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INOW ASIA

WP1: Preparation

The INOWASIA Consortium

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Fundació Solidaritat Universitat Barcelona (UB)	Spain
World University Service of the Mediterranean (WUSMED)	Spain
Institut de Recherche pour le Développement (IRD)	France
Université Paul Sabatier Toulouse III (UPS)	France
Hanoi University of Science – Vietnam National University (HUS)	Vietnam
Can Tho University (CTU)	Vietnam
National University of Laos (NUOL)	Laos
Souphanouvong University (SU)	Laos
Institute of Technology of Cambodia (ITC)	Cambodia
University of Battambang (NUBB)	Cambodia

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Abstract

This document presents the Research and Analyses plan for the preparation activities of WP1. Based on the conclusions of the Kick-Off Meeting and internal meetings, FSUB and UBB has elaborated a research and analysis plan of the main steps for the next 6-months analysis phase. The plan has been designed to define the methodology and timeline to gather information on: Water challenges in Cambodia, Laos and Vietnam, Water related labor market requirements, the Recognition/accreditation procedures, the Partner Country's HEIs about their current academic offer in the field of water management and related topic, HEIs (EU and ASEAN) expertise on water management for course implementation. This plan includes details of the information to be collected, by whom, and when. All partners have been involved in this phase. Additionally, the plan has designed a strategy to involve stakeholders by the creation of the INOWASIA Academic Professional Committee. (APC). The APC purpose is to enhance the integration of stakeholders in the project and oversee the project activities from an academic and professional point of view in order to have a multidisciplinary view.

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Acronyms

EC	European Commission
PC s	Partners Countries
SEA	Asian
SC	Steering Committee
HEIs	Higher Education Institutions
WP	Work Package
KOM	Kick-off Meeting
APC	Academic Professional Committee

Analysis and Research Planning Tasks

Based on the conclusions of the KOM and WP1 meetings, the following planning (in order of development) has been elaborated.

1. Establishment of INOWASIA Academic Professional Committee. (APC). The APC purpose is to enhance the integration of stakeholders in the project and oversee the project activities from an academic and professional point of view in order to have a multidisciplinary view.
2. Research and Analysis + Creation a Knowledge Base shared google drive
3. Research of information to
 - Identify the specific required competences of the local labour markets;
 - Identify specific water change challenges faced by the PCs;
 - Academic emphasis on local challenges of current academic offer:
 - Collection of information of the EU expertise
 - Analysis of the PC's HEIs academic offer, including employability outcomes.
4. SWOT (strengths, weaknesses, opportunities, and threats) analysis.
5. Identify specific academic requirements and define local emphasis → Final report based on the Research and Analysis

WHAT? WHO?

1- Identify and contact stakeholders (including associated partners). **CREATION OF THE APC – Academic Professional Council**
All partners

2- Gather information on:

- Water related Labour market requirements (involvement stakeholders) **APC + other stakeholders**
- Specific water change challenges in each national (involvement stakeholders) **APC + other stakeholders**
- ❖ Accreditation procedures **all SEA HEIs**
- ❖ Current academic offer in the field of water management and related topics (curriculum architecture, learning outcomes, teaching methods, target students, statistics: number of students, working places of students, internship modules, PhD programs,...) **all SEA HEIs**
- EU and PC expertise and teaching material (to plan the teaching courses) **All partners**



Analysis results regarding modules, formation courses and teachers, accreditation, potential students, employability and role of public and private sector **WP1 Leaders (FSUB+UBB) and UdG**



Data base: all info shared in google drive UDG



Figure 1. WP1 Research and Analysis Steps

Establishment of INOWASIA Academic Professional Committee

The Academic Professional Committee (APC) purpose is to enhance the integration of stakeholders in the project and oversee the project activities from an academic and professional point of view in order to have a multidisciplinary view. The APC will be established by appointing one academic representative of each project partner, as well as local public and private stakeholders. This Council will be created to:

- Oversee the project activities from an academic and professional point of view
- Compilation the info for WP1
- Enhance the relation and integration of stakeholders in the project

Membership of the APC:

- INOWASIA Steering Committee (SC)
- Associate partners (1 representative per partner)
- Each HEI will invite 4 stakeholders to join if possible: 1 Public Authority; 1 Company; 1 NGO; 1 Science Education Institution. These stakeholders may be local or international, according to existing cooperation / possibilities. Invitations will be considered for all organizations listed in the stakeholder's research document (Annex 1).

