

# **AIXTRON SE**

## **Analyst Earnings Conference Call**

**Q1/2023 Results**

**April 27th, 2023**

Edited Transcript

**Executive Board**

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

**Dr. Christian Danninger, CFO**

The spoken word applies

## **Slide 1 –Forward-Looking Statements**

**Guido Pickert**, *Investor Relations & Corporate Communications*

Welcome to AIXTRON’s presentation of our first quarter of 2023 results. I’d like to welcome our **CEO, Dr. Felix Grawert** and our **CFO, Dr. Christian Danninger**. This call is being recorded by AIXTRON and is considered copyright material. As such, it cannot be recorded or rebroadcast without permission. Your participation in this call implies your consent to this recording. 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 our CEO for opening remarks. Felix?

## Slide 2 – Q1/2023 Highlights & Operational Performance

**Dr. Felix Grawert**, *Executive Board*

Thank you, Guido! Let me also welcome you all to our results presentation. I will start with an overview of the highlights of the quarter and then hand over to Christian for more details on our financial figures. Finally, I will give you an update on the development of our business and our full year guidance.

Let me now give you an overview of the key business developments in Q1/2023 on **slide 2**. Demand for our equipment remains strong with an **order intake** of EUR 140 million, up 7% year-on-year, driven in particular by the strength of demand for wide-band-gap **Power Electronics based on GaN and SiC**. The vast majority of orders in the quarter were driven by demand from this area. We have a number of very large customers that are building high volume manufacturing capacities and are placing orders to build up the respective volume capacities step by step. From a regional point of view, the largest demand was recorded from customers with production sites in Europe. We see further adoption of the **Gallium Nitride** material system in medium voltage applications as well as residential solar applications. Our growth in the area of **Silicon Carbide** is mainly driven by the increasing adoption in electromobility as well as by us, winning additional new customers. The positive development in SiC is clearly supported by the great acceptance of our new **G10-SiC dual wafer size production tool** which we expect to become our top-selling product for 2023. Demand for tools to produce **Optoelectronics** as well as tools to produce **LEDs including Micro LEDs** continue to contribute to our overall strength in orders. As a result of all that we can report a very solid **order backlog** of EUR 418 million, up 60% year-on-year. Our Q1/2023 **revenues** have been affected by the delayed granting of export licenses. For a number of units, the licenses had not been issued

by quarter end. We are in close exchange with the government and have received clear signals that the licenses will be issued shortly. Hence, we expect that the tool deliveries can be executed in subsequent quarters. Now, I will hand over to our CFO Christian Danninger. He will take you through the Q1/2023 financials. Christian?

### **Slides 3-5 – Q1/2023 Income Statement, Balance Sheet, Cash Flow Statement**

**Dr. Christian Danninger**, *Executive Board*

Thanks, Felix, and hello to everyone. Let me start with the financial highlights of our **income statement** on **slide 3**. As Felix mentioned, **orders** in the quarter continued to be strong and our **backlog** was up, driven by the mentioned strength in demand. **Revenues** at EUR 77 million were slightly lower compared to EUR 89 million last year. To a large part, this was due to the delayed export licenses which pushed shipments of finished tools out of the quarter. **Gross profit** was at EUR 31 million, **EBIT** was at EUR 3.5 million and **net profit** also was at EUR 3.5 million for the quarter. These amounts are below the prior year quarter, mainly due to the mentioned timing effects resulting in the shift of tool deliveries. **Gross Margin** was at 40% compared to 41% the year before. **OPEX** in the quarter went up to EUR 28 million, predominantly driven by higher R&D spending and higher personnel expenses compared to the previous year.

Now to our balance sheet on **slide 4**. **Inventories** increased from EUR 224 million at the end of 2022 to EUR 295 million end of March, which is mainly due to the inventory build-up in preparation for the higher expected business volumes in the upcoming quarters and to a smaller degree to the previously mentioned delayed

issuance of export licenses. Our strategy to prepare our complete supply chain well in advance for further growth has proved highly effective over the last two years. We are very consciously managing our inventories to enable us to offer acceptable delivery times to our customers. Our ability to ship is highly appreciated by our customers and has repeatedly enabled us to win against competitors. **Trade receivables** were EUR 63 million at the end of March down from EUR 120 million at the end of 2022 mainly due to the collection of receivables from Q4/2022 shipments. The **advance payments received from customers** at quarter end were EUR 162 million, representing about 39% of order backlog. This led to a **total cash** balance including other current financial assets of EUR 328 million. Out of this, EUR 237 million were invested into funds following a very conservative diversification strategy.

