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## PRESENTATION

### Operator

Good day, ladies and gentlemen, and welcome to TomTom's Third Quarter 2020 Earnings Conference Call. (Operator Instructions) Please note that this conference is being recorded today. I would now like to turn the call over to your host for today's conference Megan Daniell, Investor Relations Officer. Please go ahead.

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### Megan Daniell

Thank you, operator. Good afternoon, and welcome to the conference call, during which we will discuss our operational and financial highlights for the third quarter of 2020. With me today are Harold Goddijn, our CEO and Taco Titulaer, our CFO. We will start today's call with Harold, who will discuss the key operational developments, followed by a more detailed look at the financial results from Taco. We will then take your questions.

As usual, I would like to point out the safe harbor applies. And with that, Harold, I would like to hand it over to you.

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### Harold C. A. Goddijn - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Thank you, Megan, and welcome, ladies and gentlemen. Thank you for joining us today. We are pleased with the upward trend that we saw in market conditions, and that has continued over the last 3 months. It's mostly best reflected in our Automotive business, which has shown robust sequential operating revenue growth. And that's a trend which we expect to continue in the next quarter. Our employees have shown agility and commitment to the company in response to the pandemic, and the challenging environment has not slowed us down in achieving our strategic priorities. We continue to invest in R&D, continuously developing and strengthening our product portfolio, and we believe that our ability to maintain course has also contributed to strong deal activity, which we have seen this year.

I want to turn to the key operational highlights for the quarter for a brief discussion. As you have seen, we announced a multiyear extension and expansion of our deal with Uber, our full suite of maps, traffic and Maps APIs will help Uber to enhance the location enabled solutions and that ensures a seamless mapping experience in the Uber apps, including its ride-hailing and food delivery services.

We deepened that relationship with Uber further as they will serve as a trusted map editing partner to us. Uber will collect on the ground insights from over 10,000 cities in which they operate and correct the database if needed.

In Automotive, we announced that we will provide our full stack solutions of maps, navigation software and connected services to Maserati in vehicle infotainment system. This is a full stack implementation and includes an automated map updater over-the-air.

During the quarter, we also launched RoadCheck. It's an industry first product for automated vehicles that contributes to safer driving. The product addresses a key industry challenge. It's a tool to define and control under which circumstances cars can safely operate in autonomous mode. This concludes my part of the presentation.

I'm now handing over to Taco for a closer look at the financials.

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**Taco J. F. Titulaer** - TomTom N.V. - Member of Management Board & CFO

Thank you, Harold. I will make a couple of comments on the financials and outlook, and then we'll go to the Q&A.

In the third quarter of 2020, we saw continued operational improvements in both automotive car production and consumer spending. These improvements translated into increased revenue compared with the second quarter as we reported group revenue of EUR 148 million.

Let me go through the revenue business by business. Our Location Technology business consists of Automotive and Enterprise and represents roughly 70% of our group revenue. Automotive reported revenue of EUR 66 million, a strong increase from last quarter, also supported by the start of production of new software platforms.

Car production volumes have continued to show recovery from the lows we experienced in April. This led to similar trends of growth in our operational revenue, which is reported Automotive revenue adjusted for the movement in deferred and unbilled revenue.

Our Automotive operational revenue grew sequentially by 24% to EUR 59 million. Because we see the positive trend continuing in the fourth quarter, we expect that the sequential growth in Automotive operational revenue will be similar to what we saw in 2019. That is in the 30% to 35% range.

Enterprise reported revenue of EUR 40 million, showing a modest decrease from last quarter. This decrease is because of a weakening of the U.S. dollar as most of our Enterprise contracts are invoiced in U.S. dollars.

We expect Enterprise revenue to show a limited increase in the fourth quarter compared to the third quarter.

