16th EPA Congress

Dublin 2013

e-Payments : Future of Parking

Richard Thoma / Nigel Williams

EPA

Introductions

Richard Thoma

EPA e-payment group chair

Principal - Altancard Ltd

International card payment expert

(40 yrs in IT management)

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Nigel Williams

EPA Policy and Strategy Committee member

Principal - Parking Matters Ltd / Statiom SAS

Parking Consultant (+25 yrs in parking: ex Vinci, Q-Park)

BPA Executive Council member

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Agenda

e-payments & parking

- Challenges
- What is the solution? ---> Standards
- What some of our industry leaders say
- EPA *e*-payments working group
- Our Approach
- The Key Message
- Benefits

- Making it happen!

Challenges

- Parking operators are obliged to invest in systems that comply with EMV (chip & PIN), PCI DSS
- They are constantly being forced to adopt new technology and processes at the whim of financial institutions and payment providers
- Operators do not know which technology to choose
- Operators are worried about:
  - Security
  - Adopting new systems
  - Development of mobile phone payments
  - Development of NFC
- Existing payment systems disappearing, without being immediately replaced
- PMS suppliers find it difficult to provide new methods of payments due to lack of approved payment technology

What's the solution ?

Standards !!

Standards facilitate interoperability and transparency

What if there were no standards for batteries???

Standards for parking payments ?

Adopting appropriate standards can*:*

- *Give* operators **confidence** to define their investment strategy with a clear roadmap
- *Enable* suppliers to provide **standardized and compliant equipment** across Europe
- *Allow* international operators to create a **single European wide compatible operation**
- *Help* free all operators from country specific regulations and allow local operators to benefit from international working standards
- *Reduce* costs (investment & maintenance)

Theo Thuis

Chief Operating Officer Q-Park Group

- e-payment is a subject of increasing importance to the parking industry
- international standardization of parking payment protocols will help our industry improve our services to our customers at lower costs and investment risks

Martin Kammler

Geschäftsführer / Managing Director Scheidt & Bachmann

- Currently, equipment manufacturers have to meet multiple different compliance requirements and obtain the necessary certifications (multiple times)
- This generates unnecessary costs which we have to pass on to operators
- Introducing international standards will simplify product specifications and certification processes and help reduce costs

Peter Schneck

Managing Director - APCOA AG

By adopting an international standard we can:

- Protect our investments in new systems
- « *Control our industry's future* »
- Help our equipment suppliers rationalize their own investments
- Reduce unnecessary capex & reduce operating costs

Which standards?

Torino EPA Congress :

Proposal « don't reinvent the wheel »

Adopt **International Forecourts Standards Forum (IFSF)**
Standards for the parking industry:

- IFSF standardization has been in place for almost 30 years in the oil retailers and continues to develop with new technologies (mobile, NFC)
- IFSF standards are implemented in all European countries
- Payments for petrol and parking are not too different
- Petrol industry is more powerful than the parking industry
- IFSF standards are accepted by Visa, MasterCard, EMV, PCI

Jeremy Massey

Card & Security Coordinator, Statoil, Norway
IFSF Technical Chair and Board Member

- IFSF's standards have made it possible for the Oil retailers to **process all card types identically in all their countries** and **facilitated both cross border acquiring contracts and the interconnection** of different Point of Sale, Card Terminal and Fuel Card systems on a very large scale indeed.
- Within the European Petroleum Retailing environment they are now the **de facto EFT standards** and are in use in **every** European Country for virtually every card scheme that allows them.
- Constant developments to handle EMV, DCC, Contactless and now also Mobile Payments and the weight placed on backwards compatibility have been of real benefits in **protecting this investment in standardisation**.

What progress has been made?

