



NEXOGENESIS

STREAMLINING WATER RELATED POLICIES

D6.8 Internal and external exploitation workshop (first report)

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Abstract

This deliverable (D6.8) describes the organisation, methodology and outcomes of the two first exploitation workshops. The first exploitation workshop was internal and organised during the Consortium meeting on the Monday 26th September 2022 in Riga, Latvia. It gathered the consortium partners to discuss the two main exploitable results, the User-Validated Policy Package and the NEXOGENESIS NEPAT. Participants were separated into two working groups (corresponding to the two main exploitable results). The workshop aimed at placing the participants (project partners) into the role of potential users and clients and to brainstorm about their problems, frustrations, possible solutions and how NEXOGENESIS results could help them in their daily work. Additional goal was to sensibilise partners to the segmentation of potential users and different exploitation options. The second exploitation workshop was organised with external stakeholders, practitioners related to the WEFE nexus sectors which are *real* potential users and clients of the same two exploitable results. This workshop was held on the 27th of September 2023 in Split, Croatia aside from the Nexus stakeholder Forum organised by the NexusNet Cost Action. It gathered 42 participants from the WEFE nexus sectors. The discussions allowed to identify the potential users and clients of the User-Validated Policy Package and the NEXOGENESIS NEPAT, the barriers and opportunities to their implementation and to gather feedback on their needs in order to finetune the exploitable results.

Keywords

Dissemination; exploitation; project results; strategy; planning

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Abbreviations	Meaning
CAP	Common Agricultural Policy
DX.X	Deliverable DX.X
EC	European Commission
EC DGs	European Commission Directorates-General
EU	European Union
H2020	Horizon 2020
IPR	Intellectual Property Rights
KERs	Key Exploitable Results
NGOs	Non-Governmental Organisation
PSB	Project Steering Board
R&D	Research and Development
RIA	Research and Innovation Action
SAM	Serviceable available market
SLNAE	Self-Learning Nexus Assessment Engine
SOM	Serviceable obtainable market
STC	Scientific and Technical Committee
TAM	Total Available market
UVPP	User-Validated Policy Package
WEF	Water Energy Food
WEFE	Water Energy Food Ecosystem
WP	Work Package

Table 1: Table of abbreviations



Summary

This deliverable (D6.8) describes the organisation, methodology and outcomes of the two first exploitation workshops.

The first exploitation workshop was internal and organised during the Consortium meeting on the Monday 26th September 2022 in Riga, Latvia. It gathered the consortium partners to discuss the exploitation of the two main exploitable results, the User-Validated Policy Package and the NEXOGENESIS NEPAT. Participants were separated into two working groups (corresponding to the two main exploitable results). The workshop aimed at placing the participants (in this case the project partners) into the role of potential users and clients, and to highlight their problems, frustrations, and possible solutions (related to NEXOGENESIS). Partners played the role of several types of stakeholders, such as a local and national public authorities involved in the WEFE nexus activities, water management organisations or river basin organisations. The outcomes of this workshop were that the UVPP answers to the different roles needs which are mainly related to water preservation, use, distribution, quantity and quality as well as to the related policies. On the other hand the NEXOGENESIS NEPAT would be a tool of interest of all the different stakeholders and more precisely the different sectorial associations would use it on a daily basis as well as the national and local authorities. Nevertheless, the question about the payment for the use of the tool brought up several discussions finally agreeing on the fact that the public authorities should be the ones paying for the use of the tool by the different stakeholders.

The second exploitation workshop was organised with external stakeholders, practitioners in the WEFE nexus sectors which are potential users and clients of the same two exploitable results. This workshop was held on the 27th of September 2023 in Split, Croatia aside from the Nexus stakeholder Forum organised by the NexusNet Cost Action. Leveraging the network of the NexusNet Cost Action, the exploitation workshop gathered 42 participants from the WEFE nexus sectors. The discussions allowed to identify the potential users and clients of the User-Validated Policy Package and the NEXOGENESIS NEPAT, the barriers and opportunities to their implementation and to gather feedback on their needs in order to finetune the exploitable results. Notably, it was pointed out that the two exploitable results would be important tools to elaborate the local strategies related to the management of the different WEFE nexus resources. It would allow to develop action plans in real time and to focus it on optimisation. The different stakeholders expressed their interest for the two results but in order to make the results exploitable and be able to sell them, the focus should be put on “speaking money” and on making it clear what is being sold (the tool or the methodology, the structure, the services behind, etc.) and what can the potential return on investment be (monetise the outputs).



Introduction

As part of the T6.4 Exploitation and sustainability, G.A.C. Group has planned to organise several co-creation exploitation workshops. These include internal co-creation exploitation workshops, inviting consortium partners to discuss the exploitation of the main exploitable results and one external exploitation workshop which invites practitioners from the WEFE nexus sectors, external to the project and not involved in the project case study activities (Tier 2 stakeholders) to discuss the exploitation of the main exploitable results in order to identify the potential clients, users and their needs.

