AIM, Inc. Registration Authority Procedures for ISO/IEC 15961-2

Registration of RFID Data Constructs

Approved by the AIM, Inc. Board of Directors on 09/03/2019
3/20/2019
AIM, Inc.
AIM, Inc. Registration Authority

Procedures for ISO/IEC 15961-2

Registration of RFID Data Constructs

ABOUT AIM

AIM is the leading international industry association, global authority and resource in automatic identification and data capture (AIDC) technologies and innovations. For nearly 50 years AIM has championed the growth and acceptance of these through industry education, standards and advocacy.

Through the years, industry leaders from the AIDC global community continue to work within AIM to promote the adoption and application of emerging technologies and innovations. AIM actively supports the development of standards through its own committees as well as through participation at the industry, national (ANSI) and international (ISO) levels.

AIM members are manufacturers, distributors, re-sellers, educators, system integrators, and technology users of barcode, RFID, the Internet of Things, RAIN, RTLS and NFC services and solutions.

AIM delivers accurate and unbiased information on technologies, standards, and applications. Through AIM committees and alliances, AIM is able to provide an unbiased technology perspective to legislators, media and consumers.
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Foreword

AIM is the leading international industry association, global authority and resource in automatic identification and data capture (AIDC) technologies and innovations. For nearly 50 years AIM has championed the growth and acceptance of these through industry education, standards and advocacy.

Since AIM’s inception in the 1970s, industry leaders from the AIDC global community continue to work within AIM to promote the adoption and application of emerging technologies and innovations. AIM actively supports the development of standards through its own committees as well as through participation at the industry, national (ANSI) and international (ISO) levels.

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This document details the Registration Authority operating procedures for ISO/IEC 15961-2
1 INTRODUCTION

The purpose of this document is to detail the procedures for organizations to request and for AIM to issue a Data Construct (AFI) in accordance with ISO/IEC 15961-2 Information technology — Radio frequency identification (RFID) for item management: Data protocol — Part 2: Registration of RFID data constructs.

The Registration Authority for ISO/IEC 15961-2 is:

AIM, Inc.
20399 Route 19,
Suite 203
Cranberry Township, PA 16066, USA

Tel: +1.724.742.4470
Fax: +1.724.742.4476
Email: standards@aimglobal.org

2 APPLICATION ADMINISTRATORS

Responsibilities

Application Administrators shall represent an industry sector or be a standards body that is responsible for publishing RFID application standards. The use of data constructs is to enable organisations complying with the application standard to do so in an interoperable manner, while ensuring that other applications are considered mutually exclusive.

Application Administrators shall apply to the Registration Authority for registration and assignment of data constructs using the form shown in Annex B. The Registration Authority may request additional information where further clarification is needed. A separate form should be submitted for each individual request for a data construct.

Applicants shall:

a) comply fully with the procedures for application for data constructs as contained in this document;

b) agree to comply fully with the requirements contained in ISO/IEC 15961-3 for Application Family Identifiers (AFI), data formats, Object Identifiers, and other data objects (if relevant to the application);

c) forward to the Registration Authority a completed application form (see Annex B) and transfer the requisite fee (if any);
d) retain the completed application form containing the data constructs assigned to the applicant by the Registration Authority;

e) within a reasonable timeframe, preferably within 12 months of the date of assignment of RFID data constructs, provide evidence of their use in the open application environment relevant to the applicant.

Criteria for approval

a) the data constructs shall be for immediate use, preferably within 12 months of the date of their issue;

b) the unique identity being issued using the data constructs shall be for use in an open interchange environment.

Criteria for rejection

Any applications for data constructs shall be rejected by the Registration Authority when any of the following conditions exist:

a) the unique identity issued using the data constructs assigned to the applicant would not be used in an open interchange environment;

b) the data constructs shall be used solely for purposes other than to facilitate uniqueness of the identity in entity management applications for the defined qualifiers

c) incomplete or incomprehensible information in application.

Appeal

When an application has been rejected the applicant may appeal to the Appeals Committee in accordance with AIM procedures (see Annex A). An appeal against rejection of an application shall be lodged with the appropriate body within 90 calendar days of the date of receipt of the letter of rejection.

Where an application has been rejected by the Registration Authority, the following information shall be provided by the applicant to the appeals committee in support of the appeal:

a) statement of which rejection clause is disputed and why the applicant believes that the rejected application fulfils the criteria for approval;
b) statement of special considerations whereby a specific requirement of the rejected application can be met, but such requirement is outside the current procedures and criteria for approval.

3 **REGISTRATION AUTHORITY**

- **Responsibilities**

The Registration Authority shall appoint an Administrator of the procedures, who shall be the most senior staff member of AIM.

