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(Information)

COURT OF AUDITORS

SPECIAL REPORT No 1/2004

on the management of indirect RTD actions under the fifth framework programme (FP5) for research and technological development (1998 to 2002), together with the Commission's replies

(pursuant to Article 248(4) second subparagraph EC)

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SUMMARY

I. The European Community (EC) fifth framework programme covering research, technological development and demonstration activities (FP5) was adopted by the European Parliament and Council in December 1998 with a total budget of 13 700 million euro. The annual funding provided for the seven thematic and horizontal programmes in the period up to 2002 accounts for approximately a quarter of the public funding for research projects in the European Union (paragraphs 1 to 5).

II. Research activities financed under FP5 are carried out through contracts with third parties and partly financed by the Community budget. Both the implementing regulation and the model contracts were adopted late. The large number of different model contracts unnecessarily increased the complexity of the contract management processes (paragraphs 9 to 20).

III. Financial contributions from the Community budget are based on the reimbursement of costs actually incurred and duly justified. The complexity of the rules for fixing the financial participation of the Community hinders the effective management of financial and administrative aspects by the Commission and is an unnecessary complication for participants. The introduction of the flat rate cost reimbursement system in FP5, which aimed at simplification, provided an incentive for participants to change to a more advantageous funding mechanism (paragraphs 21 to 35).

IV. A Commission proposal to simplify cost systems for FP6 (2002 to 2006) in line with previous recommendations by the Court was rejected by the Council and the Parliament. The rules for setting the financial contribution of the Community, that were subsequently adopted by the Council and the European Parliament, only partially address the Court's concerns. The Court welcomes the introduction of visible and dissuasive sanctions and the requirement for the certification of financial statements by an external auditor in FP6 (paragraphs 36 to 45).

V. The seven specific programmes of FP5 are managed jointly by five Directorates-General. The fragmentation of programmes results in dilution of responsibilities, duplication of functions and increased need for coordination and consultation. Moreover the basic concept of programmes composed of key actions is not adequately reflected in the Commission's organisational structure (paragraphs 46 to 57).

VI. FP5 experienced significant organisational problems and delays in the starting phase, beginning with the late adoption of the Decision by the Council and Parliament. Because of legal requirements, the Commission's internal rules and certain administrative practices, it took eight to nine months from the reception of proposals to the Commission's signing of a contract for indirect RTD actions. The Commission continued to face difficulties in employing staff with the required profiles as well as problems in recruiting permanent officials. By the end of 2001 approximately 2 000 staff members were employed on FP5-related activities, about a third of them for the administration of proposals, contracts and projects for indirect RTD actions. On average only four to five working days per year were available for the scientific monitoring of each indirect RTD action. The procedures and administrative practices for the selection of indirect RTD actions, together with the cyclical nature of the submission of project deliverables defined in the model contracts, led to an uneven caseload at Commission level. The resulting bottlenecks were not conducive to an efficient operation of the management system and also contributed to administrative delays and deficiencies in internal controls (paragraphs 58 to 77).

VII. The Council Decisions adopting the specific programmes set upper ceilings for administrative expenditure between 6,5 % and 9,8 % of the total expenditure for each specific programme. These ceilings were respected for all programmes. An alternative method of measurement, comparing the expenditure devoted to indirect RTD actions to the total budget, indicates that 837,4 million euro (6,4 % of the total expenditure for FP5) was spent for the management of RTD Framework Programmes over the entire duration of FP5. The Commission monitors its resource allocation through the Activity Based Budgeting (ABB) system. Both for methodological reasons and due to the Commission's implementation of the Activity Based Budgeting system this is not the most appropriate way of measuring the operating cost of the RTD framework programmes (paragraphs 78 to 81).

VIII. The Commission did not develop a common or integrated IT system despite the management system being essentially the same for all the services implementing indirect RTD actions. The IT systems deployed by the Commission for the proposal, contract and project management were inadequate, not least because of insufficient investment. Improvements were noted towards the end of the FP5 programme period, but technical and operational problems persisted in most Directorates-General (paragraphs 82 to 86).

IX. Whilst the RTD Framework Programmes need to be implemented using a common set of principles and procedures, the Commission's administrative reform aims at the decentralisation and empowerment of services. The contradictions between these approaches lie at the root of many of the difficulties experienced by the Directorates-General in their joint management of FP5. The complexity of the intervention mechanisms and rules for the Community's financial participation makes efficient coordination within the Framework Programme even more important. The tests of the most important controls for a sample of contracts for indirect RTD actions showed that not all had been operated effectively. Other controls were found to be lacking. Overall the level of control differed considerably between the different Directorates-General operating FP5 (paragraphs 87 to 95).

X. The testing of the legality and regularity of cost claim based payments for FP5 indirect RTD actions at beneficiary level revealed a significant incidence of errors, mainly due to an overdeclaration of costs by final beneficiaries. No overall improvement was noted as compared with audit work related to previous framework programmes (paragraphs 96 to 100).

XI. The management information systems and reporting to Directors and (deputy) Directors-General still need to be improved. In none of the five Research Directorates-General were there procedures and practices to ensure that management-level information was prepared on time or accessible in a standardised format. In 2002 the management reporting for the framework programmes did not yet fully comply with the requirements defined in the Commission's internal control standards (paragraphs 101 to 110).

INTRODUCTION

— 'Quality of life and management of living resources' (QoL),

FP5 comprises four thematic and three horizontal programmes

— 'User-friendly information society' (IST),

— 'Competitive and sustainable growth' (Growth),

1. The fifth framework programme covering research, technological development and demonstration activities (FP5) was adopted by Decision No 182/1999/EC of the European Parliament and of the Council of 22 December 1998 for the period 1998 to 2002 ⁽¹⁾.

— 'Environment, energy and sustainable development' (EESD): Environment (EESD-ENV) and non-nuclear energy (EESD-NNE);

2. FP5 consists of seven programmes, all of which were adopted by the Council on 25 January 1999 ⁽²⁾. It comprises the following four thematic programmes:

⁽¹⁾ Decision No 182/1999/EC of the European Parliament and the Council of 22 December 1998 concerning the fifth framework programme of the European Community for research, technological development and demonstration activities (1998 to 2002) (OJ L 26, 1.2.1999).

⁽²⁾ Council Decisions of 25 January 1999 adopting specific programmes for research, technological development and demonstration on:

— quality of life and management of living resources (1999/167/EC),
— user-friendly information society (1999/168/EC),

— competitive and sustainable growth (1999/169/EC),
— energy, environment and sustainable development (1999/170/EC),
— international role of Community research (1999/171/EC),
— promotion of innovation and the encouragement of the participation of small and medium-sized enterprises (1999/172/EC),
— improving human research potential and the socioeconomic knowledge base (1999/173/EC) (OJ L 64, 12.3.1999).

and three horizontal programmes for activities involving all research areas:

- 'Confirming the International role of Community research' (INCO),
- 'Promotion of innovation and encouragement of small and medium-sized enterprises participation' (SME),
- 'Improving the human research potential and the socioeconomic knowledge base' (IHP).

3. Research activities financed under FP5 consist of:

- indirect actions within the thematic and horizontal programmes carried out through contracts with third parties and co-financed by the Community budget, and
- direct actions financed entirely from the Community budget and carried out by the Commission's Joint Research Centre.

The European Community (EC) section of FP5 is jointly managed by five Directorates-General, namely Directorates-General for Research, Information Society, Energy and Transport, Enterprise and Fisheries.

Increasing importance of a European research policy in budgetary terms

4. Community research policy has been implemented through framework programmes since the early 1980s. The growing importance of these programmes is reflected in the successive budgets allocated to them. FP5, with a total budget of 14 960 million euro, is 13 % bigger in monetary terms than its predecessor FP4 (1994 to 1998). 13 700 million euro of the total budget was allocated to the EC section, with 12 961 million (95 %) earmarked for indirect RTD actions (see *Annex 1*) ⁽¹⁾. As of the end of 2002,

⁽¹⁾ In 2001, following the adjustment of the financial perspective, the appropriations for FP5 were increased in accordance with Article 2 of Decision No 182/1999/EC of the European Parliament and the Council (see Decision 2001/692/EC, OJ L 246, 15.9.2001). This adjustment increased the appropriations of 10 650 million euro for the financial years 2000 to 2002 to 11 510 million euro, resulting in total appropriations for FP5 of 14 650 million euro (including direct actions).

99 % of the commitment appropriations available for FP5 had been utilised (see *Annex 2A*). FP6, which covers the period 2002 to 2006, has seen a further increase of 17 %.

5. FP5 represents only 6 % of the non-military governmental RTD expenditure of 61 809 million euro per year in the 15 Member States of the European Union. However, if institutional funding is deducted, the budget for FP5 indirect RTD actions amounts to approximately a quarter of total funding for publicly financed research projects in the European Union ⁽²⁾. Overall annual FP5 expenditure amounts to less than 10 euro per citizen in the European Union.

AUDIT OBJECTIVES AND APPROACH

6. The Court's audit assessed the design of the administration and control system, evaluated its contribution to the economic, efficient and effective implementation of FP5 and verified the consistent, continuous and effective operation of internal controls ⁽³⁾. The audit paid particular attention to the consistent application of these internal controls throughout the services examined. Account was thereby taken of the Commission's 24 Standards for Internal Control, adopted in December 2000, which must be followed by all Commission services in the management of their resources ⁽⁴⁾.

⁽²⁾ Koordinierungsstelle EG der Wissenschaftsorganisationen (KOWI), 'R & D project funding in the European Union — governmental investments in EU Member States in the year 2000', April 2002.

⁽³⁾ 'Internal control covers the globality of the policies and procedures conceived and put in place by an entity's management to ensure the economic, efficient and effective achievement of the entity's objectives, the adherence to external rules and to management policies and regulations, the safeguarding of assets and information, the prevention and detection of fraud and error, and the timely production of reliable financial and management information.' (White Paper on Commission reform, COM(2000) 200, 1 March 2000, Part II, Chapter V, Section XXVII, paragraph 1).

⁽⁴⁾ European Commission, 'Standards for Internal Control within the Commission's services' (SEC(2000) 2203), 2 February 2001 (second version dated 18 December 2001).

7. The specific audit objectives were to ascertain:

- whether the intervention mechanisms and the rules applicable to the financial participation of the Community permit an economic and efficient implementation of FP5,
- whether, and to what extent, recommendations made by the Court, in its Annual Reports 2000 and 2001 and in its Special Reports on specific programmes of FP4 (1994 to 1998) were taken into account when defining the rules applicable to the Community's financial participation in FP6 (2002 to 2006) ⁽¹⁾,
- whether the management structure, procedures and methods for FP5 are conceived in a way which ensures the economic, efficient and effective administration of indirect RTD actions,
- whether the information technology (IT) systems deployed by the Commission adequately support the administration of FP5 proposals, contracts and projects,
- on the basis of tests of control, for a sample of contracts for FP5 indirect RTD actions, whether a sufficient level of assurance on the legality and regularity of transactions can be obtained from the Commission's internal controls, also as regards the reality and eligibility of costs claimed by final beneficiaries, and
- whether management reporting allows an appropriate monitoring of the overall programme implementation for FP5 and the effective and efficient functioning of internal controls.

8. The audit covered all procedures, from the submission of the proposal to the submission of project deliverables and, where applicable, the closure of the contract. A total of 53 contracts for FP5 indirect RTD actions were sampled by the Court for compliance and conformity testing of the internal controls operated by the Commission, identified on the basis of a comprehensive description of the FP5 management system. This sample provided coverage of all five Directorates-General as well as all thematic and horizontal programmes and was intended to allow broad conclusions to be drawn. The audit also comprised the review of the FP5 legal bases and model contracts adopted by the Commission. Furthermore the Court carried out surveys of staff resources employed by the Commission services operating FP5 and analysed statistics on contracts for indirect RTD actions. Additional surveys were carried out for IT-related aspects and management reporting for FP5.

AUDIT OBSERVATIONS

Intervention mechanisms and rules for the Community's financial participation

Intervention mechanisms for FP5 indirect RTD actions

9. FP5 offers five different types of action for thematic and horizontal programmes ⁽²⁾: shared-cost actions (type 1); training fellowships (type 2); support to (research training and thematic) networks (type 3); concerted actions (type 4); and accompanying measures (type 5). All action types are implemented by means of contracts, signed by the Commission with third parties. Proposals for indirect RTD actions are submitted by a participant, or a consortium of participants, in response to calls for proposals published in the *Official Journal of the European Union*. These proposals are evaluated and ranked by external experts according to the criteria defined in the legal bases. The highest ranked proposals are then retained for negotiation by the Commission subject to the availability of funds specified in the call for proposals. During the negotiations the scientific and financial aspects of the proposals are discussed between the services of the Commission and the consortium of participants, based on the results of the evaluations. The successfully negotiated proposals are then selected by Commission Decision and contracts for indirect RTD actions are signed by the participants and the Commission.

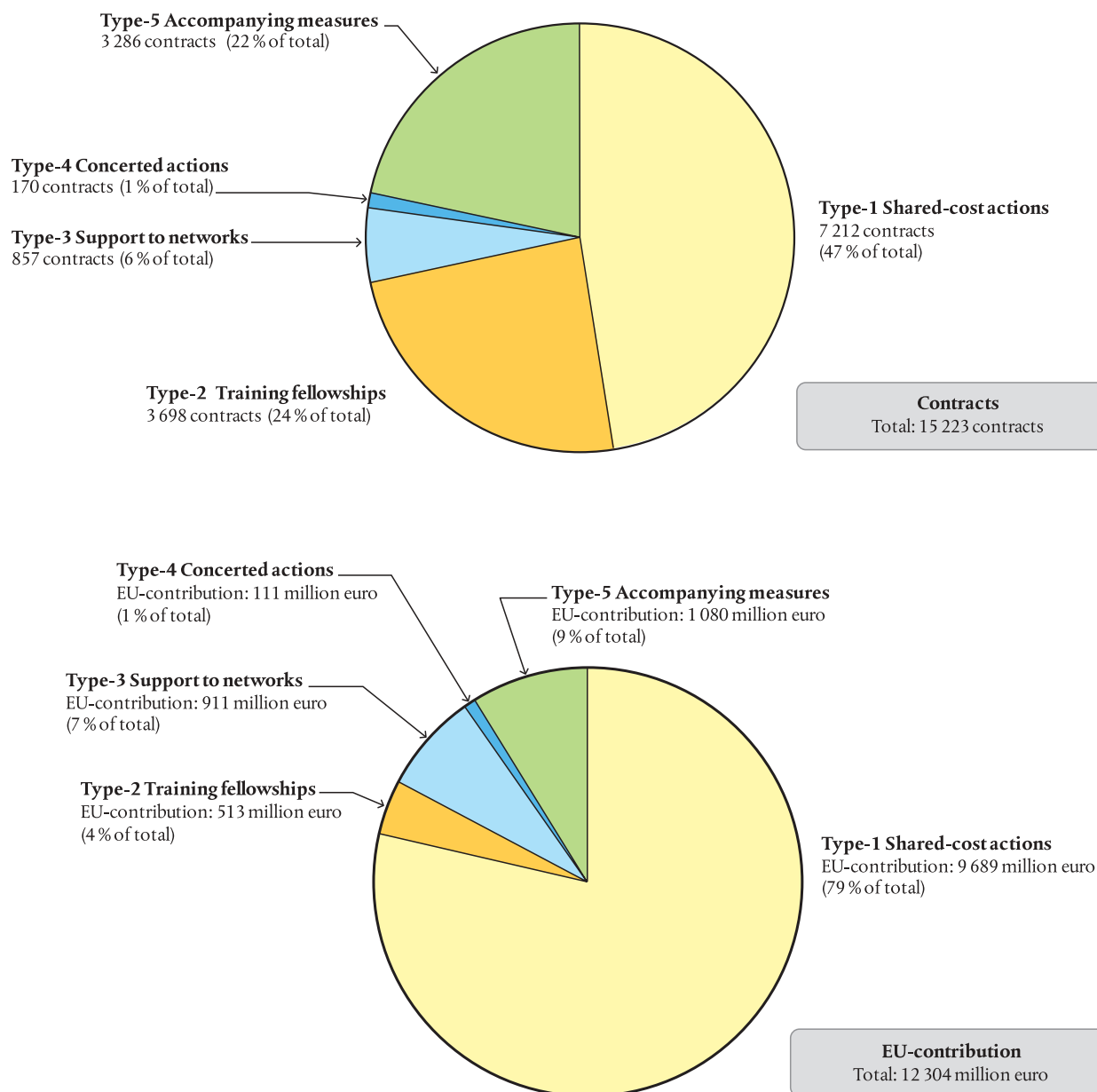
10. Figure 1 and Annex 3A show that during the period 1999 to 2003, 15 223 contracts for indirect RTD actions were signed by the Commission. Shared-cost actions (type 1), with 7 212 signed contracts, represent 47 % of all contracts, followed by training fellowships (type 2) and accompanying measures (type 5), with 3 698 and 3 286 contracts respectively. In addition, 857 contracts were signed for support to networks (type 3) and 170 contracts for concerted actions (type 4). With the exception of the programme 'Improving the human research potential and the socioeconomic knowledge base' and the programme 'Promotion of innovation and encouragement of small and medium sized enterprises participation', all programmes have signed contracts of all the action types.

⁽¹⁾ Special Report 'Joule-Thermie' No 17/98 (OJ C 356, 20.11.1998, pp. 39-68); Special Report 'Fisheries, agricultural and agro-industry research' No 9/99 (OJ C 92, 30.3.2000); Special Report 'Training and mobility of researchers' No 9/01 (OJ C 349, 10.12.2001).

⁽²⁾ Decision No 182/1999/EC of the European Parliament and the Council, Annex IV 'Rules for the financial participation by the Community', point 1 Indirect RTD actions.

Figure 1

Number of contracts and European Union financial contribution per action type



Source: European Commission, January 1999 to July 2003 (unaudited).

Implementing regulation and model contracts adopted late

11. Council Decision 1999/65/EC and the implementing Commission Regulation (EC) No 996/1999 lay down the general principles governing contracts for indirect RTD actions ⁽¹⁾. With the

implementing regulation being adopted only in May 1999, these general principles became available only after the publication of the first FP5 calls for proposals in April 1999.

⁽¹⁾ Council Decision 1999/65/EC of 22 December 1998 concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the fifth framework programme of the European Community (1998 to 2002), Article 12(2) (OJ L 26, 1.2.1999); Commission

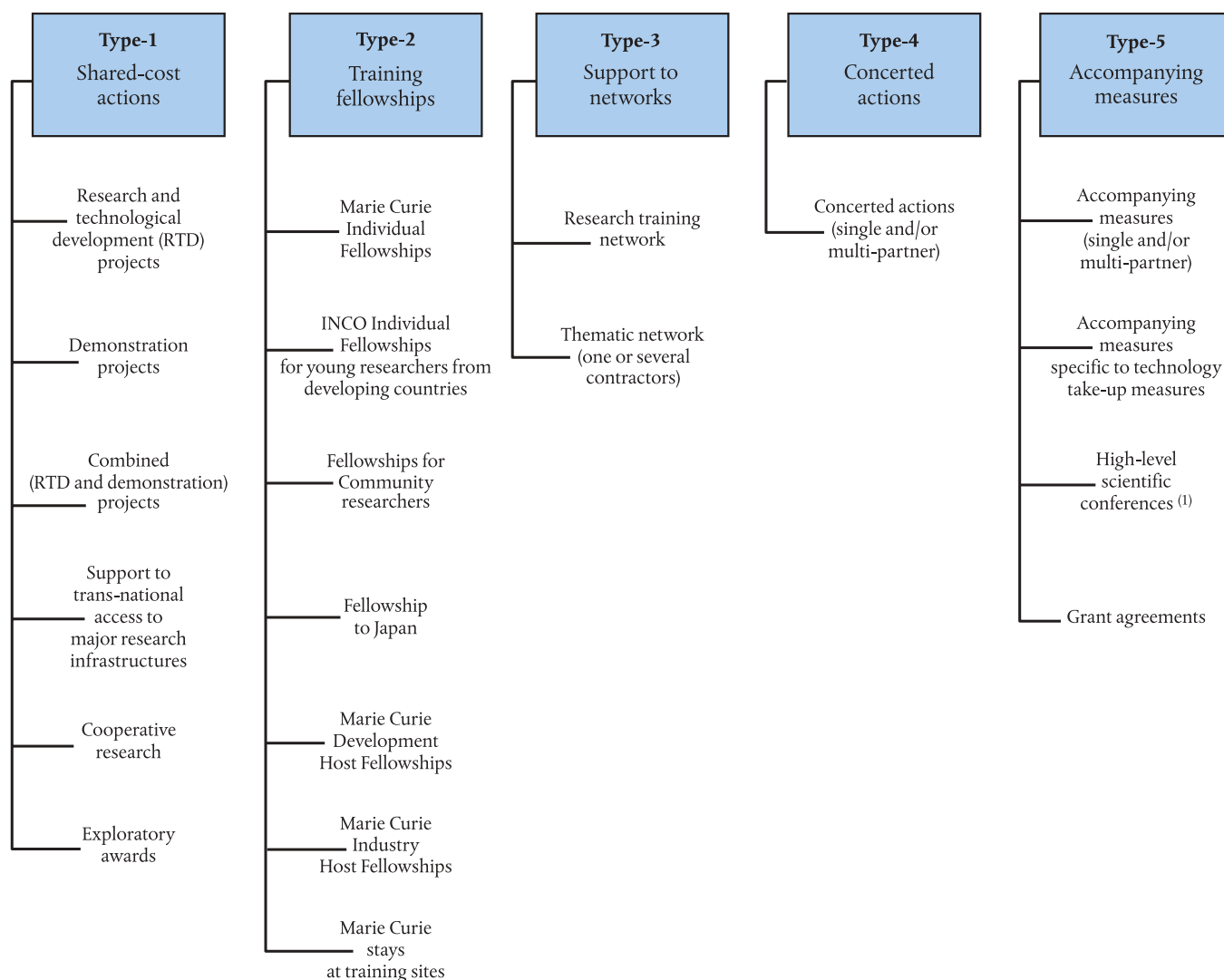
Regulation (EC) No 996/1999 of 11 May 1999 on the implementation of Council Decision 1999/65/EC concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the fifth framework programme of the European Community (1998 to 2002), Article 2(c) (OJ L 122, 12.5.1999).

12. As in previous framework programmes, more specific rules for the different RTD actions were defined at a later stage in standardised model contracts. Whereas FP5 officially started in December 1998, model contracts were adopted by Commission decision as late as September 1999. Subsequently, further 'derived' model contracts were agreed at a working level, and some of them only became available in October 1999. As a consequence, the exact wording of the contractual provisions, specifying in further detail the general principles laid down in the rules for participation and in the implementing Commission Regulation, were not known in time for the June 1999 submission deadline for the first calls for proposals and only became available during the negotiation phase for the first FP5 contracts. This caused additional difficulties for participants when preparing and negotiating the budget of estimated costs for their proposals for indirect RTD actions in the first year of FP5.

13. Unlike for FP4, the Commission defined model contracts for all types of indirect RTD actions. In total the Commission has deployed twenty different model contracts for the five types of FP5 indirect RTD actions, not taking into account different sub-types of scientific conferences or distinct versions for single or multi-partner actions and for one or several contractors (see Figure 2). The model contracts are drafted in a precise, clear and unambiguous manner. With the exception of the Commission-wide model contract for the type-5 'Grant agreements', the main structure and content of FP5 model contracts is similar. The main differences are in the general conditions which define the provisions applicable to the respective financial contributions.

Figure 2

Types of model contracts for FP5 indirect RTD actions



Source: Cordis.

⁽¹⁾ Euroconference, Euro Summer School, Euro Lab Course, Euro Workshop, Large Conference PhD, Euro Conference, Eurotron Conference.

14. However, not all FP5 model contracts were available in all official languages, some being published only in French, English and German. In addition, the bulk of the information material, in particular the material published on the Commission's website Cordis (www.cordis.lu), is available only in English. Due to the specialised nature of many technical and financial terms employed in the contractual provisions this could have created an additional difficulty for non-English speakers, especially for participants without previous exposure to the European RTD framework programmes (see paragraph 29).

15. Some model contracts and their derivatives were only seldom used (see Annex 3A). As regards the contract for type-1 'Combined RTD and demonstration projects', its implementation was considered difficult, due to different rates of co-financing for activities related to research and demonstration, which led in some cases to separate contracts being signed for each strand of activities. The large number of model contracts unnecessarily increased the complexity of the contract management processes and entailed additional costs for their integration in the Commission's central and local IT systems (see paragraph 82).

Increase in participants in shared-cost actions

16. Between 1999 and 2003, the Commission signed contracts with more than 77 000 contractors ⁽¹⁾. An entity participating in several indirect RTD actions is hereby counted separately for each contract signed ⁽²⁾. Approximately 67 % of all contractors were participating in shared-cost actions (type 1). Type-1 'RTD projects', which account for the major part of the total European Union financial contribution contractually agreed, feature an average of 7,2 contractors per contract (see Annex 3A).

17. Unlike in previous framework programmes, an FP5 contract is signed not only by the principal contractors, but by the associated contractors as well. This modification generated a significantly higher administrative burden both for the Commission and within the consortium. For instance, activities related to the negotiation and contract signature procedure and amendments to the contract, such as the reallocation of budgets (which requires the signature of all contractors) or the termination of the participation for a given contractor, became more complex and cumbersome

some due to the *de facto* veto right of all the members of any consortium carrying out an indirect RTD action. For future framework programmes, a simplified set-up could be envisaged, with the Commission concluding contracts with the coordinators of indirect RTD actions only. The contract signed with the Commission would then oblige the coordinator to carry out the indirect RTD action with the research partners stated in the proposal (or entities with an equivalent scientific or technical profile). This would considerably strengthen the coordinator's role and responsibility also in the scientific management of indirect RTD actions.

Accompanying Measures can be both indirect RTD actions and public procurement

18. During the period 1999 to 2003, Accompanying Measures (type 5) accounted for a European Union financial contribution of 1 080 million euro (9 % of the total) ⁽³⁾. Compared to other types of indirect RTD actions, accompanying measures follow different procedures for submission, evaluation and selection. Proposals for accompanying measures are the subject of calls for proposals or calls for tender, but in certain cases they may also be submitted spontaneously in the form of applications for subsidies, mostly not evaluated by external experts. Accompanying Measures provide for a reimbursement of 100 % of eligible additional costs plus a flat rate reimbursement of indirect costs of up to 80 % of direct personnel costs ⁽⁴⁾. They are often used for measures that are on the borderline between indirect RTD actions and public procurement by the Commission. This may carry the risk that normal public procurement procedures are circumvented by the use of indirect RTD actions. This, in turn, could also make it difficult to verify the Commission's compliance with the ceiling imposed on the administrative expenditure for each programme (see paragraph 78).

19. The legal basis specifies that the Community financial participation consists of the reimbursement, in part or in whole, of the costs incurred for the indirect RTD action (see paragraph 22). However, all mechanisms which provide for a reimbursement of 100 % of eligible additional costs plus a flat rate reimbursement of indirect costs allow the possibility of profit being made on overheads if the flat rate exceeds actual costs. Apart from accompanying measures (type 5) such provisions can be found for support to networks (type 3) or concerted actions (type 4). The predominant use of these contract types by a participant may lead to situations where participants become financially dependent on the Commission.

