Working Party on International Nuclear Data Evaluation Co-operation (WPEC)

Chair:	Michal Herman, USA
Members:	Representatives of the co-operating nuclear data evaluation projects, nominated by the projects.
Date of creation:	October 1989
Date of expiration:	December 2013
Mandate:	Revised and extended at the meeting of the NEA Nuclear Science Committee bureau in December 2010

Scope and Membership

The goal of the Working Party is to improve the quality and completeness of evaluated nuclear data available for use in science and technology and to promote the efficient use of available resources through international collaboration.

The Working Party will consist of four representatives of each of the following three nuclear data evaluation projects: ENDF (United States), JEFF (Data Bank member countries), JENDL (Japan), as well as four representatives of non-OECD nuclear data evaluation projects, such as BROND and CENDL. The participation from projects in non-OECD Member countries will be channelled through the Nuclear Data Section of the International Atomic Energy Agency (IAEA). At least one member of each group will be a representative of the nuclear data measurement community.

A Working Party chairman shall be elected for a two-year period, with possible yearly extensions; the guiding principal being an alternating chairmanship between the ENDF, JEFF and JENDL projects. Eligible candidates are representatives of the evaluation projects in OECD member countries.

Objectives

The Working Party will promote the exchange of information on nuclear data evaluations, measurements, nuclear model calculations, validation, and related topics, and provide a framework for co-operative activities between the participating projects. The Working Party will assess needs for nuclear data improvements and address those needs by initiating joint evaluation and/or measurement efforts. The improvements will be reflected in all major evaluated data files and will gradually help to eliminate discrepancies in these files.

Within the period of the mandate, the Working Party plans to address the following issues:

- The needs for further improvements of evaluated nuclear data for both current and advanced reactor concepts in response to indications from integral data validation activities.
- A continued effort to develop methods for the inclusion of uncertainty (covariance) information in the evaluated data files and to guide the data evaluators in providing such information to the user community.
- Investigate methods and issues for the combined use of integral experiments and covariance data in the assimilation (adjustment) process for further improvements of evaluated nuclear data libraries.
- Updating the “High Priority Request List for Nuclear Data” (HPRL) and coordination of associated nuclear data measurement activities.
- Any other emerging important nuclear data needs.

The Working Party will liaise closely with other NSC activities to ensure that the data needs, identified in these work programmes, are properly addressed.

Deliverables

- An updated version of the "High Priority Request List for Nuclear Data", accessible through the NEA Internet Web pages,
- A report addressing the methods and issues for the combined use of integral experiments and covariance data in nuclear data assimilation (adjustment) procedures,
- A report on meeting nuclear data needs for advanced reactor systems,
- A report on a co-ordinated re-evaluation and validation of ^{239}Pu data in the resonance region,
- A report on improved evaluation methods for scattering angular distributions in the fast energy range,
- A report on the use and preservation in EXFOR of experimental uncertainty (covariance) for the evaluation of the resolved resonance region and the processing into evaluated nuclear data files.