

**Commission Services' response to the recommendations
of the 5-Year Assessment Panel for the**

THE JOINT RESEARCH CENTRE

These comments have been prepared by officials of JRC and represent their personal views on the conclusions of the 5-year assessment. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the views of the Commission or JRC.

This document constitutes the JRC management response to the overall 5-Year Assessment (1995-1999) of the JRC activities, provided in conformity with articles 5 of both Council decisions relative to the 5th RTD Framework Programme. The following comments of the JRC management integrate the most recent developments, notably in the context of the European Research Area. As regards the overall 5-Year Assessment of the Framework programme, the Commission has expressed its position in the document COM (2000) 659, 19 October 2000.

It will be recalled for completeness that the JRC institutes' Scientific Audit, carried out in 1999, was taken into account by the individual Expert Panels when assessing the institutes, as well as by Professor S.Barabaschi, chairman of the JRC 5-Year Assessment Panel, in preparing the overall report on the JRC.

The JRC 5-Year Assessment report is complete, self-standing and comprehensive enough to require no other documentation for understanding. The JRC management wishes to thank all the members of the 5-Year Assessment Panel for their dedicated work and the efforts they invested in carrying out the assessment.

**1. Brief analysis of the implementation of recommendations made in the
previous 5-Year Assessment (1992-1996)**

The general recommendations contained in the previous 5-Year Assessment Report (prepared by Professor J.M.Rojo) were all implemented, except where doing so would be impossible under existing Commission rules. The follow-up provided by the JRC is commented in chapter 6 of Professor Barabaschi's report, whose concluding remarks are shared by the JRC management.

Where JRC Institutes were concerned, out of 114 recommendations, 99 had been implemented or were in course of implementation by February 1997. Of the remaining 15, 13 were under further consideration and two had to be rejected. All recommendations were carefully considered by all levels of JRC management and for the most part implemented immediately. Certain administrative matters however are inherent to the Commission's Staff regulations. After discussions with the Commission's administrative services, more efficient application of the rules was found to be possible and that, together with more delegation of responsibility to local directors, has allowed simple and more rapid routines to be employed. For example, Institute Directors were able to demonstrate much improved recruitment results stemming from a more rapid decisional system on the one hand, and a better anticipation and forward planning of needs on the other.

2. Recommendations arising from the present 5-Year Assessment report

Professor Barabaschi's report, which is rich in advice, findings and recommendations, provides a synopsis of the latter in the final section. With reference to the nineteen conclusive

recommendations contained therein, the JRC wishes to present the following comments and observations.

1. The new JRC mission fits perfectly with present needs and it should be maintained and developed, bearing in mind also the implications of the European Research Area (ERA).

Supporting the European policy making and implementation process with scientific and technical reference, the mission of the JRC, is a timely, modern original and much needed mission. Of course it is not possible for an organisation, even several times the size of the JRC, to be competent right across the many disciplines in these areas, nor is it actually necessary. It is important, however, that through excellence in selected disciplines related to the different issues, the JRC stays a respected member of the scientific community. In fact, the mission is not one which is feasible alone: the real challenge is to tackle it in a new type of network system such as proposed by the Commission's communication on the European Research Area, i.e. the European Scientific and Technical Reference System.

2. Create a new advisory structure and try to establish at all levels advisory groups relevant for the new JRC mission.

A Communication to the Commission to be adopted before the end of 2000 will address, among other things, the reform of the JRC advisory structure. In order to promote a strengthened user orientation, the approach will combine the existing Board of Governors with a High Level User Group.

At institute level, User Advisory Panels have been established in high priority areas, but have not been implemented in all institutes, in which use is made of individual experts. The point is being re-examined in the light of the new mission and for improving transparency in the JRC.

3. Complete the restructuring process of the Institutes as soon as possible. Adapt structure better to mission by redistribution of relevant functions at SAI to EI and ISIS. Rename the Institute for Advance Materials to better match its mission in clean and safe technologies. Try to avoid further perturbations over the following five years to increase stability.

