Marie Sklodowska-Curie Actions (MSCA) Horizon Europe

DOCTORAL NETWORKS MSCA DN 2021
Novelties and rules for participation

22 de septiembre 2021

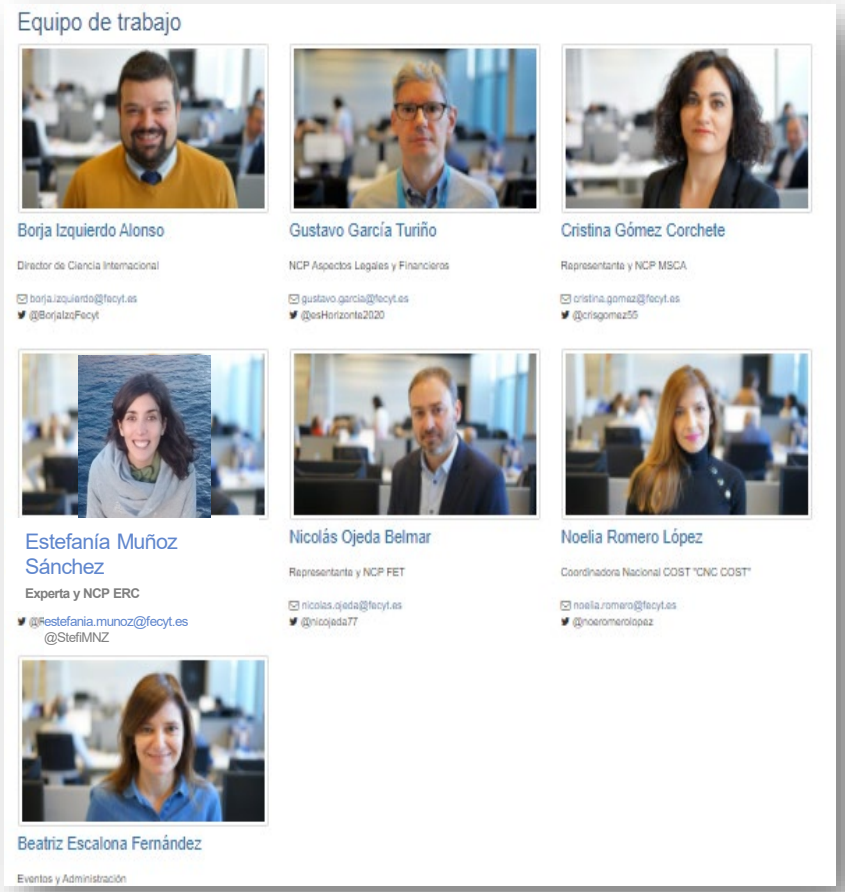
Cristina Gómez, Representante y NCP MSCA

GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN 20 años COMPROMETIDOS CON LA CIENCIA 2001-2021 FECYT INNOVACIÓN

Content

- MSCA Support
- MSCA General Aspects
- Doctoral Networks:
  - ✓ Objectives
  - ✓ Who can apply and how
  - ✓ Elegible researchers
  - ✓ Different modalities
  - ✓ Main features
  - ✓ Funding scheme
- Evaluation Criteria and useful tips

Oficina Europea - FECYT



https://oficinaeuropea.fecyt.es/

https://horizonteeuropa.es/

msca@fecyt.es

GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN

20 años COMPROMETIDOS CON LA CIENCIA 2001-2021

FECYT INNOVACIÓN

Apoyo NCPs MSCA: Horizonte Europa

- Sesiones principalmente **on-line**
- **Revisión propuestas**:
  - ✓ Doctoral Networks
  - ✓ Staff Exchange
  - ✓ COFUND
- Actividades de apoyo a **nivel de gestión** a proyectos COFUND concedidos

MSCA Spanish support team

Cristina Gómez

Representante y NCP

FECYT

Jesús Rojo

NCP

Fundación Madri+d

Maria Herrero

NCP

Agencia Estatal CSIC

Xavier Eekhout

NCP

FECYT

msca@fecyt.es

GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN

20 años COMPROMETIDOS CON LA CIENCIA 2001-2021

FECYT INNOVACIÓN

MSCA General Aspects

Pillar 1
Excellent Science

- European Research Council
- Marie Skłodowska-Curie Actions
- Research Infrastructures

Pillar 2
Global Challenges and European Industrial Competitiveness

Clusters
- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

- Joint Research Centre

Pillar 3
Innovative Europe

- European Innovation Council
- European innovation ecosystems
- European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area

- Widening participation and spreading excellence
- Reforming and Enhancing the European R&I system

MSCA General Aspects

- Gender friendly and inclusive
- Focus not only on dissemination, but on public outreach
- Synergies with European Policies, such as Green Deal, bridging ERA and EEA, RRI, C&C

MSCA: From Horizon 2020 to Horizon Europe

Horizon 2020

I. Training Networks (ITN)
Individual Fellowships (IF)
R. and I. Staff Exchanges (RISE)
COFUND
European Researchers´ Night

Horizon Europe

Doctoral Networks (DN)
Postdoctoral Fellowships (PF)
Staff Exchanges (SE)
COFUND
MSCA and Citizens

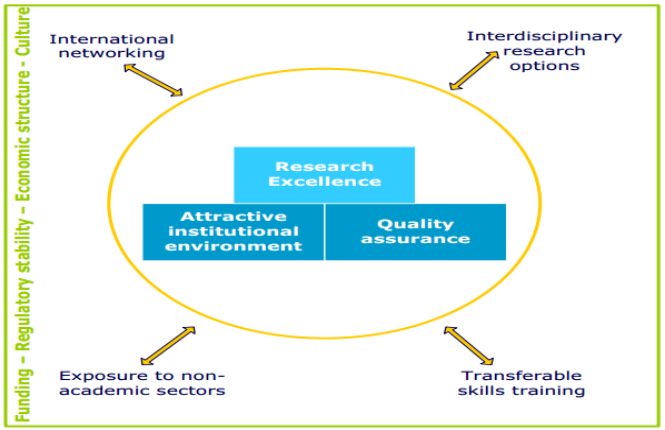
- Streamlined actions, clearer identity
- Simpler rules
- Demand management to maintain high quality
- Guidelines on supervision
- MSCA Green Charter

NEW

MSCA Doctoral Networks 2021: Objectives

- Networks training doctoral candidates, responding to **well-identified needs** in various R&I areas (bottom-up);
- Expose researchers to the **academic and non-academic sectors**;
- Offer research-related training, as well as competences relevant for **innovation and long-term employability;**
- Focus on **research and transferable kills**, (inter-sectoral secondments), **career development plan, supervision**
- Proposals can reflect **existing** or **planned research partnerships** among the participating organisations

Not a research project, it is a RESEARCH TRAINING PROGRAMME



MSCA DN 2021: Timeline

MSCA DN 2021: Who applies?

- **Consortia** of universities, research institutions and research infrastructures, businesses including SMEs, and other socio-economic actors

- At least **three independent legal entities**, each established in a different MS or AC

- Minimum of **1 beneficiary from a MS** (on top of this minimum, any entity from any third country can join; no minimum for associated partners)

MSCA DN 2021: Elegible participants

EU COUNTRIES

- Member States (MS) including their outermost regions
- The Overseas Countries and Territories (OCTs) linked to the MS.

NON-EU COUNTRIES

- Countries associated to Horizon Europe (AC)
- Low and middle income countries: See HE Programme Guide.
- Other countries when announced in the call or exceptionally if their participation is essential

SPECIFIC CASES

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organisations (IO):
  - International European research organisations are eligible for funding.
  - **Other IO are not eligible (only exceptionally if participation is essential)**
  - **IO in a MS or AC are eligible for funding for Training and mobility actions and when announced in the call conditions**

MSCA DN 2021: Elegible participants

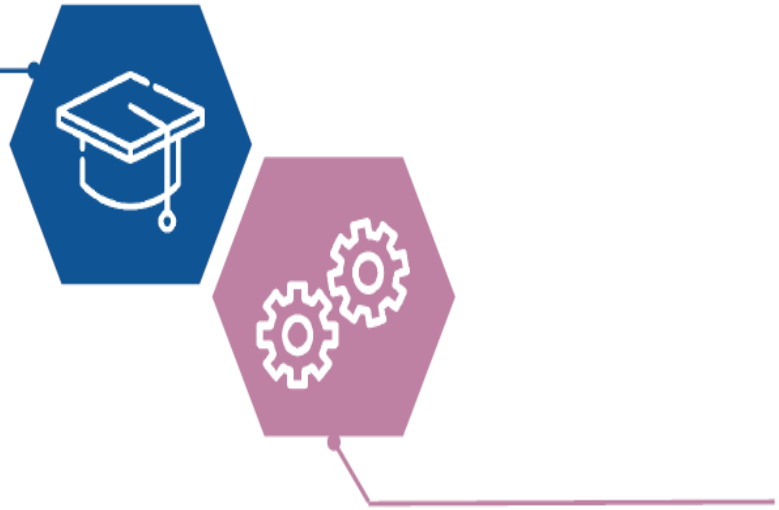
For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.

- **Países Asociados**: Iceland; Norway; Albania; Bosnia and Herzegovina; North Macedonia; Montenegro; Serbia; Turkey; Israel; Moldova; Faroe Islands; Ukraine; Tunisia; Georgia; Armenia.
- **Novedades:** United Kingdom, Morocco and Kosovo

Specific situation of UK: The UK is associating to the full Horizon Europe programme with the only exception of the EIC Fund (which is the loan/equity instrument of the EIC).

