

A Marshall Plan for better governance in ERA

Let us start looking at multilateral governance by considering a challenge that at first glance has nothing to do with either the EU or with research.

As members of a global STI community we all have a number of features in common. We are all well-educated, cosmopolitan, multilingual, and inquisitive about new things, inquisitive about change as a prerequisite for progress, prosperity and innovation. In other words: We are part of a community of knowledge workers, which actually makes us a problem.

In the eyes of many people who voted for Donald Trump as the next U.S. President, we belong to a questionable elite. In their view, research leads to the further rationalisation of production processes, to the accelerated digitisation of our lives, to the loss of further jobs, and not just for poorly qualified workers but increasingly also for people with higher education as well. Research underpins the facts that explain climate change - with the result that we are calling even more jobs in CO²-intensive sectors of the economy into question.

Research served global financial capital through the development of increasingly adventurous financial instruments, which ultimately enabled the economic crisis of 2008. Research contributes significantly to the erosion of traditional working relationships, family structures and familiar living conditions. Research is under suspicion of profiting from the dismantling of national traits because that is the only way that global knowledge chains can actually develop in harmony with global production and trade chains. All that makes us suspicious, in particular for millions of younger voters, the Millennials.

The first challenge of our time is therefore that sections of the population have a very critical notion of our policy area. Just a few short years ago, research was still considered to be one of the most important hopes for the future of global progress. Hopes that have gradually evolved into scepticism, and scepticism into rejection.

Politics demands accountability from research

From the perspective of the governance of research policy, this first challenge could be answered by concentrating on those parts of society that value research. For a long time, a broad consensus

prevailed on the right and left of the political centre about the importance of research for growth and the participation of large swathes of society in prosperity. Research was supposed to help society solve its most pressing challenges - from climate change to the future of our oceans.

After years in which research grew constantly in importance, we are now entering a phase in which politics is demanding proof of our effectiveness. Research was protected during the early years of the economic crisis compared to other policy areas. Politics is now demanding accountability for whether the confidence placed in us was justified.

I see the second challenge as being that we are not necessarily able to provide this proof of our usefulness. The interdependencies between research and social change are equally as complex as the method for measuring effects is insufficiently developed. To put it simply: We have awakened expectations that we are either unable to fulfil or, if we are able to fulfil them, can make it difficult to provide proof of our usefulness.

I see the governance of national and multilateral research cooperation as being stuck between these first two challenges: Scepticism and rejection on the one side of society, overblown expectations and possible disappointment on the other.

From my perspective, European research policy is doing too little to counteract the scepticism expressed by many people and to fulfil the expectations placed on that policy by others. There is no shortage of good intentions or occasional efforts by the European Commission or national initiatives, such as under the guiding principle of “responsible science”.

However, I do not think that the better participation of social groups, the better understanding of scientific knowledge processes and the better consideration of social wishes get to the root cause of the challenges we find ourselves confronted with.

Shared responsibility as a challenge

This root cause is to be found in the simple fact that research is increasingly finding itself in conflict between national sovereignty and European integration. In times of crisis, the question always arises as to whether such crises can be better resolved by means of measures in the individual Member States or by everyone acting together. Over time, the EU has managed to answer this question increasingly less clearly and assertively. Instead, here in Europe, we agree on dozens of compromises, on little steps that are praiseworthy but less effective and cannot be convincingly communicated to the population.

According to Article 4 of the Treaty on the Functioning of the EU, research falls within the area of shared competence, which means that the European Commission and the Member States must take all measures they deem necessary as long as this does not undermine the ability of the Member States to act.

