Transport Payments Asia Pacific

Day One: Wednesday, 18 September 2019

8.00	**Registration**

OPENING	Welcome Messages

9.00   *Welcome and opening address*

> Mark Richmund De Leon, OIC-Undersecretary for Road Transport and Infrastructure
> Department of Transportation of the Philippines

Welcome and opening address

> Melchor Plabasan, Director, Technology Risk and Innovation Supervision Department (TRISD)
> Bangko Sentral ng Pilipinas

INTRODUCTION	Event Overview

9.30   Introduction to this year's conference, theme and objectives, business and technology areas to be discussed.

- A common objective - standardising and harmonising national transport payments
- Exploring the changing state of play for transport payments in Asia in 2019
- Trends: tickets to PAYG, fares to payments, public transport to mobility services, ...
- The future: mobile + cloud => frictionless, invisible payments for mobility services

> Greg Pote, Chairman, APSCA

SESSION 1	National Standards

9.45

Towards an integrated transport network

Transport sector development in the Philippines

The Department of Transportation (DOTr) is responsible for the maintenance and expansion of viable, efficient, and dependable transportation systems. The geography of the Philippine archipelago presents significant challenges for the creation of an efficient transport network. To address these challenges the government is expediting infrastructure investment, projects and programs to integrate the archipelago's islands and stimulate development, including major upgrades to road, railway and port systems. These initiatives will facilitate movement of people and goods, deliver cost efficiencies and further accelerate economic development.

- Overview of rail and urban projects ongoing and planned in the Philippines
- Update on development of the Metro Manila Subway Project (MMSP)
- New light rail lines and bus rapid transit projects in Metro Manila
- Regional transport development initiatives outside of Metro Manila

> Timothy John R. Batan, Undersecretary - Railways Sector
> Mark Richmund De Leon, OIC-Undersecretary for Road Transport and Infrastructure
> Department of Transportation of the Philippines

10.15

Open and integrated transport payments

A standards framework for integrated transport payments

The AFC System Program Office of the DOTr explains the current status of transport revenue collection in the Philippines. Disparate transport and ticketing payment schemes that are largely cash-based and lacking harmonisation and integration represent challenges for the creation of efficient transportation systems. The DOTr is now developing a national framework and standards for interoperable and open transport payments in the Philippines, designed to support integrated payments for all public transport modes and address these challenges.

- Overview of existing transport revenue collection systems and schemes in the Philippines
- Potential benefits for transport operators and customer from the introduction AFC systems
- Current status and roadmap for DOTr standards for open and integrated transport payments
- Initial implementations of open payments for transportation systems in Metro Manila and Cebu

> Randolph Ian V. Clet, Project Manager/Implementation Manager, Automated Fare Collection System Program Office
> Department of Transportation of the Philippines

10.30	**Refreshments**

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SESSION 2	Transport Payments in 2019

11.15

The evolution of transport ticketing

From paying fares to purchasing mobility services

Mobility is the new buzzword. After all, "mobility services" sounds much more attractive and customer-focused than "public transport services". With all customers using their smartphones and transport providers using their data, the goal of delivering personalised mobility services for which customers use their accounts to make frictionless or even invisible payments, might be feasible. This session looks at some of the latest developments in transport payments in 2019 that suggest what we can look forward to in the future.

- "Public transport" used to mean group travel via mass transit on fixed routes with customers paying fares or buying tickets. In a world of mobility services, what does public transport include today?

- Connectivity and mobile devices are changing customer expectations about how they want to engage with and use public transport. How will this impact the retailing of public transport services?

- Will the more useful mobility services that customers are likely to find attractive, only be available to customers that have accounts with the mobility services provider, and not to anonymous customers?

- First and last mile challenges for multimodality in public transport are now being addressed by micro-mobility, on-demand and ride hailing services - is this all now part of public transport?

- What impact with integrating public transport with new mobility providers and on-demand transport services have on existing multi-modal smart transport ticketing schemes?