Switzerland: In 2021 Call, it is considered a third country.

MSCA DN 2021: Elegible participants



Academic sector

- ✓ public or private higher education establishments
- ✓ public or private non-profit research organisations
- ✓ International European Research Organisations

Non-academic sector

- ✓ any socio-economic actor not included in the academic sector

MSCA DN 2021: How to participate

	Beneficiaries	Associated Partners
Academic/Non-academic	✓	✓
Signatories of the Grant Agreement	✓	✗
Recruitment of researchers	✓	✗
Training and/or hosting of seconded researchers	✓	✓
Participation in Supervisory Board	✓	✓
Directly claim costs	✓	✗

Compulsory: Letters of Commitment for A.P + Letters of pre- agreement for DN

MSCA DN 2021: Elegible researchers

- Supported researchers must be **doctoral candidates** (not already in possession of a doctoral degree at the date of recruitment)
- Researchers must be **enrolled in a doctoral programme**, in at least 1 EU Member State/Associated Country (at least 2 for Joint Doctorates)
- **Any nationality**
- **Mobility rule**: must not have resided or carried out main activity in the country of the recruiting beneficiary for more than 12 months in the 36 months immediately before their **recruitment date**
- **Open, merit-based and transparent recruitment**

MSCA DN 2021: Modalities

Multi beneficiaries Actions to set up doctoral programmes, including:

Doctoral Network (Standard)

Training in academia and/or industry

Industrial Doctorates (ID)

Training in academia and industry, Joint Supervision

Joint Doctorates (JD)

Joint collaborations leading to a joint/multiple doctoral degree, Joint selection and supervision; pre agreement for joint degrees required

- ✓ - **MSCA Doctoral Networks are encouraged to lead to Industrial or Joint Doctorates**
- ✓ - **Different set ups explained in the GfA summary**

MSCA DN 2021: Main features

Size

- Up to 10 doctoral candidates (360 person-months) (standard)
- Additional 5 doctoral candidates, 15 (180 additional PM) for joint or industrial doctorates (incentive)

Duration

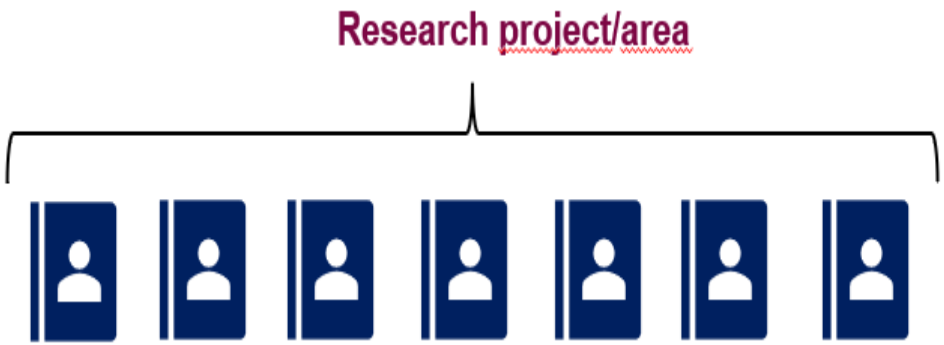
- **Programme**: max. 48 months
- **Fellowships**: between 3 and 36 months
- **Secondments**: worldwide, up to 1/3 of the fellowship duration
- **Industrial doctorates**: 50% in the non-academic sector; academic and non-academic organisations jointly supervising can be in the same country NEW

MSCA DN 2021: Main features

- **All beneficiaries must recruit at least one doctoral candidate**. They are required to host at their premises and supervise recruited researchers, or use associated partners linked to them to do so

- **Not more than 40.0% of the EU contribution may be allocated to beneficiaries in the same country** or to a single international organisation.

MSCA DN 2021: Activities



Training of researchers in the frameworkof a research project:

Network

+

Personal Career Development Plan

Training

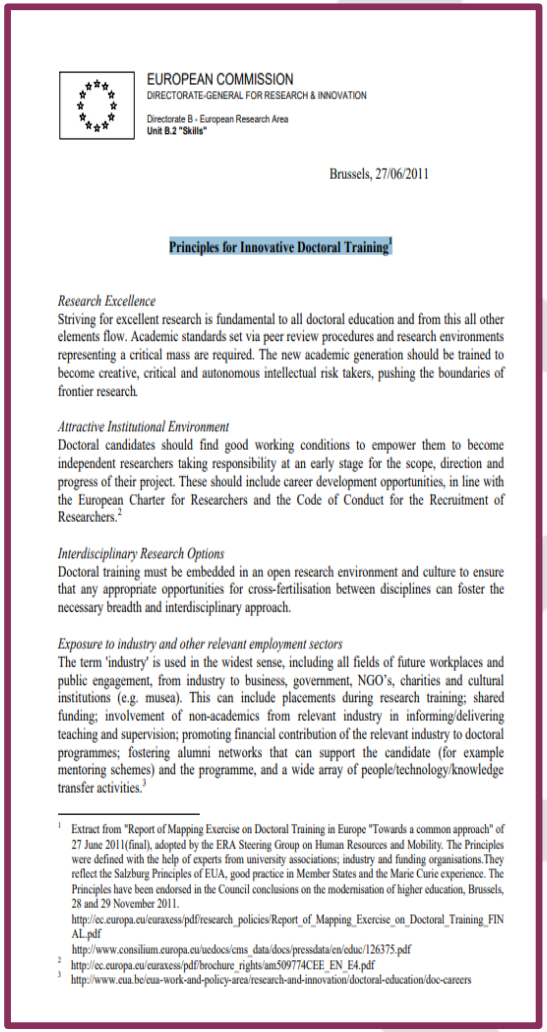
Research related issues

+

Transferable competencies

MSCA DN 2021: Secondments

- Relevant, feasible and beneficial for the researchers, in line with the project objectives.
- Variation in % time depending on the DN mode:
  - DN + JD: Up to **1/3** of the recruitment period (max. **11 months)** .
  - DN - **ID >= 50% sector no-academic (+ 1/3 of secondments at other institutions if needed)**
- During secondments researchers **keep their contracts** with the sending institution, which also pays their travel and subsistence expenses
- **Secondments of 6 months or less** = accommodation + travel **must** be paid by RTN Unit Cost
- Researchers receive **supervision and training** at the premises of the receiving beneficiary or partner organisation.



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR RESEARCH & INNOVATION

Directorate B - European Research Area
Unit B.2 "Skills"

Brussels, 27/06/2011

Principles for Innovative Doctoral Training[1]

Research Excellence
Striving for excellent research is fundamental to all doctoral education and from this all other elements flow. Academic standards set via peer review procedures and research environments representing a critical mass are required. The new academic generation should be trained to become creative, critical and autonomous intellectual risk takers, pushing the boundaries of frontier research.

Attractive Institutional Environment
Doctoral candidates should find good working conditions to empower them to become independent researchers taking responsibility at an early stage for the scope, direction and progress of their project. These should include career development opportunities, in line with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.[2]

Interdisciplinary Research Options
Doctoral training must be embedded in an open research environment and culture to ensure that any appropriate opportunities for cross-fertilisation between disciplines can foster the necessary breadth and interdisciplinary approach.

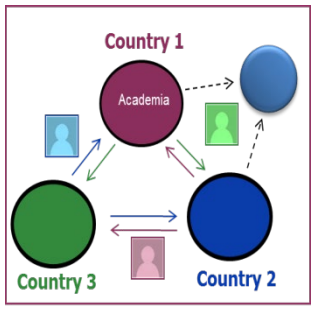
Exposure to industry and other relevant employment sectors
The term 'industry' is used in the widest sense, including all fields of future workplaces and public engagement, from industry to business, government, NGO's, charities and cultural institutions (e.g. musea). This can include placements during research training; shared funding; involvement of non-academics from relevant industry in informing/delivering teaching and supervision; promoting financial contribution of the relevant industry to doctoral programmes; fostering alumni networks that can support the candidate (for example mentoring schemes) and the programme, and a wide array of people/technology/knowledge transfer activities.[3]

[1] Extract from "Report of Mapping Exercise on Doctoral Training in Europe "Towards a common approach" of 27 June 2011(final), adopted by the ERA Steering Group on Human Resources and Mobility. The Principles were defined with the help of experts from university associations; industry and funding organisations.They reflect the Salzburg Principles of EUA, good practice in Member States and the Marie Curie experience. The Principles have been endorsed in the Council conclusions on the modernisation of higher education, Brussels, 28 and 29 November 2011.
http://ec.europa.eu/euraxess/pdf/research_policies/Report_of_Mapping_Exercise_on_Doctoral_Training_FINAL.pdf
http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/126375.pdf
[2] http://ec.europa.eu/euraxess/pdf/brochure_rights/am509774CEE_EN_E4.pdf
[3] http://www.eua.be/eua-work-and-policy-area/research-and-innovation/doctoral-education/doc-careers

