

# **AIXTRON SE**

## **Analyst Earnings Conference Call**

### **Q1/2021 Quarterly Results**

**April 29, 2021**

Edited Transcript

#### **Executive Board**

**Dr. Felix Grawert, CEO & President**

**Dr. Jochen Linck, COO**

#### **Finance & Administration**

**Charles Russell**

The spoken word applies

## **Slide 1, 2 – Operator & Forward-Looking Statements**

### **Operator**

Ladies and gentlemen, welcome to AIXTRON's first quarter 2021 results conference call. Please note that today's call is being recorded. Let me now hand you over to Mr. Guido Pickert, VP of IR & Corporate Communications at AIXTRON, for opening remarks and introductions.

### **Guido Pickert**

*Investor Relations & Corporate Communications*

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Thank you, operator. Welcome to AIXTRON's presentation of our first quarter 2021 results. I'd like to welcome the members of our Executive Board, Dr. Felix Grawert and Dr. Jochen Linck as well as our VP of Finance and Administration, Charles Russell.

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Please take note of our Safe Harbor Statement which can be found on page 2 of our results presentation slide deck, as it applies throughout the conference call.

This call is not being immediately presented via webcast or any other medium. However, we will place an audio file of the recording or a transcript on our website at some point after the call.

I would now like to hand you over to Felix Grawert for opening remarks. Felix?

## Slide 3 – Q1 2021 Highlights & Operational Performance

### Dr. Felix Grawert

*Executive Board*

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Thank you Guido! Let me all welcome you to our first quarter 2021 results presentation and I will start with an overview of the highlight in the quarter, before handing over to Charles for more details on our Q1/2021 figures before I will give you an update on the development of our business and our guidance for the year.

Let me start by giving you an overview of the key developments in Q1 on **slide 3**.

In Q1/2021, we noted a continued strong order momentum throughout all our businesses but in particular in GaN Power and 5G Wireless. The overall semiconductor market is seeing very strong chip demand across the board, also incentivizing our customers to invest in their manufacturing capacities.

Hence, orders in Q1 came in at 124 million Euros – surpassing the high level of orders seen in Q4/2020.

As expected, we start the year 2021 with a revenue figure well below the previous quarter. This is due to the fact that many customers had requested their systems to be shipped still in 2020, largely due to imminent production needs. For the coming quarters of 2021, we expect that Revenues will increase each consecutive quarter. This is a pattern that we have seen in quite some of the last years.

The strong momentum in Q1 and the current level of customer inquiries gives us confidence to firm up our guidance for orders and revenues – we expect orders and revenues to come out around the upper end of the respective ranges. This high expected level of revenues leads to a higher expectation of EBIT margin of 18% compared with 16% before.

With regards to OLED, we have decided together with our JV partner IRUJA, to focus our OLED subsidiary APEVA onto the China market. The reason for that is that we have not seen any further progress in the discussion with our key customer and in the coming years we expect a much bigger share of new investments into OLED production facilities to happen in China than in Korea. As a consequence of this change in target market, we focus APEVA on being a supplier of differentiated key components rather than offering fully integrated system solutions. Discussions with customers in China are ongoing, nevertheless we do not expect a successful conclusion before 2022. Therefore, we will keep the running cost of APEVA on the lowest possible level until then.

This move results in a reduction of OPEX from the OLED business at AIXTRON as follows: In 2021 we expect to keep the overall cost for OLED within the “high single digit” range that we had previously communicated for our OLED activities. This figure includes all expected costs for 2021, also one-time expenses. In 2022, OPEX will be reduced to a “low single digit” amount until a customer project starts. At the same time, we can preserve the potential and upside from this technology.

Let me give you also an update on the COVID-19 situation at AIXTRON. Our strong internal safety measures continue to prove effective in mitigating the risk of infection within our premises. We are offering regular testing of our employees at our headquarters twice a week and we continue to not have recorded any significant effects related to COVID-19 on our operations and business. Also, our supply chain continues to be stable. However, we will continue to watch the development of the global pandemic very carefully and we remain to be ready to take further measures if necessary.

Before handing over to Charles for the financials, let me tell you that I am glad to announce that Dr. Christian Danninger will take up his position as CFO already at the beginning of May.