Following the plan elaborated in the D6.5 Strategy for the dissemination and exploitation of project results, a first internal co-creation exploitation workshop was organised on 26th September 2022 in Riga, Latvia during the Consortium meeting and the external co-creation exploitation workshop was organised on the 27th September 2023 in Split, Croatia.

This document provides a report on the two exploitation workshops organised in the NEXOGENESIS project and is composed of two sections as follows:

1. **The first internal co-creation exploitation workshop**
2. **The external co-creation exploitation workshop**

Each section provides the agenda, preparation, progress and outcomes of the respective workshops.

1. The first internal co-creation exploitation workshop

The first internal co-creation exploitation workshop was held on the 26th of September during the Consortium Meeting in Riga, Latvia. It aimed at co-creating and discussing with partners the exploitation pathways for the 2 main exploitable results (the UVPP and the NEXOGENESIS NEPAT) by getting into the role of users and customers.

1.1. Agenda

The workshop lasted 2,5 hours and the agenda was as follows:

Time	Session
14:30 – 14:45	Introduction – Objectives & rules
14:45 – 15:00	Presentation of the 3 Key Exploitable results
15:00 – 15:05	Splitting into working groups/subgroups

15:05 – 15:15	Ice breaker
15:15 – 15:35	First round of work in working groups – user perspective
15:35 – 16:00	Second round of work in working groups – from user to customer
16:00 – 16:15	Coffee break
16:15 – 16:45	Discussions about exploitation (plenary)
16:45 – 16:55	Conclusions and next steps

1.2. Preparation

In order to identify the different pathways towards exploitation of the two NEXOGENESIS exploitable results, the first step is to identify the users and customers as well as their needs. This workshop aimed at identifying these elements.

Therefore, GAC prepared a format allowing all partners to participate and provide their inputs by separating the participants into two groups. Each group focused on one exploitable result and in each group, participants chose a role. The list of roles was decided upon prior the event in collaboration with the responsible for the exploitable result as follows:

- For the NEXOGENESIS NEPAT:
 - o National authority
 - o Local authority
 - o Developer of river basin management plans
 - o Tourism association
 - o Fisheries association
 - o Dam operator
 - o NGOs
- For the UVPP:
 - o Water management organisations/river basin organisations
 - o National public authority in the WEF E Nexus
 - o Local public authority in the WEF E Nexus

Moreover, several materials were prepared:

- A persona canvas was designed and designed according to the needs of the workshop. This canvas was printed in A1 format as illustrated in the following figure.



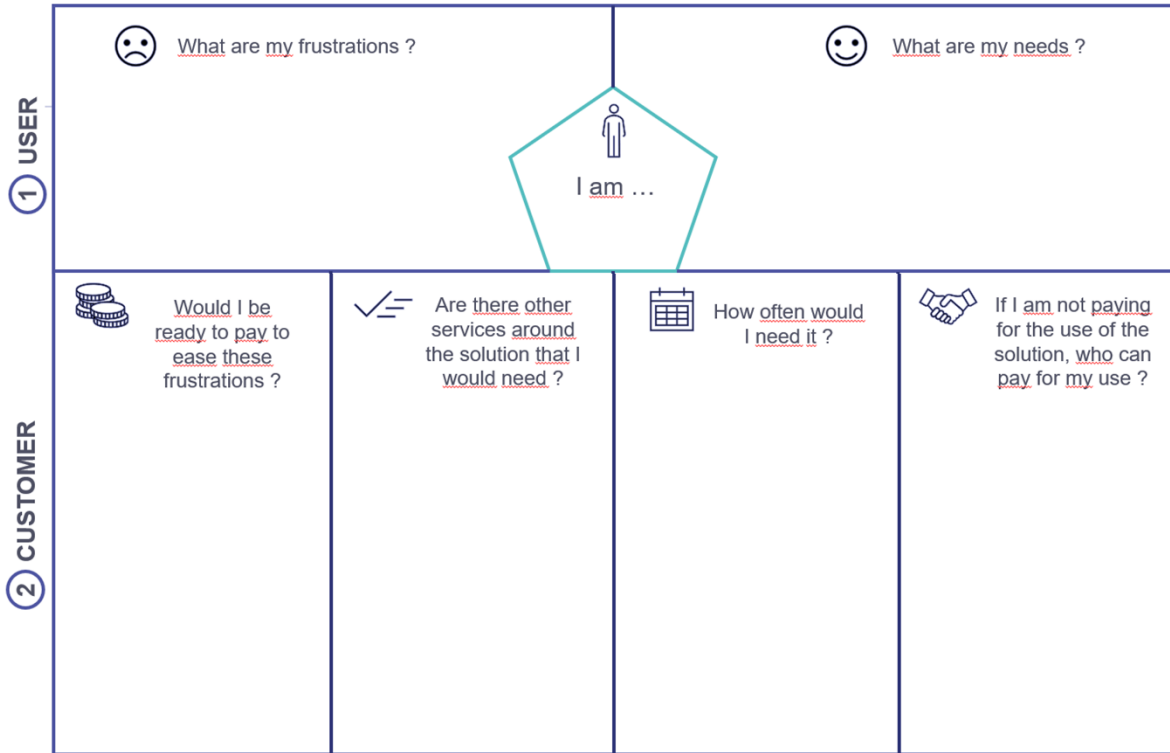


Figure 1: Persona canvas used for the internal exploitation workshop

- A sheet reminding the roll-out of the workshop for each working group as illustrated in the following figure.



