**INNOVATION QUESTIONNAIRE**

**TEMPLATE**

**Title of the innovation \***

*Original Project title: WIRES - Wiring Robotic System for Switchgears*

*Actual proposed title by the reviewer: Advanced Sensing Capabilities for Robot adaptation to high-variable working conditions*

**Describe the innovation (in less than 1000 characters, spaces included) \***

*The proposed experiment should address the problem of the robotized automatic wiring of switchgear from both the hardware and the software point of view.*

*The main objective of this experiment is to develop a robotic system devoted to the execution of the automatic wiring of the switchgear by means of both a software package for the extraction of the data from the CAD files and optimization of the wiring procedure and a suitably designed manipulation device (end effector):*

*The consortium focused mainly on the development of advanced sensing capabilities to adapt the robot program to the large variability in grasping and moving the wires inside the switchgear.*

**Is the innovation developed within the project ... \***

a) Under development

**Characterize the type of innovation \***

* Significantly improved product (sensors and methodology for sensing)
* Significantly improved process (the assembly as a whole)
* New product (the switchgear assembly)

**Is the innovation to be introduced to the market or to be deployed within a partner \***

* Deployed within a partner (internal exploitation: Changes in organization, new internal processes implemented, etc.)

**Is there a clear owner of the innovation in the consortium or multiple owners? \***

* Multiple owners

**Indicate the step(s) already done (or are foreseen) in the project in order to bring the innovation to (or closer to) the market**

* Not planned in the project but needed/desirable

|  |  |
| --- | --- |
| *Technology transfer* | Yes |
| *Engagement of both research team and partner's business units in project activities* | No |
| *Business plan* | N/A |
| *Market study* | N/A |
| *Prototyping in laboratory environment* | Yes |
| *Prototyping in real-world environment* | No |
| *Pilot, Demonstration or Testing activities* | Yes |
| *Feasibility study* | No |
| *Launch a start-up or spin-off* | A spinoff of technologies for further fields of applications |
| *Standardization* | No |
| *Application for private or public investment* | Yes |
| *Securing private investment* | No |
| *Securing public investment* | No |
| *Other (please specify)* |  |

**Indicate which participant(s) (up to a maximum of 3) is/are the key organization (s) in the project delivering this innovation. For each of these identify under the next question their needs to fulfill their market potential. \***

UniBO

SUN

IEMA

Indicate their needs to fulfill their market potential

UniBo: Creation of a spinoff that valorizes the patent they claim are applying for:

* Legal advice (IPR or other)
* Mentoring
* Incubation
* Startup accelerator

SUN: Creation of a Spinoff that valorizes the tactile sensor developed that has proved robustness and high-performance through the project demonstrators

* Investor readiness training
* Investor introductions
* Biz plan development
* Legal advice (IPR or other)
* Mentoring
* Partnership with other company (technology or other)
* Incubation

IEMA: deployment of business models and plan to evaluate the actual application and the time-to-market of the whole application

* Biz plan development
* Expanding to more markets
* Legal advice (IPR or other)
* Startup accelerator

**Market size: What is the approximate market size for this innovation \***

* Not known

**Market maturity: The market for this innovation is ... \***

* Emerging: There is a growing demand and few offerings are available

**Level of innovation: What is the level of innovation \***

* Innovative but could be difficult to convert customers

**When do you expect that such innovation could be commercialized? \***

* Between 3 and 5 years