year. So Bosch worldwide GmbH is deep into electrification. Our menu card for our parent is all areas of electrification excluding making the battery cells. We do the battery pack but we do not make the battery cells and this is the policy that Bosch, our parent has taken. We also grew the factory management systems and so on and so forth. So we have a deep knowledge. Bosch parent has also done something of eAxle, which is a combined combination of drive, the inverter and we have opened Project House Electrification in India, where we have gotten in weeks some POCs in the four-wheeler area. So we are set to be working with our customers for future. Over to our CTO.

Jan-O. Rohrl: As rightly pointed out, from the business perspective, this will be handled by the public listed companies. Everything around electrifying the engine and that is not only limited to the electric vehicles but also to hybrid vehicles which were to understanding not only on which technology is but sustainable technology for reducing CO2 and the CO2 targets will be the next big element that the industry will be facing. So the approach that we have taken here is what we call "Project House" where we drive agile methods of working of collaboration, also beyond let us say the boundaries of the public listed company, making use of all the thoughts that we can get here locally from our engineering service centers, called RBEI, also from the mother company Bosch in Europe. Technological wise and technology goes along with markets, we speak about two-



BOSCH

Invented for life

*Bosch Limited
February 13, 2019*

wheelers, we speak about three wheelers, we are yet to speak about four-wheelers, and for these we are now setting up the first POCs as we call that. So it is proof-of-concept which are by the way, we are not limiting ourselves here to providing a Powertrain solution but we want to explore possibilities also around the ecosystem. So, that is still in the nascent stage and let us say first problem that is in the market yet to come, but we are taking this year very serious from the public listed company and are deploying all the resources required in order to have the right responses for the market and market again not limited to do a three wheeler, but also taking care about light duty, last mile connected solutions also going beyond that.

Soumitra Bhattacharya: So in summary, two-wheeler, three wheeler, four-wheeler electrification is in the public listed company. Fiscal year '19-20 you are also like to hear subject to our customers going into SOP on two-wheeler and three wheeler front with Bosch Solutions.

Moderator: Thank you. The next question is from the line of Pramod Kumar from Goldman Sachs. Please go ahead.

Pramod Kumar: I had one follow up question on the engine management space what you talked about two-wheeler being in the listed entity. I just want to clarify, that would include even the fuel injection system which would be manufactured or sold by Bosch India the listed entity, right?

Soumitra Bhattacharya: Yes.

Pramod Kumar: Related to that, just wanted to understand because globally there are not many markets of the scale which are operating in the lower end of the engine displacement in two-wheeler like 100 cc, 110 which is bulk of Indian two-wheeler market and fuel injection of course makes practical and probably is only way out for bigger engines, but is there India-specific solution in terms of having a non-fuel injection BS-VI compliant engine, technically is that possible is what I wanted to understand?

Jan-O. Rohrl: From a technological perspective, you can have all kinds of imagination deployed on the two-wheeler and you know that specifically in the big market, the OEMs are highly creative and also the ecosystem is highly creative, the question is only whether now from a vision perspective, first, secondly, from tier-2 perspective, these creative solutions would be sustainable.

Soumitra Bhattacharya: We believe strongly that the EMS is the right solution.

Pramod Kumar: So in a way if you were to use something like integrator starter generator and kind of try to meet the compliance for smaller engines entry level motor cycles or scooters, is that possible without FI is what I am trying to understand?

Jan-O. Rohrl: As per our expertise, this will not be the sustainable solution and in the years to come only from a perspective of emission from clients of the type homologation, you have to continuously improve (CoP), Conformity of Production even though there is no DE. So, we are advising



BOSCH

Invented for life

*Bosch Limited
February 13, 2019*

emission yet considered for two-wheelers, but you do not know what is yet to come and beyond that, you have to see it what let us say benefits you get or disadvantage you get out of solution out in the market that are a bit more creative on the CO2 side.

