

4.7 It recommends that the current CMO intervention mechanism be maintained to guarantee the price level.

4.8 The EESC stresses that the price of the product (beet) should reflect planters' production costs. It takes note of the proposals to partially compensate planters for income lost as a result of beet price cuts. It calls for increases in this compensation, insofar as this may be possible. It emphasises the need to ensure sustainable aid and to maintain the sugar budget.

4.9 It asks that the current provisions for the supply of quota sugar to the chemical and pharmaceutical industries should remain in force.

4.10 It believes that the Commission must not shirk its responsibilities but must launch a proper restructuring plan for the European sugar industry that reflects the interests of sugar manufacturers, beet planters and the workforce.

4.11 The Committee would request the Commission to clarify its intentions regarding sugar production that is not under quota.

Brussels, 15 December 2004.

The President
of the European Economic and Social Committee
Anne-Marie SIGMUND

Opinion of the European Economic and Social Committee on the 'Communication from the Commission: Science and technology, the key to Europe's future — Guidelines for future European Union policy to support research'

(COM(2004) 353 final)

(2005/C 157/20)

On 17 June 2004, the European Commission decided to consult the European Economic and Social Committee, under Article 262 of the Treaty establishing the European Community, on the abovementioned communication.

The Section for the Single Market, Production and Consumption, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 10 November 2004. The rapporteur was Mr Wolf.

At its 413th plenary session of 15 and 16 December 2004 (meeting of 15 December) the European Economic and Social Committee adopted the following opinion by 83 votes to three with one abstention:

1. Introduction

1.1 **Europe's economic, social and cultural future.** A key determinant of Europe's future development and position on the world stage is the inexorable competition that exists on the global market, with its changing industrial and economic structures, labour market situation and raw material parameters. It is becoming increasingly clear that growth, success and economic strength — and the resultant capacity to provide social services and secure cultural development — are critically contingent on available knowledge and on investment in research and technological development.

1.2 **Global competition.** Europe is no longer competing only with now-traditional industrial nations such as the USA,

Japan or Russia, but also with rapidly expanding economies across the whole of south-east Asia, including China, India and South Korea. On scientific and technological performance hinge not just economic competitiveness and the 'pull' that that exerts on investors, scientists and engineers, but also cultural and political standing and influence. Sufficient R&D investment can and must help safeguard Europe's position and secure sustainable development.

1.3 **The European Research Area (ERA)** ⁽¹⁾. The European Research Area was conceived to meet that challenge. Following the Lisbon Council decisions of March 2000, the ERA became the key concept and reference framework for Community

⁽¹⁾ ERA: European Research Area. For further details, see in particular OJ C 110, 30.4.2004 (CES 319/2004) and OJ C 95, 23.4.2003 (CESE 288/2003).

research policy, not least against the backdrop of the well-known and ambitious objectives set out in Lisbon, Gothenburg and Barcelona. Community-backed research and development is designed to generate European added value and, under the subsidiarity principle, to take on tasks that are beyond the capacity of individual Member States on their own. It is also designed to harness, boost and exploit Europe's scientific potential, and to foster competitiveness and sustainability. Science and research are substantive elements of European culture.

1.4 Developing the ERA. The European Research Area is a useful concept that has been used to underpin all subsequent communications, decisions and initiatives relating to European research policy. The Committee would draw particular attention to the Sixth Framework Programme, the EURATOM programme and related tools to promote research, as well as to the 3 % objective ⁽¹⁾ and many others initiatives covering fields such as research as a profession, the importance of basic research, energy supply, space research, biotechnology, and the interplay between science, individuals and society.

1.5 Committee opinions to date. In its earlier opinions ⁽²⁾, the Committee has consistently expressed strong support for each of the Commission initiatives set out above. It has underscored the crucial importance of research and development for the Lisbon, and later the Gothenburg and Barcelona objectives, and for sustainable economic, social, environmental and cultural prosperity within the EU. On many key details, the Committee has made suggestions and put forward its own proposals. Often, it has even recommended considerably stepping up activities in this field, but it has also repeatedly urged corrections and expressed misgivings, mainly about the trend towards inefficiency, confusion and disquiet generated by over-regulation, restrictive requirements and bureaucratic procedures, and overhasty, precipitous changes to the processes and support instruments involved.

