### **EUROPEAN COMMISSION**



Brussels, 24.XI.2005 K(2005) 4661

**Subject:** State aid No N 414/2005 – Czech Republic

Nanotechnologies for society

Sir.

#### 1. **PROCEDURE**

By letter of 5 August 2005, registered on 8 August 2005, the Czech authorities notified the aid scheme 'Nanotechnologies for Society'. The Commission asked for additional information by letter of 2 September 2005. The Czech authorities submitted the requested information by letter of 17 October 2005, registered the same day.

#### 2. **DESCRIPTION**

#### 2.1 Objectives, organisation, structure

The main objective of the notified programme is to achieve an important progress in development of research and practical use of nanotechnologies and nanomaterials in the Czech society. The programme shall also support the creation of a platform including the Academy of Sciences of the Czech Republic, universities as well as industry which will ensure a balanced long-term development of this scientific field.

According to the Czech authorities the analysis shows that only a specific, integrated and focused programme for support of research of nanotechnologies in the Czech Republic will enable to reverse the current unfavourable situation in this field

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The notified programme shall also contribute to the implementation of the European strategy for nanotechnology as defined in the Communication from the Commission 'Towards a European strategy for nanotechnology'.

The notified programme is divided into four sub-programmes reflecting the differences in substance and, more importantly, in time perspective of practical utilisation of research results:

- 1. Nanoelements, nanofibres and nanocomposite materials,
- 2. Nanobiology and nanomedicine,
- 3. Nano-macro boundary line,
- 4. New phenomena and materials for nanoelectronics.

The notified programme also supports cooperative research of universities and other public research establishments with firms.

The Academy of Science of the Czech Republic acts as a granting authority for the purposes of the notified programme.

The projects are selected in an open tender procedure.

# 2.2 Legal basis

The legal basis of the support programme is Act No. 130/2002 Coll., on Support of Research and Development from Public Funds (thereinafter 'the Act on support of research and development'), Government Regulation No. 461/2002 Coll., on Targeted support of Research and Development from Public Funds and on Public Tenders in Research and Development (thereinafter 'the Government Regulation on targeted support') and the text of the research programme 'Nanotechnologies for Society'.

#### 2.3 Duration

The duration of the support programme is from 1 July 2006 until 31 December 2012. The public tender will be announced before this date in order to allow sufficiently long assessment of applications. The Czech authorities confirm that no aid will be granted under the notified scheme before the positive decision of the Commission.

The maximum period for implementation of a concrete research project supported under the notified scheme is 5 years.

### 2.4 Beneficiaries

Beneficiaries of the aid granted under the notified support programme are public research establishments, e.g. establishments of the Academy of Sciences of the Czech Republic, universities and firms (SMEs as well as large companies).

<sup>&</sup>lt;sup>1</sup> COM(2004) 338 final, 12.5. 2004

The Czech authorities confirmed the public character of higher-education and research establishments (universities, public research establishments etc.) and made a commitment that the financial support will be granted to this category of beneficiaries only with respect to their non-economic activities, i.e. within this category of beneficiaries the aid will be granted only to entities which cannot be regarded as undertakings in the areas of activities supported under the notified programme.

The expected number of beneficiaries ranges from 51 to 100.

Beneficiaries of the aid granted under the notified programme are obliged to keep separate records pursuant to Act No. 563/1991 Coll., on accountancy on each supported project.

The notified programme is not sector specific.

The Czech authorities confirmed that research projects in the agricultural sector (concerning the products listed in Annex I of the EC Treaty) will not be supported under the notified programme.

#### 2.5 Form of aid

The State aid is granted in the form of non-refundable grants.

# 2.6 R&D stages

Granting of aid under the notified programme limited to projects at the R&D stage of fundamental and industrial research.

The Czech authorities confirmed that they will comply with the definition of fundamental research as laid down in Annex I of the Community framework for State aid for research and development (thereinafter the 'R&D Framework')<sup>2</sup>.

Also the feasibility studies preparatory to fundamental and industrial research will be supported under the notified programme.

# 2.7 Eligible costs

The costs eligible under the notified programme are following<sup>3</sup>:

- costs of personnel employed solely on the research activity,
- costs of durable assets used solely and on continual basis for the research activity,
- costs of land and premises used solely and on a continual basis (except when transferred commercially) for the research activity,
- costs of consultancy and equivalent services used exclusively for research activity, including the research, technical knowledge and patents etc. brought from outside sources,
- other operating expenses costs of materials, supplies and similar products incurred directly as a result of the research activity.