Shared competence is a temptation for everyone involved to prefer the establishment of parallel structures, programmes and other initiatives in the area of research instead of striving for the real integration of policies which can only be successfully shaped collectively. This approach has been observable since the beginnings of the European unification process in the late 1950s, when a relatively modest research programme and a number of decentralised research centres of the Joint Research Centre were created, instead of a truly collective development in the area of EURATOM. At that time, the Member States retained their prerogative to the technological development and application of nuclear energy with all the resulting effects, which led to the growing technology leadership of the USA in this sector in the 1960s. It will be interesting to see where current efforts around a joint research programme in the area of defence lead us.

Shared competence also prevents the real return of competences away from the collective level to the Member States. Everyone does everything: Thus the EU and each Member State funds small and medium-sized companies with an affinity for research, all of them solve the big social challenges, even with completely insufficient means, all issue grants and increasingly also loans, all build infrastructure, all take measures in favour of the gender equality, mobility or career opportunities of researchers. We could go on and on.

My message is that the shared competence expounded in the Lisbon Treaty tended to strengthen the EU's despondency because it helped to circumvent tough competence decisions by building up redundancies. And worse still: The redundancies, which in truth means 29 redundancies, frequently take place without coordination, without agreement and at random. The effectiveness of European research policy is suffering under this development and the population sees ever less reason to place their trust in us.

Nowadays, the European Commission sometimes acts like a 29th Member State, defending HORIZON 2020 as "its" funding programme against "interference" by the Member States. Many Member States on the other hand are avoiding extensive structural reforms in their research systems because the shared competence allows a continuation of the status quo. Nowhere is sufficient pressure to reform in evidence, and while we manage the status quo of research policy in Europe, society's support for research is gradually being lost.

EU-13 versus EU-15 in the ERA

With that, I come to the European Research Area. The European Research Area serves to break down national barriers. It aims at promoting the globalisation of knowledge production and dissemination in the form of people, knowledge and technologies.

The European Research Area deals with structural reforms for breaking down national barriers that developed over centuries, while HORIZON 2020 enables classic research funding in the course of transnational projects.

- But why should we break down national barriers when to do so runs contrary to the need to protect many people against global competition?
- Why should we break down national barriers when the European Research Area has delivered only limited success (such as ESFRI) in the past 15 years?
- Why should we break down national barriers and tackle laborious, painful structural reforms in the Member States when the EU treaties allow us to continue as we used to for eternity?
- Why should we break down national barriers when this weakens the identity of voters at a time when the social need for identification with one's own group, with one's national ethnicity, is growing?

The European Research Area is therefore the central challenge in the multilateral governance of research policy. Things have fallen silent over the ERA. Without scarcely a word, the ERA disappeared from the annual requests to draft the national reform programmes of the Member States within the scope of the Europa 2020 strategy. Nowadays, instead of the ERA, the European Commission prefers to focus on Open Science, Open Innovation and Open To The World, which are important initiatives, yet they further blur the contours of the ERA instead of raising its profile.

The European Research Area no longer has forceful proponents, neither in the European Commission nor in the Member States. Anyone who speaks up in favour of ERA bears the risk of being ridiculed as frumpy and outdated. From my perspective, this is not only regrettable but bears witness to the short-sightedness of research policy.

In spite of denial by most policy-makers, the European Research Area is the “missing link” between research funding and the research policy ecosystem. It is embedded in primary law and

formulates in Article 179 of the EU treaty an internal market for knowledge in Europe, which the European Commission and the Member States are supposed to coordinate in accordance with Article 181 of the EU treaty.

Like any market, the internal market for knowledge is a place with winners and losers, depending on the supply and demand for education, qualification, salaries, career prospects, networks, infrastructures, reputation of institutions, financing tools and very generally the innovation climate in the 28 Member States.

When the European Research Area was announced in 2000, the Union consisted of 15 knowledge markets, all of which related to each other as equals. Our failure to integrate the EU-expansions of 2004, 2007 and 2013 into the concept of the European Research Area was colossal. We simply continued to act as if there were now simply 25, then 27 and today 28 comparable knowledge markets in the European Research Area instead of 15.