The first stage of an extensive restructuring of the JRC was carried through before the start of FP5. It was however felt unwise to attempt all changes at once, as experience with a new configuration had first to be gained before arriving at a suitable fit. After further consideration, and in the light of recommendations of the Scientific Audit and of the Five-Year Assessment, a further series of adjustments is now under way. A task force has been undertaken and it is clear that there is an urgent need to complete the restructuring following the new mission.

4. Develop a closer integration between Institutes at all levels, to promote JRC as a single corporate organism: IPTS can play an important role in supporting research and in corporate planning activities. Further develop the "Cluster" concept and allocate some funding for certain networks of projects with JRC-wide implications.

This problem is recognised and the roles of each institute have to be stabilised before interfaces will become effective and evident to all. The IPTS capacity for supporting strategy development and forward-looking exercises at the other JRC institutes is to be used much more in the future and a plan is being developed in that direction. In particular, in addition to reviewing the IPTS work programme to strengthen its links with the JRC core competence areas, it is also important to set up a relevant function visible in the organigramme, and corresponding changes are foreseen. The cluster concept is being strengthened and brought further forward via the series of strategy documents recently worked out by the JRC to prepare for FP6.

5.Preserve and develop the competence “pillars” as means of matching core competencies to present needs and future demands. A sufficient amount of high-level research is important to maintain existing competencies and to extend them into forthcoming areas.

The acceptance of the principle and details of the JRC competence “pillars” (or core competences) is a useful step forward in clarification of the JRC’s present abilities and future possibilities. The importance of preserving competence by maintaining a sufficient amount of high-level research in what is largely a services supplier, has been a central concern of the Rojo evaluation, of the Scientific Audit and of the present report. Institute directors are fully conscious of this and the matter is under constant review in the Programmes Directorate.

6.In all Pillars, apply and develop further the traditional JRC skills in measurement reliability, validation expertise, the analysis and understanding of complex processes and in technical inspection.

These concepts are indeed the JRC trademarks and are in focus in all the present research strategies of the JRC and in preparing for its future activities.

7.Develop exploratory research into a forward-looking tool and earmark a suitable level of funding for that purpose. The ISIS model is recommended.

In the new mission, the objective is clearly fixed in providing support to Commission services and EU policy-makers. To be effective, scientists must remain competent and flexible and retain the respect of those with whom they must network. This demands the conditions mentioned above, tempered by a careful selection process to ensure that research does not stray too far from present needs or future possibilities. It is agreed that the ISIS Exploratory Research activities are a well-balanced and managed example of what can be done in this area.

8.Improve the awareness of the need for networking. Identify knowledge gaps and outside opportunities for the benefit of supporting policies, especially considering a developing ERA. The idea of a “virtual” JRC, networking with organisations in Member States is strongly supported.

Networking has been under scrutiny at the JRC for a number of years, and good networking with the outside exists in most areas of endeavour. The “Virtual JRC” idea is already in evidence in a number of institutes, and IAM, ISIS and IPTS are particularly developed in that respect. Other institutes, if less in evidence, are all developing strongly in that direction. The JRC’s view on the importance of networking is presented in the recent strategy document “A networked organisation: towards an extended JRC”.

9.Ensure strong collaboration with Universities in all of the JRC core activities. Examine the possibility of extending the successful ITU “open laboratory” concept to other JRC institutes.

The ITU “open laboratory” concept has proved to be popular and successful. This will be examined for possible application elsewhere.

10.Try to increase the level of PhD students, post-doctoral fellowships and visiting scientists. Try to associate staff with local universities, technical colleges, etc., and consider sabbatical detachment of staff. The JRC’s role in education is useful and, where practised, is well appreciated.

Visiting senior scientists have always been a feature of the JRC and paid from an allocation in the staff budget. Commission schemes for receiving students have been paid from various central budgets in the past but are now at the discretion of institute directors. The value of the JRC to the EU in training young scientists and their value to the JRC afterwards is well recognised and is a focus of attention. The detachment of staff to other organisations has been the exception rather than the rule and this will be encouraged on a case-by-case basis.

11.Improve the visibility of the JRC and its achievements. Promote technology transfer of certain JRC results. A virtual “trading floor” might be established on the web and developed as a possible European Technology Exchange. Explore the possibility of an interface with Indirect Actions.