Policy and Strategy Committee & EPA Board agreed initial scope and budget for the *e*-payment initiative:

- IFSF / EPA negotiations 2012
- Preliminary investigation of technical feasibility
- *Signature of agreement IFSF/EPA Nov 13, 2012 gives EPA the ability able to use payment standards from the fuel retail industry in parking*

Leading operators/equipment suppliers commit support (funding + specialist staff) to the EPA working group

- Working group set up April 2013
- 3 formal working group meetings and many informal meetings

Technical verification with IFSF confirms suitability of IFSF standards

EPA working group - members

APCOA	Jörg Schulik
Empark	Javier Rego Yañez, Luis Ramirez
Interparking	Olivier Maes, Maurizio Locatelli
Q-Park	Jens Zier
Saba	Jose Antonio Lopez Becerra
Vinci Park	Bachir Mokrani, Erwan Bégos
Scheidt&Bachmann	Stefan Rütters
Skidata	Stéphane Callo, Severin Strmenik
WPS	Keith Williams
Nigel Williams	EPA Policy and Strategy Committee
Richard Thoma	Chair *e*-Payments working group

EPA working group - methodology

The working group developed and implemented the following methodology:

Develop an analytical approach to *evaluate* if the IFSF standards meet the needs of the parking industry:

– *Define relevant parking industry "Use Cases" (present and future)*

and then

– *Map the parking industry "Use Cases" against the IFSF standards*

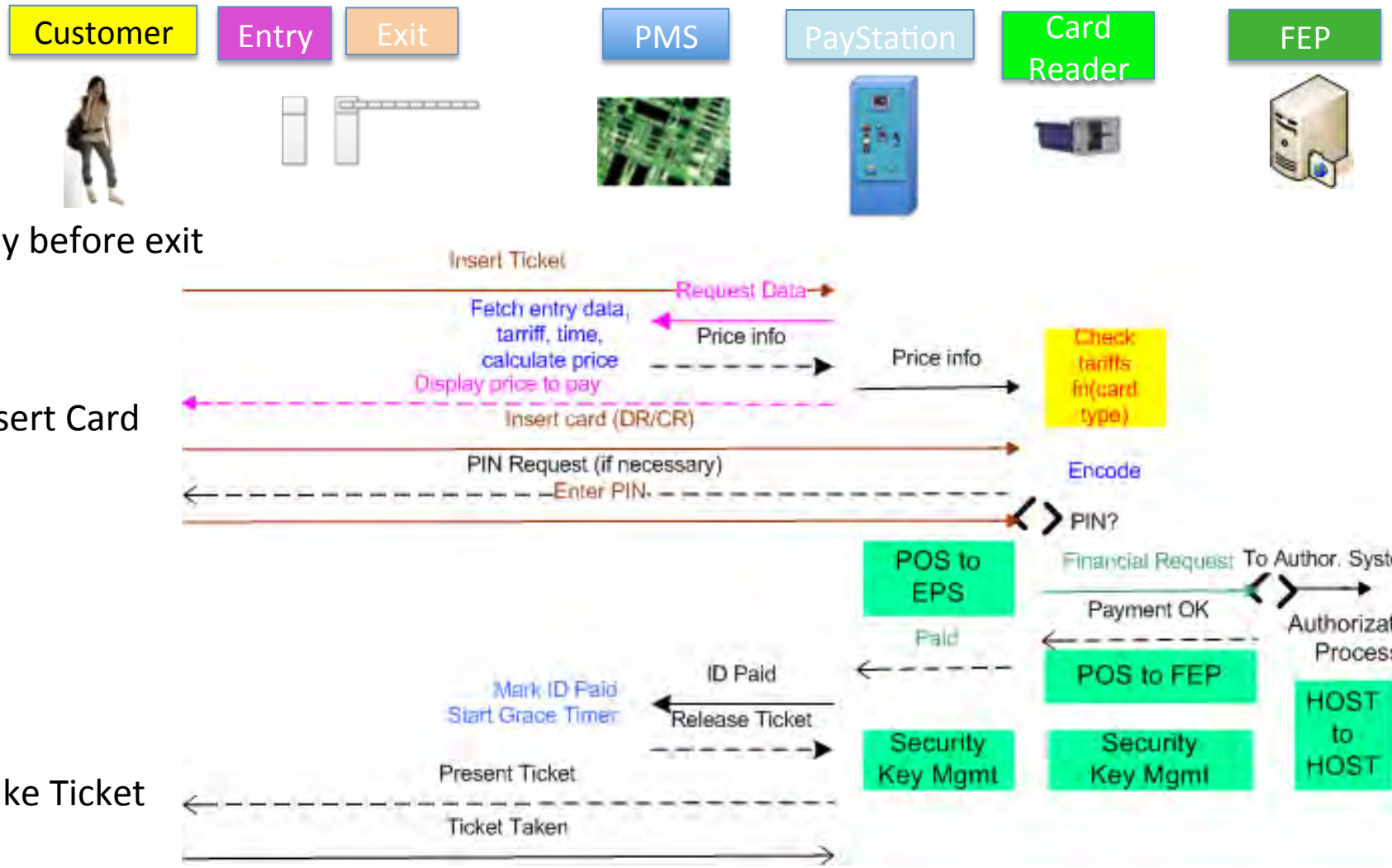
Use Cases - cashless payments in parking

