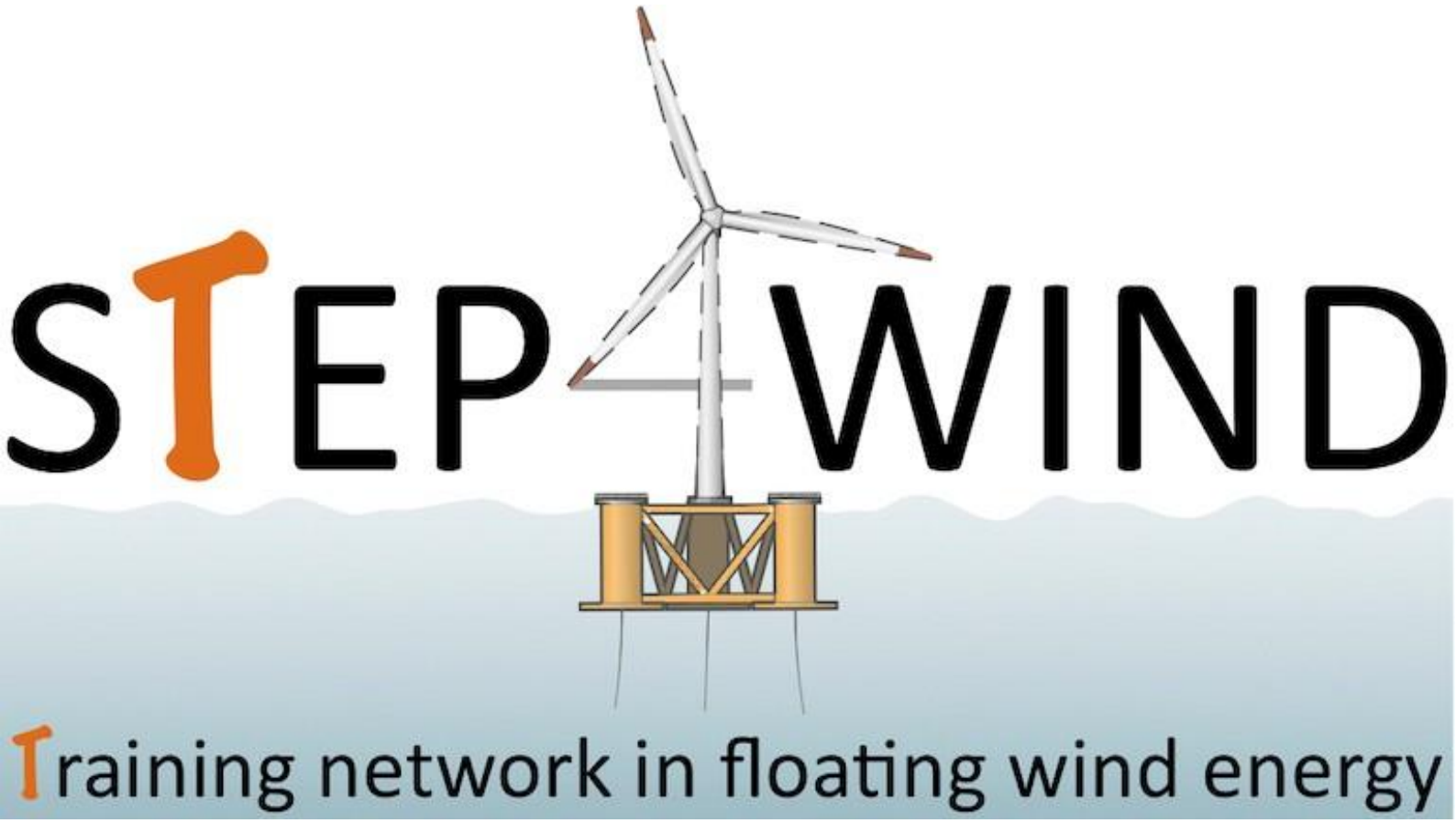
Guide to the implementation of STEP4WIND

[Public]



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 860737.

Document History

Revision Nr	Author	Review	Date
0.1	O.Schippers-Trifan (TU Delft)	First draft	29.04.2020
0.2	O.Schippers-Trifan / Marc Boonstra Axelle Vire (TU Delft)	Second draft (reviewed bij de Scientific Coordinator)	25.05.2020
1.0	O.Schippers-Trifan / Marc Boonstra Axelle Vire (TU Delft)	Final version	30.05.2020

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1. Introduction

1.1 Purpose of this document

This Project Handbook and quality manual has mainly two functions.

Firstly, it is a reference source for all consortium members covering many day-to-day activities. Secondly, it intends to standardise various elements of the project, e.g. project reports and deliverables, through the use of agreed procedures and templates where relevant.

It will be a dynamic document that will be updated as required throughout the project.

1.2 Precedence

The general principles for the project execution are defined in the EU Grant Agreement (GA) and the Consortium Agreement (CA). The Project Handbook does not replace any of these established agreements, nor does it replace any of the EU guidelines for project implementation and documentation.

Where there are any inconsistencies between these documents, the following order of precedence should be applied:

- EU Grant Agreement including all Annexes;
- Consortium Agreement (CA);
- Project Handbook (present document)

2. General Project Information

Title	Step4Wind:Novel de**S**ign, produc**T**ion and op**E**ration a**P**proaches for **f**loating **WIND** turbine farms
Acronym	STEP4WIND
Grant Agreement No.	860737
Funding Programme	REA - H2020-MSCA-ITN-2019
Instrument	Marie Skłodowska-Curie Innovative Training Networks
Topic	MSCA-ITN-2019 – EID Innovative Training Networks
Project Start Date	01/04/2020
Project Duration	48 months
Scientific Coordinator (TU Delft)	Dr. Ir. Axelle Viré Assistant Professor in Wind Energy TUDelft, Faculty of Aerospace Engineering Kluyverweg 1, 2629 HS Delft (NL) Email: A.C.Vire@tudelft.nl Phone: +31 15 27 81385 www.lr.tudelft.nl/windenergy
Project Coordinator (TU Delft)	Marc Boonstra and Oana Schippers-Trifan TU Delft, Building 26 Valorisation Centre Van der Burghweg 1, 2628 CS Delft, The Netherlands Email: m.boonstra@tudelft.nl; o.schippers-trifan@tudelft.nl Phone: +31 (0) 15 278 67 51

Table 1: General Project Information

Nr	Partner	Partner short name	Country
1	TECHNISCHE UNIVERSITEIT DELFT	TU Delft	NL
2	POLITECNICO DI MILANO	POLIMI	IT
3	UNIVERSITY COLLEGE CORK - NATIONAL UNIVERSITY OF IRELAND	UCC	IE
4	SIEMENS GAMESA RENEWABLE ENERGY AS	SGRE AS	DK
5	PRINCIPLE POWER FRANCE	PPF	FR
6	OFFSHORE RENEWABLE ENERGY CATAPULT	OREC	UK
7	EIRECOMPOSITES TEORANTA	EC	IE
8	MARIN ACADEMY BV	MARIN Academy	NL
	Partner organisations		
1	NATIONAL UNIVERSITY OF IRELAND GALWAY	NUIG	IE
2	NATIONAL RENEWABLE ENERGY LABORATORY	NREL	US
3	EUROPEAN ACADEMY OF WIND ENERGY	EAWE	DE
4	INTERNATIONAL NETWORK ON OFFSHORE RENEWABLE ENERGY	INORE	UK
5*	TECHNICAL UNIVERSITY OF DENMARK	DTU	DK

**Aspirant Partner organisation to be formally part of the consortium after Amendment is in force*

Table 2: List of partners and partner organisations

General concepts in STEP4WIND

Beneficiary/Employer (Management Board): every participating organisation that signs the grant agreement with the REA is considered to be a "beneficiary". Each beneficiary receives funding directly from the project budget and will recruit and host researchers in the context of the project.

Partner Organisations (Advisory Board): these are institutions associated to the project in order to offer training and secondment opportunities, but without being full beneficiaries. They will therefore not recruit any researchers themselves, but will instead offer their expertise and, in some cases, specific infrastructure.

Supervisory Board: Beneficiaries, partner organisations and two representatives of the ESRs

Executive Board (EB): General Coordinator (TU Delft) and Training Coordinator (Polimi)

Unit Cost: this refers to the fixed amounts that are paid for the implementation of the project. These costs are based on units, one unit being one implemented person-month.

ESR (Early-Stage Researcher): ESRs shall, at the time of recruitment by the host organisation, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Full-time equivalent research experience is measured from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the researcher is recruited.

Secondments: Secondment means a period during which a ESR is hosted by a Partner Organisation or a Party other than his/her employing entity. Secondments are detailed in Section 4 of the Annex I to the Grant Agreement.

EID: European Industrial Doctorate

3. Legal aspects

3.1 Grant Agreement

The Grant Agreement forms the legal basis for the implementation of the project. It consists of:

- Terms and Conditions (this is the core contract);
- Annex 1 Description of the Action (DoA);
- Annex 2 Estimated budget for the action;
- Annex 3 Accession Forms;
- Annex 4 Model for the financial statements;

The contract with the European Union has been signed digitally by all partners. This Grant Agreement must be filed and should be provided to the auditor in case of an audit. It is downloadable from the participant portal: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home

3.2 Consortium Agreement

Whereas the Grant Agreement is signed between the European Union and the partners, the Consortium Agreement is signed between the partners themselves. It arranges in more detail the provisions of the Grant Agreement and the collaboration within the project consortium, such as but not limited to: financial issues, payments, management, decision making, conflict resolution, intellectual property rights and liability.

The Consortium Agreement must be kept by the partners and shown in case of an audit.

Due to the fact that STEP4WIND is part of MSCA Innovative Training Networks (ITN) within H2020, the template used was based on the LERU model. Developed by the LERU Legal Expert Group, the LERU template is based on the DESCA (Development of a Simplified Consortium Agreement) model, a comprehensive Model Consortium Agreement which offers a reliable frame of reference for project consortia. Taking the DESCA model as the starting point, the special requirements for European Training Networks (ETN) projects in MSCA have been integrated by the LERU Legal Expert Group in this LERU template.

For more information refer to D6.4 (Consortium Agreement) due at month 2 (31 May 2020).

3.3 Amendments

During the project circumstances may arise which call for a request to the European Union for an amendment of the GA. Reasons may vary, but could be: change of partner(s), of legal entity or changes in the Description of the Action (Annex 1). In case an amendment is needed the coordinator shall submit such a request after an autonomous decision by all partners in the Management Board. After approval, the coordinator will inform the partners of the revised Grant Agreement, replacing former versions, on the site. Changes in the budget that do not affect the content of the work can be taken care by the consortium itself (decision through the Management Board).

