

GOVERNMENT RESPONSE TO THE GREEN PAPER: THE EUROPEAN RESEARCH AREA: NEW PERSPECTIVES

INTRODUCTION

The Commission intends to use the Green Paper 'The European Research Area: New Perspectives' (COM (2007) 161 final) to draw up an mid-term review of the progress made since the concept of the European Research Area was launched in 2000 within the framework of the Lisbon Strategy. In addition to reviewing the situation, the Commission aims to put forward concrete proposals in 2008, based on further consultations. These proposals will focus on the further realisation of the internal research market in which knowledge, researchers and technology are able to circulate freely, as well as on the effective coordination of national and regional research programmes and on EU initiatives for financing research and innovation. The consultation period for this Green Paper ends on 31 August 2007 and it is with that deadline in mind that this government response has been drafted.

GENERAL AIM

This Green Paper will form the basis for drawing up the general Dutch viewpoint. The annex includes a response to the specific questions that the European Commission formulated in the Green Paper. The point of departure is that the Netherlands acknowledges that the six key elements of the European Research Area as outlined by the European Commission are important but that, in addition, a request should be made for attention to be paid to a number of other aspects which, so far, have been insufficiently clarified.

A previous government response to the Commission's 2007 legislation and action plan (Dutch Lower House 2006-2007, 22 112, no. 480) examined, in general terms, the elements of the European Research Area which are important for the Netherlands and stated the importance of drawing up a mid-term review. Among other things, the response emphasised that research priorities have to link up with the needs of industry, that further progress as regards coordination between national research programmes and the mutual opening up of national research programmes is desirable and that there are grounds for further reflection on the development and construction of large-scale research facilities and on the consequences of the launching of the European Research Council and possibly a European Institute of Technology (EIT). The present government wants to add that the European Research Area is also important for the solving of social problems which the Member States are unable to tackle individually. This would be possible by, for example, supporting scientific progress and policy substantiation aimed at sustainable development in the field of health, energy and climate change, as indicated by the Commission. The solving of social problems also affects the way in which science and technology are communicated to the public so as to generate a greater appreciation for science and technology among European citizens.

Joint development of ambitions, joining forces and reinforcement of excellence:

Joint R&D efforts can contribute to excellent research and to solutions for problems which the individual Member States are unable to solve themselves. The Dutch government therefore considers it important to aim for the creation of focus and mass, based on European cooperation. Besides the active participation of the business community, a strong European public knowledge base is also required in order to create an innovative Europe. This can be stimulated by a permanent focus on language development, encouraging the creation of up-to-date research facilities and providing space

for the further development of the European Research Council in order to stimulate excellent independent research.

The Dutch authorities believe that the debate on the Green Paper must focus more explicit attention on this recent innovation within the EU by which, for the first time, the EU has a pan-European finance agency comparable to the NSF and the NIH in the United States. The European Research Council provides an essential basis for innovation in the longer term. If it transpires that the ERC indeed helps to attract and retain the best researchers in Europe, and strengthens the competitive position of the European scientific community in a global sense, possibilities for expansion of the ERC can be considered after 2013. However, that additional development also means that, within the framework of the further development of the European Research Area, some consideration has to be given to the long-term effects of the ERC on the national scientific establishment in the Member States and, more particularly, to the issue of how the national and European financing of independent research can be optimally coordinated. An additional aim ought to be to link the creation of the European Higher Education Area to the European Research Area.

Consolidating existing initiatives: The Green Paper pays relatively little attention to the role of the Seventh Framework Programme and of the Competitiveness and Innovation Framework Programme (CIP), Structural Funds and other recent Commission communication in the field of knowledge transfer.

The Dutch authorities would like to see a more coherent application of all of the community's instruments in relation to research on the one hand and innovation on the other. The synergy with the Structural Funds should be given specific attention, as has recently also been stressed by the Commission itself¹. They also believe that the effect of these new instruments must be properly assessed before new EU initiatives can be developed. Sufficient account also needs to be taken of the evaluation of instruments applied previously in the Sixth Framework Programme (2002-2006), for example the Excellent Networks, Integrated Projects and ERA networks. Moreover, sufficient experience needs to be acquired with the still relatively new instruments of the Seventh Framework Programme (2007-2013). Examples are the European Research Council and the mechanisms yet to be introduced, such as joint technology initiatives (JTIs), Article 169 initiatives, INCO networks and knowledge and innovation communities which are going to be part of the new *European Institute of Technology*. Of course, this determines the extent to which these are going to be treated as a priority in the future. It has to be clear to universities, knowledge institutions and the business community which instruments are available to them. The Netherlands urges to continue the drive towards simplification of the European instruments, even though some significant results have been achieved. Moreover, there must be no competition between the instruments because that would lead to a suboptimal effect. Lastly, a certain continuity of instruments is desirable in connection with the long term research and innovation objectives.

The role of the business community; linking research and innovation: The view in the Netherlands is that the pursuit of European Research Area improvements must always be considered in connection with the utilisation of the results of research in order to generate new products and processes. Sound preconditions for converting research results into innovations are, however, critical factors for the success of the European knowledge economy. Better coordination is therefore desirable between the European activities in the field of research and activities related to innovation policy. In this context, a reference can be made to the broad innovation strategy which the Commission proposed and the European Council ratified within the framework of the Lisbon process in 2006 (Lower House, 2006-

¹ "Competitive European Regions Through Research and Innovation", COM (2007) 474 final.

2007, 22 112, no. 40). The statements which the Commission published more recently on improving knowledge transfer between research institutions and the business community in Europe, relating to coordination with open innovation (COM (2007)182) and improving the European patents' system (COM (2007)165), are also very important in this context. In the further development of the European Research Area new ways of knowledge production and transfer, often referred to as Open Innovation, should be taken into account. The aim should not only be to create an internal market for research but to develop a European research and innovation area (ERIA) as well, in order to reinforce the (industrial) competitive position and solve social problems in line with the Lisbon strategy.

The Netherlands recommends that more attention be paid to the role of the business community in the European Research Area than is currently proposed in this Green Paper. After all, the business community will have to contribute the lion's share in realising the Barcelona objective of 3% GNP in 2010. Monitoring activities aimed at the realisation of the 3% action plan remains important. Another significant point of attention is the aim to reduce bureaucracy and the administrative burdens for companies and knowledge institutions so that they can participate in the European programmes. The Netherlands is going to assess each new initiative specifically with this aspect in mind. The investments in the public knowledge infrastructure must also link up better with the needs of the business community if the latter is going to be increasingly involved in identifying research needs, as is the case, for example, in relation to the European technology platforms and the Technological Top Institutes in the Netherlands.

Subsidiarity and proportionality: using the questions posed in the Green Paper, the Commission is exploring the extent to which Member States appreciate additional intervention by the Commission. The Netherlands is going to assess specific proposals regarding the further structuring of the European Research Area on the basis of the question of whether actions at a European level are desirable and, if that is the case, whether these actions won't go beyond what is actually necessary. The following framework can be used for this purpose, whereby a distinction has to be made according to financial instruments, regulations and 'soft law' such as non-binding guidelines and recommendations.

