

# **SECTION 04**

## **Criteria**

For the sake of transparency and fairness, it is important that the criteria used by the sections be brought to the attention of candidates for competitive exams or promotions, as well as to the researchers and units evaluated. This note specifies these criteria for section 04, whether it serves as an assessment and promotion body or as an eligibility panel.

The aim of this note is to enable the assessed researchers and candidates for the competitions to prepare their applications under the best conditions. It is sufficiently explicit, without being exhaustive: There is no standard profile for recruitment or promotion or a single evaluation scale.

# Periodic evaluation of researchers

### Criteria common to all researchers

The assessment is based on the quality and originality of scientific contributions, particularly as manifested in publications in peer review journals, oral communications in conferences and seminars.

Evaluation also includes consideration of others dimensions of the research activity, such as teaching activities, doctoral training, dissemination and outreach of scientific knowledge, coordination and administration of research, valuation and technological transfer.

Thematic or geographical mobility is a positive factor during evaluation, although it is not an end in and of itself.

#### **DR2** researchers

A more demanding level is applied to the quality of scientific production. Taking responsibility at local level (team, network or project management, etc.) is also an important criterion.

#### **DR1** researchers

In addition to the DR2 criteria above, an even more demanding level of requirements is applied to recognition and taking responsibility at national and international level.

# Researcher level progress

### Criteria common to all researchers

See periodic assessment/common criteria.

### **CRHC Grade Progress**

In addition to the common criteria, the researcher's scientific autonomy is also assessed, his or her ability to take initiatives, the quality of integration and supervision of other researchers and implementation of his or her research program.

## Progress to the DR1 grade

A more demanding level is applied to the quality of the candidate's scientific output. International influence and capacity to develop new themes or research strategies are important criteria. Taking responsibility for the coordination and/or the administration of research is also an important criterion.

## Progress to the DRCE grade

A very demanding level is applied to the quality of scientific production, the candidate's international influence and taking of responsibility. Scientific recognition beyond the specialty is appreciated.

## **Recruitment of researchers**

### Criteria common to all grades

See periodic assessment/common criteria.

#### Recruitment at CR level

Selection of candidates first relates to their scientific qualities because these determine long-term potential. It then relates to their research program and the suitability of their skills for this program. The section looks with interest at candidates presenting a thematic mobility within and outside the candidate's initial discipline. The section pays particular attention to the geographical mobility carried out by the applicant throughout his or her career.

According to the candidates' experience, the section also assesses the candidate's scientific autonomy, his or her ability to take initiatives independently and to supervise students and other young researchers.

#### Recruitment at DR2 level

Quality scientific production is expected. A high level of responsibilities in terms of leadership of a team or of research, scientific engagement and initiative is expected. Particular attention is paid to the candidate's ability to supervise doctoral candidates. This can be achieved in particular by obtaining accreditation to conduct research or equivalent experience. The candidate's national and international influence also plays an important role in this level of recruitment.

Candidates are invited, if they wish, to mention events that have had an impact on their professional career.

#### Recruitment at DR1 level

A higher level of demand than at the DR2 level is applied to the quality of the candidate's scientific

output and scientific influence. International recognition and the capacity to develop new research themes or strategies are expected. Taking responsibility for training and/or the administration of research is also an important criterion.

## Additional comments

### **Scientific contributions**

Given the variety of research practices across to the different domains, there is no uniform criterion for "measuring" the scientific production of researchers. This is what justifies the notion of "peer review" which involves a comparison, as objective and fair as possible, of necessarily different profiles. Recognition of the quality and originality of scientific contributions by the national and international community also plays an important role.

Scientific production partially assesses publications in peer-reviewed journals, communications at conferences or seminars. But other criteria can be added such as the influence of researchers visible, among other avenues, through the responsibility for organizing conferences and other scientific meetings, engagement in national and international scientific bodies or projects, etc.

#### Other criteria

The section is careful to take into consideration multiple criteria, including all aspects of the research activity. To the criteria previously provided, in particular, we add the value of results in the form of patents or software, and implementation of technological instruments or platforms, databases or digital tools within a community or interdisciplinary interfaces, the contribution to the development of new research areas and the associated risk-taking.

These general criteria, valid for all assessment processes, are weighted according to the levels of recruitment or promotion concerned. Some of them may not be applicable to the evaluation of an individual, but they are taken into account at the level of the teams and laboratories.

# Monitoring of unit activity

The section issues an opinion on the units that is sent to the CNRS management. The opinion is based in particular on the file that the unit provided to the HCERES, the evaluation report of the latter and, if applicable, the report of the section representative in the visit committee.

### Scientific activity

Evaluation of the unit focuses firstly on scientific production, originality and the impact of the themes developed. It also takes into account the development of a controlled research strategy within the unit, as well as the quality of interaction with its local, national and international environment. The section assesses the suitability of the unit's objectives to the scientific, human and material resources available in the unit to achieve them, as well as its participation in research programs or contracts. It assesses the synergy created by the policy practiced within the unit, beyond the simple juxtaposition of individualities, teams or resources.

### **Opening of the unit**

The section assesses the involvement of the unit in teaching and training, in particular the professional training of doctoral students and their monitoring after the thesis. It also evaluates the unit in its activities of popularization, dissemination of scientific culture, valuation and technology transfer. It takes into account the quality and interest of external collaborations to the unit and participation in the coordination of the local, national and international scientific community. The section considers that unit managers and team leaders have a particular responsibility to assist the mobility of researchers who demonstrate interest.

## **Internal organization**

The section is attentive to the quality of the laboratory's scientific life - internal advisory consultative bodies, seminars, forecasting days, structuring, etc. - and the management of human resources - researchers, teaching researchers, engineers, technicians, administrators, young researchers... It assesses the suitability of the laboratory's training plan both for its scientific strategy and for the interests of these various stakeholders. The section reviews the implementation and management of technical resources that can be used within the unit or within its local environment.