⁽¹⁾ Council Decision 1999/65/EC and Commission Regulation (EC) No 966/1999 define the principles regarding the participation of legal entities in contracts for indirect RTD actions. Participants in indirect RTD actions may be different types of legal entities in Member States and associated countries, such as governmental organisations, international organisations, public commercial organisations, private commercial organisations, European Economic Interest Groups (EEIG), private non-profit organisations, natural persons or the Commission's Joint Research Centre.

⁽²⁾ The term 'contractor' refers only to legal entities having signed a contract with the Commission, i.e. grant holders, host institutes, principal contractors and assistant contractors. It excludes members and sub-contractors to contracts for FP5 indirect RTD actions.

⁽³⁾ Decision No 182/1999/EC of the European Parliament and the Council, Annex IV, point 1(e): 'Accompanying measures will contribute to the implementation of the specific programmes or the preparation of future activities, with a view to enabling them to achieve their strategic objectives. They will also seek to prepare for or to support other indirect RTD actions. Measures devoted to the commercialisation of products, processes or services, marketing activities and sales promotion are excluded [...]'.
⁽⁴⁾ With the exception of type-5 'Grant agreements' which specifies a rate of indirect costs of only 7 % of eligible direct costs.

Subsidies granted to associations in which the Commission participates

20. Accompanying Measures were also employed to award grants to associations in which the Commission actively participates. One example is the International Association for the Promotion of Cooperation with Scientists from the newly independent States of the former Soviet Union (INTAS), which was set up in June 1993 as an independent international association under Belgian law ⁽¹⁾. Although it was requested by the Council to do so, the Commission did not, in fact, have the authority to set up an external entity and to participate as a member in its operation. The Commission's delegation of responsibilities to INTAS also went beyond the limits set out in the Treaties. Furthermore the Commission did not comply with key aspects of its administrative procedures for Accompanying Measures when awarding the grant to INTAS and authorising payments ⁽²⁾.

Rules for the Community's financial participation

International agreements on State aid limit public aid in the research domain

21. The Community framework for State aid for research and development establishes that, as a general rule, the gross aid intensity for industrial research must not exceed 50 % of the eligible costs of the project ⁽³⁾. Annex IV to Decision No 182/1999/EC of the European Parliament and the Council

stipulates that in general the Community will reimburse up to 50 % of the eligible cost for shared cost actions (type 1) ⁽⁴⁾.

22. Council Decision 1999/65/EC and Commission Regulation (EC) No 996/1999 define the rules applicable to the financial participation of the Community and the definition of eligible costs in FP5. Financial contributions are based on costs actually incurred which are necessary and provided for in the contract. The costs actually incurred must be substantiated by the final beneficiary.

Three systems for substantiation of costs incurred

23. For shared-cost RTD projects, demonstration projects and combined RTD and demonstration projects, contractors can choose between three different cost reimbursement systems ⁽⁵⁾:

- the additional cost (AC) system, providing for a 100 % reimbursement of costs additional to the recurring costs,
- the full cost (FC) system, providing for a 50 % reimbursement of total eligible costs, and
- the full cost flat rate (FF) system, providing for a 50 % reimbursement of total eligible direct costs with a flat rate for indirect costs corresponding to 80 % of the eligible personnel costs (see paragraphs 30 to 32).

24. Additional complexity arises from the fact that FP5 provides for other types of additional cost systems, the detailed specification of which depends on the action types and model contracts used ⁽⁶⁾. For support to networks (type 3) and concerted actions (type 4), all participants have to use additional cost systems, irrespective of their accounting methods. For the contract for type-1 'Support to trans-national access to major research

⁽¹⁾ The Commission, representing the European Community, is a member of INTAS, chairs its Assembly and provides the Secretariat of the Association. During FP5 the Community has contributed 70 million euro to INTAS, representing approximately 95 % of the total financial contributions received by INTAS for the period 1998 to 2002. Financial contributions for the years 2001 and 2002 were authorised by means of Commission Decisions.

⁽²⁾ The Commission did not carry out a formal evaluation of the application for subsidy submitted by INTAS; overall monitoring and evaluation on INTAS activities were carried out by its Assembly and not by the Commission's services; payments to INTAS were authorised without operational verification (e.g. scientific approval); the grant agreements with INTAS did not contain the mandatory standard elements stated in the Vade-mecum on grant management; and the information on the grant awarded to INTAS was not subject to *ex post* publicity.

⁽³⁾ Community Framework for State Aids for Research and Development (OJ C 83, 11. 4.1986) revised in 1996 (OJ C 45, 17.2.1996) and amended in 1998 (OJ C 48, 13.12.1998), and whose applicability has been extended to 30 June 2002 and 31 December 2005, by Commission Communications 2001/C 78/15 and 2002/C 111/03, respectively; Article 8 of the Agreement on Subsidies and Countervailing Measures with the World Trade Organisation (WTO) limits the funding for research activities conducted by private entities or by higher education or research establishments on a contract basis with private entities to no more than 75 % of the costs of industrial research or 50 % of the costs of pre-competitive development activity (OJ L 336, 23.12.1994).

⁽⁴⁾ For type-1 'RTD projects' and 'Demonstration projects', the rate for financial participation of the Community is limited to 50 % and 35 % of the total eligible cost respectively. For type-1 'Combined RTD and demonstration projects', the EU contribution for the different work packages is either 35 % or 50 %, according to the character of the work. For type-1 'Support to trans-national access to major research infrastructures' the rate for financial participation of the Community is limited to 100 % of eligible additional costs, whereas the maximum rates of participation are 50 % of the total eligible cost for type-1 'Cooperative research' contracts and 75 % of the total eligible cost for type-1 'Exploratory awards' (see Decision No 182/1999/EC, Annex IV, point 3).

⁽⁵⁾ Council Decision 1999/65/EC, Article 11; Commission Regulation (EC) No 996/1999, Article 11 and Article 14.

⁽⁶⁾ Commission Regulation (EC) No 996/1999, Article 11(2): 'Participants in indirect RTD actions shall charge additional eligible cost to the Commission when Annex IV [...] expressly provides for that principle, [...]'

infrastructures' two different regimes, namely additional costs and user fees, are proposed. In all these cases, the definition of eligible costs is not the same as the definition used for the Additional Cost (AC) system for type-1 'RTD projects'.

Additional cost systems do not permit verification of beneficiaries' share of co-financing

25. For all additional cost systems, including the Additional Cost (AC) system for type-1 'RTD projects', only costs additional to the recurring costs have to be substantiated and justified to the Commission. In the case of contractors applying this cost reimbursement system (mostly universities and public research institutes) a verification of the reality and the extent of their co-financing of indirect RTD actions is therefore, by definition, not possible ⁽¹⁾.

26. Council Decision 1999/65/EC specifies that the cost reimbursement system used should be in line with the accounting capabilities of the contractor. In particular only if, in the Commission's view, the accounting system does not enable the full costs of an indirect RTD action to be established with sufficient precision or does not permit the share of direct and indirect costs related to the project to be distinguished can the Additional Cost (AC) system be used ⁽²⁾. The Commission however does not systematically verify the capacity of each participant's accounting system, despite relevant information being collected in the negotiation phase in some cases ⁽³⁾ (see paragraph 92).

Detailed conditions for eligibility of costs complicate administration of indirect RTD actions

27. Based on Articles 12 to 14 of Commission Regulation (EC) No 996/1999, contracts for FP5 indirect RTD actions specify both eligible and ineligible costs. There are eight different cost categories for direct costs ⁽⁴⁾, one cost category for indirect costs (overheads) and a specific category for 'coordination cost' for the declaration of eligible costs incurred. These ten categories com-

pare to eight categories in FP4, with the categories 'protection of knowledge' and 'coordination' being newly introduced for FP5. The cost category 'coordination' which is reserved for financial and administrative coordinators includes all cost categories mentioned above, other than subcontracting ⁽⁵⁾. Overall, the large number of different cost categories did not increase the transparency of financial reporting to the Commission. It did, however, complicate the administration of FP5 indirect RTD actions.

28. Contracts for indirect RTD actions define in the table 'Indicative breakdown of eligible costs' ceilings on cost categories for each contractor. No costs can be reimbursed in excess of the overall amount allocated to the beneficiaries and the transfer of budget between contractors and cost categories needs to be approved by the Commission if above certain thresholds. Given the difficulties of correctly forecasting the estimated costs per category, per year and per contractor for an indirect RTD action running over several years, the strict ceilings stated in the 'Indicative breakdown of eligible costs' require contract amendments for budget transfers in a significant number of cases, generating additional caseload both for contractors and the Commission services.

29. Participants were often uncertain about the interpretation of the financial and administrative obligations defined in the contracts. For example many contractors incorrectly thought that budgeted rates (for personnel costs or indirect costs), negotiated when defining the maximum Community financial contribution, should or could also be charged in subsequent periods. Similarly, contractors applying average rates, e.g. for hourly personnel rates, did not understand that these rates have to be substantiated as being in line with actual costs incurred. In these circumstances more detailed guidance from the Commission would have been useful.

Full cost flat rate (FF) system provides an incentive for all participants to change to a more advantageous funding mechanism

30. One of the main initiatives for simplification in FP5 was the introduction of a flat rate option under the full cost system for shared cost actions (type 1). Flat rates such as the overhead rate of 20 % on direct costs (excluding subcontracting) for the traditional additional cost system, or the overhead rate of (a maximum of) 7 % on direct costs for type 5 'grant agreements' had already been used in previous framework programmes. In FP5, the Commission introduced in addition the option of a full cost flat rate (FF) system which allows for a flat rate for indirect costs

⁽¹⁾ Annual report concerning the financial year 2001, paragraph 4.46 (OJ C 295, 28.11. 2002).

⁽²⁾ Council Decision 1999/65/EC, Article 11(3) and Commission Regulation (EC) No 996/1999, Article 11(1). A similar condition is also contained in Annex IV of Decision No 182/1999/EC of the European Parliament and the Council where it is stated that 'in the special case of legal entities which do not keep analytical accounts, the additional costs generated as a result of the research will be financed at a rate of 100 %'.

⁽³⁾ Certain aspects (such as existence of analytical cost accounting system, use of time recording system, IT system used, overhead rates applied internally, etc.) could have been verified during the negotiation. In fact, the contract preparation forms (CPF) used by the Commission in principle already included some relevant information.

⁽⁴⁾ The direct cost categories are 'personnel', 'durable equipment', 'consumables', 'travel and subsistence', 'computing', 'subcontracting', 'protection of knowledge', 'other specific cost'.

⁽⁵⁾ The exception is for type-1 'Cooperative research' contracts where subcontracting of coordination is possible.

at a rate of 80 % of direct personnel costs (see paragraph 23) ⁽¹⁾. Although the Commission attempted to establish an objective basis to support the flat rate for overheads under the new cost reimbursement system, the methodology used by the Commission justified neither the 70 % rate initially proposed by a working group preparing FP5 nor the 80 % finally retained. This was implicitly recognised by the Commission when defining the flat rate for FP6 (see paragraph 38).

31. While the stated intention of the Commission was to offer the full cost flat rate (FF) system as an alternative for entities participating under the additional cost (AC) system, the former was in practice available to all entities participating in shared cost actions. By opening the full cost flat rate (FF) system to all types of participants, the Commission allowed entities which had previously participated under the full cost (FC) system with an actual overhead rate lower than 80 % to obtain an increased Community financial participation for the same underlying costs. As of the end of 2002, the Commission had not carried out any detailed analysis of the type of entity opting for the full cost flat rate (FF) system (see paragraph 40).

32. When negotiating contracts for indirect RTD actions, some Commission services agreed rates below the 80 % of direct eligible personnel costs for participants using the full cost flat rate (FF) system. Under the FP5 implementing regulation, such an approach was only acceptable if the lower rates had been requested by the participants on the basis of their internal rules ⁽²⁾. A more efficient use of Community funds would have been achieved had the legal base provided for a general practice whereby rates were negotiated (up to a certain threshold) on the basis of the substantiated average rates of the participating entity (see paragraph 36).

33. Similarly for Accompanying Measures (type 5), the flat rates for indirect cost, which can go up to 80 % of eligible personnel costs (except for type-5 'grant agreements') were generally negotiated at lower levels. These flat rates were, however, mostly average rates set for the consortium, independent of the actual cost structure of individual participants. Furthermore the rate setting appeared to be driven mainly by the availability of budgetary appropriations, rather than by an assessment of the underlying cost structure. In general, no justification was provided by the Commission about the reason why a certain level had been retained as an outcome of the negotiation process.

Additional administrative burden and operational problems due to overlap of different framework programmes

34. It is in the nature of the RTD framework programmes that there will inevitably be overlap between implementation phases of subsequent framework programmes. Most of the contracts for indirect RTD actions cover a period of 36 to 48 months. Other contracts have a duration of up to 60 months or even longer. Indirect RTD actions signed in the last year of the FP5 programme period (1998 to 2002) may therefore run until 2007. Up to the end of 2002 only 51,5 % of the total appropriations committed were actually paid (see Annexes 2A and 2B). As a consequence the contract management of FP5 indirect RTD actions will continue during the FP6 programme period (2002 to 2006). This also occurred with FP4 (1994 to 1998), which had to be managed alongside FP5 and is still not fully completed. One of the main implications of this overlap of framework programmes is that both the Commission and those participants concerned have to operate parallel systems regarding administrative and financial provisions and contractual obligations. Thus, when changing the underlying rules from one programme period to the next, the legislator and the Commission should give more consideration to the impact of those changes for the Commission's management of indirect RTD actions and the participant's administrative burden (see paragraph 50).

Continued divergences in legal interpretation of provisions contained in implementing regulation throughout FP5

35. The Commission has already recognised deficiencies regarding the management and control of indirect RTD actions under FP5 in its Annual Activity Reports ⁽³⁾. Procedures and provisions defined in the implementing regulation and in the model contracts, for instance on the contractual obligation to keep certified time records, the handling of contract amendments, the use of cost reimbursement systems and the reimbursement of value added tax, were applied inconsistently by the Commission services (see also paragraphs 32 and 51). This inconsistent application persisted throughout the FP5 programme period. The divergences in the legal interpretation of contractual obligations and eligibility rules were exacerbated by the absence of a centralised support function 'Procedural and legal advice' (see paragraph 122).

Changes introduced for FP6 (2002 to 2006)

Proposals for simplifying cost systems rejected by Council and Parliament

36. In order to reduce the risk of ineligible expenditure being unintentionally or intentionally declared by final beneficiaries, and to allow for a more accurate and effective financial management of indirect RTD actions, the Court, in its Annual Report 2001, recommended fundamental simplification of the cost systems. The three main types of cost reimbursement systems (AC,

⁽¹⁾ Commission Regulation (EC) No 996/1999, Article 14.

⁽²⁾ Council Decision 1999/65/EC, Article 12; Commission Regulation (EC) No 996/1999, Article 14; Model contract for type-1 'RTD projects', Article 24(1)(b).

⁽³⁾ European Commission, 'Synthesis of Annual Activity Reports 2002 of Directorates-General and Services', paragraph 5.3.4, COM(2003) 391 final, 9 July 2003.

FC, and FF) should be replaced by a single system and the ten cost categories reduced to three (i.e. personnel costs, coordination costs and specific costs), making more extensive use of flat rates ⁽¹⁾. Subject to an upper ceiling, those rates should be negotiated on the basis of the substantiated average rates of the participating entity (see paragraph 32).

37. The Commission confirmed in its reply that such a drastically simplified cost reimbursement system would have had '[...] the merit of genuinely simplifying procedures and at the same time offering greater legal and financial certainty to the Community and to contractors alike'. Such a system was proposed by the Commission to the legislator when preparing the rules on participation and dissemination of results for FP6 (2002 to 2006), but the proposal was rejected by the Council and the European Parliament.

38. Based on the provisions contained in Annex III of Decision No 1513/2002/EC of the European Parliament and of the Council concerning FP6, the Commission in the end retained as in FP5 three models for reporting costs: full cost with actual indirect costs (FC) reporting model, full cost with indirect flat rate costs (FCF) reporting model and additional costs with indirect flat rate costs (AC) reporting model ⁽²⁾. Compared to FP5, the main change is the reduction of the flat rate for indirect costs under the full cost with indirect flat rate costs (FCF) reporting model from 80 % of eligible personnel costs to 20 % of all direct costs excluding subcontracting. Furthermore the model contract now imposes conditions on which type of entity may or must use specific cost reporting models ⁽³⁾. In terms of the number of different systems, however, no major simplification has been achieved for FP6.

⁽¹⁾ Annual report concerning the financial year 2001, paragraph 4.47.

⁽²⁾ Decision No 1513/2002/EC of the European Parliament and of the Council concerning of 27 June 2002 concerning the sixth framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002-2006), in particular Annex III, point 2, table 'RTD activities and Community financial contribution according to type of instrument', footnotes 1 and 3 (OJ L 232, 29.8.2002).

⁽³⁾ In FP6, the criterion of the capacity of the participants accounting system is maintained, but linked to specific types of legal entities. Participants are allowed to move from one cost reporting model to another (AC to FCF or FC and FCF to FC) subject to this new model being consistently used in subsequent contracts.

Elimination of cost categories reduces potential for an effective protection of the Community's financial interests

39. Apart from a differentiation between direct and indirect costs, the FP6 model contract eliminates individual cost categories ⁽⁴⁾. As a result direct costs are no longer justified by nature (i.e. 'personnel', 'subcontracting', 'durable equipment', etc.) ⁽⁵⁾. Although this appears to be a simplification, the complete suppression of cost categories has in the Court's view the following drawbacks:

- it makes the presentation of financial information by the contractor less clear and comparable, and thereby complicates the verification work by the external auditor required for the provision of an audit certificate accompanying financial statements (see also paragraphs 44 and 45),
- it significantly reduces the scope for effective plausibility checks on the completeness and accuracy of data when processing financial statements and payments. Since the key information on personnel costs or hours spent is no longer reported, it further complicates the reconciliation and monitoring of scientific progress achieved by the project in relation to costs incurred, for scientific coordinators, external experts and the Commission.

Compared to the simplified cost reimbursement model initially proposed, the complete elimination of categories thus reduces the scope for the effective protection of the financial interests of the Community as required by Article 20 of Regulation (EC) No 2321/2002.

Reimbursement of costs already financed by public authorities

40. The legal bases for FP5, its implementing regulation and its model contracts do not explicitly state that recurrent costs already financed through national budgets are ineligible. This contrasts for instance with the provisions applicable to the

⁽⁴⁾ Commission Decision (C(2003) 3834, 23 October 2003) modifying Commission Decision C(2003) 799 of 17 March 2003, establishing a model contract for the implementation of the sixth framework programme of the European Community and the European Atomic Energy Community (2002 to 2006), and the Commission Decision C(2003) 2567 of 18 July 2003, establishing a derived model contract for the actions aiming at the promotion and development of human resources and mobility for the implementation of the sixth framework programme of the European Community (2002 to 2006).

⁽⁵⁾ FP6 only requires that direct costs must be attributed directly to the project and identified by the contractor in accordance with its accounting system. Similarly, no specific conditions are imposed for the eligibility of costs (such as for instance in Article 13 of Commission Regulation (EC) No 996/1999 under FP5).

Structural Funds ⁽¹⁾. The Commission reimbursed for a number of indirect RTD actions costs already covered by a Member State or one of its public bodies. This problem has been aggravated with the Commission opening the full cost (FC) and full cost flat rate (FF) systems to public bodies and actively promoting their application during FP5 (see also paragraph 31). Under these systems it was possible for public entities to claim personnel costs for civil servants or public officials, even in cases where the people concerned had not been explicitly seconded to the project, which is what would have been required by national law. Those costs were not directly borne by the participant and therefore should not be eligible for Community support.

41. In FP6 costs already financed through national budgets may be reimbursed as eligible costs if these resources are at the free disposal of the participating legal entity ⁽²⁾. In the long term the risk of reimbursing costs already funded by a Member State is that the Community financial contribution replaces rather than complements national research funding.

Principle of joint and several liability as initially proposed by the Commission limited by Council and Parliament

42. The Court also recommended that each participant in a consortium should bear joint and several liability for the use made of the Community financial contribution to the indirect RTD

action (with the exception of participants such as public universities, which cannot for legal reasons be held jointly and severally liable) ⁽³⁾. The principle of joint and several liability of participants was explicitly contained in Article 13 of the Commission's amended proposal for rules on participation and dissemination of results for FP6. The liability was then limited at the request of the Council and Parliament. As in FP5, the technical implementation of the indirect RTD action remains the collective responsibility of the participants under FP6 and the financial liability is limited to each participant's share up to a maximum of the total payments received ⁽⁴⁾.

Court's recommendation on sanctions retained by Council and Parliament

43. FP6 fully implements the Court's recommendation for strengthening the protection of the Community's financial interests by providing for the possibility of imposing sanctions according to Council Regulation No 2988/95 ⁽⁵⁾. Article 20 of Regulation (EC) No 2321/2002 entitles the Commission to recover the amount unduly paid, and, in addition, to fine a contractor who is found to have overstated costs and who has consequently received an unjustified financial contribution.

Key problems related to audit certificates remain to be solved

44. Article 14 of Regulation (EC) No 2321/2002 follows previous Court recommendations by requiring the certification of financial statements for FP6 indirect RTD actions by an external auditor or, in the case of public bodies, by a competent public officer ⁽⁶⁾. The model contract for FP6 defines the scope of this audit as the certification that '[...] the costs incurred during that period meet the conditions required by the contract'. The auditors are selected and paid for by the contractor, and the resulting audit certificate is subsequently submitted to the Commission. The cost of these audit certificates is entirely reimbursed by the Community (within the limits established by the contract). The Commission carried out two pilot actions on audit certificates during FP5. However, the effectiveness and reliability of audit certificates were not assessed in time for the Commission to identify lessons to be learnt in preparation for FP6.

⁽¹⁾ Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds (OJ L 161, 26.6.1999); Commission Regulation (EC) No 1685/2000 of 28 July 2000 laying down detailed rules for the implementation of Council Regulation (EC) No 1260/1999 as regards eligibility of expenditure of operations co-financed by the Structural Funds (OJ L 193, 29.7.2000); in particular Eligibility rules No 1 'Expenditure actually paid out' and No 11 'Costs incurred in managing and implementing the Structural Funds'.

⁽²⁾ Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities (OJ L 248, 16.9.2002); Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities (OJ L 357, 31.12.2002); Article 165 'No profit rule' (Article 109(2) of the Financial Regulation); Regulation (EC) No 2321/2002 of the European Parliament and of the Council of 16 December 2002 concerning the rules for the participation of undertakings, research centres and universities in, and for the dissemination of research results for, the implementation of the European Community Sixth Framework Programme (2002 to 2006), in particular Articles 8 and 14 (OJ L 355, 30.12.2002); Commission Decision C(2003) 3834, 23 October 2003) modifying Commission Decision C(2003) 799 of 17 March 2003, establishing a model contract for the implementation of the sixth framework programme of the European Community and the European Atomic Energy Community (2002 to 2006), and the Commission Decision C(2003) 2567 of 18 July 2003, establishing a derived model contract for the actions aiming at the promotion and development of human resources and mobility for the implementation of the sixth framework programme of the European Community (2002 to 2006).

⁽³⁾ Annual report concerning the financial year 2001, paragraph 4.50; Special Report 'Fisheries, agricultural and agro-industry research' No 9/99, paragraph 117.

⁽⁴⁾ Article 13.2 'Execution of indirect actions' of Regulation (EC) No 2321/2002 provides only for each participant being '[...] liable for the use of the Community financial contribution in proportion to his share of the project up to a maximum of the total payments he has received'.

⁽⁵⁾ Annual report concerning the financial year 2001, paragraph 4.51; Annual report concerning the financial year 2000, paragraph 4.40 (OJ C 359, 15.12.2001); Special Report 'Fisheries, Agricultural and Agro-Industry Research' No 9/99, paragraph 117.

⁽⁶⁾ Special Report 'Joule-Thermie' No 17/98; Annual report concerning the financial year 2001, paragraph 4.48.

45. Unlike in FP5, participants in FP6 indirect RTD actions are only required to report total costs incurred by activity, without giving any further details on the nature of the expenditure (for instance on personnel costs and hours spent). As a consequence, the Commission will need to rely almost exclusively on audit certificates for assessing the reality, eligibility and accuracy of costs claimed under FP6. However, this reliance is currently compromised as several essential conditions have not yet been met:

- the FP6 model contract only specifies the basic level of qualification of the auditor ⁽¹⁾. However, the Commission has not yet clearly defined the scope and extent of the audit work to be done ⁽²⁾. Without the definition of those essential aspects by the Commission there remains a considerable risk that the audit certificates will be insufficient to ensure effective control over payments based on financial statements,
- for audit certificates to become an effective control mechanism, the Commission must also assure itself that external auditors are carrying out their verifications in an independent manner. In particular the Commission should define a strategy on how to verify, on a case-by-case basis, that the audit certificates submitted were produced in compliance with these minimum requirements and generally applicable professional standards.

Management structure, procedures and methods for the implementation of FP5

Coherence of programme and organisational structure

Joint management of the seven FP5 programmes by five Directorates-General

46. Indirect actions of FP5 are administered by five Directorates-General, excluding the Commission's Joint Research Centre (see paragraph 3). These five Directorates-General report to four Members of the Commission, with the Commissioner in charge of Directorate-General for Information Society also being

in charge of Directorate-General for Enterprise. This compares to seven Directorates-General co-managing indirect RTD actions under FP4 ⁽³⁾. Historically this joint management reflects the aim of supporting the Commission's policy objectives within the different areas and generating input from the research activities for future Community initiatives.

47. Except for the programme 'User-friendly information society' and the environment part of the programme 'Environment, energy and sustainable development', all thematic programmes are operated by more than one Directorate-General ⁽⁴⁾. When preparing FP5, the Commission intended that two Directorates-General, Research and Information Society, should be in charge of FP5 implementation, but with parts of the thematic programmes being co-managed by other Directorates-General. Thematic programmes were thus fragmented across Commission services. While the partition of contract and project administration for a programme between Directorates-General resulted in a multiplication of support functions, no evidence was found that this organisational structure added value to the management of the scientific aspects of these programmes.

48. The Commission justified the creation of a second, largely independent 'pole' at Directorate-General for Information Society by the rapid evolution of information and communication technologies and their linkage to associated norms, standards and regulations which are also dealt with by this department. However the argument of scientific specificity and link to a specific regulatory framework also applies to other research fields, such as life sciences. Furthermore, the management requirements of research programmes are largely independent of the scientific area covered.

⁽¹⁾ Under FP6 each contractor is free to choose its auditor provided that the external auditor is independent from the contractor and that the auditor is qualified to carry out statutory audits of accounting documents in accordance with the eighth Council Directive 84/253/EEC of 10 April 1984 or similar national regulations.

⁽²⁾ For instance minimal requirements on materiality and confidence level, type of audit work, documentation of audit work, format and content of contradictory report between auditor and auditee, right of access by the Commission to auditor's working papers.

⁽³⁾ This reduction is due to the merger of Directorates-General for Energy and Transport as at 1 January 2000 and the transfer of agricultural research activities (which were managed by Directorate-General for Agriculture under the FP4 programme 'Fisheries, agricultural and agro-industry research') to Directorate-General for Research.

⁽⁴⁾ While the programme 'Quality of life and management of living resources' is operated by Directorates-General for Research and Fisheries, the programmes 'Competitive and sustainable growth' and the non-nuclear energy strand of the programme 'Environment, energy and sustainable development' are managed by Directorates-General for Research and Energy and Transport. In addition, as regards the three horizontal programmes, also the programme 'Promotion of innovation and encouragement of small and medium-sized enterprises participation' is operated by Directorates-General for Research and Enterprise. The programmes 'Improving the human research potential and the socioeconomic knowledge base' and 'Confirming the International role of Community research' are carried out within Directorate-General for Research only.

