

Internationalisation Agenda – *Het Grenzeloze Goed* [the Boundless Good]

Introduction

When drawing up the strategic agenda for our policy in the areas of tertiary education, research and science – *Het Hoogste Goed* [The Greatest Good] – I agreed to focus more on the international aspects of this policy, to supplement what had already been included in the strategic agenda in this regard. With this paper I intend to fulfil my promise. The core of the strategic agenda prevails: it is all about quality. Internationalisation contributes to the quality of our tertiary education, research and science. Quality is required for our institutions to appeal to foreign students, lecturers and researchers. High quality is the best tool for strengthening our international reputation.

Process

In the lead-up to this internationalisation agenda, *Het Grenzeloze Goed*, we have had discussions with a great many organisations. Not just with the umbrella organisations such as the VSNU (Association of Universities in the Netherlands), HBO-raad (Netherlands Association of Universities of Applied Sciences), Paepon (Platform for Officially Recognised Private Educational Institutions in the Netherlands), SAIL (Organisation for Cooperation between International Education Institutes and Wageningen University), ISO (Inter-city Student Consultative Platform), LSVb (Dutch National Union of Students) and NEWS (Netherlands Worldwide Students Association), but also with Nuffic (Netherlands Organisation for International Cooperation in Tertiary Education and Research), the NWO (Netherlands Organisation for Scientific Research), KNAW (Royal Netherlands Academy of Arts and Sciences), TNO (Netherlands Organisation for Applied Scientific Research) and other ministries such as Agriculture, Nature and Food Quality, Economic Affairs and Foreign Affairs. We also visited many universities of applied sciences and research universities to learn about the experiences of Dutch and foreign students, policymakers and the international offices of institutions. This agenda ties in with the internationalisation paper *Koers op Kwaliteit, van Marge naar Mainstream* (Steering a Course for Quality, from Margin to Mainstream) drafted in November 2004.

Reading guide

This paper contains a summary of the global developments that affect our tertiary education and research sector. I will explain what I want to achieve and what my guiding philosophy is. Furthermore, I will describe the measures I have taken and will take to add impetus to internationalisation among students, researchers and institutions and thus, further improve the quality of tertiary education, research and science.

Global developments

This paragraph briefly describes four major developments. Major, because they intensify the urgency for the internationalisation of education, research and science.

- Competition for 'knowledge workers' on the labour market is increasing.
- Global problems demand global solutions.
- The Dutch labour market is becoming more and more international.
- Competition with institutions abroad to 'acquire' the best students, researchers and lecturers is increasing.

Competition for 'knowledge workers' on the labour market is increasing

The increasing mobility of workers, companies and production processes means that we are living in a world that is steadily becoming more globalised. The labour market is becoming ever more international and the demand for highly qualified personnel is rising. This creates increasing worldwide competition for 'knowledge workers'. High-quality institutions bolster establishment conditions and are conducive to attracting knowledge workers. It is therefore important that the reputation of Dutch tertiary education and research is strengthened. This can only be achieved if our 'knowledge infrastructure' remains a high-quality one and we allow plenty of room for the best people.

Global problems demand global solutions

Issues such as climate change, the exhaustion of energy resources and security are global problems that cannot be solved within our borders. The solution lies in international cooperation. This means that the mutual dependency of countries increases. Education, research and science contribute to a significant degree to solving these problems that the world, and thus the Netherlands, is facing.

The Dutch labour market is becoming increasingly international

Another effect of globalisation on the labour market is the demand for graduates to develop different skills and competencies, which they need to succeed on this international labour market. Tertiary education has the task of preparing students for their future employment. However, the labour market does not only need different competencies, but also more highly qualified people. Talented foreign students who remain here after graduation can fulfil part of the urgent need for highly qualified people.

Competition with institutions abroad to 'acquire' the best students, researchers and lecturers is increasing

Students are increasingly mobile. And, in part due to the harmonisation of the systems in Europe within the framework of the Bologna process, these students can choose from more and more programmes throughout Europe and beyond. This results in strong, worldwide competition among institutions. Institutions that want to attract the best students have to ensure that the quality of their programmes is high and well known.

What do I want to achieve?

As I set out in the strategic agenda, I want to strengthen the quality of tertiary education and scientific research in the Netherlands, so that our universities and research institutions rank among the best in the world. Students who graduate from these institutions are prepared for a labour market that is becoming increasingly international; researchers perform excellent scientific and practice-oriented research and are valued participants in international scientific partnership projects. Foreign students, lecturers and researchers are anxious to study and work at such institutions.

Guiding framework

I set out my guiding philosophy in the strategic agenda. In this paper, I will place this guiding philosophy in the perspective of the internationalisation of tertiary education, research and science. The key message is that institutions, students and researchers are autonomous, also in the area of internationalisation. It is up to them to formulate their own vision, plans and ambitions. Universities of applied sciences, research universities and research institutes determine themselves with which foreign institutions they would like to cooperate. Students and researchers should be given more room to make their own choices regarding the continuation of their programme or research.