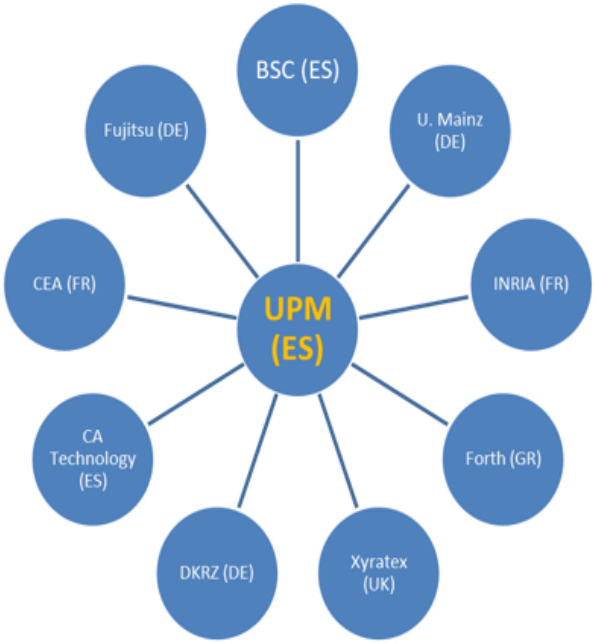
GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN
20 años COMPROMETIDOS CON LA CIENCIA 2001-2021
FECYT INNOVACIÓN

MSCA DN 2021: Example DN (previous ITN)

MSCA – ITN 2019: ETN mode



BigStorage



European Training Networks (ETN)

- **Minimum 3 beneficiaries :** 3 countries (MS/AC)
- **Max. 540 Re/Mo** for the network: **15 ESR**
- Max. **40%** of total budget to one country
- Participation of **non-academic sector** considered essential
- **Joint supervision** encouraged
- **Secondments up to 30%** of the researcher recruitment period to a different beneficiary, partn organisation, entity with capital link to a beneficiar

Important: In HE, max. recruited fellows is 360 P/M or 10 fellows. In H2020, it was 540 P/M or 15 fellows

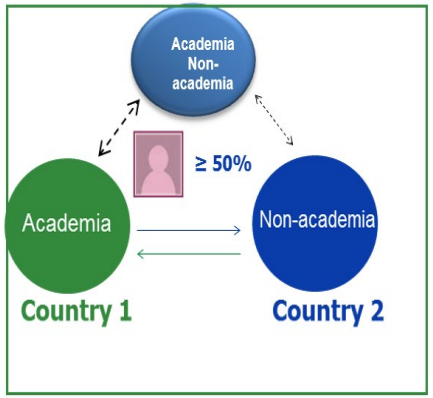
GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN

20 años COMPROMETIDOS CON LA CIENCIA 2001-2021

FECYT INNOVACIÓN

MSCA DN 2021: Example DN - ID (previous EID)

MSCA – ITN 2019: EID mode



AIRBUS
B2 – FR (40%)

Università Ca'Foscari Venezia
B1 – IT (40%)

ThalesAlenia Space
P. O – IT (20%)

European Industrial Doctorates (EID)

Applying to both

- **PhD enrollment compulsory**
- **> 50%** of time at non-academic sector: at beneficiaries or P.O.
- **Any intersectoral mobility between beneficiaries must be international**. The total secondment duration to P.O (irrespective of the sector) is limited to a max. of 30% o the fellowship duration.
- **Joint governance structure compulsory** (joint selection, supervision…)
- For academic institutions not offering doctoral degrees, **Universities should be included as P.O or entities with legal link**

2 beneficiaries

- 1 academic, 1 non-academic
- 2 countries (MS/AC)
- P.O any country, any sector
- Max. 180 ESR/Mo (**5 ESR**)

> 2 beneficiaries

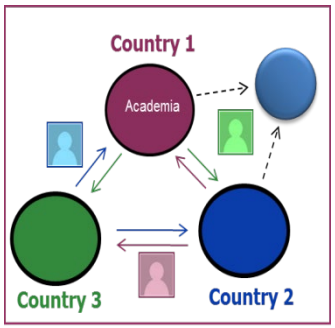
- 1 academic, 1 non-academic
- 2 countries (MS/AC), add. beneficiaries and P.O. any sector, any country
- Max. 540 ESR/Mo (**15 ESR**)
- Max. **40%** total budget to one country

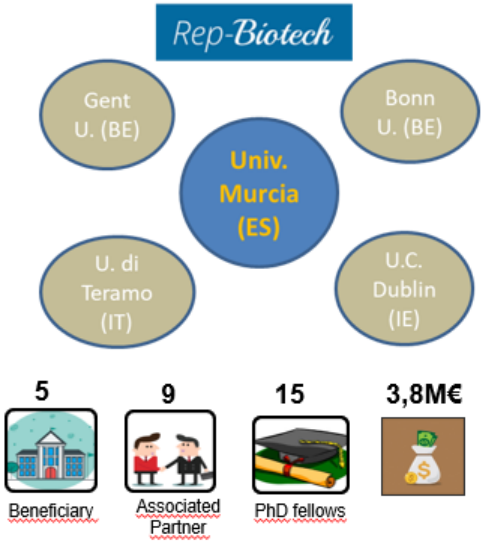
Important:
In HE, mínimum eligible consortium criteria is 3 entities (not 2 as in H2020).
Intersectorial mobility within a country is possible.

MSCA DN 2021: Example DN - ID (previous EJD)

MSCA- ITN 2019: EJD mode (1)

European Joint Doctorates (EJD)





- **Minim. 3 academic beneficiaries:** 3 MS/AC (**entitled to award doctoral degrees)**
- **Mandatory enrollment** in doctoral programme
- Provision of **joint, double or multiple degrees**
- **Max. 540 ESR/Mo (15 ESR)**
- **Max. 40% of total budget to one country**
- **Joint governance structure compulsory** (joint selection, supervision…)
- Participation of non-academic sector encouraged
- Letters of institutional commitment of beneficiaries

- **At least 2 of the entities awarding PhDs based in MS /AC**
- **Applicants must indicate from which institution (s) supported ESRs will receive the degree (s)**

MSCA DN 2021: Unit Cost funding

Contributions for recruited researchers Per person-month					Institutional unit contributions Per person-month	
Living allowance	**Mobility allowance**	**Family allowance** (if applicable)	**Long-term leave allowance** (if applicable)	**Special needs allowance** (if applicable)	**Research, training and networking contribution**	**Management and indirect contribution**
EUR 3 400	**EUR 600**	**EUR 660**	**EUR 4 000 x % covered by the beneficiary**	**Requested unit x (1/number of months)**	**EUR 1 600**	**EUR 1 200**

- Budget pre- calculated by EC, base on unit costs
- 100% financing

GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN

20 años COMPROMETIDOS CON LA CIENCIA 2001-2021

FECYT INNOVACIÓN

MSCA DN 2021: Unit Cost funding

Novelties of HE: reviewed and new cost categories

A living allowance to cover personnel costs for the employment of researchers with full social security coverage.

A mobility allowance to cover additional, private mobility-related costs, e.g. travel and accommodation costs.

NEW

A family allowance to contribute to mobility-related costs of researchers with family obligations which can be granted during the project.

A long-term leave allowance to cover personnel costs incurred by the beneficiaries in case of the researchers' leave, including maternity, paternity, parental, sick or special leave.

NEW

A special needs allowance to contribute to the additional costs for the acquisition of special needs items and services for researchers with disabilities, e.g. assistance by third persons, adaptation of work environment, additional travel/transportation costs.

NEW

MSCA: Evolution, not revolution – DN 2021

Size:

360 PM DN

540 PM for ID and JD

All fellows are to be embarqued in a Doctoral Programme

Multiple recruitments foreseen in ID and JD

Intersectorial secondments are allowed within the same country in ID

secondments up to 1/3 of the duration

Increased budget categories

Evaluation criteria

Resubmission restriction from 2022 (80% score needed)

DN 2021: Overview of the evaluation process

DN 2021: Submission and proposal structure

- **PART A**
- **PART B**
  - ✓ **B1 (30 pages)**
  - ✓ **B2**

MSCA: Evaluation Procedure

- Proposals will be evaluated by one of the eight main evaluation panels:

CHE Chemistry	SOC Social Sciences and Humanities	ECO Economic Sciences	ENG Information Science and Engineering	ENV Environmental and Geosciences	LIF Life Sciences	MAT Mathematics	PHY Physics

- Evaluation Criteria

Criteria	Weight	Priority (ex.aequo)
Excellence	50%	1
Impact	30%	2
Implementation	20%	3

DN 2021: Criteria and equal proposals

Criteria	Weight	Priority (ex.aequo)
Excellence	50%	1
Impact	30%	2
Implementation	20%	3

Novelties

From 2022:

- Limit on resubmission. Proposals that have obtained less than 80% may not be submitted again
- Public bodies, research organisations and higher education establishments will be required to have a gender equality plan (GEP) in place (this criteria applies to all Horizon Europe funding).

DN 2021: Award Criteria

EXCELLENCE	IMPACT	QUALITY AND EFFICIENCY OF THE IMPLEMENTATION
Quality and pertinence of the project's research and innovation objectives	Contribution to structuring doctoral training at European level and strengthening European innovation capacity	Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages
Soundness of the proposed methodology	Credibility of the measures to enhance the **career perspectives of researchers** and contribution to their skills development	Quality, capacity and role of each participant, including hosting arrangements and extent to which the consortium as a whole brings together the necessary expertise
Quality and credibility of the training programme	Suitability and quality of the measures to maximise expected **outcomes and impacts**, as set out in the dissemination and exploitation plan, including communication activities	
Quality of the supervision	The magnitude and importance of the project's contribution to the expected scientific, societal and economic impacts	
50%	**30%**	**20%**

DN 2021: Excellence – Research Objectives

1.1 Quality and pertinence of the project's research and innovation objectives (and the extent to which they are ambitious, and go beyond the state of the art)

Required sub-headings:

- Introduction, objectives and overview of the research programme. It should be explained how the individual projects of the recruited researchers will be integrated into – and contribute to – the overall research programme. All proposals should also describe the research projects in the context of a doctoral training programme. Are the objectives measurable and verifiable? Are they realistically achievable?
- Pertinence and innovative aspects of the research programme (in light of the current state of the art and existing programmes / networks / doctoral research trainings). Describe how your project goes beyond the state-of-the-art, and the extent the proposed work is ambitious.