Split of programmes goes against the intended design of single research programmes

49. Each thematic programme was designed as a single entity around which appropriate management structures were to be constructed. However, as pointed out above, almost all thematic programmes were co-managed by different Directorates-General, thus effectively creating separate management structures. Moreover, at Directorates-General for Research ⁽¹⁾, Information Society ⁽²⁾ and Energy and Transport ⁽³⁾, specific programmes were also split between directorates.

50. The split of programmes goes against the intended design of single research programmes. Its main drawback is inefficiencies caused by duplication of effort. For instance, the reorganisation of Directorate-General for Research in 2001, by creating largely autonomous directorates operating parts of specific programmes increased the number of administrative and financial units from five to nine. This meant that available officials at Directorate-General for Research with the necessary capacities in administrative and financial matters were spread between nearly twice the number of units. In addition the partition of programmes created an additional need for coordinating common areas of interest for the programme as a whole (such as programme committees, external advisory groups or work pro-

grammes). This problem was compounded by the additional need to carry out the activities related to the completion of previous framework programmes within these directorates ⁽⁴⁾ (see paragraph 34).

51. The joint management of FP5 by five Directorates-General and the split of programmes between largely autonomous directorates make the Commission's communication with the entities participating in the RTD framework programmes more difficult and less coherent. Within the same programme participants have to communicate on similar issues with officials from different units or directorates. Several examples were found, where Commission services gave diverging interpretations and unclear (or even contradictory) instructions to participants. This demonstrates the insufficiencies of internal guidelines and highlights the need for additional training on the administrative and financial aspects of management of indirect RTD actions (see paragraph 35). This problem is aggravated by the high dependency on non-permanent staff in the research area and the resulting turnover (see paragraphs 72 and 73).

Key actions are not sufficiently reflected in the Commission's organisational structure

⁽¹⁾ The organisation of Directorate-General for Research at the outset of FP5 until the end of 2000 was structured in three thematic groups (consisting of two operational directorates in addition to a coordinating directorate) for each of the thematic programmes. Activities related to programme committees and advisory groups were delegated to the coordinating directorate, as well as the administrative and financial management of indirect RTD actions. The two horizontal programmes were each managed within one directorate. Following a reorganisation in January 2001 the three thematic programmes (which were previously regrouped and coordinated in three 'thematic groups' covering nine directorates) were separated between six autonomous directorates. In particular this is the case for the programme 'Quality of life and management of living resources', the programme 'Competitive and sustainable growth' and the programme 'Environment, energy and sustainable development'. The management of the horizontal programme 'Improving the human research potential and the socioeconomic knowledge base' (which was previously carried out within one directorate) was decentralised and shared between four autonomous directorates. The policy aspects and administrative and financial management of the programme 'Confirming the International role of Community research' were directly attached to the deputy Director-General whereas for most indirect RTD actions the scientific follow-up was delegated to the operational directorates.

⁽²⁾ The Directorate-General for Information Society was organised by key actions of the programme 'User-friendly information society'. With the exception of one out of five operational directorates, each directorate managed one of the four key actions of the thematic programme.

⁽³⁾ At Directorate-General for Energy and Transport, the non-nuclear energy strand of the programme 'Environment, energy and sustainable development' is simultaneously carried out by three directorates and the programme 'Competitive and sustainable growth' by four directorates, with one directorate providing a coordination function to either programme.

52. Compared to FP4, a major innovation in FP5 was the structuring of the thematic (and to a more limited extent of the horizontal) programmes in key actions (see Figure 3) ⁽⁵⁾. These key actions are targeted at RTD priorities and the Community's policy objectives, whereas activities of a generic nature and support to research infrastructures aim to build up knowledge in specific areas in the longer term. This concentration of effort was intended to maximise the impact of the resources deployed within each area where RTD activities were initiated ⁽⁶⁾. However, with the exception of the 'User-friendly information society' operated by Directorate-General for Information Society, the management responsibility for key actions was not clearly assigned to an organisational entity such as a directorate or a specific unit within a directorate. For jointly managed programmes, some key actions were even split between Directorates-General.

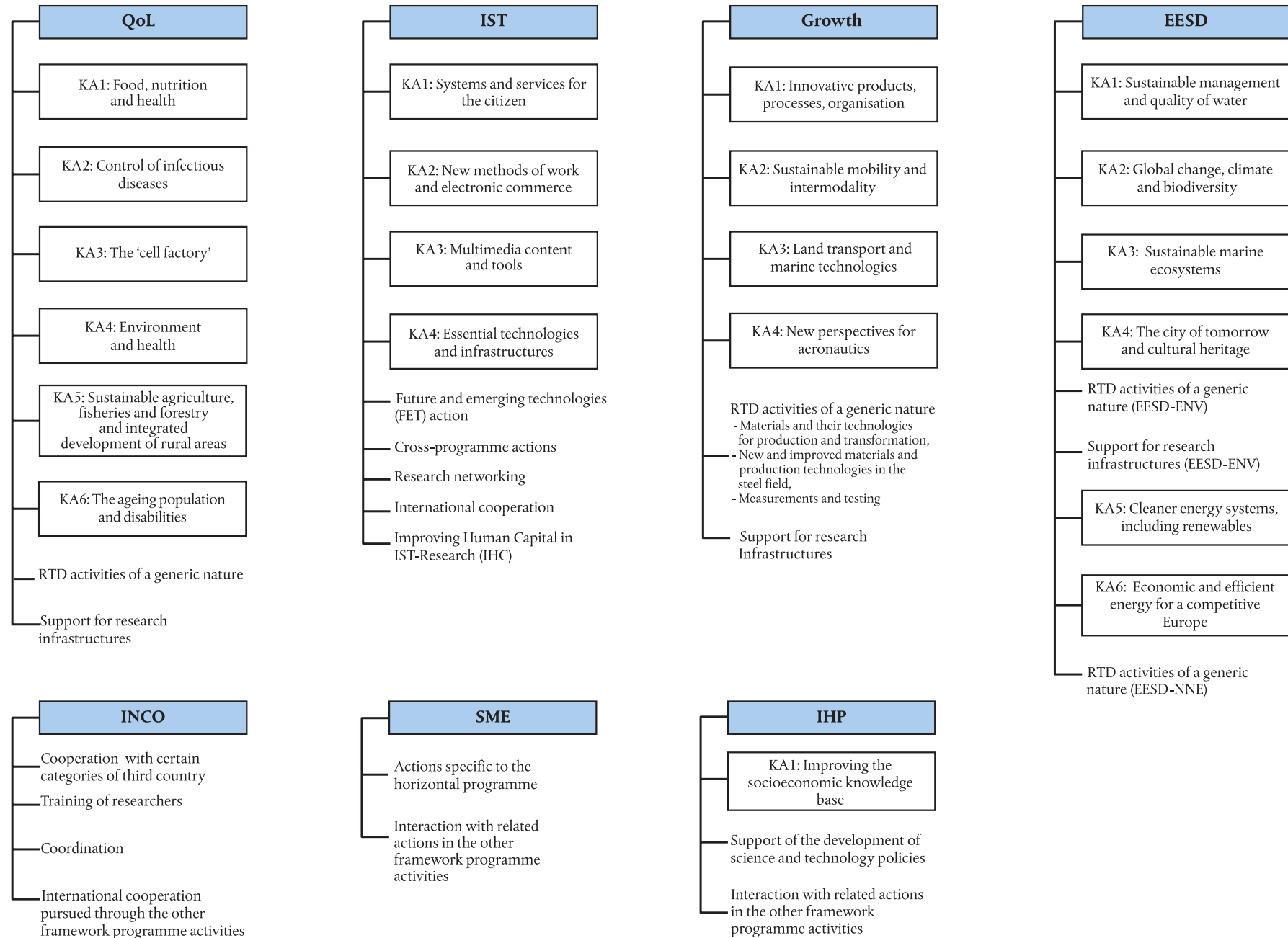
⁽⁴⁾ The project management as well as the administrative and financial follow-up including the closure of indirect RTD actions of previous framework programmes is carried out by the management structures of the successor programmes.

⁽⁵⁾ Annex II to Decision No 182/1999/EC of the European Parliament and of the Council.

⁽⁶⁾ European Commission, 'Working paper on the specific programmes: Starting points for discussion', point 11 (COM(97) 553 final, 5 November 1997).

Figure 3

Structuring of thematic and horizontal programmes in key actions



53. Other research activities which focus on specific socio-economic issues and target groups, such as the programmes 'Confirming the International role of Community research' and 'Promotion of innovation and encouragement of small and medium sized enterprises participation', could be integrated into the thematic programmes, further streamlining the framework programme. In fact, actions regarding small and medium sized enterprises were part of the 'User-friendly information society' programme from the start of FP5. Moreover, in the reorganisation of Directorate-General for Research in January 2001, the scientific aspects of the programme 'Confirming the International role of Community research' were given to the operational directorates implementing the thematic programmes closest to the scientific area of the indirect RTD actions concerned.

Insufficient coordination mechanisms in place for FP5

54. The Commission had originally intended to implement a horizontal consultation forum and coordination structure through a 'Board of Directors', bringing together representatives of all five Directorates-General⁽¹⁾. However, no such group was set up until the end of the FP5 programme period (1998 to 2002). Consultation and coordination of management aspects, such as the common evaluation platform, the handling of contract amendments or the audit strategy followed for FP5, were dealt with on an ad hoc basis mainly at a technical level that lacked the necessary authority for these kinds of arrangements.

55. For all programmes, including those managed jointly by different Directorates-General, specific 'Groups of Directors' were set up as an additional coordination mechanism. Some of these groups, for example the group of directors for the programme 'Competitive and sustainable growth', met for the first time as late as the end of 2001, the third year of the FP5 programme period. These groups were convened in addition to the regular management meetings of directors within each of the Directorates-General. It was foreseen by the Commission that the meetings of

these groups would replace the interdepartmental consultations⁽²⁾. However, the interdepartmental consultation remained in place, resulting in a duplication of consultation procedures.

56. A review of the minutes of the management meetings of directors at Directorate-General for Research showed that these weekly meetings largely addressed issues other than those of the day-to-day management problems of the operational programmes, except for budget planning and follow-up of its implementation. In particular from mid-2000 onwards, the planning and preparation of FP6 gained in importance. For no meeting did the minutes refer to any discussions on activities related to the completion of previous programmes or the scientific results of indirect RTD actions co-funded by the Commission.

57. The deficiencies in the coordination of FP5 activities, even within Directorates-General, were recognised by the Commission. In 2001, Directorate-General for Research centralised the management responsibility for the (parts of) programmes under its control with the deputy Director-General, following a recommendation made by the Court. The same year, the corresponding post at Directorate-General for Information Society, which until then had been vacant, was filled.

Contract caseload, duration of procedures and resources allocated to FP5

Large majority of contracts administered by Directorates-General for Research and Information Society

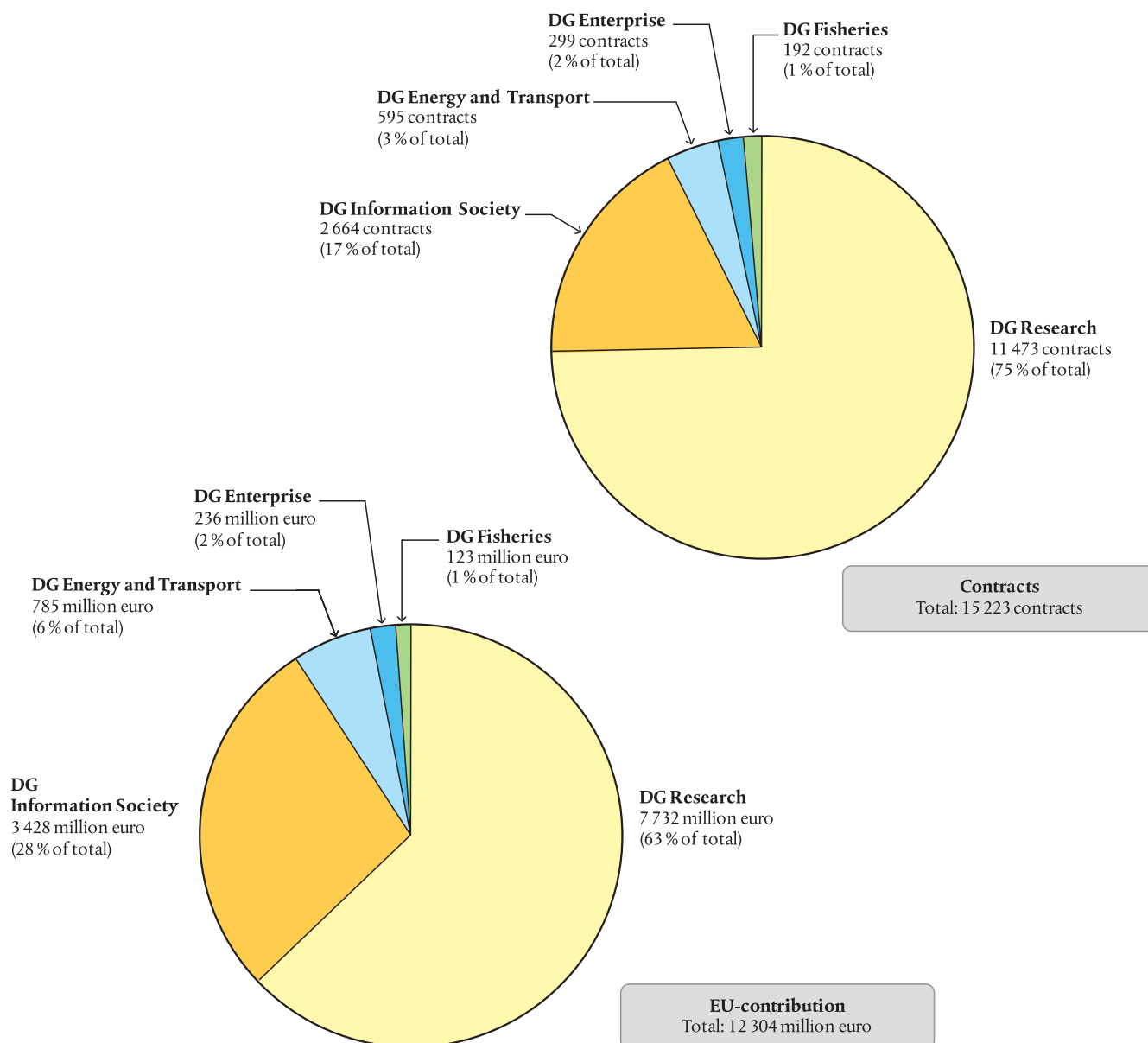
58. Of the 15 223 contracts for FP5 indirect RTD actions (representing approximately 91 % of the financial participation of the Community), 92 % are managed by Directorates-General for Research and Information Society, the remainder being managed by Directorates-General for Energy and Transport, Enterprise and Fisheries (see Figure 4).

⁽¹⁾ Commission reply to Annual Report concerning the financial year 1999 (OJ C 343, 1.12.2000), paragraph 4.51; European Commission, 'Working paper on the specific programmes: Starting points for discussion', see section Implementation and management, p. 8 (COM(97) 553 final, 5 November 1997).

⁽²⁾ Under Article 21 of the procedures implementing the Commission's rules of procedure the services responsible may set up inter-service coordination groups in the interest of good coordination. The work done by these groups is the equivalent of formal inter-service consultation, provided that the services most concerned have representatives in the group and that the minutes of the group meeting contain a record of their agreement (see Annex 3 of SEC(2001) 1860 dated 13 November 2001; adopted by the Commission on 28 November 2001).

Figure 4

Number of contracts signed and European Union financial contribution per Directorate-General



Source: European Commission, January 1999 to July 2003 (unaudited).

59. The most important programme, in terms of the contractually agreed European Union financial contribution, is the programme 'User-friendly information society' with 3 428 million euro, followed by the programme 'Competitive and sustainable growth' with 2 673 million euro and the programme 'Quality of life and management of living resources' with 2 339 million euro. The programme 'Environment, energy and sustainable development' accounts for 944 million euro in its non-nuclear energy section and for 1 046 million euro in the environment section. The horizontal programmes 'Improving the human research potential and the socioeconomic knowledge base', 'Confirming the International role of the Community research' and 'Promotion of innovation and encouragement of small and medium sized enterprises participation' account for 1 235 million euro, 403 million euro and 236 million euro respectively (see Annex 3A and 3B and Figure 5).

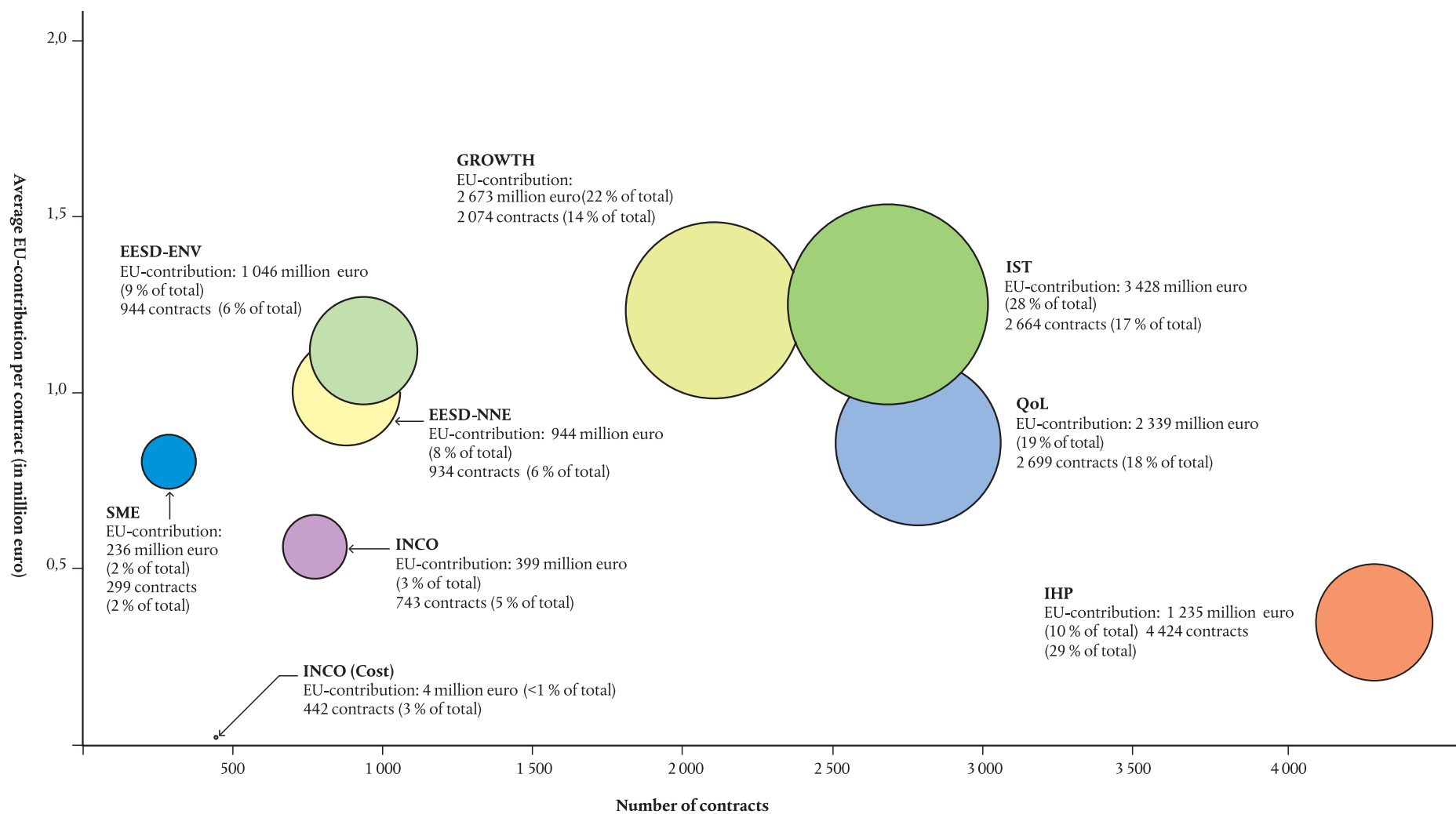
Nearly twelve months for contract signature as a result of FP5 procedures

60. Based on the sample of contracts for indirect RTD actions audited, the 'time-to-contract' from the publication of a call for proposal to the signature of a contract by the Commission averaged 348 calendar days. The average duration between the reception of a proposal to the signature of a contract by the Commission for the indirect RTD actions was 263 calendar days ⁽¹⁾ (see Figure 6).

⁽¹⁾ This finding is in agreement with a Commission survey prepared for the 2000 Framework Programme monitoring panel, indicating an average of 268 working days as 'time-to-contract' from the closing of the call until the contract signature across programmes and action types.

Figure 5

European Union financial contribution committed per programme



Note: Size of circle corresponds to total EU-contribution committed for indirect RTD actions under each programme.

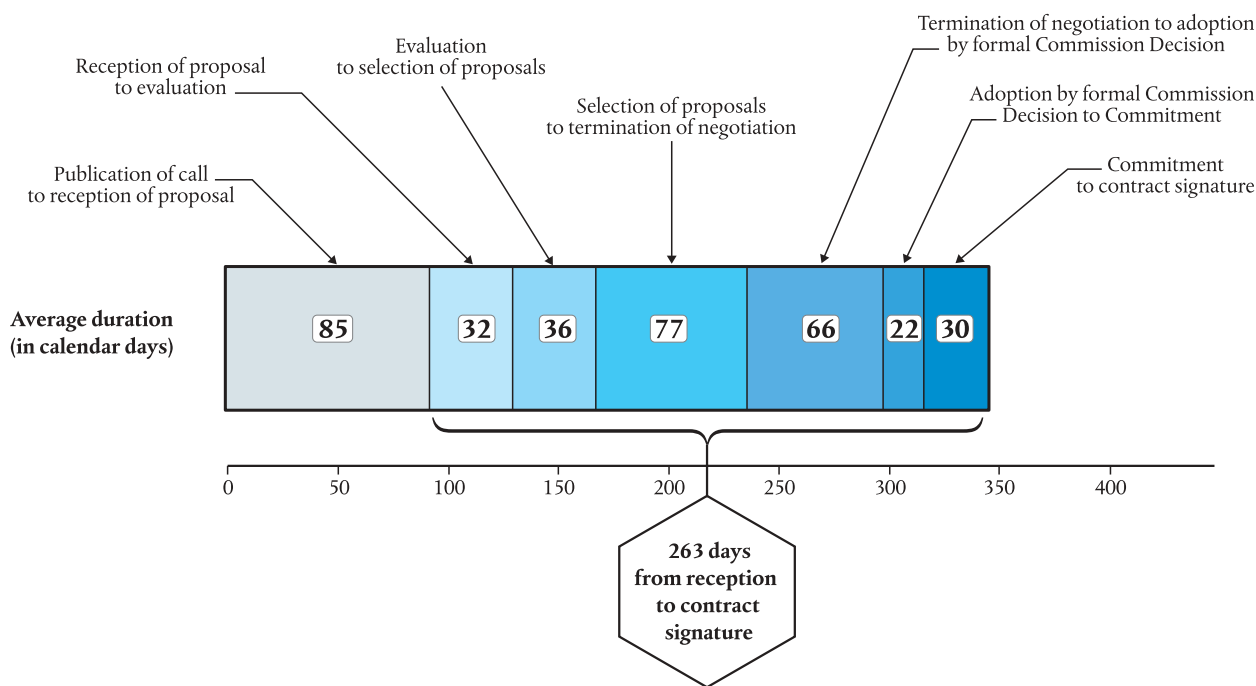
Source: European Commission, January 1999 to July 2003 (unaudited).

61. The lengthy duration of the procedures leading up to contract signature is partly a consequence of requirements imposed by the legal bases of FP5 (e.g. fixed date for submission of proposals, mandatory consultation of Programme Committees), the Commission's Rules of Procedure (e.g. the time limit of 10 working days for interdepartmental consultation prior to the submission of the selected and negotiated proposals to the Secretariat-General) or the Financial Regulation (e.g. annuality of the budget). Others are due to administrative practices that are at the discretion of the Commission's services (such as selection and adoption by batches of proposals ⁽¹⁾ or frequency of interdepartmental consultation). For the 'User-friendly information society' programme, Directorate-General for Information Society succeeded in decreasing (subject to the same procedures) the average 'time-to-contract' from 274 calendar days after the closure of the call (for the first

to the fifth call) to 138 calendar days (for the sixth to the eighth call in 2001 and 2002). This demonstrates that the scope for improvement for other programmes remains significant ⁽²⁾.

62. When preparing FP5, the Commission initially proposed that the consultation of Programme Committees should be limited to strategic matters, such as drawing up work programmes, calls for proposals or approving adjustments to the indicative breakdown of funding within each programme ⁽³⁾. However, the legislator gave a more prominent role to the Programme Committees since the Commission is required to obtain a positive opinion before each Commission Decision on the selection of indirect RTD actions proposed for funding (subject to programme

Figure 6

'Time to contract' duration

Note: Based on sample of indirect RTD actions audited.

Source: Court of Auditors.

⁽¹⁾ Proposals for indirect RTD actions are processed as part of one or several batches (linked to a specific call and its evaluation). As a consequence, proposals of a specific call are only submitted for the selection decision when the negotiations of all proposals of a batch are finalised (or, in the case of several batches, when an internal deadline has been reached). Therefore, the required time until Commission Decision is always the time of the longest negotiation (or a pre-defined deadline) of a given batch. It should be noted, however, that it is mostly Programme Committees that request that batches comprise all proposals retained after evaluation.

⁽²⁾ Council Decision 1999/65/EC; Article 9.4: 'Subject to legal constraints and the need to respect requirements of transparency and equal treatment, the Commission shall keep the procedures for the submission, selection and adoption of proposals as short as reasonably achievable and keep the administrative cost of the applicants and of the Commission to the minimum level necessary.'

⁽³⁾ European Commission, 'Working Paper on the specific programmes: Starting Points for Discussion', see section III Implementation and management, p. 7 (COM(97) 553 final, 5 November 1997).

specific thresholds) ⁽¹⁾. Cutting out programme committees could reduce the average 'time-to-contract' duration for indirect RTD actions by up to one month, without compromising the quality of the selection procedure.

Delays in setting up the common evaluation platform

63. The Commission also attempted in various ways to enhance the efficiency and effectiveness of the FP5 management structure, namely by setting up jointly used support functions, such as a common evaluation platform and outsourcing administrative and logistical services for evaluating the proposals submitted for consideration under the thematic and horizontal programmes of FP5. The external service provider operating the evaluation platform supplied assistance with the evaluation of proposals. This took the form of document receipt, registration and handling, facility management and logistical organisation. Conflicting views between different Commission services resulted in significant delays in setting-up the evaluation platform. These delays contributed to organisational problems throughout the first year of the FP5 programme period ⁽²⁾. Despite these weaknesses in the initial phase, the common evaluation platform significantly improved the efficiency and effectiveness of FP5 management.

64. Apart from the common evaluation platform and Cordis (www.cordis.lu), an externalised information service managed by Directorate-General for Enterprise, no other common service functions were deployed by the Commission for FP5, despite there being significant potential for doing so. The Court identified four main areas where existing support functions could be centralised and so allow more efficient and effective management of the framework programme as a whole (see paragraph 122).

