# Assessment Criteria and Recommendations for Section 02

December 5, 2025

We present the criteria used by Section 2 of the National Committee for Scientific Research during the 2025–2029 term, for all types of assessments, while explaining the section's expectations in each case. Towards the end of the document, we provide specific recommendations for applicants to open positions and career advancement. The section's thematic keywords can be found on the National Committee's website.<sup>1</sup>

The section seeks to conduct scientific assessments that are tailored to the situation and disciplinary, institutional, and personal practices of candidates, in a supportive manner. In particular, if applicants wish to disclose it, the section will take into account any information about situations that may have an impact on their past or future careers and professional activities

The assessment takes into account the professional experience (measured since the beginning of the thesis, excluding any career interruptions of which the section is aware), as well as the expectations for the position or promotion sought. For career advancement, the evaluation pay particular attention to the period since the last grade advancement (or promotion to a DR position).

This document is not a list of all the research-related activities that *one* person is expected to perform, but rather all activities carried out collectively by all persons whom the section may be required to evaluate. Thus, except for the scientific output, no single criterion is deemed essential. For example, if a researcher makes a significant contribution to scientific advances, this may compensate for a more limited involvement in other facets of the profession.

The assessment criteria follow the CNRS roadmap for open science, which defines some core principles for research assessment.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>https://www.cnrs.fr/comitenational/english/section.php?sec=2

<sup>&</sup>lt;sup>2</sup>In French, page 12 of https://www.science-ouverte.cnrs.fr/wp-content/uploads/2019/11/Plaquette\_Science-Ouverte\_18112019.pdf

## 1 Criteria and Associated Recommendations

## 1.1 Scientific Output

This is the first point under consideration for any kind of research assessment. The applicants should explain the publication practices running in their research community regarding, e.g., authors ordering or preferred publication venues.

#### 1.1.1 Journals and Conference Proceedings Publications

The assessment is qualitative and takes several aspects into account: originality, interest, difficulty and scope of contributions, visibility and dissemination of the results, level of contribution in the case of co-authors, etc.

The section will endeavour, particularly in the case of applications to open positions, to read some of the applicants' contributions.

Recommendations. Regarding 'predatory' and 'author-pay' journals, the applicants should follow the joint recommendations<sup>3</sup> for open science publication by the scientific board of INS2I together with former sections 6, 7, and 51 of the National Committee and with sections 27 and 61 of CNU. In particular, the section will expect to see an explanation if there are any publications in journals with 'predatory' editorial policies.

#### 1.1.2 Research Artefacts

By research artefacts we mean softwares, experimental implementations and frameworks, datasets and corpora, formal proofs, etc. These artefacts are an integral part of research and are of particular interest in an open science process. They are scientific products in their own right and, as such, are fully taken into account in the section's assessments. Their assessment is based on originality, stability, usability, reproducibility, maintainability, audience, and impact criteria.

*Recommendations.* As recommended<sup>4</sup> by the Scientific Board of INS2I, the presentation of scientific artefacts may rely on the recommendations of the Inria Evaluation Committee<sup>5</sup>, followed by a more detailed description.

It is highly recommended to provide a pointer to a permanent public repository (such as a git server, an archive of mathematical proofs, or Zenodo for instance)—unless some non-disclosure agreements prevent it, in which case we will need to know about it.

The role played by the researcher and the degree of their involvement should be described. This may include, for example, (co-)development, doctoral or post-doctoral supervision, or scientific consultancy for the research support staff who carried out the development.

 $<sup>^3{</sup>m In}$  French https://www.cnrs.fr/comitenational/csi/reco/Recommandations/INS2I/CS-INS2I\_Recommandations\_revues\_predatrices\_commune.pdf

<sup>&</sup>lt;sup>4</sup>In French https://www.cnrs.fr/comitenational/csi/reco/Recommandations/INS2I/CS-INS2I\_Recommandation\_Science-ouverte.pdf

<sup>&</sup>lt;sup>5</sup>In English, Section 4 of https://inria.hal.science/hal-03110723v1

Some indicators for the actual use of the artefact in the scientific community or in the industry are welcome. This can for instance be the inclusion as a component or dependency of a larger project, the exploitation of a dataset, or the reuse of a theory or proof scheme.

