

Swiss Position on the European Commission's Green Paper "The European Research Area: New Perspectives"

The Green Paper "The European Research Area: New Perspectives" of the European Commission launched a broad consultation on the future of the European Research Area (ERA) which contributes to the achievement of the goals of the Lisbon strategy. Switzerland welcomes the openness in which the existing problems and barriers for the further development of the ERA are addressed.

Many of the elements mentioned in the Green Paper have been the object of recent discussions on the ERA. Switzerland is actively involved in the setting up of the ERA through its participation in the EU research framework programmes and its membership in the relevant European and international research organisations (represented in the EIROforum) and initiatives and is strongly willing to continue to do so. We therefore take the opportunity of this position paper to recall our priorities in the European Research Area and to make suggestions on the directions to take.

This position of the State Secretariat for Education and Research selects some specific points and is based on a broad consultation of the relevant government bodies in research policy.

General remarks on the Green Paper

The analysis of the Green Paper shows that, after seven years of close collaboration, several of the requirements mentioned for establishing a full-fledged ERA¹ have not yet been fulfilled. This could mean that a) the instruments chosen have not been the right ones, b) there has not been enough funding available to achieve the aims, c) there exists a limit of what is feasible with the instruments chosen or d) the political will is missing.

Switzerland continues to underline that the main goal of the ERA should be to increase the attractiveness of Europe to the best researchers world-wide by keeping *scientific excellence* as the first selection criteria for any support or funding. In this sense, Switzerland considers that more *competition* is needed by enlarging the number of scientists who can compete for the same funds, as is being done in the European Research Council (ERC).

¹ Communication from the Commission "Towards a European research area" (COM (2000) 6 final)

The best national researchers do not only have to collaborate, but also to compete with the best researchers of other countries. Such competition should not be limited and restricted by an increased pressure for coordination.

In this respect, fragmentation (the keyword in the discussion about the ERA) is basically not an issue of research being carried out at too many places but mainly of lack of direct competition: Europe must create one big pool for competing scientists rather than too many small national pools.

The fragmentation of the ERA is mainly due to its complexity. Thus it doesn't need more coordination, but more simplification.

Switzerland considers that *innovation* plays an essential role in creating the ERA. However the issue of innovation is only marginally mentioned in the Green Paper. In our view it is important that technological and knowledge transfer issues be fully addressed. The Commission should lead in

showing how innovation in the context of EU-research can be tackled in a common approach of the main actors involved. Although we welcome the setting up of the Competitiveness and Innovation Framework Programme (CIP) as a good initiative in this sense, the separation of the seventh research framework programme and the CIP as well as the lack of integrating innovation in the new perspectives of the European Research Area could send out a wrong signal to its stakeholders. Ideas for best practices of all aspects

of innovation should be addressed as a reference for similar activities in the ERA on national, regional and local levels.

Any initiative should also take into account the innovation impact expected by the planned European Institute of Technology (EIT), reflect on its added value and link its dynamic to other EU-initiatives for stimulating innovation.

Realising a single labour market for researchers

Mobility

Quality of research is increased by the **mobility** of people. The need for a more effective European framework to improve the conditions for enhanced mobility is evident. Switzerland considers that more emphasis should be put on world-wide mobility and especially on cross-sector mobility between industry and academia.

support given to the researchers wishing to go abroad.

Facilitating the free circulation of researchers with a proven background is important and therefore instruments such as scientific visas should be implemented throughout the whole European Research Area, including the Associated States, as well as on a global scale.

Social Systems and Immigration Legislations

The different **social systems and immigration legislations** of the European countries doubtlessly constitute barriers against the free movement of researchers within Europe and for the exchange with researchers on a world-wide level. Even if free circulation of people is achieved within Europe, administrative complications can be very time-consuming or even discouraging. Having a bilateral agreement for free circulation with the EU Member States, Switzerland encourages the development of information and administrative

The specific **education and training needs** of researchers could be addressed within the Bologna process, notably when redesigning the PhD programmes. The Bologna process could also address the streamlining of the training track to the doctoral level for exceptionally gifted students, e.g. by giving to a small selection of the most promising bachelor-level graduates the possibility to directly go to PhD programmes. This would allow researchers to complete their training courses at an earlier age and raise their flexibility.

