

ITN –Weaknesses from ESRs of 2014 Irish Proposals

What causes a proposal to fail badly? Below Threshold Proposals (<70 marks)

Criterion 1 - Excellence

1.1 Quality, innovative aspects and credibility of the research programme (including inter/multidisciplinary and intersectoral aspects)

Typical Weaknesses:

- The research objectives are not sufficiently specific and clear.
- The description of the research objectives fails to demonstrate a progress beyond of the state of the art, thus the innovative aspect of the research programme is not sufficiently defined.
- The project lacks scientific focus; it is not clear how the themes or the individual research projects fit together.
- The research methods are not described in sufficient detail so it is difficult to decide whether the methods planned are appropriate to answer the research questions.
- The inter/multi-disciplinary aspect of the programme is not demonstrated.

1.2 Quality and innovative aspects of the training programme (including transferable skills, inter/multidisciplinary and intersectoral aspects)

Typical Weaknesses:

- Innovative aspects of the training programme are not properly addressed and information is missing.
- Complementary training is not well designed since intellectual property rights, presentation skills, project management, academic writing, research ethics, entrepreneurship, career planning are not clearly addressed in the training programme.

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- The training programme is inadequately described and the measures undertaken to train the researchers and to monitor the progress of their project are not sufficiently elaborated.
- A personalized career development plan is not presented.
- Non-academic training mainly refers to training modules and individual coaching, and innovative product and IP development are underrepresented.
- e-learning modules (HiD) take up a large part of the training, in-person training with Q&A is neglected.
- The description of the training program at the non-academic participating organisations is unclear in terms of content and partial objectives.
- Training elements are not sufficiently concrete, e.g. the description of the network-wide training activities is insufficient.
- The proposal does not offer appropriate information on what and how the individual training will be carried out.

1.3 Quality of the supervision (including mandatory joint supervision for EID and EJD projects)

Typical Weaknesses:

- The expertise and supervisory capacity of the participants in multidisciplinary programmes is not explained in sufficient detail. Not all proposed supervisors demonstrate in the proposal their relevant supervision/mentoring experience.
- The description of the joint supervision lacks structure and a clear assignment of responsibilities and interactions.
- There are insufficient details on the non-academic contribution towards the supervision.
- The role of supervisors in the supervision of the training is not adequately determined and is unclear.

1.4 Quality of the proposed interaction between the participating organisations

Typical weaknesses

- The contribution to the research of each individual organisation is not sufficiently clarified.
- The role of non-academic partners is very generic and unclear.
- The exposure of the ESR's to different research environments is not described in sufficient detail.
- Exposure to the non-academic sector through secondments is not clearly assured for every ESR.

Criterion 2 - Impact

2.1 Enhancing research- and innovation-related human resources, skills, and working conditions to realise the potential of individuals and to provide new career perspectives

Typical Weaknesses:

- The proposal provides very limited evidence of a significant impact of the programme on the ESRs career perspectives; the potential to provide new job opportunities is based merely on assumptions of a future market change, not the current needs of the labour market.
- Novel career perspectives within the professional academic and non-academic community are described too generically.
- Employability aspects and the career prospects of the ESRs have not been made sufficiently clear.
- A lack of clear plans for acquiring complementary skills and for improvement of their entrepreneurial mind-set could affect negatively the career prospects and employability of researchers.

2.2 Contribution to structuring doctoral / early-stage research training at the European level and to strengthening European innovation capacity, including the potential for:

- a) meaningful contribution of the non-academic sector to the doctoral/research training, as appropriate to the implementation mode and research field**
- b) developing sustainable joint doctoral degree structures (for EJD projects only)**

Typical Weaknesses:

- It is not demonstrated that the cohort of researchers delivered by the network will have potential to enhance the innovation capacity of Europe.
- Strengthening European innovation capacity is unclearly substantiated in the proposal, due to the insufficient definition of the research and training programme.
- The impact goals (including the intention to start an enterprise) are vague and unclear.
- The proposal fails to demonstrate a meaningful contribution to structuring doctoral/early stage research training. An overarching European training goal is not well articulated.
- The contribution of the non-academic sector to the training is not sufficiently elaborated.
- The added value of the non-academic contribution is mainly limited to providing on-line tools (teaching course).

