Evaluation of the PEGASUS Method.
How can the effectiveness and consistency of the method developed in PEGASUS be demonstrated?

The proof of effectiveness as well as the consistency of the PEGASUS method and the individual steps developed in PEGASUS are discussed and confirmed by means of a three-stage iterative result reflection.

**Result.**
Proof that PEGASUS method and individual steps provide robust results.

**Result.**
Proof that the PEGASUS method and individual steps are generally applicable for safety assessments.

**Result.**
Proof that the PEGASUS method and individual steps are in accordance with general type-approval and product safety.
Reflection of the results of the PEGASUS method.
The proof of effectiveness as well as the consistency of the PEGASUS method and the individual steps developed in PEGASUS are discussed and confirmed by means of a three-stage iterative result reflection.

Explanation:

Stage 01: PEGASUS Staff TP1-TP4

- Criteria for determining the representative reference scenarios.
  - Regulatory and normative requirements
    - Type-Approval (UNECE-R)
    - Product Safety (ISO 26262)
  - Requirements of other TPs
    - System description, critical scenarios (TP1)
    - Development process (TP2)
    - Tests (TP3 - simulation - with regard to sensitivity and robustness)

- PEGASUS-internal reflection by guiding questions at UAP level with regard to sensitivity, consistency and traceability by means of top-down reflection of PEGASUS results and bottom-up reflection of PEGASUS works.
- Critical examination of interface definition and linking between UAPs.
- Iterative reflection method in multiple phases of a defined PEGASUS nomenclature (comparability) & defined eight-stage maturity model

Stage 02: Independent Stakeholders

- Validation of results in four-eye principle by reflecting the results from TP1-TP3 with stakeholders for approval and product safety.

Stage 03: Robustness Assessment

- Robustness analysis of the documented results from TP1-TP3
- Based on FMEA methodology Cause → „Uncertainty“ (≠ Failure) → Effect
- Evaluation with regard to significance, occurrence and probability of detection