Viewpoint 1:   Will Judge, Vice President, New Mobility Partnerships
                 Mastercard [~20min]
Viewpoint 2:   Yusuke Komatsu, IT & Suica Business Development
                 East Japan Railway Company (JR East) [~20min]
Viewpoint 3:   Shinya Senba, System Division
                 PASMO [~20min]

12.15   **Discussions: New jargon, industry hype and what's really on the roadmap** [~30min]

Shared mobility, on-demand services, mobility-as-a-service, connected and autonomous vehicles, ... These are just some of the new developments supposedly on the roadmap for transport services. Most of these new concepts originated in Europe and are being piloted there but will they all be suitable for Asian megacities? A claimed MaaS objective is to make public transport so convenient that people will forego private cars - is this relevant in Asia where many people cannot yet afford a car? The growing interest in implementing QR code mobile payments for transport payments services in Asia suggest that the region might follow its own roadmap for mobility services. On a journey to the "future of mobility" should transport authorities and revenue collection companies in Asia following a different roadmap from their European counterparts?

Tomohiko Umekawa, Deputy General Manager, IT & Suica Business Development
East Japan Railway Company (JR East)
Will Judge, Vice President, New Mobility Partnerships, Mastercard
Greg Pote, APSCA

12.45   **Lunch**

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SESSION 3	Account-based Ticketing in Practice

13.45

The gateway to new mobility services

Moving transport payments and data from fare media to back-end customer accounts

Account-based ticketing (ABT) is the most significant trend in transport payments today. Despite media coverage, ABT is about more than accepting EMV contactless cards for fare payments. A complete ABT system will enable customers to pay for their travel using whichever payment instrument they prefer at the time of travel. This session explores the current status of account-based ticketing in Asia, the benefits for transport services providers and their customers, and the challenges of implementing account-based ticketing in practice.

- Why are transport authorities increasingly interested in replacing their card data-based automated fare collection systems with account-based ticketing systems? What are the advantages and disadvantages?

- What are the advantages of customer travel accounts with loosely coupled identifiers and payments instruments, over fare media that is integrated with an anonymous payment product?

- EMV contactless payment cards are only one type of third-party fare media and payment instrument that could be accepted in ABT systems. What are some others that could also be accepted?

- Why will legacy "closed-loop" contactless transport cards continue to exist in ABT systems? Aside from supporting concessions in ABT systems, are there any other advantages for customers and operators?

- Does a complete account-based ticketing system make it easier to deliver digital customer services so that passengers can purchase and manage transport products online and over mobile devices?

Viewpoint 1: Silvester Prakasam, Senior Advisor - Fare Systems
Land Transport Authority of Singapore [~20min]
Viewpoint 2: Greg Ellis, Principal
Greg Ellis Consulting [~20min]
Viewpoint 3: Raja Babu Bula, AE, Transport & Ticketing Digital Security Solutions, Infineon Technologies
OSPT Alliance [~20min]

14.45

Discussions: Best practices for transitioning to ABT systems [~30min]

The future of transport payments looks likely to be account-based. For most of the new and innovative mobility services, transport services providers will need to have a relationship with the customer rather than just a number referencing an anonymous transport card. A complete account-based ticketing system where the transport authority is the back-office and manages all the payment sources connected to it can offer PAYG, season tickets (period passes), concession passes and entitlements to a complete customer base. Are ABT systems in Asia more likely to include both open-loop and closed-loop fare media acceptance, including mobile QR codes in addition to transport and bank cards? What are the costs of implementing an ABT system and is there anything that suggests that these costs will reduce over time? What have been the lessons so far from implementing account-based ticketing in Asia?

Silvester Prakasam, Land Transport Authority of Singapore
Greg Ellis, Greg Ellis Consulting
Raja Babu Bula, OSPT Alliance
Greg Pote, APSCA

15.15 **Refreshments**

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SESSION 4	Open Payments in Transport

16.00

More fare payment options for customers

Making it easier for customers to engage with public transport

Efficient public transport systems are a key developmental focus in Southeast Asia. The Philippines government is driving an infrastructure program to improve the country's transport network including subway, rail and bus rapid transit projects. Making it easier to pay for public transport has been shown[1] to increase modal share. Ideally customers should be offered a variety of transport payment options that are widely accepted across public transport services to enable integrated multimodal journeys. This session explores open payments options.