Government intervention in the area of R&D is justified because of market failure in the area of R&D due to the high degree of uncertainty regarding the yield on investments in research and/or application. The government can reduce the financial risk of the investment by lowering the costs of investments in R&D, through subsidies or tax facilities. However, this is not always sufficient to generate investments and innovative applications of knowledge development.

Essential preconditions which the government also needs to create are properly functioning markets for goods, services and capital, an efficient patenting system, a well-trained workforce and an excellent climate for the establishment of research companies. The government can also promote the exchange of knowledge between universities and companies. National governments can only partially fulfil this task. Some research projects are of a scale or complexity that requires more resources or people than individual Member States have available. Good examples are the ITER nuclear fusion project, large-scale research facilities and the Joint Technology Initiatives. Joint innovation with partners in other countries can strengthen and accelerate innovation through the use of knowledge from elsewhere and by using the scarce resources more efficiently and effectively in order to develop new products, processes or services. Doing this at EU level generates a greater impact than would be the case at national level. Cooperation offers opportunities for increasing the existing joint market and for the opening of new ones.

Globalisation means there is already an autonomous trend towards the internationalisation of R&D instruments due to national instruments being made available for participation by parties in other

countries, intergovernmental instruments and the intensification of community instruments. However, there is always a risk of duplication. Avoiding duplication can generate considerable benefits of scale, while knowledge also has so-called spill-over effects given that it can also be of use to parties which have not developed the knowledge themselves. That is the reason why the EU has a role to play since it can assist research initiatives and combine and coordinate policy instruments². Although the EU has a clear role in this respect, sufficient space must be left for national efforts which fulfil national research needs. In the second place, some preconditions, such as an internal market for services and products, can only be achieved at EU level. A final important aspect, for all EU expenditure but certainly for programmes aimed at research and development, is the guaranteeing of project quality. The assessment of proposals at the European level can have a favourable effect on the quality of research(ers) in the Member States. For a lot of Member States this effect was the reason to advocate the establishment of the European Research Council.

Lastly, a national or regional set of instruments is essential in order to be able to make use of spill-overs, for countries or regions to present themselves in the ERA, to establish key issues, to keep certain knowledge close to home and to maintain space for policy competition. As regards the latter, the Netherlands is keen to point out that the policy competition is partly financed from the EU budget, via the European Structural Funds. It is precisely in relation to R&D that the Netherlands considers it important that investments are made not only where a favourable effect will be had on regional economic development, but also on the economic development of the EU as a whole. In this context it is particularly important that the EU plays a controlling role as regards the application of these criteria to the way larger research infrastructures choose their places of business.

The application of this framework can lead to different opinions on the desired action at EU level. For years now, the Netherlands has responded positively to activities aimed at the coordination of large-scale facilities, the international mobility of researchers and reinforcing excellence at European level. The present Green Paper refers to far-reaching activities about which the Netherlands is less positive, for example because the proposed activities interfere with the autonomy of knowledge institutions or because action at global level would be more effective than at European level, for example in relation to intellectual property. This issue will be tackled in greater detail with the specific questions.

GOAL PER KEY ELEMENT OF THE GREEN PAPER

The views of the Dutch government on the basis of the key elements of the Green Paper and the related specific questions (see annex) can be summarised as follows.

1. The realisation of a single labour market for researchers

The Netherlands attaches a great deal of importance to measures which make Europe attractive for leading researchers and which contribute to creating an adequate supply of researchers. Via the existing mobility and career instruments (Marie Curie scholarships), the EU provides an important supplement to the existing relevant measures in the Member States, starting with the provision of good quality education and training for researchers. In this context, the Netherlands is also keen to highlight the aim, within the framework of the Bologna process, to improve coordination between the European Higher Education Area and the European Research Area which is primarily important for

² See, for example, A. van der Horst, A. Lejour and B. Straathof, , Innovation Policy: Europe or the Member States? *Centraal Plan Bureau* [Netherlands Bureau for Economic Policy Analysis] document, The Hague, November 2006.

the development of high quality PhD courses³. At EU level, the priority should continue to be on measures aimed at promoting the training of researchers (through the acquisition of so-called transferable skills) and the improvement of researchers' career prospects, through the international mobility and the public-private mobility of researchers from both public research organisations and companies. In addition, the European Research Council should be given sufficient space to contribute to the careers of the best research talent in Europe by means of personal subsidies made available to (young) elite researchers.

At this moment in time, the Netherlands thinks it is too early to make any judgements about joint approaches intended to increase the cohesion and impact of international mobility programmes. On the other hand, it would seem to be a good idea to examine whether more opportunities can be offered to Europe's elite researchers to acquire experience outside the EU, comparable to the American Fulbright scholarships. Permanent attention should be paid to the European mobility strategy aimed at the removal of unnecessary hindrances to cross-border mobility, especially that of researchers. There is considerable interest in the Netherlands in the forthcoming guideline for highly-qualified employees from other third countries (knowledge migrants).

Lastly, the Netherlands supports a proper analysis and monitoring of the trends on the European labour market of researchers (and careers) and advocates the continuation of the exchange of good examples of the introduction of the Researchers' Charter and the Code of Conduct. The Netherlands explicitly rejects the idea of making these instruments legally enforceable, or of reducing the voluntary and non legally binding nature thereof.

2. The development of world class research infrastructures

The Netherlands is keen for the EU to play a greater role in relation to research infrastructures focused on better coordination between the Member States during the establishment and the making operational of large-scale, expensive or vital research infrastructures and the related instruments within the framework of future Framework Programmes. The Netherlands welcomes the establishment of a roadmap for the coming ten to twenty years, as has been drawn up by the ESFRI (European Strategy Forum for Research Infrastructure). A more in-depth study of the legal framework for European research facilities is also desirable. The Netherlands does not consider it to be essential to develop special guidelines for the management and supervision of infrastructures of European importance. However, such guidelines are necessary in order to gain access to such infrastructures, and for the exchange of research data. As regards co-financing from European resources, the condition should be imposed that infrastructures and research data are open to researchers from all Member States subject to transparent conditions.

Member States and regional authorities ought to be encouraged to strengthen the links at regional, national and international level between companies and public research organisations as regards the investments in, and the operation of, large-scale facilities. The ESFRI roadmap has aroused interest in other countries as well. The Netherlands would welcome the establishment of a broader platform for large-scale research facilities alongside the ESFRI and the OECD Global Science Forum, including with non-OECD countries such as China and India. Although this can be effective in the case of international negotiations on concrete projects like ITER, the Netherlands believes that it is not always necessary for the EU to show a united front on this issue.

