The Swedish Government’s Response to the Green Paper about a Common Strategic Framework for EU Research and Innovation Funding

May 2011
Introduction

The Swedish Government’s response to the green paper builds on an extensive national consultation with a large number of stakeholders representing research councils, academia, public authorities, research institutes, businesses and regions.

The SE government has in December 2010 presented an initial position on the next EU programme for RDI in a discussion paper sent to the Commission. SE has also presented preliminary views on the Competitiveness and Innovation Programme (CIP) in a non-paper delivered in March 2011.

The purpose with this SE response on the green paper is to complement and develop the views already presented.

The expenditure side for the next Multi Annual Financial Framework should be modernised within the framework of a reduced budget. Spending on research and innovation is a priority in the EU2020 strategy and should be increased if existing expenditure is freed-up in other policy areas.

General issues regarding a Common Strategic Framework

1. The Swedish government is positive to the proposal of a Common Strategic Framework (CSF) for EU research and innovation funding. Complementarities, synergies and interactions between funding for research and innovation are crucial factors for success.

2. The CSF should have an important role, and a clear impact logic, within the totality of EU-actions in the next financial perspective.

3. The CSF should be the major instrument to implement the Innovation Union and to contribute to the goals and ambitions inherent in the EU2020 strategy, as well as to other relevant flagship initiatives.

4. In order for EU to reach the goals of Europe 2020 and the Innovation Union, the future CSF instruments should address the whole innovation cycle and embrace both technological, non-technological, industrial and social innovations.

5. CSF should only intervene where there is a clear European added value. The council and the European Parliament could, to guide the work process with the CSF, agree on a set of criteria based on earlier evaluations and impact assessments.
6. A holistic and cross-sector governance perspective for the regional, national and European level should be applied, with specific relevance to global competitiveness, attractive business environments and labour markets. The CSF should be designed to facilitate better interaction and synergies with the Structural Funds and to strengthen regional development, e.g. through smart specialisation.

7. The relation between education, research and innovation must be developed and emphasized. Thousands of students leave universities in each member state every year and should be equipped with the latest knowledge from RDI. That is, the existence of newly examined students should be an important tool for knowledge transfer from academia to society and to business. Life long learning as a concept must also be integrated in the knowledge triangle. Other bridging activities intended to facilitate transfer of knowledge from and to major research efforts, education and innovation are also important.

8. The main focus for CSF should be supporting transnational collaborative projects. A balance and flexibility concerning project size should characterize this funding. In some cases it could be appropriate to use calls with broader topics to enhance the influence and creativity of researchers and companies.

9. The complexity of instruments within the ERA needs to be reduced. New instruments should only be introduced when really needed. Continued simplification processes through harmonisation of rules and procedures are essential. General national accounting principles should be accepted. The question of the tolerable risk of error (TRE) must be addressed in a pragmatic way.

10. In many areas it makes more sense to talk about a Global Research Area rather than a European Research Area. It is important that the CSF provides linkages with already mature markets as well as emerging markets and new knowledge and innovation hubs outside Europe. The CSF should from the beginning be designed to enable global cooperation, in particular to tackle global challenges. The nature and geographical location of many global challenges also call for increased research cooperation with developing countries. Research policy and development policy can also interact and contribute to e.g. reducing poverty.

11. The funding from CAP should continue to contribute to the modernization of the agricultural sector. Part of CAP could therefore be used for financing RDI-projects. This would increase
the efficiency, competitiveness and sustainability of production within this sector.

12. There should be a balance between, on one hand, projects funded directly from the CSF and, on the other hand, outsourcing to external programmes such as article 185 and JTIs as well as through ERANET and ERANET+. Before the share of these programmes is increased compared with today an impact analysis of existing programmes is needed. Also the implementation of these programmes should be harmonised. The added value of external programmes is to involve stakeholders in the priority setting and mobilise national, regional and private funding.

13. The CSF should work as a facilitator for joint programming. EU-funding could contribute to the progress with the JP-initiatives. In addition, to ensure a well functioning ERA, it is important to ensure that any prioritisation of challenges in the CSF remain well coordinated with the prioritisation process regarding joint programming initiatives.

14. The European Institute of Innovation and Technology (EIT) is an entrepreneurial driven investment institute which aims at innovation impact through the implementation of the Knowledge Triangle. It integrates public and private stakeholders and addresses both societal challenges, as well as increased competitiveness by investing in business output from excellence in research, innovation and entrepreneurship. The specific role and autonomy of EIT should be supported within the CSF, as it encompasses many vital aspects of the research, education and innovation landscape.