Pramod Kumar:

On the related note of FI for two-wheelers because I am just focusing on that a bit more because it is a very large opportunity and something which we are not very large in terms of as a fuel injection as a share overall two-wheeler volume currently. But how should one look at the cost curve and the volume opportunity beyond year one because I understand from OEM that many OEMs will be relying on more than two, three suppliers in year one so that they have a smooth transition and there is no disruption at the production end. But once the production stabilizes, what we understand is there are going to probably zero norm on the handful of vendors to get them the scale advantage. So in such a scenario and given the fact that some of your OEMs have subsidies which are running fuel injection systems in-house, so how big this opportunity could be for Bosch anything which you can share in terms of percentage of the market what you are looking which can come to you?

Soumitra Bhattacharya:

Pramod, I would only say one thing that you hit the nail on that I would say A) it is a very big number and B) without giving numbers, we can tell you that Bosch will play a very significant role based on our acquisition. So, we are not going to give you a number now, but this is the area where we are very clearly committed, we have experienced from our parent, we have been working on gasoline and EMS for quite sometime. Lot of these components we manufacture in our factory here, we are very good at sensors in our company and the injection systems also for gasoline and for two-wheeler.

Pramod Kumar:

Final question on EV. You said hopefully some of your customers will be commercializing two-wheelers and three wheelers in FY20. Just wanted to understand does it also include the entire packaging in terms of the battery management system, the battery cell package, everything coming in from Bosch, in a way it is going to be more of Bosch-backed EV product is what we are looking at?

Soumitra Bhattacharya:

We are not going to disclose now the specs because that would be unfair with the customers whom we are working. But when the customers come out with SOP, you will get to see that Bosch with the customers whom we are working and we are hoping 2019, 2020 based on the pull from the end customer, the government how it treats this, then you will see Bosch plays a significant role in the launches where we are working with our customers for three wheelers for sure but also for two-wheelers. All of us must understand that Honda Activa has set the standard for price expectation in terms of two-wheelers. Whether it is reasonable or not? I do not want to comment because you cannot compare apples with oranges. That is the price standard. The cost of battery which is the main component cost are higher in case of two-wheelers and today to meet price standard of 65,000 or 80,000, 90,000 is going to be very difficult to overall OEMs also. So having said that, yes, we have good solutions, we are working with customers and you

will see a significant content by Bosch on the overall ecosystem in three wheeler and two-wheeler.

Moderator: Thank you. The next question is from the line of Pratik Rangnekar from Credit Suisse. Please go ahead.

Jatin Chawla: This is Jatin Chawla. A couple of questions. One, on your aftermarket growth of 6%, now given that this is coming on a base where last year we had challenges with the transition post GST. This number seems a little bit on the weaker side. So just wanted to get your comments on that as to are you kind of happy with this kind of growth rate in the aftermarket side because I understand OEMs business were really slow in the quarter but I was expecting kind of a better number on the aftermarket side?

Soumitra Bhattacharya: Thank you for the question, Jatin. I did not say that we are delighted with 7%. We expect that we will bounce back to double digit and I also said in the previous quarter we were near double-digit. So, answer is yes, it is a positive growth, answer is also that we are not delighted but we are okay, but we definitely want double digit growth on aftermarket. In the market you have seen what has happened with NPAs and NBFCs and that has affected the automotive market but affects partly also the overall liquidity situation in the market. But those are not the reasons that we want to give. We want to look on further improving and go to double-digit sustainable.

Jatin Chawla: A small clarification on a point you made on two-wheelers, bulk of the business being done through the listed entity. Does it mean that when components come from sister companies like for example, I think ABS might come from your braking company, would that transaction routed through the listed entity or it is just that the listed entity is doing the customer management there?

Soumitra Bhattacharya: We have different models. So I am not going to end with only one model. But normally when we do the business model ownership through the listed company, then we also do the front facing with the customer as well as business model ownership means that, we run the business and take the risks and the reward which is the right thing to do. So, we have different models that we do, but as you can see from the investor community, systematically we have been putting in new elements for new age business into the listed company. I hope all of you can see that to give a simple example, two-wheeler, three wheeler in the listed company, electrification in the listed company, and we believe another business area which will grow in the future to come which is the Mobility Solutions, this is not just car connectivity, this is Mobility Solutions and that has also been put into the listed company with customer management and taking as I said the business risk and the reward we expect for the future.

Moderator: Thank you. The next question is from the line of Sandeep Manam from Franklin Templeton. Please go ahead.