Just a quick word on our Free cash flow on the **next slide** before I turn back to Felix. **Free cash flow** in the first quarter was EUR 2 million, down from EUR 22 million last year. The free cash flow was generated mainly from current earnings of the period. The strong cash inflows from receivables and down payments were mostly compensated by the increase in inventories. With that, let me hand you back over to Felix. Felix?

## **Slide 6 – Update on the 2023 Full Year Guidance**

**Dr. Felix Grawert**, *Executive Board*

Thank you, Christian.

Before giving you our view on the outlook for the remainder of the year 2023, I would like to share with you some highlights on our market development. As stated at the very beginning - the **order momentum** in particular in most of our addressed

end-markets **remains very healthy**. In the area of power electronics based on the material systems of **Gallium Nitride and Silicon Carbide**, the **momentum has accelerated further**. The order momentum for GaN epi tools continues to grow due to the increasing use of this novel material in Power Electronics. Orders for GaN Power accounted for more than one third of order intake in Q1/2023. The reason for this is that customers are addressing more and more applications with GaN – most recently with fast growing volumes in the medium voltage classes and also in photovoltaic applications. To create the required capacities, several major customers systematically build high-volume manufacturing facilities, relying on AIXTRON as their core supplier. AIXTRON was recently awarded the Supplier Excellence Award by one of these leading producers in the semiconductor industry. The award was given in recognition of AIXTRON's close partnership in setting up their volume production and the new AIXTRON GaN deposition tool G10-GaN, which the customer is already using. This new system will be widely launched later in the year and, in addition to improved performance, will offer significantly higher productivity with lower cost per wafer, as well as a completely new design with significantly reduced clean room footprint. The SiC business also continues to experience strong growth, driven by the ongoing expansion of electromobility. Several of AIXTRON's customers continue to build their high volume production with AIXTRON equipment. The new G10 SiC system, which was introduced in Q3/2022, is proving to be very successful, also in ongoing operations with our customers. It is already apparent that this SiC device manufacturing tool will clearly become the top-selling product in 2023. In addition, AIXTRON continues to win new customers with this new product. But also in the area of **Optoelectronics**, demand for lasers whether for 3D-Sensing or for optical data communication remains healthy. In **Micro LEDs**, we see the research activities to

develop next generation displays based on Micro LEDs continuing worldwide with strong momentum.

With that, let me now give you the **update on our full year guidance for 2023** on **slide 6**. As mentioned before, due to the lack of export licenses a number of tools could not be shipped in the first quarter. We are in close exchange with the authorities. We have obtained the request from the government to add an additional layer of protection in the tools that makes sure that they can only be used for the targeted end use. This additional mechanism has been implemented in Q1/2023 and based on this, we expect to receive the outstanding licenses shortly. Hence, we are planning to ship the respective backlog of tools in the course of the subsequent quarters. We continue to expect total orders for the year in a range between EUR 600 and 680 million and revenues to be in a range between EUR 580 and 640 million. We continue to expect a gross margin of around 45% and an EBIT margin in a range of 25% to 27%. Let me express our strong confidence to achieve our guidance - despite the short term effects from the delayed export licenses. 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 Christian. We will now take questions, please.

**Martin Marandon-Carlhian**, *ODDO BHF Corporate & Markets, Research Division*

My first question is on export licenses. Can you maybe give us more color on what is exactly the issue here and could it become more recurring in the future, that is first part for my question. And then this is, when do you expect export licenses to come? Should we expect them to come full at the same time or more as the year goes on?

