Can Science Advocacy Make a Difference?

The campaign to protect the EU research budget from cuts and implications for the future of science in Europe.

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On 7–8 February 2013, the heads of state or government of the European Union convened to a decisive meeting to determine the budget priorities of the EU for the years 2014–2020. Strong pressure to cut on the overall EU budget came from net-payers, in particular from the UK, in the months ahead the summit. On the other hand, several countries, in particular France and the Eastern European countries, are known to be strong defenders of the large spending blocks of agriculture and cohesion. As a consequence, other budget headings, in particular the research budget of the European Union, were highly endangered as a target for substantial cuts.

Luckily, however, in the early morning hours of 8 February, a specific sentence was inserted in the agreement of the EU leaders: "[T]he funding for Horizon 2020 and ERASMUS for all programmes will represent a real growth compared to 2013 level."

How did that happen? What made EU leaders acquiesce to a move that has saved the research communities from stronger cuts?

We cannot look behind the scenes. But we know that never before has the European scientific community been as vocal as in the months before the recent high-level EU budget meetings. With very limited financial means, we were successful in creating media attention and in reaching out to the political communities. Careful strategic thinking is key for such a political campaign to be successful and to create impact and media attention. For good timing, it is important not to expend all your firepower before the final battle has even started. Most crucial was to identify the right moments for intervention before the summits.

The activities were coordinated by the Initiative for Science in Europe (ISE), an independent platform of learned societies and scientific organisations [..]. The success would not have been possible without several individuals and organisations that worked with the ISE towards our common aim, notably the Young Academy of Europe (YAE), which was recently founded by ERC starting grant holders.

We were particularly glad to work with the ERC Scientific Council and the Nobel laureates and Fields Medallists in a first phase to rally the scientific community, build trust and, importantly, create media attention. A letter that was finally supported by 50 Nobel laureates and Fields Medallists was drafted to call EU leaders to recognise the importance of research in difficult times of crisis.

The letter gives a reminder that "[f]unding research at EU level is a catalyst to make better use of the resources we have and make national budgets more efficient and effective". It was placed in major European newspapers including the Financial Times, Le Monde, Frankfurter Allgemeine Zeitung and Corriere della Sera.

As a next step, the ISE launched the online petition "No-Cuts-on-Research.EU" to organise the broad movement of scientists and concerned citizens in support of the EU research budget. The response was initially most strong in the life sciences but more and more communities quickly joined; over the course of the following months, over 153,000 researchers and concerned citizens signed the petition. In fact, the petition played an important role in raising awareness in the research community and in stimulating actions at the national and European levels. Several organisations either joined the campaign or launched their own lobbying efforts and declarations.

With such a strong backing, we could approach the EU leaders and ask for a meeting to hand over the letter of the Nobel laureates and Fields Medallists and the list of signatories of the petition. Despite their busy schedules, a meeting in Brussels could be organised with President of the European Council Herman van

Rompuy, President of the European Parliament Martin Schulz and President of the European Commission José Manuel Barroso.

Specific activities have been initiated, supported or triggered by the ISE and the YAE to contact the national governments of at least Germany, Austria, Sweden, the Netherlands and the UK, but probably other countries as well. On the fringes of a reception in honour of Nobel laureate Serge Haroche, we succeeded in setting up a short meeting with the French president Hollande just four days before the decisive summit; the list of signatories was handed over to his scientific advisor.

Support could also be secured from the European Roundtable of Industrialists, which is a forum established by the CEOs of major international companies headquartered in Europe. It is remarkable that the leaders from European industry such as Siemens, Ericsson, BASF, Saint-Gobain, Nestlé, Shell and BP chose to express their support for the EU budget by means of a joint letter with the European Research Council (ERC). This is a strong signal that the value of frontier research is recognised by industry leaders along with applied and innovation programmes.

Now what are the next steps? The legal text still needs to be finalised and approved. It is still unclear how the divergence between commitments and payments in the EU budget will affect the exact amount that will actually be spent on research in the coming years. Decisions on the distribution of the budget within Horizon 2020 have not yet been taken. However, major shifts of spending priorities within Horizon 2020 in comparison to the Commission proposal are not expected, given the time pressure. In order to avoid a funding gap, first calls of Horizon 2020 need to be issued by the end of 2013.

The result can be summarised as follows. The EU funding programme for research and innovation, Horizon 2020, will certainly be lower than what would be necessary to meet the ambitious innovation targets that the EU leaders have set themselves at various occasions. There will be no real paradigm change towards a more sustainable and future-oriented public spending at EU level. On the other hand, in these times of austerity in many countries and considering the very difficult political situation the EU is in at the moment, it cannot be undervalued that we could prevent strong cuts for the EU research budget.

