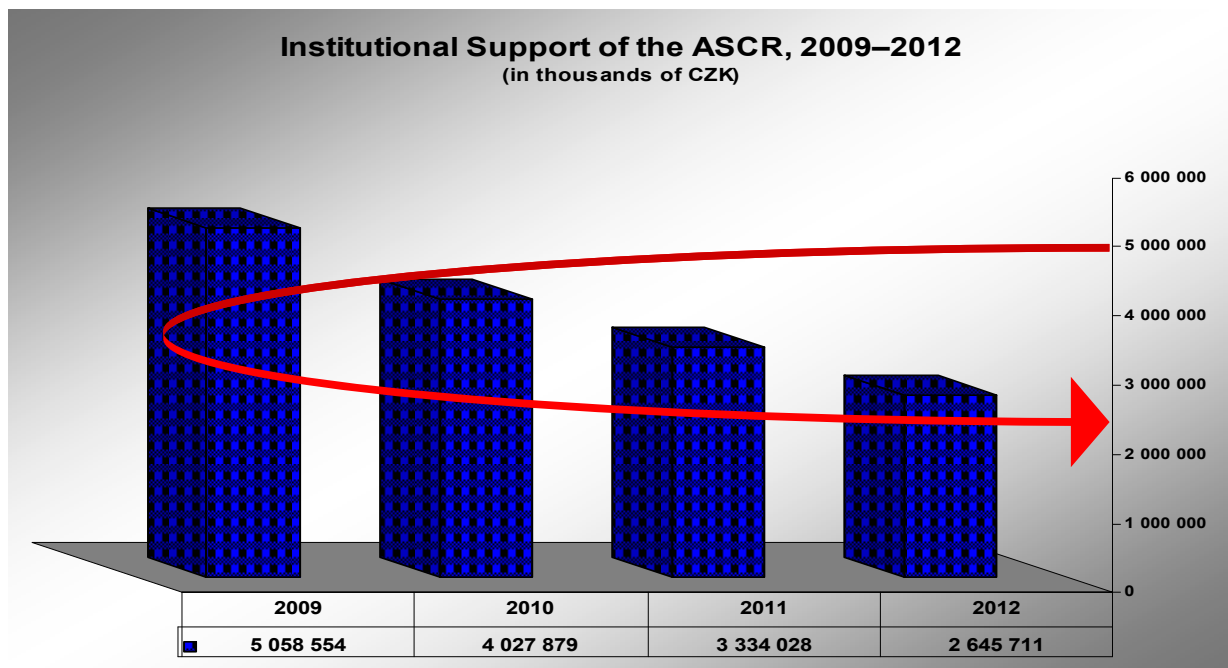


Dear members of the Academic Assembly, dear guests, ladies and gentlemen,

Today's session of the Academic Assembly is of an entirely exceptional character – it is the first extraordinary meeting of the Academic Assembly in the history of the Academy of Sciences of the Czech Republic (ASCR) up to now. The main and only reason for its convocation is the reaction of a number of you to the current situation in the area of research and development in this state. As you all certainly know, the Research and Development Council presented the Government of the CR the Proposal of the State Budget Expenditures of the Czech Republic on Research, Development and Innovation for 2010 with a Perspective on Years 2011 and 2012. The proposal of the institutional support of the ASCR in this budget assumes a plunging reduction of the institutional expenditures by 1.03 billion CZK for 2010, i.e. by more than 20 %, and in the course of the next three years by almost half as against 2009!



Source: R&DC

The proposed reduction in 2010 and especially the similar development in the subsequent years would inevitably mean the closure of the system of workplaces of the ASCR in its current form and all of this in a situation when according to the proclamation of the government the overall expenditures of the budget of the CR for R&D will not decrease!

Dear members of the Academic Assembly, dear guests, as many of you naturally already know, the Government at its meeting yesterday approved this for the ASCR liquidating budget proposal! It approved it despite the protests of a number of recognised scientific institutions as well as respected personalities from the area of research and development. The government approved this budget without giving me as the President of the ASCR any opportunity to defend the position of the ASCR at yesterday's meeting of the government.

Ladies and gentlemen, I say with all sincerity that at this moment it is far from being only about the ASCR. The utterly warped interpretation of the Reform of the System of Research, Development and Innovation (R&D&I) in the Czech Republic by the Research and Development Council, as well as the method of preparing the budget for R&D that is being pushed through by the Council will in a short time mean the liquidation not only of the ASCR but subsequently also of the quality research at other institutions, hence quite certainly also at higher educational institutions. Allow me after this excursion to continue in my prepared speech – I have no reason to change anything in it.

As a one-time stipendiary of the Humboldt Foundation, I would like to recall here one fundamental idea of Alexander von Humboldt, according to which it is essential that a 'variety of situations' exist to enrich, consolidate and perfect human existence. Science as such and primarily basic research in its results contribute to the formation and expansion of these diverse circumstances of our lives and support the growth of human knowledge in the heterogeneous palette of the scientific fields cultivated. Should the solution of one situation fail, the other possibilities remain open. In this lies one of the main benefits of science and the academic community to society, its free development, and in that sense it is also necessary to perceive traditional European plurality as a basic positive value. It is very short-sighted to bet everything on one card, on a single identical situation or on one numerical parameter, and in so doing to abandon the diversity of economic resources and institutional foundations necessary for the operation and development of science and research as a prerequisite for the freedom of intellectual movement, with whose limitation several generations of the citizens of this republic had sad experience in the period before the Velvet Revolution of 1989.