We demanded the removal of national barriers, which accelerated the brain drain in the newly joined innovation systems. Salaries in the EU-13 simply couldn't keep up with the salaries in most of the EU-15. Conversely, the EU-13 cannot, however, profit from the lower costs of knowledge production because they lack the necessary ecosystem of excellent research infrastructures, competitive and knowledge-intensive companies and recognised educational and research institutions.

The EU-15 blew across the EU-13 like a storm, like the "Wild West". The successful and well-justified European Research Council represents the pure doctrine of this internal market for research in Europe in its radical orientation towards excellence while disregarding all structural framework conditions. In the ERC, and right across the funding lines of the 7th framework programme and HORIZON 2020, the EU-13 appeared inferior to the EU-15.

EU-13: 8% PARTICIPATION RATE 4% OF FUNDING



	PARTICIPATION	FUNDING
H2020 total	47.123	19.595.610.380
EU-13	3.903	869.842.150
Share of EU-13	8,3%	4,4%
EU-15	38.105	17.283.128.608
Share of EU-15	80,9%	88,2%

EU-13	PARTICIPATION	Share Participation	FUNDING	Share Funding
H2020	3.903	100,0%	869.842.150	100,0%
Excellent Science	829	21,2%	203.745.065	23,4%
Industrial Leadership	853	21,9%	190.948.891	22,0%
Societal Challenges	1.893	48,5%	383.968.912	44,1%
Spreading excellence and widening participation	122	3,1%	51.351.121	5,9%
Science with and for Society	88	2,3%	12.508.418	1,4%
Cross-theme	19	0,5%	7.474.112	0,9%
Euratom	99	2,5%	19.845.631	2,3%

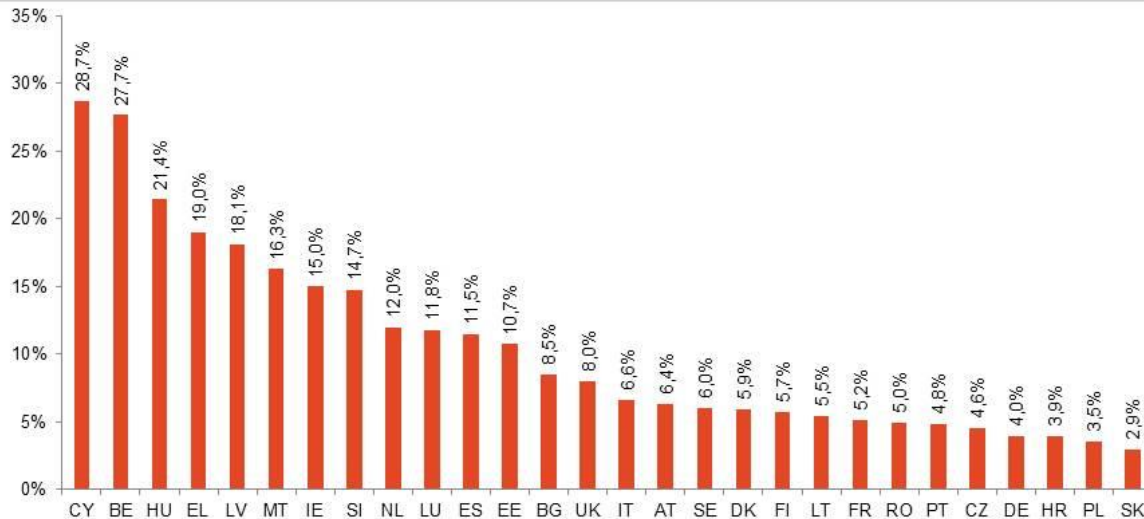
Data from 30.9.2016

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Some innovation systems in the EU-13 have tried to develop an ecosystem that is able to withstand the storms of an internal market for knowledge. The success of the framework programmes in these countries is considerable when measured by the underlying national conditions.

