

## ***Driving growth in Automotive***

### **Antoine Saucier – TomTom – Managing Director Automotive**

Good morning everyone, online, and in the room. My name is Antoine Saucier. I'm leading Automotive at TomTom. And I am as excited as my product colleagues to give you an update on where we are with Automotive. For TomTom, Automotive doesn't mean only potential cars. But we also addressing light commercial vehicles, trucks, and motorbikes, and two wheelers. Everything we're doing is based on our core three technologies, maps, software, and services.

Let's look at our market share in Europe. If you look at traffic information, we are the undisputed market leader in Europe with 75% market share, and we intend to continue doing that. On navigation software, in a still fragmented but consolidating market, we have built a leadership position and there is significant growth potential for us to continue. On map, also, we've built a very solid position and there is growth potential.

If we now move to North America, technology on the traffic side was a little bit different, so it takes a little bit longer for the market to convert to our technology. But progressively, we're getting there – we'll be leading. Same on the navigation software and on the map, where we've built a strong position and we're growing from that point. With those three key technology pillars, maps, software, and services, we're creating two product lines. One is the in-car navigation – as you know, a very customer-facing product. The other one, a little bit more in the background of the dashboard, is ADAS and automated driving features.

If we look at the navigation take rates evolution, we continue to see a strong acceleration on the take rate. What we call take rate is the percentage of cars that are getting navigation, out of the total production. The combination of the market recovery and take rate increase creates a significantly growing addressable market opportunity for us, both on the navigation side and on the ADAS and automated driving side. The adoption of ADAS services is driven by regulation, and I'll come back to that with the Intelligent Speed Assist example in Europe. It's also driven by a stronger appetite for automated driving features in the in the car. Navigation adoption is driven by more screens getting into car and this feature being considered as a must-have. But also electrification and the software-defined vehicle are triggering higher take rates and demands for navigation.

Let's look at electrification. Electrification is happening. OEMs have announced the end of the internal combustion engine, and we start to see electrical vehicles driving around. It's only going to grow in the future. And this is an industry revolution and massive transformation. It's also a significant transformation for the navigation experience. When you're in an electrical vehicle, you not only want to go from A to B, but you also want to be sure that you're going to make it to C, D, and E, charge somewhere, and ultimately make it home at the end of the day. This means we need to have an in-depth understanding of what your consumption model is with your particular EV. We also need to know about your calendar, where you're going to, what is the best location to recharge during the day, and how to make it home. Ultimately, this is a fundamental change in the navigation experience.

We're well-positioned in that market already, delivering to our current customers. We closed a deal with CARIAD, the software entity of the Volkswagen Group, and we will deliver navigation and traffic to all their cars starting from 2023 onwards, with a significant focus on electrical vehicle. We also look at new EV companies such as Fisker. Fisker is also going to launch with our full digital cockpit starting in 2023.

Moving on to ADAS. ADAS is also a growing opportunity for us, driven by the combination of regulation – I'll come back to ISA – and also higher take rates for different automation levels. For these products, we deliver both the data, the software that enables access to the data in the car, and also services that help customers to make those features available in their car in a safe way. The important example in this ADAS conversation is ISA. ISA, Intelligent Speed Assist, is a new European regulation that will start from 2024 onwards on 100% of all produced cars, and forces OEMs to show the speed limit somewhere on the dashboard. You can only do that if there is a map in the car. And that for us means that we're not only addressing the navigation market, but that we're moving towards 100% of the cars produced in Europe coming equipped with a map. And that's the deal that we have won with Hyundai-Kia – even more important in this deal, is that they took that opportunity to actually move from a certain percentage of cars with navigation to 100% navigation. So, ISA regulation has made them decide to equip 100% of cars driving in Europe with navigation. So, that doubles the opportunity for us – not only ISA-driven, but moving towards full navigation in these cars. And we're doing more with other OEMs. So electrification, ADAS and automated driving.

A third significant opportunity for us is the software-defined vehicle. Software-defined vehicle is a little bit of a buzzword, but what it really means is that OEMs are trying to take back control of the software part of the vehicle, as it is becoming one of the most important parts. And they do that for two reasons. First of all, it's a critical way to secure that the customer experience is where drivers are expecting it to be, basically meaning you have a smartphone-like experience in your car, in terms of software updates, in terms of access to your digital life and your applications. On the OEM side, software-defined vehicles also enable new business models, moving from selling only at the point of sales, to generating recurring revenue during the life of the car. Both customer experience expectations and revenue generation will be enabled by location technology. Everything you see on the screen is a map-centric type of interface. So, the map is at the core of the software-defined vehicle approach.

And this is where our Maps Platform comes in as a key enabler for that to happen. Harold has mentioned the importance of coverage. Our OEM customers are global, they are not necessarily shipping a lot of cars in Kazakhstan. But if you don't have Kazakhstan, you're not going to be able to address this or that particular OEM. And so it's a qualifier for business. It's a differentiator if you have better coverage than anyone else, and that is where we want to be. Second point is the content. There's always appetite for more content. You want to make sure you have the right POIs on the right road. You want to move towards head-up displays with augmented reality in the car, showing you the way to go directly on your windshield. It never stops. And there again, our Maps Platform can help.

And it's also about collaboration. Our customers today already contribute to our traffic information and our map improvements. They share with us all the GPS probes coming from the car. As we get more and more sensors in the car, the opportunity for us to get more data from our customers, to collaborate on this map also dramatically increases, and that's the conversation we're having at the moment.

Talking about collaboration, the software-defined vehicle also completely reshapes the relationship we're having with our customers. The typical procurement-type of three-year cycle, rechallenging everything on a regular basis, doesn't fit with the software-defined vehicle, where you want to have a long cycles of software updates, delivering features, and securing revenue generation along the lifecycle – not a standalone, or ship-and-forget, type of product and business model. So, a complete change, also in the way we interface with our customers.

Now, how does that materialize in terms of business? Last year, we announced our partnership with CARIAD, a long-term partnership on software and traffic information starting next year, rolling out across all the brands of the Volkswagen Group. This year, I told you about this Hyundai deal – triggered by ISA, but then enabling us to deliver maps and services in Europe as they fit 100% of cars with navigation. Fisker, a new OEM with a digital cockpit approach, launching also next year. And there's more that is fueling this amazing backlog that we announced today. So, we're winning deals, we're winning market share, we're winning customer trust. We're also getting more data from our customers that goes into our maps and our product improvements. We make it, therefore, even more difficult for our competitors to win the next upcoming deals. And that's where this continuous strengthening position comes from. And that makes me very confident about the future. And with that, I'll hand over to Mike who's going to tell you everything about Enterprise, thank you.