CSEWG has a stated goal of releasing ENDF/B-IX in GNDS (only)

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Adoption is slow, will we make it in time for ENDF/B-IX?

The case for maintaining ENDF

- **ENDF is often "good enough"**

    - Rare to find a format that could not be squeezed into ENDF

- **GNDS adoption is slow**

    - Processing codes moving along

    - Evaluation codes are very far behind

- **Are we spreading ourselves thin?**

    - New formats for FPY, MT=9XX, MF34 covariances

    - Do we have to do two formats?

- **Forced adoption implies forced spending**

- **Lots of ENDF tools on the market**

    - many are new (PyNE, DeCe,..)

    - ENDF formal grammar

Program specific drivers of GNDS formats

CSEWG's Golden Rule:
The program that has the gold (💵🪙) makes the rules

- **DNN R&D**:

  - Active interrogation (tighter coupling between structure & reaction + coincidences)

  - reactions off-stability (an activation library)

- **NR, NE**:

  - TSL Covariance

- **Everyone**:

  - UQ – full pdfs; all covariances on everything (& how to get it all to fit); random realizations

Most are easier to do in GNDS, but none are impossible to kludge an ENDF solution

Big (non-program specific) GNDS format drivers

Codes (and formats) must be constantly re-invented

(or become stagnate & then obsolete)

- This cannot be allowed to happen to core codes (for processing or for evaluation) - Issue is not specific to GNDS or ENDF
- GNDS adoption has been slow
- GNDS is more pleasant to work with (even if it is not perfect)
- Few GNDS tools (FUDGE, MCGIDI, AMPX, YAHFC & TALYS formatters)

GNDS is Open Data and AI/ML friendly

(well, more friendly than ENDF)

- FAIR – Findable, Accessible, Interoperable, Reusable
- FARR - FAIR AI Readiness & Reproducibility
- ENDF would require significant changes to include more metadata, provenance, etc., information
- GNDS has this better metadata and preserves processing chain data dependencies, but it is untested
- No codes currently have proper support for FAIR, FARR type data

Other questions of a GNDS-only world

- **What is the purpose of the CSEWG Formats & Processing Committee?**
  - More emphasis on Processing & discussing what additional we should store
  - Still need to coordinate GNDS formats

- **Have we given say Russia or China the permission through the EG-GNDS process to veto US formats & processing needs?**
  - If this were to happen, would we really go along with what EG-GNDS "requires"

- **What is the support for evaluators?**
  - There is very limited support for GNDS formatting in evaluator codes

- **Bringing ENDF evaluation wisdom from ENDF-102 to GNDS?**

Whether we move to a GNDS-only world or a parallel ENDF/GNDS world, do we have a plan and the necessary resources?

Thoughts from the Executive Committee

- Processing cross-comparison exercises to bring everyone up together
  - A role for the Formats & Processing committee
  - IAEA/NEA coordinated exercises?
  - NCSP funding possible (but not this FY, there's a CR right now)

- Need an inventory of where we are with GNDS for all the labs for all the needs (processing and evaluators).

- We need a plan and possibly more resources. We can't proceed unless we have a better picture where we are.