IST Programme

Report of the IST Advisory Group

concerning

‘Integrated Projects’

28th May 2001

Executive Summary

This report focuses on the 'Integrated Project' concept of the 6th Framework Programme. ISTAG has analysed (1) the best way to define and implement Integrated Projects in the IST field in order to: :

- improve impact
- concentrate RTD effort further
- build critical mass rapidly in important areas
- enable a flexible response to the evolving environment, and
- streamline administration and launching of projects

The analysis drew on examples of possible integrated projects which were elaborated (2) by an ISTAG working group, and which are presented in summary in this report.

'Integrated Projects' in FP6

The 'Commission proposal to the Council and European Parliament on the sixth Framework Programme has now been made. It establishes three major new instruments for supporting research in FP6: Networks of Excellence, Integrated Projects and the use of Article 169. Integrated Projects have a central role in FP6.and the text of the Commission's proposal for FP6 allows for a variety of implementation schemes. In this report ISTAG focuses on an implementation scheme that it believes is best suited for the IST field.

Attributes of Integrated Projects in IST

The Integrated Projects (IPs) will enable the realisation of targeted IST research initiatives, as introduced by ISTAG, provided that IPs meet the following requirements:

- ***Flexibility***

  An Integrated Project should be implemented like ***a sub-Programme, with flexibility within an agreed overall budget, rather than as a single large monolithic project.***

- ***Combination of instruments***

  An Integrated Project must be able to draw upon other instruments which are included in the Commission proposal such as the support to research infrastructure and technology transfer. .

- ***Link to activities in other areas***

  An Integrated Project should be able to include activities from areas of FP6 with different budget-holders, both inside and outside the IST Priority Thematic Area.

- **ISTAG is concerned at the prospect of fragmentary management if the above are not well incorporated into the concept of IP.**

(1) This ISTAG report has been prepared by a working group of ISTAG members that met regularly during the first quarter of 2001.

(2) The full ISTAG working group report is available from the ISTAG secretariat in DG-INFSO.

Other characteristics of IPs in IST

- ***Objectives for Integrated Projects***

  An Integrated Project must have key objectives that can be technical, socio-technical, or socio-economic. If the principal focus of an Integrated Project is a socio-technical or socio-economic outcome, then there must be a clearly defined *technical* hurdle to be overcome by research and development. The objectives must highlight the integrated nature of the project as well, for example through a demonstrator when technology-oriented or a test-bed when application-oriented.

- **ISTAG stresses that each IP must include a proof of their technical concept.**

- ***Number and scale of Integrated Projects***

  When Integrated projects are implemented as sub-programmes, the size could be higher than the average size indicated in the Commission proposal. ISTAG envisages that there could be around 25-30 such Integrated Projects. The proposed Council Decision indicates a budget of tens of millions of Euro's for an Integrated Project.

- **ISTAG advises that Integrated Projects, when implemented as sub-programmes, will range between 10 and 250 M€ - with an average of €150M - if they are to achieve their objectives.**

- ***Time to market***

- **ISTAG considers that Integrated Projects should have medium-long term targets (3-10 years).**

  If it is not within the remit of an Integrated Project to bring the results of research to the market, then it will be necessary to understand how to interface with other mechanisms (such as Venture Capital).

- ***Relationships with National Programmes and the EUREKA initiative***

  Integrated Projects should get the maximum gearing from European R&D spend, given that 90% of public support for R&D in the EU comes from national programmes and national funding for multi-national programme such as Eureka. It is therefore important to attempt to harmonise EU and national programmes. However, a 'shared ambition' is more important than mechanisms for funding participation.