4. Management structure and Procedures

4.1 Project organisational structure

The following diagram illustrates the organisation of the project in management structures:

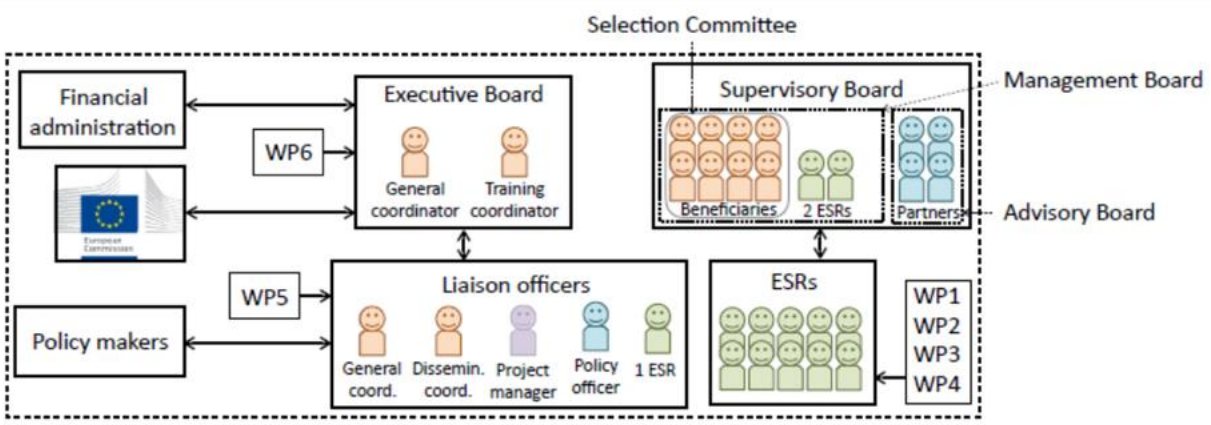

Figure 1. The STEP4WIND management structure

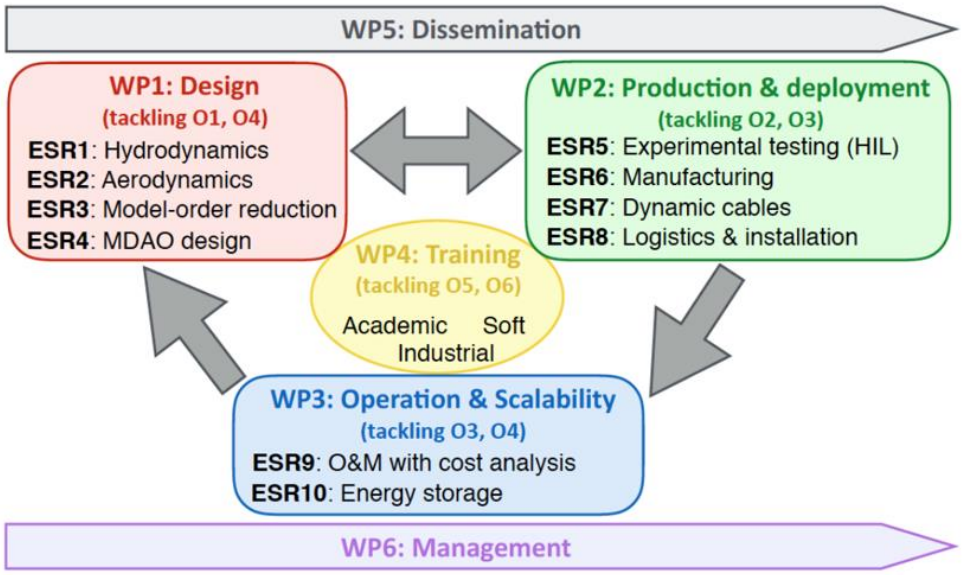

Figure 2. The STEP4WIND work package structure

4.2 Roles

The consortium covers a wide range of partners and expertise to tackle the multidisciplinary nature of the work plan, featuring a good balance between R&I centres, SMEs, universities, and large industry and wind farm developers, all actively involved in the sector. In order to facilitate the overall management, the following roles and responsibilities have been identified.

Hereunder the role of each project body is explained.

4.2.1 General Assembly

The General Assembly (GA) is ultimately responsible for the management of the project and consists of one representative from each partner in the consortium. It is chaired by the Project Coordinator (TUD).

The following decisions shall be taken by the General Assembly:

- Content, finance and intellectual property rights;
- Proposals for changes to the GA Annexes;
- Evolution of the consortium (e.g. entry of a new partner, withdrawal of a partner).

Decisions shall be taken by a majority of two-thirds (2/3) of the votes cast. More details on the decision making procedures can be found in section 6 Governance Structure of the Consortium Agreement.

The General Assembly meets at least once a year. In addition, teleconferences and written voting procedures may be organised if necessary.

The WP Leaders and the Task Leaders will be responsible for the detailed implementation of the work packages and tasks and preparation of the corresponding deliverables and milestones. The WP Leaders perform operative management at the level of their work package and are responsible for the following activities:

- Reporting progress at project meetings and in management reports;
- Immediately reporting major decisions related to any deviation to the work plan;
- Coordinating the activities of the task leaders;
- Highlighting any partners whose contributions are of insufficient or of unacceptable quality.

4.2.2 Project Coordinator (CO)

The Project Coordinator is responsible for efficient management of the project and individual activities with respect of time, budget and quality. It also functions as the intermediary for all communication between co-beneficiaries and the European Commission. The project coordination in STEP4WIND is performed at two levels:

1. The scientific coordination performed by Dr. Axelle Viré (TU Delft) for the scientific development of the project. The main responsibility is to ensure that the main goals of the project are pursued and to verify the quality of all deliverables resulting from the project. The scientific coordinators will cooperate closely with Work Package Leaders to guarantee that the project delivers the expected impact.

2. The project manager Oana Schippers-Trifan (TU Delft) assists the scientific coordinator and the consortium on financial, legal, administrative as well as on organizational matters.

The scientific coordinator and the project manager work closely together to guarantee a smooth project communication internally (within the project) and externally (with the European Union and the public at large).

4.2.3 Management Board

The Management Board consists of the Selection Committee (WP leaders) and 2 ESRs.

4.2.4 Advisory Board (AB)

There are five* partner organisations that are forming the Advisory Board:

1. National University of Ireland Galway
2. National Renewable Energy Laboratory
3. European Academy of Wind Energy
4. International Network on Offshore Renewable Energy
5. Technical University of Denmark*

**Aspirant partner organisation to be officially involved in the project through an Amendment.*

4.2.5 Supervisory Board (SB)

The Supervisory Board (SB) is the main decision body which is composed of one representative for each beneficiary (one vote each), one representative of each associated partner (advisory role), and two representatives from the ESRs (one vote each). At the start of the programme, the representatives will be the scientists-in-charge from each institution. However, representation in the SB can be changed through simple-majority votes. The general coordinator will chair the Supervisory Board (SB).

Tasks:

The board will oversee the quality of the programme and ensure adequate balance between scientific/technological and transferable skills training.

All decisions will be taken by a majority of two thirds (2/3) of the consortium partners after thorough discussions. A 'silence procedure' will be adopted in which all the associated partners will be informed of the decisions and will be given an appropriate timeframe to oppose them if they wish to do so. The SB will also act as quality control body in terms of work ethics and integrity.

The Supervisory Board will meet physically at least yearly, and every 6 months remotely, to decide on all training and scientific activities of the network, including recruitment and training of ESRs, interaction between the partners (e.g. secondments, workshops, conferences, joint publications), management of IPR, and dissemination of the programme outcomes. The meeting dates will be scheduled upfront, at the start of each project year, so that the participants can book the dates at a very early stage. If the main contact of a participating institution cannot join a meeting, a delegate will be represented.

4.2.6 Executive Board (EB)

The organisation of SB meetings and short-term decisions will be managed by the Executive Board (EB) formed by the general coordinator (Dr Axelle Viré, TU Delft) and the training coordinator, Prof. Marco Belloli, Polimi). The EB will inform all SB members on all decisions to be taken at least three working-days in advance via e-mail, giving each SB member the possibility of discussion and/or to ask for an SB meeting on the respective issue. The research will be coordinated by the WP leaders.

4.2.7 Liaison officers

Liaison officers will be responsible for interfacing with external bodies, such as the European Commission, financial managers and policy makers:

- A general coordinator (Dr. Axelle Viré, TU Delft), leader of WP6;
- A dissemination coordinator (Ms Clara de Moura Santos, PPF), leader of WP5, is responsible for disseminating the programme outcomes;
- A policy officer (Claudia Grotz, Siemens Gamesa), liaising with the Executive Board (see below), is responsible for communicating the programme developments with policy makers. The participation of Siemens Gamesa in the European Technology & Innovation Platform on Wind Energy (ETIPWind) will ensure an adequate impact of STEP4WIND on new policies;
- A recruitment coordinator (Dr. Cian Desmond, UCC).
- Project Manager (O. Schippers-Trifan, TU Delft) who is responsible for liaising with the European Commission and the WP leaders, managing finances, and ensuring that the overall programme runs as planned;
- 1 ESR (to be defined).

4.3 Meetings

Project meetings are plenary meetings and parallel sessions combining technical progress. The General Assembly will meet at least four times during the project and the Supervisory Board members will meet twice a year or at any time upon written request of 1/3 of the members of the Executive Board.

The coordinator shall give notice in writing of a meeting to each partner as soon as possible and no later than 45 calendar days preceding an ordinary meeting and 14 calendar days preceding an extraordinary meeting.

The chairperson of a Consortium Body shall produce written minutes of each meeting which will be the formal record of all decisions taken. The draft minutes will be sent to all members within 10 calendar days of the meeting. The minutes shall be considered as accepted if, within 15 calendar days from sending, no member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.

The chairperson will send the accepted minutes to all the members of the consortium body and to the coordinator, who shall safeguard them. If requested, the coordinator will provide authenticated duplicates to parties and to the EC Project Officer.

Meetings of each project partner may also be held by teleconference or other telecommunication means.

Costs for travel and accommodation to participate in these meetings have to be covered by each partner's own budget. Costs related to the organisation of these meetings (such as catering, room facilities and one dinner) will be borne by the host of the meeting.

4.4 Recruitment ESR

4.4.1 Eligibility of researchers and requirements

All researchers to be recruited in STEP4WIND must be Early-Stage Researchers (ESRs) and undertake transnational mobility (i.e. move from one country to another).

Eligible researchers

- ESRs shall at the date of recruitment by the host organisation, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. This is measured from the date when they obtained the degree which formally entitles them to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the research training is provided, irrespective of whether or not a doctorate was envisaged";
- Duration of recruitment: **min 3** to **max 36 months** (typical recruitment: 36 months). In STEP4WIND, each ESR is planned to be recruited for the maximum duration of 36 months;
- Any nationality.

Mobility rule

- The researcher must **not** have resided or carried out his/her main activity (work, studies, etc.) in the country of his/her host organisation for more than **12 months in the 3 years** immediately prior to his/her recruitment. Short stays, such as holidays, are not taken into account;
- This mobility rule applies to the beneficiary where the researcher is first recruited, and not to beneficiaries to which the researcher is sent or seconded;
- **Exceptions International Organisations**: Eligible researcher must not have spent more than 12 months in the 3 years immediately prior to the date of selection in the same appointing international organisation;
- Specifically for EID projects, such as STEP4WIND, the recruited researcher must spend at least 50% of their time in the non-academic sector. This inter-sectoral mobility must be between beneficiaries and /or partner organisations located in different countries.

4.4.2 Recruitment process

- The vacancies will be advertised and published internationally;
- Beneficiaries must publish vacancies as widely as possible;
- Obligatory publication in the EURAXESS Jobs Portal;
- The consortium will follow an open, transparent, impartial, equitable and merit-based recruitment procedure.

- Ensure that no conflict of interest exists in or arises from the recruitment (family, economic interest, emotional life,..).
- The recruitments have to be in accordance with the European Charter and Code of Conduct for the Recruitment of Researchers.
- The same principles should be followed for all recruitments during the lifetime of the project.
- The use of public sites to advertise the vacancies will be used and maximum exposure will be given (EURAXESS, organisation sites, etc.).

Date of recruitment

'Date of recruitment' means the first day of the employment of the researcher for the purposes of the action (i.e. the starting date indicated in the employment contract/equivalent direct contract).

Each beneficiary must submit a **'researcher declaration'** within 20 days after the recruitment of each researcher (Art. 19.1 of the GA). The declaration needs to be uploaded in the Portal (see appendix 3).

The beneficiaries within STEP4WIND will recruit each eligible researcher under an employment contract that reflects the requirements mentioned in the GA and be confirmed via the Researcher Declaration in the Portal.

4.4.3 Starting and duration ESR

The recruiting beneficiaries host the researcher at their premises and provide training as well as the necessary means for implementing the action. Within STEP4WIND, under the EID (European Industrial Doctorates) character of the project, the researchers will need to also be hosted by the non-academic sector, where the flexible recruitment rule applies. Researchers recruited in an EID project must spend at least 50% of their recruitment period at institutions in the non-academic sector, thus, jointly supervised by an academic and a non-academic organisation.

Within STEP4WIND, the envisioned starting date of the ESRs varies between month 7 (1st of October 2020) and month 12 (1st of April 2021). In total, the individual ESRs contracts should have the duration of 36 months, thus, the recruitment cannot take place later than month 12, as the project has a duration of 48 months.

