

Aero-Ukraine Project



AERO-UKRAINE Training Session

Part I: How to join a ‘competitive consortium’ preparing an FP7 Proposal

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Agenda

- 1. Introduction**
- 2. Step 1: Background work**
- 3. Step 2: How to identify ‘successful’ European aeronautics partners**
- 4. Step 3: Alternative routes to identifying European aeronautics partners**
- 5. Step 4: How to approach successful European aeronautics partners**
- 6. Step 5: How to identify other aeronautics related calls for proposals**



Introduction (1/2)

1. Important to have a **realistic outlook**
2. Average success rate for all submitted FP7 proposals is about 10-20%, but tends to be less for Ukrainian organisations ...
3. Ukrainian organisations have been involved in 8 of the 247 projects funded under FP6 Aerospace
4. No one can promise you success ... but you can do a lot to reduce the risk of failure
5. Preparing a competitive proposal is a challenging task even for experienced European aeronautics organisations
6. For 'inexperienced' organisations from 'third countries' (e.g. Ukraine), very difficult and time-consuming to form project consortia and write competitive proposals



Introduction (2/2)

6. Not put off yet?! So, what can you realistically do?
7. Identify ‘successful’ European aeronautics organisations who are preparing FP7 aeronautics proposals
8. ‘Successful’ European aeronautics organisations = Track record of successful EU funded project implementation
9. Persuade the ‘successful’ European aeronautics organisations to let you join their consortia by offering unique/specific research capabilities that they need



Step 1: Background work (1/2)

1. Study past and current EU objectives concerning Aeronautics research to understand if your research is relevant:
 - Examine DG Research's Aeronautics webpages (http://ec.europa.eu/research/transport/transport_modes/aeronautics_en.cfm)
 - Download and examine the latest FP7 Transport (including Aeronautics) work programme ... also investigate others such as FP7 Space (http://cordis.europa.eu/fp7/wp-2010_en.html)
 - Examine Advisory Council for Aeronautics Research in Europe (ACARE) webpages (<http://www.acare4europe.org>)
 - Register for research*eu – free magazine of the European research area (http://ec.europa.eu/research/research-eu/index_en.html)



Step 1: Background work (2/2)

1. Investigate FP6/FP7 Aeronautics projects in your areas of interest
 - Search FP6 Aeronautics projects on DG Research website (http://ec.europa.eu/research/transport/projects/search_en.cfm)
 - Download and read FP6 Aeronautics Project Synopses:
 - Volume 1:
http://ec.europa.eu/research/transport/pdf/project_synopses_vol1_en.pdf
 - Volume 2:
http://ec.europa.eu/research/transport/pdf/aero_research_synopsis_vol2_en.pdf
 - Search through “all” FP6/FP7 projects on the Cordis database (<http://cordis.europa.eu/search/index.cfm?fuseaction=proj.advSearch>)



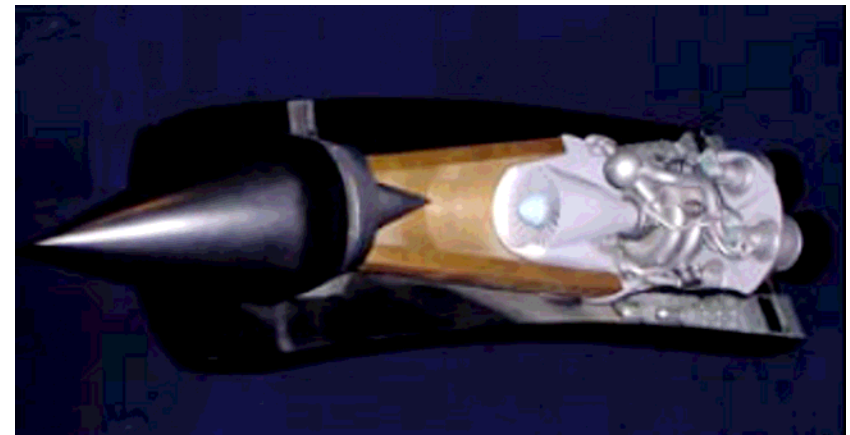
Step 2: How to identify ‘successful’ EU aeronautics organisations (1/3)

1. European aeronautics organisations who have successfully implemented FP5/6/7 Aeronautics projects:

A) Search out contact details for project coordinator and partners in FP6 Aeronautics Project Synopses (Volumes 1 and 2) e.g. FP6 LAPCAT