Our Consumer business reported EUR 42 million of revenue in the quarter, an increase of EUR 12 million from last quarter as consumers generally spend more over the summer holiday period. This was also supported by the return to more normal levels of retail activity following the lockdowns we experienced in April and May. In the fourth quarter, we expect that Consumer revenue will show a sequential decrease similar to 2019. That is a decline in the 20% to 35% range.

Our underlying gross margin trend continues to improve as it benefits from positive mix effect of more software revenue. This positive effect was partly offset during the quarter by the start of the production of new automotive software platforms, including the new Maserati platform, which lowered the third quarter's gross margin. This means that the gross margin was slightly down compared with the same quarter last year. However, this decrease is also increased by one-offs included in the gross margin in Q3 2019.

If we exclude these one-offs of last year, the trend would have shown a modest 2 percentage point increase from last year. Our gross margin will trend at around 80% on average. Total operating expenses decreased slightly from the same quarter last year to EUR 180 million and is reflected mainly in marketing and selling general and administrative costs, partly due to discretionary cost control measures.

Free cash flow in the quarter was an expected outflow of EUR 20 million. We have a net cash position of EUR 346 million at the end of the third quarter.

Let me go to the next slide quarter-on-quarter development. The COVID-19 pandemic resulted in Automotive factory closures during the year. As Automotive revenue is based on the number of cars produced, this impacted our Automotive operational revenue. We saw the biggest impact in

April when most factories were under a total lockdown. As factories started to reopen, we saw gradual improvements within the second quarter. You can see here that this trend has continued, the third quarter is showing a strong sequential increase in Automotive operational revenue.

As mentioned before, we expect that this growth will continue and that the increase in the fourth quarter will be similar to the trend we saw last year. However, we expect that most of this operational revenue uplift will be placed on the balance sheet and deferred to later periods.

You can see a similar trend in our free cash flow over the quarters. We expect that the continued improvements in Automotive operational revenue, combined with seasonal cash receipts will result in a positive free cash flow of around EUR 30 million in the fourth quarter.

The next slide is the 2020 outlook. For the full year outlook, we expect that the group revenue will be around EUR 530 million with a gross margin of around 80%. As explained on the previous slide, we expect a positive free cash flow of around EUR 30 million in the fourth quarter. This means that we will have a full year of free cash flow of about negative EUR 30 million, translating into a net cash position of around EUR 375 million at the end of the year.

While we have seen notable improvements to revenue over the last few months, we still believe that the economic circumstances remain too uncertain to resume our share buyback program. We will continue to assess the position as revenue and free cash flow generation improves.

Operator, we will now like to start the Q&A session.

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## QUESTIONS AND ANSWERS

### Operator

(Operator Instructions) Your first question comes from the line of Francois Bouvignies from UBS.

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### Francois-Xavier Bouvignies - UBS Investment Bank, Research Division - Technology Analyst

My first question is around your deal activity. Harold, you mentioned in your opening remarks that the deal activity is strong. And given that we are now in October and that you have 9 months visibility, I guess you have a pretty good idea of where the order intake and backlog -- how is it trending versus maybe last year. So could you share with us a bit more color around the backlog? Should we expect, in Q4, maybe, not giving obviously the number, but just a trend of increasing maybe? And can you explain a bit more as well the deal activity. What are you talking about? What kind of products, clients is doing well at the moment would be great. I have followups after, if I may.

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### Harold C. A. Goddijn - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Yes., Francois thank you. Yes as you know, order intake is always lumpy. It's a binary process. It can vary from quarter-to-quarter. But if I give you the general trend, and I think that's what you're asking for, we saw, particularly in the first half, very strong activity with a number of awards. We're very pleased with that. Over the summer months, this slowed down, and that is also to be expected, nothing unusual in that. I think for the last quarter, it's hard to predict where we'll end up. We're working on things but it's not sure whether that will be awarded this year. And it's also not sure that will be awarded to us, of course. But I think the overall activity level is still at a good level and probably stronger than what we have seen last year.