**Dr. Felix Grawert**, *Executive Board*

As mentioned before, we have been asked by the authorities to add an additional level of protection, which ensures that our tools can only be used for those applications that export licenses are requested for. Let me give you a bit of context here: whenever you apply for an export license, you have to indicate as part of the license application, what exactly you intend to use the tool for. In this context, we have been requested to integrate a mechanism into our tool which ensures that the tool is only doing what it was permitted to do. We have fully implemented this mechanism within the first quarter of 2023. This is done and given that this is now completed, we expect that the licenses which are outstanding will now be issued shortly. In general, having to comply with additional terms and getting certain conditions is nothing unusual. We have received such requests in many cases also in the past, so it is a normal procedure within the framework of applying for export licenses.



Now I come to the second part of your question which is whether we expect to receive the outstanding licenses all at once or whether this would be rather spread out? We don't know this exactly, but we don't expect the licenses to be issued in one big chunk. I would rather expect that they come in step-by-step, probably part of those within one quarter, the others stretching over two quarters. That is what we expect.

**Martin Marandon-Carlhian**, *ODDO BHF Corporate & Markets, Research Division*

And just maybe a quick follow-up on Wolfspeed, it seems that their 200mm ramp is slower than previously expected and some of the investments originally scheduled for H1 this year will be postponed to H2 this year and H1 next year. So did you notice any change in the order intake and does it change your expectations for silicon carbide?

**Dr. Felix Grawert**, *Executive Board*

I cannot comment on individual customers. However, some shifts within any of our silicon carbide customers would not change our expectation for silicon carbide revenue, it neither changes this year, nor does it change our expectation in the long-run, let me explain why. We have by now a relatively broad-base of customers in silicon carbide. So, Wolfspeed is not the only customer that we have and that we serve. And given that there is an overall very strong momentum, a potential shift

from one customer in a specific year to another customer does not affect the overall trend. Therefore our guidance is clearly unaffected by this topic.

**Michael Kuhn**, *Deutsche Bank AG, Research Division*

I have one follow-up question on the export licenses, because my impression is, that there are two elements of complication here. Firstly, you are being asked to add a new mechanism as you just explained. But also since last year, we've been hearing about personnel shortages in Berlin, in the Federal Office for Economic Affairs and Export Control (BAFA). So do we see an improvement there and do you see efforts by the government in terms of debottlenecking? And also in the context of export licenses, what amount of sales did you miss over the past six to nine months due to those delays? Second one on inventories, they were already high in December. Now, as of March, you reached close to EUR 300 million and you mentioned your inventory management enabling you to fulfill relatively short delivery times for customers. What absolute amount of inventories do you think is realistic to model for year end? And then the last question, on a Bloomberg article today, there were reports that Germany is in talks to limit the export of chip chemicals to China, have you heard anything about that topic and could that have any implications on your business as well?

**Dr. Felix Grawert, *Executive Board***

Let me take your questions on the export license topic first. You mentioned two effects – the additional mechanism and the personnel shortage expanding the process of granting the licenses. The statements you made are correct, as there are in fact these two effects. For both of these effects, we have an approach to deal with them. As mentioned before, the additional mechanism has been developed and installed within relatively short-time. Hence, that topic should be off the table. The topic of shortages of personnel and overall longer processing time required for granting the licenses unfortunately remains. We address this topic by pulling forward the completion of the application. So as soon as a customer order comes in, we work closely with the customer to prepare all the required documents. And such an application requires a lot of documentation, about the end-application, the customer, and so on. And we have been very clear to our customers about this whole procedure and given now that everybody has this topic apparently on their radar, you as investors, we as a company, but also our customers, we now have a common understanding that this documentation must be submitted to the authorities as soon as an order is placed. In the past, the lead time for manufacturing our tool took much longer than getting the license. Now that getting the license takes so long, we now have to make sure that the applications for the licenses are submitted as quickly as possible. Based on that, we believe that this topic which had a very big effect on us in the first quarter will go away and we will then come again to a more predictable

steady state, and this can be forgotten in a couple of quarters. From our point of view, we have a very clear road map how to address this and get this topic out of the way. So that I think was the first part of your question.

