**WBSO Project Software – Questionnaire**

**Instructions:**

Describe your project in detail + **substantiate** your answers. It must be clear that:

* You are conducting a project with major **technical uncertainties** (great technical **risk** of **failure**);
* You develop **technically**  **new methods/techniques/software** by yourself;
* The bottlenecks cannot be solved with available knowledge/ software compared to the current state of the art (in-and externally).

**Do's:** Ge in-depth of the actual programming in ' formal ' programming language(s) (Turing complete coding), describe the technical details and don’t avoid jargon.

**Don’ts:** don’t name motivations/ functional demands/ boundary conditions or requirements. This is less important for the WBSO application than the specific technical problems.

Multiple projects? 🡪 Please copy the questionnaire by project and fill it out separately.

## Company profile

Please provide a brief description of your company, size and level of knowledge.

|  |  |
| --- | --- |
| Brief company description (what do you do): |  |
| Expertise en/of Expertise and/or core activities: |  |
| # Employees: |  |
| # Technical staff (engineers/programmers) |  |
| Which techniques/ programming languages and tools do you have experience with? |  |

## Project overview

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project number** | **Title** | **Starting date** | **End date** | **# S&O hours** |
| 2020-01 |  |  |  |  |
| 2020-02 |  |  |  |  |
|  |  |  |  |  |

## Project number:

## Project title:

## 1. Project summary

*Briefly describe the project:*

1. *What are you developing and why?*
2. *What is ultimate project goal?*
3. *Which components do you need to develop to reach you goal/ what is the problem you are solving?*

|  |
| --- |
|  |

## 2. Technical bottlenecks/ challenges

1. *What are the technical (programming) bottlenecks (= expected problems, technical risks, technical uncertainties and challenges) that you have to solve yourself during the development of the software in order to achieve the desired project result?*
2. *Why is this a bottleneck? (just mentioning that something is a bottleneck is insufficient).*

**TIP**: Go in depth of the coding problems during the actual programming in ' formal ' programming language (Turing complete coding), appoint technical details and jargon.

|  |  |
| --- | --- |
| TC1: |  |
| TC2: |  |
| TC… |  |

3. Technical solutions (expectations)*What are you going to investigate, develop/program (and in which code/language) to solve the bottlenecks named under 2? Emphasize the technique and use programming languages. You need to make clear that the solutions are developed/ programmed within the company to solve the technical challenges. In addition, describe why the solution cannot be made with existing software, tools, codes and / or libraries.*

|  |  |
| --- | --- |
| TS1: |  |
| TS2: |  |
| TS… |  |

## 4. Programming languages / environments / tools

1. *Which programming languages, development environments do you use to develop the technically new component?*
2. *Describe why you choose certain languages/tools + explanations why they are not a solution to your technical problem.*

|  |
| --- |
| 1. … 2. … 3. …   … |

## 5. The technical novelty

*For the WBSO it must be clear that the intended result cannot be realized with common techniques or well-known working principles. Explain:*

* ***Why*** *is programming the expected solutions* ***technically new/ technically challenging*** *compared to the state of technology?*
* ***Why******do*** *(combination of)*  ***existing techniques****/tools/power-builders/libraries/systems/tools/ Packages.* ***fall short*** *for your project?*
* *What are the* ***technical risks and uncertainties*** *of not reaching the intended project goals (high change of failure)?*

|  |
| --- |
|  |

## Start- and end date

|  |  |
| --- | --- |
| Starting date |  |
| End date |  |

## Project development schedule

|  |  |  |
| --- | --- | --- |
| **Phase** | **Development activity/ delivarable** | **Expected end date** |
| **1** |  |  |
| **2** |  |  |
| **3** |  |  |
| **4** |  |  |
| **5** |  |  |
| **6** |  |  |
| **7** |  |  |
| **8** |  |  |

## R&D-employees (software writers/ programmers)

*Describe briefly the experience, knowledge and role of the developers / programmers*

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Role in the project | Role/skills/experience | # R&D hours |
| … | … | Software development skills / programming languages/ expertise: … years experience with …. Etc. |  |
| … | … | Software development skills / programming languages/ expertise: … years experience with …. Etc. |  |
| … | … | Software development skills / programming languages/ expertise: … years experience with …. Etc. |  |

*-- Multiple projects? Please copy the project questionnaire on a new page and answer the questions --*