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### Francois-Xavier Bouvignies - UBS Investment Bank, Research Division - Technology Analyst

Okay. And what kind of products is doing well, I mean, at the moment in your deal activity for global maps with global products or is it a particular features that...

**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

No, it's generic. It is just not a big change, I think we see more weight to ADAS type of content in the Automotive industry. We saw obviously, the Uber deal, it's not Automotive but it still was an important deal for us that came through. So that's all positive. And I think the biggest plus for us was that we won also contracts for new technologies that we will start shipping in '21, '22.

And we said in earlier discussions that we're fully moving towards online presence of all of our products and services, and that has been well received by the industry. And we've won early subscribers to that vision earlier this year. So it's full steam ahead. Very happy also, that that gives clear direction to all the engineering teams and the product teams. The route we've chosen has been validated by those early wins, and that gives a lot of direction and, generally speaking, a move to an online life.

And I think that a bit further down the line that is going to be very important because we see further opportunities for simplifying our product offering. When everything is going online, we can really concentrate our efforts in that domain. And that will help us to reduce complexity in our overall product portfolio. To give you a bit more color on that, if everything is embedded, there are variants of different flavors, different operating systems, different screen sizes and so on and so forth, all those products require significant localization and installation efforts.

Those efforts often run in the millions of euros per contract. And we think that we can leverage the online technologies to reduce those costs, concentrate more on core product activity development and that should lead us to a better place and better future.

**Francois-Xavier Bouvignies** - UBS Investment Bank, Research Division - Technology Analyst

That's interesting, your online comments. And I mean, how do you price that, I mean to your customer? I mean, the value of the contract increases because of the online or because the map pricing may be going down, so it kind of offsets this decline. And basically, you think the cost will decrease more than the price increases. How should we think about this...

**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

I think the longer-term effect is a further simplification of our product portfolio, that's really what we are trying to achieve. So get more concentration in the core products, and we're doing them really well. And then the integration costs typically will go down when services are delivered in an online framework.

We don't see a big impact on pricing as a result of going online. I think it's, generally speaking, a wash, but we're excited about the direction. It will deliver a much improved end-user experience, which allows us to better compete with mobile experiences. And generally speaking, the quality of our products will go to a higher level than what we have seen before, and a high level end-user satisfaction.

**Francois-Xavier Bouvignies** - UBS Investment Bank, Research Division - Technology Analyst

Okay. That's very clear, Harold. And maybe just on the -- you talked about Q4, you don't know if you're going to get rewarded. But it's not only for Q4, but do you see any change in the competitive landscape? I mean it's a very dynamic industry, the mapping, we see a lot of startups or local start-ups, I should say. Also Google trying for maybe more into the contract. In the last 3 months or so, I mean, do you see any change on people you are -- or companies you are competing with?

**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

We haven't seen a big shift or big wins that we're not aware of. It's always a tricky environment. You're right. There's a lot of flux in the industry. But I think we -- so far, we're holding course and everything is going according to plan. So no major shift in the competitive landscape that we have seen in the last quarter.

**Francois-Xavier Bouvignies** - UBS Investment Bank, Research Division - Technology Analyst

Okay. That's clear. And last one for me, and I will leave the floor to my peers. Around HD Maps. So you talked about ADAS content going up. Obviously, the pandemic created some uncertainty around the roadmap for autonomous driving, like you described last quarter. How is it going your HD Maps? I mean now we are 3 months, probably your customers have more visibility. Do you see the activity resuming for HD Maps? And how should we think about the contracts compared to, for example, what you said last year at your Capital Markets Day that you were rewarded, of course, on a small value market of 60% of the deals. How is it evolving these HD Maps in your deal pipeline?

**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Well, as I said, so HD Maps are applied in different ways throughout the technology stack. But if I look at the market for self driving and the progress that we've seen there, I have to say that has disappointed this year. I think there are 2 things playing a role here. First is the complexity of self-driving technology and that's a thing that has been underestimated.

