

MIGRATION TO PIN-BASED PAYMENT CARDS

Bank Negara Malaysia

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Presentation Outline

1. Strengthening Security of Payment Cards
2. Contactless EMV Chip Payment Cards
3. Safety Tips for Cardholders



Strengthening Security Of Payment Cards



Enhancements to payment card security

1

Migration to Chip technology

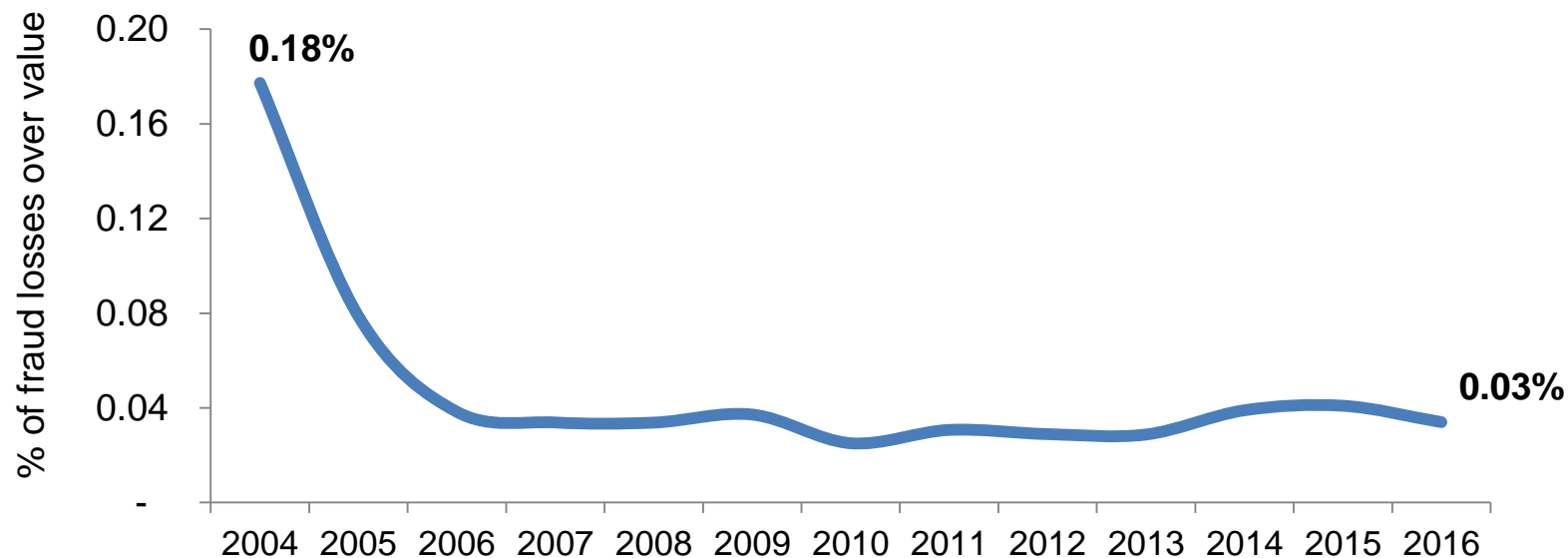
- Malaysia was the first country in the Asia Pacific region to complete the migration to chip cards in 2005
- Investment cost was recovered in 2½ years through avoidance of potential fraud losses
- Boosted confidence in the use of payment cards with increase in payment card spending
 - by local cardholders from RM42.2 billion in 2006 to RM130.8 billion in 2016 (3 x)
 - by foreign cardholders from RM5.3 billion in 2006 to RM10.8 billion in 2016 (2 x)

2

Migration to PIN

- PIN at POS deadlines
 - **1 January 2017:** Infrastructure readiness
 - **1 July 2017:** All transactions to be authorised by PIN