2.3 Effectiveness of the proposed measures for communication and dissemination of results

Typical Weaknesses:

- Only limited description of the communication and dissemination activities is provided; communication with the other partners and beyond is not sufficiently detailed.
- The communication and dissemination plan is created for internal use in the project, i.e. cover the communication between partners, supervisors and ESRs. The dissemination to the public is not convincingly presented and the outreach activities are insufficiently addressed.
- The proposal does not address targeting policy makers and politicians at national and the EU level, which would stimulate effectively the public dialogue.
- The consortium does not describe in sufficient details the goals of exploitation and plans for exploiting results and intellectual property issues are not addressed sufficiently.
- While the project describes a proactive public engagement strategy, insufficient information is provided about the content and framework. Furthermore, plans to assess and measure the effectiveness of these activities are not described in sufficient detail.
- Appropriate outreach/public engagement strategies are missing.

Criterion 3: Implementation

3.1 Overall coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources (including awarding of the doctoral degrees for EID and EJD projects)

Typical Weaknesses:

- The work plan is structured into five work packages, none of them dedicated to management, dissemination and/or communication of the results.
- The work packages content is insufficiently elaborated.
- Fellow's individual projects are lacking in detail.
- The planned secondments are not satisfactorily elaborated.
- The planned deliverables are not effectively presented (lacking a suitable description of their content) and do not provide sufficient means for monitoring the outcomes of the programme.

3.2 Appropriateness of the management structures and procedures, including quality management and risk management (with a mandatory joint governing structure for EID and EJD projects)

Typical Weaknesses:

- The network's management structures and procedures are not adequately described.
- The decision making and the overall quality control/management procedures are not sufficiently described.
- No student (ESR) representative is planned in the Supervisory Board.
- Risk mitigation strategies are insufficient and vague. They do not include contingency plans or problem solving mechanisms.
- No regular screening procedure for potential IP issues is in place.
- The technical aspects of how the joint PhD will be awarded are not addressed in sufficient details (EJD proposals).

3.3 Appropriateness of the infrastructure of the participating organisations

Typical Weaknesses:

- A description of legal entities and supportive administrative infrastructure is missing.
- The proposal lacks an adequate presentation of the available infrastructure; statements are very generic.
- Facilities available for hosting seconded students at the Partner Organisations are not described in sufficient detail.

3.4 Competences, experience and complementarity of the participating organisations and their commitment to the programme

Typical Weaknesses:

- The complementarity of capabilities among the partners have not been made sufficiently clear.
- There is insufficient detail on concrete responsibilities related to courses, training in transferable skills and involvement in general.

What causes a proposal to just miss the funding cut-off? Below Cut-Off Proposals (> 85 marks but not funded)

General comment: As we move to the top part of the ranking list, the comments from the evaluators become more specific, particularly in relation to the research theme/topic, and the comments become more “picky”. However, there remains some considerable overlap between the “weaknesses” identified in the below threshold proposals and those close to the funding cut-off.

Criterion 1 - Excellence

1.1 Quality, innovative aspects and credibility of the research programme (including inter/multidisciplinary and intersectoral aspects)

Specific Weaknesses:

- The state-of-the-art is given at a generic level and the original aspects of the research programme are not discussed in sufficient details.
- The proposal does not justify why the preparation of the ESRs research plan starts relatively late.
- The proposal does not develop a clear strategy to secure and enhance the inter-multidisciplinary approach of the project. This is important for securing the contribution of the proposed ETN to the current state of the art.
- The proposed research lacks innovative ideas.
- The presentation of the research methodology and approaches could have been described more fully, e.g. the research programme does not provide detailed information on the case studies.
- It is not fully clear which specific cutting-edge techniques and technologies will be available for training ESRs during their work in the non-academic setting.