The action should be divided in **Work Packages** and described in the table below. The Work Packages should reflect the research objectives. Only brief headings and overviews of the Work Packages should be presented in Table 1.1. More details in terms of actual implementation should be provided in the tables under section 3.1.

Table 1.1: Work Package[5] (WP) List

WP No.	WP Title	Lead Beneficiary No.	Start Month	End month	Activity Type[6]	Lead Beneficiary Short Name	Researcher involvement[7]

- ❑ Start with an "**executive summary of your DN programme**"
- ✓ Explain What, why, who, how
- ✓ Introduce the relevance and timeliness of your research by citing policies
- ✓ Define a clear and focused research goal and specific **research objectives**
- ✓ Briefly explain novelty of your research objectives compared to the SoA (remember up todate bibliography)

- ❑ Highlight the originality **and innovative aspects** of the project:
- ✓ Why does Europe need this DN in this research area?
- ✓ Check for similar DNs: what are the synergies, what are the differences?

- ❑ **Work Packages**
- ✓ Break down the research programme into WPs that link to your research objectives

DN 2021: Excellence - Methodology

1.2 Soundness of the proposed methodology (including interdisciplinary approaches, consideration of the gender dimension and other diversity aspects if relevant for the research project, and the quality and appropriateness of open science practices)

Required sub-headings:

- Overall methodology: Describe and explain the overall methodology including the concepts, models and assumptions that underpin your work. Explain how this will enable you to deliver your project's objectives. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them.

- Integration of methods and disciplines to pursue the objectives: Explain how expertise and methods from different disciplines will be brought together and integrated in pursuit of your objectives. If you consider that an inter-disciplinary approach is unnecessary in the context of the proposed work, please provide a justification.

- Gender dimension and other diversity aspects: Describe how the gender dimension and other diversity aspects are taken into account in the project's research and innovation content. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.

⚠ *Remember that that this question relates to the content of the planned research and innovation activities, and not to gender balance in the teams in charge of carrying out the project.*

⚠ *Sex, gender and diversity analysis refers to biological characteristics and social/cultural factors respectively. For guidance on methods of sex / gender analysis and the issues to be taken into account, please refer to https://ec.europa.eu/info/news/gendered-innovations-2-2020-nov-24_en*

- Open science practices: Describe how appropriate open science practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives. If you believe that none of these practices are appropriate for your project, please provide a justification here.

- Research data management and management of other research outputs: Applicants generating/collecting data and/or other research outputs (except for publications) during the project must provide maximum 1 page on how the data will be managed in line with the FAIR principles (Findable, Accessible, Interoperable, Reusable), addressing the following (the description should be specific to your project):

- ❑ Describe the **research methodology** used:
- ✓ What techniques, methods will be used in addressing the research objectives (visual….).
- ❑ Don´t ignore **gendered innovations**
- ❑ Enhance **multi/disciplinarity aspects**
- ❑ **Open Science (Open Access & Citizen Science)**
- ❑ **Research Data Management**

Novelty

Analysis of previous projects.

Previous project	Description	Project issues not covered (and covered by ACRONYM)

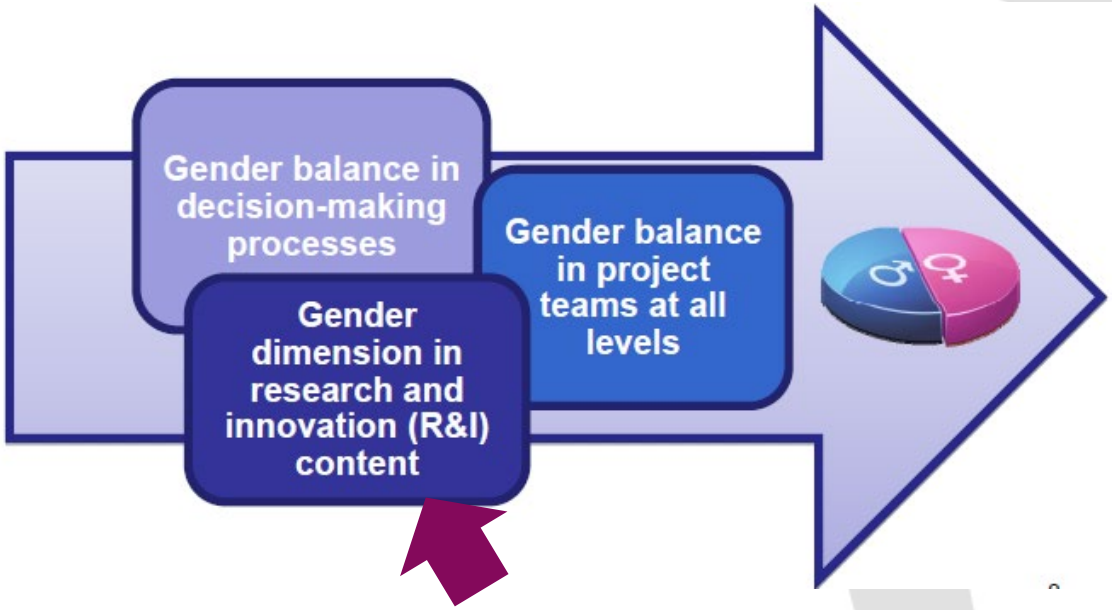
Show the state of the art in each of the participating disciplines. Show the potential to change things.

DN 2021: Excellence – Gender dimension and diversity aspects

- Gender dimension and other diversity aspects: Describe how the gender dimension and other diversity aspects are taken into account in the project's research and innovation content. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.

Gender + Diversity (race, age, sexuality, etc)

- Sex (biological quality)
- Gender (socio-cultural process)

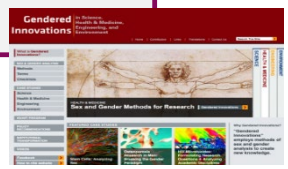


Género–Integrarlo en la Investigación

La integración de la dimensión de género en la investigación es un **VALOR** ya que:

- Aporta en términos de excelencia, creatividad y oportunidad de negocio
- Ayuda a los investigadores a cuestionar las normas, los estereotipos y modelos de referencia
- Permite una comprensión profunda de las necesidades, comportamientos y actitudes de ambos sexos
- Mejora la relevancia social del conocimiento, las tecnologías y las innovaciones
- Ayuda a crear bienes y servicios más adecuados para los mercados potenciales

Tools:
✓ Gender in Research:
https://www.yellowwindow.com/genderinresearch
✓ Gendered innovations
http://genderedinnovations.stanford.edu



Algunas **SUGERENCIAS** para tu propuesta:

- *¿Hay alguna diferencia de sexo que deba investigarse y/o abordarse?*
- *¿Has cuestionado los supuestos de género que pueden influir en tus prioridades científicas, preguntas de investigación y métodos?*
- *¿Esperas que los resultados de tu investigación afecten de manera ≠ a hombres y mujeres, niñas y niños?*

✓ Incluye estudios específicos sobre género en las actividades de tu proyecto (c. elegible)
✓ Utiliza datos desagregados
✓ Aplica metodologías que permitan análisis diferenciado de género
✓ Incorpora referencias a estudios/Proyectos sobre género
✓ Realiza actividades de formación sobre la dimensión de género (c. elegible)
✓ Incorpora investigadores con experiencia en género entre su personal de Investigación
✓ Si es relevante, tareas o WP específicos sobre género

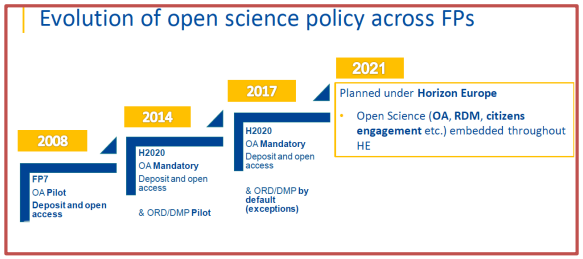
DN 2021: Open Science Practices

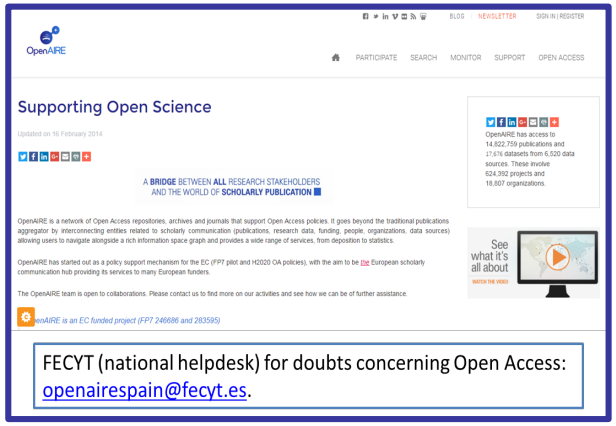
Open Science

Open science is an approach based on **open** cooperative work and systematic **sharing of knowledge and tools** as early and widely as possible in the process. Including active **engagement of society**

- **Mandatory immediate Open Access to publications:** beneficiaries must retain sufficient IPRs to comply with open access requirements;
- **Data sharing as 'open as possible, as closed as necessary':** mandatory Data Management Plan for FAIR (Findable, Accessible, Interoperable, Reusable) research data
- **Engagement of Society**

DN 2021: Open Science_Open Access





FECYT (national helpdesk) for doubts concerning Open Access: openairespain@fecyt.es.

