Project EMUE
Towards a comprehensive set of examples of measurement uncertainty evaluation to support guides and standards

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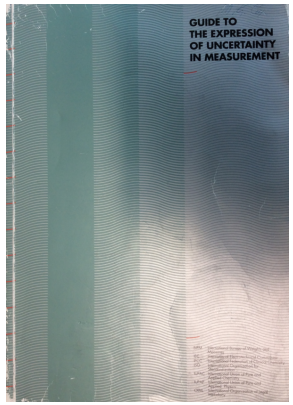
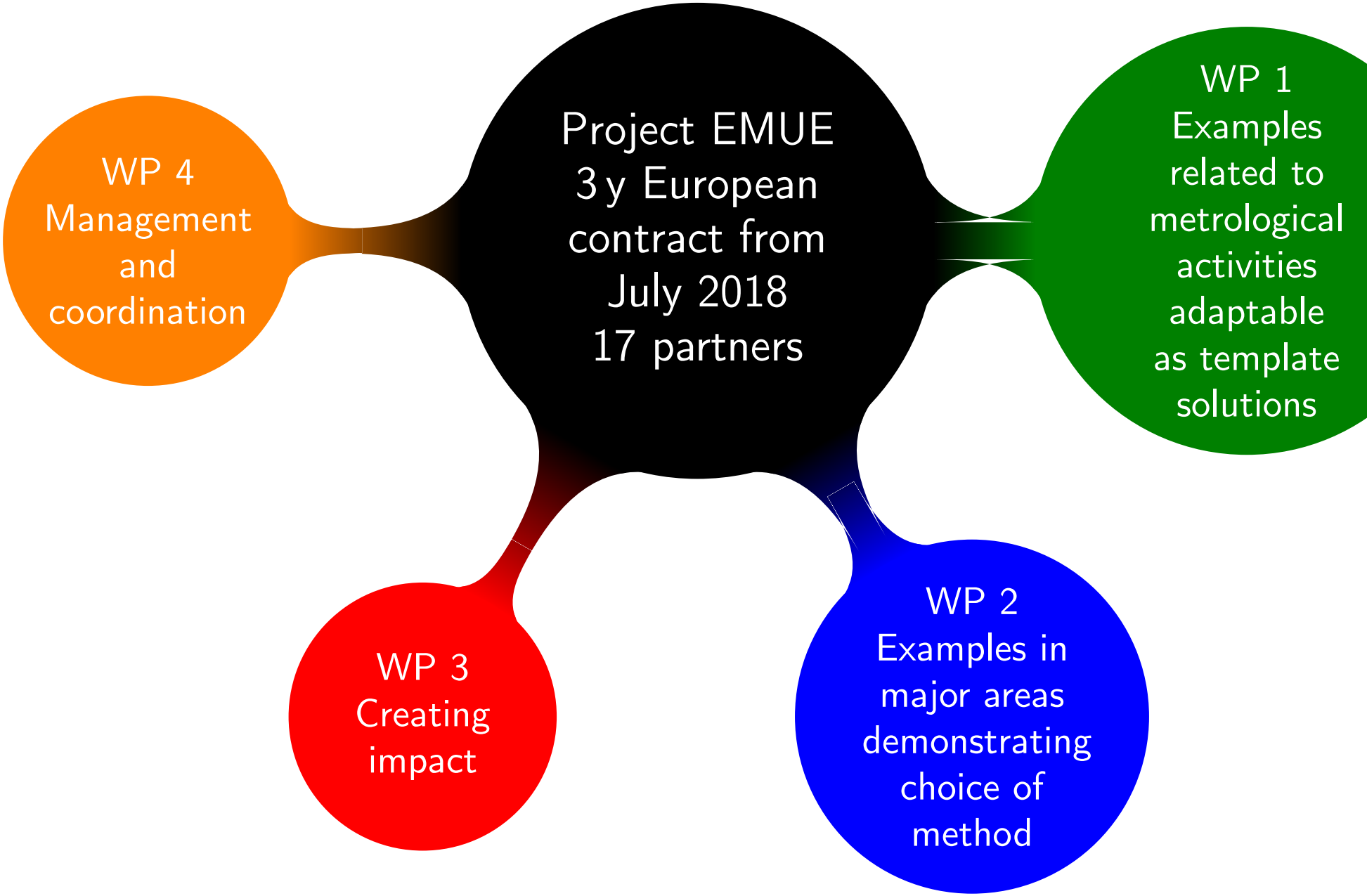
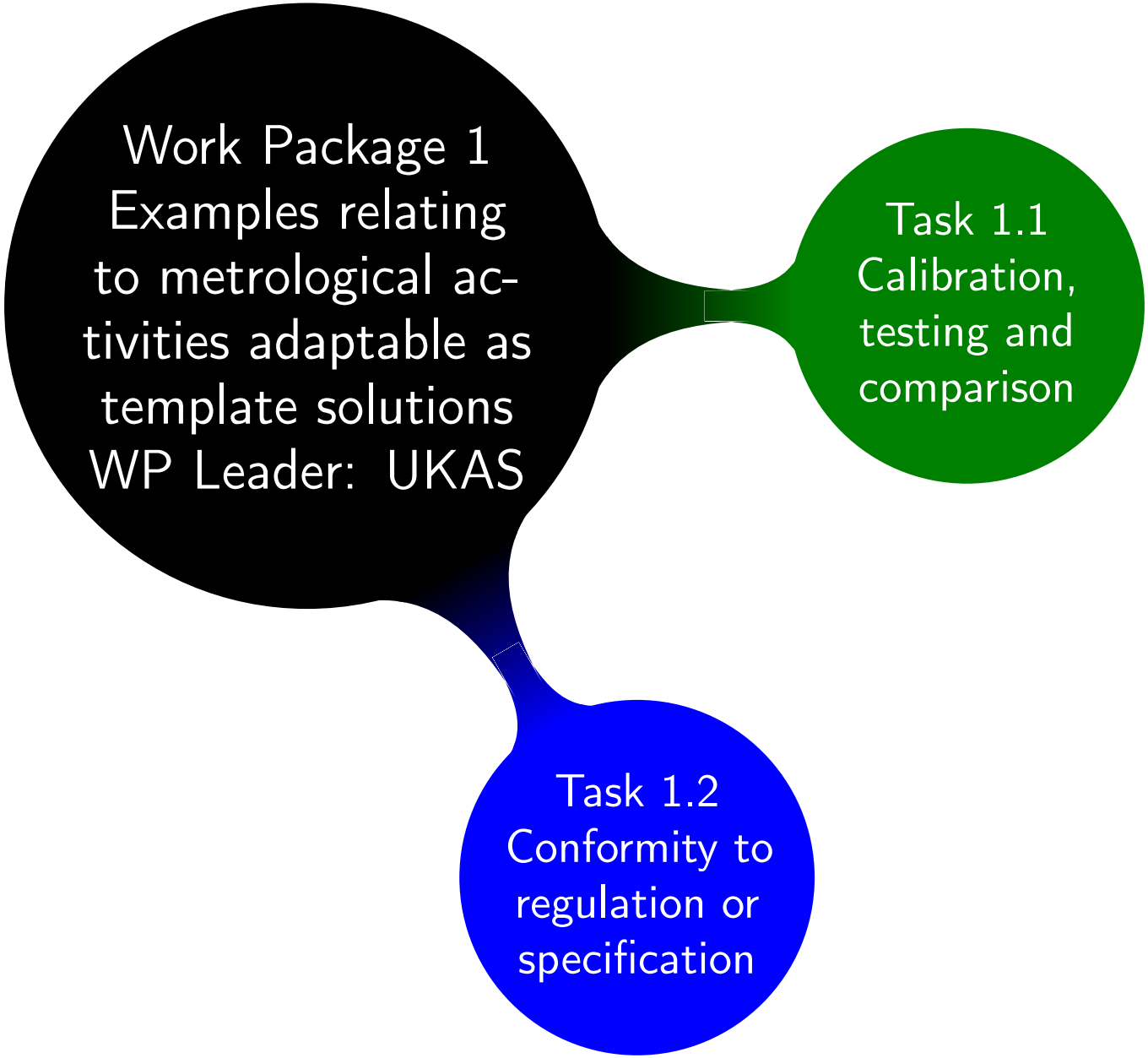
EMPIR project EMUE:
Examples of Measurement Uncertainty Evaluation