The task of the government is to stimulate and facilitate the choices made by students, researchers and institutions. At the governmental level, increasing international cooperation between universities of applied sciences, research universities and research institutes could demand more international agreements and legislation to make such cooperation possible. Examples include the introduction of joint degrees and the bachelor's-master's system, within the framework of the Bologna process. It could also require bilateral agreements with countries where international cooperation can only be established with government support but is of considerable added value for the entire tertiary education system, such as the cooperation with China (cf. the section further on in this agenda). The government also has a role to play in setting up large research infrastructures that are of special importance to scientific progress. These infrastructures often involve facilities that cannot be funded by a single country and for which international cooperation is therefore desirable and necessary. Other matters that could benefit from government support are the provision of information about and managing the reputation of Dutch tertiary education and research abroad. In addition, the government is responsible for tackling unnecessary obstacles to mobility. Finally, the government plays an encouraging role by financing mobility grants for students and researchers, for example.

What will I do?

The strategic agenda for tertiary education, research and science policy is the answer to the global developments outlined above: not changes to the system but rather a move towards improving quality. Within the framework of internationalisation, the government can contribute to the realisation of this improvement in quality, particularly by encouraging mobility and transparency. Quality, mobility and transparency therefore constitute my contribution to international ventures such as the Bologna process and the European Union. At the national level, I am taking the following actions in order to improve quality in the field of internationalisation:

- I. Increasing the mobility of Dutch students.
- II. Encouraging a more international orientation at education institutions.
- III. Expanding so-called brain circulation.
- IV. Improving the establishment conditions for education institutions and research institutes.

I. Increasing the mobility of Dutch students

The international competencies of Dutch graduates need to be strengthened. This can be achieved by having students follow an entire programme or part of a programme abroad, or by introducing international classrooms. This means that a number of limiting conditions needs to be met, such as sufficient accessibility for Dutch students to programmes abroad and clarity regarding the programme to be followed.

The scores of Dutch students are 'average' as far as following part of a programme abroad is concerned¹, but the number of Dutch students who participate in the European Erasmus programme has stagnated. Furthermore, Dutch students score very low when following an entire programme

¹ Source: Nuffic, Key Figures. These figures pertain to 2004/2005 and involve programme mobility as well as diploma mobility.

abroad is concerned.² Only 2.3% of Dutch students follow an entire programme abroad³ and 17% follow part of a programme abroad.⁴

I do not want to set target values for the number of students choosing to follow an entire study programme abroad: the choice is up to the students themselves. I believe it is important for Dutch students following programmes in the Dutch education system that the programmes devote more attention to experience abroad. My aim is to increase the percentage of Dutch students following a programme in the Netherlands with part of the programme followed abroad, from 17% to 25% by 2013.⁵ In this way, the Netherlands can enter the leading European group in this respect. My aim is very consciously not to have *every* student obtain foreign experience: although international aspects can be seen in virtually all programmes, these can also be treated in the form of international classrooms, by ensuring that lecturers obtain more foreign experience and by adjusting curricula. I will return to this subject below.

Accessibility

To increase the accessibility of international excellence programmes, I am investing in additional grants for Dutch students through the Huygens Scholarship Programme (HSP). Currently, an annual amount of €3 million is available for excellent students in the HSP. In this cabinet term, this amount was raised by €2 million, as announced in the strategic agenda. Moreover, the Netherlands was one of the first countries to ensure that students can take their student grants and loans with them when going abroad to study. This is a significant improvement. In the past, students had indicated that a lack of funds prevented them from studying abroad.⁶

The quality of programmes

More clarity is needed on the quality of different programmes in order to increase transparency for individual students. Creating such transparency worldwide does not seem feasible to me in the short term. In the long term, it might be possible to make such global agreements within UNESCO, however. At the European level, the situation is different. In the Netherlands, the quality of programmes is tested by means of the accreditation procedure. The quality of accredited Dutch programmes is recognised throughout Europe. At the European level, I would like to pursue more reciprocal recognition of the accreditation of programmes: the recognition by foreign quality assurance agencies of Dutch accreditation decisions and vice versa. This would be beneficial to Dutch qualifications abroad (and to foreign qualifications in the Netherlands).

In addition, both the European Commission and the European countries that signed the Bologna Declaration wish to be able to compare programmes and institutions. In terms of transparency, therefore, I also have in mind clarity regarding the content and level of qualifications, partly in support of the Lifelong Learning programme. But I am also thinking about a classification system for institutions that would clarify their distinctive features at the European level. I would prefer to go a step further and provide clarity for students, institutions and employers as to the strengths of a particular

² Cf. for example, Eurostudent 2008.

³ OECD Education at a Glance, or Nuffic, Key Figures.

⁴ 2007 Student Monitor. The percentage pertains to students during their studies, with the exception of first-year students. Given that foreign experience is often obtained at the end of the curriculum, the percentage on graduation is higher.

⁵ This involves so-called credit-point mobility. The measurements will be carried out in the same way as is currently the case: during the study, not after completion. There are large differences between the various programmes. The intention is to record growth in each HOOP sector.

⁶ 2006 and 2007 Student Monitors.

institution, what a particular programme comprises and what can be expected of the graduates of a particular programme. Within that context, I will ensure that the Diploma Supplement is used in the Netherlands in accordance with the European format. Quality and transparency are therefore the themes of my efforts within the Bologna process.

