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pcn-energie@recherche.gouv.fr

**Partner search**

**Date (10-09-20)**

* **(\*) Relevant topic in work programme**

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| **LC-GD-*** 1. [Preventing and fighting extreme wildfires with the integration and demonstration of innovative means](https://www.horizon2020.gouv.fr/cid153155/recherches-offres-competences-pour-appel-green-deal.html#GD-1-1)[**1.2** Towards Climate Neutral & socially innovative cities](https://www.horizon2020.gouv.fr/cid153155/recherches-offres-competences-pour-appel-green-deal.html#GD-1-2) [**1.3** Climate-resilient innovation packages for EU regions](https://www.horizon2020.gouv.fr/cid153155/recherches-offres-competences-pour-appel-green-deal.html#GD-1-3)[**2.1** Demonstration of innovative critical technologies to enable future large scale deployment of offshore renewable energy technologies](https://www.horizon2020.gouv.fr/cid153155/recherches-offres-competences-pour-appel-green-deal.html#GD-2-1)[**2.2** Develop and demonstrate a 100MW electrolyser upscalling the link between the renewables and commercial/industrial applications](https://www.horizon2020.gouv.fr/cid153155/recherches-offres-competences-pour-appel-green-deal.html#GD-2-2)

[**5.1** Green airports and ports as hubs for sustainable and smart mobility](https://www.horizon2020.gouv.fr/cid153155/recherches-offres-competences-pour-appel-green-deal.html#GD-5-1) |
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* **Quick description of the project**

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| **(describe the objectives, activities, partners requested and their skills)****Participate to specification, design, engineering and development of new technology required by positive energy smart cities and renewable energy production and stockage / distribution management in terms of sustainability, reliability, maintainability, safety, security, and life cycle supportability…****Define the condition of qualifying and certifying them in accordance to applicable regulations.** |

* **(\*) Do you intend to apply as ? :**

**Participant : Yes/~~No~~**

**Coordinator : ~~Yes~~/No**

**(\*) Either Description of the expertise requested (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

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| **Xxxxxxxxx****+ key words :**  |

**Or Description of the expertise proposed (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

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| **+key words :** **Risk Management in terms of Security, Safety, Sustainability, Reliability, Maintainability, Availability Assurance for complex systems and organization****Life Cycle Cost, Integrated Logistic Support, Obsolescence Management of systems****Certification of airports and ports in accordance with safety and security regulations****Capabilities of risk dynamic modeling and simulation for complex systems or industrial process****RAMS (Reliability, Availability, Maintainability and Safety-Security) Expertise** **Certification, Process Assurance, Safety, Security, Cyber security Airworthiness Consultancy.** **Industrial Risk: ICPE studies, Impact studies, explosion, ignition and fire propagation****Industrial risk management digital platform connected with the technological asset including capabilities of modeling and simulation of explosion, fire ignition and propagation risk, as well as toxic gaz or liquid dissemination in an atmosphere or a water lake…****Many references in Industrial Risk management in relation with Energy production, stockage, or distribution systems such as:*** **- explosion simulation in case of hydrogen stockage**
* **- safety studies of H2 transportation network**
* **- danger study of H2 liquefaction, stockage and distribution**
* **- 3D modelling of a mixture H2 – air**
* **- risk assessment of explosion of ARIANE hydrogen rocket**
* **- risk assessment of an hydrogenation reactor**
* **- risk assessment of explosion of a site for Sodium neutralization**
* **- explosion protection zoning concept of an Hydrogen production station**
* **- modeling of thermical flow and exchange when transferring gaz flows in the loading and filling process**
* **- Availability / Reliability studies on distribution station network**
* **- Reliability studies for production units**

**In case of using a connected and distributed supervision system** * **- Cyber security of supervision system**
* **- Reliability and Integrity analysis of supervision / regulation systems**
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**Organisation information**