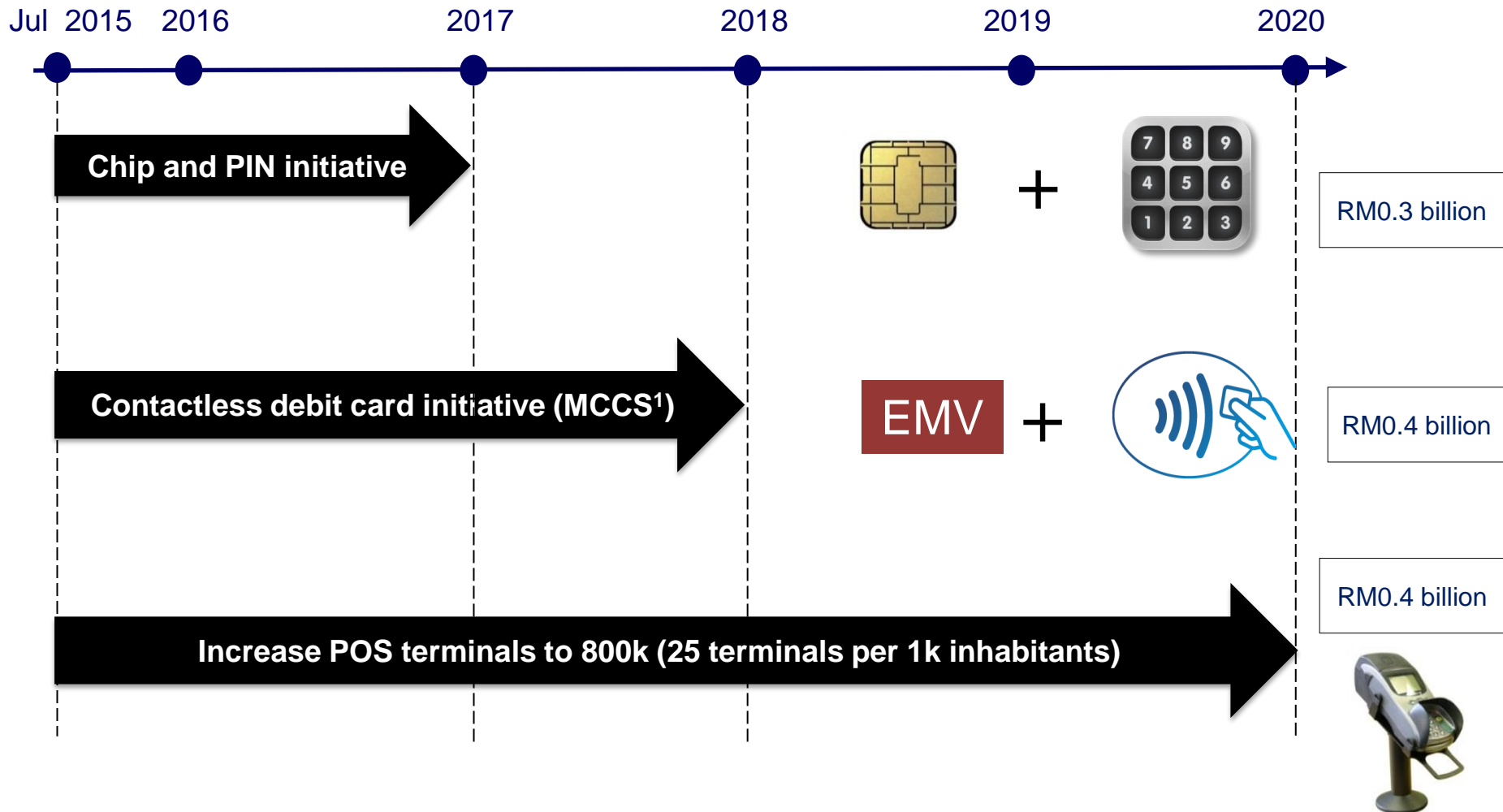
Payment card fraud level



2016	Gross losses	Losses borne by foreign entities	Actual losses
Credit card	0.04%	78%	0.009%
Debit card	0.02%	64%	0.006%
Total ¹	0.03%	77%	0.008%

¹ These figures comprise data for credit, debit and charge cards. Charge card accounted for 0.8% market share in 2016 by transaction volume.

RM1.1 billion investment to enhance the payment card infrastructure



¹ Under the Malaysian Chip Card Specification (MCCS) Initiative, the domestic debit card (MyDebit) will be migrated from its existing proprietary standard (PMPC) to adopt the EMV standard and the contactless functionality.

Debit Card: New and improved features

Old Debit / ATM card

Standalone



Co-badged with 2 debit brands



MEPS/Bankard logo are at the back of the card

New Debit / ATM card

Co-badged with 2 debit brands



1. Contactless functionality
2. Equal prominence of debit card brands
 - Empowerment of merchants to choose the lower cost debit network
3. The word 'Debit' to facilitate identification

Infrastructure readiness as at end-April 2017

	Units	Progress made	Outstanding units
Replacement of payment cards	24.4 mil	92.6%	1.8 mil
a. Active debit cards ¹	17.0 mil	90%	1.8 mil
• POS-active	7.0 mil	96%	0.3 mil
• ATM-active	10.0 mil	85%	1.5 mil
b. Credit and charge cards	7.3 mil	100%	0
c. Prepaid cards	44 k	71%	12.7k
Upgrading of POS terminals (excluding OPTs²)	218 k	99.8%	0.5k
Upgrading of OPTs at petrol stations	30 k	100%	0

All payment cards transactions must be authorised by PIN effective 1 July 2017

¹ This refers to debit cards with at least 1 point-of-sale (POS) or ATM transaction in the past 6 months

² Outdoor payment terminals at petrol stations

Contactless EMV Chip Payment Cards



Security features of contactless EMV chip payment cards

Features	Details
EMV chip	<ul style="list-style-type: none">• Protect card from cloning and counterfeit fraud
No sensitive data stored in chip	<ul style="list-style-type: none">• Data stored in chip<ul style="list-style-type: none">– 16 digit card number– Expiry date• CVV number used for e-commerce is not stored in the chip
Transaction limit	<ul style="list-style-type: none">• Contactless transactions are subject to limits set by card issuers• Any transaction exceeding the limits must be authorised by PIN• Cardholders who wish to set lower limits are advised to contact their card issuers
Protection against double charging	<ul style="list-style-type: none">• Contactless readers are configured to accept one transaction at a time• If a cardholder accidentally taps more than once, the card will only be charged once

Safety Tips for Cardholders



Safe practices for payment card

Protect your card

- Do not leave your payment card unattended
- Do not allow another person to use your payment card

Protect your PIN

- Do not disclose your PIN and cover the keypad when entering PIN
- Do not record your PIN on your payment card, or on anything kept in proximity with the payment card, that could be lost or stolen with the payment card

Report immediately

- Notify the issuer immediately if payment card is lost or stolen or an unauthorised transaction has occurred

A cardholder will not be liable for losses due to unauthorised transactions at POS terminal as long as the cardholder has not acted fraudulently and has adopted the above safe practices

Closing Remarks



Collective action necessary for a successful migration

1 Cardholders

- **Signature will be turned off with effect from 1 July 2017**
- No extension of deadline
- Cardholders should-
 - contact their card issuers if they have not received PIN-based cards
 - activate their PIN-based cards, choose and start using PIN today

2 Merchants

- Merchants should promote the use of PIN for greater protection against fraud

3 Issuers and acquirers

- Issuers to facilitate cardholders to replace their payment cards
- Acquirers to train merchants to accept PIN and address complaints on merchants who do not offer cardholders the option to use PIN

Thank You