Internships

In addition to the actions set out in the strategic agenda, I would like to encourage internships abroad. Roughly half of the students following part of a course of study abroad, are participating in internships through a foreign tertiary-education institution. There are currently few facilities for supporting students or for expanding the number of internships offered. In 2007, some 1300 internship grants were available for Dutch students. It remains difficult to fit foreign internships properly into the curriculum and to provide good guidance for students on placement. The HBO-raad, the VSNU and the ISO have all identified this as a problem.⁷ Together with the trade associations, I will investigate what the major obstacles are and how they can best be tackled. To clear obstacles and provide a temporary stimulus, in addition to the funds mentioned in the strategic agenda, I am setting aside a total of €8 million in the coming five years. For universities of applied sciences (HBO), this temporary stimulus could take the form of an international variant of the successful RAAK (Regional Action and Attention to Knowledge Circulation) programme.⁸ The focus of this programme is the circulation of knowledge among professionals in the recipient occupational fields and universities of applied sciences. By linking the research, the student exchanges and the internships in these programmes to sustainable international networks, the quality of international student internships will be raised and internationalisation activities will acquire a clearer and more structural position within the programmes.

International classrooms

As mentioned, the skills that students will need on the labour market of the future will not only be acquired by following a study programme (or part of one) abroad. Dutch students can acquire experience in the Netherlands too: by following lectures with foreign students, lectures given by foreign lecturers, international curricula, and working on assignments together with foreign students, with the assistance of ICT. According to lecturers, foreign students definitely contribute to the quality of education. I will return to this subject in the next chapter.

II. Improving the international positioning and orientation of Dutch tertiary education

Supplementary to *Koers op kwaliteit* [Steering a Course for Quality], I announced in the strategic agenda that Dutch tertiary education needs to better profile its distinctive features in order to achieve good positioning and marketing. I also announced an expansion of the existing instruments for attracting foreign students. Students are becoming increasingly mobile, which will also lead to a clustering of talent in Europe. The competition for high-quality students has therefore increased strongly. This is illustrated by the fact that in recent years, almost every European country has developed scholarship programmes aimed at attracting talent. In this chapter, I will elaborate the strategic agenda regarding attracting foreign students. The second part of the chapter focuses on the Dutch institutions attracting foreign students. Within the institutions, considerable efforts are being expanded in the field of internationalisation, depending on the programmes offered and the ambitions

⁷ Cf. for example, ISO: Een wereld te winnen: Internationale stages in het HBO [A World to be Won: International HBO Internships].

⁸ The focus in this programme is on the circulation of knowledge among professionals in the recipient occupational fields and universities of applied sciences.

of the institution concerned.⁹ The question is how this international orientation can be supported further.

Attracting foreign students

There are currently some 70,000 foreign students in the Netherlands, half of whom come from the European Union. According to the OECD, the number of foreign students following an entire programme in the Netherlands more than doubled between 2000 and 2005: from 16,500 to 35,000.¹⁰ The market share of the Netherlands rose from 1.2% to 1.8%. The differences between institutions are great. The professional programmes in the fine arts and the performing arts, in particular, are highly international in scope. The same applies to the University of Wageningen and the University of Maastricht. In absolute numbers, the University of Maastricht and the Zuyd, Fontys Venlo, Saxion Enschede and INHOLLAND universities of applied sciences attract the greatest numbers of foreign students.¹¹ The OECD believes that the Netherlands could attract many more foreign students.¹²

Why attract foreign students?

Talented students contribute to the quality of education in the Netherlands. Moreover, under pressure from a sharply falling population of young people, competition in Europe will increase still further. Many European institutions will only be able to retain their current level of enrolments by attracting students from other countries. In the long term, the Netherlands will benefit from attracting students: graduates who leave the Netherlands again fulfil an ambassador's function (if they experienced their stay positively) or, if they remain in the Netherlands, they contribute to reducing the shortfall on the Dutch labour market. This is a reinforcement of the policy of the strategic agenda of making as many well-qualified people as possible available for our labour market, for example, in technology fields. In addition, foreign students also contribute directly to the economy.¹³

Which students do we want to attract?

More top-class talent leads to better education and research in the Netherlands. Attracting top-class talent is thus a priority. In the fields in which the Netherlands is a world leader, modern dance, for example, this is relatively simple. In the other fields, more effort will be needed. Efficient marketing and good scholarships are essential. The number of students in these categories is limited, but experiences with the Huygens Scholarship Programme (HSP) show that the ceiling is not yet in sight: the number of excellent applications still exceeds the number of places available. Students from outside the European Union are not publicly funded, but as a rule they pay tuition fees that more than cover their educational costs. Today, the quality of these students is properly safeguarded by a code of behaviour that is currently being evaluated, and, in the case of China, by the NESO certificate. These students contribute to international classrooms, which, as outlined above, are of great importance to the development of the international competencies of Dutch students. It is unimaginable that only top-class talents contribute to international classrooms: the group is much too

⁹ OCW field study, interviews with HBO-raad, VSNU and Nuffic administrators.

¹⁰ OECD: 2007 Education at a Glance.