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<sup>&</sup>lt;sup>2</sup> OJ C 45, 17.2. 1996, p. 5.

<sup>&</sup>lt;sup>3</sup> Subject to detailed conditions of Article 3 of the Government Regulation on targeted support.

The patenting costs are also eligible for support under the notified programme, but their eligibility is limited to SMEs pursuant to the definition as laid down in Commission Regulation No 70/2001 as amended<sup>4</sup>.

## 2.8 Budget

The total planned budget for the whole duration of the notified programme, i.e. until 31 December 2012, is CZK 1.950 billion (EUR 65.9 million<sup>5</sup>).

The estimated yearly budgets are the following:

- 2006: CZK 100 million (EUR 3.4 million),
- 2007: CZK 350 million (EUR 11.8 million),
- 2008: CZK 350 million (EUR 11.8 million),
- 2009: CZK 350 million (EUR 11.8 million),
- 2010: CZK 300 million (EUR 10.1 million),
- 2011: CZK 250 million (EUR 8.4 million),
- 2012: CZK 250 million (EUR 8.4 million).

The Czech authorities undertook to notify individually any project to be supported under the notified programme whose costs exceed EUR 25 million and for which the proposed aid amount exceeds EUR 5 million.

## 2.9 Aid intensity

Fundamental research

The maximum aid intensity allowed is 100%.

The Czech authorities confirmed that the conditions of point 5.2 of the R&D Framework (i.e. research is far from the market, its results are widely available for exploitation on a non-discriminatory basis and at market rates, research work is not linked to any industrial or commercial objective of a particular enterprise and the results are widely disseminated) will be complied with when the aid for fundamental research is be granted.

#### Industrial research

The maximum aid intensity allowed under this programme for industrial research is 50%. The following bonuses are applicable:

- SME bonus: 10 percentage points,
- bonus for projects in assisted areas according to Article 87 (3) (a) and (c): 10 percentage points and 5 percentage points respectively,
- bonus for compliance with the Community's current framework programme for R&D: 15 percentage points.

Commission Regulation (EC) No 70/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to State aid to small and medium-sized enterprises, OJ L 10, 13.01. 2001, p.33, amended by Commission Regulation (EC) No 364/2004 of 25 February 2004 amending Regulation (EC) No 70/2001 as regards the extension of its scope to include aid for research and development, OJ L 63, 28.02. 2004, p.22.

On the basis of exchange rate EUR 1 = CZK 29.610 valid on 29.9. 2005 (Czech National Bank), the same exchange rate was applied in the whole document.

Considering the duration of the notified programme, the Czech authorities made a commitment to bring the application of regional bonuses into line with the new Regional aid map for the Czech Republic applicable from 1 January 2007 onwards.

As regards the application of a bonus for compliance with the Community's current framework programme for R&D, the Czech authorities undertook to submit the information on the application of the above mentioned bonus in the annual report on the implementation of the notified programme.

The maximum aid intensity for industrial research including the applicable bonuses will not exceed 75% of eligible costs.

The Czech authorities made a commitment to ensure in accordance with point 5.8 of the R&D Framework that in the case of State aid for R&D projects which are carried out in collaboration between public research establishments and private firms, the combined aid deriving from direct government support for a specific research project and contributions from public research establishments to that project will not exceed the maximum aid intensity ceiling applicable under the notified programme.

# Feasibility studies

The maximum aid intensities of the feasibility studies are the following:

- 100% for feasibility studies preparatory to fundamental research,
- 75% for feasibility studies preparatory to industrial research.

#### 2.10 Cumulation

The cumulation of aid granted under the notified programme with the aid received from other local, regional, national or Community sources to cover the same costs is possible. The Czech authorities confirm that maximum aid intensities applied under the programme will be respected. The granting authority will control the level of cumulated aid amount on the bases of intermediate and final reports on the implementation of supported projects. Furthermore, potential beneficiaries must submit a list of previously granted State aid to the granting authority already within the framework of the application process.

# 2.11 R&D results and their dissemination, intellectual property rights

According to the Act on support of research and development granting of aid is made conditional by the obligation of a beneficiary and a granting authority to publish<sup>6</sup> true and timely information on a supported R&D project and its results in the 'research and development information system'.