% of FP* funding (2013-2015) measured against governmental expenditure for R&D in Member States



Anmerkung: Die hier dargestellten Anteile beziehen sich auf kumulierte Werte der Jahre 2013-2015

*Datenquelle: EC, expenditure and revenue 2007-2015. Hierbei handelt es sich um tatsächliche Auszahlungen der Kommission in einem Jahr. Diese beinhalten Auszahlungen an H2020 und FP7 Projekte.

**GBARD: Government Budget Allocations for Research and Development = „Staatliche Mittelzuweisungen für Forschung und Entwicklung“ (EU-Übersetzung).

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However, many Member States have not recognised the risks posed by the internal market. For this, they would have needed politicians to introduce bold reforms and a state apparatus to support them in this endeavour. Unfortunately, the governments in many countries are not in power long enough to think about an ecosystem for research that is healthy for the long term.

All of these challenges made it difficult for the EU-13 to play along as equals in the internal market for knowledge. The disadvantages of the EU-13 got even worse by the ambiguous nature of ERA: in full day-light, the European Research Area in no way deserves the description of “internal market” with clear rules, audit procedures and, if need be, with sanctions too. Although the ERA has found its way into the primary law of the European Union, the European Research Area is still misunderstood as “soft law”.

We have to admit that many continue to act as if we take Article 179 of the EU treaty seriously. In reality, we ignore it because we shy away from the reforms needed in the case of the EU-13 or, in the case of the EU-15, trust that things will develop in our favour without any political control. This is the cynical expression of an approach of the EU-15 that basically means exploitation with the internal market. The EU-15 are therefore pursuing a policy of stalling and waiting because they know that a serious debate about the European Research Area would throw up questions about

equal opportunities and distributive justice. These are questions that people in the highly developed innovation systems of Western and Northern Europe would prefer not to hear. Instead, the EU-15 have made it abundantly clear that instead of paying attention to binding regulations in an internal market for knowledge, they would prefer to support exercises on mutual learning, exchanging experience, a report here, a comparison there, but nowhere something binding. The European Research Area should remain an area where the law of the stronger, in other words the law of the EU-15, applies. This insistence on “soft law” by the EU-15 is another serious error in European research policy.

Because this policy has important implications.

This policy continues the unequal levels in the national innovation systems between the EU-15 and EU-13. Financially homoeopathic countermeasures such as Spreading Excellence and Widening Participation in HORIZON 2020 aren't changing much in that regard.



In the long run, I suspect a downwards spiral of mutual allegations. The EU-13 will start to fight the inequality by questioning their support for European research funding, in other words the framework programme.

The EU-15 will possibly react to this questioning by saying that the EU-13 are only putting their house in order, meaning that they would have to carry out structural reforms in order to be competitive within the scope of the framework programme.

Such structural reforms, which moreover have already been carried out in some countries, are, however, all the more difficult to implement the less that formal obligations on the part of the Union force the Member States to make painful reforms.

The EU-15, however, resist any force discharged by the European level. The EU-15 in no way want to allow themselves to be talked into changing their national innovation systems by the European Commission. Of course, the shared competence of the EU treaty guarantees freedom of design at national level.

Thus the arguments go round in circles, while the global innovation system takes no account of such debates going on inside Europe. Last but not least, we are losing valuable time, which we should be using to link governance in the area of innovation with other sectoral policies in the sense of a “whole of government” approach and in doing so to increase the effectiveness of our RTI policy.

I have presented the central challenge in the European Research Area along the line of conflict between the EU-13 and the EU-15. We know that neither the EU-13 nor the EU-15 represent uniform interest groups. I therefore beg forbearance if I have not emphasised justified differences between the Member States in a way they deserve.

Challenges for institutions in the ERA

Moreover, we could also describe the challenges of the ERA by shifting the focus away from the Member States and onto the institutions, namely universities, ministries, research funding agencies, companies or research laboratories.