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| **Organisation and country: APSYS / FRANCE** |
| **Type of organisation:****~~□~~ Enterprise □ SME □ Academic □Research institute □ Public Body □ Other: Association** |
| **Former participation in FP European projects?****□ Yes ~~□ No~~** |
| **Web address: www.apsys-airbus.com** |
| **Description of the organisation:**APSYS (a 100% wholly owned Subsidiary of Airbus created in 1985) is the AIRBUS GROUP CoE (Centre Of Excellence) in the fields of Risk Management for: - RAMS (Reliability, Availability, Maintainability and Safety-Security) Expertise - Certification, Process Assurance, Safety, Security, Cyber security Airworthiness Consultancy. With 3 sites in France (Elancourt / Paris, Marigane, Blagnac) and Subsidiaries in UK (Filton), Germany (Hamburg) & Spain (Madrid), APSYS has been successfully expanding its Business Portfolio to address the Aerospace, Transportation, Defence, Energy industries. In the frame of its activities APSYS has developed specific Security / Safety, RAMS and ILS expertise, methodologies & Software Tools (SIMFIA, SIMLOG, AMASIS, FENCE). Our policy is to maintain a high level of competence in our chosen discipline: - DEPENDABILITY (R.A.M.S.): during all project phases, optimisation of system reliability, safety, maintainability. - CERTIFICATION: support to setting up agreements of aeronautical company organisation, support to certification activities for aircraft manufacturer… - INTEGRATED LOGISTIC SUPPORT: minimisation of Life Cycle Cost: Optimisation of Product Support means from early design phases (maintenance concept and tasks, documentation, training), MSG-3 analyses. - SOFTWARE/HARDWARE AND SYSTEM PROCESS ASSURANCE: support projects and suppliers for setting system, software and hardware equipment standards/directives and control their implementation up to certification (ARP 4754, ABD 100 and 200, DO 178A&B, DO 254).Our activity concerns mainly following domains : BD10263_ Safety / Security / Cyber security / Sustainability assurance,BD10263_ Data ProtectionBD10263_ Integrated Logistic SupportBD10263_ Industrial RiskBD10263_ Security linked to the Environment,BD10263_ Risk Management,BD10263_ Human Factors,BD10263_ Nuclear Safety and Vulnerability of the sites and installations,BD10263_ Experience feedback and Management of Technical Competences,BD10263_ Risk of project Management,BD10263_ Software QualityBD10263_ Assistance System to the decision,BD10263_ Development and commercial distribution of software tools according to our skills. For more than 20 years, APSYS has carried out complex certification / security and safety analyses for a large number of Key Primes throughout the Aerospace civil or Defence sectors, working in close collaboration with the Authorities (EASA/ FAA, etc.), the Aircraft and Helicopter manufacturers as well as many of their partner & Tiers 1 Systems Suppliers: AIRBUS, AIRBUS HELICOPTER, DASSAULT, EMBRAER, ATR, THALES Group, HONEYWELL, SAFRAN Group, INTERTECHNIQUE, ECE, BARCO, SOGERMA, LIEBHERR Aerospace, LATECOERE, TAT etc… Through multiple projects, APSYS has gained an extensive know-how in the aeronautical field, covering different regulatory frameworks, and relevant methods and tools.Our customers cover following domains:* Aeronautic:

Airbus, Embraer, DGAC, Latecoere, Labinal, Sogerma, SNECMA, Goodrich, Barco, Technofan, NEC Aero Space: CNES, ESA, Astrium, Alcatel Space Industries * Defence:

EADS LV, Eurocopter, DGA, GIAT, TRW, Thales Nuclear safety: CEA, Cogema, EDF, Technicatome, Areva * Transport: Automotive (including autonomous vehicles) and Railway

Air France, ADP, Eurotunnel, RATP, Renault, SAA Peugeot Citroen, SNCF, Faiveley, Bombardier, AMEC Spi* Chemistry,

Oil & Gas: Shell, BP, Exxon Mobil, Total, Bayer, Butagaz, Primagaz, L'Oreal, SSAE, Yara, Alstom Power, Subsea7 |

**(\*) Contact details**

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**(\*) –Mandatory**