1. Payment at Pay Station,
2. Payment at Exit Barrier
3. Card managed Drive in & drive out
4. Card managed Door reader
5. Reservation & Web based payments

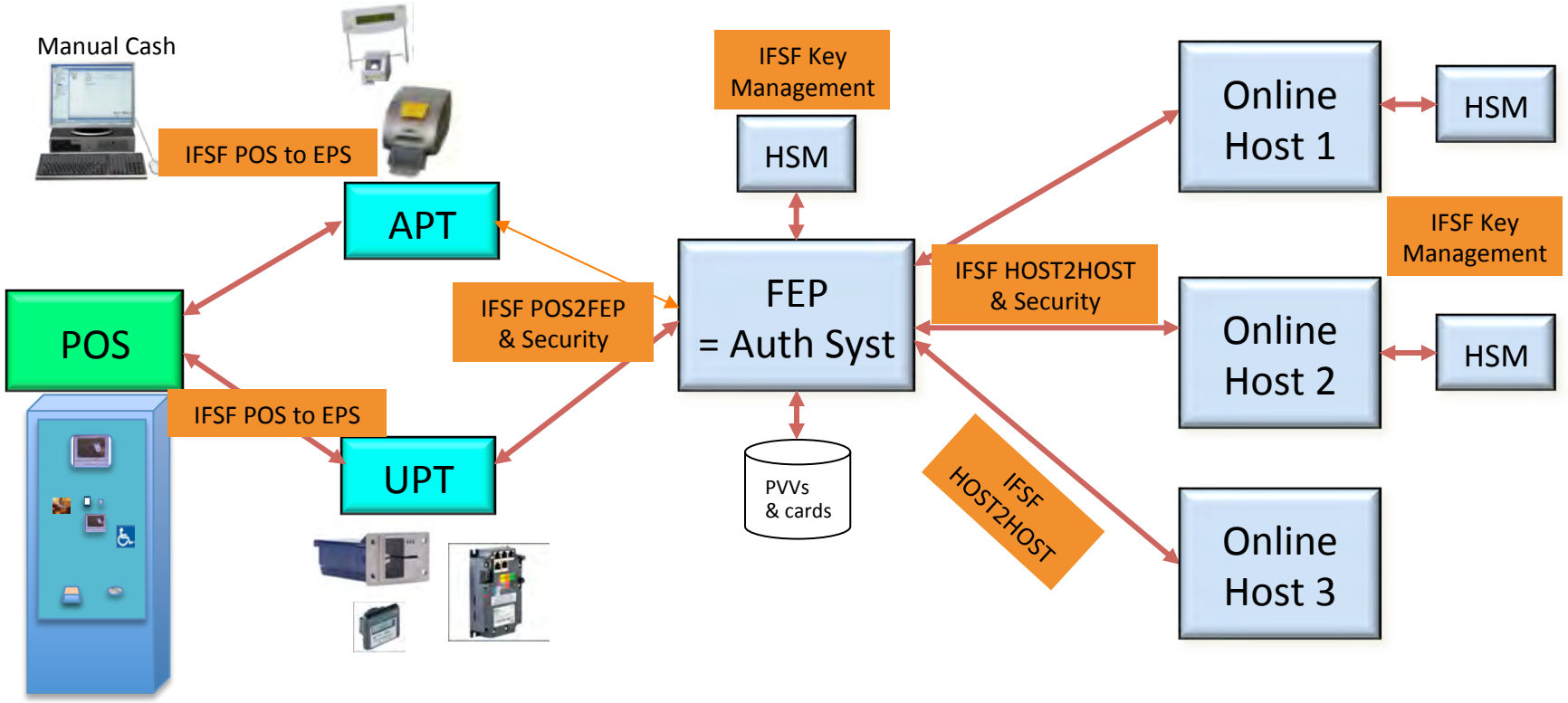
Allowing for :