2. The Commission communication

2.1 The Commission communication is a logical extension of what is, in essence, a highly positive development. It brings together objectives and considerations to be used in drawing up the proposals for the Seventh R&D Framework Programme and the EURATOM programme, in order both to reflect EU enlargement to 25 Member States and to take on board the

experience that has been gained so far with the Sixth R&D Framework Programme.

2.2 First of all, the communication again summarises the existing objectives and measures. In particular, it compares the 3 % objective in the light of EU enlargement against the current position and the state-of-play in the EU's competitor countries, and in doing so, makes a very impressive case for pursuing this goal. The communication stresses the leverage effect of public spending on private research investment, and the need to make research more attractive as a profession so as to be able to compete globally for the best brains.

2.3 That is also the reason why the EU needs to substantially step up and extend support for research — a move that must be accompanied by a corresponding increase (and under no circumstances a scaling-down) of Member States' own efforts on this front.

2.4 Drawing, among other things, on the experience gained in formulating and implementing the earlier framework programmes, the Commission lays down six major objectives:

- creating European centres of excellence ⁽³⁾ through collaboration between laboratories;
- launching European technological initiatives;
- stimulating competition in basic research at European level;
- making Europe attractive to the best researchers;
- developing research infrastructures of European interest; and
- improving the coordination of national research programmes.

2.5 Other points and proposals made in the Commission communication include:

- realising the potential of a Europe of 25;
- taking full advantage of complementarity with the Structural Funds;
- identifying topics of major European interest;
- bringing in two new key areas: space and security;
- using the most effective means of implementation; and
- improving the operation of the framework programme.

⁽¹⁾ At the March 2002 Barcelona European Council, the European Union set itself the objective of increasing overall European research spending with the aim of approaching 3 % of EU GDP by 2010. Two-thirds of this investment should come from the private sector and one-third from the public sector (the EU and its Member States). See also OJ C 95, 23.4.2003.

⁽²⁾ OJ C 204, 18.7.2000; OJ C 221, 7.8.2001; OJ C 260, 17.9.2001; OJ C 94, 18.4.2002; OJ C 221, 17.9.2002; OJ C 61, 14.3.2003; OJ C 95, 23.4.2003; OJ C 234, 30.9.2003; OJ C 32, 5.2.2004; OJ C 110, 30.4.2004; OJ C 302, 7.12.2004.

⁽³⁾ See point 3.3 below.

3. The Committee's general comments

3.1 The Lisbon, Gothenburg and Barcelona objectives.

The Committee welcomes and supports the aims and initiatives set out by the communication, and considers the Commission's proposals to be key measures for attaining the ambitious Lisbon, Gothenburg and Barcelona objectives. The Committee is very pleased that the communication takes on board many of the specific recommendations it had made in earlier opinions.

3.2 The 3 % objective ⁽¹⁾. In particular, the Committee supports the 3 % objective — an overarching goal geared towards global competitors' current R&D investment. In line with the Lisbon objectives and taking account of the new, enlarged, 25-strong European Union, this requires a massive EU-level increase in the resources available for the framework programme and the EURATOM programme.

3.2.1 Doubling the requisite EU resources. Taking all activities together, therefore, the budget should be doubled, as the Commission proposes. This also ties in with the Committee's own recommendation on this issue in its opinion on the Sixth Framework Programme ⁽²⁾.

3.2.2 Member States and industry. In order to meet the 3 % objective, however, this doubling of resources must also be accompanied by a corresponding increase in national R&D budgets and in R&D spending by industry. On both these fronts, the Committee is very concerned that nothing — or, at any rate, not enough — is being done. In many cases, industrial R&D investment is even shifting outside the EU. The Committee recommends exploring the reasons for this unfortunate trend so that steps can be taken to ensure that industrial R&D in Europe also moves closer to the 3 % objective.

3.2.3 The Committee's call. The Committee therefore again calls on the Council, the Parliament, Member State governments and, in particular, industry to factor this objective into their decision-making and thus to comply with it in their public- and/or private-sector R&D budgets. The Committee recognises that this is no easy undertaking given current overall financial constraints. However, the R&D investments proposed by the Commission are not only modest, but, given the international competitive environment, long overdue. **Words now need to be backed up by deeds.**

⁽¹⁾ OJ C 112 of 30.4.2004.

