



DE LA RECHERCHE À L'INDUSTRIE

SANDA WP5 Status – Overview

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DES/IRESNE/DER

Institut de recherche sur les systèmes nucléaires pour la production d'énergie bas carbone

Recall

■ WP5 objectives

- Perform impact studies and S/U analyses, analyze experiments, in order to relate (JEFF) ND improvements to end-user needs for selected applications
- Performing new validation experiments in existing experimental facilities

■ Practical goal

- Focus on *selected* nuclear data and a *selection* of nuclear systems for which significant pre-design work has already been done
- Get reliable estimates of ND errors and uncertainties for selected nuclides-reactions → JEFF4 needs and work plan
- Assess impact on selected nuclear systems (reactors and fuel cycles) → End-user needs + missing experiments

Tasks

- **T5.1 – Sens. analyses, impact studies, unc./corr. estimates, expected gains**
Selected systems: ESFR/ASTRID, MYRRHA, JHR, adv. LWRs, MSR, waste...
- **T5.2 – Validation studies for the above applications, by performing analyses of available relevant integral expts. and inferring trends in nuclear data**
Relevant experiments from IRPhE, ICSBEP, SINBAD, SFCOMPO,...
- **T5.3 – New validation experiments and needs for new integral data**
Experiments in selected existing facilities : GELINA, LR-0, TAPIRO

Status → See separate talks, 3 + 1 + 3

Summary

- **Good progress relative to Feb. 2021, in spite of the Covid pandemic**
 - T1 – Sens./impact studies well underway for various systems
 - Some delays reported in deliverables
 - T2 – Work continuing on analysis of integral experiments with JEFF-3 and JEFF-4T0. Much work still to be done
 - 6+ month delay will impact deliverables
 - T3 – Directly impacted by pandemic, but several experiments done
 - 9-to-12-month delay
- **Need for a WP5 face-to-face meeting**, with enough time to hold technical discussions, especially for T1 and T2