When applicable, the distribution of artefacts (openness, documentation, portability, deployment, etc.) may be taken into account for their evaluation.

#### 1.1.3 Patents

Patents, if exploited, must appear in the 'transfer' section. If they are not exploited, they will be considered as secondary publications. The scope of the patent filing—e.g., national, European, international—should be given.

## 1.2 Peer's Recognition

The visibility and recognition within a scientific community can mainly be assessed through

- invited talks at conferences, international schools, and seminars;
- conference programme committees and journal editorial boards;
- thesis or habilitation juries, especially abroad;
- awards and distinctions;
- scientific expertise;
- to some extent, the submission and management of large-scale funded projects.

This criterion is of heightened relevance for senior positions.

Recommendations. Regarding invited talks, applicants are invited to distinguish between plenary talks and tutorials at major conferences, invite-only scientific meetings, and more confidential events. Regarding multi-tier program committees, contextual information on the exact role and tasks is expected.

## 1.3 Collaborations

Several types of collaborations are considered by the section, including

- scientific collaborations;
- project management;
- participation in local, national or international collaborative projects;
- participation in multi-, inter- or trans-disciplinary projects.

Recommendations. Large-scale projects, collaborations, or networks that do not beneficiate from institutional frameworks and funding may be presented. In this case, the context, organisation, etc. should be explained for their assessment.

The precise role within the project is important: principal investigator, management of a part of the project, or simple participant. A description of the scientific outputs and achievements of the collaboration is a plus.

## 1.4 Research Management

Collective duties, especially the administration and management of research activities, are of significant importance for more senior positions. These responsibilities may vary in importance; we give a few examples below for illustrative purposes.

Major Responsibilities (generally expected for a promotion to DR1 or DRCE):

- responsibilities within a CNRS institute or a university management team;
- head of a laboratory;
- participation to a national advisory and evaluation body (CNU, CoNRS, CE Inria...);
- head of a GdR or some other national or international scientific association;
- submission and management of a multi-site European project;
- head of an evaluation committees (e.g., ANR);
- depending on its importance, head of another research structure;
- depending on their importance, deputy head of one of the above entities.

#### Other Important Responsibilities (generally expected from DR2 applicants):

- head of a research team or group of teams;
- submission and management of an ANR collaborative project (or other collaborative project, with larger-scale projects falling into the above category);
- management of industrial contracts;
- participation to representative bodies within universities;
- participation to evaluation committees (e.g., ANR).

The importance of each example above should be adjusted according to the actual activities carried out, and according to the size and administrative complexity of the entity. For especially important responsibilities, it may be more appropriate to request an assessment from CID  $50^6$ .

Recommendations. We require both qualitative and quantitative information: we expect a description of the activities carried out as part of the responsibility (these activities may indeed vary greatly depending on the local context), and if possible an estimate of the time devoted to each duty, for example in days per year.

#### 1.5 Supervision and Teaching

**Supervision.** Supervision at the doctoral, post-doctoral, or Master's level is not too relevant for CRCN applications, but becomes highly relevant for applications to more senior positions. In the case of co-supervisions, a quantitative estimate as a percentage is expected.

<sup>&</sup>lt;sup>6</sup>https://www.cnrs.fr/comitenational/english/cid.php?cid=50

Recommendations. The assessment of supervision is qualitative. In addition to the scientific outcomes of the supervision, this assessment may take into account the duration of the thesis, the career outcomes for former doctoral or post-doctoral researchers, their peers' recognition, or other contextual information provided in the application.

**Teaching.** In addition to the research training and research-based teaching that may be delivered within Master's programmes or research schools, the applicants are invited to describe their involvement in the transmission of disciplinary knowledge at all levels. The way the individual's research permeates their teaching will be particularly appreciated by the section.

Recommendations. As always, the section expects a qualitative and quantitative presentation of teaching activities that allows for an assessment of the investment in the activity and its impact. In particular,

- from a qualitative point of view, please differentiate, for example, between creating a new course and re-using an existing course, please explain the type of teaching (audience, level), and please point to the teaching material developed at this occasion;
- from a quantitative point of view, the annual number of hours for each course (in 'heures équivalent TD' if delivered in France) and the number of students in attendance are expected. In the case of applicants with a large teaching activity, a table summarising the different courses, with the total number of teaching hours for each year, may greatly facilitate reading.