On the second question, how much revenues we missed due to that topic, please let me make one clarification in case of doubt. We clearly did not lose any revenue and we did not lose any customer who went away, so there is no lost revenue for AIXTRON. However, revenue has been shifted from one quarter to another. In Q4/22 we shifted around EUR 20-30 million into 2023. This quarter, additional revenue of about EUR 50 million could not be realized, such that a total of ca. EUR 70 million of revenues has been shifted out of Q1, which we could have realized if the licenses would have been there. These revenues we now expect to realize in subsequent quarters of 2023.

I understand that you had a further question related to discussions on restricting the delivery of chips chemicals from Germany to China. I would see this in a similar direction as the ASML case, that went through the media some 1-2 months ago. We clearly see that our case is very different for the following reasons. Both the ASML case and also as I understand it, the chip chemicals case, seem to be part of the trade war where some Western governments or Japan are trying to prevent certain technologies or required consumables to go into China. In our case, China has a very strong local equipment industry. So the respective trade agreements, Wassenaar and so on, talk about local availability which is fully given for MOCVD equipment in

China. We all know there is quite a large number of local makers of Epitaxial equipment, who are also able to reach the most advanced performance specs. Therefore, they have all the capabilities. And in addition to that, there is already a very large installed base of Epi equipment in China in contrast to the ASML case, where there's no EUV or Deep UV system in China available yet. This makes clear that there is absolutely no point in restricting MOCVD shipments into China. So that gives you the understanding why our case is different. And with that, I hand over to Christian about the inventories topic.

**Dr. Christian Danninger, *Executive Board***

Thanks, Felix. If we look back a couple of years, we are just coming out of a time of material shortages, supply chain restrictions, etc. which required a lot of operational efforts to serve and satisfy our customers on time. We are now getting into the range of inventory levels required for the actual business performance, but also for the further growth that we are seeing. Just to give you a few numbers, if you look at our Q1/23 inventory level and the development from the same quarter last year, our inventory pretty much doubled. Our down payments also doubled in the same time frame. You see that a big portion of the inventory is already financed by our customers. That's all very well backed up by the order backlog that we have which also developed in the same direction. Going forward, to your question which levels to expect for the end of the year. I cannot really give you that

number because that would basically be guiding into the next year as it is mainly depending on the order backlog at the end of the year, which is the primary driver. But looking at the ratio of our inventories as a percentage of order backlog being at 50% to 60% - this seems to be a reasonable range. Down payments are also at 50% to 60% of inventories. With that, you need to make your own assumption on the development going forward and what the backlog would be at the end of the year. As we are preparing for further growth, I would not expect inventories to significantly go down with the exception of the special situation that we have with the export licenses which should be resolved by the end-of-the year.

**Olivia Honychurch**, *Jefferies LLC, Research Division*

Hi, thanks for taking the question. On gallium nitride, given that that was so strong in the quarter on the order side, are you expecting that to remain the largest driver of orders for the current year and beyond going forwards? I know you've previously spoken about a split within Power of 60 to 40 in favor of silicon carbide this year, but just wondering if the outlook there has changed considering that strength that you've seen in GaN in Q1? And then my second question is on the 2023 guidance. You're sounding very positive on the hope and expectation that these license issues resolve within the full year, if that happens and we consider the strength that you are seeing in power and GaN and SiC specifically, would you say that there's potential

of an upgrade to that 2023 guidance later down the line through the remainder of this year as you have done in previous years?

**Dr. Felix Grawert, Executive Board**

Thank you very much for these two questions. The first one I talk about the split between GaN and SiC. In fact, we see the momentum in silicon carbide unfolding exactly as we had expected and as we have reported. And we see the momentum in gallium nitride increasing further than we had expected before. Therefore, as gallium nitride sees bigger momentum than thought before, the 60/40 split might no longer be fully accurate. Nevertheless, we still see Silicon carbide ahead of gallium nitride with gallium nitride growing even faster than expected. That's what has to be considered.

Now to the second part of your question, referring to our guidance. As said before, we expect that this export license topic will be resolved within the next quarter or two, but definitely by year-end. Given that this is resolved and given the accelerating momentum in gallium nitride, it could well be that there might be an upgrade potential unfolding in the course of the year. But let's discuss that when we are really there. But you have clearly noted and identified this positive trend, that's absolutely correct.

