

#### Personal Career Development Plan

Guidelines for preparation of InnoCyPES career plan:

The purpose of this career plan is to create transparency in the researcher's academic career track, and to promote the researcher's professional development at an early career stage.

This document should be prepared at the first 2 months of the employment.

The ESR and the IST (International Supervisor Team) will hold an annual meeting to evaluate the researcher's development and status in accordance with this career plan. The annual evaluation is therefore based on this document, and the parties enter what is discussed and agreed upon in the form for the year in question at the bottom of this document. After each annual evaluation, the employee saves the new version of the document and send to the project manager who will forward to the ESRs training manager.

The contents of this document are dynamic and can be updated in accordance with changes in the ESR's tasks, career interests, and expectations of the IST. In the following, text in italics is meant as inspiration and points of attention, and non-relevant proposals for the specific employment can be disregarded.

The development plan should be made for 5 years. This gives a long-term perspective when planning of the development goals of the ESRs. The ESRs may also view their career development according to different stages, such as short-term, 1 year, mid-term, 2-3 years, and long-term, 5 years.

Background information	
ESR Name:	AGRIPPINA WANJIRU MWANGI
PhD title	IoT Network design and reliability evaluation for the renewable energy sector (1.0 FTE)
Hiring institute	Utrecht University
Department/section	Faculty of GeoSciences   Copernicus institute of sustainable Development   Energy & Resources Group
Starting date of employment	03-01-2022
End date of employment	03-01-2026
Supervisors:	Prof. Gibescu (Madeleine)
Document version:	Ver 1.0

### Expectations connected with all ESR positions from the network

Areas	Expectations from the Network
Research	You are expected to publish average of 1-2 times per year in the 3 years of employment in reputable scientific journals or conferences, and be the lead author of most of them; You are expected to be an expert ready to lead in the respective field of your ESR topic upon finishing the training; You are expected to explore your research topic actively by contributing new ideas, thoughts, and identify new problem formulations and methods in collaboration with IST; It is highly recommended for ESRs to actively participate in one or more
	working groups organized by standardization bodies or stakeholder plat- forms (eg European Technology & Innovation Platform) from the begin- ning of their study in agreement with IST;
Teaching and supervision	You are expected to gain pedagogical-didactic experience during your project through participating in organizing activities in training schools and local training; You are expected to develop 3-5 project proposals for MSc/BSc students in collaboration with partners in the network or external partners;
Collaboration	Focus on establishment of solid research collaboration with the partners involved in the ESR project and the network partners; You are expected to actively establish contacts with other universities and research units from the industry;
Innovation	Pay attention to the innovation potential of activities in ongoing research projects, which are protected against further use by patents or other protection.

#### Personal career development items

Areas	Skills can be acquired
Research com-	Technical knowledge from specific field relevant to the ESR project
petence	General research formulation skills, eg develop research method
	Ethical issues to be aware in development of research activities

Publication skills	How to write high quality journal publications, structure, format, etc How to read efficiently scientific publications Ethic issues in publication, eg authorship and referencing Understand the editorial process Develop journal publications
Project man- agement	Learn the theory of project management Take project management course Practice the tools in the own ESR project management
Funding proposal writing	Participate in funding writing at the end of the ESR projects  Develop proposal for European researcher night
Education in University Teaching	Take teaching and learning courses  Practice teaching through providing training courses and seminars within the network and beyond
Leadership in innovation	Develop innovation skills through course training Learn to use patent search engines Understand the process of patenting in the local institute
Entrepreneur- ship skills	Methods on market analysis Business plan and the relevant tools for developing the analysis Pitching

Agreement concluded on	
ESR Date and signature	
Supervisor  Date and signature	

	First year
Research	
Teaching and	
supervision	
Collaboration	
Innovation	
Personal career	
development	
Other	

Annual evaluation performed by [ESR] and [Principal Supervisor] on [date].

	Second year
Research	
Teaching and	
supervision	
Collaboration	
Innovation	
Personal career	
development	
Other	

Annual evaluation performed by [ESR] and [Principal Supervisor] on [date].

