

ANALYSIS OF THE STAKEHOLDER CONSULTATION ON

“Science and Technology, the key to Europe’s future: guidelines for future European policy to support research” COM(353)2004

DG Research, European Commission, 10 December 2004

MAIN MESSAGES

An online consultation on the Commission Communication “Science and Technology, the key to Europe’s future – Guidelines for future European Union policy to support research”, COM(353)2004, was open to all interested organisations and individuals to participate in between 30 July and 15 October 2004. Over 1700 organisations and individuals from across Europe and other countries, and including universities, large companies, SMEs, associations and government bodies responded to the consultation.

Major findings from the analysis of the responses are the following.

There is very strong support¹ (over 97% of responses) for the need to strengthen support for research at the European level (see table below). Furthermore, there is strong agreement that this would have an important impact on Europe’s research capacities and capabilities (over 95% of responses) and that this would contribute significantly to Europe’s competitiveness, social welfare and sustainability (over 92% of responses).

There is strong support for the 6 major objectives (over 80% of responses for all objectives) set out in the Commission Communication (see table below). Support is particularly strong to make Europe more attractive to the best researchers (over 95% of responses) and supporting transnational collaborative research (over 90% of responses). These actions are established ones with proven European value added. However, there is also widespread support for the new objectives to launch European Technology Initiatives (86% of responses) and to stimulate the creativity of basic research (81% of responses). Concerning the development of infrastructures of European interest and the coordination of national programmes, the support was high (86% and 85% of responses respectively).

Concerning other aspects for future European support to research, there is a particularly high importance attached to improving **science and society** relations (92% of responses); to supporting **innovation** (88% of responses) to support to research by and for **SMEs** (88% of responses); and the importance of **focusing EU efforts on topics of major European interest** (88% of responses).

¹ Percentage of responses rating the objective as either “very important” or “important”.

A number of common concerns are evident from the written comments provided:

- **Stakeholders require further information about the Commission’s proposals** in order to further the debate. This applies, in particular, to the new approaches proposed for basic research and for European technology initiatives. The Commission has in the meantime made available working documents covering many of the objectives set out in the Communication.²
- **Stakeholders want improvements in implementation of the Framework Programme.** Many of the concerns coincide with those found in the mid term evaluation of the effectiveness of the instruments of the 6th Framework Programme conducted by an independent panel led by Professor Marimon. Many of these concerns are being addressed by the Commission in its response to the panel’s report and an action plan has been established.³

Responses to questions on the strengthening support for research at European level

	Do you agree that the support for research at a European level should be strengthened?	Do you agree that a strengthened European level research support will have an important impact on Europe's research capacities and capabilities?	Do you agree that a strengthened European level research support will contribute significantly to Europe's competitiveness, social welfare and sustainability?
agree	56.4%	56.7%	54.6%
mostly agree	41.2%	38.8%	37.5%
mostly disagree	0.5%	0.6%	1.0%
disagree	0.9%	0.4%	0.6%
don't know	0.9%	1.0%	2.3%

Responses to questions on the importance of the six main objectives in the Guidelines

Importance of the objective	Creating European centres of excellence through collaboration between laboratories.	Launching European technology initiatives	Stimulating the creativity of basic research through competition between teams at European level
very important	48.4%	41.9%	45.9%
Important	42.4%	44.1%	35.3%
not important	4.5%	6.3%	8.1%
Unnecessary	2.8%	1.5%	6.4%
don't know	1.3%	6.1%	4.2%

Importance of the objective	Making Europe more attractive to the best researchers	Developing research infrastructure of European interest	Improving the coordination of national programmes
very important	73.6%	43.4%	43%
Important	22.5%	42.4%	41.5%
not important	1.9%	5.7%	7.5%
Unnecessary	0.8%	1.4%	2.9%
don't know	1.1%	6.9%	5%

² All working documents can be found at http://europa.eu.int/comm/research/future/index_en.html.

³ See the Communication of the Commission “Responding to the observations and recommendations of the high-level Panel of independent experts concerning the new instruments of the 6th Framework Programme” COM(2004)574.