¹¹ Nuffic 2008

¹² 2007 Thematic Review of Tertiary Education.

¹³ A student from within the EU is publicly funded. On the other hand, this student contributes to the Dutch economy by spending on living costs, etc. On average, this expenditure amounts to €14,000 for each EU student. A student from outside the EEA also pays tuition fees and living expenses and costs the treasury nothing at all.

small for this and, moreover, top-class talent is rare. Given that the quality of foreign students is guaranteed, these foreign students are a good supplement to Dutch education, even when they do not belong to the world's best. They add impetus to the necessary international environment, in the breadth of education as well. This leaves the European students. These students are of great importance for two reasons: for Dutch institutions, the short-term competition is coming from Europe. This means that Dutch institutions should regard the European market as their 'home market'. The second reason is that European students are ideally suited to contributing to international classrooms. Furthermore, as far as public funding is concerned, no distinction can be made between Dutch students and students from other EU countries. This means that the Higher Education Institutes also receive funding for European students who study in the Netherlands, provided that they live in the Netherlands or in one of the neighbouring countries.

Scholarships and student funding

First of all, foreign students should be aware that the Netherlands offers suitable and high-quality educational programmes. This is clearly a task for the representatives of Dutch education abroad: the Netherlands Education Support Offices (NESOs) and Dutch (research) institutes.¹⁴ These successful education support offices handle, among other things, the marketing and the provision of generic information about Dutch tertiary education and they support foreign students in the selection of a suitable programme in the Netherlands.

Once foreign students are familiar with Dutch tertiary education, we should ensure that these students can also actually study in the Netherlands. Students from outside the EEA should have the possibility of coming to the Netherlands without state funding being at issue. Nuffic has proposed the development of an international mind fund: a fund in which Dutch banks lend money to students from outside the EEA while the Dutch government, or possibly the European Investment Bank, stands as partial guarantor. I will ask Nuffic to further develop this idea.

In addition, the Huygens Scholarship Programme (HSP) is available for truly excellent students from within and outside the EU. These are students who are so talented that Dutch institutions and Dutch education would gain a clear impetus by attracting them. Last year, the portion of the HSP set aside for foreign students was raised from €4 million to €7 million. Apart from the HSP, the institutions have the legal possibility of awarding scholarships themselves to non-government-funded students from outside the EEA. This possibility was referred to in the past as *Kennisbeurzen* [Knowledge Scholarships].¹⁵ Students who come to the Netherlands within the framework of development cooperation may avail themselves of the Netherlands Fellowship Programme (NFP), set up by the Minister for Development Cooperation.

¹⁴ NESOs have been set up in China, South Korea, Taiwan, Vietnam, Indonesia and Mexico. In the months ahead, new NESOs will be opened in Russia (Moscow), Brazil, Thailand and India. Dutch institutes are present in Morocco, Turkey and Syria. In addition, the Ministry of OCW supports research institutes in Egypt, Greece, Italy, Japan and Russia (St Petersburg).

¹⁵ The Knowledge Scholarships were announced in *Koers op Kwaliteit* [Steering a Course for Quality]. The cessation of funding for students from outside the EEA involved an amount of about €50 million. This amount was not cut back. Institutions can continue to use these resources for their internationalisation objectives, including scholarships for non-government-funded students from outside the EEA (but they are not obliged to do so). In the past, it was possible in the long term to redistribute a portion of these resources (€15 million) among the institutions. Given the relatively small amount and the great quantity of administrative work involved in carrying out this redistribution fairly, in early 2008 I decided to drop the idea of redistribution.

Obviously, it is important that foreign students are not disappointed in what they find when they arrive in the Netherlands. As far as education is concerned, this means that I will be focusing on quality. In this regard, I refer to the earlier and frequently mentioned Strategic Agenda for tertiary education, research and science. In the final chapter, I will return to the services with which foreign students have to deal.

Alumni policy

After graduation, alumni are the ambassadors of their former institutions and of Dutch tertiary education. The ISS (Institute for Social Studies in The Hague), for instance, has a large majority of foreign students. This institution has made virtually no investment in name recognition. Mouth-to-mouth advertising by former students has generated more than enough interest. In order to enable the Dutch labour market to benefit from international graduates, we have implemented incentive measures to attempt to retain some of the alumni (as long as they meet the legal requirements as set out in the Modern Migration Policy). Thus, they can contribute to our knowledge economy. In collaboration with Nuffic, the Ministry of Education, Culture and Science (OCW) will further elaborate the alumni policy.

Orientation of institutions

The agendas of trade associations of the universities and talks with these associations have shown that they, and the institutions, are active in making institutions more internationally oriented. The philosophy expressed in *Koers op Kwaliteit* [Steering a Course for Quality], that the policies of institutions should focus more strongly on internationalisation, is taking shape. I would like to further facilitate this process, as indicated in the strategic agenda. In addition to attracting students, international orientation will be further developed by making joint degrees and offshore programmes possible, improving the international experience of teaching staff and continuing the implementation of the Bologna agreements.