With that, I’m handing over to Charles.

## **Slides 4-6 – Q1/2021 P&L, Balance Sheet, Cash Flow**

### **Charles Russell**

#### *Finance and Administration*

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Thanks, Felix, and hello to everyone.

Starting on **Slide 4**, our income statement. As expected, total revenue for the quarter was 50 million Euros compared with 41 million Euros in Q1/2020. Gross margin of 35% this quarter was 1% point lower than the 36% in the same quarter last year. The difference is mainly attributable to the USD/EUR exchange rate effect between the two periods, and some additional costs were incurred during Q1/2021 to prepare our production capacities for the increase in output planned for the second half of the year.

Operating Expenses in the quarter increased from 16 million Euros in Q1/2020 to 18 million in Q1/2021.

G & A expense increased to 6 million Euros in Q1/2021 from 5 million Euros in 2020, influenced by higher variable compensation.

R&D expense of 12 million Euros in Q1 was 3 million Euros lower than the comparable period in 2020. This is in line with regular fluctuations we have in R&D and partly due to lower running costs of our OLED activities.

Net Other Operating Income was 2 million Euros in the quarter – compared to 6 million Euros in the same quarter in 2020. Q1/2020 included a one-off benefit of 3 million Euros.

We recorded an EBIT of -1 million Euros for the quarter, similar to the result in Q1/2020.

The improved outlook has led us to recognize a further 4.5 million Euros of deferred tax assets which leaves us with a net profit for Q1/2021 of 4 million Euros compared with a loss of 1 million Euros in Q1/2020.

Turning to the balance sheet **on the next slide.**

In line with the increased order intake, inventories have risen to 97 million Euros from 79 million Euros at the end of 2020.

Advance payments received from customers increased to 101 million Euros from 51 million Euros at the end of 2020. This relatively large increase is because some deposits have been received before the finalization of all the criteria needed to recognize the orders.

Our cash balance increased to 341 million Euros at the end of the quarter, including 60 million Euros shown in Other Non-current Assets on the slide.

Moving to **slide 6**, which shows our cash flow statement.

Cash and investments increased by 31 million Euros in the quarter from 310 million Euros to 341 million Euros. The chief movements were the increase in customer deposits of 50 million Euros less the increased inventories for future shipments of 18 million Euros.

With that, let me hand you back over to Felix.

## Slide 7, 8 – Development Projects and 2021 Guidance

### Dr. Felix Grawert

*Executive Board*

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Thank you, Charles.

I would like to give you an update on the key developments in our addressed markets before concluding with the outlook for the rest of the year.

As mentioned at the beginning – we are seeing strong momentum from all our end-markets. The Q1 Order Intake was largely driven by systems for the production of Gallium Nitride (GaN) Power Electronics. In 2020 we have seen the Tipping Point of adoption for this market. Our customers, the chipmakers, have achieved the reliability needed in the target applications. Now, we see GaN-based Power Electronics in a phase of rapid market adoption, displacing silicon Power Electronics in selected applications. Consumer electronics devices with compact fast chargers for smartphones, tablets and laptops mark the starting point. This is what drives the big 2021 volume in GaN Power. In the coming years we expect adoption also in industrial end markets, for example in power supplies for energy efficient data centers and telecom base stations. Other applications on top will follow – please bear in mind that - according to Omdia - discrete silicon MOSFETs alone were projected to have a market volume of 7 billion USD. In 2020 GaN and SiC only represented about 7% of this market. We believe that the substitution of Silicon Power Electronics by GaN and SiC Power Electronics creates a multi-year growth opportunity for us.

Furthermore, in Q1 2021 we recorded strong orders from the 5G Telecom and Optical Datacom markets. Both areas are driven by the worldwide 5G rollout, and the rising need for fast data availability and increasing data volumes for example due to cloud computing and video streaming.

Finally, in Q1/2021 we have seen some Order Intake in the area of Red LEDs, which are used in LED displays and in indoor farming. For the upcoming quarters, we see a return of laser demand from 3D sensing as well as further progress being made in the area of Micro LEDs.

In summary, we are in a very pleasing environment currently and the sentiment is positive.

With that, let me move to our guidance on **slide 7**.

