Position of the Czech Academy of Sciences on the future of the European Research Area

The Czech Academy of Sciences (CAS), the largest research-performing institution in the Czech Republic, highly appreciates the intention of the European Commission to redesign and invigorate the European Research Area (ERA). Hereby, we would like to contribute to the ongoing debate on the future of research and innovation in the EU. Our position can be summarized into five crucial points that ought to be considered when conceptualizing the future shape of the ERA.

First, **science needs to be continuously taken care of and supported** both on national and EU levels if our resilience against future crises is to be strengthened. Therefore, the goal of investing 3% EU GDP into research and innovation should be reaffirmed and aimed for. For this reason, we maintain that the cuts to the Horizon Europe budget recently proposed by the European Council are short-sighted and clearly against the long-term interests of European citizens. If, however, a reduction of the framework programme budget proves inevitable, the cuts to its individual pillars should not be proportionate. Particularly Pillar I and its provably highly valuable instruments should not be further financially weakened. Special attention in this respect should be paid to **pan-European research infrastructures which represent the cornerstone of the current research ecosystem** and whose tremendous role in tackling major societal challenges should be reflected in an adequate budget allocation.

Second, we see a clear discrepancy between the central aim of the ERA and the actual deeds and actions undertaken. **While the purpose of the ERA is to create a single and coherent research area in Europe, the current EU's financial landscape does not correspond with this goal**. Instead of being simplified, the EU funding schemes have become rather fragmented, leading to overlapping of efforts and confusion on the applicant side. Not only is it incomprehensible but it also becomes ever more difficult for first-time applicants and new consortia initiators to succeed. More transparency and clarity is needed.

Third, we believe that **the ability to cooperate across borders, not only geographical, but above all across research disciplines, to be the key to further breakthroughs in science**. What, on the other hand, redirects our efforts into a kind of blind alley is the excessive emphasis on applied research and the association of innovation only with high TRLs (i.e. in opposition to fundamental research). This way of thinking is based on an outdated linear innovation chain and disregards the complexity and transdisciplinary character of innovative applications, which are nowadays much closer to ground breaking discoveries. As the COVID-19 pandemic demonstrated, **science has to be capable of quickly**

adapting to emerging challenges. In times of crises, the broad front of blue-sky research offers a better basis for solving various societal challenges and pressing needs, while highly specialized applied research is much more difficult to refocus. It is indeed the broad palette of strong, interconnected and interoperable science which builds resilience and readiness for devising viable solutions for urgent needs. **The flexibility of researchers has to be nurtured and supported, not limited.**

Fourth, as far as governance of science is concerned, the lately visible EU's directionality drive is based on an essentially specious argumentation. As the experience with science-evaluation methodology applied in the Czech Republic until recently (the ill-famed "coffee grinder") shows, **excessive preoccupation with monitoring and overly mechanistic approach to evaluation might actually harm the quality of research** instead of becoming an incentive and guarantee for further improvement. **Once the instrument for measuring becomes the tool of governance, though not equipped for that purpose, no good is to be expected**.

Last but not least, **the CAS fully supports the actions aimed at fulfilment of the concept of open science** while **simultaneously drawing attention to the potential risks in terms of intellectual property rights and data protection**. For effective operation of open access instruments, provided data must not only comply with the FAIR principles (Findability, Accessibility, Interoperability and Reusability), including their systematic storage and description, but also quality, consistency, integrity and reproducibility must be checked. At the same time, the process leading to generating metadata files must be under control of their original authors. In this context, it is necessary to point to the high demands placed on storage size and data operations as well as the need for robust and transparent data protocols. For these reasons, **the CAS supports that the expenditures related to the FAIR principles compliance are classified as eligible costs for all research and innovation projects funded from the EU budget.**