⁽²⁾ (The budget increase recommended in that opinion referred to the needs of the EU15 and thus needs to be extrapolated for the EU 25.) OJ C 260, 17.9.2001.

3.2.4 Dynamic development. It is important not to regard the situation as simply static. In the face of global competition, European policy must be prepared to meet upcoming developments outside Europe ⁽³⁾. If the 3 % objective is not attained on schedule, then the Lisbon objectives will not be achieved either. Indeed, in the longer term, R&D investment must go higher still.

3.3 European centres of excellence. The Committee also supports the overall objective of establishing and promoting European centres of excellence, thereby generating pan-European added value, setting qualitative yardsticks and making European R&D more attractive. The cross-border co-operation between research centres, universities and private companies that such an approach seeks to achieve must, in future too, be the essential element of support policy under the R&D framework programme (and EURATOM), with the main emphasis on the thematic priorities.

3.3.1 Prerequisite. This objective can only be attained if bodies or teams of excellence are already in place, which, if they work together, may be expected to produce first-rate results ⁽⁴⁾.

3.3.2 No new support instrument. Furthermore, the point should be made more clearly that the term 'centre of excellence' does not denote a new support instrument (see below). On the contrary, this is a generic term covering support instruments designed to further the desired objective, including Networks of Excellence (NoE), Integrated Projects (IP) and Specific Targeted Research Projects (STREPs).

3.4 Tools to promote research ⁽⁵⁾ (project structure).

Bearing in mind the Commission's laudable intention of establishing effective means of implementation, the Committee reiterates ⁽⁶⁾ its call for clarity, simplicity, continuity and, above all, flexibility in tools to promote research. Flexibility means that applicants must be able to adjust the structure and size of projects to best suit the task at hand. Otherwise, projects will be established whose size and structure are determined by the prescribed policy tools rather than by optimum scientific and technical requirements. The tools must serve R&D working methods and objectives — never the reverse. The application process and administrative effort involved must be worthwhile.

⁽³⁾ See point 1.2.

⁽⁴⁾ See also point 4.2 et seq.

⁽⁵⁾ See also point 4.6.

⁽⁶⁾ See also point 5.4 (OJ C 95, 3.4.2003).

3.5 Basic research and European competition. Reiterating the key message of its recent opinion ⁽¹⁾ on this subject, the Committee would also stress the clear need to promote basic research as the fundamental element of all further R&D activities. This must be done within the context of European competition, and applicants must be free to choose the subjects they wish to research. European competition generates European added value.

3.6 The international dimension of research. It must be remembered, however, that the international dimension of research — stretching beyond the confines of the EU — is just as important. Today, excellence in R&D flourishes on a global, international ⁽²⁾ playing field of open, worldwide cooperation — and also worldwide competition. Appropriate measures should also be put in place to promote and take account of this aspect (for instance, mobility programme, cooperation agreements etc.)

3.7 Interplay and balance between research categories. ⁽³⁾ The Committee would again draw attention to the interplay required for innovation and progress, and to the need for effective interaction and easy cross-over between the various research categories, i.e. basic research, applied research and development (project and process development). This interplay — which is vital both for the Community's competitiveness and for attaining the Lisbon objectives — is also a factor in cooperation and complementarity between industrial R&D and research undertaken in universities and state-supported research organisations. This interplay must therefore also be reflected both in the balance of support in the individual categories and in the specific remits and 'sub-issue's of the thematic priorities/actions. Hence, the above-mentioned research categories must be given access to all the relevant research parameters under the framework programme. Ultimately, this also underpins the leverage effect between public- and private-sector R&D spending.

3.8 Effective means of implementation: Last but not least, the Committee welcomes and supports the Commission's plan to use the most effective means of implementation and to improve the operation of the framework programme. The Committee therefore feels there is an urgent need for measures that require less red tape and are better coordinated with the scientific community and industry — and also reflect their internal rules, experiences and working conditions. The most

important stakeholders in the European Research Area are researchers with their passion for discovery. They need scope to develop and an optimum environment in which to operate. It is essential to bear that in mind.

