



2018-IPR-E3-FGIV-010394

**FG IV – Project Officer -
Exploratory Research Project:
Shared Ledger Technology for nuclear
SaFeGuards (SLT4SFG)**

<p>Position for:</p> <p>FG IV – Project Officer - Scientific / Technical Support Officer</p>	<p>As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.</p> <p>The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: https://ec.europa.eu/jrc/</p> <p>The JRC offers a vacancy for a Contract Agent within the Exploratory Research Project SLT4SFG (Shared Ledger Technology for Nuclear SaFeGuards) in the context of blockchain and Distributed Ledger Technology for nuclear safeguards.</p> <p>The Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that may lead to novel results, which are going to qualitatively enrich the current scientific work at the JRC.</p> <p>The vacancy is within the Directorate Space, Security and Migration. The directorate focuses on emergency preparedness, response, disaster risk management and resilience in cases of natural and man-made hazards; cyber security, data protection and space infrastructures as well as the use of communications data by security and intelligence agencies to cover the fight against crime and terrorism, including combatting the illicit trafficking of people, drugs and weapons.</p> <p>The operational scientific research will take place in the unit Cyber and Digital Citizens' Security.</p> <p>Short description of activity:</p> <p>A key element in safeguards is the verification, in nuclear plants, of the presence of declared nuclear materials in order to prevent their diversion for non-peaceful applications. It is of utmost importance that the information acquisition and flow are reliable and timely, and that they are securely transferred to EURATOM headquarters.</p> <p>In this context, the successful candidate will work within an international team to assess if Distributed Ledger Technologies can be concretely beneficial for EURATOM nuclear safeguards operations, identifying viable Nuclear Safeguard related use-cases and deploying selected proof-of-concepts in a safeguards laboratory to deeply assess their robustness, security and scalability.</p> <p>The successful candidate will be in charge of:</p> <ul style="list-style-type: none">• Analysis of nuclear-safeguards processes under a blockchain perspective;• Identification of viable use-cases;• Design and development of PoC related to the identified use-cases;• Performance and scalability analysis;• Cyber-Security and Data Protection assessment of the
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	<p>PoC;</p> <ul style="list-style-type: none"> • Minimum requirements and constraints analysis; • Drafting of scientific papers and policy support reports. <p>The successful candidate will collaborate closely with experts in the unit Nuclear Security Unit located in Ispra, Italy.</p> <p>Qualifications:</p> <ul style="list-style-type: none"> • Completed university studies of at least three years attested by a diploma and at least five years professional experience in a field relevant to the position, alternatively a doctoral diploma in computer science, ICT engineering or related field; <p>The successful candidate shall have:</p> <ul style="list-style-type: none"> • Good knowledge of the nuclear fuel cycle and of the nuclear safeguards framework; • Advanced knowledge of blockchain and distributed ledger concepts and technologies; • Experience in the practical implementation of a blockchain application in a laboratory; • Experience in cyber-security, cryptography and networking; • Capacity to analyse in detail the nuclear safeguards business processes; • Knowledge of signal processing, data acquisition and data fusion techniques; • Knowledge of distributed systems concepts and technologies; • Excellent analytical and communication skills; • Good oral and written communication skills in English (B2), knowledge of other languages is an advantage; • A proactive attitude; • The ability to work in a team and in a multi-cultural environment. <p>In addition, the following elements will be considered as an advantage:</p> <ul style="list-style-type: none"> • Experience in signal processing, data acquisition and data fusion techniques; • Experience in business process analysis (including in other domains); • Interest in nuclear energy, the nuclear fuel cycle and the international nuclear safeguards framework is an asset.
<p>Directorate Unit</p>	<p>Space, Security and Migration Cyber and Digital Citizens' Security</p> <p>Exploratory Research Project: Shared Ledger Technology for Nuclear SaFeGuards (SLT4SFG)</p> <p>Further information is available at: https://ec.europa.eu/jrc/en/research-topic/cybersecurity</p> <p>The Scientific Development Unit of the Strategy, Work Programme and Resources Directorate is in charge of the overall JRC Exploratory Research Programme. The operational scientific research will take place in the Cyber and Digital Citizens' Security Unit.</p>
<p>Indicative duration</p>	<p>24 months</p>

<p>JRC Site</p> <p>Country</p>	<p>Ispra</p> <p>Italy</p>
<p>Rules and eligibility</p>	<p>The candidate must be on any valid EPSO reserve list for Function Group IV contract staff.</p> <p>Applicants to the following Calls for expression of interest can also be considered:</p> <ol style="list-style-type: none"> 1. CAST Permanent - EPSO has launched in January 2017 an open-ended selection procedure to create a pool of candidates from which the institutions, bodies, offices and agencies of the European Union (EU) can recruit contract agents. Details available at the link below: https://epso.europa.eu/documents/2240_en 2. Call COM/1/2015/GFIV – Research - The JRC has launched in January 2015 a permanent call for researchers FG IV. Details available at the link below: https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers <p>Auxiliary contract staff: https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members</p> <p>Article 3b of the Conditions of Employment of Other Servants of the European Union applies: the actual period of employment within the Commission under this type of contract, including any period under renewal, shall not exceed 6 years.</p> <p><i>Please note that due to the high number of applications received only shortlisted candidates will be contacted.</i></p>