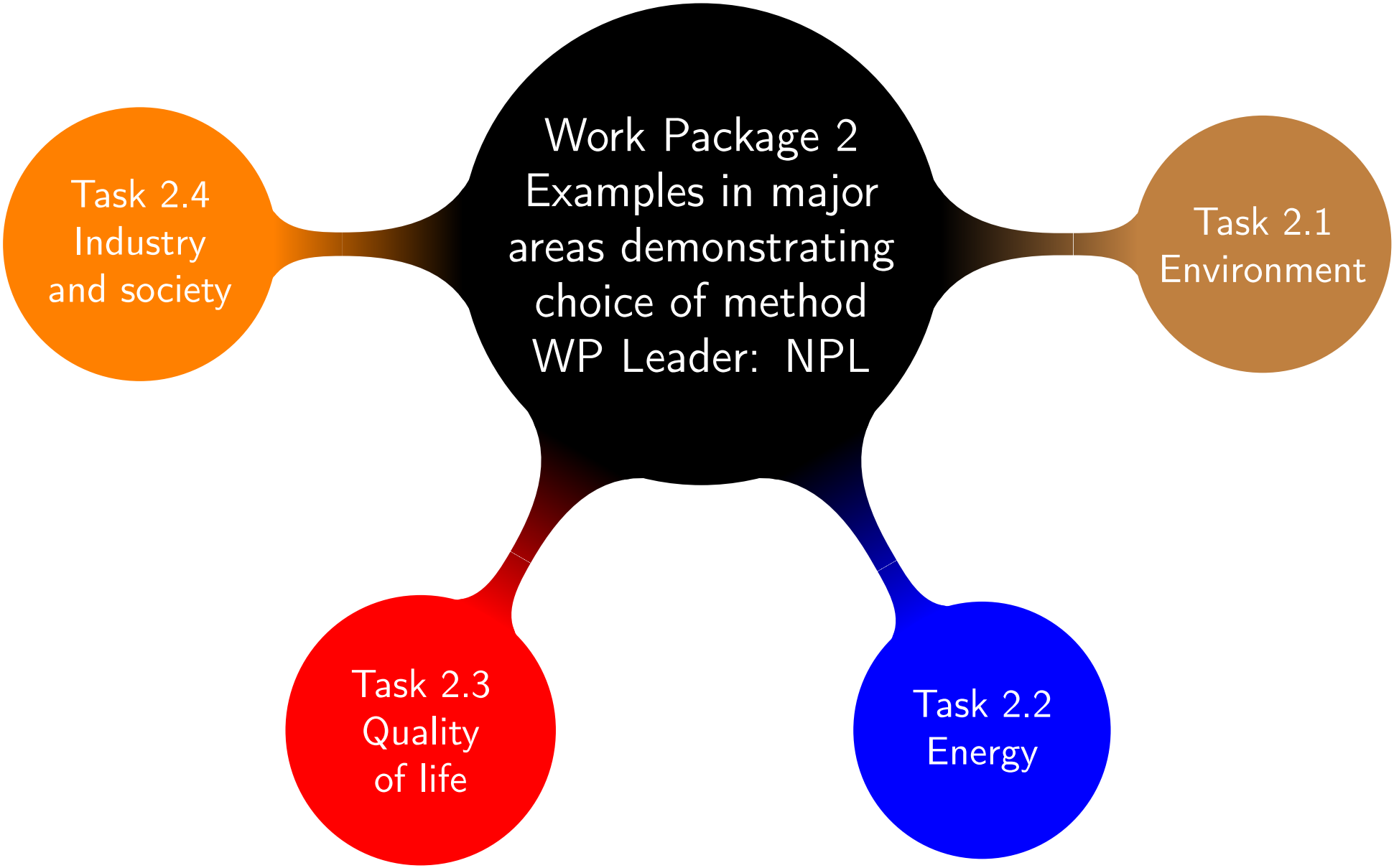
- Promote the harmonized evaluation of measurement uncertainty according to internationally recognized standards and guides across broad disciplines of measurement
- Accomplish by providing new or improved examples to the Joint Committee for Guides in Metrology (JCGM), international standards committees, and other bodies and end-users
- Improve the use by these bodies of accepted uncertainty principles
- Many examples in a form that can readily be adapted to other areas: "Learn by example"