**Gustav Fröberg**, Berenberg, *Research Division*

Well, I just have one really on new customer win. Could you maybe just give us a little bit more color around new customer wins sort of in what end market or for what applications are you seeing those new customer wins? And how far along in their own manufacturing process are these new customers that you're winning?

**Dr. Felix Grawert**, *Executive Board*

We see the new customer wins of today driving revenues of tomorrow. And we see that happening in multi dimensions, let me go through them step-by-step. First in silicon carbide, we see the momentum for the overall market continuing as mentioned. And as said before, we see our G10-SiC tool being very successful in the market. And we have reported previously that we are in a close connection with some of the leading players which is continuing. We further had reported that there is very large number of new entrants not only from the power electronics industry, but also players from the silicon industry, or automotive and electronics tier 1 manufacturers who are now newly entering the field of silicon carbide power because everybody can see the gigantic market opportunity as essentially the whole automotive world goes electric. And we all know silicon carbide is the material of choice for this area. And from many of these new entrants into the field, beyond the established power IDMs, we continue to win further new customers throughout the first quarter of '23. These are customers situated around the world, so really across



all geographies, both in Europe and the US, but also in Asia, for example in Taiwan and in China. That is the basis for a further acceleration of this momentum on the silicon carbide side. It's a continuation of a trend, which we have been speaking about.

Now I move over to gallium nitride. As I indicated, we see an additional momentum coming from the lower voltage photovoltaic space. And in gallium nitride we see that existing customers who have already qualified our platform now having three, four, five, maybe seven or eight systems, are now expanding and really planning and building large facilities with the objective to dedicate these fabs for gallium nitride power chips. And they are sharing their long-term growth plans with us on how such fabs will be equipped. And this applies to not only one customer. There is a very decent number of existing customers with expansion plans. At the same time, we continue to see new entrants or customers who have been in the R&D stage, now very seriously starting to enter this field. In addition, we have been able to convert some players who have not been our customers yet, to become our customers in the field of gallium nitride. So it's a positive trend across the market.

**David O'Connor**, *BNP Paribas Exane, Research Division*

Maybe first on the silicon carbide side, just a follow-up to the prior question. Have you seen any wins of new customers among the top five power device manufacturers? I know you talked about new entrants and some other wins in Asia,

but specifically the top five, the big five power device manufacturers, that's the first part of my questions. And also related just to clarify your answer to a previous question, you mentioned that your big US customer in silicon carbide did push out some orders, but this was offset by strength at other customers, could you please elaborate on that a bit further just to clarify that?

**Dr. Felix Grawert, Executive Board**

On your question about further customer wins from the top five, please give me two more quarters and I can give you an update on that one. The second question I took, whether we compensated some push outs of a large North American customer who is known to be our customer. As you know, we never speak about specific customer plans, treating our customers' information confidential. I would also like to keep it that way during our call and therefore not directly comment or answer your question, please understand that. However, I can tell you that across the whole industry both in the silicon carbide and in the gallium nitride segment as well as in the area of Micro LEDs, we have seen customers building fabs across all our end applications over the last 12, 15 months. Nevertheless, due to supply chain and material shortage issues, some customers be it in North America, or be it in Europe or Asia had to shift their plans here and there by a quarter or a couple of quarters and we had to react in a flexible manner to that. In addition to the fact that some factory constructions of customers take longer, I think this is a very normal thing in

this overall massively growing market for compound semiconductors that we see. You have to take into account that it's a very different thing whether you are expanding within an existing fab and you just need to install some additional electricity, water and gas lines and moving some tools or whether you really have to build a complete new fab from scratch with all the requirements that come with that. We have seen all of that across the board. But overall, as you can see, we have very well managed that by having flexibly allocated slots from one customer to another as part of our daily business, nothing to really worry about.

**David O'Connor**, *BNP Paribas Exane, Research Division*

Maybe a follow-up just on the orders, what was power in total in Q1? And then lastly, can you give us an update on Micro LED?

