## FGDC Address Standard Maintenance Subgroup Meeting

## 12/15/2021 2:00PM

## Agenda

- 1. Welcome to the December FGDC ASMS Meeting!
  - a. In attendance:
    - i. Sean Uhl
    - ii. Ed Wells
    - iii. Jacob Twarog
    - iv. Chris George
    - v. Rodger Coryell
    - vi. Armando Garcia
    - vii. Jim Heeschen
    - viii. Alex Hershey
    - ix. Laura Henderson
    - x. Matt Zimolzak
    - xi. Donna Pena
    - xii. Raul
    - xiii. Stuart Irby
- 2. Update from Chair (Sean U)
  - a. Working on getting a ASMS GeoPortal Page
    - i. Stalled at the moment, waiting on GP side's response
    - ii. J Twarog has created a mockup to illustrate our needs
    - iii. Hopefully this will get moving soon
    - iv. Questions:
      - 1. Matt Z Has there been any consideration to set up a space on the FGDC website either instead of or in addition to the Geo Portal site? I don't want to go into too much detail but for those of us who have worked in that area, there have been some challenges with the functionality of the GP over the past years and is there a quicker/better way to do it by utilizing FGDC instead?
        - a. Sean not yet discussed, but fine with either or both. Perhaps a parallel approach would be appropriate. GP was just a place to promote our mission so the more outlets the marrier.
          - i. Matt What I would suggest is to touch base with Dave C on this. This is a subgroup of the FGDC Address subcommittee so it would not be out of place to be on the FGDC website. Speaking from personal experience, while getting updates on any of these websites isn't fast, FGDC is faster than GP.
    - v. Working on assembling a list of tools that are required for ASMS (such as the wiki, etc.)
- Discuss Comments (If any) on White Paper #1: Adding Address Geometry Elements to the FGDC Address Standard

- a. From Sara why are fishbones imaginary lines? I see they are listed as live geometry but imaginary lines. I usually make them real geometry.
  - i. Ed they are real live geometry but represent no physical feature.
- 4. Review Current List of Proposals
  - a. White Paper #1 Adding Address Geometry Elements to the FGDC Address Standard –
     Ed Wells
  - b. Wisconsin Address Number parsing issue
  - c. New attributes to reconcile with NENA CLDX Ed Wells
  - d. Map position and other geometry considerations revisit, with possible updates (covered by #1?)
  - e. Other changes from 2015
  - f. Possible character set issue for non-English words
    - Raul from PR we raised this issue relevant to a national address database because in PR we use characters that create particular problems with certain datasets.
      - 1. For example, if you want to recall info from a mainframe, depending on the dataset you use, you could either get the desired characters or odd artifacts which are not appropriate.
      - 2. To combat this, characters are substituted from unaccepted to accepted characters (for example, Ñ to N)
      - 3. To follow FGDC, PR's question is:
        - a. 1 Do we submit a standardized
      - 4. From Matt the NAD is a database, not a standard. The practice since the beginning of the enterprise is that the NAD sets minimum content guidelines and then so long as an address record contains all the minimum content guidelines and contains all of the requested data it will be submitted. How special characters are submitted can be accommodated by the NAD. In terms of dictating how special characters are represented from a content provider, that is not the function of the NAD. However, the NAD is an FGDC dataset and thus at some point must conform to standards. For some specific purposes, in those meetings about servicing a mailing function, it doesn't negate providing an output product from the NAD which could offer output standardization in that way. Pending discussions of standards rather than dictating the way providers must provide data to the NAD, the more productive consideration is output product for mission or user specific purposes.
      - 5. Matt the flow of how we go through things is this group should debate these issues as a smaller body, the address body should then discuss them to determine what alterations to make to the standard, and then this should be submitted to the address subcommittee for further discussion and to make recommendations. The primary focus of this group should be to make recommendations for changes to the standard and to make those recommendations to the larger FGDC address