As mentioned at the beginning, we expect orders to be around the upper end of the range of 340 to 380 million Euros due to the strong momentum. Revenues are

expected to come in around the upper end of the range of 320 to 360 million Euros as well.

Out of backlog, we expect to turn about 180 million Euros into 2021 revenues. Taking Q1 revenues and the assumed after sales business into account, we still need about a further 90 million Euros of orders to be converted into revenues to reach the expected revenue level.

Our gross margin, we continue to expect to be around 40%.

Mainly due to the higher anticipated revenue level, the EBIT margin is now expected to be around 18% compared with 16% before.

Please note that these forward looking expectations are based on a budget rate of 1.25 US-Dollars to the Euro.

In summary – even though the year started slow in terms of Revenues and EBIT – we are looking forward to significant growth of Revenues and EBIT in 2021 compared to the previous year with an increase in each consecutive quarter.

With that, I'll pass it back to Guido before we take questions.

**Guido Pickert**

*Investor Relations & Corporate Communications*

Thank you very much, Felix and Charles. Operator, we will now take questions, please.

**Question-and-Answer Session**

**Q - Janardan Menon, Liberum Capital**

Hi, good afternoon, and thanks for taking the question. My first question is on your capacity. So, you've started the year quite low on revenues in Q1, which means that you have quite a bit of room to cover to reach the high end of your revenue guidance for the full year. So I was just wondering, based on your current capacity and your supply chain's capacity, what is the maximum level of quarterly revenue that you can recognize, given your current capacity? And can you also give us an idea on what is your current capacity increase plan? And based on that how will your sort of revenue-generating ability for the quarter or year increase into future years?

**A - Dr. Felix Grawert**

This is a good question because we expect our revenues in each quarter of this year to be larger than the revenue in the previous quarter, meaning we will see the largest revenues for 2021 in the fourth quarter. As far as our production capacity is concerned, I would like to point at what we have achieved in 2010. In that year, 450 epi tools have left our production facilities at AIXTRON. This demonstrates our capability to ramp our capacities in correspondence with the underlying demand.

Nevertheless, our supply chain and our production always needs some time to ramp up and to prepare for such an output. Therefore, we are preparing to set up the required production capacity and we have secured the required components from our suppliers to be able to produce and ship the number of tools corresponding to our guidance.

**Q - Janardan Menon, Liberum Capital**

And are you increasing capacity at all at your own or at your suppliers right now?

**A - Dr. Felix Grawert**

We are increasing our capacity by upgrading our production slots. This will enable us to manage the expected development of revenues in 2021, namely low revenue levels in Q1 and quite high revenue levels in Q4. Revenues over the year are not evenly distributed, but the strong expected shipments and revenues in Q4 are well secured, such that we come to our guidance.

**Q - Janardan Menon, Liberum Capital**

Understood. And then just on the margin side. So the increase from 16% to 18% is coming through entirely from the higher revenue expectations, and it doesn't have any impact on OPEX from the APEVA situation?

**A - Dr. Felix Grawert**

Exactly, you have perfectly described the situation. We are seeing a fix cost digression, with a largely unchanged block of fixed costs which is now being covered by a larger base of revenue and corresponding gross profit. And to the second part of your question, OPEX for APEVA will stay exactly in line with the level that we have indicated before, namely a high single-digit million Euro amount for the year. This includes the one-off effects early in 2021 which then will lead to savings later, i.e. in the second half of the year. So overall we will remain on the OPEX level we have guided to before.

**Q - Janardan Menon, Liberum Capital**

Understood. And the last question I have is just on your gross margin, you have achieved higher levels of gross margin in the past than 40%, and I agree you're starting from a low level. But I'm just wondering is there any conservatism on that 40% are there any sort of headwinds that you see over the next three or four quarters which could have a depressing effect on the margins? Thank you.

**A - Dr. Felix Grawert**

The previously higher gross margin that you mentioned was to a large extent also driven by different USD/EUR exchange rates. If you remember, in 2020 we were at an average level of 1.14 USD/EUR, and now, we are expecting an exchange rate of 1.25 USD/EUR for the remaining three quarters. For fiscal year 2021, we have realized EUR 50 million at an average rate of 1.22. So of course, the budget exchange rate of 1.25 USD/EUR is a headwind for the remainder of the year compared to Q1 and to the past year. We will now have to see how the USD/EUR exchange rate develops. If it develops in our favor, the gross margin might be a bit better.

