The Universal Postal Union

UPU Addressing Standards and ISO 19160

Berne (SWITZERLAND)
Content

UPU - introduction

• UPU Standards
• Addressing Standards

Recent progress

• Regional approach
• Promotion of UPU standards

Stake in ISO 19160
The Universal Postal Union

- Founded in Berne in 1874
  - 1874 » 22 member countries
  - 2012 » 192 member countries

- United Nations specialized agency
  - since 1948
The worldwide postal network

- 431 billion letters
- 6 billion parcels
- 5.5 million employees
- Millions more jobs in related industries
- More than 665,000 post offices
- More than 82.7% of traffic comes from 28 industrialized countries
Merging three networks

- Physical
- Financial
- Electronic

The worldwide postal network offers a natural gateway to the information society.
The UPU plays a role in:

- Regulating worldwide traffic of international mail
- Establishing quality-of-service standards
- Establishing technical standards
- Maintaining a system for compensating countries known as terminal dues

But also in:

- Promoting the development of modern products and services
- Monitoring market trends
- Promoting international cooperation and technical assistance
- Fostering a dialogue among all postal sector players
UPU STANDARDS
• MoU with CEN TC 331 – Postal services
• Cooperation agreement with ISO
• Liaison with several ISO TC
  – RFID
  – Financial services
• Since 2008 liaison with TC 211
• technical standards to facilitate the exchange of operational information between Posts
• coordinates of UPU standardization initiatives with those of other international standardization bodies
  – electronic data interchange (EDI)
  – mail encoding: Bar code standards
  – Identification/codification standards (airports, air carriers, countries, offices of exchange, postal consignments, postal despatches, postal receptacles, postal items, item tracking events)
    • Codes of International mail processing centres (IMPCs)
  – Addressing Standards
S42 Overview

International postal address components and templates

S42 Part A

terminology + postal address components => UPU Profile

languages (PATDL, NLT) for expressing rendition rules as templates => ISO 19160-4

S42 Part B

country specific address templates
design patterns for templates
postal address component - collective term for
- **segment** - group of constructs and elements with specific defined function
- **construct** - combination of elements and constructs that form a logical portion of a postal address
- **element** - has a well-defined conceptual meaning and representation and has significance for customer or postal processing
- sub-division of a element representing levels, positions or parts of the root element, used to facilitate template design, address rendition, address database storage
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Peter PEPPERS 1 Clouser LN Provo UT 84603-0320 USA

الدار البيضاء زنقة ديوان 78 تلماني حبيبة 20150 Morocco
<lineSelect>
  <isPopulated>U40.19-0-1</isPopulated>
  <lineName lineNumber="004">post office box</lineName>
  <isPopulated>U40.24</isPopulated>
  <lineName lineNumber="004">thoroughfare</lineName>
  <lineName lineNumber="005">unit</lineName>
  <lineName lineNumber="006">postcode and town</lineName>
</lineSelect>
محمد عبد الله
2345
الرياض 12345–6789
المملكة العربية السعودية

LINE 1
10.06 Given Name
محمد
10.08 Surname
عبد الله
LINE 2
40.24 Street No. or Plot
2345
40.21-1-1 Thoroughfare Name
شَارِع سَالِم
LINE 3
40.16 Town
الرياض
40.13-0-1 Primary Postcode
12345
40.13-0-2 Secondary Postcode
6789
LINE 4
40.14 Country
المملكة العربية السعودية
<table>
<thead>
<tr>
<th>S42-6</th>
<th>Added in S42-7</th>
<th>In development or approval</th>
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<tr>
<td>Australia</td>
<td>Portugal</td>
<td>Serbia</td>
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<td>Brazil</td>
<td>South Africa</td>
<td>Spain</td>
</tr>
<tr>
<td>Canada</td>
<td>USA</td>
<td>Thailand</td>
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<tr>
<td>Chile</td>
<td>Venezuela</td>
<td>Trinidad and Tobago</td>
</tr>
<tr>
<td>Finland</td>
<td>Modified in S42-7</td>
<td>Uganda</td>
</tr>
<tr>
<td>France</td>
<td>Chile</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Germany</td>
<td>Morocco</td>
<td>Iran (Islamic Rep.)</td>
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<tr>
<td>Great Britain</td>
<td>New Zealand</td>
<td>Viet Nam</td>
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<tr>
<td>Italy</td>
<td>Approved for S42-8</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Zambia</td>
<td>Indonesia</td>
</tr>
<tr>
<td></td>
<td>Belgium</td>
<td>Poland</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td></td>
</tr>
</tbody>
</table>
Regional approach – project for Asia Pacific Promotion – recognition ceremony