Hereunder the recruiting beneficiaries within STEP4WIND:

Fellow	Recruitment	Time spent in academic beneficiary	Time spent in non-academic beneficiary
ESR1	PPF (Industry, FR) TUD (Academic, NL)	TUD (NL) (16 months)	PPF (FR) (18 months) MARIN (2 months)
ESR2	TUD (Academic, NL) Siemens Gam. (Industry, DK)	TUD (NL) (16 months)	Siemens Gam. (DK) (18 months) MARIN (2 months)
ESR3	TUD (Academic, NL) Siemens Gam. (Industry, DK)	TUD (NL) (18 months)	Siemens Gam. (DK) (18 months)
ESR4	TUD (Academic, NL) PPF (Industry, FR)	TUD (NL) (18 months)	PPF (FR) (18 months)
ESR5	Polimi (Academic, IT) MARIN (Industry, NL)	Polimi (IT) (16 months) TUD (NL) (2 months)	MARIN (NL) (18 months)
ESR6	Eire (Industry, IE) TUD (Academic, NL)	TUD (NL) (12 months)	Eire (IE) (18 months)
ESR7	Polimi (Academic, IT) ORE Catapult (Industry, UK)	Polimi (IT) (18 months)	ORE Catapult (UK) (18 months)
ESR8	UCC - MaREI (Academic, IE) MARIN (Industry, NL)	UCC - MaREI (IE) (18 months)	MARIN (NL) (18 months)
ESR9	UCC - MaREI (Academic, IE) ORE Catapult (Industry, UK)	UCC - MaREI (IE) (18 months)	ORE Catapult (UK) (18 months)
ESR10	UCC - MaREI (Academic, IE) PPF (Industry, FR)	UCC - MaREI (IE) (18 months)	PPF (FR) (18 months)

Table 3. STEP4WIND Recruitment beneficiaries

As mentioned in the previous pages, each ESR in STEP4WIND will be jointly supervised and hosted by an academic and an industrial beneficiary. Besides exposing the ESRs to both academic and industrial working environments, this will ensure that the ESRs are trained to the industry needs. It will also give the opportunity to the ESRs to acquire research or complementary training that would not have been possible at the academic or industrial institution alone.

Recruitment in STEP4WIND will be shared between two beneficiaries (see table 1.7 in the Grant Agreement).

4.4.4 Secondments

In ITN, the recruited researchers can be seconded to other beneficiaries and/or to partner organisations for a specific duration of their recruitment.

In this context, **secondments** are a period of time spent by a fellow at a beneficiary's or a partner organisation's premises other than those of the beneficiary which has recruited him/her under the action - must involve physical mobility of the fellow - supervision and training/research activities.

In STEP4WIND, there is a joint host between beneficiary 1 and 2 (i.e. contract provided by both beneficiary 1 and 2), thus, where deemed necessary additional short-term secondments to partner organisations will be organised, for example to make use of specific experimental facility or get trained to specific methods. The secondments will be supervised by a local senior research supervisor.

Within STEP4WIND, the secondments are detailed in Section 4 of the Annex I to the Grant Agreement.

ESR	Public sector		Private sector	
1	TUD: modelling		PPF: floater design	MARIN: testing
2	TUD: methods		Siemens: turbine	MARIN: database
3	TUD: methods		Siemens Gamesa: loading calculation	
4	TUD: framework		PPF: farm development	
5	Polimi: wind tunnel testing	TUD: control	MARIN: wave basin testing	
6	TUD: characterisation	NUI Galway: materials	Eire: manufacturing	
7	Polimi: testing		ORE: modelling	
8	UCC - MaREI: installation		MARIN: simulations	
9	UCC - MaREI: O&M		ORE: robotics and modelling	
10	UCC - MaREI: energy storage technology		PPF: floater design	

Table 4. Appointed ESRs to the consortium members in different sectors.

The grey highlighted cells represent short-term secondments.

Personal Career Development Plan

In STEP4WIND an individual PCDP has to be delivered by each ESR by M12. A template can be found in the Consortium Agreement and as Appendix 1 to this document.

5. Communication Infrastructure

5.1 Internal communication

Internal communication is considered communication amongst beneficiaries and partner organisations.

5.1.1 Distribution lists / email

When sending emails, it should be remembered that many people may be working on a number of different projects and are likely to receive numerous emails every day. This can make it difficult to quickly recognise the significance of an email. Therefore, project related emails should always include in the subject title the name of the project followed by a more specific description of the subject. It is also advised to append the corresponding WP, for example:

[Subject: STEP4WIND: Minutes KoM - Deadline feedback 21 April 2020]

Furthermore, it is required to copy the scientific coordinator (A.C.Vire@tudelft.nl) and the project coordinator (o.schippers-trifan@tudelft.nl; m.boonstra@tudelft.nl) in all WP1 and other project coordination related e-mail communications.

Three general mailing lists have been created:

- WP leaders and other principal investigators: step4wind-pi@lists.tudelft.nl
- Administrators from consortium parties: step4wind-admin@lists.tudelft.nl
- Early Stage Researchers and joint supervisors: step4wind-esr@lists.tudelft.nl

Required changes to the mailing lists can be sent to Oana Schippers-Trifan, TU Delft (o.schippers-trifan@tudelft.nl).

The contact details of all partners can be found on the project's Internal Communication Platform.

5.1.2 SURFdrive / internal communication platform

A SURFdrive repository was set up as an Internal Communication Platform to host the work developed by the STEP4WIND consortium: https://surfdrive.surf.nl/files/index.php/s/hhDGhPYlOFXX8rl/authenticate

All members of the consortium have been provided with the login credentials to access the repository.

The SURFdrive has been organized in the following sections:

1. Project Repository:
    a. Contact Info
    b. Project Proposal
    c. Grant Agreement
    d. Finance
    e. Deliverables Milestones

f. Dissemination, Exploitation and project identity
g. Reports

2. Shared Workspaces:
   a. WP 1 – Design
   b. WP2 – Production and Deployment
   c. WP3 – Operation
   d. WP4 – Training
   e. WP5 – Dissemination and exploitation
   f. WP6 – Management
   g. WP7 – Ethics requirements

Required changes to this structure can be sent to Oana Schippers-Trifan, TU Delft (o.schippers-trifan@tudelft.nl).

5.1.3 Document standard / Templates

All public documentation needs to conform to the document standards provided by the Coordinator. The project style and the documents standard have been made available for all partners on the project internal communication platform SURFdrive.

The document standard should be used for:

- Official EU reports (such as Periodic, Final);
- Deliverable reports;
- Periodic reports;
- Public documents by the consortium;
- Project deliverables (in a report format); and
- any documents that are declared as public by the consortium.

All project templates (deliverables, presentations, document standard) will be available on SURFdrive.

For internal project documents, it is also advised to apply this standard, such as meeting presentations and minutes.

Document titles

	Deliverables	Tasks	Meetings	Conferences
First letters	STEP4WIND	STEP4WIND	STEP4WIND	STEP4WIND
Underscore	_	_	_	_
Next letters	Deliverable number [Dx.y, where x=WP number and y=deliverable number]	Task number (Tx.y where x=WP number and y=task number	Type of document (i.e. Agenda, Minutes, Presentation). In case of presentation, incl. WP number	Event title
Underscore	_	_	_	_
Next letters	Short explanatory title for the document	Short explanatory title for the document	Date and location of the meeting	Date and location of the meeting
Underscore	_	_	_	_
Next letters (only for presentations)			Short name of organisation and initials of presenter	Short name of organisation and initials of presenter
Underscore	_	_	_	_
Next letters	"v" and number of revision of this report [v0.1=draft version, v1.0=final version]	“v" and number of revision of this document [v0.1=draft version, v1.0=final version)	"v" and number of revision of this document [v0.1=draft version, v1.0=final version]	"v" and number of revision of this document [v0.1=draft version, v1.0=final version]

Table 5. Standard for document names

Deliverable documents:

[STEP4WIND_Dx.y_Title_v0.1] where:

x=WP number and y=deliverable number

v0.1=draft version, v1.0=final version

example: STEP4WIND_D1.1_Management guidelines_v1.0

Task documents:

[STEP4WIND _Tx.y_Title_v0.1] where:

x=WP number and y=task number

v0.1=draft version, v1.0=final version

example: STEP4WIND _T1.1_Technical coordination_v1.0

Meeting documents:

[STEP4WIND _Type of Doc_Location_YYYYMMDD_Organisation_Initials_v0.1]

example: STEP4WIND _Minutes_Delft_20200407_v0.1

example: STEP4WIND _WP1_Presentation_Delft_20200407_TUD_v0.3

Conference presentations:

[STEP4WIND _Event_Location_YYYYMMDD_Initials_Organisation_v0.1]

example: STEP4WIND _KoM_Delft_20200407_OST_TUD_v1.0

Internal document release

All final versions of internal documents will be released in PDF format by uploading them to the STEP4WIND SURFdrive, accompanied by their sources (e.g. Word file). Additionally, those documents that have to be public will be made accessible through the STEP4WIND project website.

5.2 External communication

External communication is considered towards parties outside the consortium, target groups of the project and stakeholders.

5.2.1 Publications and presentations: dissemination protocol

The Consortium Agreement binds beneficiaries and partner organisations (and their early stage researchers) to the following dissemination rules:

8.3 Dissemination

8.3.1 Dissemination of own Results

8.3.1.1 During the Project and for a period of 1 year after the end of the Project, the dissemination of own Results by one or several Parties including but not restricted to publications and presentations, shall be governed by the procedure of Article 29.1 of the Grant Agreement subject to the following provisions.

Prior notice of any planned publication shall be given to the other Parties at least 14 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the Party or Parties proposing the dissemination within 7 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.

8.3.1.2 An objection is justified if:

(a) the protection of the objecting Party's Results or Background would be adversely affected

(b) the objecting Party's legitimate academic or commercial interests in relation to the Results or Background would be significantly harmed.

The objection has to include a precise request for necessary modifications.

8.3.1.3 If an objection has been raised the involved Parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting Party shall not unreasonably continue the opposition if appropriate measures are taken following the discussion.

The objecting Party can request a publication delay of not more than 90 calendar days from the time it raises such an objection. After 90 calendar days the publication is permitted, provided that Confidential Information of the objecting Party has been removed from the Publication as indicated by the objecting Party.

8.3.2 Dissemination of another Party's unpublished Results or Background

A Party shall not include in any dissemination activity another Party's Results or Background without obtaining the owning Party's prior written approval, unless they are already published.

8.3.3 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree which includes their Results or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

5.2.2 Obligation to acknowledge EU-funding

Unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) must:

- display the EU emblem (when displayed together with another logo, the EU emblem must have appropriate prominence):

- include the following text (Disclaimer):

“The project STEP4WIND has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 860737.

The opinions expressed in this document reflect only the author’s view and in no way reflect the European Commission’s opinions. The European Commission is not responsible for any use that may be made of the information it contains.”

- include the project logo

The project logo has been created. This is now made available on the project Internal Communication Platform under Project Repository – 06 Dissemination, Exploitation and project identity.

Reference. The obligation to promote the project and its results is described in Article 38 of the Annotated Model Grant Agreement (https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf).

5.2.3 Website and social channels

Partners are requested to share project updates and news items on their local communication platforms and channels. Also here the obligations as set out in paragraph 2.2.2 and AMGA article 38 apply.

The central platform and social channel for the project are:

https://www.step4wind.eu/

https://twitter.com/step4wind

Both are maintained by the Coordinator TU Delft. Get in contact with the Coordinator if news items or other project updates should be communicated. The WP5-lead will check at partners for updates at a regular interval.

5.2.4 Reporting communication, dissemination and exploitation

Ongoing. All external STEP4WIND communication and dissemination actions and outings undertaken on behalf of the project should be shared to the WP5-lead providing information about:

- The date and place of the publication and/or presentation
- The content of the publication / presentation: sharing the texts, photos, videos, or any other material
- Contact person in case more elaboration is needed.

This information will be used in deliverable reports to the EC from WP5.

