

CHECK AGAINST DELIVERY

ALLEA President Günter Stock

Presentation on the **Role of European Academy Networks in shaping science policy**

G7 Science Conference *The role of National Academies and International Academic Networks in advising institutions*

Accademia Nazionale dei Lincei, Rome, 3 May 2017

Dear President Quadrio-Curzio,

Dear Presidents of Academies,

Distinguished guests and colleagues,

It is with great pleasure that I am given the opportunity to speak to you today in my role as President of ALLEA, the European Federation of 59 Academies of Sciences and Humanities within the European Council and of course I also speak to you as spokesperson of the SAPEA project. I very much want to express my sincere appreciation to you, dear Alberto, for this kind invitation and indeed for the enormous support you gave us in the past and hopefully will do so also in the future.

I have followed with great interest the presentations of the statements by the G7 academies and I must say that I am pleased to see continued engagement on these topics by Academies around Europe and the globe.

In the spirit of this conference I would like to present to you some ideas and convictions on the importance of our Academies not only in shaping science policy, what we call policy for science, but I want to also introduce you to the European Academy Network project, SAPEA – I'll describe the abbreviation later – where European Academies go beyond science policy and also provide in a truly interdisciplinary way policy advice on other matters, what we call science-**for**-policy at a pan-European – not only national - level. Interdisciplinary means including humanities and social sciences.

Before I get into all of this, I want to start with a word of caution and, to an extent, a little bit of self-reflection on the *raison d'Être* of academies today. You may also call it constructive self-criticism, which – since we are in an “inner circle” – might be tolerated.

Many of our academies, just like the Lincei, were founded during the period and under the heavy influence of the enlightenment in Europe. The never-ending quest for the truth has been our guiding light ever since and many of us can, rightly so, look back with wondrous amazement at many of the achievements from the past and today. There is no doubt that without the principles of scientific inquiry our academies are based upon we, as a continent, or indeed as a species, would not be where we are today. Dr Asenjo briefly touched on this.

Today, however, we need to also acknowledge the criticism hurdled towards us, some of it justified probably most of it less so. Scientists have been criticized of not engaging enough with their fellow citizens. And this is probably true irrespective of the fact that great efforts and even great successes have been achieved in the past, but in light of current developments one could argue: not enough. I want to paraphrase former US President Barack Obama, reality has a way of asserting itself. And sure enough for many scientists reality has asserted itself rather unpleasantly in the

recent past. And we should understand that the changes came slowly – not necessarily quietly – and this happened in an area where policy-for-science and science-for-policy are merging and where the strict differentiation is no longer possible and no longer feasible.

Our friends in Hungary were witness to a law which all but sealed the closure of one of its most prestigious university, the Central European University. Academics in Turkey are experiencing most inappropriate repercussions for simply doing their work, and even in this beautiful country it was not too long ago that scientists were put on trial for simply failing to predict an earthquake!

And we don't know yet about new ideas in the United States, where only in the last minute drastic cuts to the Life Sciences were avoided. And this happens in a time where we start speaking about our century as a century of Life Sciences. And we don't know anything about what happens with the science system, to our colleagues in Great Britain after Brexit. In many countries we have seen severe cuts in the research budgets for Humanities

research and finally who of us really knows what is going on in our sister academy in Russia.

We would be wrong to assume that these are singular incidents. If we look at history we see that the pendulum swings back and forth, and after many decades of fantastic progress we have to ask if the pendulum has started to swing in a direction that we, as scientists, cannot condone. It is therefore up to us to take ownership of what we do, to defend the principles of scientific inquiry and above all, to engage with one another and with those who are not active scientists.

Since quite some time and even more so today we can no longer afford to lean back. We are running in real danger of drifting into obscurity, in modern terms we would call it alternative facts.

Already the semantics alternative facts shows a silent adaptation to an ongoing trend. Why not call them what they are, lies. The world of science has, of course, made great strides towards those topics in the past few years. I do not want to make them smaller as they are and Dr Catlow from the Royal Society, Dr Courvoisier and

others have reported on those efforts and we can also think of the March for Science, which took place in many cities across the world just a few days ago. It shows the willingness and the need to defend these values and underlines the importance of scientific evidence. And we can also remind us of the fact that we had great helpers. It is in fact also the way that science journalists report on science, which encouraged this wider interaction. Yet unfortunately we do witness that large newspapers devote fewer and fewer resources to covering science. And in the electronic media we are not as present as we should be! And do we even have relevant concepts for Social Media?

As I laid out in the beginning, my talk is about the role of European Academy Networks in shaping science policy. I am a strong believer that whatever problems are thrown in front of us, we can only solve them together. Academies have weathered many challenges in the past and it is time that we adjust to the new challenges of the 21st century. To me, any attempts at solving these challenges must encompass interdisciplinary approaches on

an international level, for us at least at a European level, and has to be carried out with absolute scientific autonomy. Scientific findings and facts have to be seen and put in the context of the conditions under which they were made. And they have also to be seen in context with possible consequences. Hence, interdisciplinarity, including Social Sciences and Humanities, and internationality are important elements if we want to have impact in policy advice. And we have to address the general public more and probably even via new formats of public engagement. The role of academies in policy advice has to be prepared, has to be underlined, in many cases has to be preceded, accompanied by what we call in German “Gesellschaftsberatung”, which means honest, transparent societal advice, public engagement.

