Deloitte.

Press Release

Contact: Isabel Box Title: Marketing & Communications Manager Tel: +32 (0)2 302 25 51 Mobile: +32 (0)485 31 79 63 Email: <u>ibox@deloitte.com</u>

Deloitte TMT Predictions 2020: Technologies become interconnected, private 5G and robots on the rise

- More than 100 companies worldwide will begin testing private 5G deployments by the end of 2020
- The smartphone multiplier market (hardware, content, services) will grow between five to 10 percent annually through 2023
- By 2023, the number of e-bikes globally should reach about 300 million, a 50 percent increase over 2019.
- Of the ~1 million robots likely to be sold for enterprise use in 2020, just over half will be professional service robots, generating more than US\$16 billion in revenue—30 percent over 2019 revenue.

Brussels, Belgium - 11 February 2020

Deloitte Belgium today released the 19th edition of its "Technology, Media & Telecommunications Predictions," which identifies three overarching themes. The first is how individual technologies are becoming ever more interconnected and interdependent, increasing their impact and value as a result. Smartphones, computers, TVs, enterprise data centres and software, and IoT will drive most of the TMT industry's revenue. Lastly, many previously hyped services and products will finally become a reality in 2020.

Vincent Fosty, Deloitte Belgium TMT Industry Leader: "In 2020, we will start to see a canopy effect where industry players will work more closely together as individual technologies like robots and private 5G become better connected. In Belgium, accessories are an important smartphone multiplier, driving industry revenues. An interconnected ecosystem with a limited number of significant players should allow us to foresee trends with greater accuracy and more confidence."

Professional service robots set for double-digit growth

Of the almost one million robots Deloitte expects to be sold for enterprise use in 2020, just over half will be professional service robots. The professional service robot sector is dominated by logistics. Just under half of the roughly 360,000 professional service robots sold to enterprises in 2019 went to logistics companies, with inspection and defense companies the next largest buyers.

There are two additional large and growing consumer robot markets: consumer service (for tasks such as vacuuming, lawn mowing, and washing windows) and entertainment. As time goes on, however, the distinction between robot types is becoming less clear. What a machine is called may be less important than what it can do.

Deloitte.

Jan Corstens, Technology Sector leader for Deloitte Belgium: "In Belgium, we particularly see robotics, assisted by AI, in use in elderly care facilities and healthcare business, hotels, retail, and even in surgery."

Private 5G: Enterprise untethered

Deloitte predicts that more than 100 companies worldwide will begin testing private 5G deployments* by the end of 2020, collectively investing a few hundred million dollars in labour and equipment. For many of the world's largest businesses, private 5G will likely become the preferred choice, especially for industrial environments such as manufacturing plants, logistics centers and ports.

"This is also a growing trend in Belgium where, for example, Deloitte Belgium is currently advising Orange in order to go to market with a 5G private network approach and technologies for several business-to-business clients," said **Tim Paridaens, Internet of Things leader at Deloitte Belgium** "We have been working closely together, designing use cases for connecting innovative technologies such as sensors, smart cameras, remote-controlled ships, autonomous vehicles and drones. These use cases illustrate the huge potential of 5G networks for industrial applications in domains such as safety, efficiency and reliability."

A smarter smartphone

The smartphone multiplier market (hardware, content, services) will drive US\$459 billion of revenue in 2020 alone and will grow between five to 10 percent annually through 2023, lifted by continued robust growth in its largest components. This means that in 2023, the smartphone multiplier market is likely to generate revenues of more than half a trillion dollars per year.

Tim Houben, Media Sector Leader for Deloitte Belgium: "Accessories are an important smartphone multiplier in Belgium. According to Deloitte's 2019 Global Mobile Consumer Survey, 76 percent of Belgians have a phone case and 50 percent owns a power bank in order to extend their smartphone battery life. We estimate that the average Belgian owns nearly six accessories."

Ad-supported video dominates streaming to consumers

Global revenue from ad-supported video services will reach an estimated US\$32 billion in 2020, Deloitte predicts. Asia, including China and India, will lead with US\$15.5 billion in revenue in 2020, nearly half of the global total. In China, India, and throughout the Asia-Pacific region, ad-supported video is the dominant model of delivering streaming video to consumers. By contrast, in the United States, most direct-to-consumer video offerings are pursuing an ad-free subscription model.