Periodic. At the end of each project period the project is requested to report on dissemination (and exploitation) activities. Each beneficiary, partner organisation (including their early stage researchers) is required to provide input for this. Find below the information tables required.

The WP5-lead coordinates this process and shall at regular intervals contact partners to harvest input for the reporting tables. At the outset of the project the WP5-lead will share annotated versions of the reporting tables to minimize that inputs from different partners are multi-interpretable and hence difficult to assemble and compare for the consortium at large.

Overview of reporting tables for communication and dissemination below.

Organisation of a Conference	
Organisation of a Workshop	
Press release	
Non-scientific / non peer-reviewed publications	
Exhibition	
Flyer	
Training	
Social Media	
Website	
Communication Campaign (e.g. radio / TV)	
Participation to a Conference	
Participation to a Workshop	
Participation to an Event other than a Conference of Workshop	
Video/Film	
Brokerage Event	
Pitch Event	
Trade Fair	
Participation in activities organized jointy wth EU projects	
Other	

Table 6 . Number of Dissemination and Communication activities linked to the project for each of the following categories

Scientific Community (Higher Education / Research)	
Industry	
Civil Society	
General Public	
Policy Makers	
Media	
Inventors	
Customers	
Other	

Table 7. Specification the estimated number of persons reached, in the context of all dissemination and communication activities

Type of scientific publication	Title of the scientific publication	DOI	ISSN or eSSN	Authors	Title of the journal or equivalent	Number, date	Publisher	Place of publication	Year of public ation	Relevant pages	Public & private publicat i on[4]	Peer-review	Is/Will open access provided to this publication
/Article in journal/ /Publication in conference proceeding/w orkshop/ /Books/Mono graphs/ /Chapters in books/	[insert title of the publication]	[insert DOI reference]	[insert ISSN or eSSN number]	[insert authors' name(s)]	[insert title of the journal]	[insert number of the journal] [insert month of the publication] [insert year of the publication]	[insert name of the publisher]	[insert place of publication]	[insert year of the publication]	[insert first page of the publication] - [insert last page of the publication]	/YES/ /NO/	/YES/ /NO/	/Yes - Green OA [insert the length of embargo if any]/ /Yes - Gold OA [insert the amount of processing charges in EUR if any]/

Table 8. Scientific Publications

Digital Object Identifier, DOI (if available)	Title/Identifier (if no DOI available)	Is this dataset Openly accessible5?	Is this dataset re-usable6	If the dataset is linked to a publication, specify the DOI of the publication
[insert DOI reference]	[insert title or identifier]	*[YES]* *[NO]*	*[YES]* *[NO]*	[insert DOI reference

Table 9. Open Research Data connected to Scientific Publications (see also Data Management Plan)

Type of IP Rights	Application reference	Date of the application	Official title of the application	Applicant(s)	Has the IPR protection been awarded?	If available, official publication number of award of protection

Table 10. Intellectual property rights resulting from the project

6. Finance

6.1 Budget in Grant Agreement

Figure 3 presents the budget as Annex 2 to the Grant Agreement.

			Estimated eligible[1] costs (per budget category)									EU contribution		
			A. Costs for recruited researchers						B. Institutional costs			Total costs	Reimburse-ment rate %	Maximum EU contribution[2]	Maximum grant amount[3]
			A.1 Living allowance		A.2 Mobility allowance		A.3 Family allowance		B.1 Research, training and networking costs		B.2 Management and indirect[4] costs				
	Number of units (person-months)	Form of costs[5]	Unit		Unit		Unit		Unit		Unit				
			Costs per unit[6]	Total a[7]	Costs per unit[6]	Total b[7]	Costs per unit[6,8]	Total c[7]	Costs per unit[6]	Total d[7]	Costs per unit[6]	Total e[7]	f = a+b +c+d+e	g	h	i
1. TU Delft	84.00		3 528.33	296 379.72	600.00	50 400.00	250.00	21 000.00	1 800.00	151 200.00	1 200.00	100 800.00	619 779.72	100.00	619 779.72	n/a
2. POLIMI	36.00		3 413.88	122 899.68	600.00	21 600.00	250.00	9 000.00	1 800.00	64 800.00	1 200.00	43 200.00	261 499.68	100.00	261 499.68	n/a
3. UCC	54.00		3 780.12	204 126.48	600.00	32 400.00	250.00	13 500.00	1 800.00	97 200.00	1 200.00	64 800.00	412 026.48	100.00	412 026.48	n/a
4. SGRE AS	36.00		4 414.50	158 922.00	600.00	21 600.00	250.00	9 000.00	1 800.00	64 800.00	1 200.00	43 200.00	297 522.00	100.00	297 522.00	n/a
5. PPF	54.00		3 783.39	204 303.06	600.00	32 400.00	250.00	13 500.00	1 800.00	97 200.00	1 200.00	64 800.00	412 203.06	100.00	412 203.06	n/a
6. OREC	36.00		4 571.46	164 572.56	600.00	21 600.00	250.00	9 000.00	1 800.00	64 800.00	1 200.00	43 200.00	303 172.56	100.00	303 172.56	n/a
7. EC	24.00		3 780.12	90 722.88	600.00	14 400.00	250.00	6 000.00	1 800.00	43 200.00	1 200.00	28 800.00	183 122.88	100.00	183 122.88	n/a
8. MARIN Academy	36.00		3 528.33	127 019.88	600.00	21 600.00	250.00	9 000.00	1 800.00	64 800.00	1 200.00	43 200.00	265 619.88	100.00	265 619.88	n/a
Total consortium	360.00		n/a	1 368 946.26	n/a	216 000.00	n/a	90 000.00	n/a	648 000.00	n/a	432 000.00	2 754 946.26	100.00	2 754 946.26	2 754 946.26

Figure 3. Annex 2 to the Grant Agreement

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 860737.

6.2 Consortium Plan Budget

Figure 5 presents the Consortium Plan Budget which gives the actual budget to work from. This budget is an amendment to GA - Annex 2 on two paragraphs:

- Training and Networking
- Management

The original budget was redistributed amongst the beneficiaries with the following reasoning. First, all the beneficiaries contribute to the budget for a project manager. In STEP4WIND, the costs of the management of all consortium-related matters amount to 38% of the consortium management and overhead costs. This includes the hiring of a project manager (PM) who will attend all our meetings, organise reporting, assist with meeting minutes, and help with all the non-scientific documents required by the EU. This also includes maintenance of our website and the set-up of a data sharing infrastructure for the consortium documents. Second, half of the training budget was redistributed in proportion to the amount of training days organized by each beneficiary. The new budget table is shown in Attachment 8 of the Consortium Agreement: *Consortium Plan Budget and Coordination costs.*

New budget with redistribution of Management and Training budgets

					Researcher Costs			Institutional		
Participant	Organisation	Country	No	Person-months	Living	Mobility	Family	Training, Networking	Manament & Overheads	
1	TU Delft	NL	5	84	296.379,72	50.400,00	21.000,00	206.578,72	226.656,00	801.014,44
2	Polimi	Italy	2	36	122.899,68	21.600,00	9.000,00	80.655,32	26.784,00	260.939,00
3	UCC	Ireland	3	54	204.126,18	32.400,00	13.500,00	96.855,32	40.176,00	387.057,50
4	Siemens Gam	Denmark	2	36	158.922,00	21.600,00	9.000,00	53.080,85	26.784,00	269.386,85
5	Principle Pow	France	3	54	204.303,06	32.400,00	13.500,00	62.387,23	40.176,00	352.766,29
6	Offshore - Cat	UK	2	36	164.572,56	21.600,00	9.000,00	59.974,47	26.784,00	281.931,03
7	EC	Ireland	1	24	90.722,88	14.400,00	6.000,00	42.280,85	17.856,00	171.259,73
8	Marin	NL	2	36	127.019,88	21.600,00	9.000,00	46.187,23	26.784,00	230.591,11
			20	360	1.368.945,96	216.000,00	90.000,00	648.000,00	432.000,00	2.754.945,96

Figure 4. Consortium Plan Budget (see Attachment 8 to the Consortium Agreement)

6.2.1. Management Budget

Beneficiary	Amount
TU Delft (CO)	38.304
Polimi	16.416
UCC	24.624
Siemens Gamesa	16.416
Principle Power	24.624
Offshore - Catapult	16.416
EC	10.944
Marin	16.416
Total	**164.160**

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 860737.

6.3 MSCA ITN financial rules (a very short synopsis)

The financial support for ITN projects is calculated on the basis of eligible person-months and takes the form of grants covering up to 100% of the costs. Funding is exclusively in the form of **unit costs.**

Unit costs are fixed amounts and apply to all categories of eligible costs. They are measured by the number of months which are implemented by the eligible researchers in the project. Please note that the unit costs are determined ex-ante in the Work Programme, specified in Annex 2 of the Grant Agreement, and cannot be modified. The grant reimburses 100% of the project's eligible unit costs.

One unit is defined as the work of one researcher in the project for a period of one month.

In this context, these following points address to the periodic reporting and final reporting and not to the internal progress reports.

6.3.1. Unit costs

The budget contains the estimated eligible costs in unit costs, broken down by Partner (EU GA: Articles 5, 6, and 14).

There are two types of unit costs in MSCA ITN project (i.e. budget categories):

6.3.1.1. Researchers unit costs

a. **A1 Monthly Living allowance:** this refers to the basic, gross amount for the benefit of the researcher to be paid to the researcher in monthly instalments. The monthly rate for MSCA 2018-2020 calls is set to EUR 3,270* → *Multiplied by the Country Correction Coefficient where the fellow is hosted (Work Programme 2018-2020).The country coefficients are indicated in Table 2 of the MSCA Work Programme. This rate if for researchers devoting themselves to their project on **a full-time basis.**

b. **A2 Mobility allowance:** This allowance contributes to the expenses of the researcher caused by mobility. This amount if specified in Table 1 of the MSCA Work Programme and it amounts EUR 600/ month for the 2018-2020 calls. Note: this allowance covers private costs of the researchers, not professional costs (e.g. secondments) which are covered by the budget category 'research, training and networking costs'.

c. **A3 Family allowance:** This allowance will be paid to the researcher, should he/she have a family, regardless of whether the family will move with the researcher or not. This amount EUR 500/month. The family status will be determined at the time of their recruitment in the project and will not evolve during the project lifetime. In this context, family is defined as persons linked to the researcher by 1. Marriage, or 2. A relationship with equivalent status to a marriage recognised by the national or relevant regional legislation of the country where this relationship was formalised; or 3. Dependent children who are actually being maintained by the researcher.

Note: The mobility and family allowances are fixed amounts, regardless of the country of recruitment and shall be excluded from taxation, where this is in line with national legislation. The full amount of these allowances, minus the compulsory deductions, should be paid to the researcher for their own use. **Therefore, no flights or accommodation related to activities in the project (e.g. conferences, secondments)** can be charged under this category.

6.3.1.2. Institutional costs

d. **B1 Research, training and networking costs** are a unit cost of a fixed amount of EUR 1 800 per implemented person-month managed by the host beneficiaries to contribute to expenses related to:
   i. Participation of ESRs to training activities
   ii. Expenses related to research costs
   iii. Execution of the project
   iv. Contribution to the expenses related to the coordination between participants
   v. Costs for visiting ESRs
   vi. Tuition fees (where applicable)

- Institutional costs are covering also costs (e.g. travel and accommodation costs) arising from each secondment of 6 months or less which require mobility from the place of residence

e. B2 Management and indirect costs: Fixed amount of EUR 1 200 per implemented person-month

- These are the costs associated with the preparation of the reports and other documents required by the REA:
  - Researcher declarations, deliverables, ethics, progress report, periodic and final reports etc.
  - Personnel costs of the Project Manager
- Maintenance of the Consortium Agreement
- The overall legal, ethical, financial and administrative management for each of the beneficiaries
- Indirect costs of the action

The eligibility of the **Institutional costs** is linked to the **eligibility of the costs** for the recruited ESR.

Frequent internal reporting assures that these budgets are monitored well and that under- and over spending is noticed at an early stage.