1.2 Quality and innovative aspects of the training programme (including transferable skills, inter/multidisciplinary and intersectoral aspects)

Specific Weaknesses:

- The description of transferable skills is not very detailed.
- The details of the training e.g. those concerning transferable skills or network events are not elaborated upon in the proposal.
- The contribution of the non-academic partners to the training program is insufficiently described and the potential of the industrial partners to provide complementary skills training is not fully utilized.

- Three universities are not part of the consortium but they are supposed to participate in joint supervision of students with the commercial partners. This collaboration is not sufficiently described.
- The details on the enrolment of the ESRs hired by non-academic beneficiaries to the respective PhD programs are lacking.
- Innovative aspects of the training programme in light of existing programmes / networks / doctoral research trainings (including other ITNs) are not clearly addressed.

1.3 Quality of the supervision (including mandatory joint supervision for EID and EJD projects)

Specific Weaknesses:

- The proposal does not describe in sufficient detail the non-academic supervision.
- Qualifications of the industrial supervisors in view of the envisaged training scheme are not clearly substantiated.
- Specialization of the supervisors to be used in the project is explicitly described only in some cases.

1.4 Quality of the proposed interaction between the participating organisations

Specific weaknesses

- The particular role of each partner in the training programme is not sufficiently specified in the proposal.
- The roles of the partners participating in workpackages 1-3 are not sufficiently described.
- The research and training programme does not fully exploit the potential of the non-academic partners.
- Not all of the ESRs will profit to the same extent from secondments to the non-academic sector.
- The secondments proposed for some of the ESRs are too short for an effective multidisciplinary training.
- Work placements/internships are mentioned/envisaged as an integral part of the proposed training, but no specific organisations are mentioned.
- The internships at one non-academic partner are not described in sufficient detail; they are mentioned in general terms and not well-motivated in view of the targeted research and training goals.

Criterion 2 - Impact

2.1 Enhancing research- and innovation-related human resources, skills, and working conditions to realise the potential of individuals and to provide new career perspectives

Specific Weaknesses:

- The justification of the career opportunities based on demand for jobs and market orientation is not sufficiently addressed.

2.2 Contribution to structuring doctoral / early-stage research training at the European level and to strengthening European innovation capacity, including the potential for:

- c) meaningful contribution of the non-academic sector to the doctoral/research training, as appropriate to the implementation mode and research field**
- d) developing sustainable joint doctoral degree structures (for EJD projects only)**

Specific Weaknesses:

- The proposal does not explain in detail how a durable and structured training network will continue after completion of the programme.
- Comments on how the structure of the research training and capacity in Europe will be affected are missing.
- The contribution to structuring doctoral training at EU level is not taking into account other activities and initiatives and is therefore missing possible synergies.
- The contribution of the non-academic sector in the project is not clearly elaborated, and therefore its impact on the proposed doctoral training and the career prospects of the fellows is difficult to assess.
- Not all ESRs will be exposed to genuine intersectoral experience: for half of the ESRs, only 4-week internships at one of the industrial partners are envisaged.
- Secondments to the non-academic sector are typically shorter than those to the academic sector and often below 1 month duration. Thus, the contribution of the non-academic sector to the overall doctoral training remains quite limited. Career perspectives outside the field and outside research will not be enhanced.
- The project is mainly centred on basic science. The transmission to real world models is not sufficiently considered. Thus, it is not convincingly argued how the stated issues related to one of the Horizon 2020 Societal Challenges can be tackled in this project.

2.3 Effectiveness of the proposed measures for communication and dissemination of results

Specific Weaknesses:

- The individual events (including timing and participant's role) are not clearly evidenced.
- The dissemination plan starts relatively late, as it will only be developed after the first year.
- Although there is a clear list of dissemination activities, the proposal does not sufficiently detail how these activities will integrate key stakeholders (e.g. NGOs, public authorities, private organisations etc.) in the 'two way exchange' described in the proposal.
- Focused dissemination activities targeting large potential industrial users are mainly limited to invitations of their representatives to the summer schools and the last two annual meetings of the project.
- The use of existing external information platforms is not considered resulting in a substantial need for human resources devoted to communication.
- Outreach activities are not strongly coordinated at the network level, responsibilities are not yet specified.