Redesign and streamlining of procedures for FP5

65. Unlike in previous framework programmes, scientific, administrative and financial aspects of indirect RTD actions were negotiated, on the basis of the results of an evaluation by external

experts, before the Commission's formal adoption ⁽³⁾. This modification of procedures made it possible to agree on a definite estimate of necessary costs and the Community's maximum financial contribution for a project before the Commission decision, thereby strengthening significantly the negotiating position of the Commission services (see paragraph 92).

66. The Commission has started to streamline its procedures in line with recommendations made by the Court. In the first three years of FP5 proposals for indirect RTD actions were adopted by written procedure. In 2002, the Commission started to take its decisions by delegating the necessary powers to the Member of the Commission, with further subdelegation to the Director-General in line with Article 13 of the Rules of Procedure of the Commission ⁽⁴⁾. This change in procedures potentially allows more frequent selections of proposals, thus further reducing the duration of procedures.

Late start of FP5 and highly fluctuating case load revealed by contract statistics

67. The Decisions establishing the legal basis of FP5 were approved with significant delay. The European Parliament and Council Decision on FP5 was delayed until December 1998 and the Council Decisions on the specific programmes were only adopted at the end of February 1999. Nevertheless, the political commitment was made by the Commission to implement the budget for 1999 as planned. Hence the first calls for proposals were launched in April 1999, with the great majority having a deadline of June 1999. Given the average 'time-to-contract' duration, the signature procedure could only be completed in the following year (see Figure 7).

68. In addition to the late start of FP5, the statistics on contract signature also show a cyclical pattern where a large proportion of contracts are signed in the fourth quarter of each year. In 2001, for instance, the last quarter represented 47 % of all contracts signed in that year and 49 % of the European Union financial contribution contractually agreed (see Figure 7). This cyclical pattern, with peaks of contract signature towards the end of the year, is similar for all seven programmes of FP5.

⁽¹⁾ For instance Council Decision 1999/167/EC of 25 January 1999 adopting a specific programme for RTD on quality of life and management of living resources (1998 to 2002):

- Article 7.1 '[...] The Commission shall be assisted by a programme committee (hereinafter referred to as "the committee") composed of representatives of the Member states and chaired by the representative of the Commission',
- Article 7.3 (a) '[...] The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee [...]'].

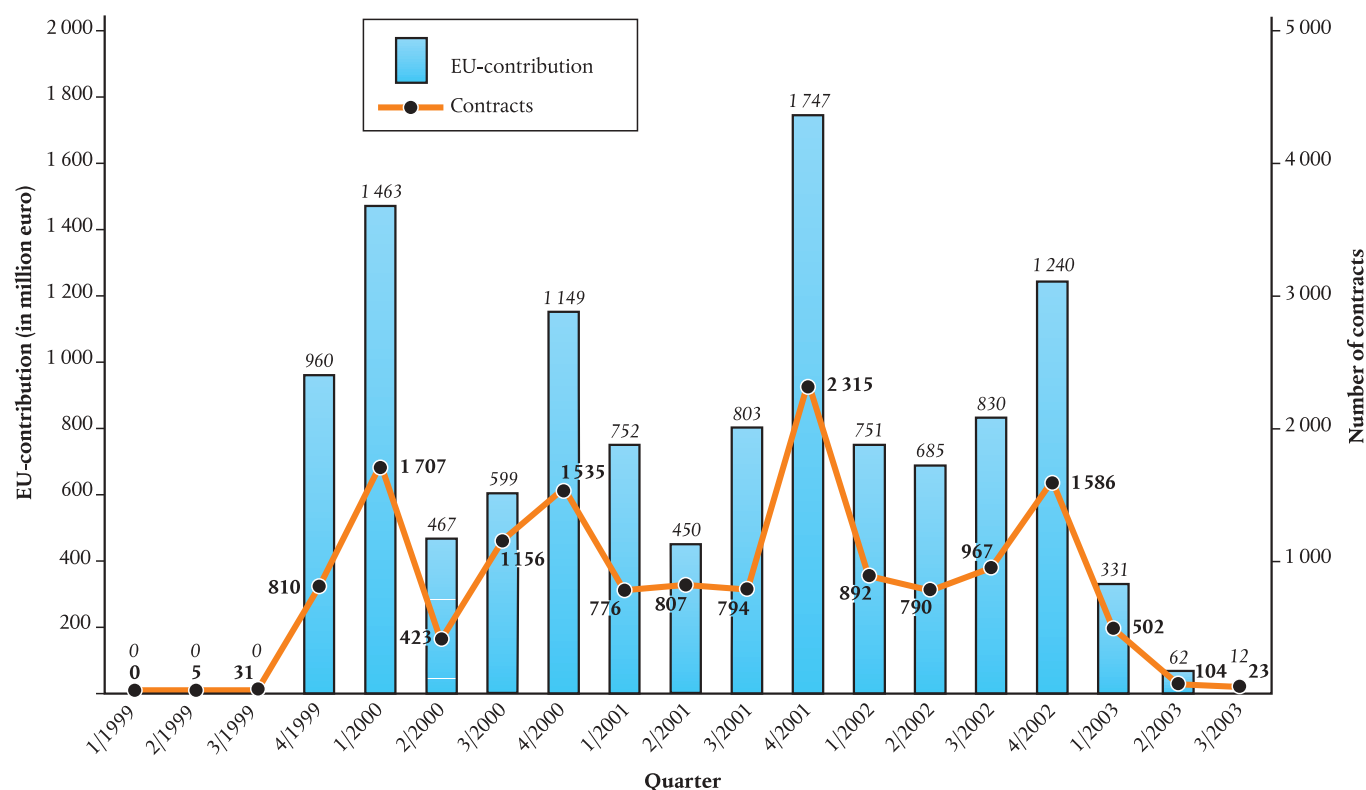
⁽²⁾ Directorate-General for Financial Control, 'Special financial audit of the service contract with WANG Global (Belgium) b.v.b.a. No FP5-Evaluation Service Provider (ESP)/1', final audit report, 18 January 2001.

⁽³⁾ Special Report 'Fisheries, agricultural and agro-industry research' No 9/99, paragraph 39.

⁽⁴⁾ Article 13 of Rules of Procedure of the Commission (C(2000) 3614, OJ L 308, 18.12.2000): 'The Commission may, provided the principle of collective responsibility is fully respected, empower one or more of its Members to take management or administrative measures on its behalf and subject to such restrictions and conditions as it shall impose. [...] Powers conferred in this way may be subdelegated to the Directors-General... unless this is expressly prohibited in the empowering decision. [...]'; SEC (2000) 2071 (final), 'La simplification du processus décisionnel à la Commission', communication de M. le Président, 28 November 2000, p. 12.

Figure 7

Contract signature and committed European Union financial contribution per quarter (1999 to 2003)



Source: European Commission, January 1999 to July 2003 (unaudited).

69. The procedures for the selection of indirect RTD actions, together with the cyclical pattern of the work planning, give rise to peaks of activity for the evaluation and negotiation of proposal⁽¹⁾. In addition, the yearly pattern of the contracts, with regard to the submission for approval of project deliverables (in particular cost statements and periodic reports containing information about the progress of scientific work), prolongs these

activity peaks after contract signature⁽²⁾. Thus, unless projects are delayed, a peak in contract signature always causes a peak in the reception and verification of project deliverables, as well as in payments, in subsequent years. These peaks for specific functions result in bottlenecks and increase the risk of error and irregularity as the time spent on each transaction reduces. In the Court's view excessive caseloads in peak times contributed to administrative delays and to the deficiencies detected in the Court's tests of the Commission's operation of its internal controls (see paragraphs 90 to 95).

⁽¹⁾ The budget timetable in the annual work programmes was the starting point for the timing of calls for proposals and the setting of the indicative funding for the periodic, open or dedicated (i.e. with a fixed deadline) calls. Most periodic and dedicated calls were published with a closing date in the first or fourth quarter of a given year, which should have left sufficient time to complete the administrative procedures (leading to a commitment and contract signature) within the current or following budgetary year. However, this planning was based on the assumption of an average duration of six months from the closing of a call to the signature of a contract as initially planned by the Commission (and sometimes referred to in work programmes). The actual 'time-to-contract' was however eight to nine months from the closing date of the call and eleven to twelve months starting from the publication of a call for proposals (see paragraph 60), thus making it difficult to complete the contract signature within the planned timeframe. This was reinforced by the annuality of the budget.

Above average vacancy rates and high dependency on non-permanent staff

70. Since the early 1970s the human resources allocated to the management of research activities have been financed from both the administrative part (part A) and the research part (part B)

⁽²⁾ The FP5 model contracts provide for a periodic submission of project deliverables. In most cases the period covered is twelve months, exceptionally also six months, starting from the contract signature date.

of the general budget ⁽¹⁾. Due to the limited duration of RTD framework programmes, staff employed on research appropriations are usually given fixed term contracts ⁽²⁾. The Commission communications of 1994 and 1996 aimed to rebalance the structure of research personnel over the period 1996 to 2005, so as to achieve a ratio of 40 % civil servants, 35 % temporary staff and 25 % other staff ⁽³⁾. Six years after this decision the corresponding rates are 28 %, 50 % and 22 % respectively; indicating that further efforts are necessary to achieve this objective ⁽⁴⁾.

71. As at November 2001, the equivalent of 1 935 full-time staff carried out activities related to FP5 within the Directorates-General implementing RTD framework programmes ⁽⁵⁾. This figure does not include those staff allocated to the management of previous framework programmes, the preparation of FP6 (2002 to 2006) or, at Directorates-General for Energy and Transport, Enterprise and Fisheries in particular, other non-research activities.

72. During FP5 the five Directorates-General operating the RTD Framework Programmes continued to face difficulties in finding staff with specific profiles (for instance in IT or general management) as well as problems in recruiting permanent officials (i.e. people who had passed open competitions) to temporary research posts. In 2001 vacancy rates were 8 % to 12 % of total posts. This is nearly double the Commission-wide average vacancy rate of 5 % to 6 % of total posts and four to six times higher than the 2 % target stated by the Commission. The audit

also found that vacancy rates have increased slightly compared to 1999 ⁽⁶⁾. In order to improve the situation, the Commission in December 2001 adopted a new personnel policy for research staff, in line with recommendations made in the White Paper on Commission Reform ⁽⁷⁾.

73. More than one in four staff members employed were interim staff, auxiliaries, experts seconded from national administrations or contract staff providing IT-related support. A high dependency on non-permanent staff, especially in administrative and financial units and in the IT departments, is detrimental to the quality and continuity of operations, due to the regular changes in staff and the corresponding loss of knowledge. In contrast, for those staff managing the scientific aspects of research programmes, the Court considers that fixed-term contracts are appropriate. This form of contract provides the Commission with the necessary flexibility in its use of staff resources in a constantly evolving domain.

One third of staff employed on administration of proposals, contracts and projects

74. Out of the equivalent of 1 935 full-time staff members, 35 % of staff resources were allocated to proposal, contract and project management (see Figure 8) ⁽⁸⁾. Some differences in distribution can be observed between Commission departments and programmes, notably in Directorate-General for Research, which allocated significantly less staff resources to the administration of proposals, contracts and projects.

⁽¹⁾ The Council noted the following statement by the Commission at its 245th session on 4 June 1973: 'As regards occupying vacant posts involving research and investment appropriations, and in particular the recruitment of nationals from the new Member States, the Commission undertakes [...] to recruit staff under fixed-term contracts'.

⁽²⁾ Annual report concerning the financial year 1999, paragraph 4.41 (OJ C 342, 1.12.2000).

⁽³⁾ Communications COM(94) 671, 22 December 1994 and SEC(96) 48 of 19 January 1996.

⁽⁴⁾ Annual report concerning the financial year 1999, paragraphs 4.46 and 4.47.

⁽⁵⁾ Comprising officials, temporary agents (including contracts with indefinite duration, renewable definite duration or three-year contract), auxiliary, interim and contract staff as well as seconded national experts financed from part A and the administrative expenditure financed from part B of the general budget.

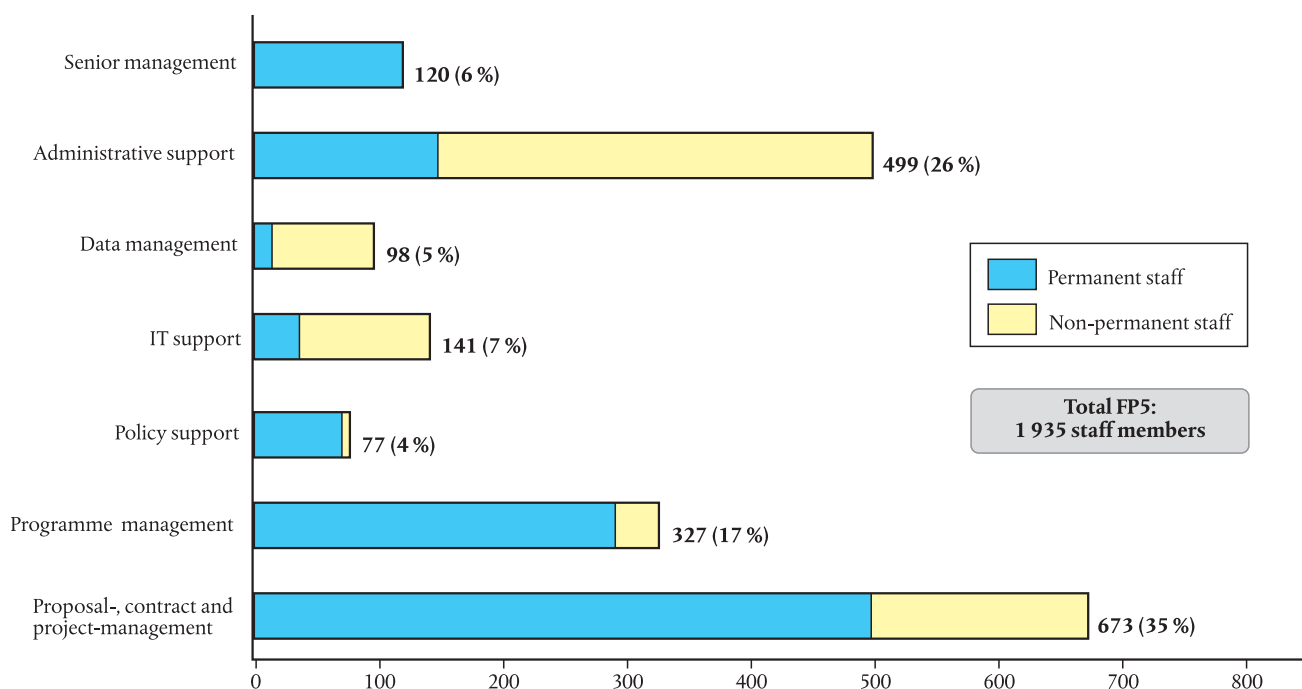
⁽⁶⁾ Annual report concerning the financial year 1999, paragraph 4.43 and table 7.

⁽⁷⁾ Communication from the Commission to the Council and the European Parliament, 'Research staff policy changes in the context of the reform of the Commission's human resources' (COM(2001) 792 final, 27 December 2001).

⁽⁸⁾ In addition, 17 % of FP5 staff resources were assigned to programme management. Policy support, i.e. relations with the Council, Parliament and Member States, accounts for 4 % of staff resources. Senior management corresponds to a further 6 % of staff resources. The equivalent of 26 % of staff resources were allocated to administrative support in addition to 7 % for IT support and a further 5 % for data management.

Figure 8

FP5 — distribution of staff resources by administrative activities



Source: European Commission, statistics on staff resources, November 2001 (unaudited).

Heavy caseload in terms of number of contracts managed per member of staff

75. Across FP5 a total of 15 223 contracts had been signed up to July 2003 (see Annex 3A and 3B). Given the equivalent of 1 935 full-time staff members employed on FP5, this implied an overall ratio of 7,9 contracts per member of staff. Taking the figure for the number of staff directly allocated to the proposal, contract and project management function, however, increases the average ratio to 20 to 25 contracts per member of staff.

76. Assuming that scientific follow-up and project management account for half of the staff resources related to these activities, scientific project officers will have to manage on average some 40 to 50 projects simultaneously. With 200 working days per year, this leaves on average a maximum of four to five working days per project per year. In the Court's view this is insufficient for adequate scientific monitoring of highly complex multinational research and demonstration projects.

77. There was also an unbalanced distribution of staff between programmes, comparison being made on the basis of number of contracts signed. For the 'User-friendly information society' programme, for example, total staff numbers allocated to the programme are significantly higher than for other FP5 programmes, despite the project's being no more complex. The Court found that internal controls performed more effectively in those Commission services which allocated a comparatively higher share of staff resources to the administration of proposals, contracts, and projects (see paragraphs 90 to 95).

Ceilings on administrative expenditure respected

78. The Commission's management of the RTD framework programmes is financed from both the administrative (part A) and the operating parts (part B) of the general budget ⁽¹⁾. For the resources coming from part B of the budget, Article 2 of each Council Decision adopting a specific programme imposed a ceiling on the Commission's administrative expenditure as a proportion of the total budget ⁽²⁾. These ceilings are set to cover the administrative expenditure for both current and previous framework programmes. They are set at 9,8 % of the total expenditure for the horizontal programmes 'Confirming the International role of Community research' and 'Improving the human research potential and the socioeconomic knowledge base', 7,5 % for the thematic programme 'User-friendly information society', 7,4 % for the horizontal programme 'Promotion of innovation and encouragement of small and medium sized enterprises participation' and 6,5 % for the thematic programmes 'Quality of life and management of living resources', 'Competitive and sustainable growth' and 'Environment, energy and sustainable development'. The ceilings were respected for each programme. The Court notes,

⁽¹⁾ Decision No 182/1999/EC of the European Parliament and of the Council; Article 2.4.

⁽²⁾ The administrative expenditure charged to the operating part of the budget covers research and external staff, missions and administration (including technical evaluation assistance), infrastructure, moveable property and data processing and communication activities (see for instance European Parliament, 'Final adoption of the general budget of the EU for the financial year 2001' (2001/110/EC, ECSC, Euratom; OJ L 56, 26.2.2001): subsection B6-RTD, Title B6-6).

however, that these ceilings were set without an independent external analysis of the actual resources needed by the Commission to manage the RTD framework programmes.

79. An alternative measure of the proportion of the budget that went to the administration of the RTD framework programmes between 1999 and 2002 is to look at the percentage of the total budget which was allocated to indirect RTD actions. Given that the contracts for indirect RTD actions signed between 1999 and 2002 covered a maximum financial contribution of 12 303,6 million euro, and a total amount of 13 141,0 million euro was committed (see *Annexes 2A and 3A*), 837,4 million euro (6,4 % of the total budget) went to the administration of the RTD framework programmes. However, this figure does not take into account the administrative expenditure allocated to the management of the RTD framework programmes that was financed from part A of the general budget.

Inadequate tools to monitor actual resource allocation

80. The Commission monitors the allocation of resources, including staff resources, in its Activity Based Budgeting (ABB) system. The general budget for the financial year 2004 will be the first budget officially based on this structure. For monitoring the real cost of implementing specific programmes, or an RTD Framework Programme as a whole, the Activity Based Budgeting system has, however, the following deficiencies:

- it measures budgetary expenditure rather than actual costs incurred for the Commission's operation of a programme,
- staff resources allocated to the programme, but financed from the administrative part of the budget (part A), are not included in this measure, but are recorded separately,
- Activity Based Budgeting records budgetary expenditure for activities which, in the case of the RTD framework programmes, do not necessarily relate to specific programmes. In addition, costs incurred for the completion of a programme after the end of the official programme period are accounted for under the subsequent framework programme (see paragraph 34). With the current specifications these activities cannot be used to identify the expenditure related to the complete life cycle of a specific programme or a framework programme as a whole.

81. The Commission does not yet operate an analytical cost accounting system sufficient to determine the actual cost for the management of a specific programme or RTD framework programme. Such a system would require, *inter alia*, a time recording system to register the staff resources employed on specific administrative activities. It could help the Commission to identify where staff resources could be used more efficiently. As currently used, the Activity Based Budgeting system can measure the expenditure from the part B of the general budget for RTD framework programmes as a whole, but it cannot measure the operating cost of a thematic or horizontal programme or a specific RTD Framework Programme.

IT support for proposal, contract and project management

FP5 IT systems: integration, availability of functions, quality and costs

No integration of management information systems across FP5

82. The inadequacy of IT support for the RTD framework programmes has been repeatedly criticised by the Court, and also by external experts⁽¹⁾. The main structural weakness of the FP5 IT architecture is the insufficient integration of management information systems with each other and with the SINCOM accounting system. This lack of integration between the IT systems operated by the five Directorates-General prevents automatic and efficient consolidation of information, for example on the financial and legal situation of participants, cost reimbursement systems used by one contractor under different contracts, hourly rates stated in the contract preparation forms or the audit history of the contractors. As a consequence the efficiency and effectiveness of internal controls were reduced when negotiating contracts for indirect RTD actions, verifying cost statements or authorising payments (see paragraphs 92, 93 and 95).

Inadequate IT support also due to insufficient investment

83. The level and quality of the IT support for the administration of FP5 proposals, contracts and projects showed inadequacies throughout the period covered by this audit. While the details differ from system to system and from component to component,

⁽¹⁾ Annual report concerning the financial year 2000 (OJ C 359, 15.12.2001), paragraph 4.36; Special Report 'Fisheries, agricultural and agro-industry research' No 9/99, paragraph 114; External Framework Programme Monitoring Panel (FPMP), '2001 Monitoring Report on the EU framework programme for RDT', 2002: point 4.1 Central Management Issues, p. 24.

the large majority of IT problems encountered in FP5 were due to the unavailability or unreliability of certain functions. The central management information systems in most Directorates-General were either made available late or, if available at the start of FP5, were incomplete or considered inadequate by users. In 1999 operational directorates at Directorate-General for Research started local IT development projects to compensate for the lack of an efficient and reliable central IT system for proposal and contract management. Such IT development activities, addressing specific weaknesses of central systems as well as the development of additional local applications, continued throughout FP5. Up until the end of the FP5 programme period the central IT systems in some Directorates-General were still only being partly used (e.g. contract and project management in the Directorate-General for Enterprise), incomplete (e.g. support for all model contracts), duplicated by local applications without interface to central IT systems or lacking important functions (e.g. the recording of project deliverables).

84. The Commission indicated that the late adoption of the legal bases (Decision No 182/1999/EC, Council decisions adopting specific programmes and rules for participation) left insufficient time for the development of adequate IT systems, since the detailed requirements specific to each programme could not be determined before the formal adoption by the Council and the Parliament ⁽¹⁾. The weaknesses identified were, however, also due to the absence of an overall IT strategy for FP5 and insufficient coordination between Directorates-General in IT planning, acquisitions, systems development and data management. These problems were compounded by the additional need to maintain different IT systems for the management of indirect RTD actions relating to previous framework programmes (see paragraph 34).

85. The Commission estimated the total cost related to IT support for the period 1999 to 2002 at less than 0,2 % of the total budget of FP5, excluding the costs related to the Commission's website CORDIS. This level of investment is insufficient, given the size and complexity of FP5. The reformed Financial Regulation promotes a more extensive use of electronic exchange and storage of data ⁽²⁾. An IT system based on electronic data exchange at all stages of the procedure would offer the potential for significantly increasing the cost efficiency of the framework programme management.

⁽¹⁾ Commission reply to Annual report concerning the financial year 2000, paragraph 4.36 (OJ C 359, 15.12. 2001).

⁽²⁾ Article 84 of the new Financial Regulation states that 'where revenue and expenditure operations are managed by means of computer systems, documents may be signed by a computerised or electronic procedure'.

Development of an integrated IT system for FP6

86. In line with recommendations made by the Court, the Commission committed itself to implementing a common IT system for electronic proposal submission, identification and selection of experts, proposal evaluation and the selection of proposals for funding from the start of FP6 (2002-2006) ⁽³⁾. According to the Commission, this new IT system will allow computerised transaction processing at every stage of the procedure, including contract negotiation, the transmission of contracts, the receipt of project deliverables (such as reports and financial statements) and communication with participants. In the Court's view there should also be a centralised support function 'Information technology' operating this common IT system (see paragraph 122).

Internal control procedures

Control procedures at Commission level

Lack of documentation of operational procedures

87. The Commission's administrative reform launched in 1999 aims at decentralisation and giving increased responsibility to managing departments. On the other hand, implementation of a framework programme must be based on a common set of principles and procedures. The tension between these orientations is at the root of the difficulties experienced by the Directorates-General in their joint management of FP5.

88. The need for a harmonised set of procedures for all Directorates-General operating FP5 was addressed by the Council and the European Parliament in their Decision 182/1999/EC requiring the Commission to establish and publish a detailed manual of operational procedures from the submission of a proposal to the selection of indirect RTD actions. In response the Commission adopted an Evaluation Manual at the beginning of FP5. This Evaluation Manual was however insufficiently detailed for use as a manual of operational procedures. Furthermore the manual was incomplete in that some procedures leading to the selection of RTD actions, especially the procedure for the negotiation of proposals, were only partially covered ⁽⁴⁾. The inadequate coverage of the negotiation phase was partly due to the redesign of procedures in FP5 which resulted in the negotiation phase being moved to precede the formal adoption by Commission decision (see paragraph 65).

⁽³⁾ Annual report concerning the financial year 2000, paragraph 4.27 (OJ C 359, 15.12. 2001).

⁽⁴⁾ Annual report concerning the financial year 2000, paragraphs 4.23 and 4.24.

89. In some instances more detailed manuals or comprehensive guidelines were prepared and used at the level of operational units and programmes or within a Directorate-General. For example Directorates-General for Information Society and Energy and Transport started their documentation of financial circuits and procedures as early as 2000. The development of manuals was continued in 2001 or, as in the case of Directorate-General for Research, only started in that year ⁽¹⁾. For Directorate-General for Research, with the exception of the financial circuits, the operational manual was still largely incomplete as at December 2002. Moreover, no initiative was taken by the Commission to standardise the form and content of these manuals as recommended by the Court ⁽²⁾. As a result, for FP5 as a whole, the documentation of operational procedures was still insufficient to comply with the minimum requirement of the Commission's Internal Control Standards ⁽³⁾. This deficiency contributed to continued differences in procedures and working practices between the Commission services (see paragraph 51).

Differences in the extent of internal control across FP5

90. Based on the sample of indirect RTD actions audited by the Court, differences in the type and extent of controls operated by the different Commission services implementing FP5 were found. Some of the deficiencies in internal control can be attributed to differences in the procedures applied, the absence of certain controls or inconsistent interpretations given to procedures in place and controls foreseen (see paragraph 35).

91. The tests of the most important controls for the sample of 53 contracts for indirect RTD actions revealed that some were not being operated effectively and consistently. For example, not all of the controls explicitly provided for in the Evaluation Manual, such as the verification of formal administrative eligibility of proposals received, the prior authorisation of the experts carrying out evaluations, the participation rule for evaluators or the verification of no conflict of interest for all experts, were being fully implemented across FP5. In several cases the controls carried out were not evidenced in the form of a document or a record indicating what controls had been carried out, and by whom.