- Specific tariffs per card type
- Credit, Debit, Loyalty, Petrol and Customer (private label) cards
- Compliant with international regulations

Use Case example : Payment at Pay Station



Overview of IFSF EFT standards



UPT = Unattended Payment Terminal
APT = Attended Payment Terminal

Roland Cracco

Managing Director Interparking

- e-payment is an increasingly important subject that is evolving very fast.
- We have supported and invested in the EPA Task Group because I am deeply convinced that adopting the IFSF Standards will help us (as well as the other operators) to secure our investments and reduce our costs.
- IFSF is a true international standard which our experts strongly believe in.

Peter Peddemors

Managing Director WPS

- Adopting the IFSF standards will give us the foundation we need to bring e-payment innovations to the market in the most cost effective and sustainable way.
- Simplifying the specification and international certification process will enable equipment suppliers to speed up the development process and reduce costs
- The whole industry can benefit from the economies of scale that adopting the IFSF standards will bring, from cheaper payment terminals to more competitive rates for payment processing

Robert Weiskopf

SKIDATA Senior Vice President Car Access

The EPA working group was a good opportunity to work together and to elaborate payment standards in the parking industry, to which we can rely on.

We are happy to share our longstanding expertise – and the benefits of the IFSF standards are clear:

- Reduction of individual investment in payment infrastructure
- Less certification and operational costs
- Higher security standards, higher system security

Wilfried Thierry

Head of Europe Vinci-Park

The EPA working group has done a fantastic job!

The IFSF Standards will soon be available to all our members. This will enable all of us to:

- Define our future investments based on a clear roadmap
- Free ourselves from country specific regulations on the payments side
- Request IFSF compliance in our parking equipment tenders
- Progressively reduce our CapEx and operational costs

Benefits of IFSF Standards

- **Roadmap of the standards is easy to understand**

- **Lower ongoing costs – reduced maintenance, less breakdowns, less expensive equipment upgrades**
  - Supplier independent
  - Minimum of 10 years availability of components

- **IFSF Standards provide the framework to develop a tokenization standard. This will allow :**
  1. *Card managed Drive in & drive out*
  2. *Card managed Door reader*
  3. *Reservation & Web based payments*

Benefits for all EPA members

	Public Authorities	Vendors	Operators	Parking Industry
IFSF Architecture provides sound base for planning future investments and developments	✔	✔	✔	✔
IFSF Architecture will facilitate (promote) interoperability	✔	✔	✔	✔
IFSF Standards will make requirements definition easier and promote selection criteria refering to established standards	✔		✔	✔
IFSF Standards already known to most vendors		✔		✔
IFSF Standards will help reduce development, nationalisation and certification costs		✔		✔
IFSF Standards in line with SEPA requirements	✔	✔	✔	✔
Having accepted standards will stimulate new payment product developments	✔	✔	✔	✔

What scale of benefits?

Operating savings

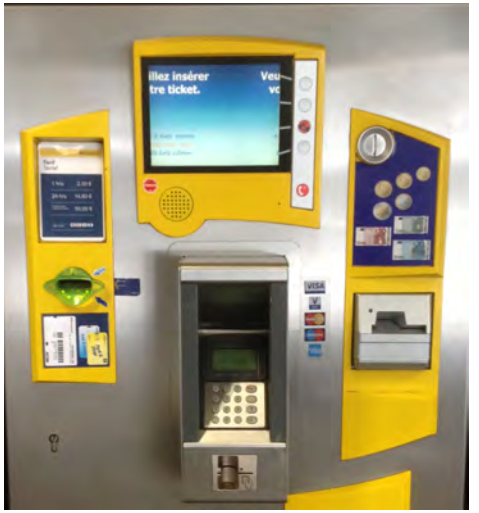
Data collection survey shows that parking turnover is a €26.4 billion

Assuming 50% are card payments and average commission is 2% leads to a commission cost of €264.000.000

Standardization will provide economies of scale. Every 0,1% reduction in commission will lead to savings of €**13.200.000**

Depreciation savings

Extending lifetime of equipment from 8 to 10 years reduces annual depreciation by 20%



Equipment savings

The petrol industry has managed to have POS/Unattended Payment Terminal with only ONE secured screen.

