Contribution of Singapore National Body to ISO/IEC JTC1/SC17/WG11 meeting, 13-14 June 2019, Madrid
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BSoC PlugFest event

* *preliminary proposal* *

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Background

- There is interest from industry to have independent investigation of BSoC performance, in particular the effect of sensor size upon accuracy (note: BSoC = biometric sensor on-card)
- Mastercard Singapore has experience in this domain and is prepared to co-organise this kind of industry event with Singapore standards national body
- Singapore IT Standards Committee welcomes such initiative and is prepared to contribute as well

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Mastercard Biometric Card

https://www.mastercard.us/en-us/merchants/safety-security/biometric-card.html

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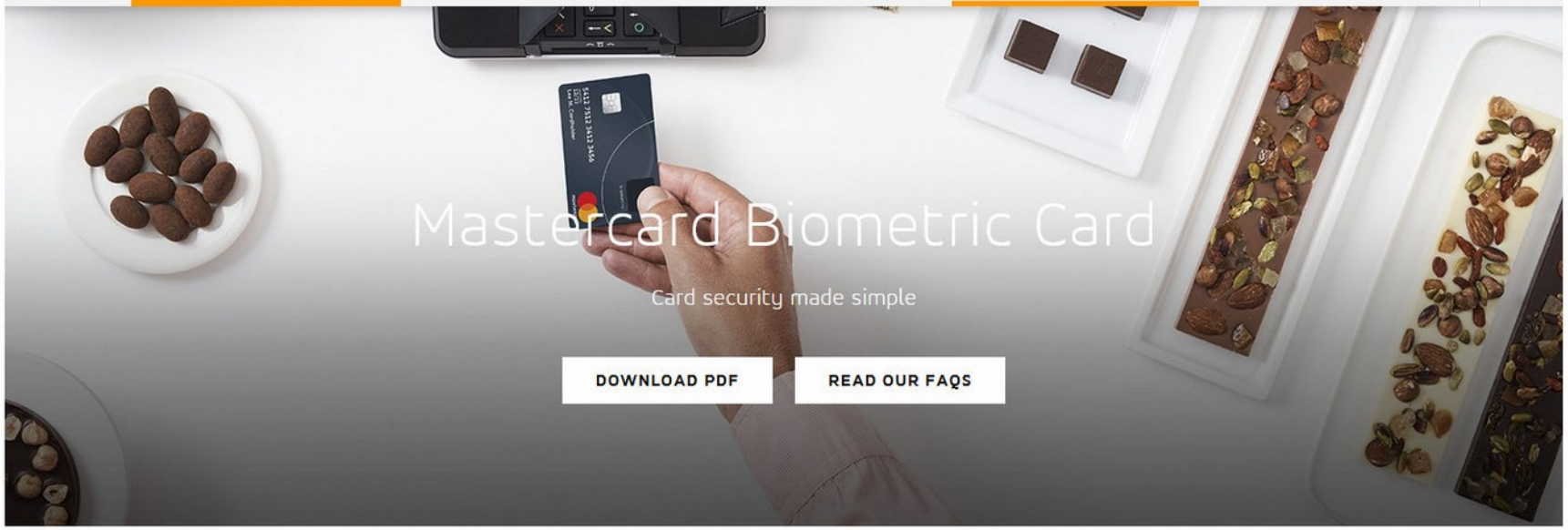

Mastercard is developing the next generation solution to provide cardholder security using biometrics.

The Mastercard Biometric Card combines chip technology with fingerprints to conveniently and safely verify the cardholder's identity for in-store purchases. An embedded sensor authenticates identity through a fingerprint, building on fingerprint scanning technology used for mobile payments today and can be used at EMV terminals worldwide.

How it works

How does this affect merchants?

Step 0 – Initial Work

- We will provide documents to participating vendors and give them 6 weeks of preparation time
- Vendors to provide:
  - HW setup including 2 board
  - Tools to run enable us to perform data collection
  - Vendors with local setup in Singapore can send a support staff in case we met with issues
  - Tools to perform matching and cross matching as per the specification provided in the document

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Step 1 – Readiness review

- Relevant tools from each vendor will be installed on the PC
- Data collection will be performed with 5 subjects
- Extracted fingerprint data will be sent to respective vendors and will be made to run through the matcher and cross – matcher. Results will be observed to rule out any abnormal behavior and to make sure tools are working correctly

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Step 2 – Actual data collection

- Different vendor station to be created and subject will pass through each station and provide the biometric samples. Number of samples captured will be set to a common number → to be brainstormed with vendors
- 125 subjects, both left hand and right hand. If it's for Biometric card, then only recommend to collect Thumb

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Step 3 – Scripts/Tools execution

- Scripts to be used to run the matcher and cross matcher, the current MC scripts return FMR/FNMR/DET Curve and other statistical data on number of comparisons, FTE/FTA etc.

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Step 4 – Results preparation

- It will be sent to individual vendors and with the consent from vendors, the results can be published on a paper with all the process information

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THE END

Thank you

Q&A

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