The step from, let's say, Level 2.5 to 3 is a little bigger than most carmakers had anticipated is our impression. And the second one is justification of the system cost. The total bill of material for self-driving seems to be higher than originally anticipated and the ability for the market to absorb those costs seems to be limited. So overall, it has been disappointing in that domain. I don't think carmakers are losing sight of the end game. They're still working and investing, and so is our Tier 1s and all the suppliers and working hard to make the technology better and cheaper and democratize that.

But net-net, I think the developments in 2020 for us as a vendor, as a system component for Automotive self-driving systems in large-scale applications has been disappointing.

**Francois-Xavier Bouvignies** - UBS Investment Bank, Research Division - Technology Analyst

And what can you do about that? I mean, do you intend to change, therefore, maybe the investment or the development of HD because you see that it's not very high demand at the moment. Or you want to continue to invest and see how it looks like in, let's say, 1 year, 6 months' time?

**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Well, there are 2 levels of cost and investment going into creation of HD Maps. One is the technology itself to produce then what we call the pipeline. And there, we keep motoring. We keep investing in optimizing that pipeline for creation of HD Maps. And again, this is not just for HD Maps but also ADAS features. So this is a combination of video processing, LIDAR processing, applying of machine learning and visual recognition.

That's a complete domain of technologies and pipeline where we're quite heavily investing in. And that is, overall, to make the production of maps, ADAS Maps, HD maps, scalable, affordable and to a high standard of quality and that investment is continuing. If you look at the other side, so the actual production of HD Maps, we have slowed that down to an extent or we have not increased activity there. We're not extending our coverage at this stage. We have a product for the major roads in North America and Western Europe, where we provide HD Maps to the industry for evaluation, development and so on and so forth, that will continue, but we are not accelerating the coverage. The main effort now is to reduce cost of production and maintenance of those maps and that continues unabated.

**Operator**

(Operator Instructions) Your next question comes from the line of Marc Hesselink from EFA (sic) ING.

**Marc Hesselink** - ING Groep N.V., Research Division - Research Analyst

My first question on the Uber contract. Could you explain a bit more? Was it a request for proposal from the company? Or was it -- because you're already in a continuous discussion with them an extension of that -- of the initial contract? Could you maybe share why they selected you? And what is extra versus the earlier contract that you had with Uber?

Maybe does it, for example, also include the app that's being used by consumers?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Yes. So location technology, obviously, is super important to Uber, and it's a big ingredient of the primary processes for allocation of trips, calculating capacity. If you improve there only a little bit, it has a big impact on the bottom line.

So in waiting times, customer service and so on and so forth.

So for Uber, it's really important to have good control of the software to run those systems. They are part of their core IP and core technology base that makes Uber what it is. And of course, they don't want to rely on standard stuff. They want to have a great deal of influence to fine-tune, train those systems and make them better over time.

Our relationship with Uber goes back a long time. We can provide them with all the technology they need to do that, all that planning and all that really reliable. It's a function of the network, the navigation attributes, speed profiles, traffic information, incident data, POIs and so on and so forth. That platform has been growing, and they have built it over the years, and there's now heavy usage of the platform as well.

And hence, the desire of Uber to continue that partnership and extend the relationship and extend their licensing contract. So it's a continuation of a partnership that's been in the making for, can't remember exactly, probably 4, 5 years. It always takes time for those technologies to mature, but there's now a solid body of technology running on top of our maps, our routing and data and traffic information.

And it was a logical step to extend that, but also deepen that. So one of the things that we are keen about is that if there are errors in the map that we haven't detected ourselves or additions to the map that are relevant to certain customers or certain use cases, then we give Uber full control to edit, add and change those data. They've been certified and following all sorts of training programs, and that helps us to keep the cost of maintenance down, but also improve the accuracy and freshness of our maps.

So all in all, you see a type of partnership that works well in every dimension. So it was a great result for us, but also I think for Uber that we found a good way forward and start the next chapter in that partnership.