- **Mandatory immediate Open Access to publications**: beneficiaries must retain sufficient IPRs to comply with open access requirements;
- **Hybrid journals** are not an eligible cost
- **Data sharing as 'open as possible, as closed as necessary':**
- Mandatory **Data Management** Plan for research data. (Include: type od data; storage/repositories) Hoe to make it access, etc).
- Data should be **FAIR** (Findable, Accessible, Interoperable, Reusable)
- **Exceptions to open access** (duly justified in the DMP; legitimate interests or constraints)

GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN
20 años COMPROMETIDOS CON LA CIENCIA 2001-2021
FECYT INNOVACIÓN

DN 2021: Excellence - Training

1.3 Quality and credibility of the training programme (including transferable skills, inter/multidisciplinary, inter-sectoral and gender as well as other diversity aspects)

Required sub-headings:

- Overview and content structure of the doctoral training programme, including network-wide training events and complementarity with those programmes offered locally at the participating organisations (please include table 1.3a and table 1.3b).
- Role of non-academic sector in the training programme.

Table 1.3 a Recruitment Deliverables per Beneficiary

Researcher No.	Recruiting Participant (short name)	PhD awarding entities	Planned Start Month 0-45	Duration (months) 3-36
1.				
2.				
3.				
…				
Total				

Table 1.3 b Main Network-Wide Training Events, Conferences and Contribution of Beneficiaries

	Main Training Events & Conferences	ECTS[8] (*if any*)	Lead Institution	Action Month (*estimated*)
1				
2				
3				
4				

Deliver your skills training through two modes:

Local Training

Offered at ESR's main host e.g. Graduate Schools

Network-wide training

Specific network events workshops, summer schools

- ❑ Main purpose of DN: Training programme!

- ❑ List of training objectives including **these type of skills**:
- ✓ Core research Skills (on the job, ESR project)
- ✓ Advanced research Skills (delivered by consortium)
- ✓ Transferable Skills (delivered by consortium – skills for non-academic careers)

- ❑ **Training to be delivered:**
- ✓ Local training: offered at the host where the ESR will work
- ✓ Network Wide training:
  - Open up some events to the wider research community**.** Typical to have a final conference for example.
- ✓ Secondment Programme: visits by each ESR to other ben./P.O

- ❑ Complementarity between local and network training achieved via **Personal Career Development Plan** (PCDP)

- ❑ Explain the **contribution of the non-academic** beneficiaries and P.O in the training programme (delivery of some of the network-wide training)

- ❑ When? Where? Content? Duration? Who will deliver it?

DN 2021: Excellence – Supervision

1.4 Quality of the supervision (including mandatory joint supervision for industrial and joint doctorate projects)

Required sub-headings:

- Qualifications and supervision experience of supervisors.
- Quality of the joint supervision arrangements (mandatory for DN-ID and DN-JD).

⚠ *To avoid duplication, the role and scientific profile of the supervisors should only be listed in the "Participating Organisations" tables (see section 5 below).*

⚠ *The following section of the European Charter for Researchers refers specifically to supervision:*

Supervision

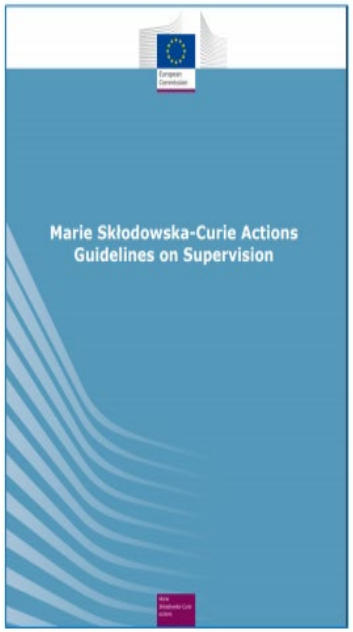
Employers and/or funders should ensure that a person is clearly identified to whom researchers can refer for the performance of their professional duties, and should inform the researchers accordingly.

Such arrangements should clearly define that the proposed supervisors are sufficiently expert in supervising research, have the time, knowledge, experience, expertise and commitment to be able to offer the research doctoral candidate appropriate support and provide for the necessary progress and review procedures, as well as the necessary feedback mechanisms.

⚠ ***Supervision** is one of the crucial elements of successful research. Guiding, supporting, directing, advising and mentoring are key factors for a researcher to pursue his/her career path. In this context, all MSCA-funded projects are encouraged to follow the recommendations outlined in the Guidelines for MSCA supervision*[9].

- ❑ Demonstrate the **quality of the research supervisor (s) /** institution (s) with regards to training of researchers: nº of PhDs graduated, nº postdocs mentored….
- ❑ Describe the **joint supervision arrangements (mandatory in DN-ID and DN-JD).**
- ❑ Each researcher should have a non-academic co-supervision.

DN 2021: Guidelines on supervision



[Marie Skłodowska-Curie actions guidelines on supervision - Publications Office of the EU (europa.eu)]

- Appropriate level of supervision depends on the career stage of both parties and the expectations of the project
- Supervisors need to be committed and involved for the full duration of the fellowship
- Make sure the supervisor is on board with the career development plans
- 4 Levels
  - **1. Role of the supervisor**: General principles and integration of the researcher, Research support, Career development, Mentoring and wellbeing of the researcher, Communication and conflict resolution
  - **2. Role of the researcher**: General principles, Research, Wellbeing, Communication and conflict resolution
  - **3. Role of institution**
  - **4. Training and professional development for supervisors**

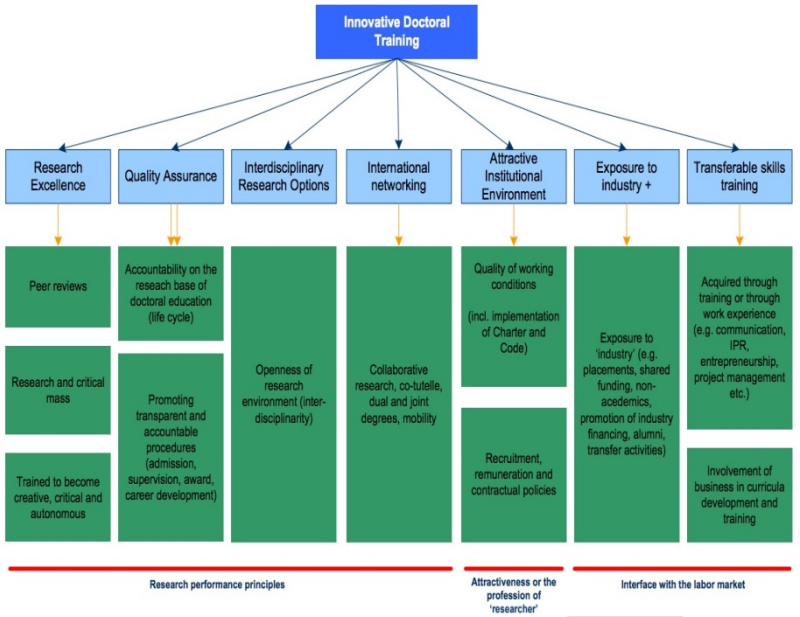
DN 2021: Impact - Structuring doctoral training (2.1)