Criterion 3: Implementation

3.1 Overall coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources (including awarding of the doctoral degrees for EID and EJD projects)

Specific Weaknesses:

- The research methodologies are not sufficiently addressed in the Work Packages' description.
- Some deliverables, namely publications and PhDs completion, are due at a very late date (months 60 to 65).
- Some subject-specific network-wide training events take place rather late in the proposed doctoral training cycle.
- The individual research project of one of the ESRs is presented with insufficient detail.
- The arrangements for quality management of the projects are not sufficiently laid out and no quantifiable milestones for assessing the quality of the individual projects are proposed.

3.2 Appropriateness of the management structures and procedures, including quality management and risk management (with a mandatory joint governing structure for EID and EJD projects)

Specific Weaknesses:

- The network and management structure, are not adequately presented. The management structure does not clearly show all responsibilities.
- The number of meetings, tasks and responsibilities of the General Assembly (the ultimate decision-making body) is inappropriate to provide smooth implementation.
- The proposed structure does not clearly assign responsibilities to individual boards.
- Specific responsibilities on the part of individual personnel for key tasks is not convincingly demonstrated.
- Measures for agile communications between all actors involved in such a complex network are not fully demonstrated.
- The proposal does not consider appropriately provisions for quality management
- Risk management and contingency plans are only briefly mentioned. Deciding about them during the project, as suggested, is insufficient.
- The risk management is mainly limited to the scientific aspects of the project.
- IPR strategies are not elaborated in sufficient detail.
- The recruitment process is not sufficiently detailed.
- The composition of the managing groups is not reflecting effectively balanced gender aspects.
- It is not clear from the proposal whether the revision and update of Personal Career Development Plan will be once or twice a year, which may be relevant for addressing potential risks in individual research project plans and adequate contingency measures.

3.3 Appropriateness of the infrastructure of the participating organisations

Specific Weaknesses:

- The capacity of one of the participating organisations is not sufficiently evident from the information provided.

3.4 Competences, experience and complementarity of the participating organisations and their commitment to the programme

Specific Weaknesses:

- One of the Partner Organisations commits to host only one ESR in its commitment letter. Yet, this institution is included as a planned secondment in the description of several different individual research projects.
- The exploitation of partners' complementarities is not clearly argued in the proposal.

Summary Table

| Section | Most Common Weaknesses (from ESRs and NCP's experience) |
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| 1.1 Research | <ul style="list-style-type: none"> • Unclear research objectives • State of the art poorly explained • Innovation/progress beyond the state of the art unclear • Poorly focused research theme • Lack of detail in describing research methodology, equipment/techniques/methods to be used • Lack of inter/multidisciplinarity • Gendered innovations not mentioned |
| 1.2 Training | <ul style="list-style-type: none"> • Training programme is unfocused and not clearly presented • Transferable skills poorly addressed esp. those related to innovation and entrepreneurship • Insufficient local training opportunities (at each ESR's host organisation) • Poorly thought-out network wide training opportunities • Poorly-time network wide training opportunities (too much at once) • Balance between local and network-wide training (including online training) is poor (too much of one, not enough of the other) • Non-academic contribution to the training is poor • No plans to use Personal Career Development Plans • Lack of detail on from where ESRs at non-academic hosts will receive their PhD • Poor explanation of how the training programme is innovative compared to existing programmes/networks (including previous ITNs) • All events closed to wider research community |
| 1.3 Supervision | <ul style="list-style-type: none"> • Lack of detail on supervision experience of the proposed supervisors • Unstructured supervision plans (including lack of clarity on preparation and monitoring of Personal Career Development Plans, no information on frequency/methods of student-supervisory team meetings) • Only one supervisor per ESR (no joint supervision arrangements) • ESRs have no non-academic co-supervisor • Role of the supervisors in the supervision of the training is unclear |
| 1.4 Interaction | <ul style="list-style-type: none"> • The role of each participating organisation (or some of them) in the research training programme is not clear • The role of the non-academic organisations is not clear and/or the programme does not fully exploit their potential • Not every ESR has a secondment to a different sector and/or the secondments are too short to have a meaningful impact (< 1 month) |
| 2.1 Career impact | <ul style="list-style-type: none"> • Proposal does not (or weakly) describe the impact of the programme on the ESRs' career opportunities • No mention of potential for careers outside of academia and how the programme will help them develop the required skills and explore these opportunities • Poor description of the effect of transferable skills training on the ESRs' career perspectives • No justification of how the potential career opportunities are linked to current and future labour market needs • No link to EU policies on research careers/research training |