Sandeep Manam: It is related to the mobility solutions which we have just discussed. In your presentation in August 2018, you have a slide on Mobility Solutions which would include automated driving, connected mobility, multimodal transport systems, etc., So does that mean in the future let us say there are order wins related to radar systems, automatic emergency, braking systems, that could happen through the listed entity?

Soumitra Bhattacharya: Thank you for the question, Sandeep. I am now not going to define what is Mobility Solutions here but you are right in saying Mobility Solutions means things like automotive connectivity and various other issues. So Mobility Solutions links up hardware to software and finally intelligence in giving on-time, real-time and even predictive or preventive situation including data management or making mobility area third link space. So, any solution related to mobility will go through the listed company again as a business model. So, right now I am not going to define it but this is a very broad area. We believe this will be very important game plan where you play not only with the OEMs but you play with the lot of other new players coming into the market and Bosch being a very strong IoT company, and a very strong innovative company, we believe since our knowledge on mobility area is pretty strong, thanks to our parent and also deep understanding in the Indian mobility market, we believe we can be a significant player in the future on this. Do not forget, we have the highest amount of R&D engineers including software engineers sitting in India after Germany. So we have that added advantage.

Sandeep Manam: My final question is related to electrification especially in passenger vehicles and three wheelers. Indian cities we already know the average driving speed is amongst the lowest in the world, maybe Bangalore during peak hours, it could be lower than 10 kph. And we also know that if the average speed is very low, the emissions are much higher compared to say 15 kph or more or 100 kph or more. So my question is as India moves towards real world emissions, is there a chance that the share of electric vehicles will increase simply because even though the ASP in India is slow, the TCO may not exactly work out but because the real world emissions could be much higher because of low speed in India, could that lead to higher penetration of electric vehicles in PV and three wheelers as we gradually move towards real world emission norms?

Soumitra Bhattacharya: I think our CTO will give you some amazing results on what diesel has achieved not just in Germany but also very ably in India with all different these cycles. So first I would like to tell you that we should not say that these will be met only through EV. I see it is a very good alternate based on the technologies that Bosch offer. Having said that, on EV, again, please let me remind you Bosch's EV introduction, three-wheeler, two-wheeler, intracity bus like STUs with support from the government and perhaps fleets only the last one will be pas cars personal ownership. So, this is the way we see it. But over to our CTO.

Jan O. Rohrl: So you might know that we are from the mobility area, we have the vision which is emission-free, stress free and accident-free driving. Coming first to the emission free driving which you were mentioning, that is not limited to electric vehicles be it battery electric vehicles, be it fuels stack. But this also related to the ICE knowing of course finally every ICE whatever kind of



BOSCH

Invented for life

*Bosch Limited
February 13, 2019*

after-treatment you have, you still have emissions, but let us say the results that we have achieved and the results are coming out from the target that we have to make our application, our systems together with the OEM, robust against the two elements which are driving the emissions. The first one is the driving style. So somebody is driving let us say very dynamic or little defensively and secondly, the conditions that you will face like road inclination or whether you have to load your vehicle. We are making vehicles, the systems, the engine robust in compliance with emission not only based on a cycle but for real world condition in Indian roads, you are referring now to Bangalore or any other deep city driving cycle in order to not only showcase to the world, but we need to contribute that the solutions that are brought on the road, let us say, to the best extent contributing to improve the air quality. So, in a nutshell, the emission criteria that we are seeing will be a six, they are demanding, you know that, particle matters is 90% and NOx (-70%) roughly, but these criterias we will easily meet not only on a cycle. So that means the ICE also for cities will have a future, whether it is gasoline or whether it is diesel and will not drive the demand for electric vehicles.

Soumitra Bhattacharya: In summary, I could only say we in the world in Bosch but also in India very strongly believe that while electrification will play a very important role, the dominant technology in 2030 and beyond will still be ICE. And I think this is the fact from the hype that we have to slowly but surely accept.

Moderator: Thank you. The next question is from the line of Jinesh Gandhi from Motilal Oswal Securities. Please go ahead.

Jinesh Gandhi: My question pertains to Mobility Solutions. So you indicated it will be part of the listed entity. So does it mean that to be similar to the project house where components can come from unlisted entity, so for example, the input in the systems which is part of the unlisted entity will be providing some components and some components might be made in-house or the entire manufacturing and sales, operations would be the listed entity?