	Third year
Research	
Teaching and	
supervision	
Collaboration	
Innovation	
Personal career	
development	
Other	

Annual evaluation performed by [ESR] and [Principal Supervisor] on [date].

	Fourth year
Research	
Teaching and	
supervision	
Collaboration	
Innovation	
Personal devel-	
opment	
Other	

Annual evaluation performed by [ESR] and [Principal Supervisor] on [date].

	Fifth year
Research	
Teaching and	
supervision	
Collaboration	
Innovation	
Personal devel-	
opment	
Other	

Annual evaluation performed by [ESR] and [Principal Supervisor] on [date].

ESR student	ESR1 - AGRIPPINA WANJIRU MWANGI
Date of birth	26-03-1992
Place of hiring	THE NETHERLANDS
	an. Il changes must be enclosed as a cover page to the study plan plan is accepted by the following:
ESR student's signature	
Supervisor's signature	
Training manager's signature	
Title of the ESR project	
Date of commencement	
Date of completion	
Main Supervisor * Title, name, department	
Co-supervisor 1 * Title, name, department/company	
Co-supervisor 2  * Title_name_denartment/company	

ESR student
Date of birth
Place of hiring
Project description
* Should be a one to two-page description of the scientific content of the project including background, hypothesis, objectives and means for the project. In the description it must be clearly stated which research activities will be conducted by the ESR and what the expected outcome of them are. References must be included in the description. An in-depth description may be enclosed as an attachment.

ESR student	
Date of birth	
Place of hiring	

ESR student	
Date of birth	
Place of hiring	
Secondment plan	
* Please state the research objective secondment and the expected outco	e and the activities that will be conducted by the ESR during the me of them based on the agreement with the host(s).

ESR stu	udent			
Date of birth				
	_			
Place o	f hiring			
Educ	ationa	al Plan		
* Local co * Network * Externa * Transfe * Course of examir statemen number of	ourses: off c-wide train l courses: rrable: cou content ar nation and t should be	ered by the enroning courses: offored anywher irses to enhance and amount of EC course provider. e obtained from soints should be a	the skills applical TS points (1 ECT If the official desc the course provide	
ECTS		Couse no.	Technical or	Course title
no.			Transferrable	
	ECTS			
Network	   wide tr	 aining courses	<u> </u>	
			owing the project of	description.
			e official course de pasted into the stu	escription for each course <i>must</i> be enclosed –
ECTS no.	10 1110 010	Technical or Transferrable	Course title	ay piani,
	ECTS			
	ECTS			
	ECTS			
ECTS o	n Techn	ical skills		
ECTS o	n Transf	errable skills		
ECTS points in total				
		ı		

ESR student	
Date of birth	
Place of hiring	
Communication a	nd Dissemination Plan
*You are expected to actively in	nplement the communication and dissemination plan of the network.

ESR student
Date of birth
Place of hiring
Time Schedule
* The time schedule should include courses, planned publications, dissemination activities, external research stay, time for detailed descriptions of subprojects, and for completing the ESR thesis (a short description per half year is strongly recommended). Complete the time schedule even if the later parts of the project are uncertain. It is expected to fill more than one page and may be included as an attachment. It may also be sent in as a Gantt table.
Short description of the extent of the supervision
* Please state the expected frequency of meetings etc. between ESR and supervisor (Meetings must as a minimum be held every two weeks). Nature and frequency of other communication with supervisor should also be described to match the expectations of each part.

ESR studen	t	
Date of birth		
Place of hiri	ng	
	and innovations plan	
Do you expe * If yes, please	ect that the project will result in patentable technologies or software? e illustrate the idea and pathway.	
Yes	No	
Other m	atters	
* Any activity tl	hat is not covered by the above categories but need to be aware of	

#### Guidelines for preparation of InnoCyPES study plan

As part of the InnoCyPES ESR study programme, the ESR must prepare a study plan in consultation with their principal supervisor.