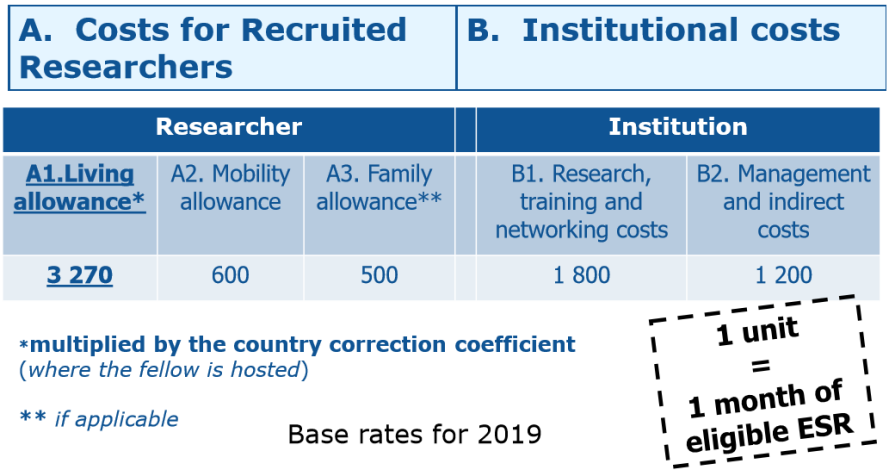

Figure 5. Cost categories in MSCA ITN projects

6.3.1.3. Budget Transfers

The costs for the researcher must be fully used for the researcher - Article 6.2.A(c).

Formal transfer **not possible** due to nature of unit costs.

The use of **institutional costs** is decided by the beneficiary. Unused amounts of institutional costs can be used for other action-related purposes e.g.:

- to organise additional training activities;
- to increase the salary of the researcher.

7. Reporting

7.1 Reporting calendar

Throughout the lifetime of the project there are:

- Internal financial monitoring;
- Periodic report(s) to the EU (financial & technical progress).

Within STEP4WIND the following reporting periods have been set up in agreement with the EC:

1. RP1→ M1 (1 April 2020) – M24 (31-03-2022) – Technical Report and Individual Financial Statements M24
2. RP2→ M25 (1-04-2022) – M48 (31-03-2024) – Technical Report and Individual Financial Statements M48

In general, the REA carries out several additional checks throughout the project's duration. As described in the MSCA Guideline these checks are usually as follows:

1. Mid-term check (M13-M15) based Technical Report at M13 covering all activities, mainly the recruitments implemented);
2. Interim Check (M24-M26) it is done remotely, not physically;
3. Final check (based on the M48 reporting).

In STEP4WIND the formalization of the additional checks by REA needs to be done in agreement with the Project Officer.

7.2 Internal Progress Report

Brief verification of the progress (incl. possible deviations from the work plan), and in particular an update on the financial expenditures will take place every consortium meeting, thus, financial update will be a fixed agenda item for consortium meetings (both physical and remote ones). The objective of this financial monitoring is to ensure contingency measures can be out in place timely, if necessary.

The monitoring of the technical work in progress or work completed by the ESRs as well as reporting of any major deviations will be done directly by the appointed supervisors. The ESRs supervisors are strongly advised to notify the scientific coordinator in due time when any deviations are expected. A template for the technical work progress will be set up during the project's deployment.

Steps financial monitoring: 1) The project coordinator provides an Excel template (based on the Model ANNEX 4 for H2020 MGA MSCA-ITN; a template will be made available on the Internal Communication Platform); 2) This template should be filled out by all the consortium partners. The currency used must be EURO (reference exchange rate based on the European Central Bank) and the time worked must be calculated in unit costs. This excel sheet provides the coordinator with valuable information needed for monitoring purposes and management reporting; 3) The coordinator consolidates the provided information and sends recommendations to all the consortium partners individually.

7.3 Periodic report

The periodic report (*EU GA: Article 20.3*) must be submitted by the project coordinator **within 60 days** following the end of each reporting period. This report must include explanations for any deviations (budget and content) from the DoA (*EU GA: Annex 1*). The periodic technical report consists of a technical report and a financial report.

The 'periodic technical report' consists of two parts; Part A and Part B:

A. **Part A** is partly generated by the EC IT system SyGMA. It is based on the information entered by the participants through the periodic report and continuous reporting modules of the electronic exchange system in the Participant Portal. The participants can update the information in the continuous reporting module at any time during the life of the project. Part A contains:

- the cover page,
- a summary for publication by the agency (which will be published on the EU website and must be written for a wider audience without reference to internal project references as work packages deliverables and milestones), and
- the answers to the questionnaire (covering issues related to the project implementation, the economic and social impact).

B. **Part B** is the narrative part that includes explanations of the work carried out by the beneficiaries during the reporting period. Part B needs to be uploaded as a PDF document following the template of Part B Periodic Technical report.

The coordinator is responsible for the summary and the questionnaire (Part A).

WP Leaders are responsible to gather all information about the technical progress in their WP from the Task Leaders and compile a WP report before sending it to the coordinator. Subsequently, a draft WP report needs to be send to the Coordinator one month before the deadline (i.e. official deadline of the periodic reporting; unless otherwise decided by the CO). The coordinator consolidates the provided information and sends the complete periodic technical report to the consortium for review. The final approved version will be uploaded to the Participant Portal by the coordinator.

The Periodic Report Template can be found on the EC website under H2020 reference documents:
http://ec.europa.eu/research/participants/data/ref/h2020/gm/reporting/h2020-tmpl-periodic-rep_en.pdf.
An adapted word version of the Periodic Report Template will be shared with all consortium partners by the project coordinator before each reporting period.

The 'periodic financial report' consists of:

- **Individual Financial Statements** (IFS, *EU GA: Annex 4*) for each partner, for the reporting period concerned. This financial statement must detail the eligible costs for each budget category calculated in EURO and in unit costs. Each partner must declare all eligible costs, even if costs exceed the amounts indicated in the estimated budget.
    - **A. Costs of recruited researchers**: this information is partly automatically filled in based on the information available in the Researcher Declaration. Thus, the Financial Statement is automatically generated using the data provided in the Researcher Declarations from Continuous Reporting and/or from the Technical Part. As result, most of the fields are read-only (see the below example Financial Statement).

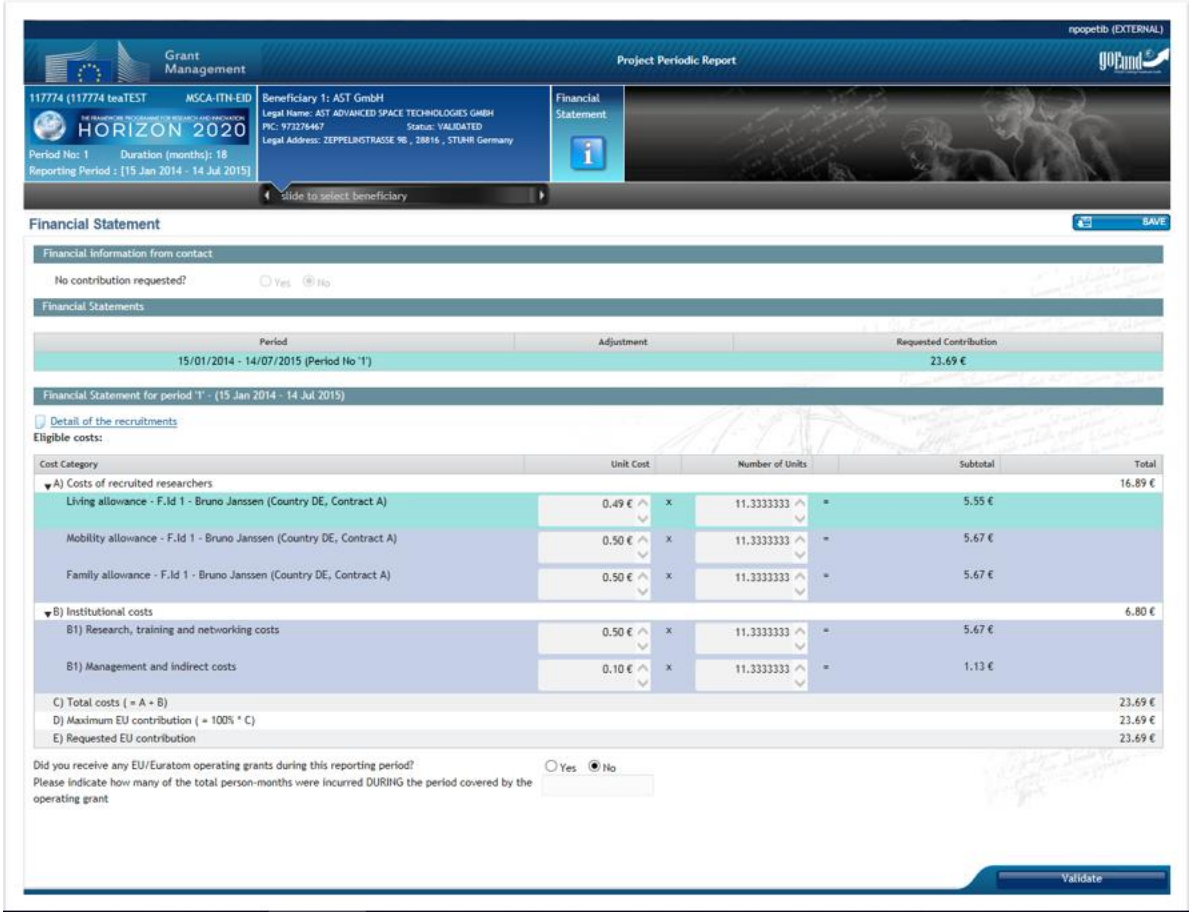

Figure 6. Example Financial Statement

A financial statement can only be "locked for review" or "signed and submitted", if the Financial Statement has been saved beforehand. Only then the latest data will be locked for review or signed. So each time the researcher declarations have been updated, the financial statement has to be saved.

The template for the financial statement for beneficiaries for a reporting period can be found in the Annex 4 of the Model Grant Agreement.

A **'periodic summary financial statement'** will be created automatically by the electronic exchange system, consolidating the individual financial statements of the partners, including the request for interim payment.

The FSIGN of each partner will be able to complete online their own Financial Statement including the explanations on the use of resources. The project coordinator will have a final check on the statements and submit electronically to the EC.

Partner Organisation reimbursement

The costs of Partner Organisations can be reimbursed by one of the beneficiaries. It is for the beneficiary(ies) and partner organisation(s) concerned to conclude a Partnership agreement on arrangements for the reimbursement.

Exchange rate

Financial statements are calculated in Euro. The beneficiaries using another currency must convert the costs into euro at the average of the daily exchange rates published in the Official Journal of the European Union, or by using the reference exchange rate based on the European Central Bank calculated over the corresponding reporting period.

Another indicative exchange rate for the specific reporting period can be checked here:

https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/index.en.html

Monthly allowances for the recruited researchers can be calculated using a conservative exchange rate, if a corrective payment is then made (to the researchers) immediately after the end of the reporting period. This must be clearly explained in the employment contract/equivalent direct contract.

7.4 Final Report

In addition to the periodic report for the last reporting period, the coordinator must submit the final report within 60 calendar days following the end of the last reporting period.

The Final Report Template should be available on the EC website under H2020 reference documents:

https://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html

The final report will include the following:

1. a **'final technical report'** with **a summary** for publication containing:
- an overview of the results and their exploitation and dissemination;
- the conclusions on the action and
- the socio-economic impact of the action.

The project coordinator compiles this final technical report in consultation with the partners.

2. a **'final financial report'** containing:
- **'final summary financial statement'** will be created automatically by the electronic exchange system, consolidating the individual financial statements of the partners for all reporting periods;

7.4.1. Individual Financial Statement – Declaration of eligible costs

The individual financial statement needs to be submitted electronically by each partner to the EU through the Participant Portal (EU GA: Annex 4).

Eligible costs => Eligible units:

- Unit costs (defined by the cost categories)
- Units incurred during the action duration
- Necessary for implementing the action Number of units must be identifiable and verifiable and supported with evidence
- Burden of proof of units' eligibility on the beneficiary

The procedure below needs to be updated once this process is available in the EU Participant Portal of the Project.

