



Supervision Manual

Good practice guide for the supervision of research and engineering staff in the early stages of their careers

Institut d'Estudis Espacials de Catalunya (IEEC)

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1. General introduction

Supervision is essential to ensure the quality of scientific and technological activities, support professional development and facilitate the successful integration of people joining teams at the Institut d'Estudis Espacials de Catalunya (IEEC).

In an environment characterised by highly specialised technical work and participation in international projects and consortia, a clear and constructive supervisory relationship contributes both to individual progress and to the successful delivery of projects.

This manual establishes common good practice guidelines for the relationship between supervisors and supervisees. It is primarily intended for researchers in the early stages of their careers—in particular, predoctoral and postdoctoral staff—and, where applicable, engineering staff who require specific support during their induction or professional development. It also serves as a reference for those carrying out supervisory duties at the IEEC.

Supervision is understood as a relationship based on shared responsibility, communication, respect, scientific integrity and the gradual acquisition of autonomy. These guidelines form part of the IEEC's commitment to the Human Resources Strategy for Researchers (HRS4R) and the principles of the European Charter for Researchers.

2. Principles guiding supervisors

2.1 Integration and induction

For newly recruited staff, the supervisor will provide a structured induction to help them understand the context of their work, the project objectives, their contribution to the team and the main working arrangements.

The supervisor will encourage their participation in meetings and facilitate access to the resources, tools and documentation needed to carry out their work with increasing autonomy.

As part of this induction, the supervisor will indicate where relevant institutional documentation can be found through the IEEC's internal channels, including HRS4R information, the Welcome Manual, applicable policies and procedures, and documentation on good practices and scientific integrity.

2.2 Support for scientific and technical activities

Support will be adapted to the experience and needs of new staff. The supervisor will help translate the project's overall objectives into understandable and achievable objectives and tasks, clarifying priorities, deadlines and quality criteria.

Monitoring will be regular, constructive and focused on improvement. Where applicable, particular attention will be paid to:

- the scientific and technical validity of results;
- the robustness and suitability of the methods used;



- the quality and traceability of code, models, data and documentation;
- the reproducibility and proper documentation of the work.

2.3 Professional development

The supervisor will encourage regular discussions about the supervisee's professional development, interests and training needs. Where appropriate, they will facilitate participation in publications, conferences, training activities, collaborations and professional networks, taking into account the position, the project and the resources available.

These discussions may also help identify strengths, areas for improvement and potential development opportunities, without necessarily requiring a formal individual plan in addition to the monitoring mechanisms already in place at the IEEC.

2.4 Working environment and well-being

The supervisor and supervisee will help maintain a respectful and healthy working environment that supports the proper performance of professional activities. The supervisor will seek to ensure that expectations, workloads and deadlines are reasonable and encourage open communication about work-related difficulties.

Where a situation requiring specific support or falling outside the scope of scientific or technical supervision is identified, the person will be directed to the appropriate institutional channels. The supervisor's role does not replace the IEEC's specialised services or procedures.

2.5 Communication and management of disagreements

Reasonable arrangements for communication and monitoring will be agreed from the outset, including the frequency of meetings where appropriate. Meetings should allow progress to be reviewed, questions to be resolved, difficulties to be identified and next steps to be agreed.

In the event of disagreements or incidents, both parties will seek to address them promptly, objectively and constructively. Where they cannot be resolved within the supervisory relationship, the institutional channels established by the IEEC may be used.

2.6 Scientific integrity and good practices

The supervisor will promote awareness and application of the IEEC's rules and good practices on scientific integrity, ethics, data management, intellectual property and any other matters relevant to the work performed. They will also inform the supervisee about available training activities and institutional resources and, within their duties, ensure that the work complies with applicable scientific and professional standards.

3. Interaction with supervisees: expectations and monitoring

3.1 Defining objectives and expectations

At the start of the supervisory relationship, work objectives, main responsibilities, quality criteria, relevant deadlines and the expected level of autonomy will be clearly explained. These elements may be reviewed as the project evolves or the supervisee gains experience.

3.2 Increasing autonomy and responsibility

Autonomy will develop gradually. The supervisor will provide closer support in the initial stages and adjust their involvement as the supervisee gains experience and the ability to make decisions and assume responsibilities in line with their category and position.. When errors occur, they will be used as opportunities for learning and improvement, within the limits required by quality, safety and project responsibilities.

3.3 Monitoring scientific and technical work

Monitoring will take into account both the results and the process followed to achieve them. Reviews should be based on clear criteria suited to the nature of the activity, considering, where appropriate, understanding of the problem, the choice of methods, interpretation of data and compliance with applicable scientific and technical standards.

3.4 Monitoring workloads and deadlines

Monitoring meetings may include a review of workloads, priorities and deadlines to identify potential imbalances and, where necessary, agree on reasonable measures for reorganisation or escalation to the appropriate people in charge.

3.5 Monitoring and communication

The supervisor will provide feedback on progress at intervals appropriate to the activity and the supervisee's experience. The supervisee, in turn, will report on progress and communicate sufficiently in advance any difficulties or incidents that may affect the work.

3.6 Incidents and complaints

Issues relating to supervision will be addressed, whenever possible, through dialogue between the parties. Where necessary, the formal procedures and channels available at the IEEC will be used, respecting the principles of confidentiality, impartiality and respect.



4. Responsibilities of supervisees

4.1 Commitment and professional attitude

The supervisee will take an active role in their learning and professional development, fulfil the responsibilities associated with their position and comply with applicable internal policies, procedures and rules.

4.2 Quality and integrity of activities

The supervisee will carry out their work with scientific and technical rigour, maintain appropriate documentation and apply the principles of integrity, ethics, traceability and reproducibility relevant to their activities.

4.3 Awareness of institutional documentation

The supervisee must become familiar with the institutional documentation needed to perform their work and consult the resources provided by the IEEC, including HRS4R information, the Welcome Manual, intellectual property policies, scientific integrity rules and other applicable procedures and policies. Where mandatory training activities on these matters are available, they must participate in accordance with the IEEC's instructions.

4.4 Work organisation and autonomy

The supervisee will organise their work responsibly, prepare adequately for monitoring meetings and actively work to develop their autonomy, seeking guidance whenever necessary.

4.5 Working environment and respect

The supervisee will contribute to a collaborative and respectful working environment, using the appropriate channels to communicate any work-related difficulties that may affect their activities.

4.6 Communication with the supervisor

They will maintain regular and transparent communication with their supervisor, reporting relevant progress and communicating promptly any difficulties, deviations or incidents that may affect the work or planned deadlines.

4.7 Conflict management and complaints

In situations of disagreement or conflict, the supervisee will participate constructively in seeking solutions and may use the established institutional channels where necessary.

5. Review and application of the manual

This manual provides a common framework of good practices and must be applied taking into account the nature of the position, the supervisee's experience and the characteristics of the project or activity. It may be reviewed periodically to incorporate experience gained from its application, staff contributions and developments in the IEEC's human resources policies and procedures for research.

6. Conclusion

High-quality supervision requires clarity, communication, trust and shared responsibility. Through this manual, the IEEC establishes a practical framework to support integration, professional development, autonomy and the quality of scientific and technical activities, in line with its HRS4R commitment and the principles of the European Charter for Researchers.