3. Strengthening research institutions

The view in the Netherlands is that the pursuit of more focus and mass can contribute to the reinforcement of the research landscape in the Member States and Europe as a whole. That

³ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world (18 May 2007).

reinforcement starts, however, in the Member States themselves by preventing unnecessary fragmentation of research resources and by helping to ensure that sufficient resources are made available for priority research areas, but also by setting up a good quality system for the evaluation and selection of both research institutions and projects. The European Research Area will primarily develop if Member States make the financing of national research institutions more competitive. The Netherlands supports the pursuit of greater autonomy for universities, as has been repeatedly emphasised by government leaders within the framework of the Lisbon process, and as corresponds with the Dutch government's own agenda. The Netherlands does not consider it to be desirable to formulate additional points of departure or guidelines for Member States but does see the application of the Method of Open Coordination between Member States as a suitable means of stimulating policy development in the Member States relating to increasing the autonomy of universities and the financing and assessment of research institutions. The Netherlands requests that specific attention be focused on supporting the introduction of 'full cost accounting' as required at European knowledge institutions. On the basis of other experiences with the EIT and the Joint Technology Initiatives, the Netherlands thinks it would be a good idea to investigate whether supplementary regulations for public-private R&D cooperation are desirable, but does not regard the implementation of new regulations to be essential at this point in time.

4. Sharing knowledge

State-of-the-art knowledge is of paramount importance for any scientific discipline and that is why the reliable, affordable and permanent access, distribution and storage of knowledge are some of the basic principles of the European Research Area. The Netherlands therefore welcomes the activities at European level, as recently proposed by the Commission, which are intended to increase, in consultation with the parties involved, the accessibility of scientific information and to keep it affordable as well as to draw up a European strategy for the long-term retention of scientific information in all countries of the European Union. The debate on 'open access' to research data with the EP, the Council and interested parties should be continued against this background.

The Netherlands also welcomes the recently initiated discussion on improving knowledge transfer between universities, research institutions and the business community. However, measures at European level should be voluntary and supported by all stakeholders, build on national instruments and contribute to the cross-border exchange of knowledge. IPR-related problems, such as the grace period and the research exception, must be approached from the broader perspective of the worldwide harmonisation of the intellectual property system. The Netherlands also regards the Community patent as the ultimate goal when it comes to the protection of intellectual property in Europe. The Netherlands advocates the intensification of efforts to publicise the results of research co-financed by the EU.

5. The optimisation of research programmes and priorities

The Netherlands believes that it is not the EU's task to formulate common points of departure at EU level in relation to a peer review, quality assessment and financial accountability. However, the EU can support and, where necessary, stimulate national financing organisations' bottom-up initiatives in this field.

The ERA network instrument that was introduced in the Sixth Framework Programme (2002-2006) has turned out to be an important and suitable instrument for removing barriers to the coordination of national research programmes. It is not yet clear whether the common financing of cross-border research projects via ERA networks is also going to be a success as regards results and efficiency. The Netherlands therefore welcomes the proposed impact study into this instrument. The Netherlands also thinks there is cause for more consultation at European level regarding the possibilities of, and hindrances to, the mutual opening up of national programmes for research projects in which partners

from other European countries can participate. The Netherlands supports the Commission as regards placing this subject on the agenda. In addition, the Netherlands is looking forward with interest to the proposals to be made for the application of Article 169 EC as a far-reaching form of coordination for national research programmes, which requires separate legislation via co-decision which will then lead to joint execution.

6. Global accessibility: international cooperation in science and technology

In the past, the Netherlands advocated the formulation of an EU strategy for international research cooperation, and wishes to repeat this wish here. The Green Paper assumes a clear differentiation between groups of countries into neighbouring countries, developing countries and industrialised and emerging economies for which, of course, different objectives apply. The Netherlands supports this approach. The Netherlands also advocates the improvement of cohesion between the approaches based on research policy and the EU policy focused on development and external contacts. The setting up of a High Level Group for international cooperation in the field of science and technology – by analogy with the successful example of the ESFRI in the area of research infrastructures – could assist the formulation of an EU strategy for international research cooperation and the identification of possible initiatives aimed at global research. However, it will not be desirable or possible in all cases for the EU to achieve unanimity in an international context and the organisation of European representation will have to be examined on a case by case basis.

ANNEX: ANSWERS TO THE SPECIFIC QUESTIONS IN CHAPTER 3 OF THE GREEN PAPER 'THE REALISATION OF THE EUROPEAN RESEARCH AREA'

Questions

1. *Are these the essential elements that the European Research Area should provide? Are there other elements which should be taken into account in the vision?*
2. *What should be the roles of EU, national and regional policies to establish such a European Research Area and take best advantage of the European dimension in the context of globalisation and national and regional specialisation?*
3. *What EU initiatives could best leverage overall public and private efforts to realise the vision?*

In the above response to the key elements, the Netherlands has already answered the above general questions in the section in the description of the goals per key element. The paragraph and question numbers in this annex refer to the corresponding passages from the Green Paper.

3.1 The realisation of a single labour market for researchers

Questions

4. *Is there a need for a more effective European framework to improve significantly the recruitment, working and geographical and intersectoral mobility conditions for researchers, including enforceable measures?*

In particular:

5. *How could the principles established in the European Charter for Researchers and the Code of Conduct for their Recruitment be effectively implemented, in order to develop fully the European dimension of research careers, including the trans-national opening of vacancies and funding opportunities for researchers?*
6. *Is there a need for a European framework to ensure portability of social security provisions for researchers across Europe?*
7. *How could 'flexicurity' principles (e.g. combining labour market flexibility with employment security) be applied to the researcher labour market?*
8. *How could we increase the numbers and quality of researchers in Europe by attracting young research talents, ensuring real equal opportunities for men and women and exploiting the experience and expertise of end-of-career researchers, for example in advisory and training roles?*
9. *Should joint approaches be developed to increase the coherence and impact of the various schemes aiming at networking European researchers abroad as well as foreign researchers in Europe? Similarly, is there scope to increase the coherence and impact of European and national schemes for international mobility of researchers (for*

example by jointly developing international 'Fulbright-like' fellowships)?

10. *How could the specific education and training needs of researchers be addressed at all stages of their careers, starting with post-graduate and doctoral curricula, building on the Bologna process for higher education?*

(4, 5, 6) In 2005, the Council laid down the European Charter for Researchers and the Code of Conduct for the recruitment of researchers as a Recommendation to the Member States. The memorandum entitled *Onderzoekstalent op waarde geschat* [Research talent recognised] (Lower House 2005-2006, 30300, VIII, no. 11) was the Dutch interpretation of the Recommendation referred to as part of a broader package of (possible) measures focused on improved career prospects for young talent, such as improved supervision and more space for doctoral candidates resulting in, among other things, a new NWO top talent programme.

