SECTION 10: Proposed Criteria

Micro- and Nanotechnologies, Micro- and Nanosystems, Photonics, Electronics, Electromagnetism, Electrical Energy

Researcher profiles vary widely, which requires evaluation criteria that account for the many dimensions of the profession. Two aspects are considered particularly important by the section: **(i)** the quality, impact, and originality of research topics, along with the researcher's creativity and willingness to take risks; and **(ii)** involvement in collective activities. Researchers are encouraged to highlight the strengths of their career path by clearly explaining their contributions and level of involvement in the work presented.

The following sections provide further details on the criteria that can help frame the assessment of the quality of the work carried out. **Meeting all criteria is not required.** Moreover, evaluators will consider the influence of the researcher's environment and the trajectory of their career. The section therefore invites researchers to provide any relevant scientific, material, or personal context that may inform the evaluation.

1. Periodic Evaluation of Researchers

Mid-term (5 semesters) and full-term (10 semesters) evaluations are based on the preparation and submission of an activity report covering the relevant evaluation period. This report should be concise and exclusively focused on the evaluation period (with the exception of the publication list included in the appendix for promotion or recruitment requests; see §2). Only the full-term report should include research perspectives for the next ten semesters.

The section requests that the mid-term report not exceed 15 pages and that the full-term report be limited to 30 pages (excluding the bibliography, which should be placed in the appendix). The report should situate the researcher's work within their team and host laboratory, as well as within a national and international context, and highlight the main achievements across all activities. It is essential to clearly describe the researcher's role and personal contributions to the various projects and actions presented.

1.1 Common criteria for all applications (listed without hierarchy)

- *Research work during the evaluation period*: Notable scientific findings, significant results; description of personal contributions.
- *Quality of scientific output*: Regularity, dynamism, and diversification of scientific production.
- *Contribution to open science*: Publications, experimental data, software.
- *Integration into the team and host laboratory*: Participation in the life of the laboratory/site.
- *Involvement in funded academic projects* (e.g., ANR, European projects): Nature of contributions, level of involvement, budget; participation in drafting submitted but unfunded projects.

- *Quality of collaborations*: Internal, local, national, and international partnerships; participation in networks.
- *Involvement in contracts and valorization activities*: Role in non-academic partnerships.
- *Quality of supervision and training*: Supervision of non-permanent staff (interns, PhD students, postdocs, etc.) and permanent staff; career outcomes of supervised personnel.
- *Participation in thesis and HDR committees*: Membership in scientific committees, organization of conferences, and editorial activities.
- *Teaching, training, and scientific outreach*: Engagement with the general public, schools, policymakers, etc.
- *Scientific project*: Context, risk-taking, positioning relative to the state of the art, ambition, and strategy to achieve proposed objectives.

1.2 Additional Criteria Specific to Grades

It is not necessary to meet all of these criteria, which remain indicative.

CRCN Researchers

- Common Criteria §1.1
- Consolidation of the research project that led to recruitment
- Evolution and prospects of the research project
- Taking on scientific or administrative responsibilities

CRHC Researchers

- Common criteria (§1.1) and criteria for CRCN researchers
- Scientific influence/recognition
- Involvement in research administration

DR2 Researchers

- Common criteria (§1.1) and CRCN researchers
- National and international influence
- Evolution of research themes, risk-taking, new themes
- Ability to direct research and federate a scientific project
- Training of colleagues, ability to advance the scientific careers of young colleagues
- Responsibility/management of scientific teams (with daily scientific management)
- Responsibility/management of teams/groups (with notable administrative aspects), laboratory/department management
- Responsibility or establishment of platforms (technological or software)
- Research administration (within the laboratory and on the national/international stage)

It is recommended to define the entity in which responsibilities are exercised (project, team, department, platform, etc.), its scope and environment (size, interactions, etc.), and to detail their role in this entity at the scientific and managerial levels, and in promoting the deployment of the team's potential.

DR1 Researchers

- Common criteria (§1.1) and DR2 researchers

- Ability to foster interactions with their environment
- Contribution to the emergence, development, and structuring of research activities while maintaining a balanced sharing of responsibilities
- Development of a prospective and original vision of their scientific field

DRCE Researchers

- Common criteria (§1.1) and DR1 researchers
- Scope of scientific contributions
- National and international recognition
- Role in structuring local, national, and international research

2. Promotion of Researchers

The criteria are identical to those for periodic evaluation but also take into account the outcomes of previous work. Note that specific attention will be paid to the dynamics of the research project since the previous promotion/recruitment. An exhaustive list of scientific outputs (journal articles, international conferences, patents, software, book chapters, monographs, edited books) over the entire career should be provided in the appendix.

3. Recruitment of Researchers

It is not necessary to meet all of these criteria, which remain indicative.

3.1 Access to CR Grade

- Quality of scientific career and previous research contributions
- Autonomy in the scientific career since the PhD and in building the project
- Quality and relevance of the project, positioning relative to the state of the art
- Feasibility, identification of necessary means and equipment for its realization
- Quality of the audition, including presentation and exchanges with the jury
- Argumentation regarding the desired assignment

3.2 Access to DR Grade

- Quality of the scientific project: originality, relevance, risk-taking, positioning relative to the state of the art
- Significant scientific results and quality of scientific output
- Ability to direct research and federate around a scientific project
- National and international influence, involvement in communities
- Thematic or scientific mobility, diversity of previous experience, interdisciplinarity
- Responsibilities for teams, platforms, laboratories, or research governance bodies
- Valorization actions
- Knowledge dissemination and training actions
- Quality of the audition, including presentation and exchanges with the jury

4. Request or Renewal of Emeritus Status

The main criteria considered are:

- Quality of scientific activity
- Project for the emeritus period and planning of deadlines
- Sustainability of the research theme within the host laboratory during and beyond the emeritus period
- Means implemented for the transmission of expertise within the host laboratory, transmission of scientific contacts and national and international responsibilities (technical committees, conference steering committees, editorial responsibilities, etc.), and capitalization of skills (research data, writing a monograph, etc.)
- For the renewal of an emeritus period: assessment of the previous period based on the above criteria

5. Request for Delegation

Applications will be evaluated with particular attention to the following points:

- Quality of the research project, scientific context. Candidates are invited, if they wish, to mention events that have impacted their professional career
- Taking on significant responsibilities in research supervision (e.g., laboratory management, coordination of European projects, etc.)