LAPCAT Long-Term Advanced Propulsion Concepts and Technologies

Acronym: LAPCAT
Contract No.: AST4-CT-2005-012282
Instrument: Specific Targeted Research Project
Total cost: €7 092 822
EU Contribution: €3 999 778
Starting Date: 26/04/2005
Duration: 36 months
Coordinator: European Space Agency (ESA)
European Space Research and Technology Centre (ESTEC)
Keplerlaan 1,
NL-2200 AG Noordwijk
Contact: Johan Steelant
Tel: +31 71 565 5552
Fax: +31 71 565 5421
E-mail: Johan.Steelant@esa.int





Step 2: How to identify ‘successful’ EU aeronautics organisations (2/3)

B) Search Aeronautics projects on the Cordis database
(<http://cordis.europa.eu/search/index.cfm?fuseaction=proj.advSearch>)

B.1) e.g. “Aero-Engine” under FP7 Transport

Projects : Enter search criteria

Search all fields:

Quality validation date: From: To: (YYYY-MM-DD) RCN:

Project Acronym:

Start date: From: To: (YYYY-MM-DD)

End date: From: To: (YYYY-MM-DD)

Accepted Execution Completed

Programme type*:
COMPETITIVENESS AND INNOVATION FRAMEWORK PROG
EDUCATION AND TRAINING
EMPLOYMENT

Programme Acronym*:

Framework Programme	Other EU Programmes
<input type="text" value="FP7-SME"/>	<input type="text" value="Any"/>
<input type="text" value="FP7-SPACE"/>	<input type="text" value="ACE 1"/>
<input type="text" value="FP7-SSH"/>	<input type="text" value="ACE 2"/>
<input type="text" value="FP7-TRANSPORT"/>	<input type="text" value="ACNAT"/>
FP7 related programmes	



Step 2: How to identify ‘successful’ EU aeronautics organisations (3/3)

B.2) e.g. “Aero-Engine” under FP7 Transport

Validation of radical engine architecture systems

Start date:2008-02-01

End date:2011-01-31

Project Acronym:DREAM

Project status:Execution

Coordinator

Organization name: ROLLS ROYCE PLC	
Contact person	Address
Name: David BONE (Mr)	Buckingham Gate 65
Tel: +44-01332249842	LONDON
Fax: +44-01332249646	UNITED KINGDOM
E-mail: Contact	Region: SOUTH EAST (UK) GREATER LONDON
URL: http://www.rolls-royce.com	Organization Type:

Description

Objective: Since the publication of the ACARE goals, the commercial and political pressure to reduce CO2 has increased considerably. DREAM is the response of the [aero-engine](#) community to this pressure. The first major DREAM objective is to design, integrate and validate new engine concepts based on open rotor contra-rotating architectures to reduce fuel consumption and CO2 emissions 7% beyond the ACARE 2020 objectives. Open rotors are noisier than equivalent high bypass ratio turbofan engines, therefore it is necessary to provide solutions that will meet noise ICAO certification standards.



Step 3: Alternative ways to identify EU aeronautics partners (1/4)

1. FP6 and FP7 aeronautics support actions:

- AERO-UKRAINE (www.aero-ukraine.eu) - Support to participation of Ukrainian organisations in European aeronautics research projects
- CEARES (www.ceares.eu) - Network of aeronautics research organisations in Central Europe
- AirTN (www.airtn.eu) - European network of aeronautics research and air traffic management organisations
- EASN (www.easn.net) - European Aeronautics Science Network
- ECATS (www.ecats-network.eu) - European network on environmentally compatible air transportation system
 - Public membership lists and contact details
 - Organise awareness raising and networking events
 - Distribute free newsletters

2. European Commission organised FP7 Transport information-days

- Presentations concerning call objectives
- Networking



Step 3: Alternative ways to identify EU aeronautics partners (2/4)

1. AEROPORTAL (www.aeroportal.eu)

- Support to participation of SMEs in European aeronautics research projects
- Partner search database
- AeroPortal newsletter

