Mastercard evolves contactless technology for quantum world

New Enhanced Contactless specifications provide next-generation capabilities for advanced protection and convenience

HONG KONG – JANUARY 27, 2021 – Mastercard announced it is applying the latest quantum-resistant technologies to develop the next generation of contactless payments so that consumers continue to enjoy high levels of security and convenience for decades to come.

The new Enhanced Contactless (Ecos) specifications are an industry-first and will help ensure contactless technology is future-proofed as the dynamic digital landscape evolves and new technologies like quantum computing are introduced.

The demand for faster, more convenient, safer and now cleaner ways to pay has driven the transition to contactless. This trend will only continue to grow. In fact, in the third quarter of 2020, contactless penetration represented 41% of in-person purchase transactions globally, up 30% from a year ago.

Mastercard has been spearheading the transition to contactless payments for years and developing specifications like Ecos to support industry standardization efforts and ensure the entire ecosystem benefits from higher levels of security.

“Contactless is the present and future of in-person payments. 2020 brought with it a rapid acceleration of digitization and reinforced the importance of digital solutions – like contactless – to help meet our everyday needs,” said Ajay Bhalla, President, Cyber & Intelligence, Mastercard.

“As the ecosystem continues to evolve, more connected devices and the Internet of Things are going to create more user demand and an even greater need for constant innovation to build next-generation capability, helping to ensure that technology never outpaces trust.”

With Ecos, consumers, merchants and financial institutions will benefit from:

- **Enhanced Convenience** – Over time, Mastercard envisions that the in-store shopping experience will become increasingly contactless-only. These new specifications will help ensure any device truly can be a payment device, while eliminating the need for a backup swipe or dip of a card.
- **Enhanced Trust** – Ecos leverages new quantum-resistant technology to deliver next-generation algorithms and cryptographic key strengths while keeping the contactless interaction under half a second.
- **Enhanced Privacy** – The new specifications deliver advanced protection when account information is shared between the card or digital wallet and the checkout terminal. Ecos builds on the increased requirements to support various privacy regulations.

As the new specifications are activated over the coming years, consumers and merchants can expect a seamless transition. Digital wallets, mobile payments, contactless cards and point-of-sale terminals will continue to work as they do today.

Compatibility with Ecos and current contactless specifications is simple. Ecos works behind the scenes and is delivered via a software upgrade, meaning no new hardware or terminals are required. This investment complements similar ones in tokenization, 3-D Secure and Click to Pay, delivering a better consumer and merchant experience.

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About Mastercard (NYSE: MA) www.mastercard.com
Mastercard is a global technology company in the payments industry. Our mission is to connect and power an inclusive, digital economy that benefits everyone, everywhere by making transactions safe, simple, smart and accessible. Using secure data and networks, partnerships and passion, our innovations and solutions help individuals, financial institutions, governments and businesses realize their greatest potential. Our decency quotient, or DQ, drives our culture and everything we do inside and outside of our company. With connections across more than 210 countries and territories, we are building a sustainable world that unlocks priceless possibilities for all. Follow us on Twitter @MastercardNews, join the discussion on the Beyond the Transaction Blog and subscribe for the latest news on the Engagement Bureau.

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