Significance of the Korean addressing project for UPU addressing services

ISO TC 211 Address Data and Standards
Busan 29 May 2013
INTRODUCTION
UPU

- Founded in Berne in 1874
  - 1874 » 22 member countries
  - 2013 » 192 member countries
- United Nations specialized agency since 1948

Worldwide postal network

- Hundreds of billions of letters
- A few billion parcels
- 5.5 million employees
- Millions more jobs in related industries
- More than 665,000 post offices
Addressing in the industrial and the information age

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
• structured data gathered from other organizations
• 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
• Beijing Congress (1999)
  • creation of addressing products and services to improve the quality of the international postal service

• This resulted in creation of:
  • PostCode Database
  • Addressing Standards (S42)
  • Technical assistance services to member countries
  • Global initiative „Addressing the world – address for everyone”
ADDRESSING THE WORLD—AN ADDRESS FOR EVERYONE
"Addressing the world—An address for everyone"

- "Addressing the world" initiative launched in 2009
- Aim: raise awareness of the importance of addresses
- Main objective: create synergies among addressing players
- Practical objective: define a holistic vision to find solutions to the addressing problem
- **Ultimate goal: provide everyone with an address**
- With this goal in mind, a *white paper* on the value of addresses was presented during the 2012 Doha Congress
Seeks to encourage leaders to support the development of addressing policies in their countries

Contains:

I. A study on the social and economic value of address infrastructure

II. Addressing policies as a nationwide effort (case studies)

III. Contributions from partners to the initiative (UNESCO, ITU, UN-Habitat, AU, WB, UNDP, ISO, EURADIN)
Thanks to the cooperation provided by MOPAS, the white paper included a case study of the Republic of Korea’s new addressing project, including its development stages, challenges and benefits.

The Republic of Korea’s contribution highlighted that:

- addressing is a cross-cutting issue that affects many sectors of society
- the Post is not the only stakeholder for these kind of projects
- political will is necessary to undertake such a project
The Rep. of Korea’s contribution supports UPU member countries and other addressing stakeholders by leading the way for address infrastructure development and change.

Resolution C48/ 2012 “Doha Declaration on the role of an address infrastructure in the development and integration of member countries”, which pledges that countries will prioritize addressing policies, was approved by Congress, in part due to the success of the white paper.

Since Congress, 12 countries expressed interest in developing addressing and postcode systems. We are confident that the Rep. of Korea’s participation in the white paper helped spur renewed interest in addressing.
S42 - UPU ADDRESSING STANDARD
### S42 Part A

<table>
<thead>
<tr>
<th>terminology + postal address components</th>
<th>languages (PATDL, NLT) for expressing rendition rules as templates</th>
</tr>
</thead>
<tbody>
<tr>
<td>=&gt; UPU Profile</td>
<td>=&gt; ISO 19160-4</td>
</tr>
</tbody>
</table>

### S42 Part B

- country specific address templates
- design patterns for templates

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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
S42 elements as Profile of ISO 19160-1
<table>
<thead>
<tr>
<th>Given name</th>
<th>Surname</th>
<th>Street No</th>
<th>Street Name</th>
<th>Street Type</th>
<th>Floor</th>
<th>Town</th>
<th>Region</th>
<th>Postcode</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerhard</td>
<td>LEICHT</td>
<td>23b</td>
<td>Eiswaldstr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12249</td>
<td>Germany</td>
</tr>
<tr>
<td>Marco</td>
<td>NICOLETI</td>
<td>300</td>
<td>Europa Viale</td>
<td>Piano 4</td>
<td>Roma</td>
<td>RM</td>
<td>00144</td>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Peter</td>
<td>PEPPERS</td>
<td>1</td>
<td>Clouser LN</td>
<td></td>
<td></td>
<td></td>
<td>84603-0320</td>
<td>USA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Morocco</td>
</tr>
</tbody>
</table>

الدار البيضاء
بئرة 78
المجلة المكسيكية
20150
الدار البيضاء
• ISO 19160-4 to endorse S42 as ISO standard
  - project starts this year and is to be completed by 2016

• Korea developed S42 template
  • thanks to contributions by ETRI
  • approval is pending
  • Korean profile for ISO 19160-1 helped define mapping rules

### Mapping of Address Elements

<table>
<thead>
<tr>
<th>S42 NAME</th>
<th>LOCAL NAME LATIN</th>
<th>LOCAL NAME HANGUL</th>
</tr>
</thead>
<tbody>
<tr>
<td>thoroughfare</td>
<td>Road name</td>
<td>도로명</td>
</tr>
<tr>
<td>street no</td>
<td>Building-Bonbeon</td>
<td>건물번호본번</td>
</tr>
<tr>
<td>region lev 1</td>
<td>SiDo</td>
<td>시도</td>
</tr>
<tr>
<td>Door</td>
<td>Building-Bubeon</td>
<td>건물번호부번</td>
</tr>
<tr>
<td>Floor</td>
<td>Cheung</td>
<td>층</td>
</tr>
<tr>
<td>region lev 2</td>
<td>SiGunGu</td>
<td>시군구</td>
</tr>
<tr>
<td>postcode</td>
<td>Postal Code</td>
<td>우편번호</td>
</tr>
<tr>
<td>region lev 3</td>
<td>EupMyeon</td>
<td>읍면영문</td>
</tr>
<tr>
<td>floor type</td>
<td>Jiha</td>
<td>지하여부</td>
</tr>
<tr>
<td>Wing</td>
<td>Dong</td>
<td>동</td>
</tr>
<tr>
<td>Door</td>
<td>Ho</td>
<td>호</td>
</tr>
</tbody>
</table>

### Structure of Address Lines Hangul

<table>
<thead>
<tr>
<th>LINE NAME</th>
<th>ORDER OF ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd line</td>
<td>Wing &amp; floor &amp; door &amp; building*</td>
</tr>
<tr>
<td>3rd line</td>
<td>Organization &amp; PO Box</td>
</tr>
<tr>
<td>4th line</td>
<td>Addressee / Mailee</td>
</tr>
<tr>
<td>5th line</td>
<td>[postcode]</td>
</tr>
</tbody>
</table>

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- Need for ability to validate global addresses expressed during Global Addressing Summit, April 2010
- Challenges:
  - Data coverage
  - Licensing
  - Variety of formats
    - (lack of interoperability)
- Value of easily accessible address data to the economy
  - Denmark
  - USA

- PostCode DB
  - Licensing facilitator
  - Data interpreted and converted into uniform format
  - cannot address insufficient coverage
Korea has chosen to provide easy access to address data

- Frequent updates
- Comprehensive coverage
• Addresses are the backbone of the global postal network

• Global addressing is developed on the national level

• Korea has shown how address infrastructure can be built and shares its knowledge with other countries

• Korea develops profiles/templates of international standards, thereby making their addressing globally interoperable

• Korea implemented best practice regarding data sharing policies

• Korea shows the way how to move addressing from the industrial to the information era
Thank you

postcode@upu.int