Soumitra Bhattacharya: You are right, Jinesh, we have both the models operating and we see both models operating also in the future. We have a total of 13 legal entities in India and lot of our divisions are inside the listed entity. Now, when we bring Mobility Solutions, lot of it we will take from our listed entity itself because you have the operating systems here, you have the electrification here and so on and so forth. But there could be some things when we want to give a solution and there is some hardware required which is outside the legal entity, we will take it from our sister companies and we have a very good competitive way of handling finally to meet the market needs. So, we do not see a challenge in that area at all. And the customer sees Bosch Limited, for the last 65-years of manufacturing as a very good business model owner because we resolve issues end-to-end for the customer from Bosch Limited. So you have to understand that. And we have the expertise inside this company.

Jinesh Gandhi: Lastly on the e-two-wheelers and e-three wheelers, can you just highlight what all components do we do, what all solutions we provide here to get better understanding of that?

Soumitra Bhattacharya: Right now we do not give a breakup, we have the breakup but we would rather talk about this in detail once the launches are done. But as I said before, you can be rest assured and you do not have to wait for too long, we are hoping based on of course market acceptance that very big part of the whole ecosystem that drives this technology is coming from Bosch. And also, you must understand with these customers we are working with them end-to-end. So it is not we are one of the many who is doing it. So we are working end-to-end with them.

Jinesh Gandhi: This would also include the charging infrastructure as well because Bosch ...?

Soumitra Bhattacharya: No-no, that is a separate matter. We are open to look into those areas. You ask me a question what is the technology that would go in for a product to be launched. I talk about that. That is add-on situation. But we are open to look at all these areas.

Moderator: Thank you. Due to time constraints, we will be able to take one last question which is from Sonal Gupta from UBS Securities. Please go ahead.

Sonal Gupta: Just one clarification; so when you provide like the breakup saying Mobility Solutions grew this much and the aftermarket grew this much, so within Mobility Solutions, other than powertrain and aftermarket, would there be anything else or everything will fall under these two buckets?

Soumitra Bhattacharya: Aftermarket is a different kettle of fish, Sonal. You know Bosch has been the largest player in the aftermarket for decades and we want to continue that. So we have a very strong and deep menu card in the aftermarket including we have our franchisees and our own outlets in the market all across India. So that is a separate matter. Mobility Solutions we will do which will involve four-wheelers, three wheelers, two-wheelers. When we talk till now about Mobility Solutions, you maybe mixing up with the segmentation in which the sales is shown. So please do not mix that up. Sometimes we show the segmentation of sales saying Mobility Solutions sales which include Powertrain, which includes aftermarket, and which includes the two-wheeler. So that is a commercial segmentation. The part which I talked about Mobility Solutions is a different matter which is we have brought into our public listed company the part of giving sensors, software services link to Mobility in any form and manner which is the new age business. That is what we talked about it.

Sonal Gupta: I understand sir. My question is mainly from the reporting segmentation that you used in your opening comments that within Mobility Solutions, powertrain solutions and aftermarket. So I am just trying to understand is there anything else or would all the revenues of Mobility really fall under these two buckets?

Soumitra Bhattacharya: What you said is right. So Mobility Solutions what I referred is the commercial definition which is powertrain sales, automotive aftermarket sales and two-wheelers.

Sonal Gupta: So, two-wheeler will be a separate...?

Soumitra Bhattacharya: 2WP is a part of the Mobility Solutions.

Moderator: Thank you very much. We will take that as the last question. I would now like to hand the conference back to the management team for the closing comments.

Annamalai Jayaraj Thank you, everyone. On behalf of B&K Securities, we would like to thank Bosch management for taking time out to discuss 3Q Results. We thank the Bosch management providing this opportunity to host the call. Have a good day.

Soumitra Bhattacharya: Thank you very much.

Moderator: Thank you. On behalf of B&K Securities, that concludes the conference. Thank you for joining us. You may now disconnect your lines.

This transcript may not be 100 percent accurate and may contain misspellings and other inaccuracies.

This transcript is provided "as is", without express or implied warranties of any kind.