The screenshot displays the AeroPortal website interface. At the top, a blue navigation bar contains the text "SUPPORTING SME ACCESS TO EUROPEAN RESEARCH IN AERONAUTICS" on the left and "HOME", "SITEMAP", and "CONTACT US" on the right. A left-hand sidebar menu lists various sections: Home, About Us, News and Events, EU Funding (with sub-links for "FP7 in Brief" and "Latest News in FP7"), Database (highlighted in orange), Servicing Team Method, Serviced Proposals, Training, and Multiplier Group. The main content area features the "AeroPortal Database" title in orange. Below it is a "Search by Country" section with three buttons: "Product", "Technology", and "Country" (which is highlighted in orange). A text box explains: "The Country Search provides you with a list of all registrants of the selected country. Select the country and press the search button. To view the company's profile click on the company name." Below this text is a "Select a country" label, a dropdown menu currently set to "All countries", and a "Search" button.



Step 3: Alternative ways to identify EU aeronautics partners (3/4)

1. Cordis FP7 Find Project Partners service (http://cordis.europa.eu/fp7/partners_en.html)

- E.g. Search on “aerodynamics”

Seventh Framework Programme (FP7)

Search all CORDIS

Find project partners

Building international partnerships is part of taking part in EU research programmes. CORDIS has an established Partners Service and a specialised service for FP7, fostering public-private partnerships to design, propose and launch new projects. You can use the search facilities to find international partners with the complementary expertise, profile or technology that you are looking for.

Enter search term(s):

EU funded collaboration

Profile Type*: Project Proposal, Company Expertise

Programme*: FP7, FP7-CAPACITIES, FP7-COOPERATION, FP7-COORDINATION

Country*: Any Country, AUSTRIA, BELGIUM, BULGARIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA

* Keep the control key pressed to make more than one selection
** As defined by UNSC resolution 1244 of 10 June 1999

Search Clear



Step 3: Alternative ways to identify EU aeronautics partners (4/4)

1. NCP SME Network (www.ncp-sme.net)

- Partner searches for SMEs
- Covers many fields of science and technology

you are here: [home](#) → [partner search](#)

LOG IN

Login Name

Password

[Forgot your password?](#)

[New Proposer?](#)

Open Partner Searches

ps id	proposal name	call	activity area	date	country
PS-SME-ES-228	WATERPLASMA - A NEW FAST AND EFFICIENT WATER DECONTAMINATION METHOD BASED ON ATMOSPHERIC PLASMA DISCHARGE	Research for SME Call 2010 (FP7-SME-2010-1)	Research for the benefit of SMEs	2009-06-15 12:12	Spain
PS-SME-ES-215	MONICURE - Development of a low cost, robust, real-time sensor, based on a piezoelectric element for in-process measurements in the composite moulding industry	Research for SME Call 2010 (FP7-SME-2010-1)	Research for the benefit of SMEs	2009-06-15 12:11	Spain
PS-SME-ES-225	POLYSENSE - System to improve use of recycled polymers in extrusion and injection processes through in-line ultrasonic measurement of polymer density and rheological properties	Research for SME Call 2010 (FP7-SME-2010-1)	Research for the benefit of SMEs	2009-06-15 11:41	Spain
PS-SME-ES-209	Multiobjective OPTIMization of Industrial processes for energy Savings and efficiency iMprovement - OPTIMISM	Research for SME Call 2010 (FP7-SME-2010-1)	Research for the benefit of SMEs	2009-06-15 11:34	Spain
PS-SME-	Vth range vegetable dishes development using	Research for SME Call 2010	Research for the	2009-06-10	Spain



Step 4: How to approach successful EU aeronautics partners (1/5)

1. Prepare marketing material

- Even universities and research institutes need marketing material!
- But, marketing material is often too long, unclear and uninteresting!
- Prepare one page, A4 sized profile form – focused on a single research department or technology
- Highlight past international research experience
- Don't forget to mention what you look for:

e.g. “We want to join a consortium of European aeronautics organisations preparing a proposal for Area AAT.2010.4.1-2 Aerostructures under FP7 Transport Call 3”

- Good example: technology profile form used by STCU (see http://www.stcu.int/documents/download/TPF_Example.pdf)