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**Marc Hesselink** - ING Groep N.V., Research Division - Research Analyst

And the consumer app of Uber, is that going to use TomTom or?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

No. That may be, but that's probably not on the charts, the driver apps, the back office are all based on the TomTom technology, but the linking to the user information is typically done to a native application like Google Maps or Apple Maps.

**Marc Hesselink** - ING Groep N.V., Research Division - Research Analyst

Okay. Clear. The second question is, I can remember from the previous quarter that you had to also adjust your backlog value a bit because some of the old automotive contracts, given the COVID-19 impact, became a bit less. What have you seen over the third quarter? If your expectation there changed? And did you see any of that impact again in this quarter?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Well, I think we are kind of struggling to see the trees from the wood here. There's a couple of things that are playing out here. So we had -- of course, we had capacity issues with pure production during the lockdown period. We've seen movements in stock levels at carmakers and inventory levels. We have seen movements in demand but it's not clear whether we have reached a new state, a new level from where we can start planning.

It's difficult to weigh all those different elements for all carmakers collectively. So we also don't know whether there's pent-up demand that was, kind of unfulfilled demand, during the lockdown period, whether that showed up all of a sudden in September or whether it will show up in Q4. It's just a little bit early to say how those different events and effects influence the underlying demand for new cars.

And I think if I look a little bit forward to 2021, then I have a hard time predicting what the overall economic outlook for 2021 will look like and how that will affect car manufacturing in 2021. I don't know. I don't think it's going to be a complete disaster. That's not what I think. But also don't think that we will go back to the levels we have seen in 2019, but there's quite a bit of bandwidth in between that. And that bandwidth will have a significant impact on the calculation of our backlog as well. We see that mixed messaging coming from the carmakers as well. We are asking them. And they changed their outlook much more frequently and significantly than what we are used to in the car industry. And it's also kind of an indicator of a level of uncertainty that we haven't seen before. But again, I'm not planning for disaster. I think it will be okay, but I also don't think that we will reach the volumes that we have seen in the pre-COVID period.

I think there's quite a significant bandwidth in between those outlooks. We learn with every month and every quarter. And maybe the forecast from the carmakers will also show a trend to solidifying and less variation.

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**Marc Hesselink** - ING Groep N.V., Research Division - Research Analyst

And then a final question. Over the last couple of years, we've seen obviously a very gradual increase in the take rates. And more recently, I see a big jump also in electrification, the sales of those vehicles. Do you also see that as a positive effect on your -- on the take rates? Is that something that's already visible for you?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Well, I wouldn't overestimate the volumes. We see, the signs are on green, let's face it. So massive investment programs. New cars coming off the line now more frequently than what we have seen before. And also much higher end user acceptance of electric cars. And we see really the beginning of a significant shift. But it's the beginning. We're coming from very, very low numbers.

I think we were used to 2% of the total manufacturing base is electric, but it's going up. And it's changing and shifting and that has a positive effect on the attachment rate. So one of the key things is range for vehicles. An accurate range prediction has a positive effect both on the peace of mind, but also on the bill of material of a car. And it has a positive effect on bill of material because you don't have to put excess capacity to reduce that range anxiety.

So it is a very important drive to get range prediction and EV routing sorted and provide drivers with accurate views on actual range, real-life range, not the sales brochure type of range that we're used to, but what it means in reality for me as a driver. And we will see implementations of

technologies, most likely in 100% of EV vehicles. That's our expectation, maybe 90%. But I have a hard time to believe that this will not be a standard feature in most, if not all, electrical vehicles.

And that ties in very neatly in the location technology in the navigation, in the mapping, in the routing, in the elevation data in weather data and so on and so forth. So we're assembling a complete suite of technologies to anticipate that demand. We're already -- the train has left the station, as you can imagine. So we are shipping EV routing ports already with a significant body of investment and research going into improving those products and collecting all the relevant data that are needed to come to a higher degree of accuracy.