- What proportion of a transport operator's customers should be using an open payment product before it becomes viable for the operator to accept that product for fare payments?

- For customers that do not have a bank account, who would be responsible for issuing prepaid products to those customers: the banks, transport ticketing schemes, or other organisations?

- What is the impact of accepting EMV contactless payments or non-bank mobile QR wallets, on the acceptance devices, fare processing, and risk management in public transport ticketing schemes?

- Public transport ticketing systems typically have complex fare structures and multiple fare concessions that need to be offered to customers. How can these be provided by accepting third-party payments?

- Why do urban public transport systems develop without integrated payments across all modes and how can policymakers, regulators and transport operators prevent such reoccurrences in future?

Viewpoint 1: Jeff Arrienda, Director, Merchant Solutions & Acceptance
Visa Philippines & Guam [~20min]
Viewpoint 2: Joanne Yu, Sales Manager, Global Business Team
Tmoney [~20min]
Viewpoint 3: Peoter Lapinski, Independent Fare Collection Systems Specialist [~20min]

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SESSION 5	Transport Payments Standards, Policy & Strategy

17.00   **Roundtable discussion with transport and payments stakeholders**

Frameworks for open transport payments

Led by: Department of Transportation (DOTr), Bangko Sentral ng Pilipinas (BSP)
The Automated Fare Collection System Program Office of the DOTr is developing standards and specifications for open transport payments in the Philippines. The objective of this session and discussion is to generate recommendations for the ongoing development of the standards, implementation and promotion of the standards, and policies and strategies for managing open transport payments in the Philippines. Adoption of open payments in public transportation could help to accelerate the adoption of e-payments in the Philippines, by both banked and unbanked citizens, contributing to the development of the National Retail Payment System (NRPS). The discussion is also relevant for policymakers and stakeholders in other Asian markets.

In considering the ongoing development and management of standards and specifications for open transport payments in the Philippines, the DOTr and BSP are particularly interested in international best practices for:

- National transport payments standards for automated fare collection
- Frameworks or architectures for national transport payments.
- Organisations managing national transport payments standards and policies
- Card-based and mobile wallet-based open transport payments
- Open transport payments supporting banked and unbanked citizens

Moderators will lead discussions with stakeholders representing major public transport projects in the Philippines and Asia Pacific to explore strategies for a national framework that supports open payments in public transportation in the Philippines. Targeted outcomes include efficient public transport services with increased modal share and excellent customer experience. Subject matter experts will provide guidance and share experience from transport payments systems in other markets. The session will also consider how, if integration and interoperability of open transport payments could be achieved, this might potentially drive e-payments adoption and enhance broader payment systems development.

To take these objectives forward it will also be considered whether an industry group of transport stakeholders, reporting to and advising the DOTr and BSP, should continue to meet to develop a clear pathway towards to open transport payments services.

17.45   **Close of day one**

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Day Two: Thursday, 19 September 2019

9.00   **Introduction**
Introduction to agenda for day 2, speakers and session objectives.

Greg Pote, Chairman, APSCA

SESSION 6	Paying at the Gate

9.15   **Closed-loop, open-loop and QR code transport payments**

Getting in and out of public transport systems

Closed-loop mobile NFC transit ticketing may be experiencing a resurgence of interest thanks to the focus of the global Pays wallets. But despite growing interest in accepting open-loop payment cards and QR code mobile wallets in transit, today payments at gates and validators in most public transport systems are made with closed-loop contactless payment cards. This session explores latest developments in accepting different types of fare media for automated fare collection in public transport systems, and issues that public transport operators need to consider.

- From the perspective of ticketing systems, infrastructure and front-end equipment, are there advantages or disadvantages of closed-loop mobile NFC transit ticketing vs open-loop EMV mobile NFC payments?