Public image is a constant preoccupation of JRC management and is an area that has been considerably strengthened in the reorganisation. Recently the JRC has put in place a number of measures to stimulate technology transfer and develop a culture of innovation under the European Technology Transfer Initiative (ETTI). For example, a private seed capital fund partially dedicated to the JRC’s results has been set in place via a contract established with a Berlin-based venture capital management company, to raise a 20 Mio€ fund from external seed capital. The suggestion of a “trading floor” will be thoroughly examined and, if possible, implemented.

12.Allocate more resources to the management of interfaces, particularly regarding the institutional customers, the various services of the Commission.

These relationships are seen as an essential element in meeting the JRC mission and increased attention will be paid to the proper development of this aspect of its services.

13.Project managers should increase their perception of the outside world and what it can offer in terms of knowledge or provide as deliverables (either as research or products). This information should be constantly updated.

Recognised by the JRC management as a prime responsibility, the function of acquiring knowledge of what others do and use it is essential to the concept of the “networked organisation” the JRC intends to develop into. The rate at which this change in culture takes place at execution levels needs to be increased.

14.Promote project managers’ training to efficiently deal with their customers and manage their projects. The users’ needs have to be fully understood, appreciated and satisfied, the results presented in simple and user-friendly language and a reliable post-delivery service provided.

Recently a number of actions have been undertaken to improve the level of career training. Project management is being developed within the TQM initiative of the JRC and will be fully employed at all institutes within the present programme period. Understanding user’s needs and the presentation of results in a user-friendly language have received much attention in the recent past, but a substantial space for improvement still exists.

15.A more detailed task break-down structure (TBS) of the Work Programme needs to be reached; develop effective project management tools for identifying resources and milestones for project control and for guiding the overall research plan.

This is entirely in line with present programme management policy and is now being developed at institute level.

16.Identify “best practices” both in scientific units and in administrative and managerial functions and, where appropriate, apply them over the whole JRC. Cut or simplify procedures wherever possible and increase efficiency.

This is an extension of exercises already in hand as can be seen in the success of the simplified recruitment procedures. The introduction of TQM across the organisation is rapidly showing its benefits and improvement teams have started their work in many critical areas.

17.The JRC is strongly advised to justify its actions not only in terms of “independence”, but also based on the highest quality and integrity, as well as timeliness, of its scientific and technical output.

Agreed. JRC's independence from national or commercial interests and external pressures, which acts as a natural force of attraction to many users and partners, must be accompanied by the highest reliability and quality of its research, products, and advice.

18. The important work in the nuclear domain on safeguarding, plant safety and lifetime, and on the safe and acceptable management of waste must not be allowed to decline in view of the one third of the Union's electricity being produced by fission reactors.

The essential character of this work is fully appreciated both for the present and for the future. JRC has a number of areas of internationally recognised "centre of excellence" status in the domain, and its engagement in this domain will be actively pursued at all levels.

19. Where still valid, the recommendations of the Scientific Audit should be completed as soon as possible.

This is being followed up, although most outstanding actions were superseded in implementing the new mission and the subsequent reorganisation. Recommendations from the Scientific Audit are treated simultaneously with those arising from the 5-Year Assessment, as explained below.

3. Recommendations derived from the individual 5YA institute reports

In order to be able to compare and more easily manage the wealth of valuable recommendations collected by the Institutes in the Scientific Audit and in the 5-Year Assessment exercises, these have been sequentially gathered in synoptic tables, along with the response provided by the institute management. A code has been assigned to the JRC response, associated to the degree of compliance that can be realised or pursued, as follows:

- A: recommendations on which the JRC management agrees; A* when already implemented
- B: recommendations which are found interesting, but which require more reflection, or are difficult to implement
- C: recommendations which the JRC find impossible to implement, or have not been accepted.

Out of a grand total of 162 recommendations resulting from both exercises, none has been classified as "C", 22 have received a "B" status, and the rest (i.e. 75% of the total) are "A". Of these, 30% have already been implemented. The synoptic tables collecting this evidence constitute the primary reference of the JRC "Action Plan for the follow-up of the 1999 Scientific Audit and of the 5-Year Assessment recommendations", which has been set up for this purpose in the aftermath of these two major evaluations.