Membership will be formalized in a signed document specifying mission, objectives, tasks and duration of the involvement. APC membership document will be drafted in English by FSUB, revised by UdG and UBB and translated to the PC Asian languages. Signed documents will be in English or local languages.

Governance and participation: the SC will steer the activities of the APC through its own meetings and each HEI will manage the participation of their invited members through national meetings, email communication, etc.

Activities and deadlines:

1. Draft of the APC membership document: 12 April 2021
2. Research and list of potential APC members (Annex 1): 12 April 2021
3. Final APC invitation letter: (18 April) (Annex 2)
4. Proposal of APC members to UdG and online SC online meeting to discuss about the final APC document and the invited members: 20 April 2021
5. Translation of documents and distribution of invitations: 22 April 2021
6. Reception of signed APC membership documents: 15 May 2021
7. Meeting for constitution of the APC: postponed to 10 September 2021 (Annex 3)

Research and analyses: information collection

This section presents the methodology used to gather information (which, by whom, how, and when) on: Water challenges in Cambodia, Laos and Vietnam, Water related labor market requirements, the Recognition/accreditation procedures, the Partner Country's HEIs about their current academic offer in the field of water management and related topic, HEIs (EU and ASEAN) expertise on water management for course implementation. The methodology and templates have been elaborated by WP leaders, and reviewed and validated by all partners.

Which information?

1. General information on:

- a. Specific required competences of the local labor markets
- b. Specific water challenges faced in Cambodia, Laos and Vietnam (PC's)

2. Academia

- a. Current PC's HEIs academic offer related to water (postgraduate, master, non-formal, PhD programs,) including employability outcomes?
- b. Identify specific academic requirements in each HEI (which modules do we want?)
- c. Analyses of validation/accreditation procedures to integrate the new module

3. Information of the EU and PC experts (which material do we have already? Which expertise?)

How?

The information will be collected by google questionnaires and Word sheets.

1. Questionnaire 1 (google forms): Water Challenges and Academic-Labour Market Competences in Cambodia, Laos and Vietnam

Objectives:

- To gather the basic information about the water challenges faced by the country and at local level in case there are strong water challenges specificities at local scale. We understand as a local scale the closest territorial area of the institution.
- To anticipate academic and labour market competencies on water in order to build the water modules which adapts and innovates from current academic offer, and tackles local water challenges and employability demands.

Target audiences:

- Public Administration with water competencies
- Private companies working on water management
- Water related research and education institutions/Platforms
- Water-Environment and/or development NGOs (foundations, and associations; grassroots community-based organizations; international NGOs present in the country...)

Goal:

- At least 2 replies from each type of target audience (replies will express individual opinions, unless it is manifested otherwise).

2. Questionnaire 2 (word sheets): Cambodia, Laos and Vietnam HEIs academic offer and needs

Objectives:

- To gather information on current SEA countries (Cambodia, Laos and Vietnam) HEIs academic offer related to water resources (master, PhD programs)
- To identify specific academic requirements in each SEA HEI
- To identify HEI thematic strengths in the water field
- To gather information about validation/accreditation procedures in each SEA HEI to integrate the new modules or refine the existing courses.
- To gather information about the enrollment process and recruitment of master/PhD students and the financing mechanisms of the program to assure sustainability
- To gather information about joint degree programs in water related fields/regional or international programs and credit recognition between SEA partners

Target audiences:

- INOWASIA SEA HEI partners

Goal:

- 1 reply per INOWASIA SEA HEI

3. Questionnaire 3 (word sheets): formation courses topics, expertise and teaching material

Objectives:

- To gather information about INOWASIA partner's expertise and available material for teaching and modules elaboration

Target audiences:

- INOWASIA partners

Goal:

- 1 reply per INOWASIA partner

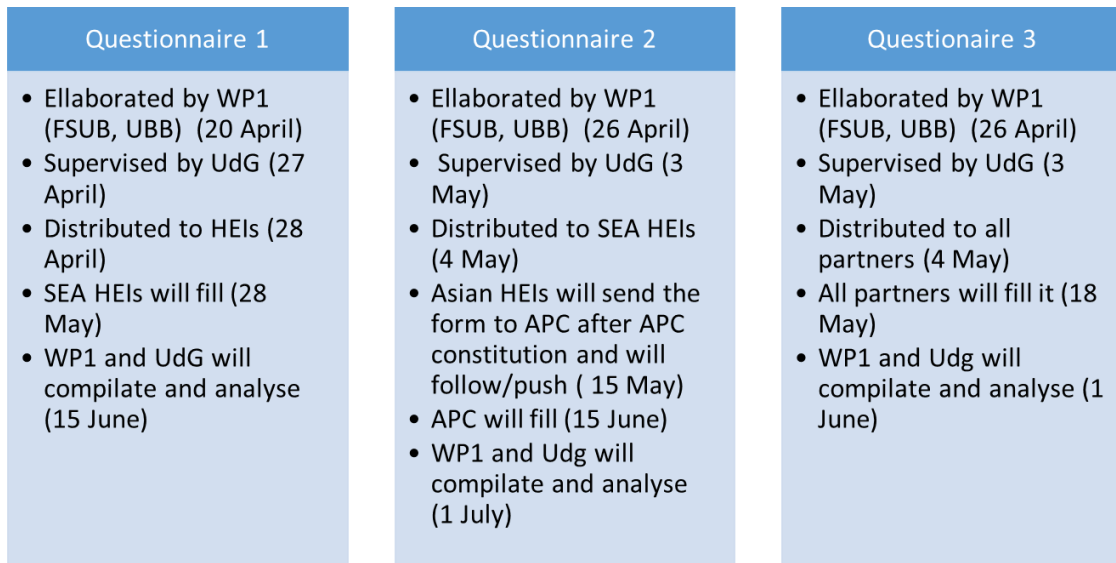


Figure 2. Info collection steps

ANNEXES

Annex 1: List of Stakeholders

A-ASSOCIATED PARTNERS

Name of organisation	Type of institution	Website	City	Country
Institut Català de Recerca de l'Aigua	Research Centre	www.icra.cat	Girona	Spain
Catalan water partnership	Association of research centres	http://www.cwp.cat/	Girona	Spain
Suez EAU France	Large Enterprise	www.suez.fr	Bordeaux	France
Epurtek	Private company	www.epurtek.fr	Toulouse	France
Global Water partnership Central and Eastern Europe	Association of research centres	https://www.gwp.org/en/GWP-CEE/	Bratislava	Eslovaquia
Global Water partnership Southeast Asia	Association of research centres	https://www.gwp.org/en/gwp-south-east-asia/	Jakarta	Indonesia
CDM Environmental Technology Ltd	Private company	N/A	Can Tho	Vietnam
Vietnam Academy for Water Resources Research	Association of research centres	www.en.vawr.org.vn	Hanoi	Vietnam
Can Tho 100 Resilient City Office	non profit organization	www.100resilientcities.org/cities/can-tho/	Can Tho	Vietnam
Center for Environmental Technology Research and Application, Vietnam Association for Conservation of Nature and Environment	Association	http://www.vacne.org.vn/index.html	Hanoi	Vietnam
National Center for Technological Progress, Ministry of Science and Technology, Vietnam	Ministry	www.nacentech.vn	Hanoi	Vietnam
Seameo Regional Center for Community Education Development, Ministry of Education and Sports	Ministry	www.seamolec.org	Vientiane	Laos
Department of Natural Resources and Environment of Luang Phrabang. Ministry of natural Resources and Environment	Ministry	N/A	Luang Phrabang	Laos
Irrigation Service Center (ISC)	National company	www.isc.org.kh/	Phnom Penh	Cambodia

Cambodia Water Partnership	Association of research centres	https://www.gwp.org/en/GWP-South-East-Asia/about/Our-Objectives/country-water-partnership/cambodia-water-partnership/	Phnom Penh	Cambodia
B2G Engineering Co., Ltd	Private company	https://www.facebook.com/b2genengineering/	Phnom Penh	Cambodia

2- OTHER POTENTIAL STAKEHOLDERS

2.1. Governmental organizations and/or governmental companies that manage all kinds of water sectors.

- **International organizations:** They work in the field of water governance, water planning at region/national/international scale and climate change. They may have influence on water policy and Governments. They need an institutional framework and the social and technical capacity to implement development strategies in the water planning field.
 - Global Water Partnership South-East Asia (associated partner of present project)
 - United Nations Water Programme's Asian Action Plan (UNEP/MAP)
 - UNSG's Advisory Board on Water and Sanitation (UNSGAB)
 - The World Bank Water and Sanitation Project in South Asia
 - Water Environmental Partnership in Asia (WEPA) h
 - The International Water Management Institute (IWMI)
 - Asian Development Bank <http://www.adb.org/Water/default.asp>
 - Japan International Cooperation Agency
 - French Development Agency
 - SEAMEO Regional Center for Community Education, Development, Ministry of Education and Sports (associated partner of present project)
 - ASEAN Working Group on Water Resources Management (AWGWRM)
 - International Water Association (IWA) <http://www.iwanet.org/>
 - Asia-Pacific Water Forum <http://www.apwf.org/>
- **Public companies and administration:** They mainly manage the water sector in Partner Countries. They need water specialists, especially in the field of integrated water resources management, climate change, watershed management, management and operation of drainage systems, engineers and IT. They need cross-disciplinary specialists, water strategists and at the end technological profiles applied to the water sector, with personal abilities to share knowledge and cooperate with other colleagues in the world.