1. INTRODUCTION

The European Commission is preparing its proposals for the next research Framework Programme due to start in 2007. In order to launch a debate a Communication on “Science and Technology, the key to Europe’s future: Guidelines for future European Union policy to support research” was published 16 June 2004.⁴ Following this, an open consultation was launched on 30 July 2004 to obtain views and comments on these guidelines with a deadline for responses of 15 October 2004.

This report provides the statistical results and analyses the main messages arising from the online consultation, where over 1700 responses were received including over 8000 written comments on the various aspects of the guidelines. In addition to the online responses, the Commission is receiving a number of position papers and other written contributions for the preparation of the 7th framework programme proposals. To date, over 100 such documents have been received. In addition, more detailed information and consultations have been provided regarding the identification of the research themes for future European Union support.⁵ Although they are not the focus of this report, these inputs are being analysed by the Commission in parallel.

The results of the consultation are being used to help the preparation of the Commission’s proposal for the 7th Framework Programme which is due to be presented in April 2005.

2. RESPONSES RECEIVED

Commission received a high level of response to the online questionnaire and a total of 1727 responses were received.⁶ All responses were on a voluntary basis.

Regarding the types of respondent:

- 115 responses (about 7%) came from large companies. Many leading companies are represented from different sectors.
- 457 responses (about 26%) came from universities/higher education institutes; this also represents a strong response, although some responses come from the level of departments or research groups rather than the university as a whole.
- 144 responses (about 8%) came from SMEs represents a good response from this group. However, given the diversity in SMEs, more caution is needed in interpretation. It should be pointed out that a number of the associations that responded have a large number of SME members.
- Regarding wider societal interests, around 7% of responses came from associations, 8% from government bodies, and 31% from individuals. However given the very different nature of their interests, the following analysis does not generally attempt to identify trends for these types of respondent.

⁴ COM(2004)353, http://europa.eu.int/comm/research/future/index_en.html

⁵ http://europa.eu.int/comm/research/future/themes/index_en.html

⁶ There were a couple of cases of coordinated actions. In one case a group of researchers from different countries have put forward comments in favour of a specific research topic. In another case a group of researcher in one country have submitted duplicates of the same form. However these two cases have not significantly affected the overall outcome of the statistics.

Regarding their activity type, just under half of respondents indicated “research” as their main activity type, just under a quarter “higher education”, around 12 % “industrial, and 5% public administration. Most of the SMEs responding indicated that their main activity is industrial, although a significant number (27%) listed research as their main activity.

Type of respondent	Number of responses	% of responses
Individual person	540	31.3%
University/higher education	456	26.4%
Commercial organisation (including consultancy) less than 250 employees	144	8.3%
Governmental body	141	8.2%
Commercial organisation (including consultancy) more than 250 employees	115	6.7%
Association (e.g. trade association, trade union, employers association, chamber of commerce, NGO)	113	6.5%
Other	218	12.6%
<i>TOTAL</i>	<i>1727</i>	<i>100%</i>

In terms of country balance, there is generally a good response from many EU Member States, with other 100 responses from Germany, the UK, Italy, Belgium, France and Spain; and over 50 responses from the Netherlands, Portugal, Greece, Austria and Sweden. However, it should be noted that relatively few responses have come from some Member States, and in particular the 10 new Member States. Most respondents indicated that their geographical scope of activities is European or international. There was, however, a significant number of regional or local organisations responding (10% of the total).

Country	Number of responses	% of total responses	Country	Number of responses	% of total responses
DE - Germany	258	14.9%	CH - Switzerland	25	1.4%
UK - United Kingdom	157	9.1%	FI - Finland	22	1.3%
IT - Italy	147	8.5%	LT - Lithuania	22	1.3%
BE - Belgium	142	8.2%	IL - Israel	17	1.0%
FR - France	132	7.6%	PL - Poland	16	0.9%
ES - Spain	123	7.1%	CY - Cyprus	12	0.7%
NL - Netherlands	89	5.2%	CZ - Czech Republic	10	0.6%
PT - Portugal	81	4.7%	EE - Estonia	10	0.6%
EL - Greece	80	4.6%	HU - Hungary	10	0.6%
AT - Austria	79	4.6%	BG - Bulgaria	8	0.5%
SV - Sweden	68	3.9%	SK - Slovak Republic	7	0.4%
TR - Turkey	44	2.5%	SL - Slovenia	6	0.3%
IE - Ireland	33	1.9%	MT - Malta	5	0.3%
NO - Norway	31	1.8%	LV - Latvia	4	0.2%
Other country	30	1.7%	LU - Luxembourg	1	0.1%
RO - Romania	29	1.7%	IS - Iceland	1	0.1%
DK - Denmark	28	1.6%	<i>TOTAL</i>	<i>1727</i>	<i>100%</i>