According to the Commission, the introduction of the European Charter and the Code of Conduct in Europe is a lengthier and more difficult process than was thought. However, the Netherlands does not support the idea of making the European Charter and the Code of Conduct legally enforceable. As was emphasised when the Researchers' Charter and the Code of Conduct were established, working conditions for researchers are a matter for autonomous knowledge institutions and companies in the Member States, and not for the European Union. As regards the development of the recommendations, the Dutch government is largely dependent on the universities and colleges of higher education. The Association of Universities in the Netherlands (VSNU) has taken the lead in the Netherlands as regards drawing up its own Code of Conduct with regard to the recruitment of international researchers, based on the Charter and Code of Conduct, the European Guideline for the admission of researchers from third countries and the Code of Conduct for International Students in Dutch higher education (*Voortgangsrapportage Wetenschapsbeleid* [Science Policy Progress Report] 2007, Lower House 2006-2007, 29338, no. 55). Neither does the making enforceable of measures relating to working conditions fit in with the European aim of increased autonomy for knowledge institutions, as formulated for example following the commission's communication on the interpretation of the modernisation agenda for the universities (Lower House session 2005-2006, 22 112, no. 460).

In practice, the mobility of both students and researchers within Europe still seems to be hindered in all kinds of ways. This has been observed by both companies and knowledge institutions. During the recent discussion of progress in relation to the intergovernmental Bologna process, it was also observed that important challenges remain in this area⁴. It is first and foremost up to the Member States themselves to get rid of the barriers. However, it is very important that a European mobility strategy continues to support this process and that, where necessary, new impulses are provided, for example in the area of pensions and social security. The Netherlands is looking forward with interest to the forthcoming Guideline for highly qualified employees from third countries (knowledge migrants).

The Commission appears to be unnecessarily pessimistic about the accessibility of academic positions when it states that these positions are often exclusively reserved for internal staff or people from the domestic labour market. After all, a lot of knowledge institutions will in fact be motivated to attract the best international researchers, including those from other world regions. A supportive instrument

⁴ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world (18 May 2007).

such as ERA-MORE, a virtual European network of web portals focusing on researcher mobility has turned out to be an effective resource for making vacancies accessible across Europe⁵. The degree to which individual researchers have access to cross-border financing possibilities is closely related to the progress made as regards the coordination and mutual accessibility of national research and mobility programmes.

The view in the Netherlands is that additional progress ought to be made in this area (see below).

(7) The question is whether the general employment market concept of 'flexurity' can simply be applied to the specific labour market for researchers. The introduction of what is referred to as the 'tenure track' system is, incidentally, a measure that is aimed specifically at researchers with which a balance is sought between a flexible appointment and long-term job security. It entails a scientist being offered attractive employment for an indefinite period of time (a 'tenure'), following a specifically described appointment for a definite period of time (a 'track'), in the event of compliance with the objective criteria determined above. Moreover, the researcher must continue to prove that s/he is capable of functioning at an ever higher level. Good timing is essential since researchers must, of course, not be discouraged from being mobile. The Netherlands supports the introduction of this sort of tenure track system. Incidentally, the introduction of such measures is primarily a matter for knowledge institutions and companies themselves.

(8) The Netherlands endorses the idea that, in addition to working towards a sound research climate, a versatile set of instruments is required which can principally be used to attract and retain young research talent and to guarantee truly equal opportunities for men and women, both at European and national levels. Knowledge institutions are themselves responsible for their personnel policy, but incentive measures for individual researchers can have added value for career prospects. In the Netherlands, there are various programmes which can be used to pursue a range of goals. Examples are Rubicon (space for young promising researchers), Aspasia (the promotion of female university teachers), Mozaïek (the transfer of immigrant researchers to PhD places), Casimir (public-private mobility) and *Vernieuwingsimpuls* (personal subsidies to stimulate innovative research). The Netherlands also has a limited set of instruments focused on researchers in a later stage of their career (the NOW's Spinoza Prize and the KNAW's academy professors). Of course, the possibility of a career in R&D in the business community is also an important factor. The private sector is being encouraged to make an active contribution to the training of researchers and, if relevant, to stimulate the inclusion of university researchers in order to promote cooperation.

Supplementary to the measures in the Member States, the EU provides a fairly fine-meshed set of mobility and career instruments (Marie Curie scholarships). In addition, the European Research Council should be given sufficient space to contribute to the careers of the best research talent in Europe through the provision of personal subsidies to (young) elite researchers.

(9) The cohesion between European activities and national programmes focused on international mobility has already been explicitly discussed during the negotiations on Framework Programme 7. As a result, experiments are to be carried out in the coming years, and on the basis of Framework Programme 7, with community contributions to national programmes which contribute to mobility within Europe and elsewhere. At this point in time, the Netherlands considers it too early to make statements on joint approaches for increasing the cohesion and impact of international mobility programmes. For researchers, both academics and those affiliated to knowledge institutions,

⁵ In the Netherlands, SenterNovem/EGL, NUFFIC and the VSNU are the 'bridgeheads' for the Dutch ERA-More portal.

experience abroad is an important condition for a successful scientific career. This point may also be interesting for researchers from the business community. It would therefore seem to be a good idea to examine whether more possibilities can be offered for supporting Europe's elite researchers who wish to gain experience outside the EU, comparable with the American Fulbright scholarships. Support for the formation of networks of European researchers who work abroad, which may lead to improved information provision regarding career opportunities in the EU, might be a useful addition to the current set of instruments.

(10) The Netherlands attaches considerable importance to the training of researchers. The memorandum entitled *Onderzoekstalent op waarde geschat* (Lower House 2005-2006, 30 300 VIII, no. 11) indicates that, first and foremost, this means a good quality PhD procedure and secondly good career prospects for elite researchers.

This government supports these points of departure. However, the competencies today's elite researchers need to have are different to those required in previous times. As regards fulfilling researchers' specific education and training needs, the Netherlands believes that more attention ought to be paid to exchanges with the business community and the training of interdisciplinary and transferable skills which are required for today's scientific and knowledge-intensive professions. For this to happen, it is very important that proper coordination takes place between the education sector and research policy, both at the level of universities and colleges of higher education, and at the level of national governments. In this context the Netherlands refers to the objective, within the framework of the Bologna process, of improving coordination between the European Higher Education Space and the European Research Area, which is primarily important for the training of early-stage researchers and the development of PhD courses⁶.

3.2 The development of world-class research infrastructures

Questions

11. *How could the EU, on the basis of identification of needs by ESFRI, effectively decide on pan-European research infrastructures and their funding – the latter involving the Community (including possible synergies with EU cohesion policy instruments), Member States, industry, the EIB and other financial institutions?*
12. *Should a European legal framework be developed to facilitate, in particular, the emergence and operation of new forms of research infrastructures of pan-European interest, including electronic infrastructures? What other policy and legal changes are necessary to encourage the private sector to invest more in research infrastructure?*
13. *Is there a need to define common and transparent principles for the management of, and access to, infrastructures of European interest?*
14. *How can the longer-term continuous improvement of research infrastructures be ensured, e.g. through S&T programmes associated with them and European electronic infrastructures?*
15. *Should a global forum on research infrastructures be created, involving third countries*

⁶ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world (18 May 2007).

and international organisations, where Europeans could speak with one voice (as they did in the ITER project on nuclear fusion research)?

