Harmonized & Unified Rules & Criteria for Cross-acceptance (HaURuCC)

ERRAC Evaluation Group - Checklist for the Risk Benefit Analysis of EU Projects

The ERRAC Evaluation Working Group has established a check list where they can assess the state of health of existing EU Funded Research Projects. The intention is to use the same list for evaluating on-going projects as well as for pre-evaluating the feasibility of projects during the preparation phase before they are submitted to the Commission.

The first set of check points are related to the ease of implementation.

(The success of the project itself is taken for granted so the aim of the check points is to identify specific threats to the successful implementation of its results)

- 1. Why is the project being initiated?
 - Risk acceptance criteria are not harmonized
 - Diverse methods for risk and safety analysis are used
 - Cross-acceptance for safety certificates is difficult
 - Certification processes are not harmonized
 - As a result a large amount of re-certification even for proven-in-use systems is necessary.
- 2. By whom is the project being initiated?

 The project is initiated by the UNIFE with the support of UIC. Proposal leader is Siemens.
- 3. What are the objectives and forecast benefits?
 - i. The project will harmonies and extend risk acceptance criteria and methods for which the principles are outlined in the 1st set of ERAs CSM Recommendation in order to enable cross-acceptance of products, systems and services:
 - ii. Common criteria for broadly acceptable risks
 - iii. Detailed criteria for risk acceptance based on application of codes of practice
 - iv. Harmonized rules for safety analysis of reference systems
 - v. Definition and justification of explicit risk acceptance criteria
 - vi. Harmonization of methods for explicit risk analysis
 - vii. Establishment of a formalized certification basis based on the CENELEC standards
 - viii. Facilitating cross-acceptance of CENELEC and IEC standards
- 4. How can that benefit be measured?
 - More efficient border crossing of trains
 - Saver border crossing of trains
 - More efficient cross acceptance procedures (today month to years and 10th of MEUR)
- 5. Who is taking the benefit?
 - Passengers of trains
 - Operators of passenger trains

- Operators of freight trains
- Manufacturers of trains
- 6. Who is taking the cost?
 - Passengers of trains
 - Operators of passenger trains
 - Operators of freight trains
 - Manufacturers of trains
- 7. How equitably are the costs and benefits being distributed? (i.e. a proper LCC analysis should be elaborated and agreed upon in the bid preparation or initial work phases)
 - The manufacturers have to deal with big variety and low sales figures per type
 - The operators have to spend a lot of money for acceptance and delayed border crossing
 - The community (in the end) pays it all
- 8. Is any party going to lose anything if specific results are implemented?
 - The notified bodies (NOBOs) would have less to do
- 9. Are all the real stakeholders for implementation of the results represented in the project or do they support the project in some other way?
 - Manufacturers and operators are represented
 - The real stakeholder (the European citizen) is represented by the EU
- 10. What are the consequences if part, or all, the implementation fails?
 - There will be less or no improvement and in the worst case it will be as it is today
- 11. Who is affected by these consequences of failure?
 - Passengers of trains
 - Operators of passenger trains
 - Operators of freight trains
 - Manufacturers of trains
- 12. Is there any up front investment necessary before the benefit can be taken? Surely yes, but refer to question 7 with a demonstrable and increased LCC. Only then should we start the full project.
 - No up front investment seems necessary.
- 13. Is there anybody who has specific reasons to block implementation? (special interest groups or some potential industry partners excluded from the project?)
 - There is a small risk that persons involved in border crossing activities fear for their employment and will not cooperate
- 14. What are the reasons for their opposition? (Market protection, job protection, call on investment funding, etc...)
 - job protection
- 15. Is there a need to change laws or Technical Specifications for Interoperability in order to be able to implement the results?
 - Not clear in the moment, but likely
- 16. How can the necessary changes best be implemented? (Through changes to Directives, national regulations or through the TSIs or mandatory or voluntary standards? What happens if there is no enabling legislation such as a Directive, as applied to most of the urban sector?)