This clear and universally valid point of departure forms the basis of my argumentation directed at those who trifle on the one hand with the idea of the institutional levelling of science and research under one unified roof – be it university or non-university, built upon a centralised system of financing, and on the other hand with the conception that the other researchers can satisfy themselves with 'fresh air' where they can devote themselves to grant activities and on occasion seek other, albeit less sophisticated jobs. It is precisely the opposite – it is necessary to reinforce the foundations of the knowledge economy, deepen the synergies between university and non-university research, between basic and applied research and between science and technologies. By the way, removing the boundaries between these traditional categories also contributes to the diversity of scientific work and is what supports the 'variety of situations' emphasised by Humboldt.

I am convinced that a hardly replaceable role in this direction has been played in our environment by precisely the Academy of Sciences, especially thanks to its significantly independent and autonomous position – the institutes of the Academy are not subjected to any ministry, are legally independent, do not suffer from bureaucracy 'from above', and have very flexible contacts with the management of the Academy of Sciences. An entirely fundamental positive aspect for the

development of research work is definitely also the fact that the people in the management of the Academy of Sciences (members of the Academy Council and the Council for Sciences) are elected by the Academic Assembly from among the scientific employees. Thanks to this democratic principle and a broad consensus, their position is thus clearly legitimate, politically independent and, connected with that, undeniably responsible for the governance of public research institutes, which needs to be emphasised particularly in comparison with the functioning of government ministries.

If I speak about non-university research, I would like to mention that this research is quite significantly represented in Europe, and that not only in former countries of the Soviet bloc. In neighbouring Germany, for example, there is an entire range of non-university research institutions, namely Max-Planck-Gesellschaft (85 % financed from public sources), Helmholtz-Gemeinschaft (70 % from public sources), Leibniz-Gemeinschaft, Fraunhofer-Gesellschaft; the situation is similar for instance in France, in Italy or in Spain. Even in the so frequently mentioned United States there is an entire range of national research laboratories, which employ a large number of people and are institutions entirely independent of universities; in other words, non-university research in developed countries exists, thrives and yields outstanding results.

	Number of Institutes	Budget (in mil. EUR)	Number of employees	of whom: researchers
Max-Planck-Gesellschaft	76	1,053	12,389	4,716
Helmholtz-Gemeinschaft	15	2,800	27,962	8,763
Leibniz-Gemeinschaft	84	1,194	13,930	6,347
Fraunhofer-Gesellschaft	58	1,320	13,600	-
Total	233	6,367	67,881	19,826

Source: Annual Reports of the individual institutes

In the given context, I therefore consider the actions of some members of the Research and Development Council (R&DC), who on the basis of either incorrect data or for purely formal reasons voted for the mentioned budget proposal and hence significantly damaged the Academy of Sciences (one of the most efficient components of the R&D system in the CR) to be very irresponsible. I would like to stress that this step of the R&DC finds no support in the programme documents of the previous governments or the current government. To wit, the limitation of funds for science or the liquidation of research workplaces or even the destabilisation of the R&D system is naturally not among the government's priorities. In reality, it is precisely the opposite. The practice of these R&DC members, who are abusing the current economic situation to justify the proposal to liquidate a significant part of the ASCR workplaces, is entirely unacceptable, and I have been very surprised by the vehemence with which the R&DC representatives defend this step. However, what is even more serious, dear colleagues, is the alarming fact that in a democratic legal state, which the Czech Republic undoubtedly is, it has not been possible so far to

initiate the mechanisms that would be able to hinder and effectively penalise such wanton, illegitimate and demonstrably incompetent acts of a narrow group of people.

At this point, I would like to emphasise that the Academy of Sciences is fully aware of the complicated budget situation in our country and appreciates the position paper of the government of the CR, which considers science, research and development as one of its main priorities. The representatives of the Academy of Sciences were thus prepared to accept a justified reduction in the institutional expenditures of the budget chapter of the Academy. However, a plunging reduction by more than 1 billion in 2010 as compared to 2009 and a further severe reduction to a mere half in 2012 can in no way be considered to be a reasonable reduction in institutional expenditures. Such a year-on-year change represents a shock, which cannot be resolved by a mere reorganisation, austerity or rationalisation measures. I remind you again that this leaping change occurs in a situation when according to a proclamation of the government the overall expenditures of the state budget for R&D&I will not be reduced. The proposed reduction of the budget of the Academy of Sciences would thus in the medium term lead to a drastic limitation of its activities and the closure of a number of research institutes, namely with all the negative social-economic consequences.

Ladies and gentlemen, if we want to deal with this situation seriously, we have to endeavour to find the answers to the following questions: **Firstly**, how could this situation have come about? **Secondly**, who is responsible for this situation? And **thirdly**, is there any solution to this situation?

How could this situation have come about?

In order for us to understand the essence of the problem, we have to return to recent history, which began with the preparation of the 'Reform of the System of R&D&I in the Czech Republic'. At that time (around 2005), it was possible to reach an agreement on the necessity of reforming the system of R&D in the CR. The main reasons for the Reform were later formulated in the following manner:

- insufficiency and fragmentation of the public support for R&D
- low contribution of research, development and innovation to the economy and society
- insufficient interconnection of research, education and innovation
- low number of quality researchers
- support of mediocrity at the expense of excellence
- unsuitable methodology for evaluating R&D outcomes
- absence of European research infrastructures
- insufficient share of university graduates in technical and natural science fields

As a person who has worked in the area of research management for some time already, I would like to remind you of the then frequently and fervently repeated statements of some members of the R&DC, namely that one of the main reasons for

the acceleration of the R&D&I reform is the fact that billions of korunas, they spoke of 5 to 6 billion per annum, are invested from the R&D chapter in the area of applied research every year without any result at all. In the same breath, it was said that these monetary leaks into black holes did not have anything to do with the institutes of the ASCR or higher educational institutions. It might be precisely for that reason that the conviction predominated in the academic community that if it were possible to identify and name the main weakness of the R&D system, the further development would only be a question of their proper resolution and the timing of the legislative-technical process. With the advantage of hindsight, however, I must now state that we underestimated the pressure of the *zeitgeist*, namely the trivialisation of the world and the oversimplification of the fundamentals of the problems. At this point, I would like to call upon the representatives of the R&DC to explain to the academic community as well as the representatives of the media present here how those black holes have been plugged and why a significant amount of finances continues to be shifted from quality basic research to the private sphere in the proposed budget. For these poorly-planned, or perhaps very well conceived shifts, particularly the ASCR but also higher educational institutions are to pay.