Subject to the above comments, the responses can be said to **represent an important indication of the views of the research community and research users**. However, the low number of responses from some Member States and in particular the new Member States means that these countries are under represented in the overall statistics. This factor is being taken into account in the Commission’s analysis of the results; this consultation is only one source of input from stakeholders and that views as represented by national governments and European parliamentary representatives have a strong importance.

3. RESULTS OF THE CONSULTATION

Participants were required to rank the importance of the various objectives set out in the Commission’s guidelines, to indicate whether they agreed with the text, and provide their view on the impact of the proposed actions. In addition, they were able to provide written comments regarding the various aspects and other 8000 such comments were received. The following sections provide the statistical results of the rankings given by participants as well as an analysis of the written comments.

3.1. Six major objectives

3.1.1. *Creating European centres of excellence through collaboration between laboratories (Section 2.1 of the Guidelines)*

Importance of this objective?		Do you agree with the views stated in the text?		If European centres of excellence are created through collaboration in specific research areas, the overall impact on the quality of European research compared to the current situation will be:	
very important	48.4%	Agree	34.1%	substantially greater	28.5%
important	42.4%	Mostly agree	54.8%	greater	56.0%
not important	4.5%	Mostly disagree	6.1%	the same	8.9%
unnecessary	2.8%	disagree	1.8%	less	2.4%
don't know	1.3%	don't know/ not concerned	3.1%	substantially less	0.8%
				don't know	3.3%

The responses indicate a very high degree of support for European level funding to trans-national collaborative research. From the different categories of respondents, there was particular support from large companies (93% rating the objective “important” or “very important”).

A large number of comments (approximately 700) were received regarding this objective. A common concern was that there should be a lower number of partners in consortia and a greater focus on smaller projects than has been the case under the 6th Framework Programme. There were also calls for simplification and less bureaucracy.⁷ Some respondents misinterpreted the terms: “centres of excellence” to mean a centre located in one geographical location; and “collaboration between laboratories” to mean only academic institutions.

3.1.2. *Launching European technology initiatives (Section 2.2 of the Guidelines)*

Importance of this objective?		Do you agree with the views stated in the text?		If European technology platforms are launched in specific industrial research areas, the overall impact on the quality of applied research compared to the current situation will be:	
very important	41.9%	Agree	32.1%	substantially greater	28.5%
important	44.1%	Mostly agree	50.7%	greater	50.9%
not important	6.3%	mostly disagree	4.6%	the same	7.9%
unnecessary	1.5%	disagree	1.4%	less	0.8%
don't know	6.1%	don't know/ not concerned	11%	substantially less	0.6%
				don't know	11.3%

⁷ This coincides with the findings of the Marimon panel, and the Commission is already making adjustments for the remaining period of the 6th framework programme.

The responses indicate strong support from stakeholders for this objective. Amongst the different categories of respondents, there was particularly high support from large companies (93% rating it “important” or “very important”) and SMEs (92% rating it “important” or “very important”).

European technology initiatives, and development of Technology Platforms, are relatively new concepts and written comments point to the need for further information and clarifications.⁸ Participants identified a number of aspects to be taken into account in developing this concept, in particular: the need for transparency, openness and clear “rules of the game”; the participation and inclusiveness of Technology Platforms so that they are not the exclusive domain of the large players; and the need for careful implementation to avoid unnecessary bureaucracy and ensure the initiatives complement existing European, national and regional programmes.