- **ISTAG recommends that this should be the responsibility of a 'Leverage Board' for each IP.**

- **It is suggested that ISTAG might make a case to parliamentarians for better harmonisation of European and National programmes.**

- **ISTAG also suggests that a web-portal encompassing RTD carried both at European-level and within National programmes should be created, covering the period since the start of FP5.**

Possible Integrated Projects

ISTAG has identified the following topics, some technology-oriented and some socio-economically-oriented which might form the canvas of some Integrated Projects:

- *Intuitive interfaces*
- *Dependability, Trust, Security and Privacy*
- *Community memory/sharing of knowledge (Information Factory Initiative)*
- *Dynamic and Massively Distributed Enabling Softwre*
- *Seamless Communications Systems and Infrastructure*
- *Intelligent Networks and Devices Initiative - in motion*
- *Intelligent Networks and Devices Initiative - for eCommerce*
- *Intelligent Networks and Devices Initiative - at home*

- **ISTAG stresses that the list of possible Integrated Projects must be further refined – to some extent by means of further consultative meetings with potential participants, and notes that different types of project may require different structures and different management models: technology-oriented projects should be managed differently from application-oriented projects.**

Management of Integrated Projects

- ***Management structure***

Integrated Projects are expected to have autonomy of management and flexibility. This will allow the management team of an Integrated Project more proactive control of the direction and content of the work packages within the project. ISTAG has identified a set of aspects of management:

- Definition
- Planning
- Selection (of sub-projects)
- Approval/decision on projects
- Operation and implementation (execution)
  - organisational
  - technical
  - financial
- Monitoring - on a variety of different levels
  - of technical competence and progress
  - of administrative competence
  - of openness and fairness
- Evaluation

There must be an appropriate management structure to address all of these in a way which is open and transparent, and which accommodates a wide range of organisations, including SME's.

- **ISTAG recommends mechanisms such as a Management Board, which would include representatives of the EC and representatives of member states, and an impartial Monitoring Board to assess the performance and probity of an Integrated Project. However, the nature of implementation of an Integrated Project might depend on the area addressed and more than one approach to management will almost certainly be needed.**

  In the full report *(Annex 4)*, the working group sketched out this approach for and example IP called '*INDI-in-motion'*.

- **ISTAG advises the Commission to prepare a report, for the end of June 2001, on possible models for management of Integrated Projects based on best existing practice, with the intention to test some administration models during WP2002 on a limited number of initiatives.**

- ***Project Definition studies***

Given the scale of the larger Integrated Projects, their formulation will be a difficult, lengthy, costly and high-risk process.

- **ISTAG advises that full-scale Integrated Projects might be preceded by an Integrated Project Definition phase to evaluate the potential for a full project, and to plan and prepare for a full project, should it be decided to proceed.**

The project definition phase could be managed by competitive calls for proposals, and even competing project definition studies could be supported with a 'fly off' for the best.

- **It is important to bear in mind that the purpose of a project definition phase would be to accelerate formulation of projects, and the administration of such a phase must not reintroduce delays in the progress of Integrated Projects.**

- ***Content of proposals for Integrated Projects***

- **ISTAG has established the following initial set of aspects of Integrated Projects which would require definition for any particular proposed Integrated Project**:
  - Objectives: qualitative & quantitative forecasts (business turnover, employment, market size and segmentation)
  - Technology road map, with an indicative timescale of the anticipated capabilities required to achieve the objectives
  - Market window
  - Competitive analysis (SWOT), including assessment of capability in the EU and whether there is sufficient critical mass of capability and market potential in Europe

- The role which SME's would play in the project, and the benefits the project would offer for SME's
- The potential for European and national (within the EU) leverage
- Manageability
- Dependencies - on other IP's and upon external developments

(As examples, outline definitions of two IP's for *'Intelligent Networks & Devices for mobility'* (*'INDI-in-motion'*) and '*Intuitive Interfaces*' are included as Annexes 4 & 5 of the full working group report).

Trial phase

- **ISTAG recommends that, during the remainder of the Fifth Framework Programme, there should be trials of the Integrated Project concept, with pilot projects to prove the concept, to test and refine the model, and to provide examples for the community. An example would be a call to establish a testing environments for UMTS services, as a precursor to a project such as *INDI-in-motion*.**

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ISTAG and DG-INFSO should ensure that these recommendations, in particular the specificity of implementation schemes for IST-fields, are incorporated / accommodated in the detailed definitions of the instruments for the execution of FP6 Specific Programmes.