1. Login to the Participant Portal
- To be able to login to the Participant Portal you need to have an ECAS (European Commission Authentication Service) password.
- Go to the sign-up page and create your ECAS account. Make sure you selected the right domain: External.
2. Choose the tab 'My Project(s)'. If STEP4WIND is not listed, contact the project coordinator Oana Schippers-Trifan (o.schippers-trifan@tudelft.nl).
3. Click 'Actions' > 'Manage project' > 'Periodic Reporting'.
4. Click under your organisation on the 'Financial Statement'. Most of the information is automatically generated based on the data entered in the Researcher Declaration (through Continuous Reporting). Fill in the open field with information requested and explanations.
5. Once everything is filled in press 'Save'.
6. Then click on the button 'inform F-sign', the F-sign will be asked by e-mail to sign the financial statement electronically. If an organisation has not yet added a F-sign to the project (the PF-sign), the LEAR needs to be contacted. The LEAR needs to nominate a F-sign for the organisation and then the participant contact needs to add the F-sign to the project.
7. The PF-sign then needs to submit the financial statement to the coordinator.
8. The coordinator will make a final check and then submit the financial statements including all reports to the EU through the Participant Portal.

7.4.2. Audit

Certificates on the financial statements (CFS) are **not required** for ITN projects for reporting purposes. Financial distribution report might be requested in some specific cases (audit, termination of beneficiary, recovery, etc.); please check Grant Agreement

7.5 Keeping records – supporting documentation

Each partner must keep records and other supporting documentation for a period of five years after the payment of the balance in order to prove the proper implementation of the action and the declared costs to be eligible. The documents need to be the original documents. Digital and digitalised documents are accepted if national law accepts these documents as originals.

The partners must keep the records and documentation according to their usual cost accounting practices and internal control procedures. There must be a track between the amounts declared, the amounts recorded in accounts and the amounts stated in the supporting documentation (audit trail).

ESR related documentation

The following records must be kept in order to prove the eligibility and number of units of the ESRs:

- Evidence of open, fair, transparent recruitment process
- Evidence of the eligibility of the fellow in terms of researcher experience, mobility and family status (e.g. CVs, copies of diplomas, ...)
- Employment contract/agreement with the fellow with all provisions from GA (Art. 32 a-m)
- Proof of payment of the researcher's allowances and of the deductions for social security etc.

Partner related documentation

For the different cost categories, consider the following documents:

Direct personnel costs:

- monthly signed time sheets (6.6.1 Time recording)
- calculation of hourly rate (EU GA: Article 6.2);
- proof of paid salary;
- labour contracts.

Other direct costs (travel costs and related subsistence allowances, equipment costs, costs of other goods and services):

- all receipts of expenditure (boarding passes, train tickets, etc.);
- meeting docs: signed presence lists, minutes, agenda;
- calculations of depreciation costs charged to the project.

Indicative Audit Programme on audits in Horizon 2020 can be found here (MSCA, page 109):

https://ec.europa.eu/research/participants/data/ref/h2020/other/gm/audit/h2020-iap_en.pdf

This document is also made available on Internal Communication Platform, SURFDrive under Shared Workspaces>WP6 – Management > Reference documents

ESRs

Recruited fellows must work full-time on the project.

It is paramount importance to keep evidence that the fellow was recruited and worked full time (unless the REA has approved otherwise) and exclusively on the action at the beneficiary's premises (or on secondment): this can include lab books, conference

abstracts, library records, etc. Further, records and other supporting documentation on scientific and technical implementation of the action is also necessary.

7.5.1. Time recording

Timesheets for MSC Fellow

If local administrative rules don't use timesheets then a clear and easy system to record the presence of the fellow for full time contract of employment (and/or secondment) is highly recommended.

8. Deliverables

8.1 List of Deliverables

WP	No.	Title	Lead beneficiary	Nature	Dissemination level	Submission deadline
WP1	D1.1	Paper: CFD modelling for wave-structure interactions with dynamic mesh adaptivity	TU Delft	Report	Public	30 Sep 2022
WP1	D1.2	Report: benchmark with wave tank data from MARIN	PPF	Report	Public	30 Sep 2023
WP1	D1.3	Paper: CFD of unsteady aerodynamics of FOWTs	TU Delft	Report	Public	30 Sep 2022
WP1	D1.4	Paper: recommendations for model-scale testing of FOWTs under large motions	SGRE AS	Report	Public	30 Sep 2023
WP1	D1.5	Paper: system-identification ROM trained on LES	TU Delft	Report	Public	31 Mar 2022
WP1	D1.6	Paper: cheap, high-accuracy, pre-trained ROM for FOWT design	SGRE AS	Report	Public	30 Sep 2023
WP1	D1.7	Paper: model for dynamic anchoring systems in an MDAO	TU Delft	Report	Public	30 Sep 2022
WP1	D1.8	Report: recommendations for risk and cost reductions of FOWT farms	PPF	Report	Public	30 Sep 2023
WP1	D1.1	Paper: CFD modelling for wave-structure interactions with dynamic mesh adaptivity	TU Delft	Report	Public	30 Sep 2022
WP1	D1.2	Report: benchmark with wave tank data from MARIN	PPF	Report	Public	30 Sep 2023
WP1	D1.3	Paper: CFD of unsteady aerodynamics of FOWTs	TU Delft	Report	Public	30 Sep 2022
WP1	D1.4	Paper: recommendations for model-scale testing of FOWTs under large motions	SGRE AS	Report	Public	30 Sep 2023
WP1	D1.5	Paper: system-identification ROM trained on LES	TU Delft	Report	Public	31 Mar 2022
WP1	D1.6	Paper: cheap, high-accuracy, pre-trained ROM for FOWT design	SGRE AS	Report	Public	30 Sep 2023

WP2	D2.1	Database of HIL wind tunnel experiments	POLIMI	data sets, microdata, etc	Public	31 Mar 2022
WP2	D2.2	Paper: comparison between HIL in wind & wave tests	MARIN Academy	Report	Public	30 Sep 2023
WP2	D2.3	Paper: automated process and characterisation of the laminates	EC	Report	Public	30 Sep 2022
WP2	D2.4	Paper: testing of large scale carbon fibre structures	EC	Report	Public	30 Sep 2023
WP2	D2.5	Paper: optimised model of cable installation configuration	POLIMI	Report	Public	30 Sep 2022
WP2	D2.6	Paper: validation of cable configuration with experiments	OREC	Report	Public	30 Sep 2023
WP2	D2.7	2-3 innovations for the installation and decommissioning of large FOWT farms	UCC	Report	Public	30 Sep 2022
WP2	D2.8	Guidelines for reduced cost, risk and environmental impact of installation/decommission	MARIN Academy	Report	Public	30 Sep 2023
WP3	D3.1	Report: review of robotic solutions for floating wind	UCC	Report	Public	31 Mar 2022
WP3	D3.2	Paper: solutions & technologies for robotics in O&M	OREC	Report	Public	30 Sep 2023
WP3	D3.3	Theoretical/Conceptual systems of Blue Economy system for FOWTs	UCC	Report	Public	30 Sep 2021
WP3	D3.4	Techno-economic assessment of Blue Economy systems supporting the WindFloat	PPF	Report	Public	31 Mar 2023
WP4	D4.1	Training guide and plan	POLIMI	Report	Public	30 Sept 2020
WP4	D4.2	Personal Career Development Plan	POLIMI	Report	Public	30 April 2021
WP4	D4.3	Training materials and 3D-printed models	TU Delft	Other	Public	31 Mar 2024
WP4	D4.4	Massive Open Online Course and online game	TU Delft	Websites, patents filling, etc.	Public	31 Jan 2024
WP5	D5.1	Completed STEP4WIND websites and Twitter account	TU Delft	Websites, patents filling, etc.	Public	31 Mar 2024

WP5	D5.2	Publication of the STEP4WIND e-newsletter	PPF	Websites, patents filling, etc.	Public	31 Oct 2020
WP5	D5.3	Progress reports on the outreach activities	PPF	Report	Public	30 Apr 2022
WP5	D5.4	Updates to the roadmap to commercial exploitation	PPF	Report	Public	31 Oct 2020
WP5	D5.5	Data management plan	TU Delft	ORDP: Open Research Data Pilot	Public	30 Sep 2020
WP5	D5.6	Literature reviews	POLIMI	Report	Public	30 Sep 2021
WP5	D5.7	Doctoral theses	POLIMI	Report	Public	31 Mar 2024
WP6	D6.1	Communication infrastructure	TU Delft	Other	Confidential, only for members of the consortium (including the Commission Services)	31 May 2020
WP6	D6.2	Risk mitigation plan and register	TU Delft	Report	Confidential, only for members of the consortium (including the Commission Services)	30 Apr 2021
WP6	D6.3	Guide to the implementation of STEP4WIND	TU Delft	Report	Public	31 May 2020
WP6	D6.4	Consortium Agreement	TU Delft	Report	Confidential, only for members of the consortium (including the Commission Services)	31 May 2020
WP6	D6.5	Supervisory Board of the network	TU Delft	Other	Confidential, only for members of the consortium (including the	31 May 2020

					Commission Services)	
WP6	D6.6	Progress Report	TU Delft	Report	Confidential, only for members of the consortium (including the Commission Services)	30 Apr 2021
WP7	D7.1	NEC - Requirement No. 1	TU Delft	Ethics	Confidential, only for members of the consortium (including the Commission Services)	31 Mar 2021

Table 11. List of deliverables in STEP4WIND

8.2 List of Milestones

Milestone nr	Title	WP	Lead beneficiary	Due date (in months)	Means of verification
MS1	All ESRs have a PCDP	WP4	Polimi	13	All the ESRs will compile a Personal Career Development Plan reviewed annually by the supervisors and also discussed with both a junior and a senior mentors (Achievement of deliverable D4.2)
MS2	First change of beneficiary started for each ESR	WP4	Polimi	25	A secondment plan will be completed for each ESR ahead of the change of beneficiary (Proof of the ESR exchange, e.g. travel/accommodation to the new host, submitted to EU).
MS3	First educational module available online	WP4	TU Delft	24	The first MOOC module will be available online and disseminated on the website and social media (The online link of the module will be sent to the EU).
MS4	STEP4WIND webpage created	WP5	TU Delft	1	The project website will be published online with a description of the project and individual projects (Link of the website sent to the EU and disseminated through social media).
MS5	First e-newsletter published	WP5	PPF	7	The first e-newsletter, presenting the newly contracted ESRs, will be published on the website and disseminated through various channels, e.g. social media, partner network (Achievement of deliverable D5.2)
MS6	First outreach activity completed	WP5	PPF	18	The first outreach activity will target 10-14 years old and will be organized in Delft (Report and photos of the event sent to the EU and disseminated online).
MS7	All ESRs have submitted their mid-term reports	WP5	PPF	30	All ESRs will compile a mid- term report so that progress can be fed back to the EU and additional feedback can be received from the whole consortium. Progress with the graduate schools requirements will also be summarised (Achievement of deliverable D5.3 and research report sent to the EU)
MS8	All ESRs have submitted at least two	WP5	PPF	40	Towards the end of each PhD project, it is expected that all ESRs will have submitted at

	papers				least 2 scientific papers. Dates of actual publication of these outputs are difficult to predict as the review process can sometimes be very long. However, both supervisors will make sure the reviews progress in a smooth way (Preprints sent to the EU and disseminated online whenever possible).
MS9	All ESRs have submitted their final reports	WP5	PPF	48	At the end of the project, each ESR will submit their final reports summarising the main scientific and training achievements of their project. Impact will also be clearly outlined (Achievement of deliverable D5.7).
MS10	Kick-off meeting	WP6	TU Delft	2	At the start of the project, all beneficiaries, and when available partner organisations, will meet in person to finalize the consortium agreement and the first deliverables (Achievement of deliverable D6.5. Meeting minutes available).
MS11	All ESRs positions advertised	WP6	UCC	1	All positions will be broadly advertised from the 1st month of the project to ensure that the best candidates can be hired and contracts can be finalized by Month 6. This will give enough time to settle any Visa issues that might arise (Link to the online vacancies disseminated online and sent to the EU).
MS12	All ESRs recruited	WP6	UCC	6	All ESRs will start their working contract at the 1st hosting beneficiary and will comply with the MSCA employment and mobility rules (ESR contracted and proofs sent to the EU).
MS13	1st Supervisory Board (SB) meeting	WP6	TU Delft	12	This will be the 1st in person SB meeting. The Supervisory Board will meet at least yearly, and every 3 months remotely, to decide on all training and scientific activities of the network, including recruitment and training of ESRs, interaction between the partners (e.g. secondments, workshops, conferences, joint publications), management of IPR, and dissemination of the programme outcomes (Achievement of deliverable D6.5. Meeting minutes available)

