

# Recent Topics regarding ISO/TC 211 in Japan

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# **Contents of the presentation**

- Development of Japanese Industrial Standards (JIS) in accordance with ISO 19100s
- Japanese Profile for Geographic Information Standards (JPGIS)
- Development of new standards on Geographic Information

# **Development of JIS on GI**

- Japanese Industrial Standards Committee (JISC)
  - is the National Body of ISO
  - issues the Japanese Industrial Standards (JIS)
- Association of Precise Survey and Applied Technology (APA)
  - is a non-profit organization whose members consist of companies engaged in geospatial data development and related services
  - is the Secretariat of Japan National Committee for ISO/TC 211 designated by JISC
  - is the Secretariat of Drafting Committee for Japanese Industrial Standards – Geographic Information

### **Present Status of JIS development**

- ISO 19100 series of standards are being developed as JIS X 7100 series of standards.
- The following standards are identically translated or technically modified from ISO 19100s.
  - Issued: JIS X 7105, 7107, 7108, 7111, 7112, 7113 (Identical respectively) and 7115 (Modified)
  - Under drafting: JIS X 7109 (Identical) and 7110, 7114 (Modified respectively)

NOTE: These will be used as multi-lingual glossary of term

 The errors found during the development of JIS are submitted to PT 19140.

 Those errors are corrected in JIS and also summarized as a special annex in JIS.

### **Issues on JIS development**

- It takes a long time for publishing JIS because it needs
  - work resources for precise translation between Japanese and English
  - official procedures like ISO
- Just after or during development of JIS, ISO 19100s are/were revised or amended.
  - ISO 19110, ISO 19111, ISO 19117, etc.
  - We could wait until being stable standards, but the official Japanese standards are indispensable to disseminate standards.
- Inconsistencies between ISO 19100s are pointed out during the deliberations of JISC
  - We try to resolve the inconsistency to correct or modify the standards.
  - ISO 19109 and ISO 19110
    - This issue will not be resolved with NWIP (draft amendment of ISO 19110)
  - ISO 19113, ISO 19114 and ISO 19115
    - ISO 19113 and ISO 19115 have already published as JIS.
    - It is impossible to drafting consistent JIS X 7114 (ISO 19114) with JIS X 7113 (ISO 19113) and JIS X 7115 (ISO 19115) and then the drafting works are pending.

### **Development of JPGIS**

- Geographical Survey Institute (GSI) has been promoting uses of ISO standards.
- GSI developed and published Japan Profile for Geographic Information Standards (JPGIS) Ver.1.0 on January 2005 (The works were done by APA under contract with GSI).
- JPGIS is a profile derived from:
  - JIS X 0301 (ISO 8601 Representation of dates and times), JIS X 4159 (W3C XML 1.0)
  - JIS X 7105 (ISO 19105), JIS X 7107 (ISO 19107), JIS X 7108 (ISO 19108), JIS X 7111 (ISO 19111), JIS X 7112 (ISO 19112), JIS X 7115 (ISO 19115)
  - ISO/TS 19103, ISO 19109, ISO 19110, ISO 19117, ISO 19118, ISO 19123, ISO 19131

### **Overview of JPGIS**

#### Purpose

 It will be used on the basis for development of public sectors' data product specifications and related services in Japan

#### Merit

- Users need not understand all contents of standards.
- Minimum (necessary and sufficient) contents are enough for practical use.
- Since ISO standards are not stable, JPGIS can be used as an intermediate and concrete standard.
- Since some of ISO standards are not complete, JPGIS is added some supplemental rules and recommendations.
- Free distribution

# **Table of Contents of JPGIS**

- 1. Scope
- 2. Conformance
- 3. Normative reference
- 4. UML notation
- 5. Basic data type
- 6. Rules for application schema
- 7. Spatial schema
- 8. Temporal schema
- 9. Schema for coverage geometry and function
- 10. Spatial referencing by geographic identifiers
- 11. Methodology for feature cataloguing
- 12. Encoding

- Annex1 Abstract test suites
- Annex2 Reference system
- Annex3 Quality
  - Reference to an external document
- Annex4 Metadata
  - Reference to JMP (Japan Metadata Profile Ver.2.0, published in 2004)
- Annex5 Terms and definitions
- Annex6 Normative classes
- Annex7 Reference model
- Annex8 XML encoding rules
  - XML encoding rules based on ISO 19118 Annex A (recommendation)
- Annex9 Rectangular grid coverage
  - Original extensions with reference to ISO 19123
- Annex10 Portrayal
  - Original portrayal rules with reference to ISO 19117
- Annex11 Data product specification
  - Reference to an external document

### **Other Works related to JPGIS**

- The following documents were published
  - JPGIS guidebook (explanation document item by item)
  - JPGIS users' manual for developing data product specification
  - Rules for quality requirements, evaluations and reports (based on ISO 19113 and ISO 19114 for the use of the JPGIS data product specification)



NOTE: All documents and tools are at http://www.gsi.go.jp/GIS/jpgis/jpgidx.html (in Japanese)

### **Certification mechanism of JPGIS**

- APA announced to start certification/accreditation business for JPGIS on October 2006.
- Abstract
  - Certification of products
    - Certification of data product specification
      - Test conformity to JPGIS
    - Certification of quality report
      - Test conformity to JPGIS
    - Certification of software
      - Test conformity of geospatial related software to JPGIS
  - Accreditation of organizations
    - Accredit of business organizations which have capabilities to develop geospatial data compliant with JPGIS.
    - Accredited business organizations can be exempted from certification procedures of self-created products such as data product specifications and quality report of geospatial data by the third party.

# Thank you for your attentions !

