Call for contribution of expertise

CERN invites collaborating institutes and universities to contribute with the expertise of their qualified employees to the activity described below.

Start date: 01.12.2019	*Duration:* One year, possible extension to a maximum of up to 3 years.

Project/Activity: Analysis of the de-installation and installation activities, related costs and integration of new equipment

Detailed description of Activity:

The expert will join the HL-LHC WP15 Team in charge of the HL-LHC machine integration, de-installation and installation studies. Main tasks:

- Perform analysis to identify the equipment/systems/infrastructures that shall be modified in order to most efficiently install in the LHC accelerator the new devices required by the HL-LHC Project. This analysis shall results in the release of detailed documentation describing phases, responsibilities and budget. Such type of activity could focus on well-defined objects or even on large and complex systems that could be distributed over large areas.
- Take part in the studies of the de-installation, identifying all the elements that need to be removed and in the optimization of all the different intervention phases (about 3km of the present LHC machine shall be de-installed).
- Keep up to date the documentation necessary to track the changes and the evolution of the installation solutions developed, including the modifications for the new civil engineering infrastructures being built for the HL project. You would need to perform integration studies using CAD 3D software (CATIA V5)
- Ensure the communication with the Services & Infrastructures Teams (electrical distribution system, cooling and ventilation, civil engineering, access system, safety, etc.) and Accelerator Technology Teams (radio frequency, cryogenics, superconducting magnets, beam instrumentation, vacuum, etc.). Perform with independency and authority, contacting and communicating with teams expected to provide information and project details to the WP 15 Team.

Profile: Bachelor degree in industrial/electrical engineering or equivalent technical experience.
Specific details: Some work in controlled radiation areas (in LHC underground premises for inspections and verifications) could be expected. Diplomacy and excellent team-working attitude is required. Valid driving license. Candidates will be expected to possess a good working knowledge of either English or French and quickly learn the other language. Skills in CATIA V5 will be an asset, experience in CAD 3D is necessary. Self-management, personal initiative, communication skills, analytical and synthesis capabilities and a problem-solving attitude are required.

Status at CERN: Associated Member of the Personnel (Project Associate).
Conditions in accordance with CERN's Staff Rules and Regulations and Administrative Circular No. 11. Subsistence allowance is payable by CERN to cover the additional cost arising from the individual's (and, as applicable, their family's) stay in the local area while performing activities at CERN.

Option: Collaborating institutes and universities can propose to support the activity of the qualified employees participating in this "Call for contribution of expertise" with students or other employees. Their status and Subsistence allowance when applicable will be adapted to their relation with their institutions

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