EVALUATION OF RESEARCHERS AND RESEARCH UNITS AT C.N.R.S.

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The position of Centre national de la recherche scientifique (C.N.R.S.) in French research (1)

- **History and mission**
  - Founded in 1939 by governmental decree, CNRS has the missions:
    - to evaluate and carry out all research capable of advancing knowledge and bringing social, cultural, and economic benefits for society
    - to contribute to the application and promotion of research results
    - to develop scientific information
    - to support research training
    - to participate in the analysis of the national and international scientific context and its potential for evolution in order to develop a national research policy
The position of Centre national de la recherche scientifique (C.N.R.S.) in French research (2)

Disciplinary fields

- C.N.R.S. covers all fields of scientific research:
  - mathematics, physics, Earth sciences and astronomy
  - chemistry
  - life sciences
  - humanities and social sciences
  - environmental sciences and sustainable development
  - information and engineering sciences
The position of Centre national de la recherche scientifique (C.N.R.S.) in French research (3)

**Staff and laboratories**

- 30000 people, including
  - 11600 permanent researchers (to be compared to the 77000 university staff professors and assistant professors)
  - 14400 engineers and technicians
- 1260 laboratories or so called "research units", about 90% of which are joint laboratories (either co-ruled by a university or by another research organisation, e.g. the "Commissariat à l'énergie atomique" (Agency for atomic energy), INSERM (National institute for health and medical research), …)
The position of Centre national de la recherche scientifique (C.N.R.S.) in French research (4)

Budget

- 3.08 G€, including 513 M€ of proper resources (2007)
  - about 1/4 of French public spending on civilian research
  - about ¾ of the budget is to pay salaries
The position of Centre national de la recherche scientifique (C.N.R.S.) in French research (5)

- Relative weight of CNRS support in national scientific production:
  - 66% of French publications outside medical research (2003) or 75% of French publications in physics, Earth sciences, astronomy and chemistry were at least partly supported by C.N.R.S.
  - About ½ of C.N.R.S. publications were written in collaboration with laboratories outside France
  - A backbone for French scientific research: CNRS full-time researchers are an essential support of the research teams they belong to.
The "Comité national de la recherche scientifique" (National committee of scientific research) (1)

Composition

- An assembly of more than 900 experts working ~1/5 of their full time for CN, who periodically examine C.N.R.S. laboratories and researchers.
- CN is renewed every four years, and every member can have his/her term renewed only once.
- 40 disciplinary sections of 21 members
- works essentially for CNRS, but half of its members belong to University staff, or to other institutions (C.E.A., the Observatories, etc.)
- each section has 3 representatives of technical or administrative staffs. Globally, 2/3 (i.e. 14 of the 21 members) are elected by the community. The last seven members are nominated by the board of C.N.R.S. directors.
Advisory evaluation of laboratories

- evaluating the research of all laboratories and "research units" either CNRS-owned or associated with CNRS, on a four-year basis (typically 400 labs per year + superstructures)
- giving an assessment of all creations and suppressions of laboratories, the nominations of directors, the need for financial support or personnel
- analysing the general situation of researches and perspectives, to make a general prospective report

- The director of CNRS makes the decisions!
The "Comité national de la recherche scientifique" (National committee of scientific research) (3)

Advisory evaluation of researchers

- CNRS full-time researchers have to write a report on their activity every 2 years. CN reads them (typ. 6000 reports per year) and makes an advisory assessment of the activity of every researcher. A complete report is written to him/her with criticism or encouragements. The examining CN section can ask for rapid re-examination of any individual file, or ask that measures be taken by the CNRS administration.

- At five different stages in a career, a CNRS researcher can compete for promotion. It is again every CN section that selects a list of those to be promoted. The director of CNRS usually follows the proposed order.
The "Comité national de la recherche scientifique" (National committee of scientific research) (4)

Recruitment

- The sections of the CN act each as the primary board of examiners for the recruitment of C.N.R.S. permanent researchers, for total annual recruitment of ca. 400 young researchers. Each section has to examine candidates for ~10 permanent positions and makes an ordered pre-selection of about 20 candidates (among sometimes several hundred). The final choice is made by boards chaired by CNRS directors, who usually follow the order initially given by the section.
The "Comité national de la recherche scientifique" (National committee of scientific research) (5)

Total cost of evaluation (2003 - recruitment and local evaluation committees not included):

- traveling expenses 587 k€
- salaries* 1497 k€
- material support 305 k€
- TOTAL 2389 k€

* only time passed during the sessions, not the time spent for evaluation outside; 29% of these expenses are provided by the University or other institutions, 71% are provided by CNRS itself.

- Average cost per file: 200 €.
The "Comité national de la recherche scientifique" (National committee of scientific research) (6)
The "Comité national de la recherche scientifique" (National committee of scientific research) (7)

Advantages

- consistency of the missions (as shown by the previous diagram)
- collegiality helps in making choices not directed by too short-term priorities
- comparisons can be made on a national scale
- all researchers are examined several times > continuity

Drawbacks

- having a partitioning in 40 disciplinary sections may be dangerous for interdisciplinary research. Additional interdisciplinary sections have been set to cover some sensitive interdisciplinary fields.
- too much work (1/5 a full time) for international experts, and a less accurate view of research made abroad.
C.N.R.S., A.N.R., A.E.R.E.S. and the present French policy for scientific research

- CNRS, still a RPO but for how long?

  - A new funding agency “Agence nationale de la recherche” (ANR) was established in 2005
  - An « orienting » law on scientific research, passed in 2006, established a new evaluation agency « Agence d’évaluation de la recherche et de l’enseignement supérieur » (AERES)
  - A "letter of mission" sent in July by president Sarkozy says that: "As for research, you will make our research organisations evolve more towards a model of project funding agencies. You will place the universities at the centre of our research effort, notably by reinforcing their responsibility in the management of joint laboratories".
A new evaluation agency: AERES

- AERES is the « Agence d’évaluation de la recherche et de l’enseignement supérieur » i.e. « Evaluation agency of research and higher education »
  - It will evaluate all public funded laboratories and research units in France on a larger scale than CN: 400 (real) labs to be evaluated every year at CNRS now become 1000. Complete implementation expected in 2008 only.
  - AERES does not allow any other institution to carry on the evaluation of laboratories
  - AERES shall not deal with the evaluation of individuals
Evaluation at CNRS with AERES (starting in 2008)

Reserved for AERES
Evaluation of
Laboratories
(4 year period)

Evaluation of
Researchers
(2 year period)

Left to Comité national
Scientific situation and
Perspectives
(every 4 years)

Recruitment
of researchers
(every year)
Evaluation of researchers and research units at C.N.R.S.

**Past**
- Evaluation with very little thematic constraint, but on a national scale
- Appraisal of researchers’ initiatives
- Recruitment based on personal excellence, more than on adequacy to pre-defined programs

**Future**
- Who knows?