Developing world-class research infrastructures

Support of Large Infrastructure

Concerning **large infrastructures**, we are of the opinion that one has to distinguish between existing research infrastructures funded, built and operated today in an international context by collaborating countries and those which are now established on the basis of regional, national or bilateral efforts. In the former ones the role of the

EU and the EC is limited to project co-funding and competitive infrastructure support. The latter ones could be supported in the context of an EU initiative whereby the EU takes also the funding lead for upgrading and operating the facility. Such an action should be discussed beforehand in the European Strategy Forum on Research

Infrastructures (ESFRI) and inserted - if qualified - into the ESFRI roadmap.

In any case, and independently of the addition of new projects to the ESFRI roadmap, the EU and Member States should lead a close dialogue on what is the added value of the actions undertaken by either of them.

Governance

Regarding the **governance** of (large) research infrastructures operated already in an international context, we are of the opinion that the governing and deciding partners must remain the individual Member States of the organisation

in question. A close dialogue with the EC should be sought, permitting to exploit all possible synergies. The EC interaction with such international research organisations would then concentrate on funding (either at project level or for development support), on offering political help and support where necessary, and possibly on representing countries which are not members based on their requests.

International research infrastructures should be governed by the States supporting them. The EC could play an important role in co-funding and finding synergies among the infrastructures.

Strengthening research institutions

Networks of Excellence

The Green Paper on ERA assesses the **Networks of Excellence (NoE)** as a basis for long-term integration and transnational partnerships. We are of the opinion that the added value of virtual centres has not yet been proven and that NoE are facing considerable problems to fulfil their task of creating stable integration. On the other hand, evidence shows that the creation of institutional networks of excellence is successful when done on the basis of geographical proximity and existing university-industry collaborations, i.e. in the form of **innovation clusters** and in the logic of transregional development.

The innovation driven Knowledge and Innovation Communities (KIC) for the EIT should be developed in this logic and constitute a more attractive alternative to the NoE.

It is important to explain at an early stage and repeatedly to ERA stakeholders what distinguishes the planned KIC from existing instruments such as NoE or newly created initiatives such as Joint Technology Initiatives (JTI).

Switzerland has an active interest in and outstanding competencies for a participation in the EIT. The high ranking of Swiss institutions in the university sector and the strong involvement of Swiss industry in R&D could contribute in a significant way to a successful EIT and thereby to the integration of innovation aspects in the European Research Area. Attention must be given to the legal framework set up for the EIT and other new initiatives, which should allow the participation of Associated Countries. Considering Switzerland's integration in the European Research and Education Area, the establishment of a close link between the EIT and Switzerland would be a coherent step.

European Institute of Technology

By setting up the **European Institute of Technology** it is important to ensure a substantial support from industry at an early stage in order to assure the proper functioning of the public-private-partnership (PPP) foreseen in this structure.

European Research Council

Switzerland welcomed the establishment of the **European Research Council (ERC)** to support on the European level basic research and to promote competitiveness amongst the researchers based on the sole criteria of excellence. Frontier basic research is the core of a successful research system. It is therefore a most valuable tool to

deliver scientific and economic added value and thus contribute in achieving long-term objectives of the ERA and should be further strengthened as such.

We consider an independent structure of ERC with a lean management and a review system based solely on quality of paramount importance to achieve a competitive system.

Therefore we would like to stress the importance of a timely implementation of an ERC structure fully independent from the European Commission.

Universities and Research Institutions

Autonomy is a key element for **universities and research institutions**. It allows them to fully play their role in science and society. We consider that the development of common principles for the management of universities and shared criteria for the funding of research institutions are not compatible with the principle of competition and are a step in the wrong direction. Instead of establishing common principles that might not properly fit all universities and research institutions throughout the EU and interfere with national competences, competition should be encouraged between the national models. Allocation of EU resources to the most performing

institutions could lead to strengthen the most efficient models. Assessments (scoreboards, “EU-barometers”) should be developed on common principles in order to allow comparisons of institutions on an EU-level (e.g. a European university ranking established by the EU).

Autonomy should be guaranteed to universities and research institutions, whereas their assessment could be based on EU-wide common principles.

Charter and Code of Conduct

We support the recommendations presented in the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers (C&C) as a basis for improving working conditions and making research careers in Europe more attractive. The C&C is also a valuable tool to establish quality standards in research institutions. Swiss institutions are therefore strongly committed to its implementation. Efforts should be made at EU-level in order to promote a wide acceptance and establishment of these standards.