15. The development of indicators measuring the output of investment in research and innovation needs to continue.

**Tackling societal challenges**

16. SE supports the green paper’s focus on the societal challenges. They will play an important role both for sustainable development and for strengthening competitiveness. However, a clear definition of what is meant by societal challenges is needed. Otherwise it could be used as a label for everything that different stakeholders wants to prioritise.

17. Societal challenges are also addressed on both regional and national levels and synergies with the CSF are important. The
results from EU-funded research and innovation should contribute to policy development at these levels.

18. The CSF must have the degree of flexibility that is necessary for adjustments of research priorities during the whole program period. What is now identified as societal challenges will maybe not, in a couple of years, be considered as the most important ones.

19. A multidisciplinary approach involving different branches of research will be needed to successfully tackle the societal challenges.

20. The importance of social sciences and humanities (SSH) research for addressing many societal challenges is obvious e.g. through its studies of human behaviours, actions, decisions and social institutions. It is easy to envisage important societal challenges that, by their nature, are predominantly addressed by SSH research.

21. When meeting societal challenges with research efforts, it is important to define and organize these in such a way that already existing knowledge is made available systematically.

22. Involvement of stakeholders in identification and priority setting of societal challenges is fundamental. Participation of industry, public sector, non-governmental organizations etc. is a prerequisite for RDI-projects with high relevance and impact.

23. For stakeholder involvement, the future CSF should use existing structures such as the ETPs. SE believes that also challenges with a more social character need some kind of forum for stakeholder involvement. So called “social platforms” has been tested within FP7 for this purpose, but these have not been evaluated so far.

24. Within the Commission, to guarantee sector specific influence, all relevant general directorates must be involved in the work with the CSF and the societal challenges.

25. Investments in basic research and research infrastructures are not in contradiction with ambitions to address societal challenges. Instead such investments can have the same purposes, but with a longer time perspective.

26. JRC should focus its activities based on a number of criteria, in accordance with what has been proposed in the FP7 interim evaluation. The basic criteria should be: contribution to
knowledge creation for policy support, ERA added value, the uniqueness of the JRC for the activity as well as cost effectiveness.

27. JRC should become a resource for the ERA, not only for the European Commission. The appreciation of JRC and its activities would increase if member states, national authorities and other actors would have the same possibilities as currently the policy DG:s of the commission have, that is, to ask JRC for scientific advice and investigation in different matters. Further, greater visibility of the JRC in ERAC activities would be of benefit for the JRC contribution the ERA. As with the member states, ERAC should be able to ask JRC for advice and consult it on scientific issues.

28. The interest and interaction of citizens and civil society regarding EU research and innovation is of great importance. Therefore the dialogue between the researcher community and the civil society needs to be stimulated within the CSF. A focus on major societal challenges is probably of extra interest for citizens, because these challenges affect everyday life.

29. SE finds the following societal challenges important: Attractive living environments; Demographic changes; Global health threats; Sustainable use of natural resources and biodiversity; Food supply, security and health; Climate and sustainable energy supply; Safety and security; Global competitiveness.

30. In an annex to this paper SE gives examples of sub-challenges. This annex is not a final SE position, but instead a contribution to the coming work of Member States, the Commission and the European Parliament to identify and agree on societal challenges for the CSF.

**Strengthening competitiveness**

31. Strengthened competitiveness for European companies, especially SME:s, must be a fundamental objective of the CSF.

32. Industrial participation in EU-funded RDI needs to be improved for increased impact on European competitiveness. Companies should have an active role in agenda/priority setting to ensure uptake of results.
33. Measures for PPPs and industry-led programs are important. The role of public financing should be focused to collaborative research, demonstration and early phase development.

34. The CSF must effectively enable SMEs to innovate, internationalise and grow through participation in the programmes. SMEs need special consideration, for instance through a fast track and through SME friendly procedures, rules and regulations. The CSF should assist companies, especially SMEs, to turn environmental challenges into business opportunities. The think small first principle should be valid in the CSF, i.e. if the administrative burden in the programmes is fitted to SMEs, then it will fit all companies.

35. Experiences drawn from the process of the Strategic Energy Technology-Plan (SET) should be taken into consideration for future work.

36. Leveraging of other sources of funding has been successful through the instrument Risk Sharing Financing Facility (RSFF) and should continue in the CSF.

37. Demand side measures could be used, for instance through innovation friendly pre-commercial public procurement, with a focus on best value for money.

38. Innovation instruments need development and boost, for instance in the form of demonstration, test beds, proof of concept and other deployment oriented support activities such as linking/bridging activities.