4. Specific comments by the Committee

4.1 Recent opinions. Many of the following observations have already been put forward in recent opinions on European research policy ⁽⁴⁾.

4.2 Guiding principle. In order for the EU to achieve or maintain a leading position vis-à-vis its global competitors, the guiding principle in selecting projects and supporting research should be scientific and technological excellence. This is the only way of achieving the objectives of *Excellence and innovation: the key to European competitiveness* and *(Stimulating) the creativity of basic research through competition between teams at European level*, put forward in the Commission's Communication.

4.2.1 Excellence. Excellence and outstanding achievements are the outcomes of a complex, laborious and lengthy development and selection process. The rules governing this process, which are laid down by the scientific community itself, need to take into account many significant and inter-connected considerations.

4.2.2 Society and policy. Society and policy must ensure that the conditions exist, or are created for the emergence and maintenance of excellence.

4.2.3 Extraneous criteria. Other extraneous or speculative influences simply result in more red tape and mismanagement, with adverse consequences not only for the Lisbon Objectives but also for European research as a whole.

4.3 Realising the potential of a Europe of 25. At the same time, it is important to develop and make full use of the potential of an enlarged Europe. The Committee fully supports the Commission's objectives in this respect. Therefore, unless they already exist, conditions for excellence need to be created in the research institutes of the enlarged EU and in regions with insufficient research resources.

4.3.1 Subsidiarity. In keeping with the subsidiarity principle, national scientific and technological capacity building and basic funding to promote excellence is the responsibility of individual Member States.

⁽¹⁾ OJ C 110, 30.4.2004.

⁽²⁾ e.g. Canada, China, India, Japan, Korea, Russia and the USA.

⁽³⁾ This issue and some of the fundamental difficulties it throws up were also discussed in detail in section 7 (Research and technological innovation) of the EESC opinion on the European research area.

⁽⁴⁾ OJ C 95, 23.4.2003; OJ C 110, 30.4.2004.

4.3.2 Structural Funds and the European Investment Fund. However, such activities can be given effective and targeted support through the EU's Structural Funds and the European Investment Fund, if such an approach is necessary and appropriate. For this reason, and also with the concerns of cohesion policy in mind, the Committee supports the Commission's intention to take full advantage of complementarity between the Framework Fund and the Structural Funds, but also recommends that this should be extended to include the European Investment Fund. Some of the funds from these sources could be used to build up research capacity and infrastructure.

4.3.3 For this to happen, sufficient funding will have to be provided to kick-start R&D measures in the new Member States, as scientific institutions in these countries are not yet in a position to come up with their share of funding for EU-supported projects. However, appropriate national schemes for supporting research and development activity should also be provided in addition.

4.4 Research infrastructure. With this in mind, the Committee also welcomes the Commission's proposal to develop research infrastructures⁽¹⁾ of European relevance. In this context, substantial funding of selected large apparatus on a 'variable geometry' basis has worked well so far and should therefore be continued. Through its consultative role, the European Strategy Forum for Research infrastructures (ESFRI) is a key partner in this process. On this basis, infrastructures can be developed which take European needs into account.

4.4.1 Medium-sized infrastructures. Depending on what resources are available and whether a case can be made for projects at Community level, such measures should not be exclusively restricted to funding large apparatus, given that medium-sized complex research infrastructures are also needed in many research fields and can serve the research objectives of several Member States at the same time.

4.5 Reinforcing thematic priorities and enhancing mobility. As already mentioned, the Committee supports the Commission's proposal to double the funding available for the Seventh Framework Programme and the EURATOM Programme (relative to current levels under the Sixth Framework Programme). This increase should mainly⁽²⁾ benefit thematic priorities/activities/projects (including those covered by EURATOM) and the mobility programme⁽³⁾ (including support both for leading researchers and for those embarking on scientific careers).

⁽¹⁾ See also point 5.4 (OJ C 95, 23.4.2003).

⁽²⁾ See also recommendations in point 3.5.

⁽³⁾ The Communication recommends a stronger role for the Marie Curie Programme, which has made a particularly important contribution here.