Joint Degrees

Almost all Dutch education institutions work in and with various international networks. Collective programmes are often offered within these networks. The student receives a joint qualification from the two institutions. Dutch institutions are at a disadvantage here because they cannot offer such joint degrees. To give them the chance to make the right decisions in this regard and further expand these networks, joint degrees will be provided with a legal basis. The paper *Naar een volwassen bachelor-masterstructuur* [Towards a Fully-fledged Bachelor's-Master's Structure] that was sent to the Lower House on 31 October 2008, states that for international cooperation in joint degrees, institutions will be allowed more flexibility in determining the course duration of the master's phase. Currently, one year of financing is available to students following a master's programme. The Minister can designate programmes as carrying 120 credit points for which two years of financing is available for students. Financing for a programme of 90 credit points will be possible for international joint degrees, as with master's programmes of 60 credit points (one year) the course duration is often an obstacle in international cooperation. The duration of master's programmes often varies from country to country.

Offering programmes abroad

Dutch institutions are operating on an ever-changing playing field. The back garden of institutions is no longer the Netherlands but Europe, and for some, the entire world. Consequently, a number of institutions are offering programmes abroad, or are planning to do so. Under current legislation, Dutch institutions may not award recognised Dutch degrees and certificates abroad. I would like to propose

that this becomes possible in the future. To this end, an accreditation procedure will have to be completed so that it is clear that the qualification meets the quality requirements. Students who study at Dutch institutions abroad cannot be registered for public funding.¹⁶

The international experience of teaching staff

An international profile demands an internationally-oriented staff. Supplementary to the in-service training budgets, European mobility grants are available for teaching staff. Thus, in 2007, almost 700 teachers received an Erasmus allowance. Many institutions indicate that they are still finding it difficult to develop staff mobility. The quality of lecturers and the further development of staff is essentially a matter for the institutions themselves, but given the difficulty the institutions have in expanding international staff mobility, I will develop a pilot project aimed at adding impetus to the acquisition of foreign experience by lecturers. A mobility programme will be set up allowing lecturers to teach abroad for a limited amount of time. To this end, I would like to reserve €8.6 million, supplementary to the funds mentioned in the strategic agenda, spread across the coming 4 years. Just as in the HSP, for example, the selection will be focused on excellence. This aspect has not yet been mentioned in the strategic agenda but I believe it is important to develop it. In the case of the universities of applied sciences, together with the HBO-raad, we will examine whether this can be implemented as an international variant of RAAK (Regional Attention and Action for Knowledge Circulation). In this way, both the international internships of students (cf. p. 5) and strengthening the international experience of lecturers by means of knowledge circulation with the recipient occupational fields, would receive a stronger focus. Moreover, the quality of the exchange of lecturers would rise because the exchange would be embedded in more sustainable, international cooperation relationships.

In addition, international competition demands a more service-oriented attitude from staff. To be able to assess all the developments, the Ministry of OCW will closely monitor the experiences and opinions of international students, to thus enable the institutions to examine their policy in this light and amend it where necessary.

Agreements in the Bologna Declaration

The achievements of the Bologna process have ensured that Europe has positioned itself and that the world is looking with interest at European tertiary education. Precisely for this reason, I believe it is important that we continue to implement the original agreements in the Bologna Declaration. These agreements contribute to the international qualitative competitive position as well as the international transparency and mobility of tertiary education. Quality, transparency and mobility are therefore also the three aspects I will be focusing on at the ministers' conference of Bologna signatory states in Leuven/Louvain-la-Neuve, in April 2009.

Strengthening the quality of tertiary education in Europe and mutual European recognition of accreditation has an effect on Dutch institutions and this effect will increase in the future. The quality these institutions deliver will then be visible across borders. If, in addition, the institutional diversity becomes visible through classification, institutions will have a picture of which institutions are their peers and will be able to make comparisons. In this way, institutions can add focus to their profile. A good classification can, moreover, form the basis for good rankings. As far as I am concerned, quality and transparency are a prerequisite for the mobility of students and staff as well as important in

¹⁶ As far as student grants and loans are concerned, Dutch programmes abroad are considered to be foreign programmes. The usual arrangements for transferring Dutch student financing apply.

attracting students and entering into partnerships with other institutions. I am convinced that in this way, excellent researchers, students and staff will get together as a matter of course.

International Education (IE) Institutions

The Netherlands has five international education (IE) institutions (IHS, ISS, ITC, MSM, UNESCO-IHE). Internationally, they have built up a good reputation regarding the strengthening of teaching capacity in developing countries. The recent integration of the IE institutions into the academic education sector provides a new and stronger framework for the implementation of the IE institutions' mission. It supports the Dutch research universities' own responsibility to contribute to development issues and capacity development. In the future, we will continue to add the resources of the IE institutions to the budget of the universities involved, earmarked for official development assistance (ODA).