Structuring doctoral training at the European level

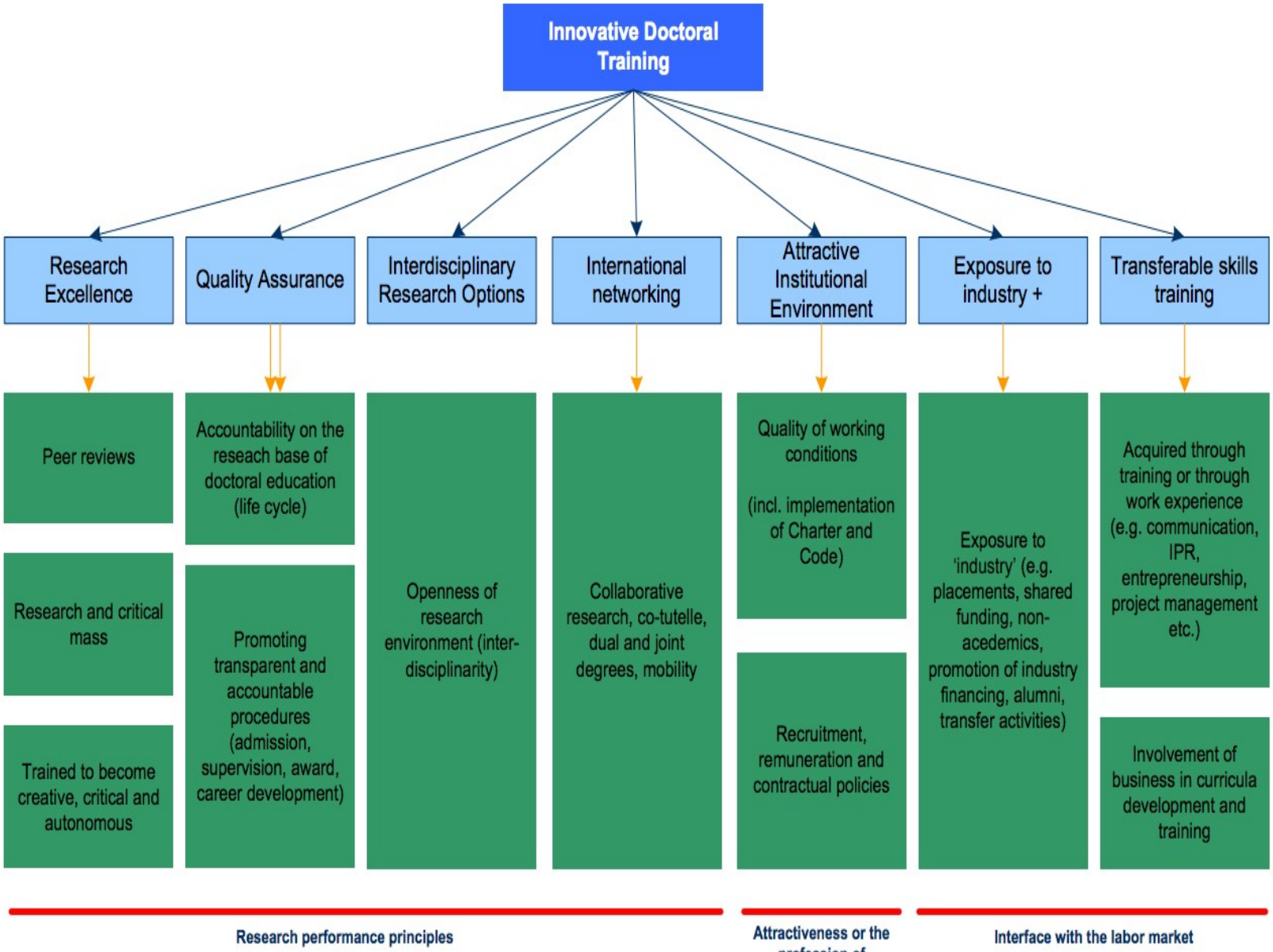
Strengthening European innovation capacity

Contribution of the non-academic sector to the doctoral training

Developing sustainable elements of doctoral programmes



Source: IDT tree, by IDEA Consult based on Report of Mapping Exercise on Doctoral Training in Europe: Towards a common approach (2011)



Source: IDT tree, by IDEA Consult based on Report of Mapping Exercise on Doctoral Training in Europe: Towards a common approach (2011). Euraxess China.

DN 2021: Impact - Structuring doctoral training (2.1)

Structuring doctoral training at the European level

Strengthening European innovation capacity

Contribution of the non-academic sector to the doctoral training

Developing sustainable elements of doctoral programmes

- Contribution to **Europe´s Economy and Society** by the Doctoral Programme and the Doctoral Candidates
- Linkage to the of **EU/HEU goals** or UN SDG or some aspects of the Green Deal, Digitalization…
- How it will help **bringing ideas to market and policy stakeholders**.
- The **role of the non-academic sector** in terms of research commercialization, training in entrepreneurship/tech transfer to the fellows.
- **Previous ITN** or other funded projects, beyond them

DN 2021: Impact - Structuring doctoral training (2.1)

- Structuring doctoral training at the European level
- Strengthening European innovation capacity
- 

Contribution of the non-academic sector to the doctoral training
- Developing sustainable elements of doctoral programmes

EXPOSURE of Fellows to the non-academic sector is meaningful

- **Employability** of the fellows in the non-academic sector
- **Stays** of the fellows in the non-academic sector.
- Excellence and impact of the research training. How the training goals can be only achieved with the **contribution of the non-academic**.
- The **contribution** of your non-academic sector participants.
- Improve the **inter-sectoral collaboration** in research training in this area.

DN 2021: Impact - Structuring doctoral training (2.1)

- Structuring doctoral training at the European level
- Strengthening European innovation capacity
- Contribution of the non-academic sector to the doctoral training
- 

Developing sustainable elements of doctoral programmes

- Spreading of **best practices** in European **collaborative research training programmes**.
- Ongoing and **sustainable activities after the end** of the programme, e.g. an own grad school.
- The **uniqueness** and need for your Doctoral Network.
- **Lessons learned** of your programme at the end

DN 2021: Impact - Career perspectives (2.2)

- How the **training modules / activities** will provide **impact on the career perspectives** and **employability**. (Core scientific training, other scientific training and the transferable skills programme).

- **Development of career perspective** opportunities in both sectors.

    - In Academia
    - In Non-Academic Sector: SMEs, BioPharma, Engineering, Telecoms, Goverments…

- As individual level: short- and long-term impact career.

DN 2021: Impact - Dissemination, Exploitation, Communication (2.3)

Required sub-headings:

- Plan for the dissemination and exploitation activities, including communication activities. (*a more detailed plan will need to be provided as a mandatory project deliverable submitted at mid-term stage*)
- Strategy for the management of intellectual property, foreseen protection measures

	Dissemination	**Exploitation**	**Communication**
What	the public disclosure of the results by appropriate means	The use of results in further research and innovation activities	Taking strategic and targeted measures for promoting the action itself and its results
When	When results are available		From the project start on
Why	Knowledge transfer, enable further use of results	Enable use and uptake of results	Inform and reach out to society, show the benefits of research
How	Publications, posters,…	Patents, policy guidelines,…	Social media, events,…
Target audiences	Audiences who can continue using the results, e.g. scientific peers	Audiences who can make use of the results for scientific, societal, economic purposes or for policy making	Multiple audiences beyond the project's community, e.g. media, broad public

DN 2021: Impact - What goes under 2.3

Dissemination

- Consider the full range of **potential users and uses**, including research, commercial, investment, social, environmental, policy-making, setting standards, skills and educational training, …
- Target **multiple audiences**, e.g. other researchers, policy makers (can link to European excellence), industry, government science advisors, "think tanks", legislative bodies…..
- Identify the **project's outcomes** (research findings (datasets, reports), guide for policy recommendations, etc
- **Channels for dissemination** (already available; create new ones; what EC channels will be used;etc). What concrete **journal and conferences** are targeted?
- **Dissemination formats** (newsletter, webinar, workshop, summer school, invited scientists, European Researchers' Night, etc.

Cuantificar!!!!!

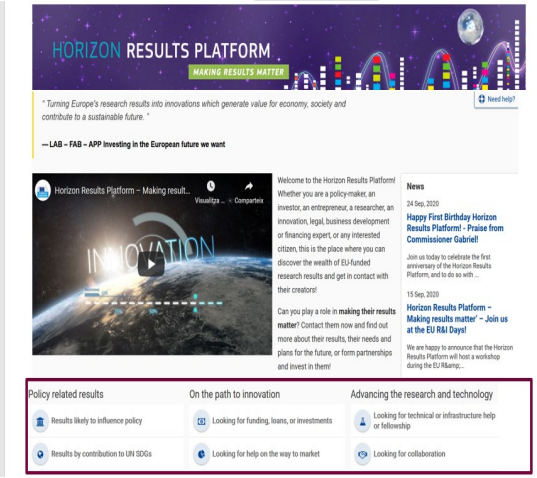
Example:

Target groups (WHO)	Main type of information and outcomes (WHAT)	Dissemination channels (HOW)

DN 2021: Impact - What goes under 2.3

Exploitation of results

- How the academic consortium members will exploit the project results?
- How the industrial consortium members will exploit the project results? Be concrete if possible with projected business figures.
- Include a **business plan** where relevant.
- Ensuring the **sustainability and continuity** of the project: financing, synergies with other European, national or regional funds, etc.



Intellectual property management

- How the IP background will be identified?
- How the ownership of the IP foreground (results) will be managed?
- What will happen in case of conflict? How it will be managed?

DN 2021: Impact - What goes under 2.3

Public Engagement / Communication

- P.E engage a large audience, bring knowledge to the general public and imply interaction between sender /receiver
- Communication requires a clear and accessible language
- Include specifics (**what – who – when**) in a readable format
- Possible Activities: Marie Sklodowska Curie Ambassadors, Workshop Days, Open Doors, Public Talks, articles, E-newsletters, multimedia releases, Videos, European Researchers´ Night, EC Events, conferences, Marie Curie Alumni Association (MCAA), MSCA "Fellow of the Week" on Facebook

- Mention the **support of the host institution's** Education and Outreach support staff.
- Specifically mention **training in communication, public engagement and edu**cation as part of the fellows training programme and direct the evaluator back to section 1.3.2.
- Mention **specific types of activities** fellows will take part in to communicate their results / interact / educate the general public – link to existing outreach and education programmes at the host organisations.

Communicating Eu Research and innovation guidance for project participants:
http://ec.europa.eu/research/mariecurieactions/documents/documentation/publications/guidelines_en.pdf

DN 2021: Scientific, societal and economic impacts (2.4)

KEY IMPACT PATHWAY: Logical steps towards the achievement of the expected impacts of the project over time, in particular beyond the duration of a project. A pathway begins with the projects' results, to their dissemination, exploitation and communication, contributing to the expected outcomes in the work programme, and ultimately to the wider scientific, economic and societal impacts of the work programme destination

Scientific impact

Promote scientific excellence, support the **creation and diffusion of high-quality new fundamental** and **applied knowledge**, skills, training and mobility of researchers, attract talent at all levels, and contribute to full engagement of Union's talent pool in actions supported under the Programme.