Net-net, yes, positive growing percentage of electrical vehicles, that means higher attachment rates than what we are used to. But the real effect on our P&L now is still limited.

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### Operator

Your next question comes from the line of Wim Gille.

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**Wim Gille** - ABN AMRO Bank N.V., Research Division - Head of Research & Equity Research Analyst

Wim Gille, ABN. A couple of questions. For starters, Harold, you mentioned during the call that if you look at the bigger picture, the development for HD Maps has been quite -- or somewhat disappointing for you. However, if I look at the robo-taxi world and predominantly Waymo but also the big Chinese guys, they are progressing quite fine.

In fact, they are moving to kind of next levels, which will facilitate autonomous driving also for consumers. So how should I look at this divergence in the technology ratrace with the tech guys continue to advance, while the OEMs are falling a bit behind. Is there going to be a problem for your strategic positioning further down the road? That will be my first question.

The other question I would have is another kind of change that we see or which we saw in the quarter, if you look at the IVI operating systems, traditionally, that market was dominated by Linux and BlackBerry. But we see that Android is making some inroads in that area despite the fact that they don't have any safety significance and what have you.

Is the fact that Android is making inroads into the operating system of the IVI unit? Is that going to be an issue for you from a strategic point of view? Or would you say that for you, that doesn't really make a big difference, given the products that you have in the market? And the last question I would have is, in the press release or the Uber deal, you mentioned that you process close to 2 billion map changes a month. On top of my mind, you were already processing 2 billion map updates a month when you presented the last numbers during the Capital Markets Day. So what is kind of the -- is this like more of a rounding thing? Or is the -- are the productivity gains, if you will, are those plateauing at the moment?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

So first, some thoughts around robo-taxis. So robo-taxis typically operate in a confined geographical area, but are using all the road types in that geographical area. From a map-making perspective, you cover a predefined geographical area in its entirety.

The second element is that in robo-taxis, the pressure for bill of material is a lot less high because they are capital goods amortized over a long period of time, a lot of kilometers. So it's okay to stuff those cars with a ton of sensors and computing power, and it doesn't have a big impact on the economics. So the technology that's used there and the economic conditions are kind of opposite of what the car industry needs. The car industry is looking for all the roads in North America. So you get long stretches of road initially the highways, the closed access roads, completely covered. And secondly, there is a high-pressure on the bill of material. So it needs to run in a limited footprint in terms of storage, processing power and so on and so forth.

So you're really trying to solve a different product problem, there in the automotive space. Our technology is mostly geared towards the automotive customer base. We are playing around a little bit in the robo-taxi market, but it's not a clear technology standard there. There's not a clear route forward but we have our toe into that market, but we don't see it for us as a critical part that we need to play in because the problems we need to solve for volume applications and the technologies deployed there are of different nature.

Second question about Android. I think it can be a little bit confusing, but Android and Google are different things. So Android is the open source operating system that runs on top of Linux. And we see that operating system, making inroads in all sorts of devices, consumer devices, mobile phones, obviously, tablets, all sorts of hardware is powered by the Android operating system. And that is because it's free of charge. There's no license fee there. And it's very well supported by the silicon industry as well.

So there's a ton of hardware and a ton of experience and integrating and running Android on top of kind of vanilla flavor hardware. And we really encourage the automotive industry to go that route as well. Because it makes life easier for everybody. You have a much richer environment, you have hardware extraction layers. You can go faster at lower cost and have lower integration costs as well.

So I think it's a good thing for the industry if there is some level of standardization that will make it easier to deliver end user experiences that meet the expectations of today and tomorrow.

Then second, production of maps. Yes, you have the 2 billion number. It's kind of a useful indicator because it gives you a flavor of the throughput and the amount of processing that's happening in keeping those maps up to date. We have internal metrics as well, cost per change and the weight of a certain change, how that change has an effect on the real quality and how the end user experiences it.