The ERC will be able to consolidate its activities, although it will not be able to launch new or extended programmes. Funding for mobility and younger researchers within the now called Marie Skłodowska-Curie actions will be lower than in 2013 in the first calls of Horizon 2020, slowly rising in the following years. There will also be new opportunities, including for mathematics, with the FET (Future and Emerging Technologies) programme. Various efforts for simplifications and radical measures to reduce the time to grant will be taken. It will have to be proven in practice whether these measures will be effective in reducing red tape without negatively affecting the quality of selection and programme management.

In the course of running the budget advocacy campaign, a number of challenges for the future became apparent, the most important three of which are:

We need to involve the society at large. To create a positive atmosphere for research investment in the long run, it will not be sufficient to try to influence policy makers by means of lobbying or by mobilising researchers: we need to go beyond the research and political communities.

As a first initiative in that direction, the ISE launched together with a group of researchers and science communicators from Portugal the video contest “Invest in our Future – Invest in Science”. Three awards will be granted for the best video clips of up to two minutes which best convey the message that it is important for the future of Europe to invest in research. Submissions have reached us from all over the world. Please find all details about the contest on http://www.investinscience.eu and vote on Facebook for the best videos!

Science advocacy needs to operate strongly at the national and regional level, not only to protect the national research budgets but also to push for EU funds to be used for research.

In fact, EU member states and regions manage large parts of the EU budget. As part of the regional policy of the EU, the so-called structural funds have in the past been used to improve the infrastructures of poorer regions in Europe. They shall, however, be more and more spent on research and innovation now in the new multiannual financial framework of

2014–20. Regions were called to develop strategies that incorporate research and innovation as priorities. In many cases, activities of the regions will have a narrow and short-term focus on business and job creation. But there have already been a number of very positive examples of regions spending money from structural funds for researcher training and research infrastructures; basic research could profit as well. That is perfectly possible as long as there are convincing and credible arguments that demonstrate the positive impact to the competitiveness of the region and job creation.

The bulk of the structural funds will be channelled to the underdeveloped regions but even in Western Europe there will still be some limited money available, for example for interregional cooperation. Spending of these EU regional funds is highly decentralised; therefore, little can be done at a European level to direct these funds towards research. Universities and research centres but also scientists and concerned citizens need to contact national and regional authorities to find out what strategy has been developed for their region or country and remind them of the importance of future-oriented spending of structural funds.

3) We need an adequately staffed and independent institution to monitor and analyse R&D budgets and proposals in Europe. Not all stakeholders and political actors have the time and capacity to analyse and digest the EU budget proposals in all their complexity. As a consequence, presentation is what matters.

The example of the Marie (Skłodowska-)Curie programme shows the pressing need for sound and serious analysis of budget numbers to take informed decisions. The European Commission proudly announced in their initial proposal a 21% increase for the Marie (Skłodowska-) Curie actions. A closer look, however, reveals that the share of Marie (Skłodowska-) Curie actions on the overall budget was planned to decrease from 9% to 7%. Also, the numbers are for the seven year lifetime of the financial frameworks of the European Union, i.e. the total sum for 2007–13 is presented in comparison with the total sum for 2014–20.

That is very misleading. Budget increases have already happened in the seven-year period of FP7 from 2007–13. It makes much more sense to compare 2013, the last year of FP7, with the development over the following years. That gives a completely different picture: the original Commission proposal allowed stagnation at best for the coming years. As mentioned above, the final result will be a decrease in 2014 for the Marie Skłodowska-Curie programme and very moderate increases over the following years.

"No-Cuts-on-Research.EU" has been the largest petition for a science cause ever in Europe if not worldwide. Nonetheless, there was no more than two weeks for the preparation of the campaign. The financial and human resources we had at our disposal were very small compared to other advocacy campaigns. As mentioned earlier, the campaign was not adapted to the wider society beyond the research community. We were far from tapping the full potential.

What could be a next step? The "European citizen initiative" is a new and officially recognised EU instrument to collect support for proposed legislative action at EU level. If the initiative is successful with support of more than one million EU citizens the EU institutions are obliged to deliver an official response.

Open letters and petitions need not always target the highest political level; there are issues that will need to be solved by the actors of the science system themselves. For example, following a conference of the American Society of Cell Biology in San Francisco, a declaration to end the misuse of the impact factor has been supported by numerous societies and individuals. Find out how to join this initiative at http://www.i-se.org/researchassessment.

There are many more topics that need to be solved. Observers in science policy often get the impression that problems are known and have been discussed at numerous policy conferences – what is lacking is political will. That's when advocacy is needed for change to take place.