92. There were specific weaknesses in internal control for the negotiation of the scientific, administrative and financial aspects of indirect RTD actions (see paragraph 65):

- for most of the audited proposals, the scientific, administrative and financial aspects to be modified as a result of the evaluation by external experts were not sufficiently well documented when the selected proposals were adopted after the evaluation. At the end of the negotiation phase most Commission services neither documented its outcome (except for the contract itself), with details of the extent to which the negotiation mandate was respected, nor subjected the negotiation outcome to formal authorisation by the official responsible for the programme in advance of its adoption by Commission decision. In one case an indirect RTD action was included in a draft Commission decision despite the contract negotiation not being adequately completed,
- the Commission services did not check the adequacy of contractors' accounting systems during the negotiation. Such a control could have provided additional assurance of the participant's compliance with the contractual requirements regarding the recording of time actually spent. Nor did the Commission services verify whether participants used a uniform cost reimbursement system (see paragraph 26). Similarly the legal and financial viability of contractors was not verified for all participants in FP5 indirect RTD actions. At Directorate-General for Research, a preliminary check of contractors' legal and financial viability was implemented only from the end of 2001 onwards. When this control was carried out, it was not based on standardised rules and criteria. Similarly actions aiming to protect the Community's financial interest were not harmonised across FP5. These controls could have been facilitated by a centralised 'registration and clearing' support function for registering proposals and verifying the legal and financial viability of contractors (see paragraph 122).

93. There were other deficiencies with regard to the commitment procedure and contract signature as well as the authorisation of advance payments. In particular persistent difficulties were encountered in the management of contract amendments, from the timely identification of contracts where amendments were required to the excessive duration of the amendment procedure. In several instances this resulted in a build-up of modifications in the set-up of the consortium and the project before the contract had finally been amended.

94. In some cases the Commission did not terminate contracts, although the original scientific objectives could clearly not be attained by the consortium at all or could not be attained within the period defined in the contract. It would be easier to avoid such cases, and the Commission's scientific monitoring of indirect RTD actions could be significantly enhanced, if periodic (or at least mid-term) evaluations, where appropriate with the support of external experts, were to be carried out for ongoing

⁽¹⁾ Directorate-General for Energy and Transport published on 1 January 2003 a fully revised version of its internal operational procedures, covering both research and non-research activities. However, this manual does not specifically cover the management of the FP5, since its programming period has been completed in December 2002. The procedures for FP6, although foreseen in the manual, were not yet documented.

⁽²⁾ Annual report concerning the financial year 2000, paragraph 4.38.

⁽³⁾ Communication SEC(2003) 1287 of 26 November 2003.

projects within all programmes. For FP5 only the programme 'User-friendly information society' systematically required these periodic evaluations during the project duration.

95. As regards the verification of the eligibility and accuracy of costs claimed by final beneficiaries and the processing of cost claim based payments, there were various cases where the scope and rigour of the controls carried out by the Commission were insufficient, leading to overpayments by the Commission, although not of a material level. Examples include the acceptance of cost statements that used cost reimbursement systems other than those stated in the contract, the processing of cost statements containing insufficient details of the costs incurred or prepared in unacceptable formats (for instance not detailing all the information required by the standard model) as well as cost statements containing clearly ineligible costs. In one case the Commission continued to accept the budgeted hourly rates for personnel claimed by a participant, although the Commission had previously been informed that a financial audit of the same contractor by the Court had found these rates to be overcharged (see paragraph 98). This indicates that procedures for following-up of audit findings are not yet sufficiently well developed (see paragraph 100).

Compliance with contractual provisions at beneficiary level

Prevalence of irregularities at final beneficiary level

96. Up to September 2001, the Commission services authorised payments related to project deliverables received and accepted for a total of 28 out of the 53 indirect RTD actions sampled by the Court. All these contracts were audited by the Court at the final beneficiary level. The objective of these financial audits was to verify that costs declared by the beneficiary and accepted by the Commission were incurred in reality, eligible and claimed in compliance with the contractual obligations.

97. In a significant number of cases beneficiaries did not comply with the contractual provisions, particularly in respect of the calculation methodology applied to determine the costs declared or the justification of the costs incurred. In other cases claims for costs outside the eligibility period or for ineligible expenditure were submitted to and reimbursed by the Commission. In some cases agreements (for example on average employ

ment costs or hourly overhead rates) with national administrations in charge of public research funding were not offered to the Commission. Similarly, cases were found where procedures that were applied within the participating organisations (and which would have resulted in a lower financial contribution by the Community) were not applied to projects funded by the Commission.

Impact of errors found by the Court

98. When evaluating the impact of its audit findings the Court applied a strict interpretation of the legal base and the contractual provisions for determining the Community's financial contribution. Within the sample of contracts audited at final beneficiary level there were two cases where the contractor was not eligible for co-financing. In all but one of the remaining 26 contracts for FP5 indirect RTD actions, relating to 33 cost statements, the beneficiaries had overstated the eligible costs. The rate of over-declaration for this sample of 26 contracts was material. For 25 out of the 26 audits considered as closed by the Directorates-General as of January 2004, the Commission services proceeded with financial adjustments averaging 21,6 % of the costs declared by the beneficiaries. This adjustment rate is an average for the sample of indirect RTD actions audited by the Court. In the Court's view, this rate cannot be extrapolated to the total budget of FP5. Although most of the irregularities could only be detected during on-the-spot audits, there were a number of errors which could and should have been detected by the Commission services when verifying cost statements before the authorisation of payments. The errors were not detected because checks were either non-existent or inadequate (see paragraph 95).

Late payments caused by coordinators and the Commission

99. The contract for FP5 indirect RTD actions specifies maximum periods for payments, both for the Commission (60 days after contract signature for advance payments and, for periodic payments, after approval of project deliverables) and for the coordinator who distributes the Community contribution to all participants (30 days after receipt of the funds paid by the Commission). In several cases the coordinator had delayed the transfer of the European Union contribution to the other participants in the consortium. In addition there were some instances of late payments by the Commission.

Inadequacies in the follow-up of audit findings by the Commission

100. For a significant number of contracts audited by the Court, the Commission had accepted the factual findings but not taken the appropriate corrective action in due time ⁽¹⁾. Also, in many cases where corrective action was taken, the recovery of funds unduly paid was delayed. Moreover, in the case of system related audit findings (such as incorrect calculation methodology used by a beneficiary), the Commission's follow-up procedures should provide for verification of the extent to which other contracts with the participant are subject to similar problems.

Reporting on programme implementation and internal controls

Adequacy and appropriateness of FP5 reporting

Reporting as a tool for monitoring programme implementation and internal controls still under development

101. Reporting should support Directors and Directors-General as (sub-delegated) authorising officers in their tasks of monitoring programme implementation and ensuring that internal controls are functioning effectively and efficiently. To be of use in day-to-day programme management reports should cover all relevant operational, financial and compliance-related information. Information should also be presented on time and managers must have confidence in its accuracy.

102. Although there are a large number of different reports, shortcomings remain as regards the reports on programme implementation and the internal control system. In 2002 many programmes and directorates were still developing reporting tools for FP5, and other Commission services had yet to provide reports containing anything more than statistics on budgetary implementation.

103. In most cases the reports were statistical tables without any explanation, comment or analysis. Evidence that the reports were regularly submitted to, and used by, management was provided for only a small number of reports. No report brought together management information for FP5 as a whole. The form, but also the content, of reports to management varied between parts of programmes jointly operated by different Commission services.

104. Organisational responsibilities for reporting within the Commission are unclear and the absence of a centralised 'controlling and reporting' support function for FP5 leads to a duplication of reports for the same aspects (see paragraph 122). In none of the five Research Directorates-General were there procedures and practices to ensure that management-level information is prepared and communicated on time, and is accessible in a standardised format. With the exception of Internal Control Standard 12 'Adequate Management Information', there are no guidelines that define minimum requirements for management reports in terms of form, frequency, content or level of detail. Many of the Court's findings in this area are supported by external experts ⁽²⁾.

FP5 reporting is mainly oriented towards operational and financial aspects

105. The main elements of budgetary and financial monitoring were adequately covered in the reporting to management for FP5. In particular, nearly all targets and performance indicators defined up until the end of 2002 related to budgetary execution or financial management.

106. As far as reporting on operational aspects of FP5 is concerned, more than half of the reports cover the procedures up to the signature of the contract for an indirect RTD action. However no report is generated on the actual implementation of projects after contract signature, in terms of project deliverables received, project status against objectives and previously defined milestones or results of scientific evaluations of ongoing projects.

107. Only a limited number of reports cover compliance-related aspects of programme implementation. Except for those indicators suggested by the Internal Control Standards or specific 'White Paper' actions, such as the reduction of payment times, the five Directorates-General have not agreed any performance indicators for monitoring the non-financial aspects of FP5.

⁽¹⁾ Annual report concerning the financial year 2002 (OJ C 286, 28.11.2003), paragraphs 6.61 to 6.64.

⁽²⁾ External Framework Programme Monitoring Panel (FPMP), '2001 Monitoring report on the European Union framework programme for RDT', 2002.

Innovative operational, financial and compliance-related targets or indicators, such as the 'time-to-contract' indicator used by Directorate-General for Information Society, are limited to some parts of FP5 only. Due to the absence of such information, comprehensive monitoring of programme implementation is hindered.

108. The audit did not identify any report that brought together information on the input into FP5 programmes and their deliverables. Such a report would be very useful for assessing the efficiency and effectiveness of Community financing. It appeared that the assessment of scientific results and of the impact of indirect RTD actions is not yet covered by formal reporting to management.

Reporting affected by weaknesses of IT systems

109. The central IT systems did not provide sufficiently reliable statistics, mainly because of differences in data structure and level of detail in local applications, encoding errors and the absence of reconciliation procedures verifying the consistency and integrity of data following up-loads from local applications or IT systems used under previous framework programmes. Most reports were produced on the basis of data contained in the different, often local, IT applications. Since reporting relies on information from a large variety of different sources there is a significant risk of inconsistencies in the data reported (see paragraph 82).

Compliance of reporting with Internal Control Standards

110. The key principles of the Commission's administrative reform are decentralisation and the taking of responsibility by management departments, accompanied by increased transparency and accountability of the Commission services ⁽¹⁾. Reporting to senior management on programme implementation and the efficient and effective functioning of internal controls are essential in creating this transparency and accountability. Four of the Commission's internal control standards, adopted in 2001, are of particular relevance for management reporting ⁽²⁾:

⁽¹⁾ European Commission, 'A new framework for resource management and internal auditing in the Commission', 22 February 2000: Chapter 4.

⁽²⁾ European Commission, 'Standards for internal control within the Commission's services' (SEC(2000) 2203 of 2 February 2001 (second version dated 18 December 2001)).

- Standard 7: 'Objective setting': each Directorate-General has to identify and, since 2001, publish general policy objectives in its mission statement and its Annual Activity Report. In addition, the Directorates-General operating the RTD framework programmes have defined specific objectives within the framework of Activity Based Management (ABM). In respect of FP5, the objectives for 2002 documented in their annual management plans or work plans, were, however, neither uniform nor comparable ⁽³⁾. Perhaps surprisingly, the five Directorates-General did not all refer explicitly to the RTD framework programmes when setting their objectives. Unless the Directorates-General jointly agree on harmonised objectives, it is unlikely that common performance indicators can be defined for the RTD framework programmes,
- Standard 10: 'Monitoring performance against objectives and indicators': except for the indicators provided for in the legal bases, or those which are mandatory according to the internal control standards, no indicators have been agreed, neither by the five Directorates-General operating the RTD framework programmes, nor within the individual Directorates-General. Efficient and effective programme supervision for the RTD framework programmes would require the definition of such indicators (see paragraph 107),
- Standard 12: 'Adequate management information': none of the five Directorates-General operating the RTD framework programmes compiled a 'scoreboard' report, as required in this standard, by December 2001, the deadline set by the Commission. The 'scoreboard' reports introduced in 2002 still did not comply fully with the requirement of the standard,
- Standard 18 'Recording of exceptions': none of the reports examined by the Court provides for compliance-related information on management intervention involving potential deviations from established policies, procedures or controls. The lack of centralised recording and standardised reporting makes it difficult for the Directors-General and their internal audit capabilities to monitor whether internal controls are functioning.

CONCLUSIONS AND RECOMMENDATIONS

Intervention mechanisms and rules for the Community's financial contribution

111. In the Court's view, the large number of different model contracts deployed by the Commission for the five types of indirect RTD actions unnecessarily increased the complexity of the administrative processes and entailed additional costs for the

⁽³⁾ In addition, most of the objectives stated were not specifically linked to FP5 or time dependent, referred to other documents, were difficult to measure or described activities rather than actual objectives.

implementation of FP5. Both the implementing regulation and the model contracts were adopted late. Accompanying measures were found to be a particular risk area, due to their being used for measures that are on the borderline between subsidies and public procurement (see paragraphs 9 to 20).

112. The high level of detail and the complexity resulting from the rules for the Community's financial participation require an excessive administrative effort from both contractors and Commission in their management of proposals, contracts and projects. The newly introduced full cost flat rate (FF) system was aimed at simplification, but in fact provided an incentive for participants to change to a more advantageous funding mechanism. Differences between Commission services in the legal interpretation of the provisions contained in the implementing regulation persisted throughout the FP5 programme period (see paragraphs 21 to 35).

113. The Court considers that the cost reimbursement systems provided for FP6 constitute an improvement compared with FP5, especially as regards the correction of the excessive flat rate for indirect costs under the full cost with indirect flat rate costs (FCF) reporting model. However, since there are still three different cost reporting models, there has been no major simplification. Furthermore, the complete elimination of cost categories in FP6 reduces the transparency of the financial statements required for the declaration of eligible costs incurred and reduces the potential for analytical checks (see paragraphs 36 to 41).

114. The Court welcomes the introduction of visible and dissuasive sanctions for FP6, which should provide an additional deterrent to participants overclaiming costs. The new requirement for the certification of financial statements for indirect RTD actions by an external auditor is a further positive development. However additional clarification of the audit scope, reporting obligations and the Commission's role in verifying the adequacy of audit certificates is required (see paragraphs 42 to 45).

115. The European RTD framework programmes are becoming ever more complex, both for participants and for the Commission services in charge of their administration. For future framework programmes, a simplified set-up could be envisaged, with the Commission concluding contracts with the coordinators of indirect RTD actions only. The Commission should also review from first principles the rules for setting the Community's participation, aiming for significant simplification whilst allowing adequate control over expenditure in a future FP7. The Court's previous recommendation of a single cost reimbursement system with three main categories of costs should be one of the main elements to be considered.

FP5 management structure, procedures and methods

116. The joint administration of FP5 programmes by five Directorates-General has effectively created separate, mostly autonomous management structures. It has resulted in dilution of responsibilities, duplication of functions and increased need for coordination and consultation. The separation of programmes is contrary to the initial intention of unified research programmes in FP5. Moreover the basic design of programmes composed of key actions is not adequately reflected in the organisational structure of the Commission. The Court also considers that the five Directorates-General operating the RTD Framework Programmes did not succeed in adequately coordinating and harmonising their approaches and procedures. In the Court's view the concept of five Directorates-General jointly implementing the RTD Framework Programmes is not conducive to the most efficient use of Community funds (see paragraphs 46 to 57).

117. The procedures for FP5 and administrative practices result in a process duration of eight to nine months from the reception of the proposals for indirect RTD actions to the signing of a contract. This is too long, especially if the Commission wants to attract state-of-the-art research activities to the European RTD framework programmes. The Commission's administration of FP5 suffered from a lack of sufficiently qualified staff, for administration and IT-support in particular, and from an excessive reliance on non-permanent staff. Given the highly complex research projects involving an approximate average of seven different participants, there were insufficient staff resources available for the scientific monitoring of indirect RTD actions. The uneven case-load during the year contributes to administrative delays and deficiencies in internal controls and reduces the overall system efficiency (see paragraphs 58 to 77).

118. The ceilings on the administrative expenditure covered by the operating part of the budget were respected by all FP5 programmes. However these ceilings were set without prior independent analysis of the resources needed to manage the RTD framework programmes. An alternative measure of the proportion of the budget that went to the management of the RTD framework programmes, based on the comparison of resources allocated to indirect RTD actions with the overall budget, indicates that 837,4 million euro (6,4 % of the total budget) was utilised for the administration of the framework programmes for the period 1999 to 2002. The Commission does not yet have adequate tools for monitoring its resource allocation. The ceilings on administrative expenditure adopted by the Council, although monitored by the Commission, are not the most effective or relevant measure of the operating cost for each of the programmes, or for an RTD framework programme as a whole (see paragraphs 78 to 81).

119. The Court recommends that the structure of the framework programme and the organisation of the Commission services which manage it be brought into line. The basic design of research programmes as single programmes should be reflected in the organisational structure of the Commission. Horizontal aspects, such as support for small and medium-sized enterprises or international cooperation, should be integrated as far as possible within the thematic programmes. The completion of previous framework programmes, including FP5, would also be facilitated if they were allocated to units specifically established for the task.

120. The Commission should further improve the flexibility of the RTD framework programme and streamline its internal procedures and practices. The Court recommends that administrative procedures be simplified, with the aim of halving the 'time-to-contract' to between five and six months. The planning of calls for proposals should aim at a balanced caseload throughout the year, allowing a better use of staff resources. In respect of the contract management for indirect RTD actions, the simplification of procedures should be accompanied by a strengthening of the role of administrative and scientific coordinators. In particular, the consortium should be given the power to terminate the participation of any non-performing participant. The Commission is encouraged to make more use of periodic scientific and technical evaluations of ongoing projects, with the support of external experts where necessary. In the Court's view, the scientific excellence of RTD actions funded through the Community could be

further enhanced if the Commission's procedures provided for a certain proportion of RTD actions to be eliminated following a mandatory mid-term evaluation, in order to allow concentration of funding on the RTD projects with the highest likelihood of success.

121. In future the Commission should recruit staff in the research area on the same conditions and with the same career perspectives as in other areas. For those staff managing the scientific aspects of research programmes, however, the Court considers that fixed-term contracts are appropriate. Particular attention should be paid to reducing the number of vacancies and achieving an equitable allocation of staff resources, based on actual and expected caseload figures, between Directorates-General and between programmes. This would require the implementation of appropriate monitoring instruments in the framework of Activity Based Budgeting (ABB). In particular the Court recommends the implementation of a time recording system within the Commission, to monitor staff resources employed on specific management activities.

122. Many of the Court's audit findings highlight the need for increased coordination and cooperation to ensure the coherence of the Framework Programme. In this respect the audit identified several areas where support functions could be centralised and services provided for the Framework Programme as a whole (see paragraph 64). In particular the Court recommends that the Commission considers setting-up centralised support functions for:

- 'procedural and legal advice' (see paragraph 35),
- 'information technology' (see paragraph 86),
- 'registration and clearing' (see paragraph 92), and
- 'controlling and reporting' (see paragraph 104).

123. Enhanced coordination and cooperation between Commission services is limited by the organisational autonomy of its Directorates-General. For centralised and clearly assigned management responsibility to be achieved, all operational framework programme activities would have to be combined within a single organisation. The Court recommends that the Commission analyses the possibility of merging the RTD framework programmes in a single entity. This would also promote the adoption of common standards and procedures and facilitate budgetary control. In addition the elimination of redundant functions (across Directorates-General, but also within programmes) would result in additional efficiency gains. With a view to the future design of an FP7 from 2007 onwards, the reorganisation of the Commission services after enlargement, and the future organisation of

other European research programmes such as COST ⁽¹⁾, Eureka ⁽²⁾ and the European Research Fund (successor to the European Coal and Steel Community), various options could be considered for carrying out the framework programme activities within a single entity, for example:

- option 1: all activities to be merged under a Directorate-General for 'Research' covering the operational, framework programme-related aspects, as well as policy-related aspects;
- option 2a: an operational Directorate-General for 'RTD framework programmes' to be set up alongside a Directorate-General for 'Research Policy' dealing solely with policy aspects. The operational activities of implementing the framework programmes could also be performed by the Commission's Joint Research Centre;
- option 2b: the Directorate-General for 'Research Policy' could also be complemented by an executive agency pursuant to Council Regulation (EC) No 58/2003 ⁽³⁾ or a body pursuant to Article 185 of the Financial Regulation applicable to the general budget ⁽⁴⁾. All operational aspects of the implementation of the RTD framework programmes could then be delegated to this executive agency or body.

IT support for proposal, contract and project management

124. No significant improvement in the IT support has been achieved by the Commission for FP5 compared with FP4 (1994 to 1998). Although the management system is essentially the

same for all services operating FP5, the Commission has not developed a common or integrated IT system to handle proposals, contracts and projects. In the Court's view, the level and quality of IT support for the administration of FP5 proposals, contracts and projects showed serious inadequacies which impaired the execution of the Framework Programme and diminished the reliability of the Commission's internal statistics. Insufficient financial and human resources were devoted to IT development and support (see paragraphs 82 to 85).

125. Against the background of increasing application of IT to the needs of the public sector, as advocated by the 'eEurope' initiative and the internal 'eCommission' strand of reform, the Commission should continue its implementation of a common and integrated IT system. In particular, the development of the IT system should be based on clearly defined user requirements and provide for comprehensive testing of the software before the programmes actually become operational.

126. As far as possible, paper-based transactions should be phased out during FP6, with the aim of achieving complete electronic interaction in FP7. Electronic data exchange would permit to further reduce process times and administrative errors in the handling of proposals, contracts and project deliverables. This requires, however, not only technological harmonisation but also standardised rules and operational procedures that are followed by all Commission services across the framework programme.

Internal control procedures

127. With regards to internal controls it appears that all five Directorates-General operating the RTD framework programmes have made a significant effort to fulfil the Commission's internal control standards ⁽⁵⁾. However, considering the requirements defined in the legal bases of FP5 and Internal Control Standard 15, operational procedures for FP5 were not adequately documented. Given the continued absence of comprehensive manuals of administrative procedures, the Commission can provide no assurance as to the degree to which internal processes and working methods were coherently and consistently applied by all Directorates-General and programmes for the period 1999 to 2002 (see paragraphs 87 to 89).

⁽¹⁾ COST (Cooperation in the field of scientific and technical research) is a European research framework resulting from two exchanges of notes between the Council of the European Community and the contracting States in 1969 and 1970. It has been progressively extended to several States that are not members of the European Community. Following the Council decision of 18 July 1978 (OJ C 100, 21.4.1979) the Commission undertakes a significant part of the secretarial work under delegation from the Council. Under FP5 it was funded through the programme 'Confirming the International role of Community research' (including cooperation of the States associated to FP5) and by the non-member countries that participate in COST (through contributions to the Community budget following a decision by the committee of COST senior officials dated June 1992).

⁽²⁾ Eureka is a pan-European network for market-oriented, industrial research and development, encouraging a bottom-up approach to technological development and to strengthen the competitive position of European companies on the world market. Eureka was established in 1985 by 17 countries and the European Union. By the end of 2003 it is supported by 29 countries and the European Commission. Its organisational structure is composed of four main bodies: the Ministerial Conference, a high level group, national project coordinators and the Eureka Secretariat in Brussels as central support unit (www.eureka.be).

⁽³⁾ OJ L 11, 16.1.2003.

⁽⁴⁾ Council Regulation (EC) No 1605/2002 of 25 June 2002: Articles 54 to 56 (OJ L 248, 16.9.2002).

⁽⁵⁾ Annual report concerning the financial year 2000, paragraph 4.57; Annual report concerning the financial year 2002, paragraph 6.44 to 6.46.

128. The Court's tests of control revealed that a number of controls have not been effectively or consistently operated by all Directorates-General and programmes. Important elements of the control system were either not applied systematically or, mainly with regard to the negotiation of proposals for indirect RTD actions, were found to be lacking in most Commission services. Particular deficiencies were noted in the verification of cost statements and the subsequent authorisation of cost claim based payments, although not of a material level (see paragraphs 90 to 95).

129. This was borne out by the results of the Court's financial audits of indirect RTD actions, which revealed a significant incidence of errors. Beneficiaries had overstated the eligible costs, in all but one of the 26 contracts audited on the spot. Given the frequency and level of errors found, the Court has serious concerns about the legality and regularity of cost claim based payments authorised by the Commission for FP5 as a whole. According to the audit work done, there has been no overall improvement compared with previous framework programmes (see paragraphs 96 to 100).

130. Internal control activities should be harmonised and their implementation strengthened across the framework programme. In particular, the Commission services should jointly define the relevant and necessary controls which address the known risks in this budgetary area. Implementing these controls should then be mandatory for all programmes and all Directorates-General, in order to ensure an adequate minimum level of control across the whole of the framework programme.

131. The use of preventive controls should be intensified. These include the provision of manuals and job descriptions. Most importantly, however, the Commission should increase the financial and legal training of staff involved in control activities.

132. The Court urges the Commission to continue its efforts to audit a significant proportion of the contractors participating in the RTD framework programmes. In particular it welcomes the fact that the Commission has set a clear and measurable objective of 10 % of contractors during FP5 ⁽¹⁾. It is recommended that the audit strategy be further adapted to take account of the modifications of the control environment in FP6.

133. Finally, the performance of internal control systems needs to be monitored. One of the key tasks of the new Internal Audit capabilities should be to carry out regular and programmed reviews determining whether all relevant and necessary controls have been instituted and whether these controls are functioning effectively.

Reporting to management

134. The Commission's reporting systems did not capture all pertinent operational, financial and compliance-related information and communicate it to the Directors and (deputy) Directors-General in a standardised form. So far no performance indicators have been agreed by the Commission for the non-financial management aspects of the framework programme. Similarly, standardised reporting on the scientific results of FP5 has not yet been implemented by the Commission and no report brings together information comparing the input and output of FP5 programmes. Except for budgetary and financial matters, the Court considers that the reports to management did not permit adequate monitoring of the specific programmes, or of FP5 as a whole. Although significant improvement has occurred since the beginning of FP5, further effort is needed to comply with the requirements of the Commission's Internal Control Standards (see paragraphs 101 to 116).

135. Management reports should contain operational, financial and compliance-related information that makes it possible to monitor implementation of the framework programme and the efficient and effective functioning of internal controls. The Court recommends that the Commission develop a comprehensive reporting and controlling system for the RTD framework programmes. Such a system should entail the use of indicators, which permit benchmarking between Commission services and programmes, as well as a comparison between different framework programmes.

136. In order to achieve full compliance with the Internal Control Standards, the Commission should agree on common (or at least, harmonised) objectives for the research area and the implementation of the RTD framework programmes, in line with the guidelines on defining objectives and indicators established by the Secretariat-General of the Commission. Based on these objectives more operational performance indicators should be defined, as required by the Internal Control Standards, and, if possible, agreed jointly by all Directorates-General.

Overall conclusion

137. FP5 is characterised by the complexity of the rules applicable to its intervention mechanisms, which are often not fully understood by the participants in indirect RTD actions. The contradictions between the Commission's decentralisation following its administrative reform and the joint management of an RTD framework programme were found to lie at the heart of many of the deficiencies identified by this audit, and were compounded by the inconsistent organisational structure of the five Directorates-General operating the RTD framework programmes. Furthermore, the Commission was not able to devote a sufficient level of human resources to the implementation of FP5, which contributed to the significant level of irregularities observed by the Court.

⁽¹⁾ Annual report concerning the financial year 2000, paragraph 4.57.

The management tools supporting the implementation of FP5, which were steadily improved during the period, still remained inadequate in several areas as of 2002.

138. FP6 will offer an opportunity for improving the effectiveness and efficiency of the Commission's management of the RTD framework programmes, in particular by adopting an organisational structure which meets real operational needs. Common IT systems and centralised support functions should be set up,

and, last but not least, an adequate level of staff resources should be devoted to the scientific and financial administration of proposals, contracts and projects.

139. The rules for setting the Community's financial participation in the RTD framework programmes should however be reviewed from first principles, with the aim of eliminating unnecessary complexity in the forthcoming FP7 so as not to compromise effective and adequate control over expenditure.

This report was adopted by the Court of Auditors in Luxembourg at the Court meeting of 12 February 2004.