4.6 Instruments to support research. In order to clarify the recommendations which have already been put forward by the Committee, the following principles should be applied:

- The number of instruments should be kept within reasonable limits.
- Instruments need to be well defined, with clear objectives.
- The instruments should be as simple to manage as possible.
- They should concentrate on direct support of R&D activities and the researchers involved in them.
- The choice of instrument should not be bound by particular aspects of the thematic priorities; rather, applicants should be able to select one or more instruments for a particular plan or project⁽⁴⁾. At the same time, the Commission should offer applicants advice and explain to them why particular instruments are preferable for particular themes.
- To ensure that instruments are reasonably manageable for all parties, there needs to be sufficient continuity, and abrupt paradigm shifts should be avoided.
- Preference should be given to the allocation of grants or Specific Targeted Research Projects (STREPS), with an emphasis on easily understandable and manageable research projects. In this context reference should be made to the Committee's earlier proposals and its subsequent observations on SMEs.

One of the recommendations that can be made with these principles in mind is to extend support for NoEs (Networks of Excellence) from assistance for coordination activities to direct participation in R&D expenditure (as is, for example, already the case for associations participating in the Euratom Fusion Programme).

4.6.1 Marimon Report⁽⁵⁾. The Committee is pleased to note that there is very close agreement between the recommendations of the recently published Marimon Report and its own recommendations on this subject, and strongly endorses the conclusions of the Report.

⁽⁴⁾ The Committee reiterates its disappointment that its earlier recommendations to this effect were ignored.

⁽⁵⁾ Report of an expert panel chaired by Prof. Marimon, 21 June 2004, Sixth Framework Programme.

4.6.2 Continuity. Once again, it should be emphasised that special attention needs to be paid to this aspect. Generally speaking, there should be as much continuity as possible in the transition from the Sixth to the Seventh Framework Programme. The changes in eligibility criteria, application procedures, assessment criteria, legal conditions, instruments and cost models which have previously accompanied transitions between successive Framework Programmes have tended to obstruct scientific and industrial activity, particularly in the case of SMEs. In order to ensure continuity, radical innovations in instruments and procedures should be avoided. Instead, existing instruments and procedures should be simplified and fine-tuned on the basis of previous experience and recommendations. The main objectives should therefore be continuity, simplification, clarity and flexibility for applicants in the choice of instruments.

4.7 Technology Platforms. The Committee is strongly in favour of initiatives by the Commission and industry to set up 'technology platforms' bringing together companies, research institutions, the financial world and regulatory authorities at European level to define a common research agenda which should mobilise a critical mass of — national and European — public and private resources.

4.7.1 Development projects at Community level. The Committee feels that a Community-level approach is an appropriate means of achieving concerted action by partners in the case of extensive and costly scientific or technical development projects with well-defined objectives, such as the GALILEO Project. The framework for such projects can take the form of 'Integrated Projects' (IPs) or of 'joint undertakings' within the meaning of Article 171 of the EC Treaty⁽¹⁾. However, this is another area where careful reflection is needed⁽²⁾ in order to avoid excessive red tape and organisational complexity, and to ensure that SMEs and smaller research institutes and groups of researchers are able to participate appropriately.

4.7.2 Administrative and organisational issues. In view of the complexity of organisational/administrative and legal issues (e.g. in the field of intellectual property), it is important to use 'technology platforms' which are currently in the development stage as a means of gaining experience before new platforms are set up, possibly on the basis of 'variable geometry'. Objectives need to be clearly defined, and procedures should be reviewed, and if necessary simplified or supplemented with simpler procedures, in order to avoid additional confusion and excessive coordination as a result of continuing

⁽¹⁾ 'The Community may set up joint undertakings or any other structure necessary for the efficient execution of Community research, technological development and demonstration programmes.'

⁽²⁾ See also point 4.7.2.

growth in the number of partly overlapping instruments. If possible, simpler instruments should be used.

4.8 Small and medium-sized enterprises (SMEs). SMEs are either already making a substantial contribution to the process of innovation, or have the potential to do so in future. The conditions for participation by SMEs in thematic priorities should therefore be simplified and made more flexible, for example through flexible classification and selection of themes and instruments (CRAFT, Collective Research, EUREKA). Generally, in the fields of both high and low technology, programming and adaptation of aid instruments should be more geared than previously to enabling eligible SMEs to participate. Aid instruments such as Specific Targeted Research Projects (STREPs) are a particularly appropriate means of achieving this, as they are more accessible to smaller groups and projects, and are conducive to a bottom-up approach.