The Registration Authority responsibilities shall be:

a) to appoint and maintain a committee of experts to help determine the validity of the applications and submit to AIM a recommendation regarding approval or disapproval.

b) to receive and acknowledge applications from organisations wishing to obtain a set of data constructs in accordance with ISO/IEC 15961-2;

c) to process applications within 30 calendar days of receipt of the application form;

d) to notify the applicant in writing, within 30 calendar days of receipt of the application form, as to the disposition of their application;

e) to register applications meeting the criteria for approval and assign a data construct within 90 calendar days of receipt of the application form; if the criteria are met;

f) to notify unsuccessful applicant organisations with reference to the relevant rejection clauses within 90 calendar days of receipt of the application form;

g) to forward to the appeals committee, within 30 calendar days of receipt of the application, requests for more than one set of data constructs or any applications where special circumstances exist;

h) where an application is referred to the appeals committee, to notify the applicant, in writing, that a reply may not be received within the usual timeframe and the reason for referring the application to the appeals committee;

i) to notify the appeals committee, in writing, within 30 calendar days of receipt of the application, if the application has been rejected;

j) to maintain the database of data construct information;
k) to produce a register of data constructs;

l) to submit a copy of the data constructs register, each January and July, to the secretariat of ISO/IEC JTC 1/SC 31 and each February to ISO and IEC;

m) to retain as a permanent record copies of all applications submitted to it, along with the disposition of each application.

The register of data constructs

The Registration Authority shall maintain a database of information taken directly from the application form.

Based on the information contained in this database, the Registration Authority shall publish a register of data constructs. The register of data constructs is a public document available free of charge.
Annex A
(informative)

Appeals committee

A.1 Constitution

In order to effectively manage the process of assigning AFIs AIM has established an Appeals Committee.

The Appeals Committee shall be made up of:

a) representative of the Registration Authority who shall be a non-voting member of the Appeals Committee and shall attend all meetings;

b) the Convenor of the Appeals Committee who shall be a non-voting member of the Appeals Committee, appointed by AIM;

c) the Secretary of the Appeals Committee who shall be a non-voting member of the Appeals Committee, appointed by AIM.

d) Three members chosen by the Administrator from a pool of five members previously appointed by the Administrator.

A.2 Responsibilities

The responsibilities of the Appeals Committee shall be:

a) to enforce the criteria for approval and rejection of an Issuing Agency by the Registration Authority;

b) to process within 60 days of receipt any queries arising from the Registration Authority.

A.3 Voting procedures

Any appeal will be circulated to the Appeals Committee as a postal ballot. If the postal ballot fails, at the discretion of the convenor, a meeting of the Appeals Committee will be called. Quorum of the meeting will be those present, a majority of votes cast is required to overturn a decision of the Registration Authority.

If the Appeals Committee cannot resolve the issue after a ballot at a meeting, the matter shall be referred to AIM Board of Directors.
Annex B  
(informative)

Application form for Data Construct including AFI

The latest version of the form may be found on the Registration Authority web page. This is at https://www.aiimglobal.org/registration-authority.html. The following in an example of the data required on that form.

A. TO BE COMPLETED BY APPLICANT (Application Administrator)

<table>
<thead>
<tr>
<th>Name of organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address street, city, country.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Principal contact in organisation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-mail</th>
<th>Telephone number</th>
<th>Website Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Organization (non-profit, government entity, corporation etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full address for correspondence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Define the application that will use RFID data constructs (attach separate sheet)</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>State which of the air interface protocols (and their modes or types) of ISO/IEC 18000 are expected to be used for the application</td>
</tr>
<tr>
<td>Anticipated date of first use of RFID data constructs</td>
</tr>
<tr>
<td>List the countries in which you are represented (attach separate sheet)</td>
</tr>
<tr>
<td>Expected number of users</td>
</tr>
<tr>
<td>Expected number of RFID tags issued annually (based on some accepted metric – please define – for the application)</td>
</tr>
</tbody>
</table>

The application requires additional registration of the following: (include explanation of each section)

- a mapping table; go to page 3
- a Packed Object encoding table (mutually exclusive with Tag Data Profiles); go to page 3
- a Tag Data Profile scheme (mutually exclusive with Packed Objects); go to page 3
- an AFI associated with a Monomorphic-UII; go to page 3
- None of the above

We hereby apply for the assignment of RFID data constructs, and state that the use of RFID data constructs will be in accordance with ISO/IEC 15961-2

Signature/date
1. **Object Identifier for Unique Item Identifier**
   1A. Can an existing registered Object Identifier be used for the UII?
       - YES  Provide details ▶
       - NO  Continue ▼

   1B. Is there an Object Identifier already registered under ISO/IEC 9834-1 for the UII for your application?
       - YES  Provide details ▶
       - NO  Continue ▼