**Q - Janardan Menon, Liberum Capital**

Understood, thank you very much.

**Q - Uwe Schupp, Deutsche Bank**

Two questions, firstly on OLED and secondly on the order guidance. Felix, can you shed some light on your thinking regarding the OLED project overall?

Because I was wondering, wouldn't this have been almost the ideal time to say, okay, we have to admit defeat, our longtime customer basically didn't pursue the project and for now we are taking it to a smaller scale? And if you achieve revenues there – fine. And if not then not. In other words, why not make a finish here and then lower the expectation level somewhat? Because right now we are saying, okay, maybe some revenue will be coming in '22 but I wonder if you're getting the benefit of the doubt here.

Then I have a follow-up on OLED as well, that would be great.

**A - Dr. Felix Grawert**

Let me first of all clarify on the running cost. With the move we are making, the running cost is being reduced to a minimum. As I mentioned for 2021, the cost incurred in the first quarter, the one-off effects for the second quarter and the savings that we are realizing from the third quarter together sum up to the previously communicated high single-digit million Euros amount. However, starting from 2022, the running cost will be reduced to a low single-digit million Euros amount. I think this is what your question implied as a suggestion. We are doing exactly that. And only in the case when we secure a follow-on customer order, there will be customer specific R&D activities and costs associated with that.

Nevertheless, we do not expect that to happen before 2022, simply because we are now talking to a new customer, opening a new market, and we all know that currently travel to China is not possible due to the COVID related travel restrictions. And this is why we clearly do not expect to secure such an order before 2022.

**Q - Uwe Schupp, Deutsche Bank**

Okay. And in terms of the one-time costs that you are seeing for the second quarter, would those be in the EUR 3 million to EUR 4 million area?

**A - Dr. Felix Grawert**

Absolutely correct. That's the right range.

**Q - Uwe Schupp, Deutsche Bank**

So, that probably means that you are laying off a fair amount of people, is that correct?

**A - Dr. Felix Grawert**

A certain amount of people, correct.

**Q - Uwe Schupp, Deutsche Bank**

Okay. And so going forward, you're saying, that the running cost base should be more in the area of EUR 2 million to EUR 3 million per year.

**A - Dr. Felix Grawert**

Yes.

**Q - Uwe Schupp, Deutsche Bank**

Okay, got it. And then just checking on the order guidance, you obviously had almost 125 in Q1 and the high end of your guidance is 380. So that implies obviously a slowdown in the second half. Are you just cautious here or is that what you're trying to tell the market?

**A - Dr. Felix Grawert**

In fact, our order momentum in the market continues to be strong, and that's what we reflect in our guidance, which is about 25% higher than the previous year. However, we do not have full visibility for the full year at this point in time. Hence we do not know at this point in time much of that momentum will actually translate into orders. We should get more clarity on that in the course of the second quarter.

**Q - Uwe Schupp, Deutsche Bank**

Excellent, thank you very much.

**Q - Stephane Hourri, Oddo BHF**

Hello. I have two questions actually, the first one is on the APEVA. First to clarify if you have anything in your forecast for APEVA this year, I think the answer is no, but I prefer to ask the question. If you are talking to more than one potential customer, and also if you think that Samsung has decided not to do OLED because they prefer to go to other displays technologies such as Micro LEDs, you could actually benefit of that maybe in the longer term, correct? That's the first question.

And yes, looking at the rest of the year and your order pattern, you basically say that the momentum is great in terms of orders? Will it continue in GaN only or do you see also see rising orders in the area of silicon carbide?

**A - Dr. Felix Grawert**

We have always included APEVA in our full guidance, both in terms of order intake and in revenues. And our firmed up guidance also reflects the measures we are now taking in APEVA and also that we do not expect an order before '22. Therefore our firmed up guidance does not include any order intake or any revenues for APEVA. Our more

positive view in terms of orders and revenues for the year is based on the development of our MOCVD business only.