(11) In 2002, the European Strategy Forum for Research Infrastructures (ESFRI) was set up as a body of high-level representatives of research ministries and institutions. The informal Competitiveness Council of July 2004 asked this forum to draw up an initial European 'roadmap' for the construction of large-scale facilities for scientific research. The 'roadmap', which was published in October 2006, contains a list of 35 research facilities related to 7 areas of science which will have a working life of several decades. The method of working of the ESFRI, which involves the drawing up of a European roadmap for research facilities via a bottom-up process of identifying scientific needs, has proven to be effective. However, there is still room for improvement.

Some areas of science are still not sufficiently involved in the drawing up of the roadmap. When the ESFRI roadmap is updated, as planned, sufficient attention must also be explicitly paid to infrastructures other than 'hard' large-scale technological projects, such as (data) collections.

At the moment, the Netherlands is also working on a national roadmap for large-scale scientific research facilities. The plan is for this roadmap to be ready at the end of 2007. As a medium-sized Member State, the Netherlands believes the European Union has a clear role to play in the realisation of large-scale research facilities. This role is currently limited as a result of the relatively small budget allocation for research facilities in the context of the Seventh Framework Programme. Because the financing of large-scale infrastructures primarily has to be realised by the Member States, it would seem to be sensible to opt for the following decision-making method: on the basis of variable geometry, (groups of) interested Member States can take a lead in the development and financing of proposals. Other Member States can decide to participate in the realisation of these facilities in a more modest way, or at a later stage. The European Commission can, however, fulfil a useful role in the optimal utilisation of the various community financing possibilities, such as the possibility of loans from the European Investment Bank and – in a regional context – the application of European Structural Funds.

(12) A large-scale research facility can be established within the legal framework that applies to the place of establishment. Establishment is also possible on the basis of an international treaty or through the application of the only available European legal entity, the European Economic Interest Group. In practice, the choice appears to entail some significant (fiscal) advantages and disadvantages. The Netherlands therefore considers a more detailed analysis of the legal framework for European research facilities to be desirable.

Incidentally, such legal considerations appear not to play any significant role as regards the decision-making by companies as to whether or not to invest or participate in research facilities.

A clear distinction must be made between research facilities which have a more fundamental scientific character and research facilities with a more applied character. In identifying facilities which are of pan-European importance, the ESFRI focused explicitly on the value which the identified facilities could have for companies.

Companies will primarily be interested in investing in the category of more applied facilities, given the low yield from more fundamental facilities. However, even in the case of facilities with a more applied character, companies will still need to approach the government, considering the high investments. Member States and regional authorities could be encouraged to strengthen the link between companies and public research organisations at regional, national and international levels as regards investments in and the operation of large-scale facilities. This relates partly to the investments

which are to be made in the future on the basis of the ESFRI roadmap or, as the case may be, national roadmaps. European policy can assist in this respect. For example by ascertaining which are the best practices in the EU (and possibly elsewhere, for example in the US) in relation to the involvement of R&D-intensive companies in the setting up and modelling of public research facilities and by specifying good examples of operating models which are attractive for both parties (companies and public knowledge infrastructure).

(13) Incidentally, the Netherlands does not regard it as essential to develop special guidelines for the management and supervision of infrastructures of European importance. However, such guidelines are necessary in connection with the access to such infrastructures, and the exchange of research data. Co-financing using European resources should be made subject to the condition that infrastructures and research data are open to researchers from all Member States on the basis of transparent conditions.

(14) On many an occasion in the past, too little attention was paid, during the realisation of large-scale research facilities, to the costs of development and maintenance and to the training of researchers and technicians who can operate the facilities. Research institutions and authorities ought to pay sufficient attention to this issue. This will not only guarantee the continuous improvement of research infrastructures in the long term, but will also prevent research budgets being unintentionally used to cover operating expenses. In so far as EU co-financing occurs, the European Commission will also have to impose this as a condition.

On the other hand, one needs to bear in mind that it has to be possible to weigh the costs of upgrades of research facilities on the basis of quality assessments and competition.

(15) The developments in the EU relating to large-scale research facilities are being followed closely elsewhere in the world. A proposal has been made within the G8 framework to set up a joint platform, whereby references have also been made to the Global Science Forum within the OECD framework that focuses specifically on large-scale research facilities. The Netherlands would welcome the establishment of a broader platform which would include non-OECD countries such as China and India. Although this may be effective in the context of international negotiations on concrete projects such as ITER in the past, the Netherlands believes that the EU does not necessarily have to be unanimous on this issue.

3.3 Strengthening research institutions

Questions

16. *How can the resources of European research institutions be strengthened in the most cost-effective manner, in order to enable them to achieve excellence and compete on a world scale?*
17. *How can research actors be better encouraged to create world-class virtual centres of excellence, such as in the context of the proposed European Institute of Technology, the FP7 'networks of excellence' and national and regional initiatives, and to share structures that pool the research management capabilities of several institutions?*
18. *Is there a need for a European regulatory initiative to facilitate the creation of public-private partnerships?*

19. *How can the EU and Member States best stimulate the emergence of European and global virtual research communities, exploiting fully the potential of computing, information and communication infrastructures?*
20. *Should action be taken to develop: (i) principles for autonomy and for the management of research by research institutions, notably universities; (ii) shared criteria for the funding and assessment of research institutions, notably universities, giving stronger weight to linkages beyond academia, as well as to output and performance factors?*

(16) The view in the Netherlands is that the pursuit of more focus and mass can help to strengthen the research landscape in the Member States and Europe as a whole. However, that strengthening begins in the Member States themselves by preventing research resources from becoming unnecessarily fragmented and by ensuring that sufficient resources are made available for priority research areas. Additional steps include the setting up of a good quality system for the evaluation and selection of both research institutions and projects. The European Research Area will continue to develop primarily if Member States make the financing of national research institutions more competitive. On the basis of the Framework Programme for Research, the European Union has, for many years, been playing a major supportive role through selection on the basis of quality. The recent setting up of the European Research Council can, in the future, help to increase the excellence of European research institutions. The Netherlands therefore favours an emphasis on the link between (higher) education and research policy at the level of the universities and the government, as advocated during recent discussion of progress within the framework of the Bologna process⁷.

(17, 19) Institutions are more likely to link up with European (virtual) centres if a more content-related condition is attached to affiliation. Financial incentives as provided for in the Seventh Framework Programme for Research may be useful but are, in practice, not often decisive. The Netherlands also wishes to highlight the existence of numerous networks of research and science organisations which have been formed on the basis of independent initiatives, such as for example ALLEA, ESF and LERU. Such networks constitute an important building block of the European Research Area. Electronic networks such as Géant can support the formation of virtual networks of institutions. Incorporating management structures into a (permanent) entity may contribute to a greater focus and mass and to a more effective solution for certain social problems. The formation of the 3TU federation in the Netherlands is a good example. However, the more permanent forms of such structures in a transnational context will be at odds with the national funding systems of public research organisations. In this context, the setting up of the Joint Technology Initiatives and the creation of Knowledge and Innovation communities as part of the European Institute of Technology may lead to new experiences and insights.