3.1.3. Stimulating the creativity of basic research through competition between teams at European level (Section 2.3 of the Guidelines)

Importance of this objective?		Do you agree with the views stated in the text?		If creativity of basic research is stimulated through competition between teams at European level, the overall impact on the output of basic research compared to the current situation will be:	
very important	45.9%	agree	39.8%	substantially greater	34.9%
important	35.3%	mostly agree	38.8%	greater	40.3%
not important	8.1%	mostly disagree	10.1%	the same	11.5%
unnecessary	6.4%	disagree	5.1%	less	4.1%
don't know	4.2%	don't know/ not concerned	6%	substantially less	2.4%
				don't know	6.7%

The responses to this objective indicate strong support from stakeholders. Although the level of support is lower than for some other objectives, there is a relatively high proportion of responses for “very important” objective, “agree” with the text, and “substantially greater” impact. Concerning the different categories of respondents, universities/higher education tended to rate this objective as more highly than average (50% “very important“, 33% “important“) and large companies rated this as less important than average (27% “very important“, 45% “important“). For SMEs, the level of support was higher than from large companies, although lower than universities/higher education (40% “very important“, 38% “important“).

A large number (approx. 700) comments were received on this objective. Most are in favour of improving support for basic research at European level with excellence as the sole selection criteria, evaluation by international peer review and no predefined priorities. Many responses stress the key role of basic research for innovation and its contribution (sometimes long term) to competitiveness. There is strong recognition that the right kind of competition can stimulate new ideas and creativity, although some concern that too much competition between researchers can be counterproductive.

⁸ Further information on Technology Platforms has been made available by the Commission, see <http://www.cordis.lu/technology-platforms/home.html>

3.1.4. Making Europe more attractive to the best researchers (Section 2.4 of the Guidelines)

Importance of this objective?		Do you agree with the views stated in the text?		If actions are taken to make Europe more attractive to the best researchers, the overall impact on European scientific careers compared to the current situation will be:	
very important	73.6%	agree	54.5%	substantially greater	54.5%
important	22.5%	mostly agree	37.8%	greater	37.6%
not important	1.9%	mostly disagree	3.4%	the same	4.6%
unnecessary	0.8%	disagree	1%	less	0.4%
don't know	1.1%	don't know/ not concerned	3.2%	substantially less	0.3%
				don't know	2.5%

This objective received the strongest support from almost all categories of stakeholder, with a large majority agreeing with the views in the Commission text and believing that the proposed actions would have a substantial impact on scientific careers in Europe.

The comments show support for the five aspects listed in the Guidelines (attracting young people, the role of women, transfer of knowledge, international dimension and lifelong learning and career development); and that support should be expanded through a more concentrated number of actions, addressing researchers at all stages of their careers. The role of SMEs in knowledge transfer is emphasised. Increasing the quality, structuring and mutual recognition of research training across Europe is needed and the link between national actions, programmes and policies is highlighted. The oversubscription in the current support to mobility is seen as a problem to be tackled in the future. Responses point to the many administrative hurdles that researchers face in moving between research systems in different Member States and pursuing a European career in research.

3.1.5. Developing research infrastructure of European interest (Section 2.5 of the Guidelines)

Importance of this objective?		Do you agree with the views stated in the text?		If research infrastructure are developed in Europe through the use of trans-European networks, the overall impact on the performance of these research infrastructure compared to the current situation will be:	
very important	43.4%	Agree	38.6%	substantially greater	32.7%
important	42.4%	Mostly agree	44.0%	greater	48.3%
not important	5.7%	mostly disagree	5.4%	the same	7.5%
unnecessary	1.4%	disagree	1.4%	less	1%
don't know	6.9%	don't know/ not concerned	10.5%	substantially less	0.6%
				don't know	9.7%

The responses indicate widespread strong support for this objective with a similar level of support from the different categories of respondents. Many of those who do not support the objective responded “don't know” or “not concerned” rather than disagreeing with it.

In the written comments, many participants stress the importance of research infrastructure to Europe's research performance, with examples such as CERN and the GEANT network cited. The need to cover a wide range of disciplines, including the social sciences and humanities, as well as the need for industrially relevant infrastructure, is mentioned. Participants want clarification and

more information about the criteria (e.g. how to define European interest) and the funding mechanism envisaged.

