Benefits & requirements for data evaluation and processing

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- ENDF-6 format framework has reached its limits
- ENDF-6 "overflow" every time one want to put more or change something poorly defined or frame
- ENDF-6 format is too constricted
- ENDF-6 framework needs polishing
- ENDF-6 format and formalism: subtle differences
- ENDF yes but PENDF and GENDF, myths or reality ??
- However, ENDF-6 is more or less understood in the EU, USA, JAPAN,.. seasoned differently though..

New framework benefits

- Breathing space

- Greater, more fidelity, flexibility

- Better, more basic physics

- Format may fit, serve more than one formalism

- Request a minimum, but procure for more…

- Clear, unique descriptive data set

- Text can accompany the data, users do not have to rely on a 400 pages manual, that does not contains what they look for…

- The occasion to account for all users needs

New framework benefits

- Dimensionless
- Drawer style nested arrays
  - MF's, MT's in clear text "endf", "pendf", "gendf"
  - parameters, xs, ssf, emitted spectra, angular distribution, multiplicities (nu-bar), partials
  - gendf universal, then sub-groups, ssf's
  - prefer tabulated data
  - basic physical constants and unique description
- Clear access protocols
- Uniquely defined processing steps sequences, else gives the raw and a processed data forms

Requirements

- Legacy processing codes will not change, nor the useful data forms they feed to the numerous transport/inventory codes, so it is important to be able to feed them properly from the new format frame

- However, new frames, data descriptions can be defined so as to serve others and account for new better, enhanced physics

- Verification and Validation needs to be embedded in the new frame

- Multi-physics aspects and usage of the data will have to be properly addressed, this time….

Try the new format frame

- The European Activation File; EAF-2010 as FENDL-3/A

- PENDF style data available at

http://www-nds.iaea.org/fendl3/000pages/StarterLib/2011-12-01/neutron-activ/

When you browse a GND file your eyes will be able to detect, read, evaluate values you suspected were in the file, but you could never really find them while browsing with vi the same file formatted in ENDF-6…. and trusted an evaluator to have done is job properly..