A proposal for a tool for the National Cyber Security Framework

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Goals

 Provide a flexible tool for assessment against National Cyber Security Framework (both from qualitative and quantitative perspectives)

Facilitate cyber risk assessment

- Status still work in progress
 - Willing to cooperate with several stakeholders to improve and validate





Background

- Work on cyber risk assessment and metrics.
 - Risk-based usage control
 - Cyber Risk for Services
 - Formal analysis of security metrics
- National and European Projects in cyber insurance (CyberSure)
- Cyber insurance survey
 - Technical Report TR-17/2015
 - Computer Science Review. To Appear





The tool

- Based on a set of questions for the users
- Under development, verification and testing
- It is an on-line tool
 - Offline version is also possible
- Users:
 - End users/evaluators (current)
 - Domain experts (To be implemented)
 - Experts (To be implemented)
- Quantitative part is based on the available statistical reports (need to be validated)





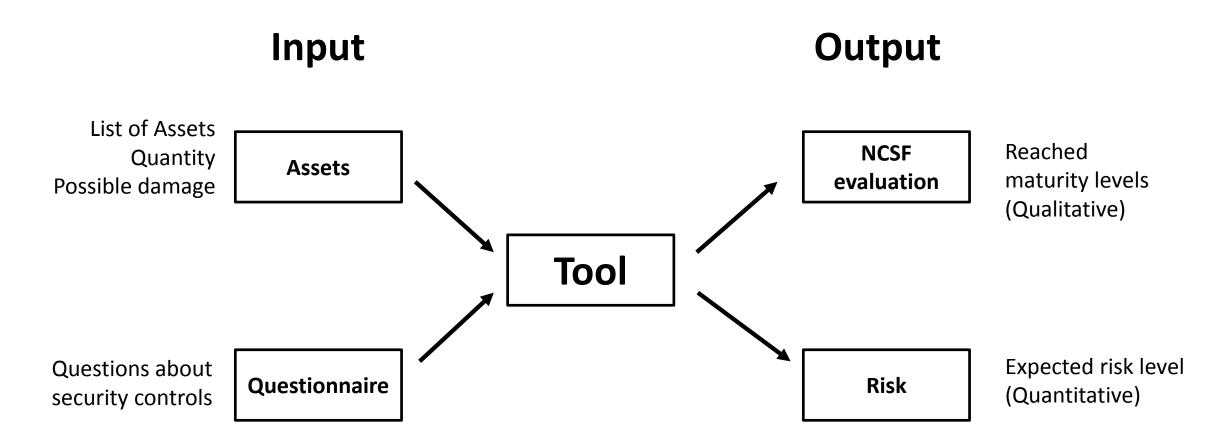
Capabilities

- Current functionality (based on the maturity levels specified for SMEs in the NSCF)
 - Check of reached maturity levels for subcategories
 - Check of subcategories with high priority.
 - Quantitative computation of risks for various threats
- To be implemented
 - Check against a target security profile
 - Custom specification of the verification schema (custom specification of maturity levels and related metrics, considered threats and asset types)
 - Help in specifying a target security profile.





Structure (for end user)







Demo



