

# MEETING MINUTES

December 7, 2016, via Teleconference

## MEMBERS PRESENT

NAME	COMPANY
Calai Bhoopathi	Identiv
Harm Braams	Vasco Data Security
Abu Ismail	NXP
Uwe Schnabel	HID Global
Uli Dreifuerst	PC/SC Administration

## MINUTES

The meeting began at 7:00 pm CET.

### 1 Administrative

#### 1.1 Financial report

The financial report for the third quarter can be viewed in the member section on the PC/SC website. Current account balance at the end of September was \$27,880.53. Workgroup budget for 2016 remains similar to previous years.

#### 1.2 Test Card Sales

The figures for test card sales for 2015/2016 were presented. Between Q4 2015 and Q3 2016 income through test card sales and rentals totaled \$6.500.

#### 1.3 Web Site

The new web site was presented. It has been upgraded to a more modern design that includes a shop where you can purchase test cards, apply for and renew membership. Several pages, especially those aimed at developers and implementers, contain links to external websites. They were reviewed and updated where necessary.

There is also the possibility to comment on certain pages that the membership wishes to open for discussion (“blog”).

We'd like to encourage all members to review the site. We need your contributions to make this a source of quality information for all visitors.

Also, please let us know if you don't have a login to access the protected member area of the site. We will then send you the required information.

## 2 Status of Past Activities

Action items from the last meeting were reviewed. Please refer to the previous meeting minutes for details.

### 2.1.1 Part 10, Floating PIN Frames

Status: text has been incorporated into Part 10

### 2.1.2 Part 10, Pinpad Readers with Firewall

Status: text has been incorporated into Part 10

### 2.1.3 Consolidation of Part 10

Part 10 Supplement - IFDs with Feature Capabilities and Part 10 Amendment PIN Verification have been incorporated into the main Part 10 document. According to Harm Braams, this draft needs further review prior to sharing with the general membership for approval.

Action items:

What: Review draft Part 10

Who: Vasco

When: 12/23/2016

What: Review over the holidays

Who: HID

When: 01/13/2016

What: Contact ISO regarding error code (see last year's meeting minutes)

Who: HID

When: to be determined

## 3 Support for Android

Android is based on the Java programming language and not on C, as in PC/SC. A "Reader Factory" library exists. The question was asked if PC/SC should specify a Java API for contact readers. According to Calai Bhoopathi, Identiv has developed such an interface for contactless readers. It uses the USB interface and is based on "JPCSC", which is an open source Java wrapper (JNI library) that allows access to PCSC

functions from Java. He shared a link with the group that points to an Android SmartCard SDK designed for Identiv readers:

<https://drive.google.com/file/d/0B9R8fKty5XJHOUJWaGppVkw2aVU/view>

It was suggested that the Workgroup members review JPCSC and then decide what next steps to take. The Workgroup does not write drivers, this would be up to a third party, similar to what Microsoft did for Windows or Ludovic Rousseau for Linux, among others.

Action items:

What: Review of JPCSC

Who: All Workgroup members

When: open

#### **4 Part 3, Supplemental Document 2 – NFC devices**

This topic followed a presentation of a high-level API by NXP two years ago. According to Abu Ismail, NXP cannot make this API generic. A review by other members saw potential conflicts in endianness and a discrepancy between IDF handler and PPDU method. It was suggested not to pursue this further and to close the discussion.

Action items:

What: none

Who:

When:

#### **5 Promotion of Member Products**

**Expand the current product list on the web site**

**Develop an application that provides detailed information about supported functions**

This topic was first discussed at last year's member forum. According to Abu Ismail, there are products on the market that passed the WHQL test but have a variable degree of compliance with PC/SC standards. NXP maintains a list of such products.

As for promotion of member products, Uwe Schnabel suggested the following:

1. Link to PC/SC member products.
2. Point to the Microsoft list of WHQL certified products.
3. Ask Ludovic Rousseau about a list of PC/SC compliant products or links for Linux.

Administration will also follow-up with Ingenico who is said to have a framework for testing which could be used as the basis for a more comprehensive test program.

## Action items:

What: Share list of products with compliance level and discuss with the group

Who: NXP

When: tbd

What: Inquire with Ludovic Rousseau about a list of PC/SC products for Linux

Who: Administration

When: 12/16/2016

What: Check with Ingenico on a framework for testing

Who: Administration

When: 12/16/2016

What: Ask members to provide current links to their products and post on website

Who: Administration

When: ongoing

## 6 Other Business

Uwe Schnabel presented two topics for discussion.

### 6.1 PC/SC support for protocols on mobile devices

HID and also Gemalto are currently involved in a Working Group of the Global Platform that develops protocols for tunneling multiple mobile devices and class 3 capable readers. He asked if PC/SC should move into protocols for mobile devices. A similar situation seems to exist with the Bluetooth protocol.

Use Case – when you want to have an electronic document such as a driver's license in a mobile device.

Harm Braams would rather stick to PC/SC being the API and not the protocol. He'd like to unify the types of classes but was skeptical about protocols.

Calai Bhoopathi added that Identiv is working on protocols and could provide guidelines that could become part of the spec.

According to Uwe, this would result in a clean-up of Part 2, removal of protocol content, and adding a pointer to Global Platform specifications.

The discussion was closed with Uwe suggesting that he will check back with the Global Platform and other relevant organizations.

### 6.2 Does it make sense to port Part 10 to other programming languages such as Java or C#?

The group did not see a need to port the PC/SC specs from ANSI C to other languages since they are sufficiently portable.

The meeting adjourned at 9:30 pm.

Members: Please review the Meeting Minutes, and inform the Workgroup Administration of any inaccuracies within 10 days of receipt. When no inaccuracies are found, the Minutes will be viewed as having been accepted by the membership.

PC/SC Workgroup Administration  
admin@pcscworkgroup.com