But back to the Reform: based on the identified weaknesses, the main aims of the Reform were set whose fulfilment was to limit low-quality research and steer the money where high-quality research was being conducted. These were the aims:

- to simplify the support of research and development – to support institutions according to results, teams by projects
- to reduce significantly the number of 22 budget chapters, to reduce the administrative burden
- to support excellence in research, favour it and ensure the utilisation of its outcomes for innovation
- to condition the programme support of R&D&I by cooperation of public research with the users of the R&D&I outcomes, based on shared financing from public and private resources
- to implement more flexible organisational structures of public research
- to provide specialists for research, development and innovation
- to integrate the CR intensively in international cooperation in R&D&I

The Reform was gradually implemented according to the following timetable:

- approval of the proposal of the reform at the 230th session of the R&DC (8 February 2008)
- discussion of the reform proposal by the government (26 March 2008)
- projection of the reform into the proposal of expenditures of the SB for R&D for 2009 (May 2008)
- projection of the reform into the implementing documents of the OP for R&D&I (June 2008)
- projection of the reform into the proposal of the amendment of Act 130/2002 Coll. and its implementing regulations (June 2008)

- projection of the reform into the changes of public administration not requiring amendments of the legal regulations (December 2008)
- the amendment of Act 130/2002 Coll. taking effect (1 July 2009)

We will probably all agree that it was possible to consent to the listed aims of the Reform and that even the reform efforts as such have brought some positive impulses. Nevertheless, in none of its stages did the Reform of Research, Development and Innovation create the desired vision of the system of scientific institutions and their mutual ties. The academic community in the ASCR therefore identified itself with the Reform only after a longer material discussion, and being aware of the urgency of a resolution of the mentioned basic aims supported the Reform in the end. The discussion at the very least allowed us to name the main weaknesses of the R&D system in the CR, identify the risks of further development and clarify many urgent and topical problems in Czech science. Contrary to the declared aims of the Reform, however, during their legislative anchoring and especially during their practical implementation some distortions occurred, which not only changed the sense of the Reform but fundamentally undermine the positive trends in the development of science and research in the CR.

These deformations can be summarised in three main points:

- The success rate of R&D institutions on the basis of the achieved results was expressed using an untested and in principle unsound methodology
- The methodology unsystematically confuses the outcomes of basic and applied research
- The evaluation of R&D has been conceived as a mere tool and means for dividing financial funds among providers, with its original sense – to stimulate quality and excellence – being entirely marginalised

The outcome of these deformations is the alarming fact that the money from the state budget for research supports quantity and mediocrity at the expense of quality and excellence.

Ladies and gentlemen, it is not the aim of this extraordinary session of the assembly to resolve in detail the weaknesses of the methodology of the evaluation – the ongoing discussion in the academic community on this theme sufficiently proves that the methodology has a number of fundamental inadequacies. I would like to remind you here of the most important ones:

- The methodology:
 - contradicts the basic aims of the Reform
 - supports excellence neither in research, in development nor in innovation
 - prefers quantity to quality
 - changes the motivation of the participants in an undesirable way
 - places barriers between individual R&D institutions in the CR and thus further

- deepens the gulf between research and education
- acts against international cooperation

In terms of the application of the evaluation methodology, I must emphatically object here to the demonstrably untrue claims of some members of the R&DC that the ASCR did not begin to protest expediently against the application of the methodology until the beginning of this year. We can prove that the Academy of Sciences already in 2004, thus five years ago, expressed officially and in writing the opinion that, on the basis of this proposed mechanism (convert the results of the evaluation into points and the points into money), institutional funds cannot be divided into individual institutions. In the years that followed, in addition to component comments which were to remove the most deforming aspects from the evaluation methodology, we always consistently insisted on our main reservations and pointed to the possible negative consequences of such a mechanical and purely bureaucratic approach. The persistence of our efforts and the wantonness of the governmental officials is proved by the fact that already three consecutive Presidents of the Academy of Sciences have drawn attention to the substantial systemic flaws in the evaluation methodology. In this context, I would like to emphasise that in the debate on the final version of the evaluation methodology for 2009 its fundamental principles were refused also by the Czech Rectors Conference and fundamentally criticised by the Council of Higher Educational Institutions, namely for the same reasons to which also the Academy of Sciences has been calling attention in the long term.