   1C. Is there an Object Identifier in the process of being registered under ISO/IEC 9834-1 for the UII for your application?
       - YES  Provide details ▶
       - NO  Continue ▼

   1D. Is the Object Identifier to be encoded as a Monomorphic-UII?
       - YES  Provide details on Page 4 and continue below ▼
       - NO  Continue ▼

   If you have answered NO to questions 1A, 1B, and 1C the Registration Authority will assign an Object Identifier for the UII for your application

2. **Object Identifier for other item-related data**
   2A. Will the application support item-related data
       - NO  Go to Question 5
       - YES  Continue ▼

   2B. Can an existing registered Object Identifier be used for the item-related data?
       - YES  Provide details ▶
       - NO  Continue ▼

   2C. Is there an Object Identifier already registered under ISO/IEC 9834-1 for the item-related data for your application?
       - YES  Provide details ▶
       - NO  Continue ▼
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D. Is there an Object Identifier in the process of being registered under ISO/IEC 9834-1 for the item-related data for your application?</td>
<td>YES</td>
<td>Provide details ▶</td>
</tr>
<tr>
<td>NO</td>
<td>Continue ▼</td>
<td></td>
</tr>
</tbody>
</table>

If you have answered NO to questions, 2B, 2C, and 2D the Registration Authority will assign an Object Identifier for the item-related data for your application

| 3. Possible dual Data Format registration | | |
| 3A. Does the RFID tag proposed for the application have special memory area for encoding the UII that is distinctly different from the memory for encoding other item-related data? | YES | Continue immediately below ▼ |
| NO | Continue Question 4 ▼ |

| 3B. Are separate data formats required for the OID for the UII and item-related data? | YES | Continue immediately below ▼ |
| NO | Continue Question 4 ▼ |

If your answer to 1A was YES, the Registration Authority will assign the same data format as that already register for the OID for the UII
If your answer to 1B or 1C was YES, the Registration Authority will consider assigning a new data format for the UII of your application

| 4. Possible single Data Format registration | | |
| If your answer to 2B was YES, the Registration Authority will assign the same data format as that already register for the OID for the application | | |
| If your answer to 2C or 2D was YES, the Registration Authority will consider assigning a new data format for the application | | |

| 5. Possible AFI registration | | |
| Can an existing registered AFI be used for the application? | YES | Provide details ▶ |
| NO | Continue ▼ |

If you have answered NO to this question on AFI, the Registration Authority will consider assigning a new AFI for the application
### Registration details of a Mapping Table

<table>
<thead>
<tr>
<th>Title of data dictionary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Publisher</td>
<td></td>
</tr>
<tr>
<td>Availability</td>
<td>□ Free □ May be purchased</td>
</tr>
<tr>
<td>url for access or purchase of the data dictionary</td>
<td></td>
</tr>
<tr>
<td>url for the mapping table (shall provide links to any revised editions of the tables)</td>
<td></td>
</tr>
</tbody>
</table>

### Registration details of a Packed Object Encoding Table

<table>
<thead>
<tr>
<th>Title of data dictionary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Publisher</td>
<td></td>
</tr>
<tr>
<td>Availability</td>
<td>□ Free □ May be purchased</td>
</tr>
<tr>
<td>url for access or purchase of the data dictionary</td>
<td></td>
</tr>
<tr>
<td>Maximum size of the basic Packed Object table</td>
<td>□ 16 □ 22 □ 32 □ 44 □ 64 □ 90 □ 128 □ 256 □ 512 □ 1024 □ 2048 □ 4096 data elements</td>
</tr>
<tr>
<td>url for the Packed Object encoding tables (shall provide links to any revised editions of the tables)</td>
<td></td>
</tr>
</tbody>
</table>

### Registration details of a Tag Data Profile Scheme
The application administrator (as on page 1)

- A separate organisation As a new application is required from that organisation, please contact them to apply directly

Availability

- Free
- May be purchased

URL for the Tag Data Profile

Registration details for a Monomorphic-UII

- Is the UII always fixed length and of a fixed hierarchical structure
  - YES
  - NO

- Mandatory compaction scheme for this Monomorphic-UII
  - 6-bit
  - 7-bit
  - URN Code 40
  - Octet (8859-1)
  - Octet (App-Defined)

Please return application to:

The Registration Authority
AIM, Inc.
20399 Route 19, Suite 203
Cranberry Township, PA 16066, USA
Email: standards@aimglobal.org

B. TO BE COMPLETED BY THE REGISTRATION AUTHORITY

<table>
<thead>
<tr>
<th>Form received on</th>
<th>AFI</th>
<th>AFI issued on</th>
</tr>
</thead>
</table>

Qualifiers permitted for use:

Signature/date