39. Support of key enabling technologies (nanotechnology, advanced materials, biotechnology, production and ICT, including electronics and photonics) and linking them to instruments for stimulating industrial deployment should be included in CSF. Also cognitive science may be relevant as a key enabler.

40. The CSF must assist in unlocking the potential of entrepreneurship and innovation among European citizens, especially women and young people needs to be stimulated.

41. It is important to raise the awareness of Intellectual Property Rights (IPR). The increased focus on innovation requires that greater attention is paid to IPR aspects.
Strengthening Europe's science base and the European Research Area

42. Investments in bottom-up frontier research via the European Research Council (ERC) has been a very important tool for indentifying and supporting the most excellent researchers in Europe. The ERC should remain an important part of the CSF. The possibility to link research results from ERC to innovation instruments should be explored and developed, to better enable exploitation and deployment. The independence of ERC must be preserved and the question whether ERC should be set up as an independent organisation needs to be addressed.

43. The use of research infrastructures is becoming increasingly important for scientific progress and the creation of new knowledge. However, the costs of such infrastructures are becoming more and more expensive. Therefore, investments in research infrastructures are very good examples where European added value and economies of scale could be motivated and created. Such projects must be characterised by good planning, cost efficiency, governance and control. When the decision for EU-funding is taken the EU part of the funding should be in place.

44. European research infrastructures should not be located only in a limited number of larger member states, but also in smaller EU countries. Contribution from the CSF to the construction of infrastructures, not only to the preparatory phases, must be considered. It is also important that the structural funds can be used for the same purpose.

45. The mobility of researchers is a cornerstone for the development of ERA and the current mobility program in FP7 is much appreciated. Support to young researchers is important for the supply of future researchers with international experience. A well-designed mobility program within CSF makes it possible to connect the education part of the knowledge triangle to research and innovation, for example through the use of Master- and PhD-instruments, but also via industry-academia and public sector-academia exchanges.

46. Funding of research and innovation from the Structural Funds is already substantial, in fact larger than that from FP7. It is important for the regional, national and EU level that this funding can be used in a strategic and efficient way to complement funding from CSF. This may improve the links between research, innovation and other stages, such as market introduction and commercialisation.
47. There is a huge potential in building up RDI excellence in all 27 member states. Strengthening Regions of Knowledge by effective links to SF is a possible way of interaction. Coordination of funding from SF with thematic areas in CSF could be an efficient alternative for capacity building in regions with less or underdeveloped RDI. The excellence criteria must, like in FP7, guide decisions of funding from the CSF.

48. The CSF must adequately address gender equality and the underrepresentation of women in EU financed RDI. The current situation means that human resources are ineffectively used within the EU. Therefore, monitoring and evaluation of the EU RDI instruments should include gender issues. Gender disaggregated data is a pre-condition for such work. Efforts to reach the target of 40% female participation in all evaluation and advisory committees are required.

49. Finally, greater involvement of young talents from across Europe, and the rest of the world, is necessary in order to strengthen Europe's science base.
ANNEX

Examples of societal challenges

In this annex SE gives examples of societal challenges and sub-challenges for the coming CSF. This is not a final SE position, but instead a contribution to the coming work of Member States, the Commission and the European Parliament to identify and agree on societal challenges for the CSF.

- **Attractive living environments**
  - Sustainable cities
  - Resource efficient transport systems
  - Fast, reliable, safe and secure ICT and mobile communication

- **Demographic changes**
  - Active and Healthy ageing
  - Age-related diseases and illnesses
  - Improved sustainability and efficiency of social and health care systems including e-health

- **Global health threats**
  - Antimicrobial Resistance
  - Pandemics, zoonoses and other communicable diseases
  - Non-communicable diseases affecting public health
  - Pollution/Poison free environment

- **Sustainable use of natural resources and biodiversity**
  - Recycling and resource efficient exploitation of natural resources
  - Renewable raw materials and bio economy
  - Replacement of critical non-renewable raw materials
  - Bio diversity

- **Food supply, security and health**
  - Food production/packaging and an efficient food chain
  - Animal welfare
  - Contamination and traceability

- **Climate and sustainable energy supply**
  - Renewable energy
  - Efficient use of energy including smart grids
  - Climate efficient transports and fuel
• Safety and security
  - Antagonistic threats, e.g. cyberterrorism and CBRN
  - Natural disasters
  - Resilience in major systems e.g. infrastructures, energy, IT

• Global competitiveness
  - Efficient, sustainable production of services, products and processes
  - Innovation and entrepreneurship, including human capital