



Pisa, Italy
18th September 2006

Initial Survey Results Of Research Programmes That Promote Novel, Ambitious, Unconventional, And High Risk Research.

P.J. Prendergast^a, S. Brown^a, T. Heinze^b

*^a Trinity Centre for Bioengineering, School of Engineering, Trinity College, Dublin, Ireland
^b Fraunhofer Institute Systems and Innovation Research, Karlsruhe, Germany*

1.0 Introduction

The authors described their own organisation in the Irish and the international context, noting that Ireland has increased funding for research significantly in recent years. Main among these increased have been the programme for Research in Third Level Institutions (PRTL) and Science Foundation Ireland (SFI). Some of the funding of SFI fits within the definition of New and Emerging Science and technology projects (NEST).

The authors then described the background to the survey conducted under the present project titled “Promoting Research on Optimal Methodology and Impacts Supported by Experience – PROMISE. The survey is a survey of HINGE programmes in Europe, where HINGE stands for High Innovation/Gain/Expectation programmes.

2.0 Methods

2.1 Contacts list

A list of contacts was designed using input from (i) PROMISE partners, (ii) all European NEST contacts, (iii) European Research Area Network (ERA-NET) contacts, and (iv) through additional research (internet/and Irish contacts, in particular the Irish NEST contact).

2.2 Survey design

The questionnaire itself was presented. It requests details in the following categories: (i) programme details, (ii) numbers applying/funded by the programme, (iii) criteria for allocating funds, (iv) decision process for allocating funds.

3.0 Results

As of 10th September 2006, 201 questionnaires were sent and 41 were returned (i.e. 20%). 21 of the 41 returned surveys funded HINGE programmes. Distribution by geographic area was western Europe (17), eastern Europe (1), North America (3). It is recognised that this data is too few to draw definite conclusions at this stage but the following points do seem clear.

- (a) Eastern Europe returned only one HINGE programme funded by a national government. The single response of Eastern Europe [Janos Irinyi Programme Idea, Agency for Research, Fund Management, and research exploitation, Hungary] may not reach the HINGE definition, although it is significant perhaps that the funding body classifies it as such.
- (b) HINGE programmes were overwhelmingly in the area of Science, Engineering, and Mathematics, though there were two that stated they were open to the Humanities (Irish Programme for Research in Third Level Institutions and Volkswagen's "Off the beaten track"). Again, we must note that it is a self-assessment that they are HINGE programmes.
- (c) HINGE programmes tended to be open to all, regardless of age and experience.
- (d) Funding: in western Europe the funding amount tended to be below, or very much below, a €1m threshold, e.g. Vienna Science and Technology Fund Thematic Programme in Life Sciences (~700k). In North America we had three replies: NIH Director's Pioneer Award programme with an average of \$1m each; Georgia Tech Focused Research programme 150k per awardee; Natural Science and Engineering Research Council of Canada Special Research Opportunity with 64 awards in the most recent year and a CAN\$11.1m budget.
- (e) 16 found the originality of the proposal to be indispensable whereas 5 did not. There seemed to be no regional pattern in this, but it seems that some respondents viewed scientific originality differently than originality of the problem to be solved.

4.0 Discussion

The first point to emphasise is that, by *self-assessment* criteria, many organisations worldwide see themselves as funding High Innovation/Gain/Expectation programmes. Reasons that they do it, according to the reply to the questionnaire, are the pursuit of new research opportunities, encouragement of new collaborations, to make the region a 'research hub', to attract top researchers, to encourage R&D in small and medium size enterprises, and finally to attract top researchers to the country. Interestingly, some programmes specified criteria for HINGE funding outside the options given on the survey; among these were:

- (a) Coherence in the national politics of research
- (b) Scientific relevance of proposers
- (c) Appropriate share of basic science to be funded
- (d) Willingness of partners to 'network'
- (e) Contribution to push the development of renewables or energy saving

What has been presented in this paper is by way of an interim report on the data. It can not be considered conclusive until further surveys are received back. In addition, it will be necessary to assess each questionnaire returned to analyse whether or not the programme is indeed HINGE as the self-assessment procedure is not sufficiently objective. Despite the need for further questionnaires to be returned, this does present the first attempt to obtain a pan-European view of the funding situation for innovative and risky research which can be built on in the future.

Acknowledgements

We acknowledge the advice of the Irish NEST coordinator Dr Imelda Lambkin.