Societal impact

Generate knowledge, strengthen the impact of R&I in developing, supporting and **implementing Union policies**, and support the **uptake of innovative solutions in industry**, notably in SMEs, and society to address global challenges, inter alia the SDGs

Economic impact

Foster all forms of innovation, facilitate technological development, demonstration and **knowledge transfer**, and strengthen deployment of innovative solutions

+ environmental, Sustainable development Goals, etc

- Provide a **narrative** explaining how the project's results are expected to make a difference in terms of impact, beyond the immediate scope and duration of the project.

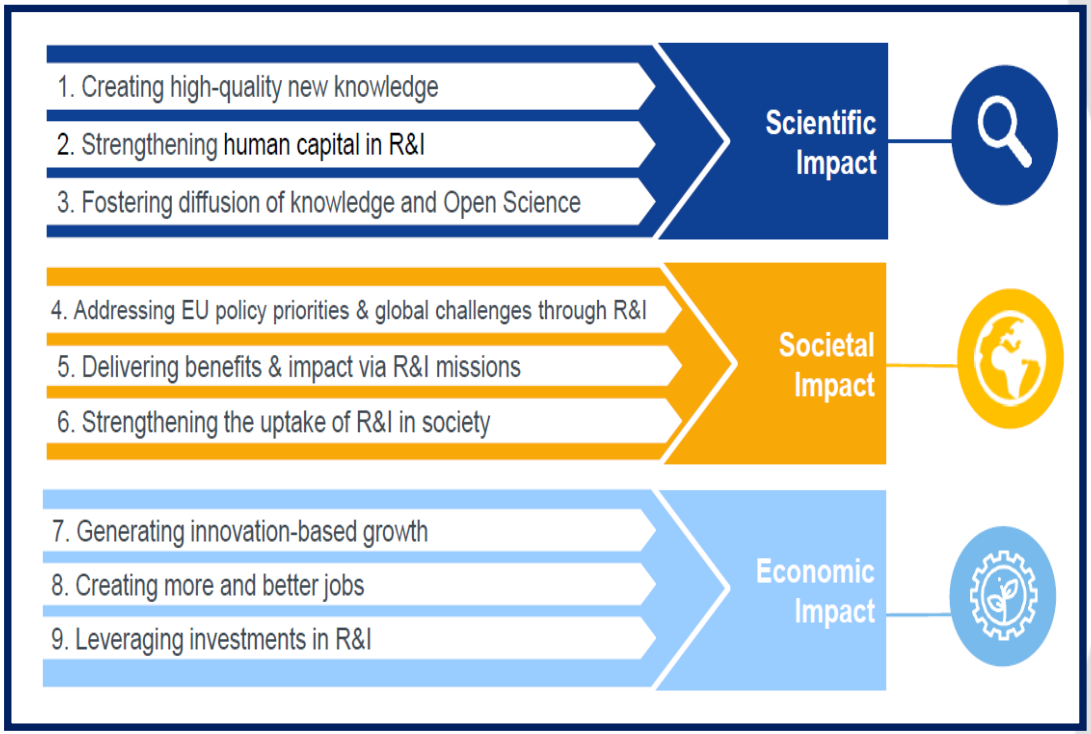
GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN

20 años COMPROMETIDOS CON LA CIENCIA 2001-2021

FECYT INNOVACIÓN

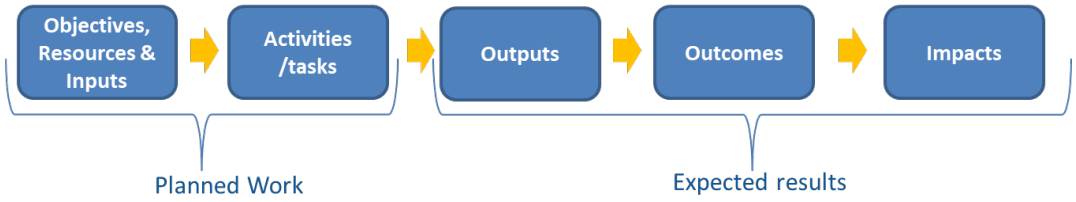
DN 2021: Scientific, societal and economic impacts

HORIZON EUROPE LEGISLATION defines three types of impact, tracked with Key Impact Pathways

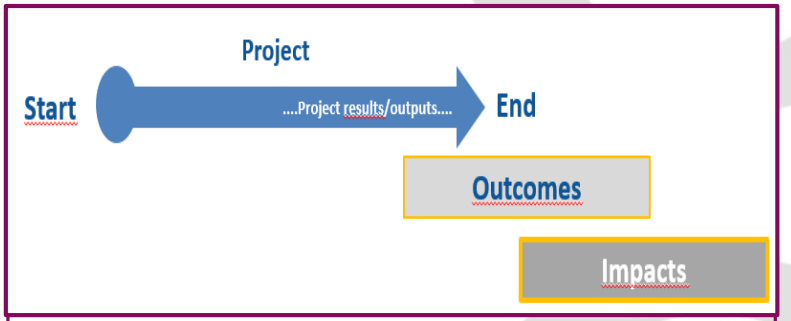


Article 50 & Annex V 'Time-bound indicators to report on an annual basis on progress of the Programme towards the achievement of the objectives referred to in Article 3 and set in Annex V along impact pathways'

DN 2021: Scientific, societal and economic impacts (2.4)



- **Ouputs (Results):** What is generated during the project implementation. This may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, trained researchers, new infrastructures, networks, etc.
- **Outcomes:** are results that occur from creating your product or service. They are the changes in policies, people and communities that you aim to achieve with your work. Occur during or shortly after the end of the project. These statements are specific and measurable, letting you know when you accomplished your goal. Focused goal. During or Shortly after.
- **Impact:** are also results that occur from creating your product or service but occur some time after the end of the project. results that occur some time after the end of the project. Wider goal. Some time after.



A plan for achievement the outputs/impacts beyond the immediate scope and duration of the project

- **Magnitude**: How widespread the outcomes and impacts are likely to be. Example: How many people are benefitting (ie. The size of the target group).
- **Importance:** how large the benefits for the target groups are likely to be (ie. Tones of CO2 saved per households).

- **Target group**: who would benefit.
- Related to EU policies, Horizon Europe programme (ie. Missions), SDG
- **SMART:** Specific, Measurable, Achievable, Realistic and
- anchored within a Time Frame

GOBIERNO DE ESPAÑA MINISTERIO DE CIENCIA E INNOVACIÓN
20 años COMPROMETIDOS CON LA CIENCIA 2001-2021
FECYT INNOVACIÓN

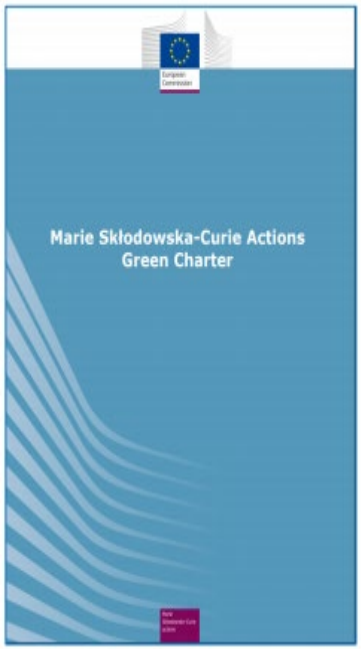
DN 2021: Implementation: Work Plan (3.1)

Required Sub-headings

- Work Packages description (please include table 3.1a);
- List of major deliverables *(*please include table 3.1b, including the awarding of doctoral degrees;
- List of major milestones (please include table 3.1c);
- Fellow's individual projects, including secondment plan (please include table 3.1d)*;*

- Network organisation
- Joint governing structure (mandatory for DN-ID and DN-JD actions)
- For DN-JD, joint admission, selection, supervision, monitoring and assessment procedures
- Supervisory board
- Recruitment strategy
- Progress monitoring and evaluation of individual projects
- Risk management at consortium level (including table 3.2a)
- Gender aspects
- Environmental aspects in light of the MSCA Green Charter

DN 2021: MSCA Green Charter



- Code of good practice for MSCA recipients
- Promotes the mainstreaming of environmental considerations in all aspects of project implementation
- Aims to:
  - Reduce the carbon footprint of MSCA projects
  - Raise awareness of environmental issues
  - Promote sustainable research management best practices
- Not an evaluation criteria as such

- 4 levels:
  - 1. Researcher-related measures
  - 2. Institutional-related measures
  - 3. Consortium-related measures (for multi-beneficiary projects)
  - 4. Outreach (applicable to MSCA researchers and participating institutions)

[Marie Skłodowska-Curie Actions Green Charter - Publications Office of the EU (europa.eu)]

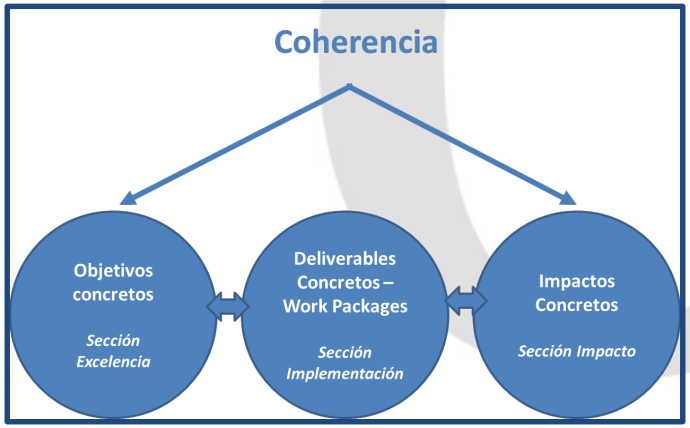
DN 2021: Implementation: Capacity of institutions, hosting arrangements (3.2)