The existence of contractual arrangements between a granting authority and a beneficiary, between a beneficiary and the third parties taking part in a project and between beneficiaries if there are more than one, on the property and exploitation rights linked to the R&D results and their accessibility, represent a further precondition for granting the aid. In case a firm participates in a project in collaboration with public research establishment, the allocation of rights linked to R&D results depends on the individual arrangements among a granting

The Czech authorities note that the beneficiaries are obliged to publish directly the research results if they are not patentable.

authority, a public research establishment and a firm, i.e. the intellectual property rights are not automatically allocated to a public research establishment.

The following general rules of the Act on support of research and development apply as regards the exploitation of R&D results:

- all rights linked to R&D results belong to beneficiaries, intellectual property rights are regulated by specific legislation,
- as regards the results of R&D activities financed from public sources at the level exceeding 50% of eligible costs, a beneficiary is obliged to make those results accessible under the same conditions as laid down in a contract on R&D results exploitation for all parties interested in their utilisation,
- as for the results of R&D activities partly financed from public sources at the level of 50% or less of eligible costs, an agreement concerning the method and timing of R&D results exploitation must form part of a contract on R&D results exploitation,
- in case the results of R&D activities partly financed from public sources and from other sources are not exploited through a method and according to timing set up in the contract on R&D results exploitation, a beneficiary is obliged to provide R&D results for exploitation on the basis of standard non-discriminatory conditions to all interested parties.

The Czech authorities confirm that the R&D results linked to the supported projects will be available for exploitation on a non-discriminatory basis.

### 2.12 Incentive effect

The incentive effect of aid granted to large companies will be examined ex ante by the granting authority with a view to ensure that the R&D aid will serve as an incentive to large companies to undertake the R&D activities in addition to their normal day-to-day activities. The assessment criteria include e.g. the difference in R&D spending before and after the aid is granted, the number of jobs created during and after the implementation of a project, including those directly linked to the R&D activities, the increase of competitiveness assessed in relation to quality, importance and expected results of a R&D project to be supported under the notified programme.

The Czech authorities undertook to submit the annual reports on the implementation of the notified programme which will also include the information demonstrating the incentive effect of the aid granted to large companies.

### 3. ASSESSMENT

# 3.1 Existence of aid within the meaning of Article 87 (1) of the EC Treaty

## 3.1.1 Level of firms (SMEs, large companies)<sup>7</sup>

The Commission comes to the conclusion that the notified programme 'Nanotechnologies for Society' constitutes State aid within the meaning of Article 87 (1) of the EC Treaty at the level of firms carrying out R&D activities since it allows the beneficiaries to be relieved, by means of State resources, of a part of the R&D costs which they would normally have to bear themselves. Consequently, the financial aid from the State strengthens the position of beneficiaries in relation to their competitors in the Community and therefore has potentially distorting effects on competition. Products of beneficiary companies concerned are or might be subject to intra-Community trade and therefore the aid is likely to affect trade between Member States.

# 3.1.2 Level of public non-profit making research establishments

Pursuant to point 2.4 of the R&D Framework 'public financing of R&D activities by public non-profit making higher education or research establishments is normally not covered by Article 92 (1) [now 87 (1)] of the EC Treaty'. According to the Czech authorities this group of beneficiaries has a public character. The Czech authorities confirm that within this category of beneficiaries the aid will be granted only to entities which cannot be regarded as undertakings in the areas of activities supported under the notified programme, i.e. the aid will be granted only in relation to their non-economic activities. As regards the possible spill-over effects of public funding into the potential economic activities, the Commission notes that these entities are obliged to keep separate accounting records on eligible costs for each R&D project. Taking into account the fact that the R&D results are made available to Community industry on a non-discriminatory basis, the Commission concludes that the support granted to this group of beneficiaries does not constitute State aid within the meaning of Article 87 (1) of the EC Treaty.

## 3.1.3 Level of firms participating in cooperative research<sup>8</sup>

In the case of cooperative research carried out by public non-profit making research establishments in collaboration with industry (firms) which may be also supported the Commission notes that according to the Czech authorities none of the conditions of point 2.4 third paragraph of the R&D Framework<sup>9</sup> is satisfied and therefore pursuant to the same point

This group of beneficiaries includes all entities irrespective their legal form performing economic activities, i.e. entities which are considered as undertakings, i.e. entities carrying out an economic activity of industrial or commercial nature.