Achieving the same in Parking should lead to cost reduction

Business development

Enhancing the existing standards with a Tokenisation standard will allow the *Card managed Drive in & drive out*

Making it happen!

DELIVERABLES

- Finalise and publish the « **IFSF Implementation Guide for Parking**»
  - Expand Use cases
  - Include practical recommendations
- Develop with IFSF team a **tokenization** standard
- Set-up 1st level support (e.g. give advice to members)
- Develop web-site

RELATIONSHIPS

- Set up direct support to members
  - National Associations
  - Individual organisations
- Maintain links with IFSF and other organisations

Timeline

	Q3-2013	Q4-2013	Q1-2014	Q2-1014	Q3-2014
Implementation Guide		V1		V2	
Tokenization Standard with IFSF					
1st Level Support					
Web Site					
Relationships					
Progress report AGM 2014					
A significant amount of work is still needed from experts and the working group					

Nick Lester

President European Parking Association

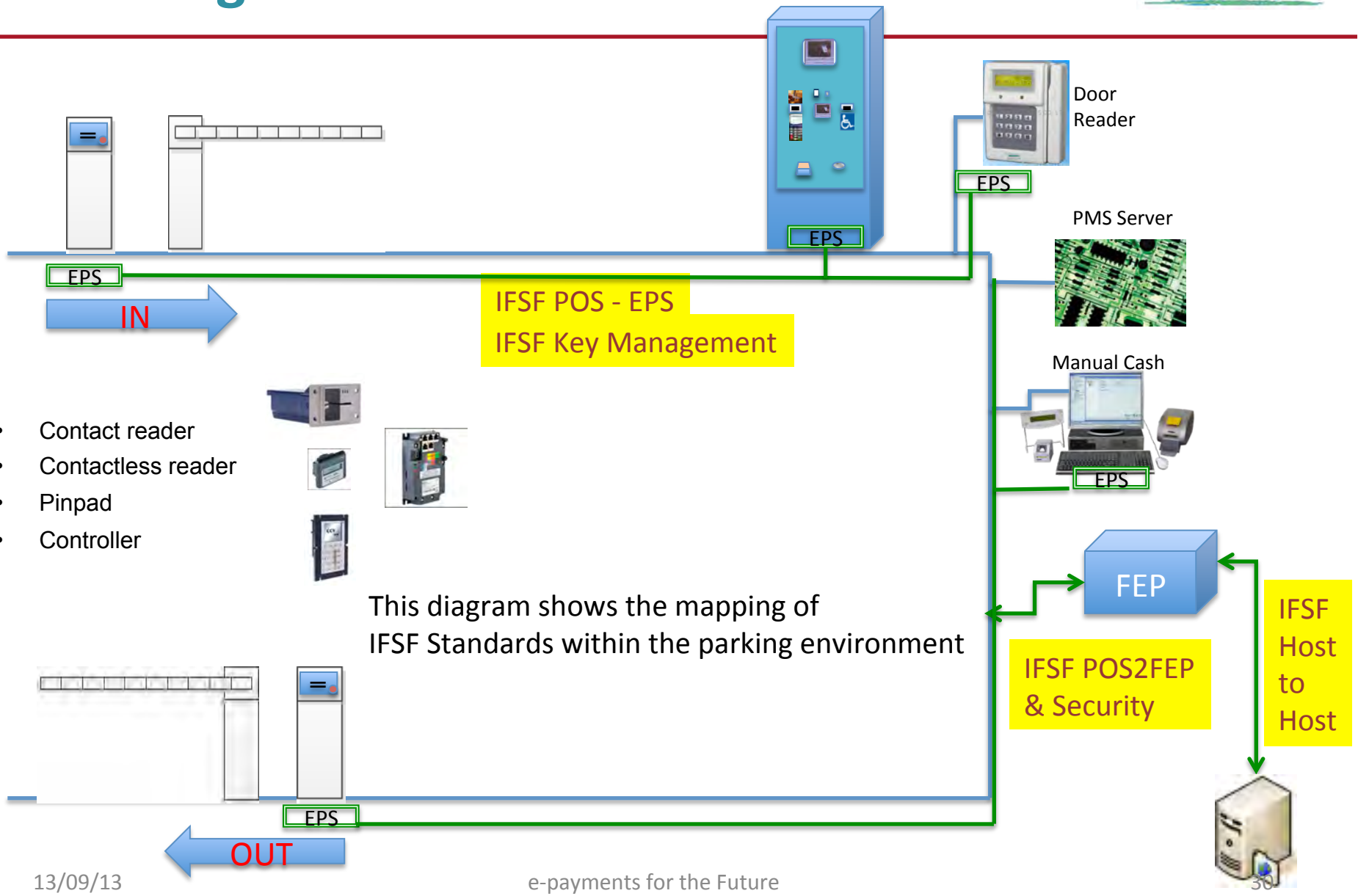
- e-payments have been a nightmare for operators; in terms of investment strategy and protection of the investments made.
- The EPA Board has supported the IFSF initiative as we believe that it can make a significant difference to our members' and their members
- I urge you all to make the most of this opportunity!