- What are the challenges of accepting multiple types of payment cards in public transport systems - beyond multiple SAM slots? Can infrastructure owners prepare for multi-card acceptance from the outset?

- Adoption of open-loop EMV contactless mobile payments in public transport appears to be growing so why are the major Pays wallets accelerating support for closed-loop mobile NFC transit ticketing?

- The large number of closed-loop transit AFC schemes is a significant market opportunity but how many of these can the major Pays wallets support? Will they only support the largest AFC schemes?

- Adoption of mobile QR code payment solutions for ticket purchases and pay-at-gate is growing in Asian markets. What are the advantages/disadvantages of QR codes versus mobile NFC in transit ticketing?

Viewpoint 1:   SL Wong, Regional Marketing, Payment & Ticketing Solutions
                     Digital Security Solutions Regional Center - Asia Pacific, Infineon Technologies [~20min]
Viewpoint 2:   Alexander B. Dimitrov, Segment Marketing Manager
                     NXP Semiconductors [~20min]
Viewpoint 3:   Bob Jiang, President
                     Snowball Technology [~20min]

10.15   **Discussions: Mobile is not eating transit ticketing** [~30min]

If "mobile is eating the world", it has missed transit ticketing. The global Pays Wallets are becoming enthusiastic about closed-loop transit payments but within the scope of global AFC schemes they are barely moving the needle so far. Will they only target public transport schemes in megacities? Is there a way for the Pay wallets to be able to target any and all contactless transport AFC schemes? Open-loop mobile transit ticketing would require every scheme to transition to ABT. What needs to change before most public transport customers will be able to use their mobile phone to pay transit fares instead of their transport smart card or EMV contactless payment card? In Asia are mobile QR code payments likely to be more readily adopted by customers in public transport or is this just a fashionable trend driven by fintechs? What needs to be done to accelerate the adoption of mobile transit ticketing?

SL Wong, Infineon Technologies
Alexander B. Dimitrov, NXP Semiconductors
Bob Jiang, Snowball Technology
Greg Pote, APSCA

10.45   **Refreshments**

Transport Payments Asia Pacific

Day Two: Thursday, 19 September 2019

SESSION 7	Cloud-based Transport Payments

11.30

Frictionless and invisible

transport payments

How mobile and the cloud are integrating transport services and payments

Customers already get all their information online, most of it from mobile devices[2]. Whatever they think about using their mobile device to pay at the gate, they already want to manage their travel information and options, journeys and transport payments on mobile devices. The future of transport services, transport data and transport payments will be dominated by mobile. Customers expect transport information to be ubiquitous, accurate and personalised to their own needs. This session looks at how payments will be integrated into cloud-based transport services.

- Ride-hailing services with transit options, mobile ticketing apps with ride-hailing, trip planners with transit payments - how is transport being integrated into combined mobility services?

- As cloud-based mobility integrators connect the new mobility providers and on-demand services with public transport, how will multimodal interoperability be extended to cover first mile to last mile?

- Mobility service integrators aim to offer additional convenience to customers by becoming resellers of public transport services, what will be the considerations for transport authorities and operators?

- Integrating mobility services and public transport ticketing in mobile apps will accelerate ABT adoption but will customer accounts reside with the mobility integrator or with the public transport authority?

- Transport authorities opened their data and enabled mobile developers to build their trip planners. How easily can they connect their transit payment systems to third-party mobility services providers?

Viewpoint 1:   Giacomo Biggiero, Head of Business Development, UK & Asia
                      Masabi [~20min]
Viewpoint 2:   Wye-Shun Fong, Technical Director
                      Bangkok Payment Solutions (BPS) [~20min]

12.15

Discussions: A PSD2-like revolution in transport services and payments [~30min]

A variety of mobility providers and mobility integrators have already taken advantage of open data and integrated public transport information into their solutions. Whether they are trip planners, ride hailing companies or other on-demand transport services, the logical next step is to also provide transport payments services and be able to offer end-to-end mobility services to customers. This might not yet fit the idealised model of Mobility-as-a-Service (MaaS) but are we likely to see different levels of mobility services providers offering transport payments services before we arrive at the MaaS Nirvana? Is there a future where customers will no longer directly interact with public transport authorities and operators and instead manage all their transport information, options, journeys and payments through a mobility integrator, or through their favourite mobility service provider?

