

For Partner Search: Please do not forget to fill the expected requirements for the possible project partner(s).

Program Type (If you are not sure, please do not fill)	
EUREKA	<input type="checkbox"/>
EUREKA Clusters	<input type="checkbox"/> If yes, name of Cluster
EUREKA Umbrellas	<input type="checkbox"/> If yes, name of Umbrella
EUROSTARS	<input checked="" type="checkbox"/>

Contact Person Details	
Title / Name Surname	Dr./ Cuneyd FIRAT
Position	General Manager
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Organization Details	
Name	C2Tech
Address	TÜBİTAK Teknoloji Serbest Bölgesi (TEKSEB) C-Blok No: C-210 Gebze,
City / Country	Gebze / Kocaeli, Turkey
Website	www.ctechsoft.com
Type of Organization	<input checked="" type="checkbox"/> SME <input type="checkbox"/> Large Company <input type="checkbox"/> University <input type="checkbox"/> Research Institution <input type="checkbox"/> Administration <input type="checkbox"/> Other: please specify:
Number of Employees	<input type="checkbox"/> <10 <input checked="" type="checkbox"/> 11-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101-200 <input type="checkbox"/> 201-250 <input type="checkbox"/> > 250
Last Turn Over / Balance Sheet	/



EUREKA - EUROSTARS



TUBITAK

Project Pre-Application Form

EUREKA eurostars™

Describe the activities, products, services and expertise of your organization:

C2TECH is an R&D based SME specializing in design, development, and system integration of Secure Communication and Network Systems, RF Systems and Stealth (RCS) analysis, and Command-Control (C2) and Simulation Systems. It is located in the Technology Free Zone of TUBITAK, Gebze. As C2Tech, we are developing both hardware (embedded) and software systems (mobile applications, distributed applications, simulation framework and simulations, city surveillance command control applications). C2Tech vision is to be a national and regional leading solution focused in development and integration of command-control (C2), communication and information technologies. C2Tech has the security clearance required in defense industry standards. Also, C2Tech has background on wired and wireless communication infrastructures, COMSEC and TRANSEC equipments, network fault management, performance, configuration and calculation management, Planning of communication infrastructure, IP based network management and security systems and Network-Centric structures.

Project Details	
Project Title	ADS-B Automatic Dependent Surveillance Broadcast
Keywords	ADS-B-in, ADS-B-out, ATC, NRA
<p>Describe your project:</p> <p>ADS-B is a surveillance technology that broadcasts aircraft surveillance information (position, identity, speed, altitude etc.) automatically. ADS-B transmission can be from an aircraft to potential ground station (GS) which is called ADS-B-out and from aircraft to another aircraft which is called ADS-B-in. ADS-B technology usage is becoming widespread for Air Traffic Control (ATC) purposes. It is envisaged that Secondary Surveillance Radar (SSR) will be replaced by ADS-B GS. ADS-B is used especially for non-radar areas (NRA) where a radar installation is not feasible.</p> <p>Basically, ADS-B ground station covers; ADS-B antenna which receives ADS-B signals sent from MODE-S Extended Squitter Transponder mounted on aircrafts, GPS timing unit and antenna for position and timing information, receiver and signal processing units (SPU), hardware and software used to translate ADS-B signals to ATC surveillance information and send to ATC networks, power unit hardware and control, monitoring and ATM display and software.</p> <p>The primary targets are functionality, quality and safety with the system that will be designed and developed as well as modularity and price performance.</p> <p>At the end of this project, ADS-B ground station prototypes will be developed and installed. Prototypes which will be manufactured will follow International Civil Aviation Organization (ICAO) and Europe Aviation Safety Agency (EASA) specifications.</p>	
<p>Describe the innovative part of your project:</p> <p>It is a new technology which is going to take place instead of SSR. In ADS-B technology the surveillance informations will be taken by ADS-B antennas. Transfer of data will be done with higher accuracy and precision. This technology brings new hardware and software. ADS-B system installation and maintenance is easy and more reliable compared to radars. The main advantage of this technology is its low cost.</p>	
<p>Describe the market expectations of your project:</p> <p>Our country as well as many other countries should have ADS-B technology for efficient ATC which is rapidly increasing and to meet safety requirements. Many of the ATC authorities have plans to meet air traffic requirements and to have effective ATC. By this technology there will be direct and indirect sales targets with new hardware and software.</p>	

Possible Partner Profile	
Type of Partner Needed <i>(multiple choices are allowed)</i>	<input checked="" type="checkbox"/> SME <input checked="" type="checkbox"/> Large Company <input checked="" type="checkbox"/> University <input type="checkbox"/> Research Institution <input type="checkbox"/> Administration <input type="checkbox"/> Other, please specify:
Desired country(s) for partnership, if any	
Describe the expertise of possible partner(s) required for your project: Application facility or mechanical designers/manufacturers and companies which are expert on air traffic management would be needed in this project for cooperation.	
Describe the role of possible partner(s) in your project: Support on design and development of air traffic management software. Support on RF hardware development and testing for ADS-B ground station tests. Support on mechanical design/manufacturing.	

Date: 02/ 02/ 2010 (day / month / year)

Deadline for Partner Search: 28 / 02 / 2010 (day / month / year)

Please send the filled form to eureka@tubitak.gov.tr