RECENT PROGRESS
Promotion of standards

- New S42 Ceremony in February
  - Six recently approved countries will qualify
  - Several more still may approve before end of year

- Switch of target in promotion
  - from countries to users
  - national level
  - international level
• Countries in the project: China, India, Malaysia, Indonesia, Mongolia, Iran, Philippines, Vietnam, and Thailand

• Two years project with phases:
  • data gathering
  • template drafting
  • workshop to resolve outstanding issues
  • Approval and publication

• Workshop at APPU in Bangkok, June 2011

• The Project financed by UPU and APPU
Addresses of almost half population of the globe covered by this project

Five different scripts: Hanzi, Latin, Arabic, Cyrillic and Thai
Addressing in industrial and information eras

**Industrial Era**
1950 – 1990

**POSTCODES AND SORTING MACHINES**
- to make sorting more efficient

**POSTCODE DIRECTORY**
- published as books available at PO
- optimized for printing
- postcodes related to unstructured data

**ADDRESS FORMATS**
described as generic recommendations

**Information Era**
1990 – NOW

**DELIVERY POINT DB with GIS**
- to validate addresses at data capture or before mail production

**DATA PRODUCTS**
- published as raw data and included in validation services
- optimized for data querying

**ADDRESS FORMATS**
precisely standardized including detailed rendering rules
Address Types:

Address formats used in China depend on language and script. There are three versions of address formats defined for English, Pin Yin and Hanzi.

<table>
<thead>
<tr>
<th>Lines\Types</th>
<th>Urban – English</th>
<th>Rural – English</th>
<th>PO Box/Post Restante – English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1</td>
<td>Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line 2</td>
<td>Street</td>
<td>Rural locality</td>
<td>Post Office</td>
</tr>
<tr>
<td>Line 3</td>
<td>{Administrative Areas}</td>
<td>{Administrative Areas}</td>
<td>PO Box</td>
</tr>
<tr>
<td>Line 4</td>
<td>Postcode</td>
<td>Postcode</td>
<td>Postcode</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lines\Types</th>
<th>Urban – Pin Yin</th>
<th>Rural – Pin Yin</th>
<th>PO Box/Post Restante – Pin Yin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1</td>
<td>Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line 2</td>
<td>Street</td>
<td>Rural locality</td>
<td>Post Office</td>
</tr>
<tr>
<td>Line 3</td>
<td>{Administrative Areas}</td>
<td>{Administrative Areas}</td>
<td>PO Box</td>
</tr>
<tr>
<td>Line 4</td>
<td>Postcode</td>
<td>Postcode</td>
<td>Postcode</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lines\Types</th>
<th>Urban – Hanzi</th>
<th>Rural – Hanzi</th>
<th>PO Box/Post Restante – Hanzi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 1</td>
<td>Postcode</td>
<td>Postcode</td>
<td>Postcode</td>
</tr>
<tr>
<td>Line 2</td>
<td>Urban address</td>
<td>Rural address</td>
<td>PO Box/ Restante</td>
</tr>
<tr>
<td>Line 3</td>
<td></td>
<td></td>
<td>Post Office</td>
</tr>
</tbody>
</table>
Structure of Address Lines Latin, English:

<table>
<thead>
<tr>
<th>LINE NAME</th>
<th>ORDER OF ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>Door &amp;, &quot; &amp; floor &quot;, &quot; &amp; stairwell &quot;, &quot; &amp; wing &quot;, &quot; &amp; building &quot;, &quot; &amp; district instance 3</td>
</tr>
<tr>
<td>Street</td>
<td>street no &amp; primary thoroughfare &amp; secondary thoroughfare &amp; district instance 2</td>
</tr>
<tr>
<td>PO Box</td>
<td>[DS identifier]</td>
</tr>
<tr>
<td>Post Office</td>
<td>[DS qualifier]</td>
</tr>
<tr>
<td>Rural Area</td>
<td>street no &amp; primary thoroughfare &amp; &quot; &amp; district instance 1 &amp; town &amp;&quot;, &quot; &amp; [region level 4]</td>
</tr>
<tr>
<td>Administrative Areas</td>
<td>[region level 3], &quot; &amp; [region level 2]</td>
</tr>
<tr>
<td>Postcode</td>
<td>[postcode] &amp; [region level 1]</td>
</tr>
</tbody>
</table>
## Address Elements used

<table>
<thead>
<tr>
<th>S42 Name</th>
<th>Local Name in English</th>
<th>Name in Latin (Pin Yin)</th>
<th>Local Name Hanzi</th>
</tr>
</thead>
<tbody>
<tr>
<td>door</td>
<td></td>
<td>Shi</td>
<td>室</td>
</tr>
<tr>
<td>floor</td>
<td></td>
<td>Ceng</td>
<td>层</td>
</tr>
<tr>
<td>stairwell</td>
<td></td>
<td>Dan Yuan</td>
<td>单元</td>
</tr>
<tr>
<td>street No</td>
<td></td>
<td>Men Pai</td>
<td>门牌</td>
</tr>
<tr>
<td>building</td>
<td></td>
<td>Lou</td>
<td>楼</td>
</tr>
<tr>
<td>district instance 3</td>
<td>Residential area (Complex of bldg)</td>
<td>Xiao Qu</td>
<td>小区</td>
</tr>
<tr>
<td>district instance 2</td>
<td>urban area</td>
<td>Pian Qu</td>
<td>片区</td>
</tr>
<tr>
<td>secondary thoroughfare</td>
<td>Lane</td>
<td>Hu Tong/Nong</td>
<td>胡同/弄</td>
</tr>
<tr>
<td>primary thoroughfare</td>
<td>Street</td>
<td>Jie</td>
<td>街</td>
</tr>
<tr>
<td>DS type</td>
<td>PO Box / poste restante</td>
<td>Poste Restante</td>
<td>存局候领</td>
</tr>
<tr>
<td>DS indicator</td>
<td>PO Box number</td>
<td>PO Box</td>
<td>邮政信箱</td>
</tr>
<tr>
<td>DS qualifier</td>
<td>post office</td>
<td>Post Office</td>
<td>邮局</td>
</tr>
<tr>
<td>district instance 1</td>
<td>Group</td>
<td>Zu</td>
<td>组</td>
</tr>
<tr>
<td>Town</td>
<td>Village</td>
<td>Cun</td>
<td>村级自治组织</td>
</tr>
<tr>
<td>region level 4</td>
<td>Township</td>
<td>Xiang</td>
<td>乡级行政区</td>
</tr>
<tr>
<td>region level 3</td>
<td>County</td>
<td>Xian</td>
<td>县级行政区</td>
</tr>
<tr>
<td>region level 2</td>
<td>Prefecture</td>
<td>Shi</td>
<td>地级行政区</td>
</tr>
<tr>
<td>region level 1</td>
<td>Province</td>
<td>Sheng</td>
<td>省级行政区</td>
</tr>
<tr>
<td>postcode</td>
<td>Postcode</td>
<td>Postcode</td>
<td>邮政编码</td>
</tr>
</tbody>
</table>
ISO 19160
Address Stakeholders

Citizens

Delivery service providers

Emergency response

Location services

Utility service providers

National government

Customer services

Local government
• Coordination between agencies responsible for addressing has impact on quality of address infrastructure
• Standards are needed to support exchange of information not only within domain but also between various domains
• ISO 19160 proposed suite of standards addresses this need and UPU supports its recommendations
Thank you

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