So I wouldn't put too much weight on that single number but what I can tell you is that we're making, we're feeling good about process, progress we're making on our map making technologies, and we see efficiency improvement coming through everywhere. I spoke about HD, image recognition, all those technologies, we are really seeing significant improvements in throughput and reduction in cost per modification.

That is in itself good news but it's also a necessity. It's not that there's a real urgency to make further improvements there because the requirements are going up all the time. People have more accurate maps, better maps, more detail, more attributes, bigger geographical coverage, so improving efficiency for us is a key driver of our strategy, and we think we can make further progress there, significant progress in building that efficient mapmaking platform. We alluded also map editing partnerships, what we're doing with Uber, we do with other companies as well. That also helps us to find high-value changes in the database that we can then process at low cost.

So there's a big, big effort and a lot of focus on making that platform efficient, high throughput and deliver value for money.

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**Wim Gille** - ABN AMRO Bank N.V., Research Division - Head of Research & Equity Research Analyst

Very good. And maybe as a bit of a follow-up on your remarks, which is very consistent with kind of the things we've heard in the past that if you look at robo-taxis that they are essentially solving a different puzzle versus the OEMs, which need to have autonomous driving, which is working on every road in every jurisdiction and every circumstance, which is different from a robo-taxi. But given the fact that if you look at kind of the simple picture, the let's say, problem set that the OEMs have to solve is quite a bit more complex than the problem set that robo-taxi guys need to solve, so how come that you, but also HERE technologies for that matter, are not that well embedded in the robo-taxi world. Why do these guys do everything themselves and why they try to invent the wheel themselves rather than, basically, rely on the market standards which you and HERE technologies are?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

Well, that is because they are systems that are in development. They can use different technology. The technology they deploy doesn't need to scale. If I go driving around with a LIDAR, and I've just recorded all data, store on a hard disk of how many megabytes on a disc of how many megabytes, that's not a problem. I don't have to do much in order to create that map because it's not compressed or the need for

compression is not really there. There are other problems that are much more urgent for those robo-taxi guys. And because those are closed proprietary systems, the additional cost of scanning a neighborhood or a city are not prohibitive. If they had to do that for the whole world, you would be trying to solve a different problem. But that's not the state where the industry is these days.

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**Wim Gille** - ABN AMRO Bank N.V., Research Division - Head of Research & Equity Research Analyst

Helpful. Then maybe lastly, obviously, you announced the partnership with Microsoft already quite a few quarters ago. Can you give us a bit of an update on where you stand in terms of the number of API calls? And also maybe some of the recent news around, let's say, the progress that Microsoft is making into the automotive space?

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**Harold C. A. Goddijn** - TomTom N.V. - Co-Founder, Chairman of the Management Board & CEO

I don't have the actual API calls. But what we can see is further deepening of the relationship, so the traffic is going up. The use cases are expanding, we're moving into the Bing mapping platform now that will also drive a lot more traffic and interaction. So I would say that, that relationship, the partnership with Microsoft is on track and developing in line with our expectations.

They have a kind of an independent activity in automotive. They're coming from a different angle and that is to provide a cloud platform to collect vehicle data, interact with its customers, do data analytics and so on and so forth. They can do that independent from us or any other unit vendor. We are aware of their plans. We are aware of the commercial success, we collaborate where possible.

There's a good exchange, and collaboration there. But they are different products. So you have a cloud-based data analytics platform and a more embedded or in-car location technology platform that we are providing and there are ways to connect those two systems, obviously. But I think important for us is at the commercial level, that's all well. And we have a fairly good picture of what's happening in the marketplace.

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**Operator**

We have no further questions, if you wish to continue.

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**Megan Daniell**

Thank you so much for the questions. I'd like to thank you all for joining us this afternoon. And operator, if you can please close the call.

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**Operator**

Thank you. Ladies and gentlemen, that does conclude today's presentation. Thank you all for participating, and you may now disconnect.

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