MICROSYSTEMS TECHNOLOGY

A NEW PROGRAMMABLE 3-AXIS PIEZOELECTRIC NANOMANIPULATOR WITH ULTRA-LOW DRIFT FOR CELLS TECHNOLOGIES

Description

Robotic micromanipulators are used for demanding biotech applications such as Patch Clamp (holding and positioning a cell), IVF (in-vitro fertilization), and cell cloning, as well as in the semiconductor integrated circuits industry – all growing markets. LILEYA's PSF-3 IVF is a state-of-the-art 3-axis nanomanipulator system based on advanced piezoelectric rotary motor, integrated with a digital signal processor (DSP) multifunctional programmable controller including 46 operations. When the motor is deenergized, it provides an automatic solid brake on movement, with almost undetectable backlash and drift. It works by converting the rotary motion of an advanced piezoelectric motor (fitted onto each axis of the nanomanipulator) into linear motion. A combination of high torque, variable speed and high angular resolution enables the piezoelectric motor to be used in either continuous or stepper mode. These characteristics facilitate a smooth transition, without degradation in intrinsic performance, from an angular step of less than 5 μ rad to continuous motion, and a range of angular velocities, from 5 μ rad/sec up to 60 rev/min. This translates into a linear resolution of 0.4 nm and a linear range of velocities from 0.4 nm/sec to 500 μ m/sec for each axis of the PSF-3IVF. Additional benefits of the PSF-3 IVF design include the elimination of heat dissipation, the use of non-ferrous and nonmagnetic components, ultra-low electrical noise and low supply voltage (12 VDC), which together make the PSF-3 IVF ideal for very sensitive applications.

Innovative Aspect and Main Advantages

PSF-3 IVF combines extremely high resolution (0.4 nm), long term stability (drift less than 2 nm/hour @ 20°C) and long travel (10 mm). The "Stick/Slip" is one of the major factors, which limits nanometer resolution and hence the performance of traditional nanopositioners/manipulators. The PSF-3 IVF overcomes the stick/slip effect using the unique combination of the piezoelectric motor and DSP control. Any angular position of the rotor is locked by the self-decelerating torque of the motor. The same force locks the whole friction system of the nanomanipulator. To limit the effect of any jump when initiating motion the unlocking process must occur almost instantaneously (within 10-100 μ sec). PSF-3 IVF's DSP core has been designed to implement a step formation within 2-10 μ sec/ μ rad. This timing results in an angular step of the motor in the nanometer range, which translates immediately into an equivalent linear step eliminating measurable static friction effects.

Areas of Application

LILEYA's advanced Nano-Manipulator technology is designed to meet a variety of positioning needs for the scientific, biotechnology, medical, semiconductor and industrial markets. It is suitable for applications such as: patch clamp experiments on cells in culture, microinjection into cells, cell imaging, cellular and material handling, IVF fertilization and sterility treatments, DNA cloning experiments, extracellular recording, intracellular recording, cytopathology, precision robotic applications, MRI-guided robotic surgery applications, integrated circuits applications, IC mask generation and alignment, IC

lithography, IC wafer measurements, fiber optic assembly and alignment, laser production, E-beam control for IC's, ion beam control for IC's, read-write heads for recording tape and CD's, storage media applications.



Fig.1 SOFTWARE PSF-3 IVF



Fig. 2 Nanomanipulator PSF-3 IVF



Fig. 3 Nanomanipulator PSF-3 IVF -H

Stage of Development

LILEYA's unique designs are protected by:

- United States Patent "MICROMANIPULATOR", Application Serial No.#2005/0023930
- Russia Patent "MICROMANIPULATOR" No.2041480
- UA Patent "MICROMANIPULATOR" No.2002064866

LILEYA builds systems with superior high performance characteristics and it can produce 50-100 systems in years at a low cost.

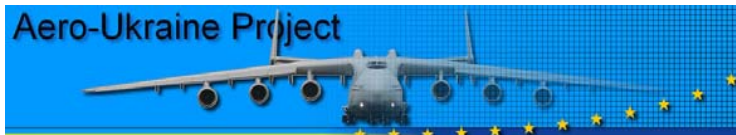
Contact Details

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 E-mail: tyll@svetex.kiev.ua
 Web-site: www.piezomotor.com.ua

Technology Reference

nataliya.mykhaylovska@stca.int





Department of Open Education Systems (Nikolaev State University)



Who we are

The Department of Open Education Systems operates under the Nikolaev State University after V.O. Sukhomlinsky. It specializes in the implementation of the principles of open education, in particular, distance learning in the educational area of Southern region of Ukraine. The department is training the faculty of foreign philology (different specialties) for distance learning, and plans to cover all the institutions and faculties of the university as soon as possible.