From Laos:

- Ministry of Agriculture and Forestry (MAF)

- Ministry of Communication, Transport, Post and Construction Urban water supplies and inland waterways.
- Ministry of Energy and Mines (MEM)- Electricity, hydropower and mining
- Ministry of Health.
- Ministry of Natural Resources and Environment (MoNRE) (associated partner of present project)
- Lao National Mekong Committee (LNMC)

From Cambodia:

- Department of Potable Water Supply, Ministry of Industry and Handicrafts –
- Ministry of Public Works and Transport (MPWT)
- Ministry of Water Resources Management and Meteorology (MOWRM)
- Ministry of Environment (MoE)
- Ministry of Health
- Ministry of Rural Development
- The Phnom Penh Water Supply Authority (PPWSA) and the Siem Reap Water PWWKs) as well as 147 smaller utilities.
- Mekong River Commission (MRC)
- Tonle Sap Authority
- Cambodia National Mekong Committee

From Vietnam:

- National Water Resources Council (NWRC)
- Ministry of Agriculture and Rural Development (MARD)
- Water Service Companies (WSCs): state-own provincial services.
- National Center for Rural Water Supply
- Other state-owned enterprises
- Community water managers

2.2. NGOs working in the water field at Partner Countries: They work at local/regional scale on water resources management and wastewater treatment. They need an institutional framework and the social and technical capacity to implement water-related projects at local or regional scale.

- CARE International <http://www.care-international.org/>
- WaterAid <http://www.wateraid.org/>
- Consortium for Dissemination of DEWATS (CDD) <http://www.bordasa.org/modules/cjaycontent/index.php?id=3>
- WTO - World Toilet Organization <http://worldtoilet.org/>
- Engineers without borders
- Oxfam International
- Safe water network <https://www.safewaternetwork.org/>
- Water and Sanitation for the Urban Poor (WSUP)
- Water For People
- World Vision: Water and Sanitation

2.3. Private companies directly or indirectly related to water management, especially in the field of services (e.g. tourism), wastewater treatment (e.g. piped water systems operation,

domestic and industrial wastewater treatment plants), industries, consultants and clusters and associations of companies (e.g. B2G, CDM,...)

2.4. Citizens: According to Sustainable Development Goals (UN), they need: Good health and well being (Goal 3), Quality education (Goal 4), Clean water and sanitation (Goal 6). It is necessary to empower the citizens in water management as they are the ultimate's beneficiaries, and their involvement and awareness is needed to meet the targets of universal access to water, sanitation and hygiene (WASH) by 2030.

Annex 2: Academic and Professional Committee letter



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INOWASIA Academic-Professional Committee

Prospective APC member, Institution, Date

Dear (.....),

On behalf of INOWASIA APC full partners, I am pleased to invite you to become a member of the INOWASIA Academic-Professional Committee (APC) in the ERASMUS+ project:

« INOWASIA: Development of innovative multilevel formation programs for the new water leading professionals in South East Asia » with project reference number 619225-EPP-1-2020-1-ES-EPPKA2-CBHE-JP.

The APC's main purpose is to enhance the integration of the project stakeholders, and to oversee the project activities from an academic and professional point of view, in order to obtain a multidisciplinary perspective.

Being a member of the APC will offer you an opportunity to:

- ✓ Make a positive impact on water resources research and formation in your country
- ✓ Give visibility to your institution
- ✓ Expand your network in Asia and Europe
- ✓ Participate in interesting events organised by the project
- ✓ Take part in the project activities

Thank you for your time and consideration of becoming a part of the INOWASIA APC.

Whilst you consider our invitation, please do not hesitate to contact me for any further information.

Sincerely,
Ignasi Rodriguez-Roda
INOWASIA Coordinator



Annex 3: Constitution of the Academic and Professional Committee

Meeting/Project Name:	Constitution of the Academic and Professional Committee		
Date of Meeting: (MM/DD/YYYY)	Sept 10 th 2021	Time:	10:30 (CET)
Minutes Prepared By:	UdG	Location: virtual	virtual
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