Verification and Analysis for Safety and Security of Applications in Life

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Acknowledgement

VASSAL

Verification and Analysis for Safety and Security of Applications in Life

Motivation & Goals

BUILDING EXCELLENCE

- **Institution**
- **Administration**
- **Research**

SCIENTIFIC SCOPE

EXPECTED OUTCOMES

- Enhanced Capacities & Competencies
- Access to Knowledge
- Reputation & Visibility

Consortium

1
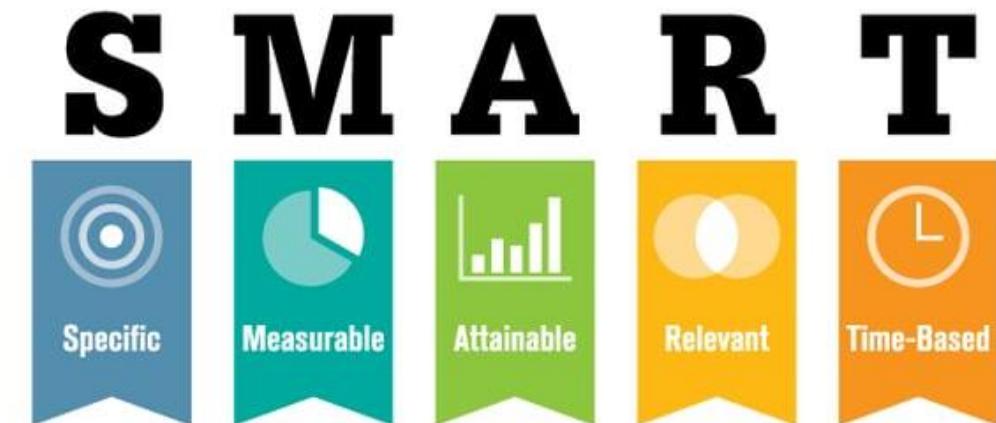
Needs Analysis

What are the gaps in expertise and capacity?

2

Mapping Ecosystem

Potential partners

3

Fit for Goals

Complementary strengths & track record

4

Implementation Capacity

Training, hosting, mentoring & supervision

5

Full Commitment

LoIs, time commitment & visibility

RESULT

TU Wien (AT)
Formal verification of excellence

CEA List (FR)
Industry & policy link

Honeywell (CZ)
Validation & use-cases

Partner Roles

Coordination &xx Widening
- Project management & governance
- Capacity building & cultivation talent
- Research and innovation
- Integration and Sustainability

Institutional and Methodological Excellence
- Formal verification of expertise
- Advanced training & PhD tracks
- Joint high-impact publications

Policy & Strategie
- Industrial liaison management
- Access to standardization forums
- EU policy & network introductions

Validation & Industry
- Data and validation
- Use-cases (aerospace)
- Requirements definition, Certification
- Industrial roadshows & demos

🧪 Theory ↔ Application

Academia (BUT, TUW)	⇄	Industry (Honeywell, CEA)

Validation of theoretical models in industrial environments accelerates TRL growth.

🌐 Widening ↔ Advanced

Competencies Building capacity and Scaling up	📈	Excellence Mentoring

Transfer of best practices and network access structurally strengthens BUT's position.

🔗 Network Effect

The combination provides direct access to **EU policymakers** , **standardisation committees** and international **R&I ecosystems** .

How to

Excellence and competence building

- Scientific
- Administrative (focus: R&I management / Pre-award)

- Strategic plans (Admin / Scientific)
- Best practices / frameworks
- Intensive training / workshops
- Mobilities / Mentoring / Coaching of students