At ALLEA, traditionally, we put a great focus on policy-for-science, that is ensuring that the framework conditions under which science, in the German sense of *Wissenschaft* encompassing all scientific disciplines, can flourish and prosper. In today’s world the only viable way to achieve this is to work cooperatively with each

other across borders. Now, Europe is a diverse place with many different science systems and with each having their own regulations. At ALLEA, we try to work towards harmonisation of these regulations wherever possible.

To give you one example: Our Working Group on Science & Ethics has recently published a revision of the European Code of Conduct for Research Integrity. This document, which will serve as a reference document for Horizon2020 Grant Agreements, is an important step in creating and emphasizing the need for a unified understanding of what good research practice entails. It is not always the groundbreaking scientific discoveries that create trust in science, it is knowing that the way science is carried out is transparent and accountable. In times of “fake news”, lies and “alternative facts” we should not make the mistake of producing science of questionable quality only to satisfy the perceived need to publish ever faster and with ever more attention to creating a baiting headline at the price of solid research.

While the above mentioned Code of Conduct is a sort of meta issue for science, ALLEA, via its working groups, also tackles legislative questions of emerging technologies. Our working group on intellectual property has recently come out with a statement on patenting issues surrounding the CRISPR-Cas technology, which was mentioned by Thierry Courvoisier as genome-editing. A, as you know, very exciting new way of altering genetic material and thus in need of carefully thought through legislation as to not offend human dignity. For example, my home academy, the Berlin-Brandenburg Academy of Sciences and Humanities, has already published a paper on responsible use of this technology in 2015, where we included and reflected upon ethical and legal consequences. But here again it is important that this is now done on a European level. Institutes across the continent are looking into applications for CRISPR-Cas and legal uncertainty around their research results, but also about the future practical applications of their findings must be avoided at all costs.

Now, shaping European science policy by working on the very foundations of what it means to conduct science is but one thing that academies are in an excellent position to do. We have been doing this for a long time, and we will continue working this mission.

However, we can do much more. The expertise assembled in academies, together with the unique quality of academies to bring together scientists from a wide range of disciplines, is a fertile ground for experiencing and training interdisciplinarity and hence, of course also, the provision of advice to policy-makers and the general public. Some academies already fulfill this role, yet many more should consider doing it for themselves and for their audience.

On a European level, ALLEA together with its partners Academia Europea, EASAC, Euro-CASE and FEAM, has started doing exactly this: providing evidence-based scientific policy advice to the European Commission via the SAPEA project, which I mentioned at the beginning. SAPEA, or - **Science Advice for Policy by European**

Academies – brings together the expertise of over 100 academies around Europe to inform the High Level Group of Scientific Advisors within the European Commission's **Scientific Advice Mechanism, SAM**. One of the main aims of the project is also to create a debate via our academies to involve the general public in topics that are often, or will become, highly relevant for our society.

To us this is a very welcome development. Previously, the European Commission attempted to attain their scientific advice primarily through its Chief Scientific Advisor, a model that is commonly found in Anglo-Saxon influenced countries around the world. Yet, Europe is more complex than that and the fact that even such an accomplished scientist like Anne Glover found herself under heavy scrutiny is perhaps testimony of this diversity of opinions and systems.

In any case, SAPEA and SAM are at the beginning of proving that we can deliver high quality advice and we sure hope that together with our Member Academies we can have a real impact in

grounding future European legislation on solid scientific evidence. It should and will not only greatly improve the quality of European legislation, I also believe that by ensuring that legislation is scientifically sound, we may just be able to increase the trust in European policy-making by our fellow citizens. This, however, will only happen if we manage to avert the developments I mentioned in the earlier part of my speech.

My fellow academicians, I believe we have a truly unique chance at our hands. Never before have European Academies been approached by European policymakers to provide concerted advice. I would therefore like to encourage all of you to consider either to participate in a SAPEA working group via academy expert nominations or to consider what your national academy already has to offer to your national policy makers. There are already quite a number of relevant fact papers, recommendations, and the like available in individual academies. They all contribute to our task. We heard during the day excellent examples of what is available already, this is a perfect basis which can and will be used, and in

some cases enlarged, by including aspects as brought forward by the Humanities and Social Sciences. And we should carefully consider to what extent this material can be considered for transparent and careful advice for our societies at large.

In conclusion, I see the role of European academy networks in a dual responsibility. We try to ensure that research is carried out and can be carried out in a comparable, and most importantly excellent, fashion anywhere on the continent AND we share the expertise we have with those who have to make complex decisions on complex issues so that those decisions are better informed, more sustainable and in the end fair to all citizens of our European project. Ladies and Gentlemen, it is of paramount importance to include all people in our growth of knowledge and hence the widening of our concepts to societal engagement has to receive high awareness!

Thank you very much.

*****END OF SPEECH*****