- Operational capacity fully assessed under criterion 3.2
- Description of the **necessary infrastructure** and how the consortia provides them.
- **Hosting arrangements** – excellent environment for host the doctoral candidates.
- Euraxess Services – Office
- **HR Excellence in Research**
- Explain the consortium and its **complementarities, synergies**, previous collaborations, etc.
- Commitment of the beneficiaries

DN 2021: General tips

About the project :

- How your Project goes beyond the state-of-the art.
- Innovative Aspects of the current state of the art, existing programmes, networks.
- Employability - Career Development of the Doctoral Candidates
- Supervision
- IMPACTS of the Project
  - Doctoral Training / Career development
  - Scientific/ Social /Economic
- Novelties of the call
  - Gender Dimension and diversity Aspects
  - Open Science
- Related to EU policies, SDG
- Synergies with other projects or programmes



DN 2021: General tips

General Approach:

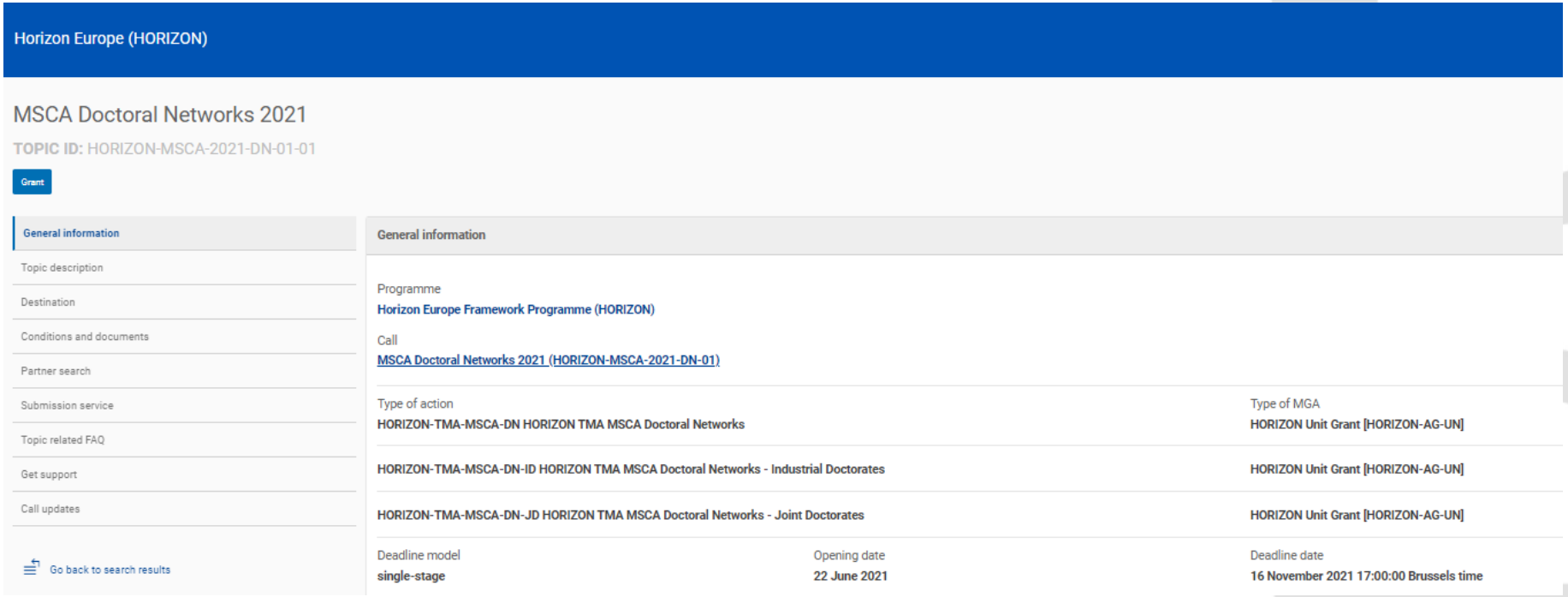
- It is a DOCTORAL NETWORK based on individual projects and its relationships
- Doctoral candidates the centre of the project.
- Concrete, Concrete and concrete

About the evaluation:

- The **weighting of criteria** is 50% -30% -20%. You need to perform at close to 100% on each
- **Follow the template** –the evaluators need to find all key points
- The reviewers may not be specialists in the field
- **"Una imagen vale más que mil palabras":** use visuals to provide global information at a glance

MSCA DN 2021: where to find the information

Funding and Tenders Opportunities Portal



MSCA DN 2021: where to find the information

Horizonte Europa Website

La documentación se actualiza a medida que tengan lugar las diferentes sesiones.

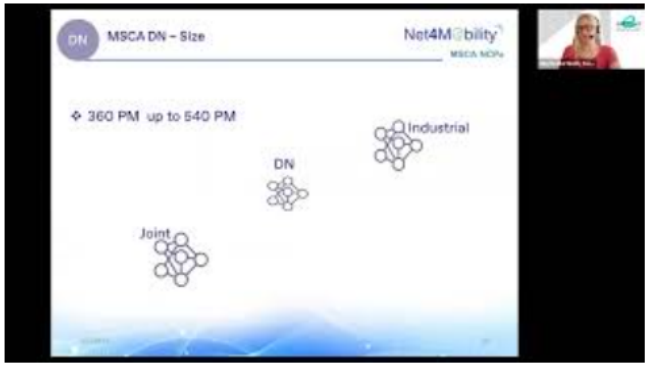
Webinario nacional 15/06/2021: aspectos generales de la convocatoria. En esta sesión se ofrece **información sobre las novedades, reglas de participación, aspectos de elegibilidad y demás aspectos generales** de esta primera convocatoria MSCA DN 2021 en Horizonte Europa. Se cuenta igualmente con el testimonio tanto de un coordinador de un proyecto beneficiario como de personal de gestión que apoya la preparación de propuestas en una institución española. Finalmente, se explica el apoyo que los Puntos Nacionales de Contacto ofrecen para esta convocatoria en España.

Webinario nacional 07/09/2021: aspectos prácticos para preparación de propuestas

En esta sesión se hará una breve revisión de aspectos generales pero se centrará en **aspectos más prácticos relacionados con los diferentes criterios de evaluación y pautas para escribir una propuesta competitiva.** Los Puntos Nacionales de Contacto de MSCA serán los encargados de impartir este seminario, con el apoyo de una evaluadora de proyectos ITN en Horizonte 2020.

Inscripción: https://bit.ly/3g2cHaP

15_06_2021_Explicación aspectos generales Convocatoria DN 2021 - REA	3.12 MB
15_06_2021_Caso de éxito ITN BioInspireSensing_UPC	421.45 KB
15_06_2021_Ejemplo práctico apoyo institucional_UPC	1.23 MB
15_06_2021_Explicación apoyo Puntos Nacionales de Contacto MSCA en España	1.27 MB
15_06_2021_Agenda sesión informativa DN 2021: aspectos generales	608.97 KB
07_09_2021_agenda sesión informativa DN 2021: aspectos prácticos	588.41 KB
Documento Guía del Participante MSCA DN 2021 publicado por la Comisión Europea	735.02 KB
Formato de propuesta técnica MSCA DN 2021 publicado por la Comisión Europea	1.3 MB



Evento 05-07-2021: Webinario sobre Redes Doctorales (Doctoral Networks) DN 2021, realizado en el marco del proyecto Net4mobility+. Disponible en Inglés

DN 2021: pre-screening service

Fechas:

Apertura servicio revisión: **11/10/2021.** Cierre servicio revisión: **25/10/2021, a las 10:00**

Envío de comentarios por parte de NCP: **máx. 2 semanas tras confirmación de aceptación revisión (8/11/2021)**.

Procedimiento:

- La solicitud de revisión deberá hacerse a través de la Oficina de Proyectos de la entidad coordinadora, **siendo la propuesta preferiblemente revisada por dicha Oficina con anterioridad al envío a l@s NCP.**
- Incluir en copia al personal coordinador científico del proyecto al hacer el envío.
- Solo se hará una revisión por proyecto.
- La elegibilidad DEBE ser previamente revisada por la Oficina de Proyectos
- Se deberá enviar la siguiente documentación al correo msca@fecyt.es :
  - ✓ Propuesta completa en Word con formato DN 2021. Apartados B1 y B2
  - ✓ Si se trata de un reenvío, indicadlo e incluir también el Evaluation Summary Report (ESR) del año anterior, la propuesta **debería estar preferiblemente actualizada.**

Quién puede solicitarla?:

- Proyectos **coordinados** por entidades españolas.
- **El presupuesto** solicitado por el conjunto de entidades españolas participantes deberá ser **superior al 25 % del total** solicitado por el consorcio en la convocatoria.
- En caso de propuestas enviadas con anterioridad, se dará prioridad a los proyectos con mayor puntuación.
- Se dará prioridad a aquellas propuestas no revisadas con anterioridad

NOTA. Se irán aceptando revisiones en función de la demanda y los criterios establecidos, pudiendo quedar fuera del servicio aquellas propuestas que no se ajusten al perfil o excedan del volumen máximo de revisiones.

Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less

¡Muchas gracias!

Cristina Gómez

MSCA NCP in Spain

msca@fecyt.es