Sharing knowledge

Open Access

Open access (OA) as precondition for efficient sharing knowledge should be achieved through the development of common principles together with the publication industry based on the experience of organisations which already use open access publication. The Swiss National Science Foundation has introduced the principle of OA recently whereas CERN has already been working along this line.

Intellectual Property Rights

The development of a proper **Intellectual Property Rights (IPR) system** supporting innovation as well as researchers and the fruit of their work is an important element for a future ERA. After the

failed attempt to create a European patent, alternative ways to harmonise IPR structures on a European level should be explored by the EU as well as the European and international research and IPR organisations.

Science communication should be further developed into a dialogue with society and individuals (as citizens) and become *de facto* an integral part of science policy.

Optimising research programmes and priorities

Switzerland considers that the *distinction between investigator-driven research and society driven research* made in the Green Paper is highly relevant in the discussion on optimising research programmes and priorities. For the development of the ERA both approaches are important.

Coordination among National Programmes

Switzerland supports the aim of improved *coordination among national research programmes*. In our opinion collaboration between research funders and programme managers across Europe should be encouraged on a voluntary basis as bottom-up initiatives. Switzerland has been involved in 18 ERA-NETs in FP6. Experience has shown that an important benefit drawn from participating in ERA-NETs is the possibility of exchange among partners of different countries.

Successful collaboration, such as coordination between different programmes, common research agendas or joint calls, has evolved where it has been considered appropriate. Administrative tasks however should be reduced as much as possible.

As organisations funding or managing research are often short of staff, ERA-NETs should have the option of subcontracting part of the work. In addition, the Commission should offer possibilities to share experiences of different ERA-NETs, e.g. by generating a common evaluation process or eligibility criteria. We would welcome if the Commission could provide information on best

practices and “general principles” of different activities often implemented in ERA-NETs.

International Organizations and new Initiatives

Strong emphasis should be put on *reinforcing and using the strengths of the existing international organisations and initiatives* (CERN, COST, EMBL, EMBO, ESA, ESF, ESO, ESRF, Eureka, ILL, ITER). These intergovernmental organisations and initiatives are very active partners in the ERA offering leading research infrastructures as well as excellent instruments for transnational networking and collaboration. New initiatives for co-ordinating research should be established taking into account the ideas of the EU Member States as well as (more systematically) the specific needs of Associated Countries like Switzerland.

Rules of participation in the new initiatives and their legal structures should be shaped in a way which does not prevent the Associated Countries and their research communities from participating fully.

This should particularly apply to initiatives co-financed under FP7, e.g. initiatives under Article 169 and 171 of the Treaty, to which Associated Countries automatically make a financial contribution through their share in the budget of FP7.

Opening to the world

Worldwide Cooperation

Switzerland considers that *worldwide cooperation* will benefit to European research in an important way if its actions are directed towards an exchange of truly excellent scientific results and top researchers. Parallel to exchanges between existing centres of innovation, the cooperation with developing (building up

capabilities) and transition countries (opening up markets) should receive a higher priority.

Existing national bilateral research cooperations should be taken into account.

Switzerland has recently established a strategy for bilateral cooperation in research that was presented to the CREST international S&T strategy working group. The Swiss strategy

focuses on several priority countries, having a high scientific and technological potential and corresponding to foreign policy criteria as well as to economic collaboration criteria. A network of scientific counsellors and scientific consulates financed both by private and public funds has been set up in these countries in order to foster bilateral collaboration in the fields of research, education and mobility. Other countries follow similar models.

Open Method of Coordination and Common Priorities

The *open method of coordination* used in CREST (e.g. in the international S&T strategy working group) constitutes in our view an important instrument for establishing a dialogue between the EU, its Member States and the

Associated Countries and for seeking best practices of bilateral S&T cooperation.

The establishment of an international S&T policy in Europe, based on *common priorities*, is still at the very beginning. However, when developing common priorities and streamlining the international S&T policy of the EU, due account should be taken of the specific scientific relations many European countries have developed and maintained with certain countries or regions as well as of the existence of successful “niche” strategies.

Safeguarding this variety, taking advantage of diversity and exchanging information on specific relations and niche strategies could be more rewarding for the European Research Area than to strictly streamline international S&T policy.