III. Brain circulation

In the battle for the best and the brightest, it is of great importance to keep up with the best in the world. The Netherlands is standing its ground but the internationalisation of research is increasing and international competition will become stronger. Moreover, the accompanying pressure on scientific top talent will become greater. The labour market for researchers is becoming more and more international. Mobility is constantly increasing. In a report published in March 2008, the Netherlands Observatory of Science and Technology (NOWT)¹⁷ noted that the Netherlands is an exporter of researchers. This means that we are losing potential talent. In addition, the Netherlands appears to be insufficiently attractive for foreign researchers and Dutch researchers who travel abroad are not quick to return. This development gives cause for concern. A solution could be to develop an international talent policy for researchers, the starting point of which should be a healthy, international 'brain circulation'. The Ministry of OCW will devote more attention to:

- international cooperation among researchers;
- supporting researchers in international fund raising;
- ensuring that researchers can be mobile;
- improving knowledge migration rules and regulations;
- attracting additional PhD holders and candidates.

International cooperation between researchers

'Brain circulation' expands when researchers across the whole world cooperate with one another. The researchers themselves know best who has expertise in a given field. The quality and the network of researchers is the largest magnet for talent. Therefore, it is good for Dutch researchers to expand their networks through international cooperation. The role of the government in this is limited. There are three forms in which the government contributes to international cooperation among researchers:

- bilateral cooperation,
- European cooperation, and
- intergovernmental cooperation.

The government supports bilateral cooperation when researchers or institutions have difficulty gaining access to other countries. In such instances, the government can play a facilitating role through Memoranda of Understanding (MOUs). China is a good example of this. Currently, we are working with China on a new, collective programme in which the Netherlands (OCW/ Netherlands Organisation

¹⁷ NOWT, *Wetenschaps- en Technologie indicatoren 2008* [2008 Science and Technology Indicators], Ministry of OCW, March 2008, p. 98.

for Scientific Research [NWO] and the Royal Netherlands Academy of Arts and Sciences [KNAW]) and China (MOE/MOST/CAS/CASS/ NSFC¹⁸) participate with a range of organisations. This programme is aimed at creating more in-depth cooperation, improving the quality of the collective research and generating collective scientific publications. The Netherlands is investing €2.25 million in this revised programme, with effect from 2009.

We are currently looking at whether, where desirable, NESOs and Technical Scientific Attachés (TWAs in Dutch), for example, could be reinforced by science officers who specifically focus on researchers and possibilities for cooperation in research. This idea will initially be elaborated for research cooperation with China.

In the European Council, the government negotiates about the allocation of European funds for the strengthening of European research cooperation. The European Commission implements the European Framework Programme for research and technology, the main task of which is to bolster research cooperation within Europe by financing concrete research cooperation projects. The next paragraph will deal with this in more detail. In addition to this concrete programme, in Europe a debate is in progress about improving the harmonisation of the research policies of European Member States. In 2000, the European Commission launched a wider discussion under the title The European Research Area (ERA), primarily focusing on combating the fragmentation of the research policy of Member States. In April 2007, the Commission published the Green Book European Research Area. Subsequently, in 2008, five new reports were published aimed at strengthening research cooperation in Europe. My standpoint in the debate will mainly be the need for improving the quality of research, realising large research facilities and improving the mobility of researchers in Europe.

Synergy and creating mass through intergovernmental cooperation can add considerable value. The Netherlands is therefore a joint founder and has for many years been a member of large intergovernmental research organisations such as the European Council for Nuclear Research (CERN), European Molecular Biology Laboratory (EMBL), European Molecular Biology Conference (EMBC), International Thermonuclear Experimental Reactor (ITER), European Organisation for Astronomy Research (ESO) and the European Space Agency (ESA). Such memberships go hand-in-hand with financial obligations (cf. financial chapter), but they offer researchers access to the research facilities they need to make scientific progress and which, in terms of size, cannot be funded by one country alone. The concentration of researchers within these research organisations delivers considerable scientific added value. Within these organisations, the Netherlands is active in the form of scientific and administrative participation.

Supporting researchers in international fund raising

The major international research fund for Dutch researchers is the European Framework Programme for Science and Technology mentioned above. Over the past ten years, the budget of this research programme has grown from €3 billion to €7.5 billion annually.¹⁹ For many years, the Dutch participants in this programme (60% of whom consist in research universities; the remainder consists in TNO, other research institutes and companies) have received relatively more funding from the European

¹⁸ MOE: Chinese Ministry of Education, MOST: Chinese Ministry of Science and Technology, CAS: Chinese Academy of Sciences, CASS: Chinese Academy of Social Sciences, NSFC: National Natural Science Foundation of China.

¹⁹ The Fifth Framework Programme had a budget of €12 billion for 4 years (1998 – 2002), the current Seventh Framework Programme has a budget of €53 billion for 7 years (2007 – 2013).

Framework Programme than the Dutch state contributes to the EU budget. In terms of budget, these European research projects deliver significant amounts.

