

## Questionnaire (from Sprint 10 to Sprint 11)

\*Notation:

1. This questionnaire is designed for the Scrum development process with safety assurance techniques.
2. The questions are the same with the evaluation from Sprint 6 and Sprint 7 for a better comparison.
3. The estimated time is ~5 minutes, the answers shall be written at the very beginning (in \_).

e.g.

- 2 Safety expert is kept as long as possible with the team members.

4. Each question should be answered with the number 1 to 5.

1	2	3	4	5
Negative				Positive

### [1] Questions about the team composition

- Safety expert is kept as long as possible with the team members.
- Safety expert is willing to help other members to achieve team goals.
- Safety expert is on the team from the requirements to finished system.
- People including safety expert are not on more than two teams.
- Including the safety expert's opinion, management rarely changes the team's priorities during an iteration.
- Team members don't have to work on tasks that they deem to not add value, including safety values.
- Management and safety expert set goals but don't tell team members how to achieve them.
- Team members choose which tasks (including safety related tasks) to work on.
- Standup meeting are effective at synchronizing work (safety work is including).
- The team is not concerned about the knowledge gaps, and can take the safety consideration into it when someone goes on vacation (or it otherwise unavailable).
- Team members including safety expert from one team communicate with team members from other teams in a high-bandwidth manner without undue interference.
- Safety documents are used to supplement rather than replace faster, more informal safety information communication.
- Team members including safety expert communicate in a high-bandwidth manner without undue interference.

### [2] Questions about the project preparation

- Projects do not begin with an extensive safety technical design phase.
- The team performs iterative safe design throughout a project.
- The team performs safe design throughout the iteration.
- Safety requirements are represented at different levels of detail based on how soon the team expects to implement them.
- The safety expert is available to discuss upcoming features and work-in-progress.
- Safety requirements are determined early enough to appropriately influence design and testing.
- The whole team embraces safety change and emergent opportunities in an efficient low-ceremony way.
- Teams are able to start projects with incomplete safety requirements.

### [3] Questions about the project planning

- Technical team members, the product owner, and the safety expert are included in the planning process in a way that they can meaningfully and appropriately affect scope and deadlines.
- The product owner and the safety expert will both maintain a prioritized product backlog.
- Technical team members, product owners and safety expert collaborate in determining what safety features will be included in the release plan.

- The safety expert performs a draft safety plan before each sprint, and the safety plan is detailed during each iteration in parallel with the development team.
- All work (including safety work) is done in iterations of no more than 30 days.
- Iterations focus on creating features (including safety features) with value to customers and infrequently focus on infrastructure specific work.
- One or more of scope (including safety), schedule (including safety), or resources (including safety) is allowed to change during a project.
- There is a highly visible representation of the team's progress (including safety progress) with a release.
- Each day (week), there is a highly visible representation of the team's progress (including safety progress) within an iteration.
- Each safety feature has a well-defined completion criteria that can be used to determine if the safety feature is done or not done. We do not consider a partially completed feature done.
- The safety estimations are created collaboratively by the people who will do the work.
- Upfront planning for safety is helpful without being excessive.

#### **[4] Questions about the project execution**

- Most safety-related code is written using unit test-driven development.
- Safety-related code is written using pair-programming.
- Refactoring is performed when safety requirements needed.
- Safety related technical debt is also made visible to both technical team members and stakeholders.
- Within our team, anyone can change anyone else's code (safety-related code is including).

#### **[5] Questions about the acceptance phase**

- Safety expert actively participate in the creation of the acceptance criteria for each safety feature, and decide together with the product owner.
- All safety requirements related failures are fixed during the iteration in which they are found.
- At the end of each iteration there is little time for safety testing.
- Safety expert (also for safety analysis and test) are involved and productive right from the start of each iteration.
- At the end of each iteration, the team has a high-safety working software.
- The team has pre-defined and agreed-upon criteria for considering a safety feature done.
- The team evaluates also how they are doing about safety assurance and discuss how to get better.
- Safety expert attends also the iteration reviews to provide safety-related actionable feedback.
- The productivity is not influenced by increasing safety assurance in an agile approach.
- Our customer(s) have been more satisfied with both the functionality and the safety of our products since we started using an agile approach.
- The safety does not influence the great economic value brought by using an agile approach.
- The usability is also not influenced by safety of our products since we started using an agile approach with safety assurance.
- The morale is not influenced by increasing the safety assurance since we started using an agile approach.
- The high quality (except safety quality) of products is not influenced by increasing safety assurance since we started using an agile approach.



**Thanks for your collaboration!**