
TSG-T3 meeting #6
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Tdoc T3-99182

Liaison statement

To: 3GPP TSG-T

From: 3GPP TSG-T3

Title: Allocation of Application Identifiers (AIDs)

1 Background

In a multi-application environment, a flexible application selection method is an obvious requirement. To achieve this, TSG-T3 would like to implement the ISO/IEC concept for application identification as defined in ISO/IEC 7816-5. This International Standard specifies application identifiers (AIDs) and the registration of such identifiers. These identifiers allow each application and each application provider to be uniquely identified. TSG-T3 does not see any feasible alternative to the international approach standardised by ISO/IEC.

The AID is used to explicitly select an application in a multi-application smart card, e.g. a *specific* USIM application (there may be more than one) or a GSM application on the same card. An AID consists of an RID (Registered Application Provider Identifier) and a PIX (Proprietary application identifier extension).

As an example, in the case of telecommunications cards issued by ETSI, the RID is the unique ETSI RID issued by ISO/IEC followed by the PIX which identifies the application and the application issuer. Currently, two ETSI applications have been defined (GSM and SIM Application Toolkit). Details of the process and the precise format of the ETSI-AIDs are specified in the ETSI guide EG-201 220. See also T3-99156 (attached) for further information.

It has been identified by TSG-T3 that AIDs need to be managed for 3GPP applications. There are, however, some issues which need to be resolved.

2 3GPP AID Administration

Administration means obtaining an RID from ISO/IEC, and issuing and maintaining the list of AIDs. Issue and maintenance of the AIDs consists of assigning and registering a unique identifier to an application upon request by the appropriate 3GPP committee. It should be noted that the PIX could be structured in such a way that there is no need for any further action by the administration authority as has been achieved in EG 201 220 (e.g., there is no need to assign identifiers to issuers or maintain a list of issuers).

According to the understanding of TSG-T3 it is possible that 3GPP as "an international organisation in charge of specification of IC card applications" (ISO/IEC 7816-5) could apply for an RID from ISO/IEC and administer AIDs. The fee charged by the ISO/IEC registration authority (Tele Danmark) to issue an RID is less than USD 100.

3 Conclusion and Proposals

The arguments given above leads T3 to the following options:

- one of the partners applies for an RID (possibly ETSI which already has an RID) and administers the list of AIDs for 3GPP;
- 3GPP as an organisation in its own right applies for an RID, and 3GPP or one of the partners maintains the list of AIDs for 3GPP;
- each partner independently applies for an RID and T3 specifies the structure of the PIX in a 3GPP document which applies to all Partners.

T3 believes that the second option presented is the most suitable approach. 3GPP would create a new document similar to the ETSI guide EG 201 220 for the structure and the maintenance of AIDs.

Title: Discussion document on the format and allocation of Application Identifiers (AIDs)

Source: SMG9 API WP Chairman

The ETSI document EG 201 220 v1.4.0 "ETSI numbering system for telecommunication; Application providers (AID)" provides the procedure for application providers to apply for an AID from ETSI. It also gives details of the AID. The AID is used to explicitly select an application in a multi-application smart card, e.g. a USIM application (there may be more than one) or a GSM application on the same card.

The procedure is a relatively simple and can be summarised thus:

- The application provider fills in the form contained in annex 1
- The application provider pays the required fee for issuance of the AID

The document gives details as to what the criteria are for acceptance or rejection of the application.

Format of the AID.

The AID consists of two parts: the RID (Registered application provider ID) and the PIX (Proprietary application Identifier Extension). The ETSI RID as registered by ISO is "A000000009".

The PIX format is defined in EG 201-220 and is between 7 and 11 bytes long. There are currently two PIXs registered with ETSI: The GSM Application which is 0001 RRRR SSSS 89, and SIM Toolkit applications which have the following format 0002 RRRR SSSS 89 TTTTTT UU.

where RRRR is the country code of the card issuer as defined in ITU Recommendation E.164, right justified and padded with 'F' on the left, SSSS is the card issuer code defined in ITU-T recommendation E.118, right justified and padded with 'F' on the left, TTTTTT is the Toolkit Application Reference (TAR) as defined in GSM 03.48 and UU is provider specific data.

This mechanism ensures that card issuers can allocate their own PIX without having to explicitly register it with ETSI, i.e. if a card issuer wants to issue GSM application they just identify their application with country and issuer code. (e.g. Orange in the UK would have the AID A0000000090001FF44FF1289). The same would apply for a non ETSI member.

Possibilities for USIM AIDs

There are two possibilities for the definition and administration of AIDs for 3GPP.

1. One of the partner standards bodies (possibly ETSI) administers the AIDs for the USIM applications in the same way as outlined in EG 201-220.
2. Each partner standard body registers their own RID with ISO, and 3GPP defines a common format for the PIX for USIM applications, ensuring that the PIX can define the card issuer/application provider uniquely in order to avoid the situations of AID duplication, or requiring the application provider to register a specific PIX for their own USIM implementation.

One area that will require clarification is how to align whichever mechanism is decided upon with any proposals that might come from 3GPP2.