And what you said about the customer in Korea applies to all players in the market who put their focus on the development of Micro LED displays. In fact AIXTRON is very well positioned to capture the momentum from this market. We have mentioned that we are currently working with all the players in the market who are exploring Micro LEDs. We are very much looking forward to make our way into the display business. We see a good momentum for us.

With that I come to your second question, whether we expect the momentum for gallium nitride power electronics to continue throughout the year. The answer is clearly yes. We do not expect that this to be just a one-time effect in the first quarter. In fact, we expect a strong contribution from gallium nitride power electronics also in the second quarter. We see good momentum from GaN power also in the third and fourth quarter because many customers globally, namely in the U.S. in Europe in China and in Taiwan are expanding their facilities for GaN power.

And the other markets we are seeing strong momentum throughout 2021 are the market for telecom/datacom in the area of communications, as well the market for specialty LEDs, be it Mini-LEDs or Micro LEDs. So it's a quite a broad mix across all our end markets, clearly led by the strongest one - GaN power.

**Q - Stephane Hour, Oddo BHF**

And silicon carbide, will it be already this year or this is the next phase for next year?

**A - Dr. Felix Grawert**

I would say, we would see stronger momentum in silicon carbide in '22 then '21.

**Q - Stephane Hour, Oddo BHF**

So, given all these things you said, it means that you may reach your orders in the level of 90 million in Q2 already, so you will have secured your full year guidance, right, for revenue?

**A - Dr. Felix Grawert**

This figure refers to orders that are still shippable in 2021. And as mentioned before, each quarter successively will be stronger in shipments than the previous quarter which we are preparing for in terms of production capacity. Therefore we will have to see which of the orders which we are receiving, we can still ship in the year. Whatever we receive for example within the second quarter, we should be able to turn into revenues by December assuming a lead time of approximately six-month time from order intake to shipment. But please bear in mind, that very often we talk about a lead time of 7 to 8 months which explains why we talk about orders that we can still turn into 2021

revenues. Therefore the largest part of Q3 order intake will turn into 2022 revenues reflecting the typical lead times that we have on our shop floor.

**Q - Stephane Hourri, Oddo BHF**

Okay. Thank you very much.

**Q - Charlotte Friedrichs, Berenberg**

Hello. Thank you very much. The first question would be, if you can give us a little bit more of an idea of the split of the order intake. I think you've already alluded that it was mostly gallium nitride power, but can you talk a little bit about how exactly this split looked like and how you expect this to develop over the year?

**A - Dr. Felix Grawert**

Very happy to do so. So in the first quarter, the split was just slightly below 50% for gallium nitride power, followed by telecom/datacom, including the radio frequency portion of telecom/datacom. And lastly, followed by a mix of order intake from the different areas of specialty LEDs, mostly Micro LEDs. So those three were the main contributors for the order intake in the first quarter of the year.

Taking into account that our forecast cannot be as precise as actuals with three quarters still to come when looking at the total year '21, we expect that GaN and silicon carbide power electronics together will make up roughly half of the order intake, again followed by telecom/datacom. In this case, both the RF portion as well as the optical communications portion will take the number two place. And again, the specialty LEDs, both Micro LED but also mini LEDs will take the third place. So you can say, if you look at the total year, the first quarter is probably a good representative for the total year split.

**Q - Charlotte Friedrichs**

Okay, understood. You said with the APEVA business that you're no longer looking to do entire production line, but rather focusing on smaller components. Can you elaborate a little bit on that?

**A - Dr. Felix Grawert**

With the formation of the joint venture in Korea we had focused our APEVA business on both the differentiated components, which are the key of what would have been produced in Germany, as well as the automation and handling systems and a big OLED chamber that would have been contributed by our partner H&IRUJA.

What do I mean with this big chamber? Imagine a conference room which is large enough to hold about 15 people, that's about the size of such a system. And you can

imagine the more profitable parts are the differentiated key components, whereas the big steel and vacuum systems carry lower margins. However, they need to be produced very close to the customer.

Now, we are moving away from Korea to be addressing the China market. In China, analysts expect about 70% of the OLED CapEx spending, that is several billions, over the next years. We also get requests from customers for a certain degree of localization. Furthermore, we see a certain price expectation of customers. For all these reasons combined, we are now focusing on the differentiated components, which is the core of the OVPD technology and the therefore the differentiated element. We are pulling out of all the other systems components being less differentiated and therefore carrying lower margins.