Some of the consequences of the application of the evaluation methodology for the area of development and innovation are illustrated by the following comparison:

<i>Recipient</i>	<i>Patent</i>	<i>Technologies</i>	<i>Utility Model</i>
(points:	25»40/200/500	25»100	25»40)
ASCR	1.1	0.6	3
Universities	2.3	1.4	27
Companies	10	1.1	10
ALE*	0.7	0.8	8

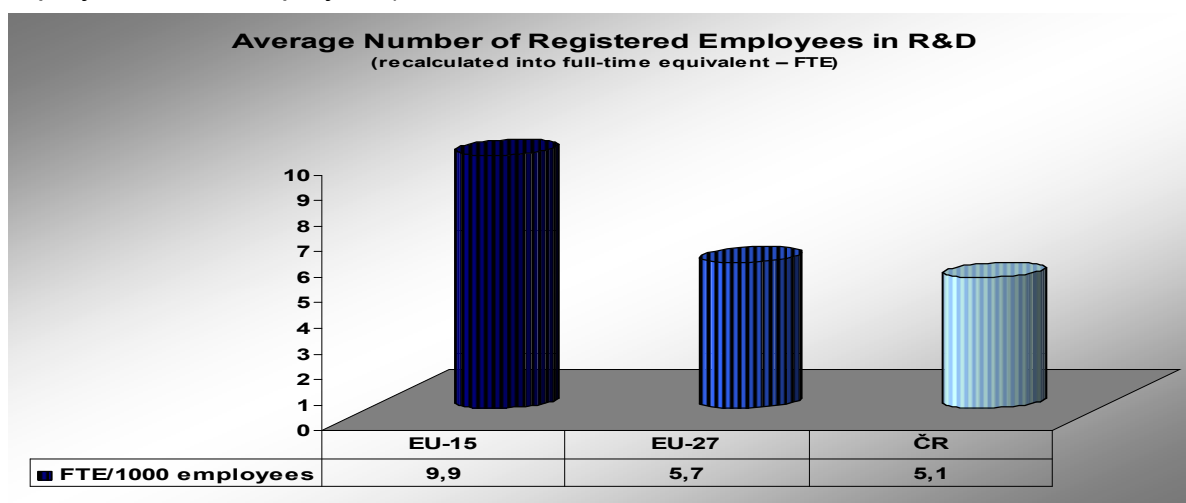
*ALE – Association of Legal Entities

Please take note of the negligible increase of points in the area of technologies, although precisely this area is key for further development in the production sphere. Not even the number of patents skyrocketed; however, the category of results that are relatively highly evaluated in points, poorly verifiable and in terms of the gains very disputable, thus the number of prototypes, implemented methodologies, functional models and authorised software, increased unbelievably.

An undesirable outcome of this reform effort in the R&D&I area is thus the fact that under the pressure of the Reform it is not worth it to conduct quality basic research or

in the framework of applied research to design new technologies. Moreover, in its consequences the methodology is counterproductive for the desired cooperation between the individual R&D&I institutions in the CR. This entirely mechanical approach, which dominated in the preparation of the proposed budget for the R&D&I area and which does not take into consideration such key parameters as a different method of financing individual types of research institutions or different levels of expensiveness of individual fields and types of research, results in the budget proposal most significantly limiting, in contradiction to the main aim of the Reform, the financing of precisely the Academy of Sciences, despite that fact that according to a number of indicators its system of workplaces is the best-quality and most efficient component of R&D&I in the CR. The workplaces of the Academy of Sciences do not dominate research and development in our environment by their extent but by their output and quality. At the same time, it need be said that along with the higher educational institutions it yields the absolute majority of all the outcomes in this area.

Nevertheless, here I must point out the different way of financing the Academy of Sciences and public higher educational institutions. Unlike higher educational institutions, the expenditures for the activity of the Academy of Sciences have up to now been covered only from the funds for research and development. However, it is not only about the activity of the ASCR (as an organisational component of the state) but also and mainly about the provision of the basic operation of all the workplaces of the Academy, their infrastructures, which are at the same time very often utilised by the wider academic community of the given fields, no matter if they work at a higher educational institution or elsewhere. In terms of the structure of the state budget, it would therefore be desirable to increase this item so that it would respect the actual operational costs of the Academy and its workplaces. Otherwise, the impacts of every reduction of the ASCR budget on the level of institutional funding will always be reflected in the personnel area, and the Czech Republic with 5.1 FTE employees/1000 employees is already now below the average of the EU-27 (5.7 FTE employees/1000 employees) and far below the average of the EU-15 (9.9 FTE employees/1000 employees).



Source: Czech Statistical Office, Eurostat

If I am speaking about the financing of the ASCR, I have to stress the fact that the Academy of Sciences moreover subsidises with a considerable part of its budget also the costs of students in doctoral study programmes: for example in 2007, 2,154 doctoral candidates were being trained at workplaces of the ASCR, without that activity being systemically financed. The normative entitlements per student or the means for the support of a specific research project are not transferred into the workplaces of the Academy of Sciences. This amounts to ca 150 million CZK (with the average costs per student being ca 70,000 CZK)¹. Considering the direct participation of the doctoral students in the research programmes of the institutes of the Academy of Sciences, the students in doctoral programmes are simultaneously also employees of its workplaces. The costs connected with them (salaries and other operational means) can be estimated at another roughly 300 million CZK per annum (it is an estimate according to the normative entitlements of the MEYS), with a significant part of the results created in this way being simultaneously reported by higher educational institutions. Last but not least, it is necessary to remind everyone that the employees of the Academy of Sciences ensure and sponsor also a number of study programmes of higher educational institutions. Also the costs of this activity, including its preparation, are predominantly borne by the budget of the ASCR. I do not list these data to request a shift of means from higher educational institutes to workplaces of the ASCR but for us to realise what all is at the bottom of the data on the basis of which some try to evoke the impression of the ineffectiveness of the ASCR workplaces.