The study plan is a good management tool to manage your project. It will give you the opportunity to follow up on whether the activities are carried out in the planned way and research objectives are explored and achieved adequately, or whether the project has changed direction or progress has stalled. The plan may be regarded as a mutual statement of intent between the supervisor and the ESR and should continuously be revised and sent to the training committee for approval, when significant changes are made.

The study plan should be used to ensure coherence between the InnoCyPES activities, career development plan and the final PhD thesis.

#### **Purpose**

The study plan has several purposes, including:

- 1. To ensure that the principal supervisor and the ESR project carefully consider and formulate the purpose of the studies, contents, and time schedule of the study.
- 2. To form the basis for the half-yearly study report and plan for the remaining part of the study period.
- 3. To provide a basis for the PhD committee (at the completion of the studies) to assess whether the achieved results are in accordance with the planned course of study.

Efforts should be made to present a clear description of the contents, the original contribution, and the expected result of the project (1 to 2 pages).

#### Secondment plan

The ESRs are expected to implement the secondment plan as per project description. Risk of change of the secondment plan must inform the principal supervisor and the project coordinator at the early stage.

#### Course requirements

According to the project, the PhD student must follow courses to an extent corresponding to about 30 ECTS-points (1 ECTS-point corresponds to about 28 working hours).

Courses planned in InnoCyPES projects should be approved by the enrolled PhD programme. The number of ECTS points is estimated and finally approved.

Please make sure that your study plan is up to date before the conclusion of the PhD programme in order to ensure, among other things, that the activities planned in InnoCyPES have been completed.

#### **Communication and dissemination**

The PhD student must gain experience in communicating knowledge, either by teaching within his/her academic subject or through dissemination of research results, e.g. articles, presentation at conferences, etc.

The study and project plan must specify which activities the student wishes to have approved as department work and dissemination activities, as well as an estimate of the time needed to carry out the activities.

#### Time schedule for the three-year study programme

The study plan must contain a time schedule which forms the basis for the half-year study reports on whether the studies are progressing satisfactorily. The duration of the PhD studies is three years.

#### Approval of and changes to the study plan

The study and project plan must be submitted to the ETM (ESR Training Manager) of InnoCyPES no later than two months after the date of commencement. The study plan must be approved by InnoCyPES supervisory board; however, the individual institute may also have special requirements for the plan.

If any essential changes are made to the study and project plan, a revised plan must be prepared and submitted. The revised plan must be approved by the project management team.

# Half-year study report

ESR name	
Project title	
Hiring institute	
Supervisor	
Co-supervisor 1	
Co-supervisor 2	
Half-year report number	
Number of ECTS earned	so far
education is progressing satisi in which the progress is evalua	iption, the project must regularly assess whether the ESR's research factorily. In InnoCyPES this is done by the submission of study reports, ated by the supervisor and the PhD student in unison.
The supervisor evaluation	n is that the progress of study is
satisfactory	
The student is following the	e study plan as well as the personal career development plan. he study plan must be mentioned.
not quite satisfactory	
Problems have occurred in project to be completed wi this is the case then a plan cause analysis of the probl	respect to the time schedule but the supervisor and the ESR expect the th a positive result within the usual course of the study programme. If n for remedying deficiencies must be briefly outlined including the root em. The enclosed plan demonstrates how deficiencies in the course of signing this report, the ESRs' training manager confirm that the project d plan of action.
Unsatisfactory	
	ESR accepts an offer by the project to rectify the situation within a ease enclose a copy of the recovery plan.
Please note that an acad	emic evaluation must be enclosed
ESRs training manager Date and signature	
esr Date and signature	
Supervisor Date and signature	

nnoCyPES (for project use only)	draft
ESR name	
Performance evaluation	
Refers to courses, project work, publications, secondment, disse changes to the schedule. Please remember to enclose course of	
Performance assessment of the previous six months	
Supervision during the previous six months	
Activities planned for the next six months including schedu	ıle
Plans for supervision during the next six months	
·	

InnoCyPES (for project use only)	draft
ESR name	
Is everything going according to study plan? If no, please provide explanation and justification.	