December 13, 2018
Attendees:
John Wack
Katy Owens Hubler
John Dziurlaj
Neal McBurnett
Gema Howell
John Sebes
John McCarthy
Ryan Macias
Herb Deutsch
Josh Benaloh

Status Updates
- 4 CDF efforts:
  - Election Logs has been done for a while and just needs to be finalized – modeled after VVSG 1.0 and 1.1 requirements.
  - CVR – will talk about today
  - ERR V2 has been worked on primarily by people who have been using it
  - VRI has been modified. We thought we were done with it and then it was used in Virginia and elsewhere and there were some things that needed modifications to help its adoption in other states.
  - All have specifications drafted, being reviewed, up on GitHub servers.
- Election Glossary
  - Available on https://pages.nist.gov/ElectionGlossary/index.html.
  - Mostly set at this point. If there are some additional comments or terms to look at more in-depth please email with those comments or issues – direct to Katy Owens Hubler katyowenshubler@democracyresearch.com and John Dziurlaj john@hiltonroscoe.com.
- CVR Overview
  - John W: There are not requirements in CDFs for how they ought to be used. There are few things that are required – most are optional. It's just difficult to get one particular format to work in a variety of different states. You want something that will work but not something that is so general or so complicated that it can't be implemented – it's a balancing act.
  - Neal: are there profiles for particular use cases? For example for an RLA you have to have x, y, z.
    - John W: we've generally not put that into the format itself. It might make the specification need to be updated more frequently. At the same time we've striven to make sure that it has all the elements needed for the various use cases. Take a look at existing data fields – it wouldn't be too tough to create profiles.
    - John D: the main body probably wouldn't have profiles built in, but have done some work as to how to profile a NIST 1500 spec – doable and there's good support in the XML schema definition. Work in that area is still ongoing. Hope to

put up a repository on GitHub on a general approach to profiling, but it would be up to third parties to create those profiles and negotiate with entities to use them.

- Herb: certain elements should be required for certain uses cases – could be separate documentation.

- John W: the file is in two parts. First are definitions for contests and contest selections – i.e. building cast vote records for a particular advice requires a definition for every contest that is voted and for every contest selection that is voted. The CVRs themselves link to those definitions as necessary. The definitions can consist of an ID of the contest, or an ID along with the name of the contest, vote variation, additional information. It could contain additional data depending on how interoperable you want the CVR to be.

- Simpler to have multiple snapshots of the CVR:
  - Snapshot of original CVR without contest or mark density rules applied.
  - Snapshot with contest or mark density rules applied.
  - Snapshots as needed after adjudications.

- John W went through the different sections of the CVR CDF. Available for review here: https://github.com/usnistgov/CastVoteRecords.

- John D walked through the CVR prototype he developed: https://github.com/HiltonRoscoe/CDFPrototype/tree/master/CVR/xdp