It is a sad consequence of the incorrect implementation of the Reform that the absolutely obvious cooperation of the institutes of the Academy of Sciences and higher educational institutions, which is proved *inter alia* by more than 50 joint workplaces, is eclipsed today by the externally promoted competition for financial resources in the order of percents. At the same time, however, it is clear from the Proposal of the State Budget Expenditures of the Czech Republic on Research, Development and Innovation for 2010 with a Perspective on Years 2011 and 2012, approved by the R&DC, that a significant part of the institutional funds which the ASCR will lose is not transferred to the benefit of the higher educational institutions but that there will be a transfer of the financial means outside both most effective components of R&D&I towards what is labelled as applied research, with the sources thus allocated being available under progressively worsening conditions. In this context, I would like to stress that unlike other entities participating in R&D, the workplaces of the Academy of Sciences will without suitable institutional financing from the funds for research and development and innovation be closed even with their systematically developed infrastructure. The mentioned development therefore completely precludes equal competition for specific-purpose funds so often proclaimed by the R&DC.

In connection with the occasional opinions on the efficiency of the ASCR in utilising institutional funds, some data can be presented: the number of employees of the

¹ Annual Report on the Activity of the CRC for 2008

Academy of Sciences paid from institutional funds has not risen since 2001. The workplaces of the ASCR cover only 53% of their expenditures from institutional funds, 23 % is covered from extrabudgetary means – in 2008 it was ca 2 billion CZK. I do not know of any other institution in this state that deals with basic research and is so successful in acquiring further resources from outside the state budget. Nevertheless, it is clear that without the institutional base, the workplaces of the ASCR will not be capable in the future of gaining even that fourth of the funds coming from extrabudgetary sources or other sources from specific-purpose financing, which will continue to deepen the deficit of the budget of the Academy of Sciences and spin the liquidation spiral swiftly.

The proposed drastic drop in the financing of the Academy of Sciences from institutional funds and especially the similar development in the subsequent years would unavoidably mean the closure of the system of workplaces of the ASCR with these consequences:

- the liquidation of one of the most efficient components of the R&D system in the CR
- a substantial lowering of the already very low number of employees in R&D&I (almost half when compared with the EU-15 average) connected with a massive brain drain of research workers abroad and outside the R&D&I area
- a debasement of the investment so far in the human and material potential of the ASCR, namely in the order of tens of billions of korunas
- a destabilisation of the R&D&I system in the Czech Republic and fundamental reduction in the efficiency of Czech research, which in the long term will necessarily be projected also into the development of the competitiveness of the Czech Republic
- the closure of many projects of domestic and international cooperation in research
- the damaging of the reputation of Czech science as well as the Czech Republic in the international context
- an endangering of the public trust in science and scientific institutions in which the tradition of European rationality lies
- the interruption of the continuity of many decades of scientific research and its infrastructure

Allow me to mention several randomly selected important scientific infrastructures or large projects that would be threatened by this development.

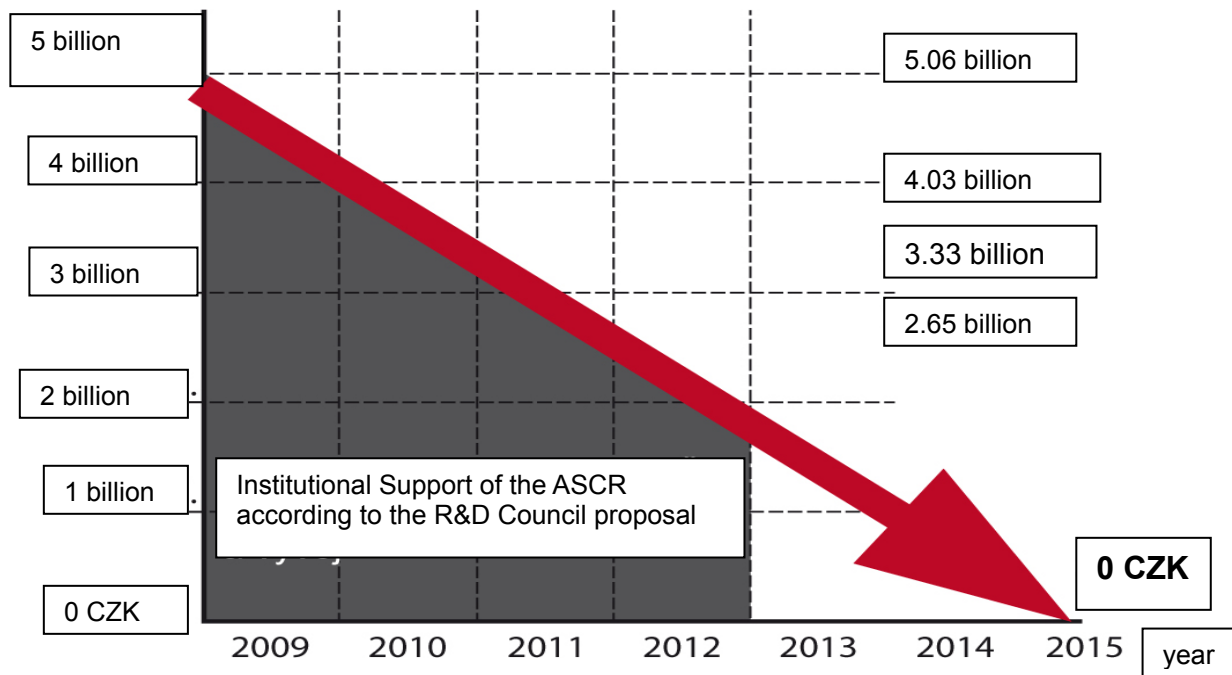
In the area of sciences on the inanimate nature, it is for example the COMPASS tokamak, which represents a significant part of the international research on thermonuclear fusion, or one of the largest laser systems, PALS, which already now serves as a centre of European research and without whose successful operation the CR could not apply at all for the ELI (Extreme Light Infrastructure) project, the project of the first large European infrastructure in the new EU member states, and would lose that opportunity for many more years. Through its outcomes, this laser system

should contribute to European as well as world development in a wide spectrum of fields – ranging from oncological treatment to nuclear waste disposal. The current situation would have a negative impact on not only cooperation with the medical field, which is ever more reflected in the discoveries of basic methods of medical diagnostics and biodiagnostics as well as new materials, but also on successful cooperation in the industry and technology areas – for example the Česká hlava (Czech Head) Award in 2008 was presented in the Industry category for the Holography and Diffraction Optics project. Such development would lead to a radical limitation of further possibilities for study and care for nature and the cultural heritage.