For the Court of Auditors

Juan Manuel FABRA VALLÉS

President

LIST OF ABBREVIATIONS

AAR	Annual Activity Report
ABB	Activity-Based Budgeting
AC	Additional Cost system / Additional Cost with indirect flat rate costs reporting model
Cordis	'Community Research and Development Information Service' — Commission research website
COST	Cooperation in the field of scientific and technical research
CPF	Contract Preparation Form
DG	Directorate-General
EC	European Community
EESD	Theme IV of FP5 — Energy, environment and sustainable development
EESD-NNE	Theme IV of FP5 — Energy, environment and sustainable development — Non-nuclear energy
EESD-ENV	Theme IV of FP5 — Energy, environment and sustainable development — Environment
EP	European Parliament
FC	Full cost system / Full cost with actual indirect costs reporting model
FCF	Full cost with indirect flat rate costs reporting model
FF	Full cost flat rate system
FP	Framework programme
FP4	European Community fourth framework programme covering research, technological development and demonstration activities (1994 to 1998)
FP5	European Community fifth framework programme covering research, technological development and demonstration activities (1998 to 2002)
FP6	European Community sixth framework programme covering research, technological development and demonstration activities (2002 to 2006)
GROWTH	Theme III of FP5 — Competitive and sustainable growth
IHP	Fourth activity of FP5 — Horizontal theme 'Improving human research potential and the socioeconomic knowledge base'
INCO	Second activity of FP5 — Horizontal theme 'Confirming the international role of Community Research'
INTAS	International Association for the Promotion of Cooperation with scientists from the new independent States of the former Soviet Union
IST	Theme II of FP5 — User-friendly information society
KA	Key actions
OJ	Official Journal
QoL	Theme I of FP5 — Quality of life and management of living resources
RTD	Research, technological development and demonstration activities
SME	Third activity of FP5 — Horizontal theme 'Promotion of Innovation and Small and Medium-sized Enterprises (SME) participation'
WTO	World Trade Organisation

ANNEX 1

FP5 BUDGET (1998 TO 2002)

(million euro)

	FP5-EC		FP5-Euratom		FP5	
Indirect actions: Thematic and horizontal programmes	12 961	100 %	979	100 %	13 940	100 %
THEMATIC PROGRAMMES	10 843	84 %	979	100 %	11 822	85 %
Quality of life and management of living resources	2 413	19 %			2 413	17 %
Six key actions	1 860				1 860	
Generic research and activities to support infrastructures	553				553	
User-friendly information society	3 600	28 %			3 600	26 %
Four key actions	3 120				3 120	
Generic research and activities to support infrastructures	480				480	
Competitive and sustainable growth	2 705	21 %			2 705	19 %
Four key actions	2 122				2 122	
Generic research and activities to support infrastructures	583				583	
Environment, energy and sustainable development	2 125	16 %	979	100 %	3 104	22 %
Six key actions (EC)	1 921				1 921	
Two key actions (Euratom)			930		930	
Generic research and activities to support infrastructures (EC)	204				204	
Generic research and activities to support infrastructures (Euratom)			49		49	
HORIZONTAL PROGRAMMES	2 118	16 %			2 118	15 %
International role of Community research	475	4 %			475	3 %
Promoting innovation and the participation of SMEs	363	3 %			363	3 %
Improving human research potential and the socio-economic knowledge base	1 280	10 %			1 280	9 %
One key action (13 % of horizontal programme)	166				166	
Direct actions: Joint Research Centre (EC and Euratom actions)	739		281		1 020	
FP5 Grand total	13 700		1 260		14 960	

Source: Decision No 182/1999/EC, Article 2 and Annex III; Council Decision 1999/64/Euratom, Article 2.

ANNEX 2A															
FP5 COMMITMENT APPROPRIATIONS								AND OUTTURN (1999 TO 2002)							
Budget line	Description	1999			2000			2001			2002			1999-2002	
		budget ⁽¹⁾	outturn ⁽²⁾	%	budget ⁽¹⁾	outturn ⁽²⁾	%	budget ⁽¹⁾	outturn ⁽²⁾	%	budget ⁽¹⁾	outturn ⁽²⁾	%	budget ⁽³⁾	outturn ⁽⁴⁾
QoL — B6-6 1 1	Quality of life and management of living resources	539,9	537,2	99,5	581,6	579,0	99,6	647,4	642,9	99,3	694,1	692,2	99,7	2 460,9	2 451,4
B6-6 1 1 0	Administrative expenditure			n/a	28,3	27,0	95,3	31,6	29,5	93,3	35,3	33,56	95,1	95,2	90,0
B6-6 1 1 1	Operating expenditure	539,9	537,2	99,5	553,3	552,1	99,8	615,8	613,4	99,6	658,8	658,7	100,0	2 365,7	2 361,4
IST — B6-6 1 2	User-friendly information society	858,5	857,6	99,9	894,1	892,4	99,8	954,2	952,5	99,8	964,2	963,5	99,9	3 670,9	3 666,0
B6-6 1 2 0	Administrative expenditure			n/a	67,9	66,2	97,5	69,6	68,5	98,3	71,3	71,22	99,9	208,9	205,9
B6-6 1 2 1	Operating expenditure	858,5	857,6	99,9	826,2	826,1	100,0	884,6	884,0	99,9	892,9	892,3	99,9	3 462,1	3 460,0
GROWTH — B6-6 1 3	Competitive and sustainable growth	630,6	629,5	99,8	667,0	658,0	98,6	722,5	717,5	99,3	748,0	747,4	99,9	2 768,1	2 752,4
B6-6 1 3 0	Aministrative expenditure			n/a	28,3	27,0	95,5	34,3	32,1	93,6	38,3	37,80	98,6	101,0	97,0
B6-6 1 3 1	Operating expenditure	630,6	629,5	99,8	638,7	630,9	98,8	688,2	685,4	99,6	709,7	709,6	100,0	2 667,2	2 655,4
EESD — B6-6 1 4	Environment, energy and sustainable development — Environment	217,7	217,5	99,9	256,6	253,7	98,9	298,6	292,2	97,8	338,1	335,6	99,2	1 111,0	1 099,0
B6-6 1 4 0	Administrative expenditure			n/a	17,2	15,9	92,5	15,5	14,8	95,6	19,2	16,9	87,7	52,0	47,7
B6-6 1 4 1	Operating expenditure	217,7	217,5	99,9	239,4	237,8	99,3	283,1	277,4	98,0	318,9	318,7	99,9	1 052,3	1 051,4
EESD — B6-6 1 5	Environment, energy and sustainable development — Energy	217,7	215,8	99,1	242,1	236,1	97,5	283,8	280,5	98,8	319,6	318,5	99,7	1 063,2	1 050,8
B6-6 1 5 0	Administrative expenditure			n/a	14,1	13,2	93,8	15,9	15,4	97,0	17,7	16,6	94,1	47,7	45,3
B6-6 1 5 1	Operating expenditure (in 1999: B6-6 1 4 2)	217,7	215,8	99,1	228,0	222,8	97,7	268,0	265,1	98,9	301,9	301,9	100,0	1 014,7	1 005,5
INCO — B6-6 2 1	Confirming the international role of Community research	74,4	74,3	99,8	118,1	117,8	99,8	138,5	138,0	99,7	153,3	153,0	99,8	484,4	483,2
B6-6 2 1 0	Administrative expenditure			n/a	11,4	11,2	98,3	12,2	11,8	96,9	12,7	12,4	97,9	36,3	35,5
B6-6 2 1 1	Operating expenditure	74,4	74,3	99,8	106,7	106,6	99,9	126,3	126,2	99,9	140,7	140,6	100,0	448,1	447,7
SME — B6-6 3 1	Promotion of innovation and encouragement of participation of SMEs	54,0	37,1	68,7	121,8	105,7	86,8	125,7	99,6	79,3	96,1	94,7	98,6	397,6	337,2
B6-6 3 1 0	Administrative expenditure			n/a	7,9	5,5	69,7	6,3	6,0	95,6	7,7	7,0	91,6	21,8	18,5
B6-6 3 1 1	Operating expenditure	54,0	37,1	68,7	114,0	100,3	88,0	119,3	93,6	78,4	88,4	87,7	99,2	347,3	318,7
IHP — B6-6 4 1	Improving the human research potential and the socioeconomic knowledge base	298,7	298,5	99,9	315,7	314,9	99,8	331,4	330,3	99,7	359,2	357,5	99,5	1 305,1	1 301,2
B6-6 4 1 0	Administrative expenditure			n/a	16,5	15,8	95,6	20,2	19,3	95,3	24,0	23,0	95,7	60,7	58,0
B6-6 4 1 1	Operating expenditure	298,7	298,5	99,9	299,2	299,1	100,0	311,2	311,1	99,9	335,2	334,5	99,8	1 244,3	1 243,2
	Total FP5	2 891,6	2 867,5	99,2	3 196,9	3 157,6	98,8	3 502,1	3 453,5	98,6	3 672,6	3 662,3	99,7	13 261,1	13 141,0

⁽¹⁾ Commitment appropriations taking into account supplementary budgets and transfers as well as appropriations carried over, re-use of revenue and revenue made available as a participation of third parties (see Decision No 182/1999/EC, Article 2 and Annex III, published in OJ L 26, 1.2.1999, p. 4 and 28 as amended by Decision 2001/692/EC on the adjustment of the financial perspective to take account of the conditions of implementation, published in OJ L 246, 15.9.2001, p. 29, footnote ⁽¹⁾).

⁽²⁾ Appropriations utilised, including appropriations carried over from the previous year, re-use of revenue and revenue made available as a result of participation of third parties, other earmarked revenue and appropriations made available again.

⁽³⁾ Total commitment appropriations taking into account supplementary budgets and transfers as well as re-use of revenue and revenue made available as a participation of third parties (see Decision No 182/1999/EC, Article 2 and Annex III). Appropriations carried over have not been taken into account.

⁽⁴⁾ Appropriations utilised, including re-use of revenue and revenue made available as a result of participation of third parties, other earmarked revenue and appropriations made available again. Appropriations carried over have not been taken into account.

ANNEX 2B

FP5 PAYMENT APPROPRIATIONS AND OUTTURN (1999 TO 2002)

(million euro)

Budget line	Description	budget ⁽¹⁾	1999 outturn ⁽²⁾	%	budget ⁽¹⁾	2000 outturn ⁽²⁾	%		budget ⁽¹⁾	2001 outturn ⁽²⁾	%	budget ⁽¹⁾	2002 outturn ⁽²⁾	%	budget ⁽³⁾	1999-2002 outturn ⁽⁴⁾	%
QoL — B6-6 1 1	Quality of life and management of living resources	70,1	30,1	42,9	355,6	351,7	98,9		392,8	383,5	97,6	487,8	443,9	91,0	1 306,3	1 209,1	92,6
B6-6 1 1 0	Administrative expenditure			n/a	27,6	25,2	91,2		30,2	25,3	84,0	35,3	29,2	82,9	93,1	79,8	85,7
B6-6 1 1 1	Operating expenditure	70,1	30,1	42,9	327,9	326,5	99,6		362,6	358,1	98,8	452,5	414,6	91,6	1 213,2	1 129,4	93,1
IST — B6-6 1 2	User-friendly information society	175,4	163,0	93,0	554,0	507,6	91,6		613,2	590,8	96,4	840,4	815,2	97,0	2 182,9	2 076,7	95,1
B6-6 1 2 0	Administrative expenditure			n/a	69,2	64,5	93,2		69,6	64,3	92,4	71,3	69,7	97,8	210,2	198,6	94,5
B6-6 1 2 1	Operating expenditure	175,4	163,0	93,0	484,7	443,1	91,4		543,5	526,5	96,9	769,1	745,5	96,9	1 972,7	1 878,1	95,2
GROWTH — B6-6 1 3	Competitive and sustainable growth	118,4	40,5	34,2	451,1	324,0	71,8		491,2	471,7	96,0	616,8	587,7	95,3	1 677,5	1 423,9	84,9
B6-6 1 3 0	Administrative expenditure			n/a	28,5	25,3	88,7		34,1	27,8	81,4	38,3	32,6	85,2	101,0	85,7	84,9
B6-6 1 3 1	Operating expenditure	118,4	40,5	34,2	422,6	298,7	70,7		457,1	443,9	97,1	578,5	555,1	95,9	1 576,5	1 338,2	84,9
EESD — B6-6 1 4	Environment, energy and sustainable development — Environment	33,6	10,6	31,6	166,9	135,2	81,0		148,8	146,6	98,5	264,7	259,8	98,2	614,0	552,1	89,9
B6-6 1 4 0	Administrative expenditure			n/a	16,8	14,0	83,5		14,4	13,1	90,8	19,2	15,2	78,9	50,4	42,2	83,8
B6-6 1 4 1	Operating expenditure	33,6	10,6	31,6	150,2	121,2	80,7		134,4	133,5	99,4	245,4	244,6	99,7	563,6	509,9	90,5
EESD — B6-6 1 5	Environment, energy and sustainable development — Energy	21,7	10,5	48,4	141,9	92,3	65,0		177,6	145,5	81,9	215,3	151,6	70,4	556,5	399,8	71,8
B6-6 1 5 0	Administrative expenditure			n/a	14,6	11,5	78,5		17,0	13,0	76,6	17,7	14,9	84,0	49,3	39,4	79,8
B6-6 1 5 1	Operating expenditure (in 1999: B6-6 1 4 2)	21,7	10,5	48,4	127,2	80,8	63,5		160,6	132,4	82,5	197,6	136,7	69,2	507,2	360,4	71,1
INCO — B6-6 2 1	Confirming the international role of Community research	20,4	15,5	75,9	70,6	69,5	98,5		91,7	90,2	98,3	121,4	108,5	89,4	304,1	283,7	93,3
B6-6 2 1 0	Administrative expenditure			n/a	11,9	10,9	92,3		12,4	11,2	89,9	12,7	11,6	91,9	36,9	33,7	91,3
B6-6 2 1 1	Operating expenditure	20,4	15,5	75,9	58,7	58,6	99,8		79,3	79,0	99,7	108,8	96,9	89,1	267,2	250,0	93,6
SME — B6-6 3 1	Promotion of innovation and encouragement of participation of SMEs	14,3	4,7	33,0	66,9	39,3	58,7		77,7	41,2	53,1	79,9	71,2	89,1	238,8	156,5	65,5
B6-6 3 1 0	Administrative expenditure			n/a	7,9	4,9	62,3		6,3	5,6	88,1	8,7	6,1	70,7	22,9	16,6	72,6
B6-6 3 1 1	Operating expenditure	14,3	4,7	33,0	59,1	34,4	58,2		71,3	35,7	50,0	71,3	65,1	91,4	216,0	139,9	64,8
IHP — B6-6 4 1	Improving the human research potential and the socioeconomic knowledge base	72,4	13,0	18,0	213,3	203,7	95,5		186,2	164,6	88,4	292,1	285,8	97,8	764,1	667,1	87,3
B6-6 4 1 0	Administrative expenditure			n/a	16,7	15,0	89,6		20,2	16,6	82,1	24,0	19,4	80,8	61,0	51,0	83,7
B6-6 4 1 1	Operating expenditure	72,4	13,0	18,0	196,6	188,6	96,0		166,0	148,0	89,1	268,1	266,4	99,4	703,1	616,1	87,6
	Total FP5	526,3	287,9	54,7	2 020,3	1 723,3	85,3		2 179,2	2 034,1	93,3	2 918,4	2 723,7	93,3	7 644,1	6 769,0	88,6

⁽¹⁾ Payment appropriations taking into account supplementary budgets and transfers as well as appropriations carried over, re-use of revenue and revenue made available as a participation of third parties (see Decision No 182/1999/EC, Article 2 and Annex III, OJ L 26, 1.2.1999, p. 4 and 28 as amended by Decision 2001/692/EC on the adjustment of the financial perspective to take account of the conditions of implementation, OJ L 246, 15.9.2001, p. 29, footnote ⁽¹⁾).

⁽²⁾ Appropriations utilised, including appropriations carried over from the previous year, re-use of revenue and revenue made available as a result of participation of third parties, other earmarked revenue and appropriations made available again.

⁽³⁾ Total payment appropriations taking into account supplementary budgets and transfers as well as re-use of revenue and revenue made available as a participation of third parties (see Decision No 182/1999/EC, Article 2 and Annex III). Appropriations carried over have not been taken into account.

⁽⁴⁾ Appropriations utilised, including re-use of revenue and revenue made available as a result of participation of third parties, other earmarked revenue and appropriations made available again. Appropriations carried over have not been taken into account.

Source: European Commission, Revenue and expenditure accounts 1999 and 2000, Annual accounts 2001 and 2002.

ANNEX 3A

FP5 CONTRACTS FOR INDIRECT RTD ACTIONS (1999 TO 2003) — BY TYPE OF ACTION

Action type	Number of contracts signed in the period	%	Number of contractors	%	Total eligible cost as stated in the contracts (million euro)	%	EU-contribution contractually agreed (million euro)	%
Total FP5	15 223	100	77 065	100	19 979,0	100	12 303,6	100
Type-1 SHARED-COST ACTIONS	7 212	47	51 799	67	16 839,0	84	9 689,4	79
RTD projects	5 045	70	40 908	79	14 200,2	84	8 554,8	88
Demonstration projects	162	2	1 213	2	1 058,6	6	313,8	3
Combined RTD and demonstration project	221	3	2 174	4	709,7	4	322,5	3
Support for transnational access to major research infrastructures	187	3	188	0	125,1	1	120,8	1
Cooperative research	646	9	5 416	10	717,6	4	356,4	4
Exploratory awards	951	13	1 900	4	27,9	0	21,0	0
Type-2 TRAINING FELLOWSHIPS	3 698	24	3 617	5	512,8	3	512,8	4
Marie Curie Individual Fellowships	2 569	69	2 520	70	284,4	55	284,4	55
INCO Individual Fellowships for Young researchers from developing countries	45	1	61	2	1,1	0	1,1	0
Fellowships for Community Researchers	—	0	—	0	—	0	—	0
Fellowship to Japan	22	1	19	1	2,7	1	2,7	1
Marie Curie Development Host Fellowships	120	3	108	3	29,4	6	29,4	6
Marie Curie Industry Host Fellowships	429	12	420	12	89,7	18	89,7	18
Marie Curie stays at training sites	513	14	489	14	105,5	21	105,5	21
Type-3 SUPPORT TO NETWORK	857	6	10 832	14	942,6	5	910,6	7
Research training network	332	39	2 641	24	456,7	48	444,0	49
Thematic network (one or several contractors)	525	61	8 191	76	485,9	52	466,5	51
Type-4 CONCERTED ACTIONS	170	1	1 887	2	115,7	1	110,6	1
Concerted actions (single and multi-partner)	170	100	1 887	100	115,7	100	110,6	100
Type-5 ACCOMPANYING MEASURES	3 286	22	8 930	12	1 568,9	8	1 080,3	9
Accompanying measures (single and multi-partner)	1 311	40	5 437	61	900,4	57	688,3	64
Accompanying measures specific to technology take-up measures (single and multi-partner)	325	10	1 883	21	418,1	27	256,6	24
High level scientific conference	727	22	727	8	95,4	6	35,6	3
Grant agreements	923	28	883	10	155,1	10	99,9	9

Source: European Commission, January 1999 to July 2003 (unaudited).

ANNEX 3B

FP5 CONTRACTS FOR INDIRECT RTD ACTIONS (1999 TO 2003) — BY DIRECTORATE-GENERAL

Directorate-General	Number of contracts signed in the period	%	Number of contractors	%	Total eligible cost as stated in the contracts (million euro)	%	EU-contribution contractually agreed (million euro)	%
Total FP5	15 223	100	77 065	100	19 979,0	100	12 303,7	100
DG Research	11 473	75	52 859	69	11 531,1	58	7 731,6	63
Type-1 Shared-cost actions	4 962	43	35 586	67	9 763,0	85	6 114,3	79
Type-2 Training fellowships	3 610	31	3 529	7	495,0	4	495,0	6
Type-3 Support to network	644	6	8 563	16	756,5	7	732,0	9
Type-4 Concerted actions	152	1	1 661	3	101,6	1	97,2	1
Type-5 Accompanying measures	2 105	18	3 520	7	415,0	4	293,0	4
DG Information society	2 664	17	17 399	23	5 934,7	30	3 427,8	28
Type-1 Shared-cost actions	1 694	64	11 867	68	5 104,6	86	2 817,8	82
Type-2 Training fellowships	56	2	56	0	14,0	0	14,0	0
Type-3 Support to network	148	6	1 810	10	111,1	2	106,7	3
Type-4 Concerted actions	2	0	8	0	0,8	0	0,8	0
Type-5 Accompanying measures	764	29	3 658	21	704,3	12	488,5	14
DG Energy and transport	595	4	4 387	6	1 907,5	10	784,7	6
Type-1 Shared-cost actions	334	56	2 888	66	1 659,3	87	575,0	73
Type-2 Training fellowships	—	0	—	0	—	0	—	0
Type-3 Support to network	36	6	359	8	46,4	2	43,3	6
Type-4 Concerted actions	6	1	56	1	5,8	0	5,1	1
Type-5 Accompanying measures	219	37	1 084	25	196,0	10	161,3	21
DG Enterprise	299	2	1 475	2	417,1	2	236,2	2
Type-1 Shared-cost actions	104	35	752	51	140,3	34	73,9	31
Type-2 Training fellowships	—	0	—	0	—	0	—	0
Type-3 Support to network	27	9	89	6	27,4	7	27,3	12
Type-4 Concerted actions	—	0	—	0	—	0	—	0
Type-5 Accompanying measures	168	56	634	43	249,4	60	134,9	57
DG Fisheries	192	1	945	1	188,5	1	123,4	1
Type-1 Shared-cost actions	118	61	706	75	171,7	91	108,4	88
Type-2 Training fellowships	32	17	32	3	3,8	2	3,8	3
Type-3 Support to network	2	1	11	1	1,2	1	1,2	1
Type-4 Concerted actions	10	5	162	17	7,5	4	7,5	6
Type-5 Accompanying measures	30	16	34	4	4,3	2	2,5	2

Source: European Commission, January 1999 to July 2003 (unaudited).

THE COMMISSION'S REPLIES

SUMMARY

I. Community research policy and the support of the European research capacities have been considerably strengthened through the successive framework programmes. In 2003 the European Union set itself the objective of creating a European Research Area (ERA) and to boost investment in research to 3 % of the EU's gross domestic product (GDP).

II. Some delays have occurred, mainly in connection with the adoption of a legal basis for FP5. However, most of the documentation has been produced, thus enabling negotiations with participants to be started. The number of different model contracts has been reduced significantly in FP6, with only one model contract for all indirect RTD actions (except for Marie Curie actions). Specific annexes take account of the specificities required for the main instruments.

III. FP5 cost reimbursement systems reflect the provisions of the legal basis. The Commission has initiated an in-depth reform of the contractual and financial arrangements for Community research programmes as part of FP6.

IV. FP6 has resulted in major simplification as regards implementation of research actions. The Commission proposals were essentially based on Court recommendations. However, they were amended by the Council and Parliament.

The cost reimbursement system set up for FP6 is easier to implement from the perspective of participants and Commission departments alike. As such, it should protect the financial interests of the Community more effectively. In addition to the sanctions provided for in the model contract and the FP6 participation rules, the penalties laid down in Article 114 of the Communities' new Financial Regulation can be applied.

V. The structure set up by the Commission has enabled synergies to be developed between research and other Community policies. Responsibilities have been attributed accordingly and common instruments have gradually been made available. Furthermore, the joint management of programmes by different Directorates-General is facilitated by a number of coordination mechanisms.

For FP6, deployment of management instruments, including centralised support functions, reflects the Commission's policy of increased coordination between departments.

VI. The schedule for adopting FP6 and its specific programmes was treated as a priority and was complied with.

All management procedures were set up in accordance with the rules and objectives set out in the framework programme. The time which elapsed before contracts were signed was used to guarantee the quality of the crucial selection and negotiation phases. Despite the European framework programmes being the world's largest research cooperation programmes, the length of time-to-contract is shorter than in similar national and international programmes.

Measures to reduce the length of procedures will be extended under FP6 and will complement the new arrangements governing the entry into force of contracts introduced by the FP6 participation rules.

In line with recommendations in the White Paper on Commission Reform, the Commission has addressed the specific difficulties as regards staff policy in the research domain.

Simplified procedures and better planning should permit to even out the caseload under FP6, improving internal control and speeding up processes.

VII. The Commission has implemented FP5 within the budget adopted by the European Parliament and the Council. The alternative measure proposed by the Court is not the one required by the rules.

The staff allocation is presented in the Annual Management Plan in accordance with the newly introduced Activity-Based Budgeting (ABB) since 2002, but 2004 will be the first year where the General Budget will be officially based on this new system. The Activity-Based Budgeting methodology further increases the transparency of the Commission's budgetary management.

VIII. The progressive integration of IT systems has improved significantly throughout the FP5 programme period. Moreover, IT-support in FP5 compares favourably to that in FP4.

Specific deficiencies identified by the Court are addressed by the Commission in the development of a common IT system for FP6. This system will be deployed in 2004.

IX. The Commission takes the view that there is no contradiction between the administrative reform aims and the need for the different research directorates-general to use common principles and procedures. Greater decentralisation of responsibilities does not mean that they are not properly defined or create barriers to effective cooperation.

Further to the Court audit, with a view to FP6 and the ongoing financial reform, the Commission has already improved several aspects of its internal control mechanisms. The Commission established a joint action plan for the directorates-general concerned in 2003.

X. The Commission acknowledges the problem, which is due to the fact that the Community's financial contribution is paid on the basis of eligible costs incurred, as declared by the final beneficiaries. The accuracy of these costs and their conformity with the contractual provisions cannot be completely and accurately verified by the Commission prior to the authorisation of payments. Only a financial audit at the beneficiary level can determine with certainty and accuracy the correctness of the costs claimed and their conformity to the contractual provisions.

With a view to reducing the incidence of errors, the Commission increased the *ex post* controls and drew up an action plan based on the synthesis of the 2001 Annual Activity Reports which has been implemented and is monitored on a regular basis. In addition in FP6, audit certificates from beneficiaries will be required.

XI. The Commission's internal reporting to Directors and (deputy) Directors-General is characterised by the different roles and responsibilities of decentralised and centralised management functions within the Directorates-General and FP5 programmes. Within each Directorate-General, senior management meetings are the engine of the management and supervision information system.

In addition to the formal internal reporting to management, the Commission produces, as required by the legal base, an extensive reporting to external users such as programme committees, external advisory groups or monitoring panels.

The Commission's Internal Control Standards were in effect only for part of the period covered by the Court's audit. This has to be taken into consideration when assessing the findings presented by the Court. The deployment of the common IT system for FP6 will help to improve management reporting.

INTRODUCTION

4. Since it was launched in the 1960s, significant changes have occurred in Community research policy. In particular as a result of the successive framework programmes, the European research capacity has been considerably strengthened. The Single Act, followed by the Treaties of Maastricht, Amsterdam and Nice, has confirmed the importance of research policy in the European Union. At the Lisbon Summit the European Union has launched the initiatives known as 'Towards a European research area (ERA)' and 'eEurope', thereby underlining the fundamental role that research must continue to play in the move towards a knowledge-based European Union.

5. The European Union has set itself the task, in the RTD field, of creating a European Research Area, which will be a 'single market' and a coordination centre for the Member States' research activities and policies.

The budgets allocated to the European RTD framework programmes are still significantly smaller, both in absolute terms and per capita, than those allocated to non-European research programmes such as the National Science Foundation (NSF), the United States Federal Agency for the Promotion of Basic Research and Education.

As back-up for national efforts, the RDT framework programmes are designed to boost research investments. In addition, private investment has been significantly increased and covers two thirds of the expenditure necessary to reach an investment level equivalent to 3 % of the EU's gross domestic product (GDP).