(18) Public-private cooperation can take on many shapes and forms depending, in particular, on which parties are involved, what the objective is and what the tasks are. Tailor-made solutions are required to do justice to the responsibilities of the different parties. At the same time, it is conceivable that certain aspects, and in particular the legal personality of joint enterprises, are standardised in order to avoid any repetition of discussions. It is not easy to say right now whether these aspects, namely tailor-made solutions on the one hand and standardisation on the other, will conflict in practice. In the coming years, more experience will have to be gained at EU level in relation to

⁷ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world (18 May 2007).

public-private cooperation, as in the form of the Joint Technology Initiatives and knowledge and innovation communities which come under the European Institute of Technology. The Netherlands regards it as important to investigate, on the basis of these future experiences, whether supplementary regulations are desirable but does not think it is necessary at the moment to impose new regulations on public-private partnerships relating to R&D. At European level, the Framework Programme for research and development is still an extremely suitable instrument, as is also laid down in the relevant stipulations in the Treaty. However, the Netherlands is concerned about the participation of companies in the Framework Programme, despite the fact that companies are deciding more and more often to subcontract research to public knowledge institutions.

The Netherlands has worked consistently on simplifying participation in the Framework Programme and on linking the research themes to industry's research needs and is to continue monitoring the development of industrial participation closely. The application of the R&D state support framework is an important point of attention for public-private cooperation.

(20) The Netherlands supports the pursuit of greater autonomy of universities, as government leaders have repeatedly emphasised within the framework of the Lisbon process. The point of departure of the Dutch view as regards universities has, for decades, been the realisation of a high level of autonomy with regard to strategic policy and execution, but based on accountability to the government. The Netherlands itself has already established that the ideas of the European Commission regarding university reform largely support the agenda of the Dutch government (Lower House 2005-2006, 22 112, no. 460).

The Netherlands does not consider it necessary to formulate additional points of departure or guidelines for Member States for the (personnel) management of knowledge institutions at European level. The same applies to criteria for the financing and assessment of research activities. That would be at odds with the competencies of the Member States as regards the organisation and funding of higher education, as well as with the competencies of the institutions themselves. Moreover, the institutional reform realised by Member States is already an issue that is being taken into account within the framework of the Lisbon process and the National Reform Plans. However, it is conceivable that application of the Open Coordination Method between Member States will stimulate policy development in the Member States relating to both increasing the autonomy of universities and the funding and assessing of research institutions.

In addition, the Netherlands wants to draw attention, in this context, to the need for action at European level as a consequence of the change in the reimbursement rules in the Seventh Framework Programme (2007-2013). On the one hand, these facilitate a simplification. However, on the other hand, they also require institutions to acquire an insight into all the research costs incurred. This would require them to make drastic changes to their administrative procedures. The FP7 decision includes a temporary transitional regime that is to end in 2010. It is right to expect universities in a lot of Member States to have trouble with this transition. It would therefore be desirable for the Commission to provide strong support for the European universities during the transition to this 'Full Cost Model' which the Commission believes may also be important for the application of the R&D state support framework.

3.4 Sharing knowledge

Questions

21. *Is there a need for EU-level policies and practices to improve and ensure open access to and dissemination of raw data and peer-reviewed publications from publicly funded research results?*

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| 22. | <i>What should constitute a European Framework for knowledge sharing between research institutions and industry based on identified good practice and models?</i> |
| 23. | <i>Are there specific R&D-related issues, such as the grace period, joint ownership regimes and the research exception that need to be looked at from a European perspective?</i> |
| 24. | <i>What conditions should be created to promote innovative approaches in the way that science and technology is communicated, taught, discussed and valued by Europeans, and taken up for evidence-based policy-making?</i> |

(21) It is important for the entire European Union, and therefore for the Netherlands as well, that scientific knowledge is optimally accessible. State-of-the-art knowledge is of paramount importance for any scientific discipline and that is why the reliable, affordable and long-lasting access, distribution and storage of knowledge are among the basic principles of the European Research Area. The Netherlands also believes that the development of databanks of scientific data and publications pertaining to publicly-financed research should be stimulated and integrated at European level. It is also equally important that the system used to publish scientific research remains at the same high level as is currently the case via the publication process, based on peer reviewing, as used by the scientific publishing houses, of which a number of large-scale players are located in the Netherlands. An examination needs to take place of how the publishing and distribution costs can be controlled while accessibility is optimised. Moreover, the possibilities for the business community to transfer and commercially use knowledge developed within public knowledge institutions must not be hampered. The Netherlands therefore welcomes the activities at European level which the Commission recently proposed whose aim is to increase the accessibility of scientific information in consultation with the parties involved, to keep said information affordable and to devise a European strategy for the long-term retention of scientific information in all countries of the European Union (Lower House 2006-2007, 22 112, no. 521). A continuation of the debate on open access with the EP, the Council and the interested parties may contribute to the success of the proposed experiments with new business models. The same debate ought to be held simultaneously at Member State level. Within this framework, a reference can also be made to the Ministerial OECD declaration of 2004 on the, in principle, free accessibility of research data pertaining to publicly-financed research and the resulting OECD Guideline which is to be published later this year. In recent years, the Netherlands played a pioneering role as regards the establishment of this Guideline.

(22) The Netherlands welcomes the recent discussion on improving knowledge transfer between universities, research institutions and the business community which was held partially as a result of the statement on improving the knowledge transfer between research institutions and industry within Europe: embracing open innovation – Execution of the Lisbon Agenda (COM (2007) 182 final) (Lower House 2006-2007, 22 112, nr. 532). Knowledge transfer is important for economic growth. Activities which stimulate practical cooperation between the parties are endorsed. For example, the Netherlands is one of the seven countries involved in setting up a programme to teach staff skills and competencies. The innovation vouchers aimed at knowledge transfer to small and medium-sized businesses in the Netherlands is another such example. In principle, guidelines (relating to intellectual property) which make the transfer of knowledge between public knowledge institutions and the business community easier and more effective should be supported since they can facilitate such cooperation. As regards the process of developing these guidelines, the point of view adopted by the Netherlands will be that measures at European level should be voluntary and not too detailed, that

they are supported by all stakeholders (universities, public research institutes, the wider business community, the small and medium-sized businesses, new businesses, venture capitalists, government, etc.) in order to realise the intended objective of improved knowledge usage, and that they have to continue building on national needs and instruments, as well as help to stimulate the cross-border exchange of knowledge. Countries such as Great Britain, Denmark and Ireland all have national charters. In the Netherlands, the Association of Universities in the Netherlands (VSNU), the Federation of University Medical Centres (NFU) and the Confederation of Netherlands Industry and Employers (VNO-NCW) drew up a Guideline (Innovation Charter) in 2004 which lays down the points of departure serving as a basis for cooperation agreements between companies and knowledge institutions with a view to a responsible application of knowledge. More recently, the leading Dutch research parties signed a statement in which they express the intention to continue developing joint valorisation within the Dutch innovation system, including the business community. The Netherlands also wishes to refer to the community patent as the eventual goal for the protection of intellectual property in Europe.