MS14	Risk register	WP6	TU Delft	13	A risk register will be periodically updated by the general coordinator and submitted at least yearly to the Supervisory Board. This will ensure that project risks are identified early and appropriate actions are taken to mitigate them (Achievement of deliverable D6.2)
MS15	All recruited fellows enrolled in PhD programme	WP4	POLIMI	12	All ESRs will be enrolled in a PhD degree and will comply with the rules of their respective Graduate Schools. This will provide additional support and training to the ESRs (Proof of enrolment sent to EU).
MS16	Project Check	WP6	TU Delft	15	The Coordinator and the REA will check that the project meets all requirements (Meeting between REA and consortium).
MS17	Advanced models for the non-linear hydrodynamic and aerodynamic behaviour of a semi-submersible FOWT	WP6	TU Delft	30	Through both ESR1 (hydrodynamics) and ESR2 (aerodynamics) projects, insight will be gained in the non-linear behaviour of a semi-submersible FOWT and its interaction with wind and wave loads. The most relevant data generated during the project will be made accessible open-source online following the FAIR principles (Achievement of deliverables D.1.1 and 1.3)
MS18	A methodology to integrate high-fidelity data into design tools	WP1	SGR AS	42	A new reduced-order model based on machine learning algorithms will be applied to the study of FOWTs in order to incorporate CFD into the design optimization, hence making the bridge between ESR1-2 and ESR4 (Achievement of deliverable D1.6).
MS19	Bridge between two experimental techniques to test FOWTs at small-scale	WP2	MARIN Academy	42	HIL in wind tunnel and wave basin will be to advance the reliability of wind tunnel/offshore basin complementary testing approach for industry and advanced design (Achievement of deliverable D2.2).
MS20	Optimal dynamic cable configuration for FOWTs	WP2	OREC	42	A new model, developed in STEP4WIND, will be used to identify the criteria that lead to the optimum cables solution in order to reduce cables solicitations and maximise FOWT performances (Achievement of deliverable D2.6).

MS21	Guidelines to extend the operational window for installation / commissioning of FOWTs	WP2	MARIN Academy	42	A detailed impact assessment and viability plan will be produced for each innovation related to optimizing the installation and decommissioning processes of a large number of FOWTs, whilst reducing the cost, risk and environmental impact of these marine operations (Achievement of deliverable D2.8)
MS22	Design of a specific Blue Economy system for a FOWT	WP3	PPF	36	Conceptual systems of blue economy activities coupled with floating offshore wind farms and substation will be developed and assessed based on their levelised cost of energy. The most promising ones will be outlined and a feasibility study will be performed for the implementation of a specific system on the WindFloat, including the quantification of the benefits of the Blue Economy activity (Achievement of deliverable D3.4).

Table 12. List of milestones in STEP4WIND

8.3 Approval process of deliverables

Work Package Leaders are responsible for their WP deliverables. In agreement with the project partners there is an **internal review procedure defined** with appointed internal reviewers for each of the deliverable.

The quality review process should respect the following timeline:

1. Deliverable responsible sends the final draft version v0.1 to the appointed internal reviewers and the WP leader;
2. Internal reviewers perform the first check of the deliverable and will sends it three weeks before due date to the WP leader
3. The involved WP leaders need to give feedback and sends the final deliverable to the Coordinator one week before due date for a final check and approval;
4. TU Delft project coordinator uploads the deliverable to the Participant Portal (final submission to the EC) and to Internal Communication Platform.

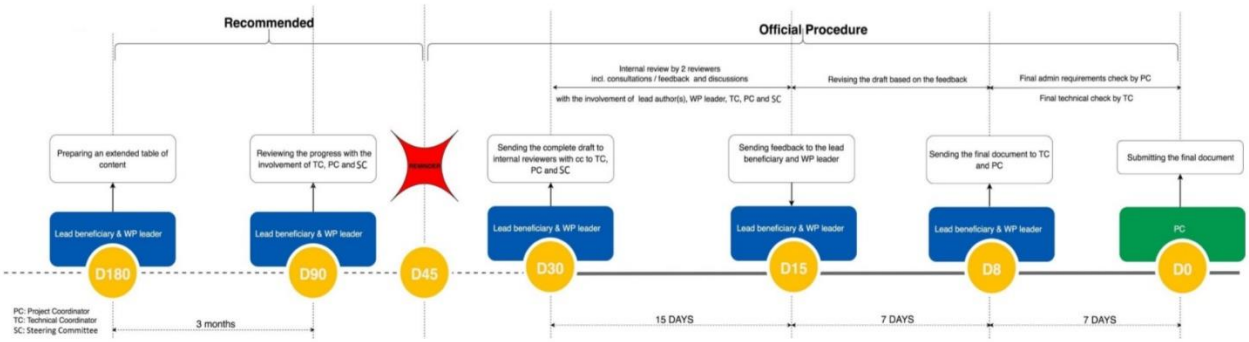

Figure 7. Procedure of ensuring the quality review process

In case the deliverable production occurs in a period with, e.g. public holidays the author should – timely - agree on an alternative feasible timeline with the readers and the coordinator.

Quality management of case studies, regional reports within tasks, etc., will be ensured by a peer-review system in which partners who have worked on parallel tasks review draft versions of the outcomes and report their findings to WP leader and task leader. This happens before step 1 in the above schedule. WP leaders, supported by task leaders, make specific time schedules to organise these activities in the detailed research and innovation guidelines for their WPs.

For milestones means of verification are indicated in the Grant agreement.

The appointed internal reviewers are listed hereunder:

WP	Deliverables	Month		Estimated del. Date	Type	Lead Author	WP Leader	1st reviewer	2nd reviewer
1	D1.1	M30	Paper: CFD modelling for wave-structure interactions with dynamic mesh adaptivity	30 Sep 2022	Report	TU Delft	TU Delft	PFF	MARIN Academy
	D1.2	M42	Report: benchmark with wave tank data from MARIN	30 Sep 2023	Report	PPF		TU Delft	MARIN Academy
	D1.3	M30	Paper: CFD of unsteady aerodynamics of FOWTs	30 Sep 2022	Report	TU Delft		SGRE AS	MARIN Academy
	D1.4	M42	Paper: recommendations for model-scale testing of FOWTs under large motions	30 Sep 2023	Report	SGRE AS		MARIN Academy	TU Delft
	D1.5	M24	Paper: system-identification ROM trained on LES	31 Mar 2022	Report	TU Delft		SGRE AS	MARIN Academy
	D1.6	M42	Paper: cheap, high-accuracy, pre-trained ROM for FOWT design	30 Sep 2023	Report	SGRE AS		TUD	POLIMI
	D1.7	M30	Paper: model for dynamic anchoring systems in an MDAO	30 Sep 2022	Report	TU Delft		PFF	MARIN Academy
	D1.8	M42	Report: recommendations for risk and cost reductions of FOWT farms	30 Sep 2023	Report	PPF		TUD	UCC
2	D2.1	M24	Database of HIL wind tunnel experiments	31 Mar 2022	data sets, microdata, etc	POLIMI	EIRE C	MARIN Academy	TU Delft
	D2.2	M42	Paper: comparison between HIL in wind & wave tests	30 Sep 2023	Report	MARIN Academy		POLIMI	TU Delft
	D2.3	M32	Paper: automated process and characterisation of the laminates	30 Sep 2022	Report	EC		TU Delft	NUIG
	D2.4	M42	Paper: testing of large scale carbon fibre structures	30 Sep 2023	Report	EC		TU Delft	NUIG
	D2.5	M30	Paper: optimised model of cable installation configuration	30 Sep 2022	Report	POLIMI		OREC	TU Delft
	D2.6	M42	Paper: validation of cable configuration with experiments	30 Sep 2023	Report	OREC		POLIMI	MARIN Academy
	D2.7	M30	2-3 innovations for the installation and decommissioning of large FOWT farms	30 Sep 2022	Report	UCC		MARIN Academy	OREC
	D2.8	M42	Guidelines for reduced cost, risk and environmental impact of installation/decommission	30 Sep 2023	Report	MARIN Academy		UCC	OREC
3	D3.1	M24	Report: review of robotic solutions for floating wind	31 Mar 2022	Report	UCC	UCC	OREC	MARIN Academy
	D3.2	M42	Paper: solutions & technologies for robotics in O&M	30 Sep 2023	Report	OREC		UCC	TU Delft
	D3.3	M18	Theoretical/Conceptual systems of Blue Economy system for FOWTs	30 Sep 2021	Report	UCC		PPF	MARIN Academy
	D3.4	M36	Techno-economic assessment of Blue Economy systems supporting the WindFloat	31 Mar 2023	Report	PPF		UCC	OREC
4	D4.1	M6	Training guide and plan	30 Sep 2020	Report	POLIMI	POLIMI	TU Delft	UCC
	D4.2	M13	Personal Career Development Plan	30 Apr 2021	Report	POLIMI		UCC	TU Delft
	D4.3	M48	Training materials and 3D-printed models	31 Mar 2024	Other	TU Delft		POLIMI	OREC
	D4.4	M46	Massive Open Online Course and online game	31 Jan 2024	Websites, patents filling, etc.	TU Delft		POLIMI	PPF
5	D5.1	M48	Completed STEP4WIND websites and Twitter account	31 Mar 2024	Websites, patents filling, etc.	TU Delft	PPF & TU Delft	PPF	not applicable
	D5.2	M7	Publication of the STEP4WIND e-newsletter	31 Oct 2020	Websites, patents filling, etc.	TU Delft / VC		PPF	all partners
	D5.3	M25	Progress reports on the outreach activities	30 Apr 2022	Report	TU Delft / VC		PPF	all partners
	D5.4	M7	Updates to the roadmap to commercial exploitation	31 Oct 2020	Report	PPF		TUD/VC	all partners
	D5.5	M6	Data management plan	30 Sep 2020	ORDP: Open Research Data Pilot	TU Delft		not applicable	all partners
	D5.6	M18	Literature reviews	30 Sep 2021	Report	POLIMI		UCC	TU Delft
	D5.7	M48	Doctoral theses	31 Mar 2024	Report	POLIMI		All beneficiaries 2	All partners
6	D6.1	M2	Communication infrastructure	31 May 2020	Other	TU Delft	TU Delft	not applicable	not applicable
	D6.2	M13	Risk mitigation plan and register	30 Apr 2021	Report	TU Delft (VC)		TUD	all partners
	D6.3	M2	Guide to the implementation of STEP4WIND	31 May 2020	Report	TU Delft (VC)		TUD	all partners
	D6.4	M2	Consortium Agreement	31 May 2020	Report	TU Delft (VC)		TUD	all partners
	D6.5	M2	Supervisory Board of the network	31 May 2020	Other	TU Delft (VC)		not applicable	not applicable
	D6.6	M13	Progress Report	30 Apr 2021	Report	TU Delft (VC)		TUD	all partners
	D7.1	M12	NEC - Requirement No. 1	31 Mar 2021	Ethics	TU Delft	TU Delft	all partners	not applicable

Table 13. STEP4WIND appointed internal reviewers

9. Open Access and Research Data Publication

The partners must — as soon as possible (but not before a decision on their possible protection) — disseminate their results (i.e. make them public). Some of the classic forms of dissemination are:

- Website or social media channels;
- Peer reviewed publication (open access);
- Presentation at technical or scientific conferences or relevant business events (e.g. trade fairs).