In the area of sciences on living nature and chemical sciences, we have already been forced as a consequence of the current budgetary problems to stop the preparation of the Central European Synchrotron Laboratory (CESLAB), despite its being demonstrably one of the best prepared projects of the Operational Programme of Research and Development for Innovation. The proposed budget seriously puts a number of other projects in theoretical as well as experimental research in selected areas of chemical, biological, ecological and medical sciences in grave danger. Here, I would mention just a few from the area of human medicine: e.g. a project of targeted treatment of tumours using polymer cytostatics, promising research of the treatment of neurodegenerative brain diseases, or the development of another generation of antitumour medicines from plant hormone derivatives. I could of course name a number of other research projects with outstanding results on the world-wide level – none of them would have emerged without multiple-year and systematic research.

Finally, as far as the area of humanities and social sciences is concerned, it can justifiably be presumed that under such circumstances such extensive and fundamental projects as the *Atlas historických měst České republiky* [Atlas of Historic Cities of the Czech Republic] would have never been completed, the synthetic work *Dějiny českých zemí* [History of the Czech Lands], which has just been issued in English and is being translated into a number of European languages, would never have emerged. Furthermore, work on the projects of a similar character that are being prepared would have to be stopped, but foremost it would not be possible to finance even the infrastructure of the scientific libraries, journals and publishers, which have centuries of tradition and without which work in these fields is not possible. Whereas other (particularly smaller) European states intensively support research of national history, language, literature and culture and for this purpose have founded the European network HERA – Humanities in the European Research Area, the Czech Republic for lack of funds for such projects would reach the edge of scientific and cultural marginalisation in the European area also in this respect.

The medium-term outlook of the institutional support of the ASCR according to the proposal of the Research and Development Council is pregnantly illustrated by the following graph:



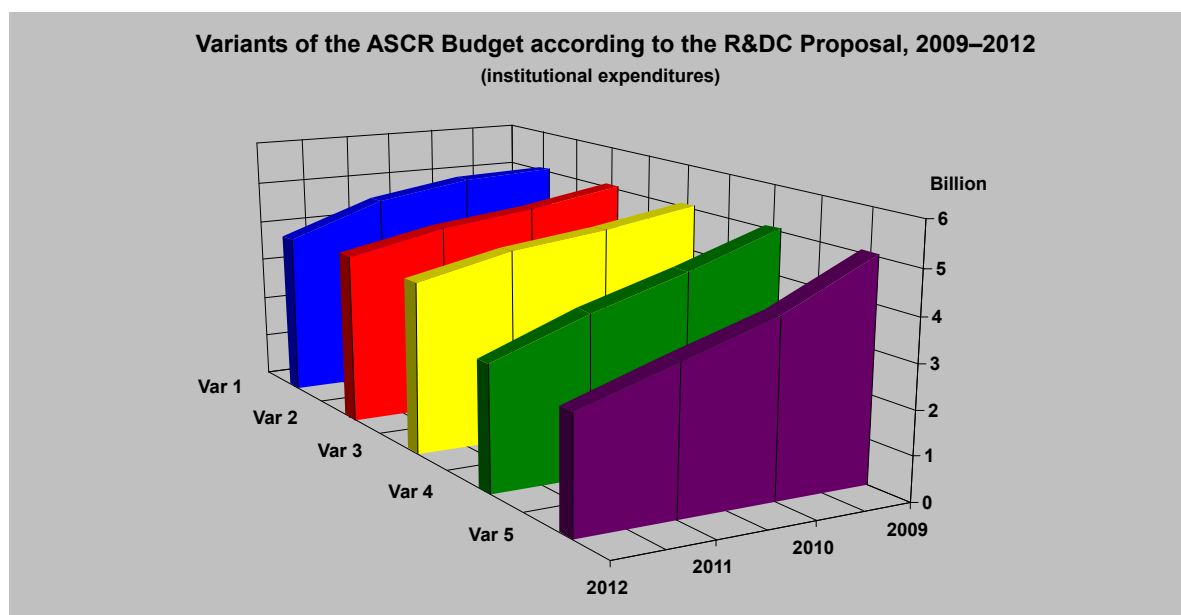
Who is responsible for this situation?

The first thing that I would like to mention in relation to this is the fact that I am still trying to believe that the current problem of the considerable limitation of the activity of the Academy of Sciences and its workplaces did not emerge as a consequence of the fulfilment of a direct political task. However, we have to be aware here that even the politics of good intentions can be manipulated, especially if its practise relies on a bureaucratic apparatus whose interest is particularly and primarily to simplify its work. It is indisputable that the preparation and implementation of the reform measures have been assumed by bureaucrats, who in an attempt to find the simplest possible instrument for the distribution of financial means for research subordinated the principles of the evaluation of research and development precisely to the needs of this distribution. It is significant that their efforts were directed not at the core of the Reform – thus the quality evaluation of research, which would have rather complicated their work, but at the simplest possible form of money distribution. Without reflection of the bounds of their professional competence, yet subject to self-indulgence and their special interests and perhaps even the interests of allied lobbying groups, these bureaucrats set out on a path negating the sense of the Reform of Research and Development and Innovation.