(23) IPR-related problems, such as the grace period and the research exception, must be approached from the broader perspective of the worldwide harmonisation of the intellectual property system. Individual activities which remain limited to the EU area would not be productive.

(24) As regards communication on science, technology and innovation, the Netherlands wishes to refer to the Science and Society Action Plan that the European Commission published in 2003. This provided the basis for coordination between the Member States, but gradually developed into concrete projects in the Member States after science and society was included as a priority in the Sixth Framework Programme for Research and Development (2002-2006). Although this possibility also exists in the Seventh Framework Programme (2007-2013), communication with the general public appears to be less of a priority in the European research policy. The Netherlands therefore advocates intensification of the efforts to bring the results of the research partly funded by the EU to the attention of the more general public, such subject to the precondition that this must not result in any additional bureaucracy. The EU can also make better use of the knowledge which is present in the European and national sector and industry organisations.

As regards 'evidence based' policy, one can state first of all that the Netherlands regards the proper distribution of research results to be of major importance. During the FP7 negotiations, the Dutch focus was on the realisation of sufficient possibilities for the distribution of research results with an eye on using knowledge that had already been acquired. The Netherlands also welcomes the recent announcement by the Commission that one of the aims of FP7 is to improve access to the publications of EU funded research. This involves examining activities which will improve knowledge transfer from public knowledge institutions to the business community and the (commercial) application of such knowledge. Possibilities for this are offered by the professionalisation of knowledge transfer managers at public knowledge institutions and the stimulation of exchanges of expertise in this field within the European Research Area. This development can also contribute to better substantiated policy and improved communication on science and technology.

3.5 The optimisation of research programmes and priorities

Questions

25. *Should common principles be developed and used for peer review, quality assurance*

and joint evaluation of European, national and regional research programmes? Should these programmes be opened to participants from other Member States, and how?

26. *Is there a need for shared principles for the accountability of public research funding, which would enhance simplification of rules and procedures and increase its effectiveness and efficiency?*
27. *What participative processes need to be put in place to enable public authorities to jointly identify and decide upon major societal issues requiring a pooling of resources and capacities?*
28. *On such societal issues of European or global dimension, how could principles and modalities be established and tested for joint programming of research, involving all stakeholders (research institutions, business, civil society etc.) and bringing together funding from EU, national, regional, business and philanthropic sources?*
29. *Should the European Community seek membership of intergovernmental research organisations?*

(25, 26) The exchanging of experiences with peer review, quality assessment and quality assurance at European level is, of course, an important opportunity given the fact that 95% of the European research programmes are executed at national level. The Netherlands also supports proposals which lead to a simplification of rules and procedures for researchers that appeal to European, national and regional programmes.

The cross-border accessibility of programmes and the blanket applicability of research scholarships are an important aspect of realising the European Research Area, although relatively little progress has been made. The Netherlands also believes there is reason for additional consultations at European level regarding the possibilities of, and hindrances to, the mutual opening up of national programmes for research projects in which partners from other European countries are also involved. The Netherlands supports the Commission's desire to put this issue on the agenda. In addition, the Netherlands is eagerly looking forward to the proposals which have already been announced for the application of Article 169 EC as a more intensive form of coordination of national research programmes which require separate legislation via co-decision, which then leads to joint execution.

However, this does not yet mean that it is EU's task to formulate common points of departure at EU level for peer review, quality assessment and financial accountability, also in view of the scientific and content-related expertise and autonomy of national financing organisations. However, the EU can support and stimulate initiatives which are created by a bottom-up approach, as in the case of the standard evaluation protocol developed in the Netherlands by KNAW, NWO and VSNU.

The Netherlands has high expectations at European level of the European Research Council, which can fulfil an important mission and example function with regard to the quality of the assessment and selection process, particularly for smaller Member States as well.

It is first and foremost a task for the autonomous financing organisations involved in research and science, as united in the European Science Foundation (ESF), EuroHORCS and TAFTI, to take initiatives to create voluntarily more intensive cooperation at European level. They may decide to combine forces in European cooperation programmes and to achieve transparent, peer-reviewed coordination of their national research programmes. Initiatives in this area by, among others, NWO have recently resulted in the decision to set up an informal network of European R&D organisations,

in which information will be exchanged, shared problems tackled and the dialogue between European stakeholders stimulated.

Lastly, the Netherlands wishes to point out that the ERA network instrument focused on coordination of national research programmes introduced in the Sixth Framework Programme (2002-2006) has turned out to be an important and suitable instrument with which to structure this aspect of the European Research Area. It has resulted in the (improved) coordination and harmonisation of national programmes. Programme managers have been able to get rid of many of the practical obstacles which hindered transnational coordination, as also expressed in the launching of joint calls by a large number of ERA networks. It also resulted in the development of new – joint – programmes. The Netherlands considers it a good idea to collect and analyse the experiences of the various ERA networks with a view to the organisation of European, national and regional programmes. The Netherlands therefore welcomes the recent 2006 ERA network review and the impact study which the European Commission has announced is going to take place later this year.

(27, 28) The research priorities of the Seventh Framework Programme for Research and Development (2006-2013) are more or less an unabridged continuation of the priorities laid down in the Sixth Framework Programme (2002-2006). The most significant change concerns the addition of security as a new field of research. With a view to future Framework Programmes, it is important to reflect now on the way in which the EU is going to identify its research priorities after 2013. The Commission indicates that the establishment of European Technology Platforms has proven to be valuable for the programming of European research (FP7), but that it is desirable for such an identification process to be expanded from purely themes based on industrial needs to themes with a more social background. The Commission suggests this can be achieved by means of a joint process of exploration and technology assessment.

In this context, the Netherlands is currently gaining experience with the setting up of ‘knowledge rooms’ at each Ministry in which social questions present in and around the Ministries can be articulated more quickly at a relevant level so that they have more of an effect in scientific research, advice and policy. Such a model may also be feasible at European Union level, with a view to translating it into clear research priorities through clear objectives at policy level. The Standing Committee on Agricultural Research (SCAR), which was set up in 1974⁸, and which advises the Commission on the coordination of agricultural research, is another model which recently developed new initiatives in the area of exploring the research needs derived from the agricultural projections to 2020. Regional actors could also play a role as regards programming research priorities, given the emphasis which will have to be placed, in the coming period, on the use of structural funds for Lisbon aims, including R&D and innovation. For that matter, the programming of research at European level would be assisted by timely and thorough analysis by the European Commission of sectors and thematic areas in which European research cooperation can provide the greatest added value. Other examples include sectors experiencing rapid and high potential technological and scientific development, those in which scientific progress and innovation is desirable given future challenges, etc.

The Netherlands also thinks it is an interesting idea to look beyond technology areas, and by analogy with the European technology platforms, to gain experience with social platforms. For example, greater attention for research and innovation in the services sector may be of interest to the Netherlands, and experience was recently gained in the Netherlands with *Maatschappelijke*

⁸ Regulation (EC) No. 1728/74 by the Council dated 27 June 1974.

