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.

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/

The Technology Innovation in Security Unit aims to increase European competitiveness and resilience by research in technologies, standardization and harmonisation to enhance the protection of European networked infrastructures and to prevent hazards in industrial installations.

Special emphasis is given to the protection of large scale European infrastructures, including the smart grid, the internet, mobile telecommunication networks and European space assets.

The vacancy is in a team providing scientific and technical support to Commission Services and Member States on the protection of critical infrastructures and industrial facilities against natural hazards. Many incidents have highlighted the vulnerability of technological systems, e.g. energy infrastructure, chemical industry or military assets to natural-hazard impact. Such impacts may also increase the risk of hybrid attacks. Since these activities may provide society with indispensable goods and services, it is of strategic interest to ensure that they are safe and protected.

The successful candidate will contribute to enhancing the capacity of the EU to manage the risks to technological systems from natural hazards. More specifically, the candidate will carry out the following tasks:

- Improve the knowledge base to understand the EU’s current and future vulnerability of technological systems to natural hazards;
- Identify relevant risk parameters and improve or develop models for the assessment of these risks, including HILP risks;
- Collect and analyse natural hazard triggered incident data for civilian infrastructure and military assets to understand disruption patterns and dynamics and learn from past events;
- Prepare science-based recommendations and guidance on adequate technological risk management for natural-hazard impact in collaboration with state and private actors;
- Develop indicators for measuring the performance of technological risk-management measures and systems with respect to natural-hazard impact;
- Engage government, industry, international partners (e.g.,
OECD, UN) and academia to strengthen technological risk governance and build capacity.

Qualifications:
The successful candidate should have a Ph.D. in engineering or physics or a minimum of 5 years of equivalent professional experience after the first university degree. Expert knowledge in critical infrastructure systems and their protection and demonstrated experience in model development and risk analysis for critical-infrastructure systems is required.

The following will be considered as an asset:
- Experience in forensic (incident) analysis and natural-hazard damage assessment for industry or critical infrastructures;
- Familiarity with Natech risk analysis and reduction.
- Knowledge of GIS-based tools and Matlab.

The ability to work in a multi-national team and a very good level of spoken and written English (B2) is required.

| Directorate Unit | Space, Security and Migration  
| Technology Innovation in Security |
| Further information: [https://ec.europa.eu/jrc/](https://ec.europa.eu/jrc/) |
| Indicative duration | 36 months initial contract with possible renewals up to maximum 6 years |
| JRC Site | Ispra |
| Country | Italy |

**Rules and eligibility**
The candidate must be on a valid EPSO reserve list for Function Group IV contract staff.

If you are not in any valid EPSO reserve list for Function Group IV contract staff, you can still apply by following these steps.

You express your interest by applying to the CAST Permanent or to the permanent JRC Call for researchers.

1. CAST Permanent: 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. [https://epso.europa.eu/documents/2240_en](https://epso.europa.eu/documents/2240_en)


Only then you can apply for this specific position, through [http://recruitment.jrc.ec.europa.eu/?type=AX](http://recruitment.jrc.ec.europa.eu/?type=AX)

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.

*Please note that in case a high number of applications is received only shortlisted candidates will be contacted.*