## 1.6 Transfer, Outreach, Industrial Contracts, Partnerships

This involves assessing the efforts made to demonstrate the value of research work to society. Thus, depending on the field of research, the efforts made to promote and transfer research to other entities, be they academic, public, associative, or industrial organisations, may be an important assessment criterion. Scientific outreach may take several forms: publications in popular magazines, media appearances, conferences and public events, etc.

*Recommendations.* As always, we exhort the applicants to provide qualitative and quantitative information; for example by distinguishing between the entire design of a mediation activity and the running of ready-made activity.

In order for the section to assess transfer activities (when they are non-confidential, for example in the case of industrial contracts), the nature of the contract, the participants, the subject of the contract, its duration and its achievements should be explained, with links to reports where possible and, where applicable, the amounts. For example, 'CIFRE' PhD contracts are viewed favourably.

Consultancy activities may be taken into consideration, provided they contribute to scientific activities.

## 1.7 Mobility

In its assessments, the section takes into account geographical, thematic, and functional mobility, whether chosen or imposed. Thus, the section views geographical mobility favourably, as well as thematic mobility (not essential, but an asset), and diverse scientific collaborations (for example, a strong network of international collaborations resulting in joint publications may compensate for a lack of geographical mobility).

In line with the CNRS's national low-carbon strategy, multiple short stays abroad (e.g., for conference or jury participation) are not deemed relevant. Geographical mobility involves extended stays in a different host institution or a change of affiliation, and differs from long or recurring research visits, and even more so from short research visits.

Finally, while thematic mobility is viewed favourably, the section is aware of and takes into account the risks involved and the impact it may have on scientific productivity.

## 1.8 Research Proposal

A research proposal is valuable, even for mid-term assessments where it is not required. Among the criteria, let us mention the relevance, importance, originality, feasibility of the scientific project, its position in the local, national, and international scientific context, etc.

## 2 General Recommendations

Readability. Every application is reviewed by at least one member of the section, who is a researcher in computer science but not necessarily a specialist in the applicant's precise field. A gentle introduction to the scientific context is therefore needed in order to help fully appreciate the perspectives and implications of the results. An application that makes an effort to explain and educate help to report on the researcher's perspective on their research activity and will thereby be all the easier to appreciate. As with any scientific communication, applicants are advised to provide intuitions, concrete examples, and illustrations for the objects of their research.

**Scientific Highlights.** It is recommended to indicate which publications and scientific artefacts are considered to be the most important and representative (over the evaluation period for periodic evaluations). Depending on the applications, CNRS recommends a maximum of 7 to 10 such items, but a smaller number may suffice.

Please provide sufficient context for each one of these significant scientific outputs: for example, what scientific challenges do they address? How do they fit in a broader scientific landscape? What was the applicant's personal contribution? Which difficulties were encountered? How is the approach new or original? What is the impact of these results within the scientific community or beyond? Efforts to make the work accessible to non-specialists will be appreciated.

These selected research outputs are often read by the section's members; they must therefore be easily accessible online, which is anyhow required by the national open science policy. In the case of large-scale collaborative works, an indication of the nature of the applicant's contribution is desirable (e.g., based on the CRediT model<sup>7</sup>).

**Guidelines on the Size.** For CR and DR applications, as a rule of thumb (and to avoid excesses in either direction)

- the description of the research work should be up to 6 or 7 pages long, including at least one page of context, and approximately one page per selected scientific highlight,
- the proposed research programme should fit into approximately 4 pages, excluding the bibliography and the description (if relevant) of how the applicant would fit into the host teams.

Note that the assessment criteria described in this document can only be taken into account inasmuch as the relevant information can be found in the application file: please provide estimates of the individual participation in collaborative works, a self-assessment of software, quantitative estimate of the workload and qualitative descriptions of activities for management duties, etc.

## 3 Position-Specific Recommendations

#### 3.1 CRCN Positions

A guide for applicants to research positions is available from the CNRS 'service des concours' website.<sup>8</sup> We provide here additional guidelines specific to Section 2.

#### 3.2 Past Research Work

As pointed out in Section 2, research work should be presented in a manner that is accessible to all the Section's members. This presentation should also aim for concision (typically 6–7 pages). It is advised to highlight a small number of major scientific outputs. When these are publications, they must be available for download by the reviewers. For software and other research artefacts, please follow the indications of Section 1.1.2.