The more the internal market for knowledge provides opportunities for knowledge-intensive players, the less it is guaranteed that these opportunities will actually be taken. The first hurdle is the institutions themselves, which are simply not used to dealing with the system environments

beyond their own front door, let alone with the structures across Europe. For a long time, the issue of Europe was left to the researchers themselves who participated in research projects. Europe was for many years a subcategory of third-party fund raising. Nothing more.

The internal market for knowledge, however, is transforming working conditions for the research sector, with the result that increasingly matters is being perceived as an “attractive” institution on the knowledge market. With the removal of national barriers, the best minds can choose between the best institutions. To make it onto the shortlist of the most attractive places to work for the best global brains, the institutions have to establish excellence in their fields and focus on key topics in which they are competitive on the knowledge market. This requires a process of prioritisation within the institutions, which in turn produces winners and losers of that prioritisation. Furthermore, the laboratories have to bring their equipment up to the state of the art, and where they are unable to do so themselves they must network with other institutions in order to procure and use equipment together.

The European Research Area therefore requires a rethink about the institutions. They are no longer only national players with a more or less additional financing share from the framework programme of the EU; today, the institutions are perceived as a whole and dealt with on the internal market for knowledge.

Many institutions are only slowly coming to terms with this changed reality.

ERA Observatory Austria

What can we in the government do to support the research institutions, indeed the entire innovation system, with this change process?

In Austria, we have identified five key areas in which we provide effective support with a raft of appropriate measures.

Firstly, open and comprehensive information and communication about the latest developments in the European Research Area are needed as well as the analytical classification of these complex developments. Nobody can have an overview of all aspects of this internal market for knowledge, and nobody should presume to select information of relevance for other players. On the contrary; given the number and variety of players and interests, information management requires the state to trust in the ability of the players to organise themselves and to strengthen the ability of the

institutions to perceive their own interests. We make all information we have on European research policy available for free on our “ERA Portal Austria”.

Using analytical tools such as the “Policy Briefs”, we also endeavour to provide guidance on important topics, to develop a narrative that nobody has to agree with but which is intended to help place the information on the European Research Area in a meaningful context.

This is the first pillar of support for navigating around the internal market for knowledge.