Audiobook and podcast markets grow

In 2020, the global audiobook market will grow by 25 percent to US\$3.5 billion and the global podcasting market will increase by 30 percent from 2019 to reach US\$1.1 billion in 2020, surpassing the US\$1 billion mark for the first time. In Belgium, more and more podcasts are being created, but not everyone is familiar with this medium. The majority of listeners are young people.

Roll to work

Tens of billions of additional bicycle trips per year will take place in 2022. The increase in bicycling will double the number of regular bicycle users in many major cities around the world where cycling to work is still uncommon. Deloitte predicts a 1 percentage point rise in the proportion of people who bike to work during the three years from 2019 to 2022. Between 2020 and 2023, more than 130 million e-bikes (using all battery technologies) are expected to be sold.

"Reserarch shows that a rapidly increasing number of workers in Belgium are also opting to cycle to work on bicycles that are more and more often leased by their employer. The success of the lease bike goes hand in hand with the discovery of the electric bike as a handy shuttle," added **Fosty**.

More insight from Deloitte's 2020 TMT predictions:

Deloitte.

- **AI has the edge:** A new generation of edge artificial intelligence (AI) chips will reduce frustrations caused by lack of internet connection on smartphones by bringing AI to the device. Deloitte predicts that in 2020, more than 750 million edge AI chips—chips or parts of chips that perform or accelerate machine learning tasks on-device, rather than in a remote data center—will be sold, and that the edge AI chip market will continue to grow much more quickly than the overall chip market.
- **Low-earth orbit satellites soar:** By the end of 2020, there will be over 700 satellites in low-earth orbit (LEO) seeking to offer global broadband internet, up from roughly 200 at the end of 2019. These new "mega-constellations" of orbiting broadband stations will potentially add more than 16,000 individual satellites to that count over the coming years.
- **Terrestrial TV's surprising staying power:** Antenna TV will thrive in 2020 with at least 1.6 billion people worldwide, representing 450 million households, enjoying some of their TV viewing via an antenna. Antenna TV will help the global TV industry to keep growing even in the face of falling TV viewing minutes and, in some markets, increasing numbers of consumers cutting the pay-TV cord.
- The workhorse of the internet: Deloitte also predicts the global Content Delivery Network (CDN) market will reach US\$14 billion in 2020, up more than 25 percent from 2019's estimated US\$11 billion. The market will double to US\$30 billion by 2025, a compound annual growth rate of more than 16 percent. This growth is being driven primarily by increasing consumer hunger for streaming video over the internet.

*Private 5G network: can be deployed either by purchasing its own infrastructure while contracting for operational support from a mobile operator, or by building and maintaining its own 5G network using its own spectrum.

About the 2020 TMT Predictions:

To ensure sustained business growth, it is critical that organizations address the increasing disruption posed by emerging technologies. Deloitte's Technology, Media & Telecommunications (TMT) industry practice brings together thought leaders and trusted specialists to shape many of the world's most recognized brands in these fields. Through its work, the TMT team aids clients in creating competitive advantage and helps them succeed in an increasingly digital world. Deloitte Global's annual TMT predictions serve as guideposts for future business strategy by providing a 1-3 year outlook on key trends in the global technology, media, and telecommunication industry sectors. The trends are based on a global analysis of figures and developments for each topic and help identify key challenges and areas of focus for the world's TMT brands as they navigate the impact of new technologies shaping the future of industry.

Deloitte in Belgium

A leading audit and consulting practice in Belgium, Deloitte offers value added services in audit, accounting, tax and legal, consulting, financial advisory services, and risk advisory services.

In Belgium, Deloitte has more than 4,400 employees in 12 locations across the country, serving national and international companies, from small and middle-sized enterprises, to public sector and non-profit organisations. The turnover reached 565 million euros in the financial year 2019.

Deloitte Belgium CVBA is the Belgian affiliate of Deloitte NSE LLP, a member firm of Deloitte Touche Tohmatsu Limited. Deloitte is focused on client service through a global strategy executed locally in more than 150 countries. With access to the deep intellectual capital in the region of 312.000 people worldwide, our member firms (including their affiliates) deliver services in various professional areas covering audit, tax, consulting, and financial advisory services. Our member firms serve over one-half of the world's largest companies, as well as large national enterprises, public institutions, and successful, fast-growing global companies. In 2019, DTTL's turnover reached over \$46.2 billion.

Deloitte refers to a Deloitte member firm, one or more of its related entities, or Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"). DTTL and each its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/about for a detailed description of DTTL and its member firms.