Table 1a: Relative contribution and revenues from FP5, FP6 and FP7

	NL contribution to the FP budget	NL revenues from the FP budget	Difference
FP5 (1998 – 2002)	6.0%	6.7%	0.7 percentage point
FP6 (2003 - 2006)	5.3%	6.3%	1.0 percentage point
FP7 (2007 – to date)	5.0%	6.6%	1.6 percentage points

Table 1b: Absolute contribution and revenues from FP5, FP6 and FP7

In millions of euros	NL contribution to the FP budget	FP budget	NL revenues from the FP budget
FP5 (1998 - 2002)	€763	€12,720	€852
FP6 (2003 – 2006)	€1,013	€19,113	€1,204
FP7 (2007 – 2013)	€2,663	€53,272	not yet known, estimate (based on 6% return) € 3,000

The ambition is to continue our return of over 6% (cf. table) in the years ahead. Given the growing number of participating countries and the increasing budget of the programme, this will be a difficult task. I will allocate resources to encourage the participation of Dutch researchers in the European Framework Programme and thus support international research cooperation. These resources will be for SenterNovem/EC Liaison, which acts as the National Contact for the European Framework Programme. SenterNovem/EC Liaison provides information, training courses and financial and legal advice to researchers for submitting research proposals. In addition, the institutions have been recommended to appoint a so-called liaison officer to reap maximum benefit from the European programme. Moreover, the Ministry of Education, Culture and Science (OCW) is financing the first five years after establishment (up to and including 2010) of NetHER (Netherlands House for Tertiary Education and Research). In this way, the position of our tertiary education and research institutions is bolstered in Brussels.

To obtain more insight into the impact of this European programme on the Dutch knowledge economy, the Ministries of Economic Affairs (EZ), OCW and Agriculture, Nature and Food Quality (LNV) will be performing a study this autumn. In addition to the content, the budget and the experiences of the past, the findings of this study into the impact of the European programme could contribute to determining the Dutch position in negotiations regarding the eighth European Framework Programme. These negotiations will commence soon.

Ensuring that researchers can be mobile

The Netherlands already has the necessary instruments in place to encourage and promote mobility. For instance, mobility scholarships are available (NWO Rubicon mobility grants and the grants of research universities), the *Vernieuwingsimpuls* [Innovational Research Incentives Scheme] has been opened to foreign talent and Dutch researchers participate actively in European programmes such as Marie Curie activities and ERC grants.

In addition to these incentive instruments, measures are also needed to remove the barriers to mobility encountered by researchers. With this in mind, the European Commission has set up a European Partnership for Researchers. The Member States are expected to elaborate the items set out in the paper into their own action plans to improve their policy and add impetus to the movement of researchers within the EU. The items contained in the plan are:

- transparency in the filling of job vacancies and the portability of grants (also across borders);
- removing barriers to social security (supplementary pension);
- attractive terms and conditions of employment for researchers, and

- opportunities for training and skills development for researchers.

I believe this is a good initiative. There are, however, questions about the issue of subsidiarity and I would particularly like to cooperate at the European level, where a clear European added value can be realised. Working from the action plan, I will identify the obstacles to the international mobility of researchers more clearly. These obstacles are most likely in the areas of social security and pensions. Where possible, I would like to cooperate with other ministries and examine with other Member States how we can increase mobility among researchers.

Attracting additional PhD holders and candidates

I would like to attract more talent, given the fact that in international terms the Netherlands is lagging behind in recruiting young talent, while it is precisely young talent that is needed to meet the demands of a knowledge intensive society. I therefore support the Innovation Platform in its aim of attracting more international top PhD candidates and PhD holders to the Netherlands, together with the VSNU, KNAW and the NWO.

IV. Improving the relocation climate for education institutions and research institutes

This will make the Netherlands more appealing to foreign researchers. In 2007, commissioned by the Ministry of OCW, Dialogic carried out a study into the satisfaction of foreign scientists with living and working in the Netherlands.²⁰ In general, foreign researchers are satisfied, but the bureaucratic red tape involved in coming to the Netherlands needs to be reduced and the HRM policy of research universities needs improving. To improve the relocation climate in the Netherlands for foreign talent, the Ministry of OCW will work towards:

- improving the rules and regulations for knowledge migration;
- reducing the bureaucratic red tape for entering the country and providing good support;
- realising a high-quality research infrastructure in the Netherlands and
- providing good programmes and training for researchers.

Improving knowledge migration rules and regulations

The Netherlands seems to have insufficient appeal for foreign talent. This has to do with practical barriers for foreign researchers regarding our immigration policy, particularly obtaining visas and permits. At the inter-ministerial level, actions have been taken at both the policy level and the implementation level to amend the entry regulations and procedures for 'knowledge workers' and to arrive at a more inviting policy for knowledge migrants. This appears to be successful, although at the implementation level, the fact that not everyone is sufficiently aware of the new regulations and the related practical aspects still leads to problems. In addition, at the European level, work is being done on a blue card for highly-qualified foreign knowledge workers. Through these initiatives, the Netherlands is working towards a positive image as a relocation country for talent.

The red carpet: improving services

Although both foreign students and researchers in the Netherlands are satisfied with the academic facilities, they are often unhappy about the amount of bureaucracy and the way in which they are received. In the long term, the Netherlands will not be able to continue in this way. I would therefore like to investigate whether the process of registering at institutions, with the municipality for the

²⁰ Dialogic, *Buitenlandse wetenschappers over wonen en werken in Nederland* [Foreign researchers talk about living and working in the Netherlands], commissioned by the Ministry of OCW, 15 May 2007.