Mapping

Strategy

Implement
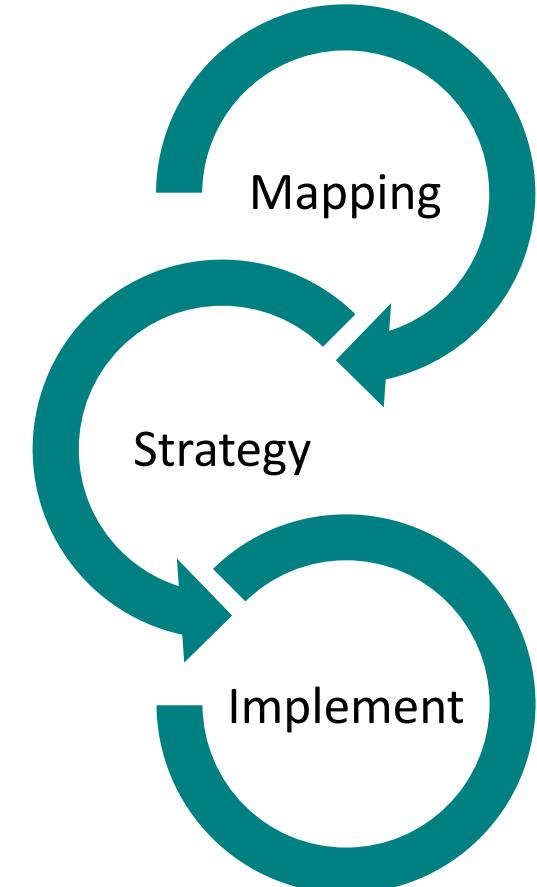
Impact and expected results

Enhanced R&I Capacity

- Structural improvement of skills and governance at BUoT

- Professionalization of research support and project management

Scientific Excellence

- Joint publications in top-tier (CORE A*/A) conferences and journals -> greater int'l visibility

Funding

- Active participation in new EU consortia and taking leadership roles

Industry Uptake & Validation

- Move towards applied research -> Honeywell

Sustainability & Ecosystem

- Building a network, integration in ecosystem

- Contributing to policy and international standards

Specific OUTPUTS & KPI'S

- 20 KPIs (scientific, HR, training, mobilities, processes etc.)

Ultimate Goal
Positioning BUoT as an indispensable partner in the EU ecosystem for secure SW and critical systems

Lessons learned

Lessons learned: proposal development

- Communication, Communication, Communication

- Vision

- Partnership

- Complementarity

- Measurable goals achievable via specific activities

- Budget (Lump Sum)

Lessons learned: timing & writing
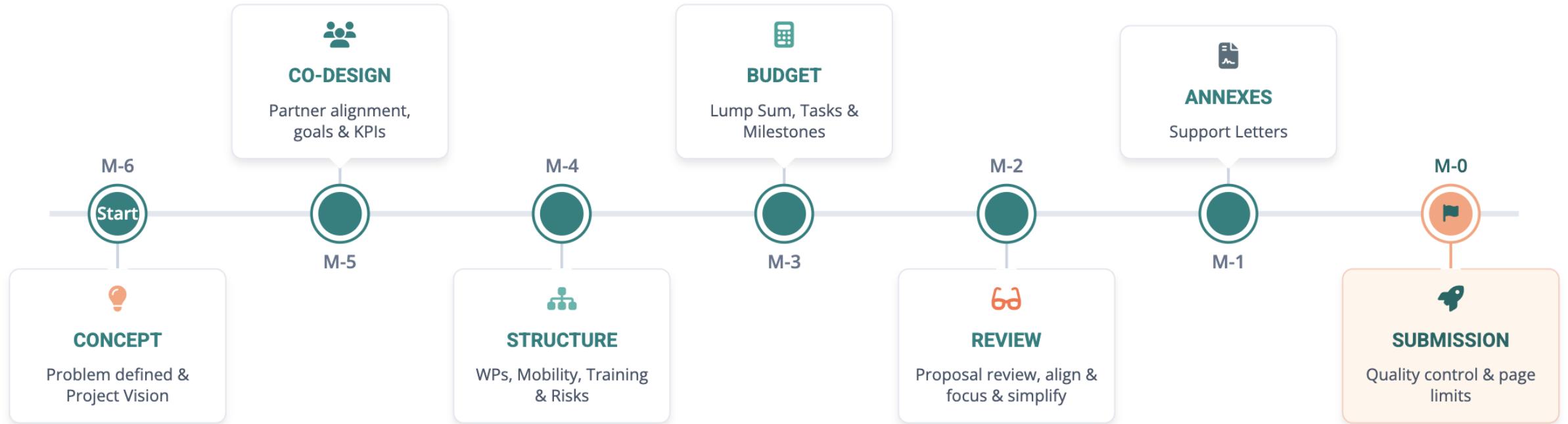
Success Factor: Start early with the Lump Sum budget and the mandatory annexes

Lessons learned: implementation

Kick-off

Flexibility -> life is a change

- Pennstate University
- Communication
- Fluctuation

- DEC -> social media
- Small scale project
- Open science
- Managing the project and planning
- Mid-term review -> update

Thank you

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