**Dr. Felix Grawert**, *Executive Board*

GaN and SiC Power Electronics in Q1 represented about three quarters of total order intake. And to your second part of your question, in Micro LEDs we continue to be very strongly engaged with our customers there. The overall plans of our customers remain unchanged, meaning the big volume ramp and the ambition to make Micro LEDs the next big display application. But as reported previously, the mass transfer step remains a hurdle as a combination of technical and commercial challenges. It can be done on a technical level, but not at commercial scale and those things which

are commercially viable are not technically feasible. However, the Epi step and the processing of the LED are working fine, there are no major obstacles. And therefore, our customers, might still need another few quarters to resolve those topics before then the big volume ramp kicks in.

Nevertheless, we see some customers taking let's say smart compromises, meaning that they are not aiming for the highest volume applications in one shot. They would rather take a step-by-step approach, going for some high-end applications which are able to carry a premium first and do the ramp-up for higher volume applications more gradually.

**Adam Angelov**, *BofA Securities, Research Division*

So firstly, I wondered if you could quantify for us the rough the percentage of your revenue that you need export licenses for on an ongoing basis?

**Dr. Felix Grawert**, *Executive Board*

We need export licenses for all countries outside of the EU, the UK, the United States and Japan. We do need an export license for shipments to China, Korea, Taiwan, Malaysia and the rest of world. So roughly estimated, we need an export license for about 30 to 50% of our revenue split we expect for 2023.

**Adam Angelov**, *BofA Securities, Research Division*

And so it's for all tools to those geographies, it's not restricted to certain ones?

**Dr. Felix Grawert**, *Executive Board*

Exactly.

**Adam Angelov**, *BofA Securities, Research Division*

So, secondly, on your power electronics orders which obviously have been very strong. I am curious to know whether you view the order strength is sustainable, let's say, into 2024 or is it a case that some orders having been ahead of large fab buildouts and so the orders are coming in now and maybe would slow down later?

**Dr. Felix Grawert**, *Executive Board*

I can confirm that we do see this as a sustainable and steady trend because the customer base in this market is following a dynamic where they build their fabs step-by-step. They are adding our tools roughly on a quarterly basis as the customers expect their revenue ramp to come. Such revenue ramps are based on the megatrend of – let's call it – “*the electrification of everything*”. This applies to the very efficient gallium nitride power electronics, allowing us to cut down the energy being wasted and converted into heat. It also applies to silicon carbide power

electronics where the benefit is that you get more mileage out of your battery. It's a continuous and steady trend. And we don't have any customers amongst these, which are driven by government subsidies which would lead them to fill a complete fab and then the full fab would be just sitting there. We have seen this in the blue LED boom about a decade ago, where Chinese subsidies triggered exactly this. In contrast to that, we see the current development as a very steady very, very, very stable trend according to customer behavior.

**Adam Angelov**, *BofA Securities, Research Division*

So they're basically ordering as they build out the fab rather than ordering all at once - is that the right way to read it?

**Dr. Felix Grawert**, *Executive Board*

Exactly, that's exactly how it goes.

**Adam Angelov**, *BofA Securities, Research Division*

And then last one from me just on competition in silicon carbide and to a lesser extent gallium nitride. I think in silicon carbide it's interesting that you and most of your peers are all speaking very positively about new customer wins and also about the 200 millimeter transition. So just curious, could we maybe be seeing some multi

sourcing from customers here or how can basically everyone be gaining share. And then on gallium nitride, I guess you've clearly had a very dominant share for a while there. So, are you seeing any increased competition there?

**Dr. Felix Grawert**, *Executive Board*

So let me take the second question first. In gallium nitride, we don't see a change on the competitive landscape. Therefore, this answer can be held very short.

In silicon carbide, there are multiple players involved and the market is very dynamic. I don't think that the incumbents of the industry are the ones getting the wins, it is rather the attackers to which we are counting. Remember, we barely had any significant silicon carbide revenue two years ago, so the attackers are taking all the new slots. This is the dynamic that we see, and that gives us the confidence because we are winning a large share of these new tools.

