

European Commission



Guidance notes

Virtual Institutes

10 November 2000
Rev. 1



COMPETITIVE AND SUSTAINABLE GROWTH

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"Guidance notes on Virtual Institutes"

1. INTRODUCTION

... guidelines for those proposing Virtual Institutes

...

This document, is formed as a set of guidelines for people interested in making proposals for Virtual Institutes under the Competitive and Sustainable Growth (GROWTH) programme of the Fifth Framework programme (FP5). It is written by a group of independent experts, and summarises the presentations and the discussion held in connection with the Workshop on Virtual Institutes in Brussels on the 28th of September 2000. The document has been checked by the commission services and is recommended for use.

2. BACKGROUND

... support to establish Virtual Institutes ...

Financial support for the creation and initial start-up of Virtual Institutes is available within the Competitive and Sustainable Growth programme of the Fifth Framework Programme (FP5), under the "Support for Research Infrastructures". EU funding is available to cover the support activities necessary to create and establish a Virtual Institute; the costs of research per se within the Virtual Institute are not covered. The style of contract involved is that of a thematic network which may cover up to 100% of eligible costs.

3. WHY VIRTUAL INSTITUTES?

... transfer research results and knowledge to industry ...

There is a paradox at the centre of EU research activity. It appears that while the quantity and quality of research are high in Europe, the exploitation of results is less impressive and lagging behind Japan and the USA. Therefore, it is necessary to develop appropriate means to improve the interaction between industry and research and facilitate the transfer of technology and research results to industry and in particular to SMEs for quick exploitation. Knowledge networks support the transfer of research results, and know-how. Virtual Institutes are concrete examples of such knowledge networks.

4. WHAT ARE VIRTUAL INSTITUTES?

... definition ...

A Virtual Institute is defined as "a new capability that is created by linking geographically scattered complementary research and industrial expertise in order to transfer and implement research results into application".

Key terms in this definition include:

<i>... complementary skills ...</i>	<u>Complementary</u> – based on a mix of partners with appropriate complementary as distinct from overlapping skills and capabilities.
<i>... industrial ...</i>	<u>Industrial Expertise</u> – industrial researchers as well as users of research and services.
<i>... financially viable and sustainable ...</i>	<u>Transfer and Implementation</u> – Implementation implies a commercial activity in the sense that the services of the Virtual Institutes will be financially viable and sustainable beyond the period of EU Framework funding. In fact, the intention is that the Virtual Institute should become an independent and self-financing legal entity, providing services for European customers on a commercial basis at the end of the start-up phase. Such customers are intended to include EU industry and government / public bodies. SME customers are considered to be particularly important.
<i>... independent and self-financing legal entity ...</i>	

5. WHAT RESEARCH TOPICS AND AREAS ARE APPROPRIATE?

<i>... Expression of Interest followed by dedicated calls ...</i>	The precise list of topics to be covered by Virtual Institutes is generated following an open call for Expression of Interest (EoIs). The EoI mechanism allows individuals, individual organisations and indeed consortia to submit ideas for topics which should be included in future dedicated calls for Virtual Institutes. The EoIs, which may be submitted at any time, are evaluated by experts who help the EU to determine if a Virtual Institute in the proposed topics should be established (see section 9; additional information). Successful EoIs result in the formulation of supporting documentation for each of the dedicated call topics. Full proposals are to be elaborated based on the specified objectives. It should be emphasized that the "supporting documentation" is always made available to all parties interested in submitting proposals to the dedicated calls. In this way the EoI mechanism works as a "bottom-up" approach to the selection of research topics to be addressed by Virtual Institutes. The precise list of topics to be addressed in a particular dedicated call is identified clearly in the call (see section 9; key dates and contacts).
<i>... Expression of Interest is a bottom up approach to topic selection ...</i>	

6. WHAT COULD A VIRTUAL INSTITUTE DO?

As indicated above a Virtual Institute is a knowledge-based, market-oriented network designed to facilitate rapid exploitation of R&D results and know-how.

Thus, a Virtual Institute might, for example:

... provide services including RTD services ...

- i. Provide services on a commercial basis to industry, research community and/or public authorities.
- ii. Connect individual industrial companies or networks of companies to the most appropriate research facility – in effect acting as a research broker.
- iii. Establish and document the state of the art in the particular field of expertise of the virtual institute.
- iv. Identify research and development needs and gaps in the particular field of expertise.
 - v. Act as an information centre for research results and developments.
 - vi. Facilitate mobility of researchers between institutes within the Virtual Institute and industry.
- vii. Act as a tool to create consortia to address the R&D needs and gaps identified in iv above and support research collaboration.

... leading experts, excellent communications ... the human dimension ...

To meet the objectives and to offer services of the type listed above, the Virtual Institute needs to have an in-depth knowledge of its subject and is likely to involve some of the leading experts in its research area. It must also have a finely tuned internal and external communication system based on genuine thrust and a spirit of co-operation between its members and indeed with its customers.

7. A SUCCESSFUL VIRTUAL INSTITUTE PROPOSAL

A prerequisite for a successful proposal is that the evaluators are convinced that the proposed Virtual Institute is likely to be self-funding beyond the period of EU funding. To this end, successful projects are likely to have:

... convincing business plan ...