3.1.6. Improving coordination of national programmes (Section 2.6 of the Guidelines)

Importance of this objective?		Do you agree with the views stated in the text?		If the coordination of national research programmes is improved, the impact on the efficiency of the overall EU research system compared to the current situation will be:	
very important	43%	Agree	36.7%	substantially greater	30.9%
important	41.5%	Mostly agree	46.2%	greater	49.3%
not important	7.5%	mostly disagree	6.7%	the same	7.7%
unnecessary	2.9%	disagree	2.8%	less	3.4%
don't know	5%	don't know/ not concerned	7.6%	substantially less	0.9%
				don't know	7.6%

There is strong support for this objective from all categories of participants. Support is slightly lower from large companies (78% consider it “important” or “very important”).

From the written comments, it is evident that many of those who consider this less important are not familiar with the concept or the existing actions. For those with direct experience in the existing ERAnet scheme, the level of support is high (some 92% of government bodies consider this objective important or very important). The written comments indicate concerns from some participants that coordination could in some way weaken national programmes, although others considered that it improves their quality by allowing them to learn from each other. The comments concerning Article 169, and coordination with intergovernmental bodies were largely in favour, but with that lessons from the current Article 169 must be taken into account, and that coordination with EUREKA is important.

3.2. Additional aspects

3.2.1. Industrial competitiveness (Section 1.3 of the Guidelines)

Importance of activities to support research in SMEs and for their benefit?		Importance of activities to support innovation (i.e. innovation related action within projects, transnational networking between providers of innovation support services such as technology transfer, intellectual property management, incubators, regional clusters, etc.	
very important	47.6%	very important	45.5%
important	40.7%	important	42.5%
not important	4.2%	not important	3.9%
unnecessary	1.5%	unnecessary	1.7%
don't know	5.9%	don't know	6.3%

The responses show very strong support for European level actions to support research in SMEs and for their benefit. As would be expected, the level of support is particularly high from SMEs (74% considering this “very important”, and a further 24% “important”), but is also high from large companies (94% “very important” or “important”). In the written comments, the current SME specific measures (cooperative and collaborative research schemes) are seen as very useful although an increased budget is called for to reduce oversubscription. Many comments point to financial and administrative difficulties for SMEs to participate in other parts of the Framework Programme. A number of responses question the usefulness of distinguishing SMEs from other companies,

particularly from those companies which are only slightly larger. There is emphasis placed on addressing SME needs at regional level and on linking them to universities and larger companies.

The responses show an equally high level support for EU activities to support innovation, particularly from large companies (97% considering the objective “important” or “very important”). In the written comments, many participants stress that innovation should be seen as integral to the projects and this aspect needs strengthening at the evaluation stage and in the IPR provisions in Framework Programme contracts. Ideas for improving the support available include more training on technology transfer and IPR matters, greater support for near market activities, a greater regional focus and complementarity with EUREKA funding. Many responses point to the importance of the wider environment for innovation, including the need for a Community patent, innovation friendly regulations, and encouraging a risk taking culture.

3.2.2. Raising Research Performance throughout the Union (Section 3 of the Guidelines)

Realising the potential of a Europe of 25 and more				Complementarity with Structural Funds			
Importance of this aspect?		Do you agree with the views stated in the text?		Importance of this aspect?		Do you agree with the views stated in the text?	
Very important	39.8%	Agree	35.5%	very important	37.2%	agree	34.9%
important	47.9%	mostly agree	50.5%	important	41.8%	mostly agree	41.8%
not important	4.7%	mostly disagree	3.6%	not important	4.8%	mostly disagree	3.9%
unnecessary	1%	Disagree	1%	unnecessary	0.9%	disagree	0.9%
don't know	6.4%	don't know/ not concerned	9.3%	don't know	15.2%	don't know/ not concerned	18.4%

There was strong support for this aspect and recognition of the research excellence that exists in the new Member States. Many written comments stressed, however, that the Framework Programme must remain based on excellence and implemented through calls where participants compete on an equal basis. Ideas for specific measures to support the participation from new Member States include mobility actions, financial incentives, and focusing on smaller projects and priorities of relevance to them.