In numbers, due to the new focus we now speak about roughly half of the revenue levels that we had expected before. However, in terms of absolute profits that can be realized, we do not expect a major decrease compared to the absolute profit that we had expected before. Against this background combined with the OPEX reductions that come along with this move, you can very well follow our strategic rationale for this.

**Q - Charlotte Friedrichs, Berenberg**

Understood, thank you very much.

**Q - David O'Connor, Barclays**

Maybe if I can go back on OLED again, can you give us a bit more detail of what was the exact reason your Korean customer didn't adopt your technology? Was it performance, something in the technology that didn't work or integration or down to a cost issue? If you can give us a bit more color there.

And then related to that, I mean, if your Korean customer didn't adopt OLED, what gives you the confidence that you think Chinese customers will now adopt the technology?

And I have a follow-up. Thanks.

**A - Dr. Felix Grawert**

Thank you very much for your question. Our Korean customer has decided strategically to switch from OLED to pursue the development of other display technologies such as Micro LEDs, because our Korean customer is focusing on the high-end market within the display area. They also see that all new investments into OLED technology are moving to China, because the Chinese display makers are mastering OLEDs roughly as well as the Korean display makers are doing. According to our interpretation, they see

no further differentiation potential in OLED which is why they are giving up their OLED program and consequently they also move away from our system.

So very clearly, it has nothing to do with the failure of our technology. We completed the qualification successfully in December. It is rather a consequence of the strategic decision of our customer to move away from OLED. And at the same time, the shift of OLED investments to China explains, why we now focus on the China market as the Chinese are still expanding in OLED, as I mentioned earlier on.

**Q - David O'Connor, Barclays**

That's very helpful. Thank you. And then maybe separately on silicon carbide. You mentioned that you expect stronger momentum in 2022 on silicon carbide than this year. Can you give us a bit more color on what you're seeing to support that statement? Thank you.

**A - Dr. Felix Grawert**

Yes. We see a wider adoption of battery electric vehicles across the automotive industry, we all hear the announcement of car makers about new models. Many of those models are ramping in 2023/2024. Calculating backwards, the component makers or the chip makers will have to significantly upgrade their factories starting in 2022/2023 to prepare for a launch of new car models just one year ahead. That's the reason why we expect a strong momentum starting in 2022 and rather smaller expansions in 2021. But the real strong momentum to come from 2022/2023 onwards.

**Q - David O'Connor, Barclays**

Okay. Understood. And that's what your customers indicating to you, correct, at this point?

**A - Dr. Felix Grawert**

Correct.

**Q - David O'Connor, Barclays**

Excellent. Thank you.

**Q - Lee Meyer, Lord Abbett**

Hi, thanks for taking my question. It appears as though the conversion of your order book and of your orders into revenue is a little bit low. And you talked about lead times, are your lead-times extending? And have you been affected by the shortage of semiconductors in any way, which is curtailing the production of your equipment?

**A - Dr. Felix Grawert**

Very good questions. Let me come to the second part of your question first. We are not seeing any limits or shortages in supply nor are we shifting revenues from one quarter to another, because there is a component shortage or similar. In fact, we can ship to the dates agreed with our customers. And this is very much in line with our full year guidance and distribution of revenues throughout the four quarters of 2021. This is a clear reflection of the desires of our customers on the reception of their system.

To the point of the chip shortage you mentioned: We are not directly affected by this at the moment. Nevertheless, have seen customers placing orders maybe a little earlier in advance to secure a production slot on our shop floor. If a customer, for example, is building a new factory or extending their facility, expecting to have their facility ready in Q3 and Q4, their logic might be to place their order rather earlier than later in order to secure a production slot and ensure the shipment of the system in line with their plans. In addition some customers may have thought, there might be limitations due to an overall chip shortage in the market, others might have thought that the strong demand throughout our product portfolio might lead to full utilization at AIXTRON. This overall situation could have motivated some customer placing the order a bit earlier than they would have normally. But clearly this is not due to limitations on our side.