Municipal Personal Records Database, with the IND, with the Tax Office for a Resident's Service Number and with the Information Management Group (IB-Groep) if applicable, can be simplified. I would like to work with Nuffic on gathering best practices and making them available to research universities and universities of applied sciences. Moreover, the Ministry of OCW has commissioned a study into the motivation and experiences of students. The outcomes of this study will provide further insight into the steps to be taken. I would like to take these steps together with the trade associations. To this end, I will make €2.8 million available in the coming 5 years.

Research facilities

A good research infrastructure is important for the competitive position of our national research. For this reason, an additional budget of €63 million was made available for large infrastructural facilities in the strategic agenda for this cabinet term. These funds will be added to the NWO budget. Moreover, as decided earlier by the cabinet, an additional one-off investment of €78 million (FES resources) will be made in large-scale research infrastructure projects.

At the European level too, the creation of European research infrastructures is being discussed. This is the responsibility of the European Strategy Forum on Research Infrastructures (ESFRI). The Netherlands supports this European initiative and is investigating what is of importance to the Netherlands within this forum. In this regard, the Van Velsen Committee has drawn up a national roadmap. This roadmap shows both national and international priorities. Where our national priorities are in accordance with the priorities of the ESFRI, we will look at whether the Dutch contribution to these international priorities can be financed using funds earmarked for the NWO.

Graduate schools and the Vernieuwingsimpuls [Innovational Research Incentives Scheme]

To raise the quality of programmes for researchers, the strategic agenda proposed setting up graduate schools according to the American model. I made this choice because this model provides the best PhD candidates considerably more opportunities to direct their own research career. They can choose the best graduate school, within that school they can select their own research subject and also their own supervisor. Moreover, the educational aspect is considerably stronger, in part due to working with groups of PhD candidates who are in the same year of their study. This greater freedom would increase the attractiveness of the Netherlands for young foreign research talent. As announced in the strategic agenda, the NWO *Vernieuwingsimpuls* has been expanded and can now be accessed by foreign researchers who wish to come to the Netherlands. Not only does this instrument attract talent, it also contributes to a significant degree to the high score of Dutch researchers in the comparative European instrument for European Research Council (ERC) grants. Moreover, the Netherlands appears to be capable of attracting foreign researchers through these grants.

Financial paragraph

Tertiary Education Internationalisation Financing

Current policy

(X 1,000 euros)	2009	2010	2011	2012	2013
• Huygens Scholarship Programme. Excellence in education: talent at home and abroad (HSP)	11,175	10,156	10,156	10,156	10,158
• Dutch Institutes Abroad (NIBs), Netherlands Education Support Offices (NESOs), Beeldmerk	6,966	6,966	6,966	7,116	7,116
• Libertas Noodfonds for international emergency aid activities (LN)	1,000	1,000	1,000	1,000	1,000
• International partnerships and scholarship programmes	2,277	2,277	2,252	2,252	2,252
• Nuffic	8,786	9,792	9,787	9,787	9,785

Intensification

(x 1,000 euros)	2009	2010	2011	2012	2013
Dutch student mobility					
Work placement fund	2,000	2,000	2,000	1,000	1,000
Improving the international positioning/ orientation of institutions					
Improving staff mobility	3,000	2,500	2,500	600	0
Improving the Dutch relocation climate for education/ research					
Improving service provision	0	1,000	1,000	600	200
Total	5,000	5,500	5,500	2,200	1,200

Financing of the Research and Science Internationalisation Policy

In total, the Ministry of OCW invests almost €80 million annually in membership fees for international research organisations, SenterNovem/EC Liaison and bilateral cooperation to facilitate and stimulate international research partnerships. By being a member of international research organisations and through the agreements signed, OCW is tied to a financial contribution. Together with the Ministry of EZ, other ministries and the European Commission, the Ministry of OCW finances the work of SenterNovem/EC Liaison, which supports Dutch researchers in submitting research proposals to the European Framework Programme. This investment in EC Liaison (annually some €3.5 million, of which OCW's contribution will grow to €390,000 by 2013) is delivering about €2.6 billion in research revenues to research institutes during the Seventh Framework Programme.

In addition, I am investing in the quality and appeal of Dutch research. These investments are set out in the strategic agenda, 'The Greatest Good'. In this context, this internationalisation agenda once again makes an explicit reference to the resources for large infrastructural research facilities (€63 million in this cabinet term via the NWO and a further €78 million through the FES resources), the expansion of the *Vernieuwingsimpuls* and the plans for graduate schools following the American model.

Current policy for international research cooperation:

International research organisations	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
CERN	31,535	31,535	31,535	31,535	31,535
EMBL	3,950	3,950	3,950	3,950	3,950
EMBC	724	724	724	724	724
ESO	6,500	6,500	6,500	6,500	6,500
ESA	32,732	32,732	32,732	32,732	32,732
Total	75,441	75,441	75,441	75,441	75,441
SenterNovem/EC Liaison	340	355	365	380	390
Bilateral cooperation					
Bilateral cooperation with China	2,250	2,250	2,250	2,250	2,250
Bilateral cooperation with Indonesia	1,800	1,200	1,800	1,400	1,400
Bilateral cooperation with France	140	140	140	140	140
Total	4,190	3,590	4,190	3,790	3,790
 General total (x 1,000 euros)	 79,971	 79,386	 79,996	 79,611	 79,621