Giacomo Biggiero, Masabi
Wye-Shun Fong, Bangkok Payment Solutions (BPS)
Greg Pote, APSCA

12.45   **Lunch**

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SESSION 8	The Transition to Mobility	continued

14.00

How mobility payments will be managed

A customer-centric approach for transport products and services

The migration from transportation to mobility is more than new jargon and represents a shift in thinking about how transportation systems could be developed and managed. Mobility is a customer-focused approach to creating convenient, flexible and user-friendly transportation products and services that meet the needs of today's travellers. This session explores why mobility is the new mantra, what mobility services are feasible in Asian markets, the impact on existing public transport systems and how mobility could change the way we pay for transport services.

- Increasingly sophisticated and connected customers are demanding more travel options, more convenience and a better customer experience - how will mobility services meet these needs?

- Are mobility services only appropriate for European cities with efficient public transport infrastructure and ticketing systems? Are they feasible in Asia with its megacities and developing markets?

- Which organisations are most qualified to be mobility services providers? Will they be existing transport authorities and operators, third-party transport solutions providers, Fintechs or Internet companies?

- Interoperable multimodal transport must extend to include the new mobility providers. Can seamless end-to-end mobility services be achieved through market forces or will regulation be required?

- Many of the new on-demand mobility providers do not have a proven business model and some have already failed. Is this going to make it difficult to build the new mobility services ecosystem?

- What are the components of the new mobility ecosystem? Do mobility providers include PTAs and PTOs? Who could be a mobility integrator? And what is a mobility aggregator?

Viewpoint 1: Mick Spiers, General Manager - Asia
Cubic Transportation Systems [~20min]
Viewpoint 2: Manny Palomo, Transportation Business Unit, Global New Business and Market Development
LG CNS [~20min]

14.45 **Discussions: Who will deliver Mobility-as-a-Service (MaaS) in Asian markets?** [~30min]

MaaS aims to provide transport through a real-time personalised service model that integrates all mobility choices and presents them to the customer as a holistic solution that enables them to make a seamless end-to-end journey. Payments already play an important role in successful mobility services and they will be even more important when mobility services are integrated in a MaaS offering. Since MaaS must include "first mile" and "last mile" travel, not just across traditional public transport services, it cannot be provided by a single transport services provider (unless they are connected to all other transport services). MaaS appears to be an over-the-top service in which case it cannot be provided by mobility providers and would need to be managed by third parties - would they come from the transport sector, Internet/fintech business, payments industry or from government?

Mick Spiers, Cubic
Manny Palomo, LG CNS
Greg Pote, APSCA

15.15 **Refreshments**

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SUMMING UP	Review and Next Steps

15.45

Open discussion

Take away messages and outstanding issues

A Fishbowl style discussion and debate session where the audience is the panel. The entire group participates in the conversation to give their input and perspective. This session aims to crowd-source a summary of the conference, highlighting what was covered and what remains to be addressed. The first objective is to distil the key take away messages from conference discussions. The second objective is to identify the road ahead for policymaking, technological and operational challenges in transport payments and mobility services for customers.

CLOSE	TPAP 2019 Wrap-up

16.00

▪ Closing remarks and thanks

Greg Pote, Chairman, APSCA

▪ Closing remarks and thanks

Randolph Ian V. Clet, Project Manager/Implementation Manager
Automated Fare Collection System Program Office
Department of Transportation of the Philippines

16.15   **End**

1 - https://resources.mynewsdesk.com/image/upload/y8u2g5b6a5eg4ezfoyep.pdf

2 - https://developers.google.com/search/mobile-sites/mobile-first-indexing