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| 2.2 | Innovation and structuring training | <p>Innovation capacity</p> <ul style="list-style-type: none"> No/weak description of how the cohort of ESRs trained via the programme will have potential to enhance Europe’s innovation capacity No/weak mention of how the research programme will impact on Europe’s innovation capacity The relationship to the basic science being proposed in the programme to the “real world” problems of the H2020 Societal Challenges is poorly justified <p>Structuring training</p> <ul style="list-style-type: none"> Comments on how the proposed programme will structure doctoral/early stage research training in Europe are missing Potential synergies with other doctoral/research training programmes (at EU or national level) are not described The role of the non-academic sector in the training programme is limited, limiting the impact of the programme to structuring training at EU level. Comments on the lasting impact of the ITN (continuation after completion of the programme) are missing. |
| 2.3 | Communication, Dissemination, Exploitation, Public Engagement | <ul style="list-style-type: none"> Lack of detail on internal consortium communication methods Lack of detail on external communication/dissemination methods Poorly defined/lack of public engagement strategy Dissemination focuses on communicating with other researchers – there is no mention of other stakeholders such as e.g. policy makers, politicians, NGOs, private companies, public bodies Lack of detail on the goals and potential impact of exploiting the results of the project for societal/economic benefits (including exploiting any IP) Dissemination/public engagement events are poorly timed and/or only occurring in the country of the Coordinator – all countries/participants must have a role |
| 3.1 | Work-plan | <ul style="list-style-type: none"> WPs are only about research, with no WPs for management, dissemination/communication, training etc. The content of the WPs is poorly described (lack of detail on methodology) The descriptions of the Individual ESR projects (all or some of them) are lacking in detail – cannot understand precisely what they will do Details of secondments are unclear Deliverables are poorly defined and do not provide an effective means for monitoring the outputs of the programme Project is poorly timed, with some deliverables occurring too late or too early in the process Milestones for assessing the quality of the Individual Research Projects are missing (related to quality management) Coordinator leading too many WPs (capacity issue) |
| 3.2 | Management | <ul style="list-style-type: none"> Lack of detail on the management structures Only having one body to manage the entire project (the Supervisory Board). The SB has overall responsibility, but a number of smaller committees and a project management team should feed into the SB. Decision making and conflict resolution strategies are not clear No ESR representative on the Supervisory Board Poor gender balance in management structure Quality management is poorly addressed Risk management is poorly addressed (focuses only on research risks, not project implementation risks, or vice versa) No clear details of how and when potential IP will assessed during the programme, and by whom Information on the EJD admission and degree awarding processes is unclear Details of the recruitment process are insufficient |

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| 3.3 | Infrastructure | <ul style="list-style-type: none">• One or all of the organisations has not provided details on the appropriate available infrastructure for the research training programme (esp. for secondments at partner organisations) |
| 3.4 | Complementarity & Commitment | <ul style="list-style-type: none">• The complementarity between the capabilities of the organisations (in light of their tasks in the programme) has not been made clear• Inconsistencies between the stated role of Partner Organisations in the proposal, and the content of their Letter of Commitment |
| 5 | Participating Organisations Tables | <ul style="list-style-type: none">• All Beneficiaries and Partner Organisations need to show that they <u>currently</u> have the Operational Capacity (space, infrastructure, resources, personnel) to perform the tasks allocated to them (particular important for SMEs/start-up/spin-outs) |