- This will be an output of the project, not clear in the moment
- 17. What are the probabilities to succeed with the necessary changes to the law or TSIs? See 16
 - If a change should be required, it is fore the sake of the European citizen
- 18. Are there any unknown parameters affecting implementation? (Fees, hidden costs or permissions required, etc...)
 - There are no unknown parameters affecting implementation.
- 19. Is there a need to redesign products to gain any benefits from the project? See 12.
 - The variety of products will be reduced and as an optimization a redesign may happen
- 20. Is there a need to make changes to already installed base of vehicles or infrastructure?
 - There is no need to make changes to already installed base.
- 21. If there is no need to change the existing installed base, can the existing base be disadvantaged in any way?
 - See question 20
- 22. Who pays for the above changes and how will investment be funded? LCC must demonstrate.
 - See question 19 if a simplification is possible, the manufacturers will calculate the RoI
- 23. Is the project underwritten by all stakeholders, at an operational level, with an appropriate level of authority?
 - All the technical directions of all the stakeholders are in favor of the project.
- 24. Are there any negative impacts of implementation foreseen which could threaten implementation in the longer term?
 - No negative impacts of implementation are foreseen.
- 25. Are there any existing projects whose results could be in conflict with this one?
 - A cooperation with the ETCS activities is natural, but no conflict can be foreseen
- 26. Are there any other projects supporting or depending on this one?
 - The ETCS cluster and e.g. MODTRAIN and Integrail are supporting this project. No known project is depending of this project.
- 27. Are the results of the project immediately capable of implementation or is some additional research work likely to be required?
 - The results of the project are immediately capable of implementation
- 1. Can an 'Early Adopter' be identified and brought into the project from day one?
 - a. All the operators involved in the project will be "early adopters" and represented by UIC.
- 2. Are there any 'parallel' activities at the level of CEN/CENELEC/ETSI/IEC/ IEEE in this area?
 - a. There is now known activity in this special field.

The second set of check points deals with the project & threats to its future success.

(Economic and project auditing issues are excluded. Almost all of these items are required in the Bid documents and the agreed description of work negotiated with the Commission.)

- 3. Project participants (Composition of Consortium) Operators:
 - UIC & UNIFE (details to be defined)
- 4. Project mandate (Description of Work)
 - a. TBD
- 5. Project organization (Management Structure)
 - a. TBD

- 6. Representatives with an appropriate level of authority and expertise (Identified Experts)

 The experts who will take part of the projects will be (list to be completed by each organization)
 - a. TBD
- 7. Intellectual leadership of the project, system architecture, etc. (Technical Management)
 - a. TBD
- 8. Mechanisms available to ensure that the project is not deviating from its original mandate and objectives within the defined review frameworks (Management Structure)
 - a. Steering Committees ensure that the project is not deviating from its original mandate
- 9. Measures taken to follow up deliverables are made on time and to the right quality (Project Quality Plan)
 - a. Project control will be given to UNIFE. They will follow up all the deliverables of the project.
- 10. Mechanisms to quickly and smoothly resolve conflicts within the project (Management Structure)
 - a. Technical Management Team of the project will resolve conflicts within the project.
- 11. Known sources of potential conflicts (Risk Assessment prior to contract signature)
 - a. No risks foreseeable, except question 14
- 12. Any participant who may have an interest in failure of the project, should be identified at the Risk Assessment stage and mitigation measures considered
 - a. No participant will have an interest in failure of the project.
- 13. Communication with the main stakeholders (Communication and Dissemination Plan)
 - a. An Internet site will be created for the dissemination of the information.

The third set of questions could be industry or company specific

(These are not normally made available for public use)

- 14. Who will pay for the proposed changes and how will investment be funded? If there is a market and demonstrable LCC, the companies will pay for changes, if not they won't and the project shouldn't start.
 - a. The stakeholders involved in the project will pay.
- 15. Is the project underwritten by all internal stakeholders, at an operational level, with an appropriate level of authority?
 - a. Not yet, TBD.
- 16. Are there any negative internal impacts of implementation foreseen which could threaten implementation in the longer term?
 - a. No negative internal impact
- 17. Are there any existing internal projects which could be in conflict with this one?
 - a. No known projects, very unlikely that such projects exist.
- 18. Are there any other internal projects supporting or depending on this one?
 - a. In the case of our success, projects will be started

The fourth set of questions relates to completed projects researching into the same topic and deals with the degree of implementation achieved:

- 19. Have the results already been implemented somewhere?
 - a. No
- 20. Have the results not been implemented in areas where similar conditions exist?
 - a. No
- 21. What are the reasons for this non-implementation? (Lack of funding, NIH, research overtaken by innovation, etc...)
 - a. Not relevant, see question 20

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