4.8.1 SMEs and knowledge transfer. Another key issue which should be tackled separately is how to give researchers and engineers working in industry, particularly in SMEs, access to new and potentially relevant basic research findings from universities and government-funded research institutes, and thus to accelerate the knowledge transfer process, which is vital for industrial innovation and competitiveness. This too is a subject which the Committee has discussed on several occasions⁽³⁾, particularly with regard to the transfer (mobility) of researchers between industry and the academic world, an area in which there is considerable scope for improvement and for creation of more attractive conditions.

4.8.2 Entrepreneurship and industrial policy. Start-ups of small companies are a powerful engine for innovation and economic growth. The problems facing new companies usually have less to do with insufficient support for research and development than with management and marketing issues, and especially the lack of financial resources to adequately bridge the initial loss-making period. This, then, is an area where coordination between industrial policy and research policy is needed, in order to stimulate European business activity and to give it a better chance of success.

4.8.3 The SBIR Programme in the USA. The Committee also recommends referring to the experiences of the USA with the Small Business Innovation Research (SBIR) programme⁽⁴⁾, which has been used by the United States government to support commercial R&D activity in small and medium-sized enterprises through various agencies.

⁽³⁾ See, for example, points 7 and 8 (OJ C 204, 18.7.2000).

⁽⁴⁾ See <http://sbir.us/pm.html> and <http://www.zyn.com/sbir/funding.htm>.

4.9 **Open coordination.** The Committee has called on the Commission to apply the method of open coordination on several previous occasions; at the same time, it maintains the view that this can only happen on a voluntary basis, with the consent of Member States.

4.10 **Self-organisation and self-coordination.** As the Committee has also noted on several occasions, there is a bottom-up, autonomous approach to organisation and coordination in European scientific and technological circles. Actors get to know one another within their respective fields through publications, conferences and workshops, they become involved in programme development on their own initiative, and thus contribute to coordination — a process which is influenced by the interplay of cooperation and competition (see below). Major research initiatives, programmes and institutes have arisen in this way, achieving international prominence and preparing the way for the concept of the European Research Area. This process should be acknowledged and made use of.

4.11 **Promoting competition.** In this context, the Committee welcomes the fact that the Commission has chosen competition as one of its six major objectives. It shares the Commission's belief that added value can be generated at European level through competition. The Committee reiterates its previous statement⁽¹⁾ that science and research depend on competition for the best ideas, procedures and findings, on independent confirmation (or disproving) — i.e. 'certification' — of new findings, and on their dissemination, deepening and extension. Thus it is necessary to facilitate and foster diverse, interdisciplinary research approaches and structures, in order to stimulate and utilise the resulting competition for the best ideas and findings.

4.12 **Competition, cooperation and coordination.** The objectives of competition, cooperation and coordination are not always in harmony with one another; conflicts are particularly likely to arise in connection with product development. The optimal scope of each objective should be defined and appropriate instruments for each one should be selected accordingly. The principle should be as much competition as possible, and only as much cooperation as necessary.

4.13 **Critical mass and global competition.** Some research and development activities, such as large infrastructures and certain large technological projects, exceed the capacity of individual Member States, even when taken in isolation from other activities, and therefore are generally only feasible through joint European action; such activities are particularly exposed to global competition (cf. the section on the International Dimension), and need to measure up to international standards. The previous comments on technological platforms also apply here.

⁽¹⁾ Points 4.2.2, 4.2.3 and 4.2.4 (OJ C 95, 23.04.2003).

4.14 **European Research Council (ERC).** As previously mentioned in its recent opinion⁽²⁾, the Committee supports the Commission's plans to set up a European Research Council (ERC) to coordinate and support basic research, with the support of the scientific community. The Council should have full autonomy and operate on similar lines to successful counterparts in Member States and the USA. In order to exploit the interplay between research categories, the Committee recommends that leading industrial researchers should be included in the Council.

4.15 **Peer review.** The main assessment method used by the Council should be peer review. To compensate for the familiar and inherent shortcomings of even this method (e.g. conflicts of interest), experienced scientists with a track record of scientific achievements and in-depth knowledge of the specialised subjects referred to them should be employed by the ERC (and generally by all support organisations⁽³⁾).