**Q - Lee Meyer, Lord Abbett**

Okay. So, lead times in general then have not extended. And you mentioned that they are six months or did you say seven to eight months?

**A - Dr. Felix Grawert**

Six to eight months is the standard lead time.

**Q - Lee Meyer, Lord Abbett**

Okay. Thank you very much.

**Q- Jan Erik Schmidt, Loys**

Thanks for taking my questions. I just have a quick question on the CapEx, you mentioned that there are still some investments in capacity to be able to cover the strong Q4 revenues you expect. Just on the CapEx guidance then, what kind of number is expected for 2021 and maybe the coming years then?

**A - Dr. Felix Grawert**

In the previous years, our Capital Expenditure was typically on a level of EUR 10 million to EUR 12 million. And in 2021, we expect the CapEx around EUR 25 million. The increase is partly driven by investment into our facilities. Even more, it is driven by investments into our prototypes and enhancing our laboratory in order to complement the renewal of our portfolio on the R&D side.

**Q- Jan Erik Schmidt, Loys**

All right. And so, after 2021 it's going to go down to EUR 10 million to EUR 12 million again?

**A - Dr. Felix Grawert**

I wouldn't dare a forecast for 2022 yet. I would rather hope that our revenue keeps increasing and we further need some expansion of the production side. But we are now in Q1 of 2021, and thus is too early for a 2022 outlook.

**Q- Jan Erik Schmidt, Loys**

Okay. And then just on the net working capital. You mentioned that you had a larger chunk of prepayments, so that effect is going to normalize over the course of the year going back to normal levels or is that some sort of structural trend we might see or is that just a kind of timing effect?

**A - Charles Russell**

It's actually a timing effect. And I think that normally we would expect to see somewhere around 40% customer deposits relative to the order backlog. So this is just a one-off event I expect.

**Q- Jan Erik Schmidt, Loys**

All right. Okay. Thanks.

**Q - Malte Schaumann, Warburg Research**

Good afternoon. The first one is on OPEX, just a clarification. Last year you had kind of EUR 20 million related to OPEX, which is not expected or guided to be less than EUR 10 million. So if we then perhaps assume, owing to the fact that R&D should be significantly higher owing to the qualification work you're doing, that OPEX in general should be relatively flat in this year and then there's a chance OPEX will come down next year and then the OLED contribution on OPEX and maybe lower qualifications have an effect.

**A - Dr. Felix Grawert**

In 2021, we expect an R&D expense of around EUR 55 million, and an OPEX level of around EUR 80 million. In 2022, we could expect these numbers to go down, R&D

expense maybe around EUR 45 million and an OPEX level of roughly EUR 70 million to EUR 75 million.

**Q - Malte Schaumann, Warburg Research**

Okay. And then in 3D sensing. You mentioned all the other areas pretty active, less so on 3D sensing, maybe it's because the strength of the other areas, but what's your take on the opportunities you see in your pipeline in that area?

**A - Dr. Felix Grawert**

In 2019 and 2020 we have seen customers absorbing the overcapacity that was built-up in 2018. So, demand from that application was very slow for us. In 2021 though, we see demand from that space gradually coming back. We see some initial customer inquiries. However, we do not expect the 3D sensing driven demand to be a major part of our 2021 order intake or revenue. It's still a fairly limited number of systems we expect to ship. Nevertheless, in 2022 and the following years we expect an increase of 3D sensing driven demand due to new applications taking advantage of the 3D Sensing capability on the world side of the smart phone. In addition, we see additional demand drivers from applications such as contextual awareness of robots or LIDAR for autonomous driving.

**Q - Malte Schaumann, Warburg Research**

Okay. Maybe a quick one on service revenues. You see a significant expansion of business activities in this year and then going forward. So when should we then expect following that kind of expansion of your after sales revenues maybe not immediately, but some point in time one should expect that.

**A - Dr. Felix Grawert**

I would expect that by 2022/2023 this should start having an effect on our P&L.

**Q - Malte Schaumann**

Okay. Good. Thanks.

**Guido Pickert**

Thank you very much. With this, I would like to conclude today's call. Thank you to all of you for attending. Please note that our next earnings call will be on July 29, 2021, for our Q2 '21 quarterly results. Thank you. And bye bye.