That, however, in no case excuses the position of those members of the R&DC who defend the R&D Evaluation Methodology and its flawed outcomes as a bureaucratic tool for the distribution of funds, and that despite the unremitting protests of the Academy of Sciences, the Czech Rectors Conference, the Council of Higher Educational Institutions and further significant representatives of the academic community. At the same time, it is inconceivable that the R&DC, already from the sole perspective of its competency, would ignore such an unequivocal position of the academic community. Here, it is indisputably a failure of the R&DC – I would

therefore call upon those members of the Council who actively participated in pushing the budget proposal for the Academy of Sciences through to stand up publically and inform the academic community on the reasons for their acts, or even to explain them here on the spot if they are guests or even members of the Academic Assembly. In this context, I cannot but mention the report from the June meeting of the Research and Development Council, whose author is Prof Zrzavý, Vice-Chancellor of the University of South Bohemia in České Budějovice, Chairperson of the Specialist Commission of the R&DC for the Sciences of Living Nature and member of the R&D Results Evaluation Commission. The members of the Academic Assembly could become acquainted with his report in the electronic discussion. Ladies and Gentlemen, after reading this contribution of Prof Zrzavý I might have become in the eyes of some of you a naïve person who has not yet understood how the R&D policy is formed in this state – to wit more precisely said in the R&DC. But I think that the mentioned document provides information especially on its author, a high functionary of a public higher educational institution, whose Faculty of Biological Sciences could not even have been established, let alone then successfully exist, without the close cooperation with the institutes of the ASCR in České Budějovice. Moreover, although the author might not have intended it, his report as a whole aptly illustrates the ‘conceptuality’ of the discussions on the key issues of the future of R&D in this state in the R&DC.

Here I reach the **second thing** that I would like to emphasise – namely in what situation the mentioned budget proposal comes.



Source: R&DC

It comes at a time when the Czech government in its programme manifesto undertook to seek responsibly ways to minimise the impacts of the global economic crisis on the Czech economy – a component of the government politics should be also a realistic and well-founded budget for 2010. In this regard, the proposal approved by the R&DC cannot in any way be considered as a responsible and qualified decision. It is precisely at a time of deep economic and financial crisis which is connected with the limitation of funds also for other chapters of the state budget that the proposal of the destruction of the functional institutional structures of the ASCR, which ensure the quality results of research and development, represents an unequivocal economic and social gamble. The competition for specific-purpose funds, so often declared by the R&DC, can and will be a boon and will guarantee the results for certain areas of research and development but only under the assumption that the institutional base for quality research institutions is maintained. This fact is twice as true in a period of economic instability and crisis, when the private sector is in no way capable of absorbing the work force, albeit highly qualified.

The last – already the fifth – version of the Proposal of the State Budget Expenditures on R&D&I to be prepared by the R&DC would mean in the final consequences the redundancy of at least one-third of all the research employees of the Academy of Sciences.

In the given context, it is necessary to stress also the fact that the problem of the proposal of the budget of the ASCR for subsequent years is not caused by the necessity to co-finance European projects either. However, the R&DC is abusing the

current economic recession to weaken the position of the ASCR financially with entirely incorrect arguments.

This is also in direct contradiction to the main aim of the Reform, because it affects one of the main producers of top internationally comparable results of basic research with a disproportionately large reduction. Furthermore, the proposal of the state budget is not supported by any professional analysis which would verify whether the Methodology which is applied adequately assesses the quality of R&D&I results in individual scientific fields.

My **third note** deals with the ethical dimension of the evaluation methodology. As is evident from the explanation so far, the fundamental problems are caused by the contemporary application of an unsound methodology of evaluating the results when preparing the R&D&I budget. The negative consequences of the application of this Methodology and the approach when distributing the money are visible already now. In a number of institutions, the creation of scientific results has changed into a mere pursuit of points. The quality of the research, which was one of the main aims of the governmental Reform of the System of R&D&I, has been replaced by quantity and the production of outcomes highly evaluated in terms of points but very disputable in terms of quality and contribution. Scientists are exhorted to attempt to ensure the highest number of points for their institution at any price, which is in contradiction to the basic ethical principles of scientific work as they are formulated e.g. in the European Charter and the Code of Ethics of Scientific Employees. Since points for results are divided among co-authors and their institutions, considerations as well as official advice appear on how to take every opportunity to deprive the co-author and his/her institution of a part of the points (thus money). 'The Register of Information on the Results of Research and Development' was overrun in a flash by a large amount of so-called 'soft' results, whose use does not require any thorough opponency or assessment of quality. Pressure is thus being exerted to change the behaviour of the research community towards showing results, not towards an increase in the research quality.

As a consequence of the erroneous and ill-conceived steps of the R&DC, it has happened that the institutional financing has changed from the support of research, i.e. the defrayal of costs, to a kind of premium for the implementation of research regardless of where the research is conducted, in what quality, and from what funds its costs are covered. This puts institutions that conduct exclusively or predominantly research activity at a disadvantage when compared to institutions whose costs are covered also from other sources. The R&DC has completely resigned on a systemic resolution of this problem. Instead of a well-conceived and long-term solution, the efforts of some of the members of the R&DC and its apparatus were aimed at pushing through a single, universal instrument for the evaluation and distribution of the money for science, with the primary aim being to divide the finances and not to evaluate the science and stimulate its development.

At the request of the presidium of the R&DC, in an attempt to resolve the problem of

the costs for the activity of the ASCR, the management of the Academy of Sciences quantified these costs in numbers and, in accord with the long-term articulated opinion on the unsuitability of the huge changes in the budget, they proposed as an accommodating gesture a gradual increase of the expenditures for activity in 2010–2012 always by a third of the quantified amount, i.e. by ca 360 million CZK per annum, not by 1 billion CZK, as was purposely presented by some members of the R&DC. Despite the conservative estimate of the ASCR not having been officially disputed by the representatives of the R&DC, it was completely ignored by the Council in the preparation of the budget proposal.