**Gianmarco Bonacina**, *Equity Research EQUITA SIM*

Three for me, please. The first one is about accounting on the backlog basically to clarify if the orders you got signed from your clients, but still doesn't have the export license. These are all in your backlog or not? So basically do you recognize them when you get the order signed or when you have the basically export license? Second question is about the lead time. So, forget about the export licenses, what's

your normal lead time at the moment from ordering to shipment. And then related to this, looking at your chart on the revenue guidance, on page seven. So considering your EUR 370 million of shippable backlog plus the Q1 revenues plus the after-sales. So to reach your guidance, you need less than one quarter of new orders. So, I am just wondering why is that because basically with the orders you will get in Q2, you will probably even overachieve this guidance, if you can clarify this point?

**Dr. Felix Grawert, Executive Board**

OK, three questions. To the first one, you asked about booking of our orders. As you know, we have very strict internal procedures for recording and booking equipment orders. These rules documented in our annual report. According to these policies, we undergo an individual risk assessment on several risk factors for each order at the time it comes in. One of these factors is the topic of granting of export licenses. Whenever we see a risk here in place, we don't record the order until the export license is granted. And yes, for a part of our orders, this is the case.

To your second question, the lead time for our tools is today between eight and 12 months and that already leads to your third question about the revenue guidance. In fact, we need less than one quarter of new orders to achieve our revenue guidance. However, if you bring that in relation to the lead time of shipment, you understand that an order we get in the beginning of the third quarter would be falling out of the year 2023 into 2024 simply due to the lead time topic.



**Gianmarco Bonacina**, *Equity Research EQUITA SIM*

Just a follow-up. So basically considering the orders in Q2 will likely be shipped at the end of the year and you have the EUR 70 million of machines which you built and you didn't have the license. And part of the EUR 70 million is not in the backlog. So the EUR 370 million probably is bigger, given that you will get the export licenses. This means that your real sales power for this year is bigger than this pie chart if you get the licenses and if you get, let's say a decent number of orders in Q2, is that fair?

**Dr. Felix Grawert**, *Executive Board*

Overall, this depends on individual factors like the lead times for the tools and how we get the parts for these tools for which the orders are coming in. And last but not least, it is also about the delivery date to which the customer wants to have the tool. In these days, several customers have experienced delays in completing their new fab construction projects. You see, overall, the revenue that can be realized in a defined time frame depends on multiple factors. Therefore, it is not as simple as just adding the numbers. An upside can only materialize if several positive factors come together. For example, first the customer wants the tools fast because they have the demand and the factory is ready. Second, all the export licenses are coming on time, and lastly all the components and the materials are available on time, and so on. In such a positive case, if it all comes together, then it could very well be, that overall

the numbers look even better towards the end of the year. But it's too early to say that today because many of these topics are external factors out of the control of AIXTRON. And what's out of our control, we can't consider today.

**Gianmarco Bonacina**, *Equity Research EQUITA SIM*

And just to conclude, sorry, out of this EUR 70 million of revenue, which is postponed because of the export licenses, can we assume that I don't know half of these are not recognized in the backlog? Is it the minority or is it the majority of this figure?

**Dr. Felix Grawert**, *Executive Board*

Probably something in the upper half, I would say.

**Malte Schaumann**, *Warburg Research GmbH*

Yes, two quick ones. First is on the export licenses again. Is it the case that the approval time for repeat customers will be shorter than what you're currently seeing - independent from the additional security layer which you have implemented?

**Dr. Felix Grawert, Executive Board**

This is what we expect. This is also due to the fact that for repeat customer orders, typically the approval goes faster than for new customer orders. Hence, your assumption is correct.

**Malte Schaumann, Warburg Research GmbH**

And then on the customers, could you provide a number how many customers have actively ordered or are actively ordering silicon carbide and GaN tools for each of the technologies?

**Dr. Felix Grawert, Executive Board**

On that I can only roughly estimate. Maybe 20/30/40 for each of these two material systems? In any case – it is a substantial number of customers.

**Malte Schaumann, Warburg Research GmbH**

Okay. Thanks.

**Guido Pickert**, *Investor Relations & Corporate Communications*

All right, thank you very much. With this we end today's call. Thank you all. Just a final remark from me. Please note that we would appreciate your support for our upcoming Annual General Meeting for which registration and voting is possible on our website at [aixtron.com/agm](http://aixtron.com/agm). This meeting takes place on May 17th, so any support would be appreciated. Thank you very much and bye-bye.