AUDIT OBSERVATIONS

12. The Commission confirms that some delays in contract negotiation and signature occurred in the first year of the FP5 programme period.

The late availability of the model contracts should not have posed major problems to potential contractors. The relevant information with respect to determining their estimated budgets was available in the implementing regulation and the model contracts merely put this into contractual form, along with other contractual details.

14. The main model contracts were available in all official languages and translations were always possible when required. Given the variety of nationalities and languages involved, most research consortia use English as the language of their own choice for communication. As a result the overwhelming majority of FP5 contracts were signed in English. Unless the contract is signed in a language other than English, only the English version is legally binding.

As far as the availability of key documents in different languages is concerned, it is important to note that the research website Cordis has been developed with an explicit multilingual approach which provides different language versions of relevant information to the possible extent.

15. The complexity of the contract management processes has been addressed in FP6. The approach chosen for FP6 is based on two principles:

- differences between instruments are primarily differences between aims and not legal differences, and should therefore be treated as such,
- a modular approach whereby instruments' legal peculiarities — e.g. additional obligations — must be distinguished from general and common provisions.

By dint of these principles, for seven of the eight instruments, the contract includes:

- a 'core contract' common to these instruments,
- an Annex II (general conditions) common to these instruments.

Three instruments (STREP, CA and SSA) use only these two documents. For four instruments, four Annexes III, each less than five pages long, complement the two aforementioned documents.

For the eighth instrument, 'actions for the promotion and development of human resources and mobility', covering 14 activities or 'sub-instruments' based on different financing mechanisms and the same principles, the contract consists of the following:

- a core contract,
- a common Annex II (general conditions),
- 10 or so Annexes III.

Lastly, there is the particular case of letters of contract for experts and the use of Commission standard contracts for public procurement.

17. The administrative burden associated with the implementation of these provisions results from the financial and legal certainty required in order to manage contracts of this type. Under the legal provisions governing FP5, all contracting parties enter into a legal commitment by signing contracts individually. The purpose of these arrangements is to clarify the existence of a direct relationship between the Community and participants, notwithstanding differences in terms of the rights and obligations resulting from their investment in the indirect action.

The amendment policy initially proposed for FP5 was rather cumbersome and did indeed lead to certain cases of a *de facto* veto right where all signatories were required to sign each and every amendment. However, this has been addressed still in FP5 and simpler processes for contract amendments (including mandates to the coordinator for signature) have been drawn up. The re-allocation of budgets does not necessarily require the signature of all contractors.

Under FP6, the legal liability of the various parties is governed by simplified arrangements (signature and entry into force, amendments) which should enable Commission management procedures to be reduced to the strict minimum without sacrificing protection of the Community's financial interests (see paragraph 42).

18. Indirect actions as defined by the relevant legal basis may well be implemented by both grants and procurement according to the specific legal provisions. The Commission has implemented the different types of actions according to the provisions in the legal basis and by use of the model contracts as foreseen.

The grant agreement contract was used for ad hoc applications for subventions for actions like workshops, seminars and conferences. For this type of grants, the Commission standard foresees to limit overheads to 7 % of direct costs. The use of the type of contract depends on the nature of the action.

For FP6, the distinction between actions to be implemented by grants or by public procurement has been clarified through the rules of participation.

19. Given the nature of these types of indirect RTD actions, the Commission considers that flat rates for the reimbursement of indirect costs are appropriate. The use of flat rates is a major element of simplification, in particular for the consideration of indirect cost or overheads. This is also recognised by the Court (see paragraph 36).

For Thematic Networks (type-3) and Concerted Actions (type-4) the flat rate for indirect costs, which is set at 20 % of direct costs excluding subcontracting, is considered sufficiently low to make it unlikely that profits can be made on overheads.

20. INTAS was not created by the Commission but by the Community represented by the Commission at the request of the Council, its Member States and third countries, all members of that association. INTAS competencies are not the ones of the Commission or of the Community, but missions commonly established by those abovementioned public bodies member of INTAS. The Community retains its full competencies with regard to international cooperation in the field of science and technology with newly independent States.

Under FP6, taking into account the new rules for participation (Article 9.2.a) and the new Financial Regulations (in particular Article 160(3) of the implementing rules of the Financial Regulation), the Community's financial contribution will be made as a membership fee to INTAS. The rest shall be considered as a grant and subject to rules and procedures defined in the rules for participation and the Financial Regulation.

Further to an audit carried out by the Commission's own internal audit capabilities, new procedures for monitoring and payment have been defined and INTAS' statutes have been amended at the request of the Commission representing the Community in order to avoid future potential conflicts of interests.

21. The Community framework for State aid provides that in case of a combination of research State aid with Community financing, the Commission must take into account the effect on competition and trade. Thus, where Community financing and State aids are combined, total public support may not exceed 75 % in the case of industrial research and 50 % in the case of pre-competitive development activities.

24. When setting up FP6, the Commission took account of the somewhat complex nature of the FP5 cost reimbursement systems. In principle, the same cost reporting model has to be used by one contractor in all actions carried out under FP6, except in some justified cases (see paragraph 38).

25. As indicated by the Court, the determination of the exact cost of these resources is not necessary, as the framework programme allows the financing of 100 % of additional costs for those contractors permitted to use this system for substantiating and justifying costs incurred. The principle of funding all additional cost is that it is a proxy for funding half the full costs.

Indeed, contractors using the Additional Cost (AC) system usually cannot determine with sufficient accuracy the actual costs of their recurring resources contributed to the indirect RTD action. However, the estimate of permanent personnel hours contributed to the project must be indicated in the contract preparation form (CPF) and the results of the work contributed are indicated in the periodic progress reports submitted. In some cases, the number of person-hours contributed by these people is specifically mentioned in the progress reports submitted to the Commission.

Under FP6 projects, in view of the new Financial Regulation, Additional Costs (AC) contractors will be required to identify the other resources contributed to the Community funded project and to provide an estimate of the costs of those other resources.

26. The Commission does not systematically verify the capacity of the accounting system of each participant prior to signing a contract. It is expected that the contractors can understand and apply these underlying rules and requirements of the contract correctly.

The quality assessment of the account system is initially based on declarations made by the participants themselves, *inter alia*, on the contract preparation form. This information cannot be checked until an *ex post* audit is carried out on the final recipient.

Under FP6 this assessment is one of the elements which must be certified by the recipient's external auditor (see paragraphs 44 and 45).

27. The use of the two cost categories newly introduced in FP5 was optional.

Under FP6, costs have to be calculated in accordance with the normal and legal accounting rules and practices, and no longer based on contractually imposed cost categories that can be considered artificial in comparison with the accounting principle of final beneficiaries (see paragraph 39).

28. The FP5 model contracts allow contractors to move up to 20 % of their budget between categories without any amendment to the contract and to move between themselves up to 20 % of their budgets without any prior Commission's approval.

This provides a certain level of flexibility for the execution of Community funded research projects. More important movements are possible by means of amendments to the contract.

The simplification in FP6 provides for substantially increased flexibility for the consortia as no pre-defined cost categories exist anymore (see paragraph 39).

29. Recipients must meet their contractual obligations. The FP5 model contract allows the use of average rates for personnel cost as long as they do not significantly differ from the general principle of a reimbursement of actual costs incurred.

The Commission shares the Court's concern regarding simplification and has initiated an in-depth reform of the contractual and financial arrangements for Community research as part of FP6. For FP6, the Commission — further to the clear provisions of the model contract in this respect — made available on its model contract website a 'Guide to financial issues' relating to FP6 indirect RTD actions in order to give more detailed guidance.

30. The use of flat rates can be seen as a major element of simplification in particular for the consideration of indirect cost or overheads. This is also recognised by the Court (see paragraph 36).

As far as the appropriate level of such flat rates is concerned, it is important to take into account the type of action and therefore the relevance of such cost, as well as the base on which this flat rate is applied.

The initial proposal of the Commission for the flat rate option was increased to 80 % following discussions with the Member States' representatives.

The fact that the flat rate changed from 80 % of personnel costs under FP5 to 20 % of all direct costs under FP6 does not imply recognition by the Commission that the rate in itself was inappropriate in FP5 (see paragraph 38).

31. In this case also, the opening of the full cost flat rate (FF) system to all types of participants was requested by representatives of the Member States.

For FP6, the new full cost flat rate reporting model (FCF) that replaces the FP5 Full cost flat rate (FF) system, includes a flat rate for indirect costs established at a level of 20 % of the direct costs excluding the costs for subcontracting. This is the same rate used for the Additional cost (AC) model (see paragraph 38).

In addition, the possibility to opt for the full Cost flat rate reporting model (FCF) is limited to small and medium-sized enterprises and to legal entities eligible for the Additional cost (AC) model (except for natural persons).

32. The implementing regulation gave no authority to the Commission services to negotiate at their own initiative the flat rate of overheads with contractors proposing to use the FF system. It clearly indicates that the flat rate for indirect costs to be applied is 80 % of personnel costs.

The model contract for shared-cost actions for FP5 indicates also that the rate shall be 80 % of personnel costs but 'a contractor may request a lower percentage when this is required, for instance, by his internal rules.'

The Commission does not share the Court's view that a more efficient use of Community funds would have been achieved by negotiating rates on a case-by-case basis.

33. For accompanying measures, in some programmes specific negotiation guidance was provided to determine the rates of overheads proposed, depending on the nature of the action being carried out by the accompanying measure.

Even if negotiation of overhead rates had budgetary constraints as their *raison d'être* in some cases, the alternative would have been to lower the percentage rate of the Community financial contribution in these contracts (Community contribution can be up to 100 %) and to use a higher overhead rate. The end result would be the same.

34. The RTD framework programmes need to be updated, both in terms of contents and implementation mechanisms. When proposing such modifications to the European Parliament and the Council, the Commission takes into account the lessons learnt from previous programmes.

A significant effort has been made in FP6 to simplify the administration of indirect RTD actions both for participants and the Commission services implementing the RTD framework programmes (see paragraphs 36 to 45).

35. The Commission has made a concerted effort to ensure consistency and uniformity of legal interpretation and application by means of the Action Plan established further to the Commission's synthesis of the 2001 Annual Activity Reports (Communication from the Commission to the European Parliament and the Council. Synthesis of the Annual Activity Reports and Declarations of the Directors-General and Heads of Service. COM(2002) 426 final, Brussels, 24.7.2002).

The inter-services group established in January 2003 pursuant to this Action Plan (C(2002) 5558) will continue its work on the coordination and application by different Directorates-General of similar approaches in their contract management.

Amongst other actions, the Commission has prepared financial guidelines for participants in FP6 indirect RTD actions to clarify the contractual obligations of beneficiaries (see paragraph 45).

38. Major simplification has been achieved concerning the rules governing the different cost categories and related issues like budget transfers between categories and between contractors.

Maintaining three different cost reporting models has the added benefit to contractors that the basic principles for determining the costs incurred for an indirect RTD action, initially established under FP5, have continued into FP6 (see paragraph 34).

39. In its initial proposals for FP6, the Commission took up the recommendations of the Court's Annual Report 2001. Council and Parliament introduced modifications to the Commission proposal on the Rules for Participation, which did not allow aligning fully to the Court's recommendations.

The arrangements for FP6 are based on the five following principles:

- definition of a strict cost eligibility framework,
- participants will apply their own accounting principles and rules,
- since the Commission cannot be fully conversant with these rules, audit certificates will be used systematically (see paragraphs 44 and 45),
- an obligation for consortia to hand in a management report demonstrating the link between resources input and work carried out/findings,
- redeployment of resources to monitor the scientific quality of projects, with the help of external experts, using simplified procedures (see paragraphs 94 and 121) and to *ex post* checks (see paragraph 133).

On that basis the Commission takes the view that the system set up for FP6 is more rational and easier to implement for participants and Commission departments alike. It should therefore protect the Community's financial interests more effectively.

40. The Commission has, in line with the reinforced requirements of the new Financial Regulation as of 2003, addressed this issue with a new set of explicit rules in the model contract for FP6.

Community research policy is not founded on the same level of integration and funding as, for instance, Structural Funds policies. To date, it reflects coordination rather than integration of national policies.

The cost reimbursement models allowed by the legal framework do not reflect the legal status of bodies participating in research projects but their capacity to identify the real costs incurred for the project. However, the principles of complementarity and additivity are used in the contract negotiation phase.

41. Under FP6, resources made available by third parties may be claimed as eligible cost, subject to a prior agreement and on proper justification.

In addition, the FP6 model contract deals with the concerns expressed by the Court by obliging recipients of Community funds to notify the donor body of the use made of the resources it provided for the project funded by the Community. This public body will therefore be able either to cancel the corresponding commitments or to redeploy them to other objectives.

42. The principle selected for FP6 places greater responsibility on a consortium's members than in the past and provides increased protection for the Community's financial interests.

The new mechanism provides better guarantees than was previously the case:

- it forces contractors to continue indirect research action even if one of them goes bankrupt,
- where contractors refuse to continue work on the project, the mechanism provides for them to be penalised by recovering all or part of the amounts owed by a defaulting contractor, without prejudice to the proceedings instituted in respect of the contractor.

43. The penalties provided for in the participation rules and in Article 114 of the Community's new Financial Regulation complement the provisions on 'liquidated damages' in the FP6 model contract. Hence any contractor responsible for an irregularity will no longer be able to take part in FP6 activities. This means that not only any proposal submitted by these contractors for indirect RDT action will be ineligible but also that the contractors will be excluded from any other outstanding contracts in which they are involved, irrespective of whether they have committed irregularities in connection with those contracts.

44. Running pilot actions in FP5 helped the Commission in the further development of the audit certificate system in FP6.

The certification of cost statements by independent qualified auditors should provide for a reasonable assurance as far as the required reliability of cost claims of contractors in terms of legality and regularity is concerned.

The Commission has launched in 2003 an evaluation of the FP5 pilot action on audit certificates.

45. In the light of the new conditions governing this co-financing, which are based partly on audit certificates, the type of checks to be carried out by the Commission for FP6 indirect actions is different to the checks carried out for FP5 actions.

Information on personnel hours spent has to be reported in the technical reports and the reconciliation of the scientific work and the financial aspects should be easier as the justifications for the latter are confirmed by audit certificate.

The external auditor must certify that the expenditure is eligible and that it has actually been effected. For their part, the Commission departments must decide whether it is necessary to carry out the RDT indirect action. This distinction makes the role of the external auditor clearer.

In view of ensuring the effective use of this new instrument, the Commission has prepared Financial Guidelines for participants in FP6 indirect RTD actions, including a model for audit certificates. These guidelines cover a number of relevant provisions to assure consistency and quality of audit certificates (see paragraph 35).

The Commission will take the necessary steps to ensure quality and overall consistency with the use of audit certificates.

46. The main overall principle of the Commission's organisation of the management of European research programmes is the optimisation of support to and synergy with high priority policy objectives, whilst respecting at the same time cost-efficiency considerations. The organisational set-up evolves therefore necessarily along changes in policy priorities. The volume and scientific diversity of the framework programme as such and the need for manageable bodies imply an organisational structure with specialised entities. This requires both the provision of adequate support functions and appropriate coordination.

The Commission's choice for the management structure of the FP5 was motivated both by the aim of a certain concentration of management responsibilities (seven Directorates-General were involved in the FP4 compared to five Directorates-General in the FP5) and by keeping and further strengthening of synergies with and support to high priority policy areas.

48. In the case of the Directorate-General Information Society, synergies and mutual benefits between IST Research, the policy to generate competition in the communication market and initiatives to promote the effective deployment of applications and content are widely recognised by key stakeholders across Europe.

49. Independent from the organisational set-up for particular thematic research areas, the Commission pays much attention to horizontal coordination between different inter-linked policy domains, both within and across Directorates-General. With respect to the coordination of the management of FP5 contracts, an inter-service group was set up by the College further to the Synthesis Report of the AAR 2001 reports, to cover issues relating to the management of FP5 and FP6 research contracts.

50. The design of a specific programme as one entity does not necessarily mean that it must be managed by one service in the Commission.

The reorganisation of the Directorate-General for Research in 2001 needs also to be considered in the context of the reform that is being implemented at the Commission's level; in particular, the objective of reinforcing the financial management of the operational services. Subsequently, the number of administrative and financial units has been increased as a result of the reorganisation of the corresponding responsibilities.

51. Instruments such as the Cordis website provide access to general, coordinated information. Regular meetings between the research directorates are designed to harmonise the standpoints of the Commission services. All the significant interpretation questions are agreed in these meetings.

A helpdesk for each programme and for the framework programme as a whole has been set up for FP6. Research operators can also refer to a network of national contact points.

Partly with a view to assisting participants more effectively, the Commission has set up — within the framework of Action 1 of the action plan on follow-up to annual activity reports — an interdepartmental group and a network of correspondents whose

purpose is to ensure that contracts are interpreted in a more cohesive fashion and to apply and exchange examples of good practice. This action plan was adopted in January 2003 (see paragraph 35).

52. Key actions have proved to be very successful in structuring the specific programmes.

53. A significant participation of small and medium-sized enterprises (SMEs) in the RTD framework programmes is set as an explicit cross programme objective by the legislator in the legal basis by means of a target percentage of 15 % across the board for all programmes, as well as the specific horizontal programme and 'Promotion of innovation and encouragement of small and medium-sized enterprises participation'. Specific measures across the different thematic programme are clearly necessary to achieve this objective.

For FP6, the objectives relating to participation of legal entities in accordance with the international cooperation interests have also been integrated into the thematic priorities. In addition, there is a special action for promoting the participation of SMEs. The target of achieving 15 % participation from SMEs has also been integrated into the whole framework programme and there is a particular action specifically for SMEs.

54. Overall coordination is provided partly at Director-General level and by specific interdepartmental structures set up to ensure the necessary coordination. Examples include the interdepartmental groups for evaluation matters and legal/contractual issues and the external audit network.

55. 'Groups of Directors' were set up to ensure coordination between thematic programmes and linked policy domains. In November 2001 these groups were in addition assigned to exercise the inter departmental consultation, according to the Commission Empowerment Decision for FP5, which constituted an important simplification of the decision-making process of FP5.

As far as Directorate-General Information Society is concerned internal coordination between different Directorates is assured by weekly meetings of directors, whereas coordination between Directorates-General at the level of work programmes, call for proposals and project selection was assured by written interdepartmental consultation.

56. Although the Directors-General and Directors assure the overall responsibility, many of these issues are dealt with primarily at the level of administration and finance units rather than at the level of Directors.

The completion of earlier programmes was followed up through close and regular monitoring of the budgetary execution at the level of Directors.

57. The decentralised management approach used in FP5 has in general been efficient and effective, with a balance between adapting approaches to local needs and specific requirements. Where needed coordination across FP5 was assured by appropriate means.

For FP6 this approach will be continued, with more coordination for the support functions but keeping the benefits of managing the programme at the level of individual Directorates-General.

60. The Commission agrees that the time from publication of calls to contract signature as observed in the first phase of FP5 throughout the different programmes managed by different Directorates-General was too long.

The Commission has made efforts to decrease 'time to contract', in particular for Directorate-General Information Society, which significantly reduced the average time-to-contract for the programme 'User-friendly information society' (see paragraph 61).

Nevertheless, the 'time-to-contract' indicator has to be put into context and used with care. The average of 263 calendar days hides a considerable variety between types of actions and does not take into account important constraints for contractors as well as the Commission. Furthermore, the Commission's performance of the 'time-to-contract' compares favourably with other research programmes.

61. Since 2001 the Commission has attempted to tackle the problem by simplifying its own internal procedures, for example by decentralising decision-making in accordance with its own internal rules (see paragraph 66), but also by requesting the requisite information at an early stage and by collecting contractors' signatures without awaiting finalisation of its internal procedures.

These arrangements will be renewed under FP6 and will complement the new arrangements governing the entry into force of contracts as established by that framework programme's participating rules.

62. The Commission agrees that the step of the consultation of the Programme Committee, as indicated by the Court, increases the 'time-to-contract'. Nevertheless, as pointed out by the Court, the legislator insisted on this aspect when adopting the legal base for FP5.

63. The Commission agrees that the delays in the establishment of the evaluation platform caused problems, in particular for the evaluations related to the first calls for proposals in 1999. These problems were overcome in the following evaluations and the Commission considers that the service worked satisfactorily.

A common evaluation platform is also used for FP6.

64. A centralisation of support functions will not necessarily increase efficiency. The Commission's reform is about giving responsibility for an action to those who have actual control over the action. This requires proper coordination and supervision, but is not in contradiction with the latter. Moreover it is important to ensure proximity between the support functions and operational services.

67. The first calls for proposals could not be published until all the elements forming the legal basis had been adopted. The situation in 1999 was somewhat unusual in that the specific programmes were not adopted until February, i.e. in the course of the year of implementation. All the calls were then published simultaneously and procedures had to be completed within the same limited time frame.

Aware that in some areas publishing calls for proposals at unduly close intervals is unlikely to yield good results, departments ensured that the deadlines of calls for proposals for subsequent years were staggered over time.

On the basis of that experience the schedule for adopting FP6 and its specific programmes was prioritised and respected.

70. Since 1973 permanent posts paid from the research budget had been filled exclusively by temporary staff with, in most cases, renewable five-year or permanent contracts. The length of their contracts was therefore unrelated to the length of the framework programmes, which did not exist at the time.

The target set in 1996 (40 % of officials) was to have been reached after an estimated transition period of about 10 years. So it is not abnormal that the rate in 2001 should be only 28 %.

The target was raised to between 60 and 90 % with the decision on the new research staff policy adopted on 27 December 2001 (COM(2001) 792 final).

Decisive action has since been taken to meet this new target, including:

- conversion of 'research' temporary staff posts to be continued and intensified,
- recruitment of successful candidates in open competitions to 'research' posts since April 2002,
- launch of the first research competition with a view to recruiting scientists as officials as from 2004,
- stop to recruitment of temporary staff as from November 2003.

71. As a rule, the same staff deal with work left over from the previous framework programme, current framework programme projects and preparations for the next framework programme. As a result, the data for the respective shares are estimates.

72. The Commission shares the Court's concern as regards the assignment of external staff to essential financial or IT duties.

It is true that the vacancy rate was very high in 2001. This was partly due to the lack of successful candidates available. Lists of successful candidates for research posts did not become available until mid-2000 and the effects were felt gradually: by 2003, the vacancy rate was around 7 %.

The Commission is currently developing a mobility policy based on the guidelines on mobility adopted by the Commission in 2002. This will include a policy on posts that remain vacant after publication and systematic verification of laureate lists. Decisions on the (re-)allocation of such vacant posts will be dealt with at senior management level. Efforts to appoint staff to permanent posts and the possibility of recruiting new officials for vacant research posts should improve the situation.

73. Personnel and vacancy management should enable the risks identified by the Court, and shared by the Commission, to be limited and external staff as a percentage of the total to be reduced in the longer term. The Commission aims to reduce the

proportion of external staff with a corresponding increase in permanent staff. This approach takes on board the Court's concerns regarding the assignment of external staff to essential financial or IT duties (see paragraph 70).

The project officer's profile has an increasing political and horizontal dimension and carries greater responsibilities. That is why the Commission regards it as more appropriate to recruit them to permanent posts. It has therefore been decided, partly with a view to promoting mobility, to recruit as project officers successful candidates with a scientific background (who could, if necessary, be given specialist assistance throughout the duration of the project). The first research competition has been launched with that aim.

These personnel and vacancy management measures on the part of the Commission should enable the risks observed by the Court to be reduced (see point 72).

74. Resources of the other categories are supporting the work of those allocated to proposal, contract and project management. Their importance illustrates amongst other things the efforts made for coordination and programme management.

As for the differences observed by the Court, these may also be due to differences in the organisational profile of services or due to differences in the types of indirect RTD actions administrated (see paragraph 77). In Directorate-General Research, for instance, the emphasis put on the creation of the European Research Area (ERA), the design and planning of FP6 and the reorganisation of the services, which led to the creation of the units responsible for political coordination and strategic issues, might explain a lower rate. For 2002, however, in a similar exercise carried out within the Directorate-General for Research, it was estimated that 56 % of all the staff of the Directorate-General were involved in project management (32 % for the selection and the scientific follow-up of indirect RTD actions and 24 % for the financial and administrative tasks).

76. It is true that the number of projects managed by project officers is high. However, it should be borne in mind that scientific follow-up for projects often relies partly on the assistance of external experts.

77. A variable relationship exists between the various programmes and personnel expenditure. The rate set for the 'User-friendly information society' (IST) programme reflects the needs identified in the course of the legislative process, taking particular account of the involvement of a large number of small and medium-sized enterprises.

78. The ceilings on administrative expenditure defined by the legislator for the management of the RTD framework programmes were respected by the Commission.

The Commission's proposals regarding the framework programme's forecast requirements are based on a detailed analysis of necessary resources.

79. The alternative measure of the proportion of the budget that went to the administration of the RTD framework programmes presented by the Court is not the one required by the relevant legal bases or consistent with the budgetary structure.

80. The staff allocation is presented in the Annual Management Plan in accordance with Activity-Based Budgeting (ABB) since 2002, but 2004 will be the first year where the General Budget will be officially based on this new system.

81. In the Commission's view, a time recording system would mainly increase the administrative burden for its services. The information provided by such a system is not considered as sufficiently relevant to make its implementation a cost-efficient measure.

82. The Commission accepts that system integration would have improved the efficiency of the FP5 management system and agrees that a central management information system would have been desirable. Given the constraints at the start of FP5, it would however not have been feasible to embark immediately on the development of a single global and integrated IT system.

Nevertheless, compared with FP4, there was a greater sharing of IT systems. Since the beginning of FP5, the Directorates-General operating the RTD framework programmes have used a common database for experts and single system for the electronic submission of proposals (Protocol). They also shared the Evaluation Service Provider (ESP) who, *inter alia*, was charged with introducing the entire contents of all proposals into a common database and tracking them during evaluations. Recognising the importance of sharing information on contracts and contractors, a common FP5 contract data warehouse (DWH) was established from 2002 onwards.

Following an evolutionary approach, the Commission has decided to integrate its IT systems gradually over time and to launch a fully integrated system for FP6 (see paragraph 86).

83. Although the situation differed from one Directorate-General to another, central IT systems were operated by all Commission services by the end of FP5. The Directorate-General Information Society and Directorate-General Research developed IT support for checking of legal and financial viability of potential

contractors, these being integrated with the early warning system of Sincom as well as their contract databases. Both Directorates-General also integrated their contract and payment systems directly with Sincom. Directorate-General Enterprise also used a version of this IT system for systematic control of the financial viability of potential contractors. Directorate-General Energy and Transport applied the same principles in its workflow, also using centralised IT support.

Furthermore the situation has been improved at various intensity in different parts of the framework programme throughout the FP5 programming period, but also as compared to FP4 (see paragraph 82). Overall, the Commission considers that the level and quality of IT support was sufficient to guarantee the legality and regularity of operations.

84. The performance of the IT support has to be seen in the context of the complexity of the RTD framework programmes. The delays in the adoption of FP5 and the definition of the programme requirements contributed to some of the problems experienced (see paragraph 67).

For FP6, in line with the Court's recommendations, the Commission has defined a strategy of providing central IT support for all aspects of the RTD framework programmes (see paragraph 86). This common FP6 system, which is a highly modular system that can be used for future framework programmes with the necessary modifications, entered into service progressively throughout 2003.

85. The Commission recognised for FP6 that a greater and earlier level of investment is required and has made the necessary resources available for the development and maintenance of a fully integrated system for FP6. Higher investment cannot however compensate for the late availability of specifications against which to build a system or frequent changes to these specifications.