Is there any solution to this situation?

If we proceed from the identified risks of the further development, then it is entirely crucial for the resolution of this situation that the political and professional levels be separated from one another.

For the successful completion of the Reform, it will be necessary to undertake the following steps on the professional level:

- to prepare an alternative system of evaluation and distribution of the institutional funds for R&D&I so that the priority would be to guarantee the quality and excellence of the results
- to apply internationally recognised standards to the evaluation of the results of research work
- to prepare the relevant legislative amendments
- to prepare specific communication programmes for the public with the aim of stimulating the society-wide discussion of science, its principles and further development

For the successful completion of the Reform, it will be necessary to adopt these measures on the political level:

- to analyse the main reasons for the non-fulfilment of the fundamental principles of the Reform of the System of R&D&I
- to revise the proposal of the state budget for R&D&I for 2010 with a medium-term perspective for 2011–2012 in order to ensure the fulfilment of the main aims of the Reform of the System of R&D&I
- to change the personnel composition of the Research and Development Council and its secretariat
- to revise, after a thorough expert discussion, the problematic provisions of Act No. 130/2002 Coll., On the Support of Research and Development from Public Funds

I would like to emphasise that the fulfilment of the aims of the Reform would be

significantly assisted by an increase in the expenditures of the state budget for research and development. Even though I am aware of the overall difficult economic situation, I want to appeal to the Government of the CR to support like other advanced countries the future development of the Czech Republic in the spirit of the current trends of the globalised world, where the increase in competitiveness is tied to the advancement of the knowledge economy, tertiary education, science and research and the support of their synergies.

In an attempt to achieve the declared goals of the Reform, the Academy of Sciences is still prepared to act in a constructive and transparent way. These aims, however, cannot be at odds with the principle of quality and excellence. The key issue in this endeavour will be to gain and maintain the support of the public, because the autonomy of science and its institutions is conditioned by the support and trust of the public in science and its contribution to all of society. However, we must realise that society does not need only scientists, but that it requires the best scientists possible if feasible. If we are to have great scientists and results comparable with the world, then also society will be favourably inclined towards the support of our scientific, educational and research activities. This clearly reflects the short-sightedness of the approach of the R&DC, which by its steps is changing the sense of the Reform towards the support of mediocrity.

Put in economic terms: what is important is not what is being fully produced today but the likelihood that it will be possible even tomorrow. Nevertheless, just like the economy cannot live outside the rules of economic processes, not even science can function optimally in an environment of short-term and unsystematic steps, leading outside the framework of the rules of the operation of science and research normally respected in all of the advanced and developed countries of the world.

Hannah Arendt described one of these destructive forms as the transformation of citizens into functionaries, who under the guise of fulfilling their obligations assume the right to determine what is correct for society and what is not. Everything indicates that we have to deal with this type of action and it is high time that the academic community united its efforts and demonstrated distinctly that it will not submit to the attempts of functionaries and state officials to determine the future of science and research in the Czech Republic.

We, the entire academic community, must jointly attempt to find a solution that would place science and generally the issue of tertiary education at the very core of the life of Czech society. I repeatedly stress that these steps cannot be implemented without the systematic cooperation with our partners from the higher educational institutions. The Academy of Sciences, despite the trends set in the Methodology, considers the cooperation between its institutes and higher educational institutions as the basis for the effective evaluation of public funds both in the higher quality of research and in education.

In the given context, however, it is entirely fitting to remind you of the status of all of

the workplaces of the Academy of Sciences, i.e. the status of public research institutions whose activity is supported from public funds, should serve the public and be checked by the public. There is no choice but to alert to the given situation precisely the public, its representatives in the Chamber of Deputies and the Senate of the Czech Republic (particularly the relevant committees of both chambers), governmental officials, institutions cooperating in the long term with the Academy of Sciences, namely at home as well as abroad, and last but not least and perhaps predominantly the media. I emphasise that these steps are required by the alarming situation when a significant part of the specialised public in this state regard the ill-conceived activity of the current R&DC very critically.

From this place, I would like to thank especially the Learned Society of the Czech Republic, the Council of Scientific Societies of the Czech Republic, the Chancellor and Scientific Council of Charles University, the Czech Society for Cybernetics and Informatics, the Czech Immunological Society, the Czech Physics Society, the Trade Union of Workers in Science and Research and further institutions as well as a number of individuals for the public support which the Academy of Sciences has been given in this difficult situation.

At the very end, allow me, dear members of the Academic Assembly, to express several recommendations for today's resolution of the Assembly. I recommend that the Assembly:

- request that the Government of the Czech Republic, Prime Minister and Chairperson of the Research and Development Council Jan Fischer ensure the revision of the Proposal of the State Budget Expenditures of the Czech Republic on R&D&I for 2010 with a Medium-Term Perspective on Years 2011 and 2012 in such a way that it guarantees the fulfilment of the main aims of the Reform of the System of R&D&I in the CR;
- request that Chairperson of the R&DC Jan Fischer make fundamental personnel changes in the Research and Development Council and its secretariat, namely as soon as possible;
- charge the President of the ASCR and members of the Academy Council with discussing the resultant situation with the representatives of all the parliamentary parties and members of the materially relevant committees of the Chamber of Deputies and the Senate of the Parliament of the Czech Republic and with informing European Commissioner for Science and Research Janez Potočnik and European Commissioner for Regional Policy Danuta Hübner on this situation;
- declare the will of the academic community to protest events in public in September and October of this year if it is not possible to reach agreement concerning the preparation of the budget for R&D&I for the next three years.

Thank you for your attention.