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<sup>(</sup>a) where the public non-profit-making higher-education or research establishments contribute to research projects as a commercial firm would, e.g. in return for payment at the market rate for the services they provide;
(b) or

<sup>-</sup> where the industrial participants in the research bear the full cost of the project, or

<sup>-</sup> where the results which do not give rise to intellectual property rights may be widely disseminated and any intellectual property rights to the R& D results are fully allocated to the public non-profit-making establishments, or

<sup>-</sup> where the public non-profit-making establishments receive from the industrial participants compensation equivalent to the market price for the intellectual property rights which result from the

of the R&D Framework the State aid within the meaning of Article 87 (1) of the EC Treaty might be involved at the level of firms participating in cooperative research with public higher-education and research establishments.

Accordingly, the Commission comes to the conclusion that the notified programme 'Nanotechnologies for Society' constitutes State aid within the meaning of Article 87 (1) of the EC Treaty at the level of firms participating in cooperative research on the basis of reasons identical to those expressed in point 3.1.1.

### 3.2 Lawfulness of the aid

By notifying the aid scheme before its implementation, the Czech authorities complied with their obligation under Article 88 (3) of the EC Treaty.

# 3.3 Compatibility of the aid

The Commission has assessed the compatibility of the notified support programme according to Article 87 (3) (c) of the EC Treaty and in the light of the R&D Framework.

The Commission comes to the conclusion that the aid can be considered to be compatible with the common market for the following reasons:

The R&D stages supported under the notified programme are in line with the definitions as laid down in Annex I of the R&D Framework.

The Commission finds that the eligible costs are in accordance with the definition laid down in the Annex II of R&D Framework. Furthermore, the Commission notes that in line with point 5.7 of the R&D Framework only SMEs will be eligible for support of patenting costs.

Taking into account the confirmation of the Czech authorities concerning the conditions of support of fundamental research, i.e. research is far from the market, its results are widely available for exploitation on a non-discriminatory basis and at market rates, research work is not linked to any industrial or commercial objective of a particular enterprise and the results are widely disseminated, the Commission comes to the conclusion that the aid granted for support of fundamental research activities (with the aid intensity up to 100%) is compatible with point 5.2 of the R&D Framework.

As regards the R&D stage of industrial research supported under the notified programme, the Commission finds the maximum aid intensity to be in line with point 5.3 of the R&D Framework. The application of bonuses is compatible with points 5.10.1, 5.10.2 and 5.10.3 of the R&D Framework. As regards the practical application of a bonus according to point 5.10.3 if a project is in accordance with the Community's current framework programme for R&D, the Commission notes the Czech authorities undertook to include the details about its application in the annual report.

The Commission finds that the maximum aid intensity applied to industrial research, including the applicable bonuses, is in line with the maximum level of 75% as laid down in point 5.10.6 of the R&D Framework.

As regards the aid intensities applied to feasibility studies preparatory to fundamental and industrial research, they are in line with the provisions of points 5.2 and 5.4 of the R&D Framework

With respect to cooperative research supported under the notified programme, the Czech authorities undertook to grant the aid in accordance with point 5.8 of the R&D Framework.

The Commission notes that the cummulation of the aid granted under the notified programme with any other aid received from local, regional, national or Community sources to cover the same costs is possible and that the maximum aid intensities applied under the notified programme will be respected also in case the aid amount granted under the notified scheme is cumulated with any other aid received from other financial sources.

Furthermore, the Czech authorities confirmed the compliance with the individual notification obligation of the R&D Framework (point 4.7).

The Commission notes that projects concerning agricultural products listed in Annex I of the EC Treaty are excluded from the scope of the notified programme.

Finally, the Czech authorities undertook to submit annual reports on the implementation of the notified programme including also the information demonstrating the incentive effects of the aid granted to large companies.

### 4. CONCLUSION

The Commission finds that the aid granted on the basis of aid scheme 'Nanotechnologies for Society' is compatible with the common market in accordance with Article 87 (3) (c) of the EC Treaty and has accordingly decided not to raise objections to the notified measure.

The Commission reminds the Czech authorities that, in accordance with Article 88 (3) of the EC Treaty, plans to refinance, alter or change this aid scheme have to be notified to the Commission pursuant to provisions of Commission Regulation (EC) No 794/2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 [now 88] of the EC Treaty (OJ L 140, 30.4. 2004, p.1).

The Commission further reminds the Czech authorities to submit annual reports on the implementation of the notified programme which will comprise the information demonstrating the incentive effects of aid granted to large companies and the information concerning the application of a bonus for compliance with the Community's current framework programme for R&D.

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Your request should be sent by registered letter or fax to:

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Yours faithfully,

For the Commission

Neelie KROES

Member of the Commission