Participants generally view the potential synergies between the Framework Programme and Structural Funds to be important, but also stress that the objectives should be kept separate. Some responses highlight the difficulties of implementing such synergies given the different way the funds operate, but many consider that combined funding can work in particular cases. A significant number of participants commented that they were not familiar with the structural funds and could not comment properly.

3.2.3. Focusing the European Union's efforts on key topics (Section 4 of the Guidelines)

Identifying topics of major European interest				Supporting the Union's political objectives			
Importance of this aspect?		Do you agree with the views stated in the text?		Importance of this aspect?		Do you agree with the views stated in the text?	
Very important	44.1%	Agree	37.1%	very important	34.4%	agree	33.8%
important	43.8%	mostly agree	45.6%	important	44.4%	mostly agree	43.6%
not important	5.4%	mostly disagree	6.5%	not important	9.7%	mostly disagree	5.9%
unnecessary	2.7%	Disagree	3.7%	unnecessary	4.3%	disagree	5%
don't know	3.8%	don't know/ not concerned	7%	don't know	7.1%	don't know/ not concerned	11.5%

Participants recognised the importance of focusing efforts on priorities and that these should support EU policy objectives. Many participants commented on the difficulties of identifying priorities, but there was a general view that this should be done in transparent way, involving stakeholders and avoiding capture by large industry or powerful lobby groups. Many responses stress the importance of flexibility and there was strong support for some areas, such as basic research, allowing researchers to choose the topic. Several responses call for greater use of results by policy makers.

Importance of helping to implement European space policy?		Importance of placing research at the service of security?		Do you agree with the views stated in the text?	
very important	24.1%	very important	27.2%	agree	21.5%
important	40.4%	important	37.2%	mostly agree	40.9%
not important	17.5%	not important	15.0%	mostly disagree	13.2%
unnecessary	5.7%	unnecessary	8.0%	disagree	6.4%
don't know	12.2%	don't know	12.3%	don't know/ not concerned	17.7%

Space and security related research are the only two specific priorities identified in the guidelines and in general there is support for European funding in these new areas. Of the two, the level of support for security related research is marginally lower and many comments stress that such research must strike the right balance with fundamental liberties, human rights and social values.

3.2.4. *Doing better to do more (Section 5 of the Guidelines)*

Responses on this aspect call for reductions in the level of administrative burden, bureaucracy and proposal preparation costs in the Framework Programme, as well as faster procedures. Many express support for the use of two stage procedures for proposals. Some participants comment that the use of externalised management should be considered for the ERC and human resources, but that there are limits to taking this further. Some suggestions are made on improving the financial and contractual provisions in Framework Programme support, although importance is also attached to continuity and making sure any novelties are well understood and communicated in advance.

3.2.5. *Science and society*

The interactions between science and society (science awareness, interactions between science and policies, science learning, ethical issues and gender aspects) will be taken into account in the design of future European research programmes and initiatives. Importance of this aspect?	
very important	56.1%
Important	35.6%
not important	4.4%
Unnecessary	1.8%
don't know	1.9%

Although it was not a specific part of the Guidelines, participants in the consultation were asked to rate the importance of taking into account interactions between science and society in the design of future European research programmes and initiatives. Participants attached a very high level of importance to this aspect and commented on the need to achieve better connections between science and society at large. Many comments highlight the need to focus on young people and science education. Several responses underline the importance of ethical aspects of research and the need for genuine debate. A small minority of respondents express a degree of scepticism or caution. Some stress that 'societal' considerations should not take precedence over scientific criteria. A few warn that such considerations tend to increase the amount of paperwork involved for programme participants.

4. CONCLUSIONS

The number and quality of responses received for this consultation indicate the high level of interest and importance of future EU policy to support research, both for the research community and users of research.

Following this general consultation, more specific events and consultations are underway on particular issues set out in the Guidelines. In particular, further information and consultations on research themes for the 7th Framework Programme have been made available at http://europa.eu.int/comm/research/future/themes/index_en.html.

These inputs, together with others being received, form a valuable contribution to the preparation of the Commission's proposals for the 7th Framework Programme.