- committee and then they will make those decisions. Sean, if you have questions or concerns, let me know. Otherwise, I hope we're all in concert regarding the process of making updates to the standard.
- 6. From Raul if the choice to make changes is placed back on the providers, the last PR question for FGDC is what is your recommended guidance? 70-80% of PR communities are seeking guidance for what FGDC recommends in terms of best practices of creating databases. Our goal is to make consistent databases that comply with these standards.
- 7. Matt that is exactly the purpose of this group. To make recommendations based on those standards to FGDC address group and then make changes to the standard.
- 8. Matt The FGDC preference would be that PR place a lot of weight on having PR communities create what they think is a good standard. That would have a lot of clout with this group and with the larger FGDC Address group. The ground-up approach is looked upon as desirable. If stakeholders on the island come up with what they would like in the absence of an officially endorsed standard that would be excellent.
- 9. Raul PR groups want to make sure that the data that they have is compatible at a federal level as they go and create these datasets. The way addresses are maintained right now is like how they were taught by the Spanish postal service for centuries.
- 10. Sara This sounds like the perfect opportunity for an attribute. It would be simple to construct an attribute to describe the character set that you're using (PR). If we make it an attribute, you can submit what you have and it can be dealt with however is needed.
- 11. From Ed Raul, the question you're focusing on, we should focus on Page 10 (Sec 1.4.14) which is called "Character Sets". This is the only place in the standard character sets are mentioned. We should review this and see if that covers the purposes for which someone might want to use this standard. Right now, the standard says only that a character set should be specified in the metadata of an address file because the purpose of the user is not known.
- 12. Sean we will circle back to this topic at some point.
- ii. From Sean the point of going through this list was to generate interest in specific topics. If you have a desire to be a stakeholder in one of these topics, please let Sean know.
- g. Changes to Part 3 (Quality)
- h. Discuss adding a Conformance clause (Sean)
- i. Discuss how to leverage ISO standards (licensing, and fees considerations)
- j. Anything needed for Part 4 (Data Exchange)? E.g., adding JSON encoding?
- k. Other topics that anyone has right now?
  - From Ed the possibility of adding to the element descriptions whether mandatory conditional optional and min/max occurs. This is mainly to conform it to the FGDC framework standards model. I am prepared to do that; the work

has been done. If we have different ideas should we be thinking in terms of fairly quickly after we raise the item, do we compose a white paper that says what is the problem, why do we need to solve it, what is the direction for a solution, and what are the benefits?

- 1. Sean for most topics this fits the process. We need the safety requirements. I'm thinking some of the stuff in PT 3 and PT 4 might need or not need a white paper. We may need to fix things. When there is a conceptual or content change, that's when we need white papers, but in general this is a good process.
- I. Meeting Schedule
  - i. Next meeting will be in January.
- 5. Presentation on ISO 19160 Suite of Addressing Standards (Sean U)
  - a. This is the 20-minute version of this presentation.
  - b. Background of ISO Addressing project
    - i. 2008 Denmark National Survey and Cadastre hosted intl' addressing workshop
      - Attendees agreed to create a review summary project in ISO/TC 211 GEO Info/Geomatics
    - ii. 2011: Review summary of project 19160, Addressing published with 5 recommendations:
      - 1. Develop a conceptual model for addressing (19160-1 published)
      - 2. Develop a good practice document for address assignment schemes (19160-2 under development)
      - 3. Develop standards for address management that ensure address data quality (19160-3 published)
      - 4. Adopt UPU S42 (international postal components and templates) as part of ISO addressing project (19160-4 published)
      - 5. Investigate how addresses are rendered for purposes other than mail 19160-5 dropped from program of work
      - 6. Part 6 proposed Digital interchange models added after summary published (ISO 19160-6 under development)

ISO 19160-1 and FGDC Address Standard (parts 1,2,4) side by side

ISO	FGDC
Includes conceptual model (doc and EA HTML)	Includes data model (doc)
Not a content or classification standard	Content and classification standard
Address-related info as separate classes	Address-related info as attributes
Provides means to cross map between different conceptual models	Provides means to exchange data conforming to address standard XML schema
Defines an address	Defines an address

- c.
- d. Definitions of address:
  - i. FGDC definition of Address:
    - 1. An address specifies a location by reference to a thoroughfare or a landmark; or it specifies a point of postal delivery
  - ii. ISO 19160-1 definition of address:

- 1. Structured information that allows the unambiguous determination of an object for purposes of identification and location
- From Sean's perspective, there are similarities but differences in the definitions. There are also different conceptual mentalities around them, but there are no technical conflicts between these two defections.
- e. Part 1: Conceptual Model
  - i. UML model provides common representation of address info
  - ii. Provides a means to cross-map between different conceptual models
  - iii. Includes terms and definitions describing model concepts
    - 1. Provides Conceptual Schema for 19160-3: Address Data Quality
    - 2. FGDC Address Standard profile of 19160-1 created.
- f. Part 2 19160-2 Scope
  - i. Refer to slides
- g. Part 3 Address Data Quality
  - i. Refer to slides