The Commission shares the Court's view concerning the potential efficiency gains resulting from electronic data exchange and data storage. In fact, the new FP6 IT system is capable of fully computerised operation from the preparation of proposals to the closure of projects. It also provides means for participants to submit project deliverables and to communicate with the Commission electronically, as well as for electronic archiving.

86. When designing the common FP6 IT system, the Court's recommendations have been fully taken into account (see, for instance, paragraph 85 on electronic transaction processing and data exchange).

Given the complexity of introducing such a system capable of meeting the needs of a programme as diverse as FP6, it was decided to introduce it gradually. This was done progressively from November 2002 onwards, with full deployment of the system being achieved in 2004. The Commission acknowledges that the degree of utilisation of the common IT system has varied between Directorates-General in the first year of the FP6 programme period.

The Commission agrees with the Court that such a common IT system requires the establishment of a centralised support function (see paragraph 123). To this end a separate unit is being established in Directorate-General for Research, charged with providing services to all Commission services operating the RTD framework programmes. To ensure that the needs of all Commission services continue to be taken into account, the IT Management Office will report directly to an IT Management Board with members at director level from all Directorates-General. It now remains for each Directorates-General to define and schedule its migration to the common IT system for FP6.

87. The organisational principle of the Commission reform is to ensure that responsibility for an action is taken by those who actually have control over the action, which implies decentralisation and empowerment. Needs for adequate coordination is a logical consequence of any decentralisation, but not a contradiction to it. The Commission is aware of the challenges and is deploying great efforts to address them appropriately.

The creation of common management instruments for FP6 is a further reflection of the Commission's concern to provide for increased interdepartmental coordination following the decentralisation resulting from the reform.

88. The Commission agrees that the RTD framework programmes must be implemented according to a common set of principles and procedures. However, in line with the basic orientation of the administrative reform of the Commission, each Directorate-General and programme is to remain responsible for its detailed design and implementation of internal control.

The Evaluation Manual has been adopted by the Commission in order to make the process from the pre-proposal checks to the preparation and finalisation of the contract more transparent and harmonised. On the basis of this manual, the specific programmes derived more detailed documents relevant to the preparation and finalisation of the contracts for the use of both the Commission and the contractors (see paragraph 89).

89. In application of the Commission's Standard 15 for internal control 'Documentation of procedures', significant efforts have been undertaken since 2001 to remedy the shortcomings identified. The system description produced by the Court in the framework of this audit constituted a valuable input to this work.

Further efforts will be undertaken to guarantee that the Commission's procedures are sufficiently standardised within the framework programme, and adequately documented within each Directorate-General and programme.

In order to standardise the form and content of the operational manuals, as recommended by the Court, the Commission will examine in the existing interdepartmental group established after the 2001 AAR, the possibilities of identifying best practices in the existing operational manuals, in particular for FP6, with a view to adapting them accordingly.

90 and 91. Further to the audit of the FP5 management system by the Court, both with a view to FP6 and within the framework of the current financial reform, the Commission has already improved several aspects of its internal control mechanisms.

An action plan common to the Directorates-General was adopted in January 2003 (see paragraph 35).

92. An important number of manuals and checklists are available in each Directorate-General to support operational and financial procedures.

- The negotiation outcome is subject to an authorisation, sometimes implicit, as the agreement of different scientific and financial departments within each Directorate-General is required in order to launch the Commission decision for each indirect RTD action. During the FP5 programme period, further progress was made with regard to formal documentation of this control step.
- With regard to the adequacy of a contractor's accounting system, on-the-spot financial audits are the only means of verifying the appropriateness of the beneficiary's choice of a cost reimbursement system.

In this context, the Commission provided specific guidelines to help the participants in the preparation of proposals and during negotiations. Its consistent use was verified as part of the legal and financial verification within each programme. This control will be extended beyond a specific programme with the deployment of the common IT system for FP6 (see paragraph 86).

The preliminary check of contractors' legal and financial viability is a standardised procedure which ensures a clear and coherent decision making process regarding the financial viability of potential contractors. As a result of the procedure, various protection measures such as financial guarantees, refusal of coordination and additional submissions of business plans for SMEs, were proposed. This control procedure was facilitated by a shared support function for the financial viability and was based on a user's manual.

93. The Commission aims to perform its contract amendment procedures as timely as possible given the limited resources at its disposal. These amendments have to be based on well reasoned requests by coordinators of the indirect RTD action, including written agreements by all contractors concerned.

The Commission acknowledges some difficulties in the management of contract amendments. Actions to remedy the situation include the development of new guidelines and improvement of the IT support tools (see paragraph 86).

94. External experts are used to assist the Commission for the evaluation of ongoing projects. The generalised use of external experts for the purpose of project monitoring is considered as a positive experience. Amendments are adopted where monitoring shows that this is necessary.

The FP6 funding mechanism will ensure that the scientific approval and payments will be better synchronised. The Commission will also consider extending the policy of periodic reviews of indirect RTD actions to all programmes (see paragraph 3). Such evaluations of ongoing actions, carried out on an annual basis, will be mandatory for integrated projects and networks of excellence. For other projects, it is expected that more reliance will be made on external experts to carry out such reviews.

95. The Commission has set up procedures assuring that the verification of financial deliverables and the processing of cost-claim based payments are subject to relevant controls. Monitoring the plausibility of cost rates submitted is common day-to-day practice when verifying cost statements. A more frequent use of check-lists has intensified this practice.

In the case referred to by the Court, the necessary adjustments were made by the Commission.

The proposals put forward in the action plan adopted by the Commission in January 2003 further to Action 1 of the synthesis of the 2001 Annual Activity Reports include the creation of a permanent interdepartmental group to ensure better coordination and cohesion between Commission departments (see paragraph 35).

96. The Commission participated in a number of the audits carried out by the Court as observer, allowing for a valuable exchange of experiences and working practices between the two Institutions.

97. The Commission acknowledges the problem, which is due to the fact that the Community's financial contribution is paid on the basis of eligible costs incurred, as declared by final beneficiaries. The accuracy of these costs and their conformity with the contractual provisions cannot be completely and accurately verified by the Commission prior to the authorisation of payments. Only a financial audit of the beneficiary can determine with certainty and accuracy the correctness of the costs claimed and their conformity to the contractual provisions.

The Commission has put in place a number of measures to reduce the associated risks, including awareness raising amongst beneficiaries and the significant increase of financial audits during FP5 (see paragraph 98).

98. The five Directorates-General have set up procedures assuring that the verification of project deliverables and the processing of cost-claim based payments are subject to relevant controls.

When verifying the conformity of cost statements with the contractual provisions, the obligation to substantiate personnel costs is not only assessed on the basis of time records but also in the light of alternative evidence provided by final beneficiaries. Other errors evidenced by the Court are formal, such as the declaration of costs outside the eligibility period for a given cost statement.

Nevertheless, the Commission accepts that the incidence of errors remains an important issue. With a view to reducing the risk of errors in connection with the complex nature of FP5's contractual rules, it has worked on training recipients and raising their awareness. The Commission has also taken on board the lessons of implementing FP5 in order to amend and simplify the rules for FP6, taking its lead from the Court's proposals (see paragraphs 36 to 45).

Furthermore, during the FP5 programme period, the Commission has intensified its *ex post* audit activities significantly, defining an overall audit target of 10 % of contractors during an RTD framework programme (see reply to the questionnaire of the Budgetary Control Committee of the European Parliament, paragraph 4.3, 21 December 2001).

These *ex post* financial audits result in less frequent errors and lower rates of overdeclaration than resulting from the Court's sample (see in particular, Court of Auditors — Annual report concerning the financial year 2002 (OJ C 286, 28.11.2003), paragraphs 6.44 to 6.46; Court of Auditors — Annual report concerning the financial year 2001 (OJ C 295, 28.11.2001), paragraphs 4.57 to 4.61). For instance, for Directorate-General for Research, the average overdeclaration for indirect RTD actions of both FP4 and FP5, for audits carried out in 2002, was 4,9 %. Given the significantly larger number of audits carried out under

the Commission's responsibility, broad conclusions should be based on the results of the audits carried out by the Commission (or on its behalf).

The Commission's *ex post* audit findings are also reported in each Directorate-General's Annual Activity Reports.

99. The Commission pays a lot of attention to the respect of the rules and deadlines for the execution of payments. In a number of cases delays in the execution of payments are due to additional checks and requests of supporting documents, whilst these events have not always been properly recorded as interrupting the relevant period available for the execution of the payment in question.

In those cases where the coordinator had incurred in excessive delays, this is by definition beyond the control of the Commission. Nevertheless corrective action has been taken and the contractors concerned were reminded of their contractual obligations.

100. The Commission is committed to respond to the Court's audit findings as soon as possible. The Commission underpins the numerous steps necessary for the preparation of the follow-up, including the thorough analysis of the audit findings, the execution of the contradictory procedure with the final beneficiary and proper coordination between the different Commission services concerned.

Based on agreed audit findings, financial adjustments are applied for the specific contracts for indirect RTD actions audited. The Commission underlines that a number of measures has been launched to improve and speed up these procedures.

101. As for its internal reporting, the Commission has through its administrative reform introduced a system of internal control standards laying down a number of detailed requirements for the design of management reporting schemes. As a result reporting practices have been significantly improved and harmonised throughout the Commission's services.

In addition to the internal reporting to management, the Commission provides, as required by the legal basis (see for instance Council Decision 1999/65/EC of 22 December 1998; Articles 23 and 24), an extensive reporting to external users such as programme committees, external advisory groups or monitoring panels. Examples include the Annual reports on the RTD activities of the European Union (Article 173 report).

102. Reporting has to respond to evolving needs. This is reflected in a continuously improved reporting function.

Moreover, the independent creation and maintenance of local reporting tools and procedures serves a legitimate purpose given that it would be difficult to create a standardised solution that meets all expectations.

Increased provision for better management information systems is being made in FP6 (see also paragraph 110).

103. Reports on main management processes like the evaluation of project proposals, the implementation of contract negotiations, the establishment of budgetary and legal commitments and the execution of payments are addressed to the management levels concerned and followed-up in regular weekly management meetings.

The deployment of the common IT system for FP6 will contribute to the preparation of more standardised reports (see paragraph 86).

104. The Commission's reporting is characterised by the different roles and responsibilities of decentralised and centralised management functions within the Directorates-General and FP5 programmes. Due to the decentralisation and increase of management responsibility of Directors of operational programmes, the Commission reform also increased the need for reporting at the directorate level. Also, formal reporting is just one out of several communication tools used in the management of the framework programme.

As regards formal reporting, the main requirements are defined in the legal basis and in the Financial Regulation as far as budgetary aspects are concerned. This has been completed by the requirements defined in the Internal Control Standards. Further to that, responsible managers may identify additional reporting needs for the respective area of responsibility.

The future development and intensification of the reporting procedures further to the administrative reform of the Commission will allow to address the issues pointed out by the Court.

105. The weight and advanced quality of financial reporting respond to the high priority of financial management issues in the context of the Commission's reform.

'Scoreboard' reports in line with the requirements defined in the Internal Control Standard 12 'Adequate management information' have been introduced in all five Directorates-General. These reports reflect items like budgetary execution, payment delays and contract statistics.

106. Project review and monitoring systems exist for most FP5 programmes which can provide detailed information on specific indirect RDT actions. Furthermore, impact assessments of projects are published on the internet site Cordis.

Generally this information is used internally on a case-by-case basis rather than in a consolidated and standardised reporting format. In addition it is made available for the overall programme evaluation. Considerable work has been carried out in 2003 to develop indicators which would be 'result oriented' and, ultimately, could be linked to the evaluation system of FP6 which is still under conception.

107 and 108. As regards the overall monitoring of programme implementation, the legal requirements defined in Decision No 182/1999/EC of the European Parliament and of the Council of 22 December 1998 and the decisions adopting the specific programmes are complied with by the Commission.

These issues are subject to the impact assessment and the evaluation on the overall programme level. Impact studies are increasingly carried out across the programmes. For certain specific programmes under FP4 such studies were produced and considered in the latest published five-year assessment in 1999. The next five-year assessment will take place in 2004, for which a number of impact assessments are under way.

Within Directorate-General Information Society, the management objective of shortening the 'time-to-contract' was first reported on in a pilot phase. Following its successful completion, this performance indicator was then adopted for all subsequent calls of the IST-programme until the end of the FP5 programme period.

109. Under FP6 the common IT system and database for the RTD framework programme operated jointly by all Directorates-General will counter the weaknesses indicated by the Court for which corrective actions have already been initiated where necessary (see paragraph 86).

110. The Commission's Internal Control Standards were in effect only for part of the period covered by the Court's audit. This has to be taken into consideration when assessing the findings presented by the Court (see paragraphs 110 to 111).

— The overall objectives for the RTD framework programmes as for other Community programmes are set in the relevant programme decisions as adopted by the legislative authority, i.e. Parliament and Council. These objectives are included in the annual management plan, established within the framework of activity-based management (ABM) and the strategic planning and programming cycle (SPP). This system

will make it possible to evaluate, in the course of the year and, in particular, when the annual activity report is drawn up, whether the planned activities have been completed and, therefore, whether the objectives to which these activities contribute have been met. The Commission focuses on the need for more effective management which sets clear objectives and priorities, backed up by efficient management of its human and financial resources.

- According to Standard 10, the definition of indicators was not required for the year 2002. Some indicators were employed, but not necessarily included in the reporting to senior management.
- The Commission accepts that slight delays incurred in the production of comprehensive scoreboard reports as required by Standard 12. Different subreports composing these scoreboard reports were however produced and submitted to senior management in time.
- Instances of overriding of controls or deviations from established policies and procedures are documented and justified in the Annual Activity Reports of each Directorate-General.

CONCLUSIONS AND RECOMMENDATIONS

111. Commission departments are required to implement indirect FP5 actions by procedures which comply in full with the existing rules.

The Court's criticism as regards the large number of model contracts has been addressed in FP6 where only one model contract is established for all indirect RTD actions (except Marie Curie actions). Specific annexes are provided for the main instruments where deviations or additions to the standard model are required.

The delays in adoption referred to by the Court concern only the legislative aspect. However, for FP6, the timetable was kept.

As regards accompanying measures, the distinction within indirect RTD actions between grants and public procurements has been more clearly established under FP6, both in terms of procedure and in terms of ownership of the results.

112. FP5 cost reimbursement systems are governed by the provisions of the legal basis. However, the Commission acknowledges a number of difficulties in connection with FP5 contractual and financial arrangements.

When FP6 was drawn up, the Commission initiated an in-depth reform of this system with a view to introducing major simplifications for participants in framework programmes. The application of a flat rate for indirect cost reimbursements reflects the approach recommended by the Court, most recently within the context of preparing FP6.

The Commission has made a concerted effort to ensure consistency and uniformity of legal interpretation and application by means of the action plan established further to the Commission's synthesis of the 2001 Annual Activity Reports. An interdepartmental group has been established in order to reinforce the Commission's coordination of legal and contractual issues and to ensure consistent interpretation and application across the different Directorates-General.

113. The new approach adopted for FP6 cost reimbursement systems provides greater cohesion and clarity while also protecting the Community's financial interests.

In conjunction with the general application of audit certificates, these new arrangements should provide real protection for the Community's financial interests while also safeguarding the innovative and dynamic character of research efforts.

114. In addition to the sanctions provided for in the model contract, the arrangements set out in the FP6 participation rules and the penalties laid down in Article 114 of the Communities' new Financial Regulation can be applied.

The external auditor must certify that the expenditure is eligible and that it has actually been effected. The Commission departments must confirm that it is necessary.

The Commission will take the necessary steps to ensure quality and overall consistency with the use of audit certificates.

115. The Commission has introduced significant simplifications with the introduction of FP6. It will ensure that the framework programmes' management model continues to develop, including when the proposal is put forward for the future FP7, focusing in particular on streamlining procedures.

116. The main overall principle of the Commission's organisation of the management of European research programmes is the optimisation of support to and synergy with high priority policy objectives. The organisational set-up evolves therefore necessarily along changes in policy priorities. The volume and scientific diversity of the framework programme as such and the need for manageable bodies imply an organisational structure with specialised entities. This requires both the provision of adequate support functions and appropriate coordination.

Organisational aspects within the Directorates-General depend on the type of operations to be undertaken, in particular financial operations. Key actions have proved to be very successful in structuring the specific programmes. The fact that FP5 activities are allocated to various Directorates-General does not imply that responsibilities are not clearly assigned or that an efficient coordination is not in place.

With a view to reinforcing coordination within the framework programme, the Commission set up, as part of Action 1 of the action plan on follow-up to annual activity reports, an interdepartmental group whose purpose is to ensure that contracts are interpreted in a more cohesive, coordinated fashion and to apply and exchange examples of good practice.

117. The period prior to signature of contracts encompasses the crucial selection and negotiation phases. Significant efforts were undertaken by the Commission to shorten and simplify its internal procedures during FP5. The process duration for contract signature in the European RTD framework programmes is less important than in similar non-European research programmes.

The option, available since 2002, of recruiting officials to research posts should enable the problem referred to by the Court to be tackled more effectively.

It is true that the number of projects managed by each project manager is high. However, staff may be helped by external experts.

Simplified procedures and better planning should allow to even out the caseload under FP6, improving internal control and speeding up processes. Progress will however also depend on a more adequate level of staff resources put at the Commission's disposal.

118. The Commission has carried out the framework programme within budget allocated by the European Parliament and Council. The alternative measure proposed by the Court is not the one required by the rules.

Since 2002 the staff allocation is presented in the Commission's Annual Management Plan in accordance with the Activity-Based Budgeting methodology. 2004 will, however, be the first year when the budget is presented according to the Activity-Based Budget methodology. This new methodology will further increase the transparency of the Commission's budgetary management.

119. The Commission attaches considerable importance to implementation of framework programme activities and to aspects of research policy.

The organisational structure set up for FP6 ensures proximity with research operators. The Court's recommendations concerning horizontal aspects have largely been adhered to.

For significant parts of the specific programmes there is a strong continuity from one framework programme to the other, both in terms of scientific areas and the research communities. Commission management within the same entities ensures continuity of operations and more efficient use of resources.

120. Building on the experience acquired during FP5, the Commission will continue to simplify its administrative procedures in accordance with the new arrangements laid down by the FP6 participation rules. The schedule for adopting FP6 and its specific programmes has been treated as a priority and has been complied with.

The breakdown of calls for proposals is based primarily on the schedules established for research activities. These schedules are, inevitably, the result of a compromise between different constraints.

The powers and responsibilities of project coordinators have also been increased.

The Commission will consider extending the policy of periodic evaluation of ongoing projects to all programmes where appropriate. More scientific and technical questions are referred to independent experts.

The Commission looks at monitoring and project/programme evaluation results with a view to refocusing objectives. A policy of systematic termination of indirect RTD actions would however be against the spirit of the European RTD framework programmes.

121. During the 1970s, in order to meet very broad but changing scientific needs, the Commission agreed to establish a research staff policy based on the recruitment of temporary staff. However, since then, the Community research policy has been considerably strengthened, in particular as a result of the successive framework programmes.

In line with the Court's recommendations, the Commission has adopted a package of measures designed to integrate its research staff into the mainstream of the Commission's personnel policy and to reduce vacancy rates.

The profile of 'project officers' has an increasing political and horizontal dimension and their powers and responsibilities have been increased. That is why the Commission deems it more appropriate to recruit them to permanent posts.

From 2002 onwards, the Commission has deployed its Activity-Based Budgeting system in all departments. It will be applicable to the General Budget from 2004 onwards. Implementation of Activity-Based Budgeting will enable systematic monitoring of resource allocations instead of the specific tools used previously.

As regards the recommendation concerning a registration system for the time spent working on these programmes, the Commission does not regard this measure as useful at this stage in view of the red tape involved in setting up and maintaining it as compared with the expected benefits.

122. In FP6, efforts have been stepped up to increase coordination across all specific programmes and there are common principles that apply to the entire FP6.

The creation of the requisite centralised instruments is a key element of any organisational structure. Contrary to FP5, one 'Programme Management Committee' oversees all thematic priorities in each specific FP6 programme. Depending on the operations to be undertaken, coordination within FP6 is ensured by means of appropriate arrangements:

- with regard to interpretation of the legal terminology and notification of research operators, in addition to providing access to the Cordis website, the Commission stepped up cooperation and cohesion efforts in its action plan further to the synthesis of the 2001 Annual Activity Reports,
- as regards IT back-up, a single system for FP6 covering all project phases was decided on early in 2001. It should also be possible to use this highly modifiable system for future framework programmes, subject to the necessary amendments. The system will gradually enter into force in 2004.

A joint entity (IT Management Office) is being set up for that purpose. It will be overseen by a Steering Group chaired by the Director-General of Directorate-General for Research,

- the Commission is not likely to opt for the proposed recommendation for a joint registration and verification function in view of the varied nature of units proposing indirect RTD actions from one programme to another and the relatively high rate of rejected proposals,
- with regard to 'controlling and reporting', the rules provide for a series of standardised reports. New reports have also been conceived as part of the reform. This complements the wide variety of reports in departments necessary in order to take on board their specific objectives as well as one-off circumstances and events.

The development and deployment of an integrated IT system, jointly used by all Directorates-General operating FP6, and the

storage of data in a common data warehouse, will allow for significant improvements in reporting within each Directorate-General and programme.

123. The Commission follows the principles of effectiveness and efficiency with a view to its overall mission and policy objectives. The synergy between research activities and the objectives of the sectoral policies is the underlying principle for the Commission's organisational structure for the RTD framework programmes.

The Commission shares the Court's view that effective coordination between the different participants in a framework programme from the Commission (be it between units belonging to a single Directorate-General or between units belonging to several Directorates-General) is crucial to efficient management. It should be noted that the various Directorates-General do not work independently: they cooperate with a view to achieving the objectives set by the Commission, acting collectively, and have developed instruments enabling work to be coordinated, thus avoiding the risks highlighted by the Court.

Therefore, the Commission considers that a centralised management model is not appropriate. In its internal organisation the Commission aims at the allocation of responsibilities at the appropriate level and delegation of powers and duties, accompanied by appropriate coordination mechanisms.

The action plan adopted in January 2003 by the Commission further to Action 1 of the synthesis of the 2001 Annual Activity Reports includes a proposal to set up a permanent interdepartmental group to ensure better coordination and cohesion between Commission departments.

Nevertheless, the Commission will continue to evaluate all possible options for organising framework programmes and research programmes with a view to achieving Community objectives and ensuring efficient, coordinated management.

124. Some problems, which are identified in the Annual Activity Reports, have been encountered in terms of IT systems quality. Overall, however, the Commission assesses the level and quality of IT support as sufficient for guaranteeing the legality and regularity of operations. In particular, it considers that significant improvement in the provision of IT support has been achieved in many areas during FP5, but also as compared to FP4.

The Commission accepts however that further integration of its IT systems would have improved the efficiency of the management of FP5 indirect RTD actions. The Commission has recognised for FP6 that a greater and earlier level of investment is required and has made the necessary resources available for the development and maintenance of a fully integrated system for FP6.

125. This common IT system is a highly modular system that can be used for future framework programmes with the necessary modifications. It entered into service progressively through 2003 and will be fully deployed in 2004. It now remains for each Directorate-General to define and schedule its migration to the common IT system for FP6.

126. The Commission has started to apply the Court's recommendation. The new IT system conceived for FP6 provides for electronic exchange of information between the various partners (external participants or Commission departments). The total disappearance of paper is now a technical possibility, but an appropriate legal framework still has to be established.

127. The Commission agrees that the RTD framework programmes must be implemented according to a common set of principles and procedures. However, in line with the basic orientation of the administrative reform of the Commission, each Directorate-General and programme is to remain responsible for its detailed design and implementation of internal control.

In compliance with the Commission's Standard 15 for internal control 'Documentation of procedures', significant efforts have been undertaken to remedy the shortcomings identified since 2001. Delays in finalising certain procedural manuals have now been made good.

128. The Commission underlines that the deficiencies in internal controls pointed out by the Court did not have had material implications for the legal and regular execution of the framework programme. Nevertheless, the audit work done by the Court is valid since it points to specific problems which the Commission has already addressed or will address in the future.

129. The Commission accepts that the incidence of errors remains an important issue. With a view to reducing the risk of errors, an action plan drawn up following the synthesis of the 2001 Annual Activity Reports has been implemented and is monitored on a regular basis.

Nevertheless the *ex post* audits carried out by the Commission (or on its behalf) result in less frequent cases of errors and determine lower rates of overdeclaration by final beneficiaries. Given the significantly larger number of audits carried out under the Commission's responsibility, broad conclusions should be based on the results of the Commission's audits as documented in the Annual Activity Reports.

130. Further efforts will be made to guarantee that the Commission's procedures are sufficiently standardised within the RTD framework programmes and adequately documented within each Directorate-General and programme.

131. The Commission will continue its efforts in the areas indicated by the Court.

132. The Commission will continue its *ex post* audit efforts, adapting its methodology to the requirements under FP6.

During the FP5 programme period, the Commission has intensified its audit activities significantly, defining an overall audit target of 10 % of contractors during an RTD framework programme.

133. The Commission takes note of the Court's recommendation concerning the monitoring of internal control systems.

134. In addition to the internal reporting to senior management, the Commission provides, as required by the legal basis, an extensive reporting to external users such as programme committees, external advisory groups or monitoring panels.

The Commission's internal reporting to Directors and (deputy) Directors-General is characterised by the different roles and responsibilities of decentralised and centralised management functions within the Directorates-General and FP5 programmes. Due to the decentralisation and increase of management responsibility of Directors of operational programmes, the Commission Reform also increased the need for reporting at the directorate level. Formal reporting is however just one out of several communication tools used in the management of the framework programme.

The Commission's Internal Control Standards were effective for only part of the period covered by the Court's audit. This has to be taken into consideration when assessing the findings presented by the Court. The deployment of the common IT system for FP6 will help to address the shortcomings in standardisation identified by the Court.

135. As regards the overall monitoring of programme implementation, the legal requirements defined in Decision No 182/1999/EC (of the European Parliament and of the Council of 22 December 1998) and the decisions adopting the specific programmes are complied with by the Commission.

The establishment of harmonised internal control standards has contributed to the regular production of management reports in addition to those required by the rules.

136. The Commission will continue to focus on ongoing improvements to management, setting clear objectives and clear priorities, backed by efficient human and financial resources management. In particular, the Annual Management Plan (AMP) is a management tool which the Commission established within the framework of activity-based management (ABM) and the strategic planning and programming cycle (SPP).

With this system it will be possible to evaluate, during the year and in particular when the Annual Activity Report is drawn up, whether planned actions have been completed and, accordingly, whether the objectives to which these actions contribute have been met.

137 and 138. The organisation of departments responsible for research is fully in line with the principles of the Commission's administrative reform. Hence the direct involvement of various Directorates-General contributes to mutual enrichment with other Community policies, whereas application of internal

control standards promotes greater harmonisation throughout the Commission.

With a view to reducing the administrative burden resulting from the FP5 rules, both for itself and, above all, for recipients, the Commission has established an action plan based on its synthesis of the 2001 Annual Activity Reports. The principles selected for the purpose of defining FP6 also provide the expected simplifications.

Regular monitoring by the Commission of compliance with targets, using the instruments set up by the reform, confirms that its efforts have been successful.

139. The Commission has made some significant simplifications with the introduction of FP6. It will ensure that the framework programmes' management model continues to develop, including when the proposal is put forward for the future FP7, focusing in particular on streamlining procedures.