Cooperation interests

The Department of Open Education Systems is interested in the development of open education in Ukraine, in particular, distance learning in universities and institutions of postgraduate education. Our potential roles: coordinators, partners, scientific experts, a research center.

Directions in research and development cooperation

- distance learning courses;
- seminar of develop distance learning courses;
- distance-learning web-system;
- learning tools in open education.

What makes us a good partner:

- skilled, creative staff;
- own web-system of distance learning;
- experience in creating distance education courses;
- extensive use of information and communication technologies;
- introduction of innovative technologies in education.

Our achievements

- introduction of distance learning in the state educational system at the same level as other forms of studying;
- develop our own distance-learning web-system;
- creation of 15 distance-learning courses;
- the availability of certificates of participation in the distance learning courses on the use of different systems of distance education.

Participation in projects:

- in collaboration with the and Southern Regional Institute of Teachers Postgraduate Education conducted a pilot distance course for teachers and principals, developed new case-distance courses and distance courses of methodical support for the learning process of pupils;
- participated in the project «New technologies in education» (the organizer is the National Technical University «Kharkiv Polytechnic Institute») to introduce Web 2.0 technologies in distance education;
- create a web-portal of the Education Management University Central Institute of Postgraduate Pedagogical Education;
- creating a methodological resource to help schoolchildren and teachers (in collaboration with Southern Regional Institute of Teachers Postgraduate Education).

Other information

Name of the research department:

Dept. of Open Education

Name of the organization:

Nikolaev State University after V.O. Sukhomlinsky

Country: Ukraine

Number of researchers: 12

Working languages: Russian, Ukrainian, English

Contact person: Samoylenko O.M.

Position: Head of the Department

E-mail: samoylenko65@mail.ru

For more information you can visit: <http://dlearning.in.ua>



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Step 4: How to approach successful EU aeronautics partners (4/5)

2. Promoting your organisation

- Use personal contacts and referrals (usually best method)
- Attend networking events organised by EC (don't hide, make a presentation!)

3. 'Cold emailing' successful EU aeronautics organisations (part A)

- Send short email in English (100 - 200 words)
- Attach your marketing profile form(s)
- Provide full contact details and website address



Step 4: How to approach successful EU aeronautics partners (5/5)

2. 'Cold emailing' successful EU aeronautics organisations (part B)

- Successfully contacted someone by email ... now what?
- Be brave and follow up with a phone discussion on how to collaborate
- If phone calls are too expensive, consider using Skype or Microsoft Messenger, and using a webcam, to enrich discussions
- Stay in regular contact

2. 'Cold emailing' successful EU aeronautics organisations (part C)

- Tried contacting by email but no response
- Wait 1-2 weeks then follow up with another email or phone call (better)
- Always be polite
 - maybe many unknown reasons why you get rejected
 - you may not succeed first time but later



Step 5: How to identify other aeronautics related calls for proposals (1/1)

1. FP7 Co-operation

(http://cordis.europa.eu/fp7/cooperation/home_en.html)

- Other FP7 programmes: Space, Security, NMP (Nanosciences, nanotechnologies, materials and new production technologies) etc

2. Joint Technology Initiatives

- Framework for stakeholders - led by industry - to define R&D priorities and fund collaborative R&D projects
- SESAR (www.sesarju.eu) - EU air traffic control modernisation programme & CLEANSKY (www.cleansky.eu) - SMART fixed wing aircraft, green regional aircraft, green rotorcraft, ...

3. Do your background research

- Download work programmes and search them for key research terms (e.g. aerodynamics, avionics, etc) and call deadlines



Important Legal Notice

Seventh Research Framework Programme (FP7)

English (en) ▼






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In the spotlight

The EU provides major support for RTDI through the Seventh Research Framework Programme, the Competitiveness and Innovation Programme and the Structural Funds. The Commission is looking for your comments and suggestions for

Latest News

[Watch that heart](#)
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Clothes, bed sheets and home appliances could soon help heart patients to better deal with their condition. The new EU-funded HeartCycle project sets out to create innovative telemonitoring solutions. Launched on 1 March... [read more](#)



Highlights

- The updated version (10 February 2008) of the [Negotiation Guidance Notes](#) is now available in the [documents' directory](#) under the "Guidance documents" section
- The updated version (19 March 2008) of the [FP7](#)



Be patient, persistent and polite ... Good luck!