When deciding on dissemination, the partners must consider the other partners' legitimate interests.

9.1 Open Access to scientific publications

Each partner must ensure open access (free of charge online access for any user) to all peer reviewed scientific publications relating to its results.

In particular, it must as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications. This can be done via institutional repositories, such as, the TU Delft Institutional Repository (https://repository.tudelft.nl) or comparable repositories at other institutions.

Moreover, the partner must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.

- Ensure open access to the deposited publication — via the repository — at the latest:

  (i) on publication, if an electronic version is available for free via the publisher, or
  (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.

- Ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication.

The bibliographic metadata must be in a standard format and must include all of the following:

- the terms "European Union (EU)" and "Horizon 2020";
- the name of the action, acronym and grant number;
- the publication date, and length of embargo period if applicable; and
- a persistent identifier.

9.2 Guide for STEP4WIND Research Data Publication

STEP4WIND recognizes that good research is *transparent* and *verifiable*. To that end, STEP4WIND is committed to promote proper data management practices and data publication. This guide is expected to assist STEP4WIND researchers into publishing research data *"as open as possible, and as closed as necessary*" following the FAIR principles[1].

What is meant by 'research data'?

Research data is the evidence that supports the answers to research questions. Research data can come in different formats and types. This includes source code, protocols, models, images, survey data, tabular data and any other form of information supporting research findings.

What does it mean to publish research data?

Publishing research data means depositing data in a trusted repository that provides adequate archiving services, so that others can access it and re-use it. Publishing data considers:

- The data is stored for the long-term (>10 years).
- The data is tagged with standard citation metadata, findable by (web) search engines.
- The data obtains a persistent identifier (e.g., DOI) which ensures its findability, and makes it citable!
- The data is published under a license (to tell others how to re-use the data).

What data should be published?

In principle, consider all (raw, processed and finalized) data underlying the results published in a journal article. This includes the scripts and code used to process and analyze the data. However, always discuss with your team at the beginning of the project what data must remain under closed/restricted access, as there might be valid reasons not to publish data (e.g., commercially sensitive data). The earlier this is discussed, the earlier you can start properly managing the data, and the easier it will be to publish it!

Where will the data be published?

Data that can be published will be archived via a trusted repository such as the 4TU.ResearchData or Zenodo. Both platforms provide proper archiving services. Will you be publishing code? Zenodo can archive a snapshot of a Github repository, making the code citable and easily findable for the long-term. The 4TU.ResearchData is expected to have such a feature after summer 2020.

When to use which?

➔ Discuss with your supervisor which repository to choose depending on the size of the dataset and the budget available for data archiving. Consider the following:

- At 4TU.ResearchData, TU Delft researchers can upload up to 1 TB of data per year free-of-charge. The fee for non-TU Delft staff is a one-time fee of 4.5 euros per GB.
- At Zenodo, uploads below 50 GB are free-of-charge.

[1] https://www.force11.org/group/fairgroup/fairprinciples

What to consider when publishing data?

1) Provide clear documentation as embedded (e.g., docstrings, headers) and/or supporting information (e.g., manuals, README files). When publishing code, provide information about the back-end infrastructure needed to run/deploy the code (think about software sustainability!) and provide a benchmarking dataset. Always keep in mind re-users might be from outside your field of study.
2) Use disciplinary metadata and conventions followed in your field of study (e.g., variable nomenclature, unit system).
3) Publish data in open (i.e. non-proprietary) or standard formats. If the work has been done with proprietary formats: document it, and when publishing the data convert it to open/standard formats.
4) In the repositories you can reserve the persistent identifier (DOI) of the dataset, so you can include it and refer to it in the article. Once the article is published, you can continue submitting the dataset to the repository. Add the persistent identifier of the article in the citation metadata of the dataset, and then the data will refer to the article and vice versa.
5) To further promote responsible re-use of the data, choose an open-content license to publish general data/documentation, and an open-source license when publishing code. If you have any questions, please contact the Data Steward of STEP4WIND (via PST-AE@tudelft.nl).

After the data is published, what to do next?

Send the persistent identifier of the dataset to the Data Steward of STEP4WIND (via PST-AE@tudelft.nl). This information will be added to the Dataverse of STEP4WIND (it will also be added to the STEP4WIND website). What is the Dataverse? This is a repository where all non-research STEP4WIND outputs (e.g., dissemination, training materials, etc.) will be archived for the long-term, and where all research outputs of STEP4WIND will be referred to in the metadata. This will allow all (research and non-research) outcomes of STEP4WIND to be findable for the long-term.

Do you want to cite the published datasets?

Always use the persistent identifier (e.g., DOI). Recommended format for data citation:
Creator(Publication_Year). Title. Publishing_Institution. Persistent_Identifier.

Is there sensitive data that cannot be published?

Discuss with your supervisor where to store sensitive data for the long-term under closed and secure access. The dataset should be stored in a structured way together with proper documentation (following the FAIR principles) and being accessed only by the relevant staff.

For any further assistance or questions about data management and how to publish the data, please contact the Data Steward of STEP4WIND at PST-AE@tudelft.nl.

10. Risk Assessment and Mitigation

In Step4Wind project risks are assessed in the internal report every six months. We use the Risk Index presented in figure 8.

	Risk Index			
	Probability x Severity			
4	*4*	*8*	*12*	*16*
3	*3*	*6*	*9*	*12*
2	*2*	*4*	*6*	*8*
1	*1*	*2*	*3*	*4*
	1	2	3	4

	Probability
1	Low (< 20%) - Unlikely to occur
2	Medium Low (20 - 50%) - Low probability of occurring
3	Medium High (50 - 80%) - Large probability of occurring
4	High (> 80%) - Very likely to occur

	Severity
1	PLAN – No impact or no significant impact (additional tasks required, keeping original schedule) COST – No impact or cost increased no significant TECHNICAL - No impact or very low impact: no scope change and keeping same solutions
2	PLAN – Important milestones delayed, but no impact on critical path COST – Significant impact in project cost (5-10%) TECHNICAL - Significant impact: Minor project effects, requirements or functionalities compliance; There is an alternative
3	PLAN – Impact on critical path; Recovery plan agreed with stakeholder/EC COST – Critical impact in project cost (10-20%) TECHNICAL – Critical impact: May significantly affect the project, requirements or functionalities compliance; Possible impact in the final result
4	PLAN – Non compliance with major Program Milestone; No recovery plan available COST – Increase in project cost (10-20%) TECHNICAL – Serious impact in the project final result: Severely affects the project, requirements or functionalities compliance; No project qualification/ certification/ homologation

Figure 8. Risk Index

Each risk – known and newly identified during the project – will be entered in the Risk Mitigation table (figure 9).

Open Date	WPs	Risk ID		Risk Status	Probability	Severity	PxS	Impacts	Mitigation (M) / Contingency (C) Plan	Responsible	Dates	Plan Status	Remarks	Lessons Learned
		1		open / closed			P x S							
		2		open / closed			P x S							
		3		open / closed			P x S							
		etc		open / closed			P x S							

Figure 9. Risk Mitigation table

11. Reference

H2020 Programme Guide for Applicants Marie Skłodowska-Curie Actions Individual Fellowships (IF). Version 1.4 / 08/04/2020

H2020-ITN-2019-Coordinators Info Day 22 November 2019. Finance. Maria Vili. Research Executive Agency Unit REA-A1

H2020 Indicative Audit Programme 29 July 2019, page 109

H2020 Online Manual (https://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm)

H2020 Annotated Model Grant Agreement (MSCA-ITN-EID)
(https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf)

STEP4WIND Consortium Agreement, LERU model (https://www.leru.org)

12. Appendices

Appendix 1 – Template PCDP

Appendix 2 – Research Declaration example

Appendix 1 – Template PCDP

Career Development Plan-Year 1 (Draft)

Name of fellow:
Department:
Name of Supervisor:
Date:

BRIEF OVERVIEW OF RESEARCH PROJECT AND MAJOR ACCOMPLISHMENTS EXPECTED (half page should be sufficient):

LONG-TERM CAREER OBJECTIVES (over 5 years):

1. Goals:
2. What further research activity or other training is needed to attain these goals?

SHORT-TERM OBJECTIVES (1-2 years):

1. Research results

- Anticipated publications:
- Anticipated conference, workshop attendance, courses, and /or seminar presentations:

2. Research Skills and techniques:

- Training in specific new areas, or technical expertise etc

3. Research management:

- Fellowship or other funding applications planned (indicate name of award if known; include fellowships with entire funding periods, grants written/applied for/received, professional society presentation awards or travel awards, etc.)

4. Communication skills:

5. Other professional training (course work, teaching activity):

6. Anticipated networking opportunities

7. Other activities (community, etc.) with professional relevance:

Date & Signature of fellow: Date & Signature of supervisor

Career Development Plan-Final year (Draft)

BRIEF OVERVIEW OF PROGRESS, ACHIEVEMENT AND PERFORMANCE (half page should be sufficient):

LONG-TERM CAREER OBJECTIVES (over 5 years):

If relevant, mention any adjustments to your long-term career objectives as a result of the training received.

SHORT-TERM OBJECTIVES ACHIEVED DURING THE TRAINING PERIOD:

1. Research results

- Publications (incl. in press):
- Conference, workshop attendance, courses, and /or seminar presentations:

2. Research Skills and techniques acquired:

- Training in specific new areas, or technical expertise etc.:

3. Research management:

- Fellowship or other funding applications achieved (indicate name of award if known; include fellowships with entire funding periods, grants written/applied for/received, professional society presentation awards or travel awards, etc.)

4. Communication skills:

5. Other professional training (course work, teaching activity):

6. Anticipated networking opportunities

7. Other activities (community, etc.) with professional relevance:

Date & Signature of fellow: Date & Signature of supervisor

Career Development Plan

Guidance on some of the competencies expected

The following points are a non-exhaustive series of aspects that could be covered by the career development plan, and it is relevant to the short-term objectives that will be set by the researcher and the reviewer at the beginning of the fellowship period. The objectives should be set with respect to the skills and experience that each researcher should acquire at a given time of his/her career. A postgraduate researcher at PhD level will have very different needs compared to a post-doctoral researcher at an advanced stage of his/her professional development. These objectives should be revised at the end of the fellowship and should be used as a pro-active monitoring of progress in the researcher's career.

1. Research results.

These should give an overview of the main direct results obtained as a consequence of the research carried out during the training period. It may include publications, conference, workshop attendance, courses, and /or seminar presentations, patents etc. This will vary according to the area of research and the type of results most common to each field. The information at this level should be relatively general since the career development plan does not strictly constitute a report on the scientific results achieved.

2. Research Skills and techniques acquired.

Competence in experimental design, quantitative and qualitative methods, relevant research methodologies, data capture, statistics, analytical skills.
Original, independent and critical thinking.
Critical analysis and evaluation of one's findings and those of others
Acquisition of new expertise in areas and techniques related to the researcher's field and adequate understanding their appropriate application
Foresight and technology transfer, grasp of ethics and appreciation of IPPR.

3. Research management.

Ability to successfully identify and secure possible sources of funding for personal and team research as appropriate.
Project management skills relating to proposals and tenders work programming, supervision, deadlines and delivery, negotiation with funders, financial planning, and resource management.
Skills appropriate to working with others and in teams and in teambuilding.

4. Communication skills.

Personal presentation skills, poster presentations, skills in report writing and preparing academic papers and books.
To be able to defend research outcomes at seminars, conferences, etc.
Contribute to promote public understanding of one's own field

5. Other professional training (course work, teaching activity):

Involvement in teaching, supervision or mentoring

6. Anticipated networking opportunities.

Develop/maintain co-operative networks and working relationships as appropriate with supervisor/peers/colleagues within the institution and the wider research community

7. Other activities (community, etc.) with professional relevance.

Issues related with career management, including transferable skills, management of own career progression, ways to develop employability, awareness of what potential employers are looking for when considering CV applications etc.

Appendix 2 – Research Declaration example