## 3.2.1 Research Proposal

The section recruits researchers with a long future career at CNRS. Their ability to develop independently a mature scientific project is a very important assessment criterion. The motivation and scientific positioning, the long-term vision and originality, the more concrete short-term objectives and the means envisioned to achieve them, the opportunities for collaboration, and how all this articulates both with the applicant's previous work and with the host team expertise, are all factors that will be taken into account.

<sup>&</sup>lt;sup>7</sup>https://credit.niso.org/

 $<sup>^8\</sup>mathrm{In}$  English https://carrieres.cnrs.fr/en/external-competitions-for-researchers-m-f/

CRCN candidates must explicitly list several CNRS laboratories they would like to join: at least two labs, ideally three. The research proposal may, of course, be adapted to the various proposed host labs. The applicants are expected to explain how those labs will provide a suitable environment for the research programme (typically through possible collaborations and a good alignment of the research programme with the host team's own research agenda, etc.). Please note that the choice of which lab will host which successful applicant is not made by the section, but later by the CNRS Informatics Institute.

#### 3.2.2 Additional Data

The applicant's file should include an academic curriculum vitae, listing the positions they've held and including a list of their works and achievements. If other sections are deemed relevant (peers' recognition, collaborations, research management, transfer and outreach, teaching, etc.), these should also be included. Awards and other prizes (if any) may be mentioned in a section entitled 'Awards,' providing information that will help the section to assess their importance. Finally, it is advisable to mention any career breaks that the applicant deems relevant.

The reports on the PhD manuscript and defence may be joined with the application.

#### 3.2.3 Reference Letters

Integration. Letters from the proposed host teams or labs, focusing on the applicant's integration and the relevance of their research proposal for the team and lab's scientific project, are welcome. These letters may be collective and should be succinct, approximately one or two paragraphs per applicant, and focus solely on how they would assimilate. There is no point trying to prepare the work of Section 2 by 'pre-ranking' or 'pre-selecting' among the applicants to the lab or team, since Section 2 establishes a national ranking of applicants for CNRS as a whole and not for the enrolment into a specific lab. Again, the final choice of which lab will host which successful applicant is not made by the section, but later by the CNRS Informatics Institute.

**Support**. Support letters may also be written by scientific personalities, either by people with direct experience working with the applicant, such as PhD or post-doc supervisors, or on the contrary by people able to provide an independent insight into the scientific project. We wish to limit letters of support from scientific personalities to at most three letters per applicant.

**Process.** No letters of either kind is required. The letters will not be taken into account by the section when establishing the shortlist of applicants invited for interviews. The letters may be communicated as specified by the CNRS 'services des concours.'<sup>8</sup>

#### 3.3 CRHC Promotions

The CRHC rank was created at CNRS in 2017 and the section is in charge of assessing applications for this promotion.

A research proposal (c.f. Section 1.8) is expected.

One may apply to both DR2 positions and CRHC advancement at the same time. Being promoted to CRHC is not detrimental to a concurrent or future application to DR2 positions.

The section does not accept reference letters for these applications.

#### 3.4 DR2 Positions

The general criteria are the same as for CRCN positions. The research proposal is normally broader in scope and has a collective dimension, which may include PhD students along with other researchers or postdoctoral fellows.

The section will place particular emphasis on the criteria from the sections 'peers' recognition' (Section 1.2), 'collaborations' (Section 1.3), 'research management' (Section 1.4), and 'supervision' (Section 1.5).

Up to at most three letters of support from independent scientific personalities may be submitted, following the same procedures as for CRCN positions; this is not a requirement. In case of a change of hosting laboratory, a letter from the new laboratory expressing its support for the applicant's integration may also be sent.

#### 3.5 DR1 and DRCE Promotions

The assessment for promotions takes into particular account the activities since the last promotion (or recruitment). However, the entire career is also considered (inasmuch as the information is available in the application file). It is therefore useful to reflect on the entire career.

While the quality of scientific results still plays an important role, the contributions to the higher education and research institutions (through management duties, student supervision, scientific outreach, transfer, etc., as described in sections 1.3 to 1.7) carries significant weight.

A research proposal (see Section 1.8) is required for such a promotion.

We do not wish to receive reference letters for these promotions.