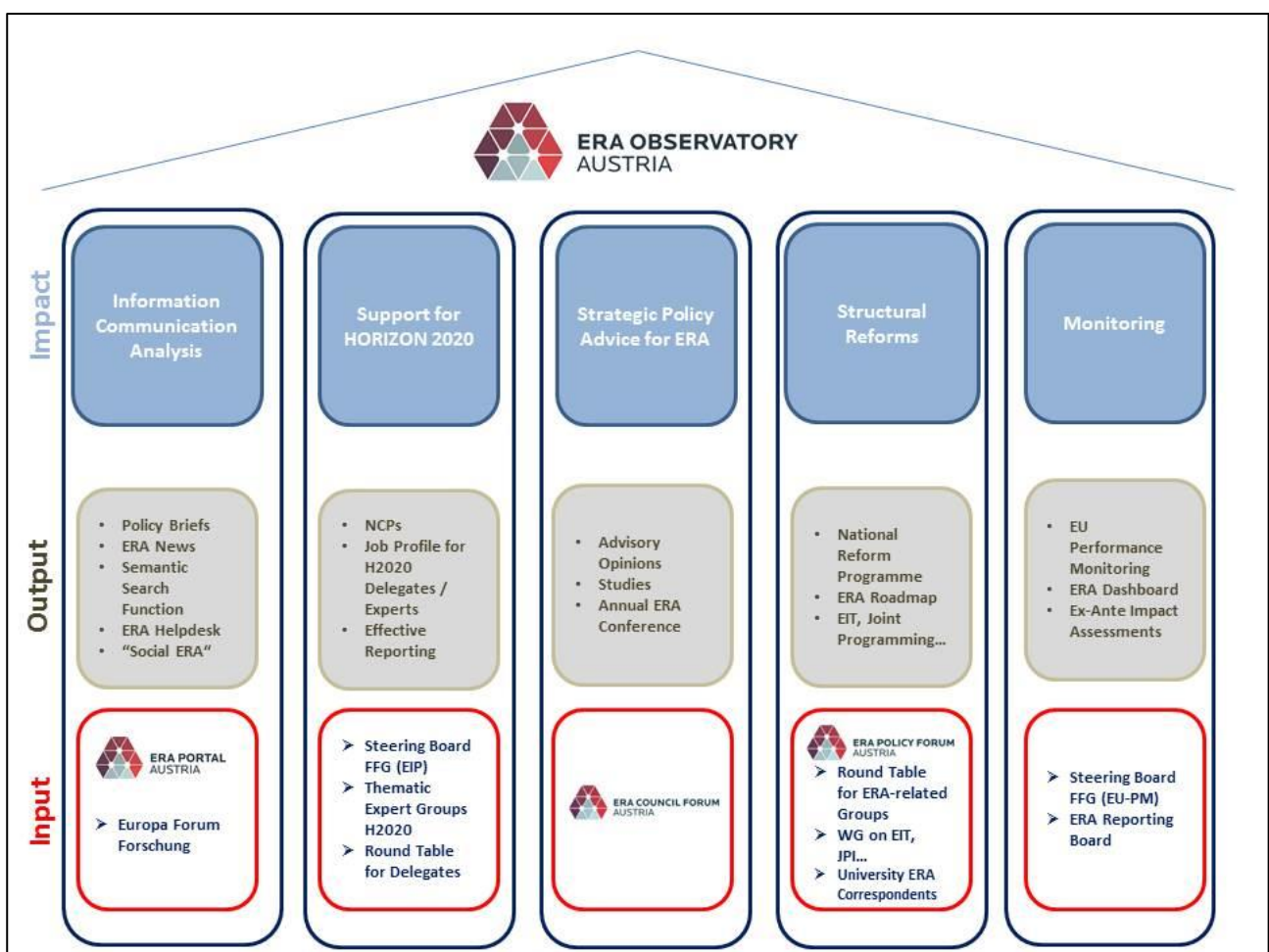
The second pillar concerns the advice and support we give our research community when making applications under HORIZON 2020. For this, we rely on a central advisory service provided by the Austrian Research Promotion Agency. This advisory service offers the researcher assistance through national contact points for all matters relating to research funding under the framework programme. But it does more than that: It holds so-called “ERA Dialogues” with the research institutions, in which the entire national and European funding portfolio is discussed and synchronised with the long-term, strategic goals of the institutions. The agency also develops so-called “thematic dossiers” in close interaction with the Austrian delegates on the programme committees of HORIZON 2020. These thematic dossiers analyse the interactions between the European and national RTI agenda and present recommendations for how a specific sector of the Austrian innovation system can position itself even better in Europe.

The third pillar addresses political management. It is a major challenge for the responsible minister to reconcile the importance of European development with the often difficult underlying conditions in the national innovation system. As a rule, the daily business of a minister focuses on national matters. That is why Vice Chancellor and Federal Minister Mr Reinhold Mitterlehner, who represents Austria at European level on the Competitiveness Council, created the “ERA Council Forum Austria”. This is made up of five well-known European personalities from the areas of science and economy who support the Vice Chancellor directly and personally with studies, recommendations and an annual European congress in order to identify the advantages of the European Research Area and use them for Austria.