- a) A reasonably well developed and convincing draft business plan.
- b) A convincing management structure, which is strong enough to implement that business plan successfully.
- c) A legal structure foreseen, to be put in place in due time.
- d) A convincing market mechanism (reach-out towards customers) that provides a low access thresholds for clients, in particular SMEs.

... access to professional expertise in the consortium ...

Given the requirement to ultimately develop a separate legal entity, capable of an independent existence and delivering commercial services, it is likely that a consortium developing a successful proposal will be relatively large. As well as the scientific and technical excellence on which the Virtual Institute is to be based, the consortium may also need access to professional expertise in areas such as:

- Management and administration, including legal issues.
- Communication systems including ICT and knowledge management procedures.
- System to gather, process, maintain and disseminate commercially the core knowledge of the Virtual Institute.

7.1 A business plan for a Virtual Institute

... a business plan can structure planning and communicate intentions ...

A business plan is a vehicle that can structure thinking and planning in many areas, and communicate intentions at both strategic and operational levels.

... identifying a 'market' ... or attracting sponsorship....

By answering the issues raised in writing a business plan, the proposers of a Virtual Institute will ensure they are creating something with longer lasting value. It does not matter whether this is done by identifying a 'market' for the 'products and services' the VI offers, or whether it is articulating a vision that will attract sponsorship. The key issue is that a business plan requires qualitative and quantitative assessment of the major factors that will determine the success of a VI, such as: mission; role of planned product or service and why it is better (or at least different); target market requirements and volume; products /services/ pricing / demand forecast; suppliers / value-add / distribution; competitors, risks and countermeasures; external SWOT (strengths – weaknesses – opportunities – threats); the team that will execute the plan; internal SWOT; structure / problem resolution / ownership / IPR; costs and revenues; timeline and metrics.

7.2 Ongoing Reviews of Virtual Institutes

... mid-term review of ongoing projects in order to share experiences ...

Given the innovative nature of Virtual Institutes, the lack of concrete experience of establishing and operating such institutes as well as the need to create sustainable structures, it seems reasonable to consider a 'mid-term' review of progress within this important area. Such a mid-term review, which might take the form of a cluster meeting between the various ongoing Virtual Institute projects, should prove useful in pooling experience so that each emerging Virtual Institute might have the opportunity to learn from others. Through such an initiative, emerging best practice might be articulated and adapted and in general each would learn from the experience of others. A review panel might be created to facilitate such a mid-term review.

8. WHAT IS THE EXPERIENCE TO DATE WITH VIRTUAL INSTITUTES?

*...limited
experience to date
...*

The experience to date is very limited. The proposal evaluators will be encouraged to be open to new ideas which meet the basic requirements in terms of scientific excellence, solid management structure and business plan, as well as a commitment to developing a sustainable legal entity, post the EU funding period.

The following mistakes should be avoided:

*... mistakes to be
avoided ...*

- Organisational structure; on the one hand too many academic partners; on the other hand too many consultants.
- Management structure; on the one hand too democratic with all partners having equal rights; on the other hand too highly centralised with all of the responsibility and workload borne by one partner.
- No legal structure in mind for the Virtual Institute to be formed.
- Insufficient commitment to sustainability beyond the period of EU funding and weak business plan.

9. KEY DATES AND CONTACTS

Timetable:

*... timetable for
proposals ...*

- The call for expression of interest is open until 30th of April 2001.
- The 4th Dedicated call was published on the 13th of October 2000, with a deadline for receipt of proposals on the 15th of March 2001.
- The 5th Dedicated call will be published on the 15th of October 2001, with a deadline for receipt of proposals on the 15th of March 2002.

Title of dedicated call topics for virtual institutes published 13th October 2000 (see also Guide for Proposers - Part 2)

*... themes for the
October 2000 call
...*

Virtual Institute in Structural Integrity
 Virtual Institute on Design by Analysis of Pressure Equipment
 The European Virtual Institute for Geometric Measurements
 A European Jewellery Technology Virtual Institute
 Virtual Institute for Industrial Chemometrics and Metrology
 Virtual Institute for Advanced Manufacturing Enterprises
 The European Recycling Virtual Institute
 The European Virtual Institute for Gas-turbine Instrumentation
 The European Tribology Virtual Institute

Additional information:

... *contacts* ...

Growth helpdesk: growth@cec.eu.int

Growth web-site: <http://www.cordis.lu/growth/>

For information on the Expression of Interest/Dedicated Call Mechanism and guidance notes on Thematic Networks see:

<http://www.cordis.lu/growth/src/library.htm>

Call text and Guide for Proposers:

<http://www.cordis.lu/growth/calls/200003.htm>

Supporting documents: <http://www.cordis.lu/growth/calls/topics-200003.htm>

Partner search facility: <http://www.cordis.lu/fp5/partner.htm>

IPR inquiries: <http://www.cordis.lu/ipr-helpdesk/>

Further information from the workshop on Virtual Institutes is available on the growth web-site on Europa: <http://europa.eu.int/comm/research/growth/>

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