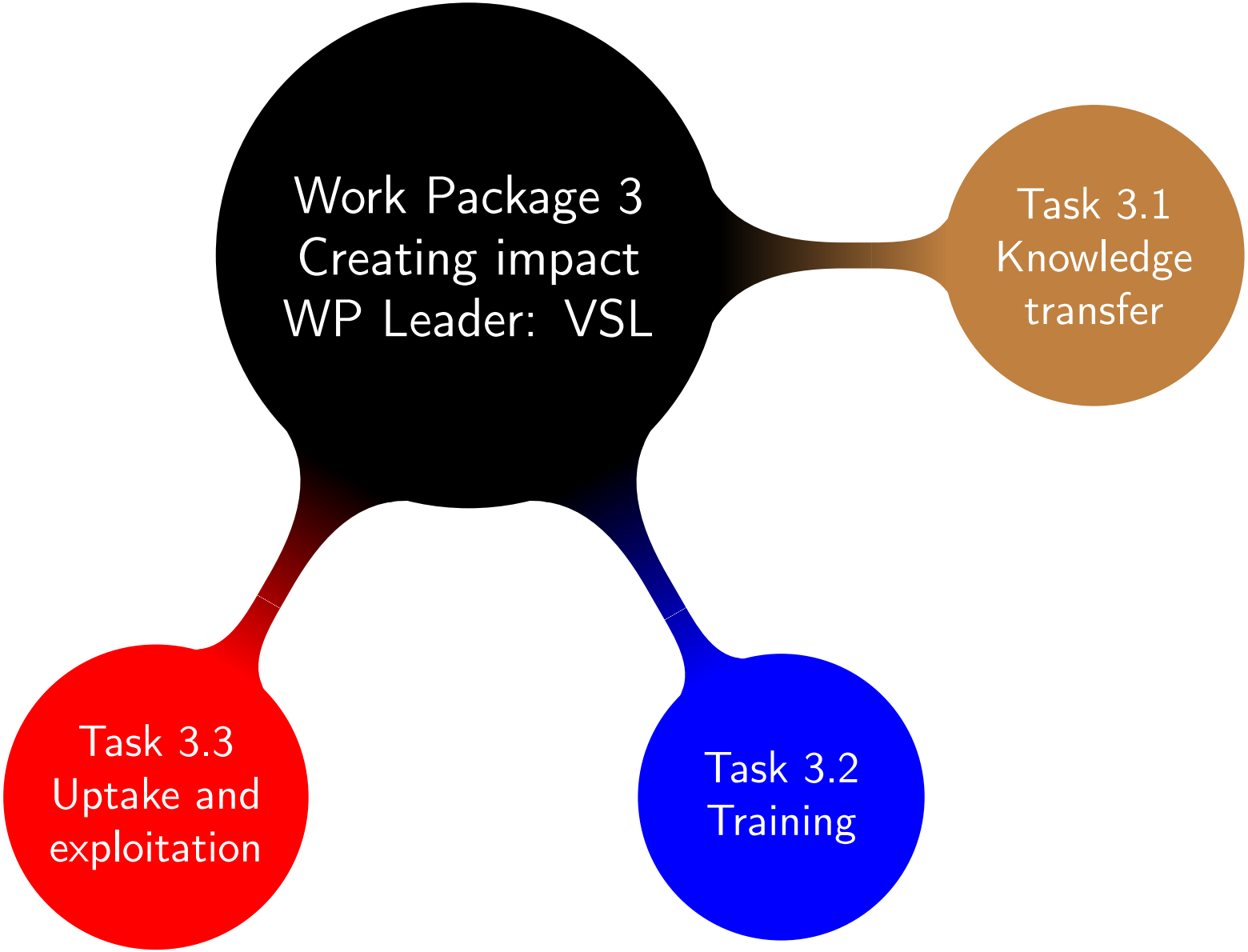


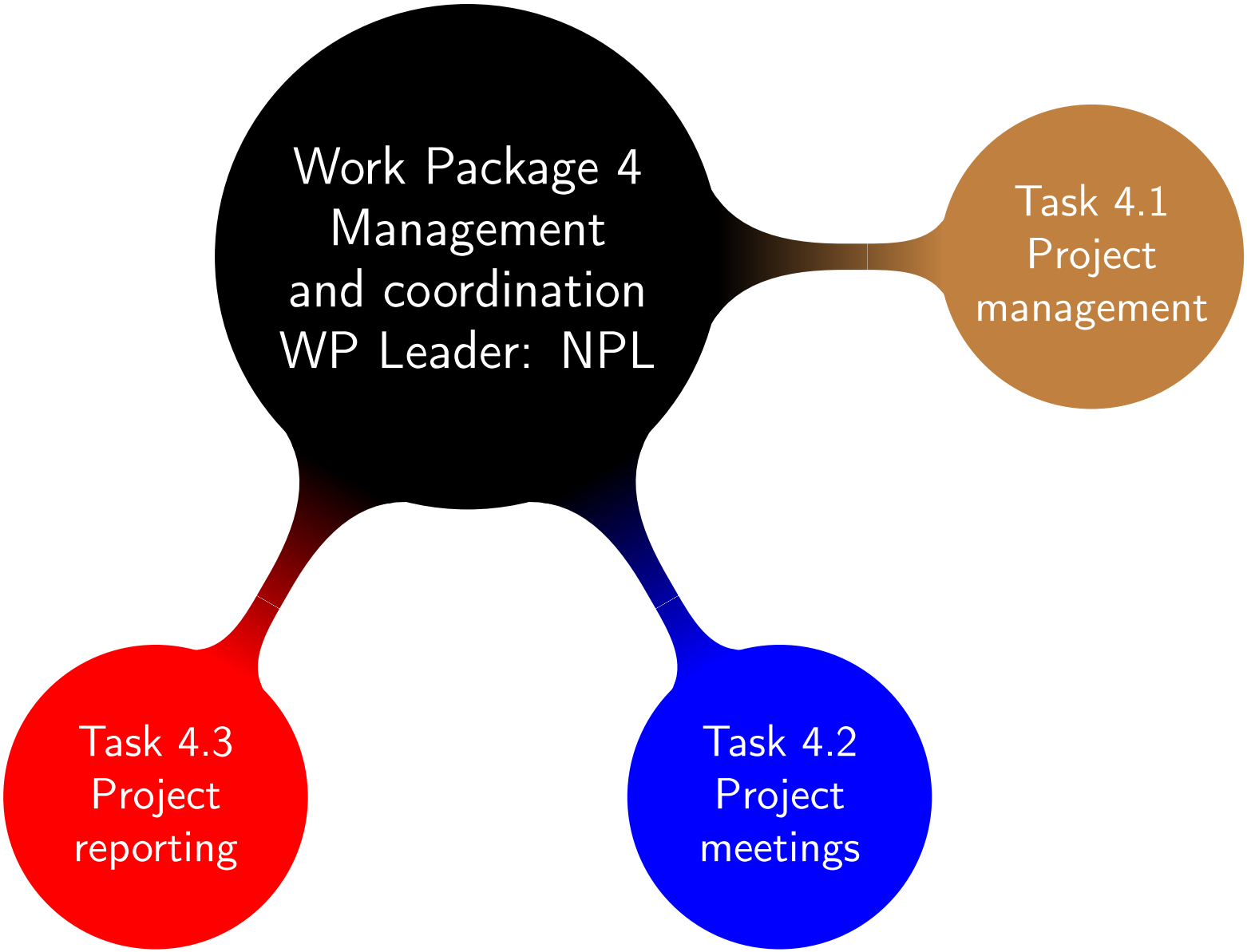
The "GUM" aka JCGM 100:


Project EMUE
3 y European
contract from
July 2018
17 partners
WP 1
Examples
related to
metrological
activities
adaptable
as template
solutions
WP 2
Examples in
major areas
demonstrating
choice of
method
WP 3
Creating
impact
WP 4
Management
and
coordination


Work Package 1
Examples relating to metrological activities adaptable as template solutions
WP Leader: UKAS
Task 1.1
Calibration, testing and comparison
Task 1.2
Conformity to regulation or specification


Work Package 2
Examples in major areas demonstrating choice of method
WP Leader: NPL
Task 2.1 Environment
Task 2.2 Energy
Task 2.3 Quality of life
Task 2.4 Industry and society


Work Package 3
Creating impact
WP Leader: VSL
Task 3.1
Knowledge
transfer
Task 3.3
Uptake and
exploitation
Task 3.2
Training


Work Package 4
Management
and coordination
WP Leader: NPL
Task 4.1
Project
management
Task 4.3
Project
reporting
Task 4.2
Project
meetings

Benefits

Benefit to all above areas from carefully elaborated examples that are

- Practical and specific to these domains
- As far as possible can be adapted to end-users' data and knowledge

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*, states that it should be ensured that

> *"the form of reporting of the result does not give a wrong impression of the uncertainty"*

Thus, practitioners should pay an appropriate level of attention to evaluating and reporting uncertainty

Since many end-users "learn by example", a wide-ranging set of practical examples, ranging in complexity from the simple to the sophisticated, would be highly beneficial and is being provided by EMUE

Acknowledgment

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