4.16 **Career support.** The Committee strongly supports the objective of making science, research and development a more attractive career option, of stimulating enthusiasm among talented potential recruits and providing appropriate career support. A recent EESC opinion⁽⁴⁾ went into the subject in depth and endorsed the Commission's work in this field.

4.16.1 **Unsatisfactory pay and conditions for scientists.** One of the problems associated with scientific careers is that pay and conditions, particularly for young scientists, are less favourable than those offered in the private sector or even in otherwise comparable public sector employment. The Committee reiterates its call for urgent action, particularly by Member States.

4.17 **Preventing overlap and parallelism of administration and governing bodies.** Research activity involves planning, entrepreneurial, administrative and assessment tasks, which can only be performed by experienced scientists. In view of the proliferation of application, assessment/review and monitoring procedures, the Committee reiterates its recommendation⁽⁵⁾ that the Commission look into this question and work towards effective, coordinated procedures (especially procedures coordinated between the Commission and the various participating bodies in the Member States, and between these latter bodies among themselves) in order to prevent the emergence of too many separate vertical (as well as horizontal/parallel) approval, governing, review and monitoring bodies (and procedures) and the resulting unproductive activity.

⁽²⁾ OJ C 110 of 30.4.2004

⁽³⁾ The Committee has repeatedly recommended following a similar procedure in the Commission's activities to support research.

⁽⁴⁾ OJ C 110, 30.4.2004 (CESE 305/2004) and CESE 1086/2004.

⁽⁵⁾ CESE 305/2004, point 5.18 (OJ C110, 30.4.2004).

4.18 **Selection procedures for experts/assessors.** At the same time, and while keeping in mind the need to reduce current burdens on experts/assessors, it is important to secure the most experienced and distinguished specialists in the relevant fields for this purpose, thus reducing the risk of errors. However, successful scientists are particularly likely to be put off by excessively rigid and bureaucratic selection procedures; for this to change, there is a need to cut through the red tape enveloping such procedures.

4.19 **Assessment procedures.** The intentions behind some of the procedures which have met with criticism from the scientific community may well have been good; however, they impose standardised assessment criteria in a complex and sensitive area, instead of judging on the basis of personal/human experience. The Committee acknowledges the aim of guarding against abuse and possible disputes by making assessments more objective and transparent, and leaving as little scope for subjectivity as possible; however, the situation poses an impossible dilemma. Evaluation of scientific achievements and creativity cannot be made an automatic process, and it should not be entrusted to inexperienced individuals.

4.20 **Two new research themes: space and security.** The Communication from the Commission makes no mention of thematic priorities, with the sole exception of basic research ⁽¹⁾ and the two new themes of space and security. The Committee welcomes the Commission's proposal to tackle these subjects at European level, and in doing so it reaffirms its previous recommendations on space policy ⁽²⁾. However, the Committee recommends that, in view of their special character and incompatibility with Framework Programme procedures, these two areas should be approached separately from the thematic priorities and outside the proposed budget for the Seventh Framework Programme.

4.20.1 In the case of **space research**, a very strong and successful programme already exists. The programme involves collaboration between the ESA and European space and aviation industries, with substantial contributions from research institutes in Member States. Participation by the Commission, which the Committee strongly recommends, should therefore come under the existing cooperation agreement between the ESA and the Commission, but should be run and financed separately from the Framework Programme. The Committee would be interested to find out more details of this.

4.20.2 In the case of **security research**, a European approach is very much in the joint interests of Member States, as repeatedly discussed and emphasised at the Committee. The Committee is therefore strongly in favour of action in this area. However, the approach would differ to that of the Framework

Programme's Thematic Priorities (which, for example, require transparency), given that issues of confidentiality and possibly also domestic and external defence activities are involved. In view of this, financing and instruments in this area should also be planned separately from the Framework Programme.

5. Summary

5.1 The Committee emphasises that research and development are vital for European competitiveness, and consequently also for the Lisbon objectives. The Committee therefore supports the objectives and measures put forward in the Commission's Communication.

5.2 This particularly applies to the 3 % objective, as well as the twofold increase in the EU budget for R&D (through the Framework Programme and EURATOM) which has been proposed as a means of achieving it. The Committee calls on the Council and the Parliament to act on this proposal; in addition, government spending and private investment in research and development (in Europe) should be increased accordingly.