The fourth area of governance in the European Research Area is dedicated to perhaps the most difficult challenge: that of structural reforms in Austria. A few months ago, the Austrian federal government passed the “Austrian ERA Roadmap” with a raft of measures, all of which are intended to contribute to the better performance and permeability of our innovation system. Like all other countries, we also follow the joint framework and prioritised topics proposed to us by the European Union. The current situation, objectives for Austria, measures and instruments for implementation, milestones, resources and responsibilities and indicators have been set for each priority reform

topic. Implementation of the reforms is in the hands of government representatives in the ministries, who also represent Austria in the ERA-related groups at EU level. We will present a progress report on the status of the implementation of the “Austrian ERA Roadmap” every two years, starting in 2017.

Each of the four mentioned governance areas can only be as effective as the evidence that leads to the right conclusions in the respective area for the respective players acting on their own responsibility. Consequently, the fifth pillar is dedicated to monitoring, in other words, the ongoing search for strategic intelligence that helps us to take a look behind the scenes of this internal market for knowledge.



All of this together forms the “ERA Observatory Austria”. The added value of this observatory isn’t any individual of the five pillars. Instead, the greatest impact comes from the interaction between the pillars, between the information management of our website and the strategic intelligence obtained from the monitoring, between the consulting experience of the agency in the dialogue with the research organisation and the advice of the Vice Chancellor on the political level, between the support of the research programme HORIZON 2020 and the reform agenda of the “Austrian ERA Roadmap”. Only when the five pillars are no longer pillars but spaces of better mutual

understanding and better governance will Austria succeed in the European Research Area thanks to this observatory.

2018 as a window of opportunity

As in Austria, the demarcation between the framework programme and the structural reforms of the ERA also ought to be negotiated at European level. The Member States should allow for a deepening of European integration in research and innovation. They should understand that structural reforms in ERA, once such reforms have been agreed by national governments, need to be implemented under a regime of incentives and, sometimes, sanctions. The European Commission would be the natural guardian of a deepened ERA. But the European Commission would need to do more than just reminding national governments of their self-commitment. The European Commission needs the vision to use the 9th framework programme to actively, financially and structurally support all Member States with their reforms instead of just demanding such reforms be implemented. The 9th framework programme should be placed primarily at the service of a reform agenda in the Member States, well beyond the current activities of the Policy Support Facility.

The European Commission should be prepared to put itself at the service of European unification instead of defending its “territory” like a Member State. This is the main difference between the Member States and the European Commission: While Europe may function without any particular Member State, without the European Commission the European idea will collapse. Europe cannot succeed without the positive power of the European Commission. We need a Marshall Plan for research in Europe, but which government in Europe, which society in Europe recognises the long-term benefits of strengthening the catching-up research systems in the short and medium term? Citizens often don’t recognise the value of research because this value does not deliver any short-term and certain returns.

And yet: For their part, the people in the Member States should elect governments which recognise that the success of the nation state does not lie in isolation but in opening up. They should introduce the necessary reforms in full autonomy as Member States. The direction of such reforms should steer towards further opening of national STI systems, perhaps in stages that are compatible with their own knowledge community, but an opening that is nevertheless decisive in nature. You can’t keep on pointing the finger at Brussels while continuing to finance third-rate research structures in your own country and then wonder why you’re losing ground in the internal market for knowledge.

As a citizen, I fear the failure of the European idea. I see no unifying force to counteract the centrifugal forces. I fear the failure of the European Research Area because we adapted ERA to the requirements of the day too late and too half-heartedly. Still, there is one last window of opportunity. In 2018, Europe will review the ERA structures in the light of changing political priorities. At the same time, Europe will start negotiations on the 9th framework programme. The coincidence of tabling both ERA and FP9 to the Competitiveness Council in 2018 is a wake-up call and perhaps our very last chance to get it finally right.

Part of the burden to take us through this decisive period may fall on the shoulders of Austria's presidency of the EU in 2018. I am convinced that Austria will make every effort to build bridges between ERA and FP9. In this regard, I hope for and trust in an emerging alliance of like-minded partners across all European institutions.

This policy brief is a slightly revised version of a key-note given at the "EU SPRI Doctoral conference" on 22 November 2016 in Vienna.