Status of the ENSDF Analysis & Utility Codes

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A. Changes since the last USNDP meeting
B. In progress and future plans
C. GTOL proposal from B. Singh

Status of the ENSDF Analysis & Utility Codes — 2

- Changes since the last USNDP meeting
  - COMTRANS
    - Converted to FORTRAN 95 & ISAM dictionary replaced by direct access dictionary
    - Increased stability & other problems fixed
  - ENSDAT
    - Converted to FORTRAN 95 & ISAM dictionary replaced by direct access dictionary
    - ENSWIN replaced by option in ENSDAT to invoke a PostScript viewer
  - FMTCHK
    - Several errors corrected and some changes in severity of messages
    - Updated check on J field for new formalism of J, J1, … and added other checks to the J field

Status of the ENSDF Analysis & Utility Codes — 3

- RULER — Several problems fixed

In Progress and Future Plans

- GAMUT — Converted to MS Windows by Dr. Choi
  - Extensive testing required
  - Upgrade to current ENSDF formats and standards
  - Port to Linux and OpenVMS
- GTOL — Increase levels to 500 and gammas to 2000
- HSICC
  - Work in progress on converting the HSICC package to use the new Band, *et al*. ICC's

Status of the ENSDF Analysis & Utility Codes — 4

- LOGFT
  - Logic from the LBNL program ft has been incorporated to calculate 3rd and higher order unique forbidden transitions.

    Extensive testing and intercomparison with LBNL Codes still remains before release.

  - Update to use the electron-capture data of Schönfeld, *et al*.
- RadList
  - Converting current in-house version of RadList to FORTRAN 95. Linux, MS Windows, and OpenVMS versions planned.
  - Add calculation of subshell conversion- & Auger-electron & X-ray intensities and improve calculation of continua spectra.
  - Incorporate logic from LOGFT after new version of LOGFT released.
- In calendar year 2005, maintenance of OpenVMS versions will cease.

Status of the ENSDF Analysis & Utility Codes — 5

- GTOL Proposal from B. Singh – Add option to add/modify/delete A/B/E records in new output file
  - How would GTOL recognize a measured intensity used in normalization and not replace it?
  - How do we handle assumptions used in obtaining the normalization?
  - How to treat uncertain gammas?
  - Should the limit from Lyon's method 1 be used?
  - For particle unstable states branching ratio information required for correct calculation of net feeding.
  - Need to properly parse N record to see if relative or absolute $I_{\beta-}$ or $I_{\varepsilon+\beta+}$ should be output.