ISO 19160-3 and FGDC Address Standard (part 3) side by side

ISO	FGDC
Quality concepts based on ISO 19157 (profile)	Quality concepts based on CSDGM, ISO 19115 (updated since publication) and ISO 19113 (replaced by 19157 in 2013)
Several examples but no specific "how to" for measures	Examples and well-formed data prep and SQL methods
Reporting requirements based on ISO 19115 (2013)	Reporting requirements based on ISO 19115 (2003), etc.
Describes new "Completeness" terms	F:

- h.
- i. Opportunities for use of ISO address data quality standard
  - i. Similar to the FGDC address standard, it can be used
    - 1. As a framework for QC planning and processing
    - 2. To allocate QC tasks to different staff members or areas
    - 3. For incoming, outgoing, and stored data
    - 4. For any data quality unit (Scope + Measure)
    - 5. As a type of "policy document" (i.e., part of product specifications)
- j. Next Steps
  - i. ISO 10160-2
    - 1. Part 2 probably published in the next 12 months
    - 2. Will circulate in ISO/TC 211 as DIS
  - ii. ISO 10160-6 (Address interchange models) being canceled with the intention of breaking into two parts (models and register for models)
- k. Other considerations
  - i. Theoretical shift in ISO geographic data standards content:
    - 1. Moving implementations/encodings out of base standards

- 2. Creating resource repositories that allow improvements (e.g., XML implementations) without changing semantics of concepts, elements, relationships, etc. that require lengthy standard revision
- ISO/TC 211 Committee ballot out now for creation of a Harmonized Resource Maintenance Agency
  - a. Benefits of a Maintenance Agency for users of ISO standards:
    - i. enabling machine-readability of important elements related to the standards;
    - ii. availability at a persistent web location, with stable and defined web path patterns;
    - iii. ensure access to past versions of the Resources;
    - iv. ensure access to the current valid Resources, since these follow a different lifecycle than the standards
- 4. From Sean Should be of particular concern for this group, aligns with our objectives.
- I. Comments or Questions?
  - i. From Raul I know that UPU have been working with S24 and signing different countries for many years. I was curious because I know the USPS is a participant. Do you know if there is any UPU membership in meetings that they do with the Dept. of State?
    - Sean doesn't know of any. USCB has not been involved in any of that.
      We typically don't do a whole lot with postal standards. They are not
      something that we have been particularly involved in. Can't speak to
      who was involved.
      - a. From Matt- the official US delegate to UPU is the USPS. They do have one person, maybe staff, that represents US in discussions around UPUs. They would be the logical point of contact. I did see how the UPU standard is now an ISO standard.
      - b. Raul S24 is now ISO160. Same thing, different terminology.
  - ii. Ed has there been any question as to whether the members of this committee can get access to ISO standards through Census without violating the paywall restrictions of ISO?
    - 1. Sean have no better answer than certainly not yet and it's a broader issue of access. The one thing I will show (I know this is not much of a consolation) is the ISO TC211 website. As far as the conceptual model goes, there is a lot of resources here that are available. In the meantime, I understand these are not the standards and not everything is here, but you can go to the enterprise architect site and see all the UML models of the standards. I think this is a useful way to be able to view than in a paper. You can see the core types and everything.
    - 2. Sean this is definitely an issue and I don't know what else to say.
    - 3. Matt I agree this is an issue but from my best knowledge there is nothing we can do about it. This is a fee-structure-support type model so sharing outside of dually designated licensing breaks the model for

- supporting the administration of the standard. I am not an expert but I don't see it happening.
- 4. Ed I understand. We could probably go out and buy the standard, but the issue is when we reference it in a US standard, folks will be locked out.
- 5. Matt yes, if you want to delve into the details of the standard, you're going to have to pay to take a look at it. There are different licensing options and there are ones that are less costly that folks could take advantage of that are time-limited. In the bigger picture, I don't see escaping the established model and there are legal issues at stake too, so I don't think we want to risk running afoul of the law.
- 6. Ed in the meeting notes, will you indicate which ISO standards we would want to refer to in order to participate in the discussion?
  - a. Sean yes, of course.
  - b. Part 1, which is the conceptual model and Part 3, which is the data quality model are the most relevant. Argue address assignment one maybe is, but I would say that would be the third in terms of relevance for this group. But yes, I can respond to that. I will send out an e-mail also with this link to the TC211 page and I will say the parts that I think are the most relevant and see what happens.
- Sean we will reconvene in January after the holidays and the New Year. We will figure out what the next best topic for discussion is. Be on the lookout for an invite sometime in January.
- Sean I will continue trying to work on this web page issue. Hopefully we will try to get some movement on the tools/wiki discussion. (I don't think Carl Anderson is on).
- Sean Have a safe and happy holiday season and we will reconvene in January. Thanks so much for attending!