Topinstituten [Key Social Institutes], in which direct links are established between excellent research and parties in need

Whether there needs to be a combination of resources for such priorities at European level is, of course, not something that goes without saying. However, the political will increases as the problem becomes more urgent and large-scale. Article 169 EC offers a good basis for such cooperation between Member States. The Netherlands is looking forward with interest to the proposals, as have already been announced, for this weightier form of coordination of national research programmes.

(29) Since the 1950s, various intergovernmental organisations have been established which support European fundamental science. They bring together resources and expertise and have been successful in creating the largest and most complex research infrastructures, such as particle accelerators or telescopes. Since time immemorial, these organisations have been extremely important for the Netherlands for international research cooperation. They provide Dutch scientists with access to research made possible by facilities which cannot or can scarcely be realised by individual Member States such as the Netherlands. The Netherlands regards stronger links between the EU and these (European) intergovernmental research organisations, such as CERN (high energy physics), the EFDA (fusion research), the EMBL (molecular biology), the ESA (aerospace technology), ESO (astronomy), the ESRF (synchrotron), the ILL (neutron research) as desirable within the framework of the continued development of the European Research Area. As regards the ESA, a special arrangement already exists within the framework of the further development of European aerospace policy. The question is, however, to what extent the articles of associations of the various organisations permit membership of the EU. As regards (industrial) R&D, the Netherlands has been an active participant in the Eureka network for more than 20 years. The intergovernmental Eureka network is a proven framework of cooperation between the Member States and the Commission in the field of (industrial) R&D. National policy resources are used to provide effective support to international cooperation projects, particularly those of small and medium-sized businesses. The Eurostars initiative (Art. 169) provides an opportunity for further harmonisation of the cooperation between the Member States and the Commission. In the future, the Eureka framework can be instrumental in the context of embedding of emerging intergovernmental initiatives. Good cooperation between Eureka and the other instruments within the European Research Area is hugely valuable in this context. The positioning of COST as an intergovernmental organisation in the European Research Area also deserves more attention during the years ahead.

3.6 Global accessibility: international cooperation in science and technology

Questions

30. *How can the European Commission and Member States work together to (i) define priorities for international S&T cooperation in close coordination with the other dimensions of external relations; (ii) ensure the coordinated and efficient use of instruments and resources; (iii) speak with one voice in multilateral initiatives?*
31. *How can the European Commission and Member States work together to explore the potential of initiatives for international research programmes on issues of a global dimension, involving the Community, Member States and third countries?*
32. *How should S&T cooperation with various groups of partner countries be modulated to focus on specific objectives? Should complementary regional approaches be explored?*
33. *How can neighbouring countries be best integrated into the European Research Area*

as part of the European Neighbourhood Policy?

34. *How can the EU's bilateral S&T agreements be made more effective? Are there alternative or complementary instruments that can be used, such as joint calls for projects, involving where possible the Member States?*
35. *How can common European agendas for S&T cooperation be promoted in multilateral organisations and agreements as well as with regional organisations?*

(30)

(i) At the moment there are a lot of different committees in which the European Commission and the Member States can attune their international cooperation policy. However, this has not resulted in any joint priorities. New instruments were introduced recently in the Seventh Framework Programme. Their focus is on the combining of national programmes which, with EU support, are oriented around bilateral research cooperation, referred to as ERA networks (for example CO-REACH which focuses on China) and INCO networks which are focused on stimulating dialogue on research cooperation with specific world regions. For the time being, parties in the Netherlands have been playing an active role in the ERA networks. However, given the as yet unclear relationship between revenue and expenditure, the involvement in INCO networks has been limited. At the moment it is still too early to carry out a proper assessment of the effectiveness of these new instruments.

(ii). It seems that massive progress could be made as regards improving the approaches based on research policy and the EU policy focused on development and external contacts. An initial step could be to survey and analyse the instruments in both fields and the specific activities vis-à-vis particular regions and countries. Incidentally, the Netherlands welcomes the fact that, as regards cooperation with third countries, this has been accommodated in the themes of the Seventh Framework Programme, by which more specific prioritising is possible which meshes well with those of the EU.

(iii) European Union unanimity as regards multilateral initiatives can be regarded as an ultimate goal. The role played by the EU in the recent multilateral ITER negotiations are a good example of the effectiveness of this. An obvious step would also be to allow the EU to play a role in the dialogue with world regions. However, it will not be desirable nor possible in all cases for the EU to always be unanimous and the organisation of European representation will have to be examined on a case by case basis.

(31 and 35) In the past, the Netherlands has argued in favour of the formulation of an EU strategy for international research cooperation, and is keen to repeat this view here. The setting up of a High Level Group for international cooperation in the area of science and technology – by analogy with the successful example of the ESFRI in the area of research infrastructures – could contribute to the identification of possible initiatives aimed at global research. Incidentally, the Framework Programme already contains research themes which represent the European contribution to global research programmes and the science community is already taking similar global initiatives, without EU intervention (e.g. the International Polar Year). One of the tasks of a high-level international cooperation group could be the formulation of an EU international cooperation strategy, as has been repeatedly urged by various Member States, including the Netherlands.

(32) The Green Paper includes a clear differentiation into groups of countries namely neighbouring countries, developing countries and industrialised and emerging economies for which, of course, entirely different objectives apply. The Netherlands can support this approach. However, in the case of the group of developing and adjacent countries, the question is how the available programmes can be used for the cooperation goals that have been formulated without the focus as regards the use of research resources on behalf of Europe's competitiveness becoming diluted. An additional question relates to the extent to which coordination can be achieved based on the EU efforts in the area of external policy.

(33) The EU Framework Programme is open to researchers from third countries and therefore also to researchers from adjacent European countries. However, it is conceivable that the participation of countries in the latter category is supported by specific measures, as provided for in FP7 for the new Member States in the section entitled Capacities, 'Research Potential'. This would link up with the focus of the European Commission on cooperation with the countries which are members of the European Neighbourliness Policy. It is also conceivable that such supportive measures can be financed by the financial instrument for cooperation with ENP partners (ENPI). The Netherlands has adopted a positive attitude towards cooperation with the ENP countries in the area of research, technology and science (Lower House 2006-2007, 22 112, no. 490).

(34) It is widely known that a significant number of EU bilateral cooperation agreements are, in effect, inactive. In fact, this situation applies to the bilateral agreements of many Member States as well. The demand for an increase in effectiveness is therefore justified. The more flexible application suggested, such as the issuing of joint calls between the EU and the cooperating countries, which sometimes even involves Member States, certainly deserves more detailed examination. However, the Commission will have to take a serious approach to periodical consultations with the Member States, whereby an assessment can be made as to whether Member States are prepared to interpret the bilateral agreements together with the Commission. However, it is imperative that these consultations also involve the experiences of the recently initiated projects, as supported by the Commission, focused on coordination between Member States as regards their bilateral cooperation with third countries. The Netherlands is leading such an ERA network aimed at streamlining bilateral programmes with China (CO-REACH).