5.3 The Committee points out that the 3 % objective is in line with current spending by competitors, and in future will have to be revised to keep up with growth trends, e.g. in the USA and South-East Asia.

5.4 The Committee supports the Commission's plan to fully realise the potential of an enlarged Europe, and also to reflect the transitional situation in the new Member States, by devoting some of the resources from the Structural Funds to building up research capacity and research infrastructures. In addition, the Committee recommends using the European Investment Fund for this purpose.

5.5 The Committee supports the Commission's intention to improve practical implementation of the programme and to streamline implementation procedures. It therefore recommends simplifying instruments and making them more flexible, while maintaining continuity. Applicants must be able to adapt instruments so that the structure and scale of projects are suited to the relevant tasks. The same applies to setting up 'technology platforms'. The Committee endorses the Marimon Report.

5.6 The Committee recommends closer involvement of relevant SMEs than hitherto in research, development and innovation. In this connection, it refers to the SBIR programme in the United States. The Committee also recommends closer coordination of policies in the fields of enterprise and research, in order to develop and fully realise the potential of SMEs and new start-ups for stimulating innovation and economic growth.

⁽¹⁾ See point 3.5.

⁽²⁾ OJ C 112, 30.4.2004.

5.7 The Commission supports the Commission's plan to adopt research into space and security as new thematic priorities, and it explains why these should be financed and run separately from the Framework Programme.

5.8 The Committee supports the Commission's plans for basic research as such to be covered by the Framework Programme and to be stimulated through European competition, and it is in favour of setting up an independent European Research Council.

5.9 The Committee emphasises that the interplay between the categories of basic research, applied research and develop-

ment is of vital importance, and that therefore a balance should be struck in providing support for each one.

5.10 The Committee supports the Commission's plans to enhance the attractiveness of Europe for top scientists and to persuade talented young people to take up scientific careers, while providing support for such careers. This will require action by all concerned, and by Member States in particular.

For many other key arguments, recommendations and criticisms, the Committee refers to the detailed comments in Sections 3 and 4.

Brussels, 15 December 2004.

The President
of the European Economic and Social Committee
Anne-Marie SIGMUND

Opinion of the European Economic and Social Committee on the 'Proposal for a Directive of the European Parliament and of the Council on statutory audit of annual accounts and consolidated accounts and amending Council Directives 78/660/EEC and 83/349/EEC'

(COM(2004) 177 final — 2004/0065 (COD))

(2005/C 157/21)

On 21 April 2004 the Council decided to consult the European Economic and Social Committee, under Article 44(2)(g) of the Treaty establishing the European Community, on the abovementioned proposal.

The Section for the Single Market, Production and Consumption, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 8 September 2004. The rapporteur was **Mr Frank von Fürstenwerth**.

At its 413th plenary session on 15 and 16 December 2004 (meeting of 15 December 2004), the European Economic and Social Committee adopted the following opinion by 86 votes to three, with one abstention:

1. Introduction

1.1 The proposal of the European Commission for a Directive of the European Parliament and of the Council on statutory audit of annual accounts and consolidated accounts and amending Council Directives 78/660/EEC and 83/349/EEC should be seen in the wider context of EU actions included in the Financial Services Action Plan. Particularly important in this respect are the Commission Communication on Modernising Company Law and Enhancing Corporate Governance in the EU — A plan to Move forward (COM(2003) 284), the move to international accounting standards from 2005 onwards, and the market abuse and prospectus Directives.

1.2 Since 1996 the European Commission has been working towards the objective of improving and harmonising

the quality of statutory auditing in the European Union. In May 2003, a step towards this objective was taken with the presentation of a ten-point action plan (Commission Communication on reinforcing the statutory audit in the EU; COM/2003/286). One of the points in the action plan concerns modernising the Eighth Directive on Company Law, 84/253/EEC. The current proposal for a directive is intended to replace the Eighth Directive on Company Law.

1.3 The measures proposed in the directive are intended to restore confidence in accounting procedures and financial markets. Although the proposal is a reflection of policies on statutory audit which have been in place since 1996 and not a direct response to the recent accounting scandals, these were taken into consideration.