Thank you for your attention

Adopt & Use the EPA/IFSF standards!

The slides after this point contain extra info that could be useful to understand more details

Parking Environment & IFSF Standards



Other issues

- Mobile payments
  - Mobile payments are a misnomer. The mobile phoner **is just an enabler**. The payment is a CARD payment
  - Mobile payment standard is being developed but based on EPC work.
  - Definition of a payment : Payment is a movement of money between two bank accounts : payer's and payee's bank accounts.
  - There are only three (3) ways to make a payment :
    - Direct Debit
    - Credit Transfer
    - Card Payment
  - Anything else is NOT a payment.

- For example, Starbuck's mobile payment is NOT a payment. It is only the usage of funds prepaid on an account. The original transaction of funding the account was a payment. The rest is not.

Other issues

- NFC (Near Field Communication)
  - NFC, or Near-Field Communications, is a set of standards for smartphones and similar devices that was established to enable **radio** communications between these terminals by touching them together or bringing them near to one another. NFC-enabled devices can be used in contactless payment systems similar to those currently used in credit cards and electronic ticket smartcards, enabling mobile payments to replace or supplement these card-based systems.
  - The economic challenge to adoption, however, remains an obstacle: the NFC chip would need to be embedded not only within the smartphone or device, but also **within the merchant's payment terminal itself**, which would end up costing just Tier 1 merchants tens of billions of dollars in upgrades.
  - The market success of NFC also depends on the widespread embracing of a new and unfamiliar type of consumer behavior, contactless payment, which is further complicated by the fact that contactless technology right now is only being actively supported by a subset of smartphone manufacturers.
- But NFC and mobile transactions are two different things. They don't have to be linked together

Other issues

Case for Tokenization

- Replacing cardholder data with „something else“ may limit the scope (and cost) of PCI DSS, but it depends on exactly how it is done whether this is actually achieved or not.
- Tokenization can be used to minimize PCI DSS impact by:
  - Replacing cardholder data in logs
  - Systems storing cardholder data may store tokens instead and thereby be out of scope for PCI.
- Tokenization minimizes the number of systems required to know and handle card holder data to a centralized repository, but encryption can be performed at many places. It enforces secure business models.
- But the tokenization system must be managed under strict procedures including Key Management processes. One of the EPA requirements is that the tokenization key be shared between PEDs (PED = PIN Entry Device) (e.g: at entry and exit barriers, pay stations etc.), door locks (may also be a PED) within a single car park and also with an internet based reservation system so that the same card will be recognized when booking a place online (or even paying in advance), when driving into the car park, when returning on foot and when driving out.