Ice breaker

All participants answer to the question "Imagine you have to stay several weeks on a desert island, what is the ONE object you would take with you"

Work in the working group

1. Each participant chooses one of the following "roles":
 - National authority
 - Local authority
 - Developer of river basin management plans
 - Tourism association
 - Fisheries association
 - Dam operator
2. Take the corresponding post-its:
 - Yellow post-it = National authority
 - Yellow post-it and green dot = Local authority
 - Yellow post-it and blue dot = Developer of river basin management plans
 - Yellow post-it and red dot = Tourism association
 - Yellow post-it and pink dot = Fisheries association
 - Yellow post-it and yellow dot = Dam operator
3. Keep in mind you would like to perform a resources assessment or an analysis of the impact of a new regulation on resources.
4. First round of work.
Complete the two boxes:
 - What are my frustrations?
 - What are my needs?
5. Second round of work.
Complete the four boxes:
 - Would I be ready to pay to ease these frustrations?
 - Are there other services around the solution that I would need?
 - How often would I need it?
 - If I am not paying for the use of the solution, who can pay for my use?

Reminder

The NEXOGENESIS SLNAE is developed EURECAT.

The SLNAE is a digital and intelligent tool which exploits AI and allows scenario definition with multiple objectives to assess nexus-wide impacts of policy implementation, providing a series of possible actions that maximise nexus performance.

Figure 2: Example of the sheet for each working group in the internal exploitation workshop

- A PPT presentation
- Different coloured post-its and pens

1.3. Course of the event

The internal co-creation exploitation workshop started with the introduction to the workshop including the explanations about the objectives and the rules of the workshop. As mentioned in a previous section, objectives of the workshop are to co-create and discuss with consortium partners the exploitation pathways for the different NEXOGENESIS Key Exploitable Results and to think from a user and customer point of view to define exploitation pathways. The workshop rules were presented with the aim to encourage all participants to collaborate and express their ideas. Rules included for example "consider all the contributions", "Say more "Yes and" rather than "No but"", "Learn from differences", "Do not judge", etc.

The presentation was followed by the presentation of the 3 key exploitable results (KERs) presented by the developers and responsible for the KERs: the UVPP, the NEXOGENESIS

NEPAT and the WEF Nexus Footprint. As for the latter the exploitation pathway is already defined, the team decided to focus on the two first exploitable results.

Participants were then separated into two groups moderated by a GAC Group member and were invited to do an ice breaker. Participants were asked to answer each one after the other to imagine they have to stay several weeks on a desert island, what is the one object they would take with them.

Afterwards, the participants were asked to pick a role they would impersonate for the exercise. According to the role, participants received coloured post-its. The first round of work in the working groups was focusing on the KERs' users and participants were asked to complete the upper half of the persona canvas.

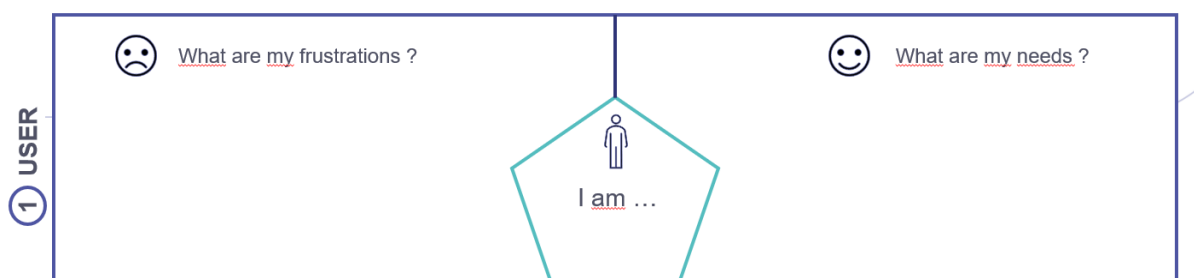


Figure 3: First round of work in working groups

The participants had 10 minutes to complete their post-its keeping in mind their role and the KER in focus. After these 10 minutes, each participant explained what their frustrations and what their needs were which led to discussions between the participants in the different roles. The post-its were then fixed on the canvas.

For the working group on the UVPP the completion and discussion on these user aspects were intense and allowed to identify several important points. Therefore, it took longer than expected and participants were only able to complete the work from the first round in the given time.

The second round of working group work was focusing on the second half of the canvas and focusing on the customer point of view.

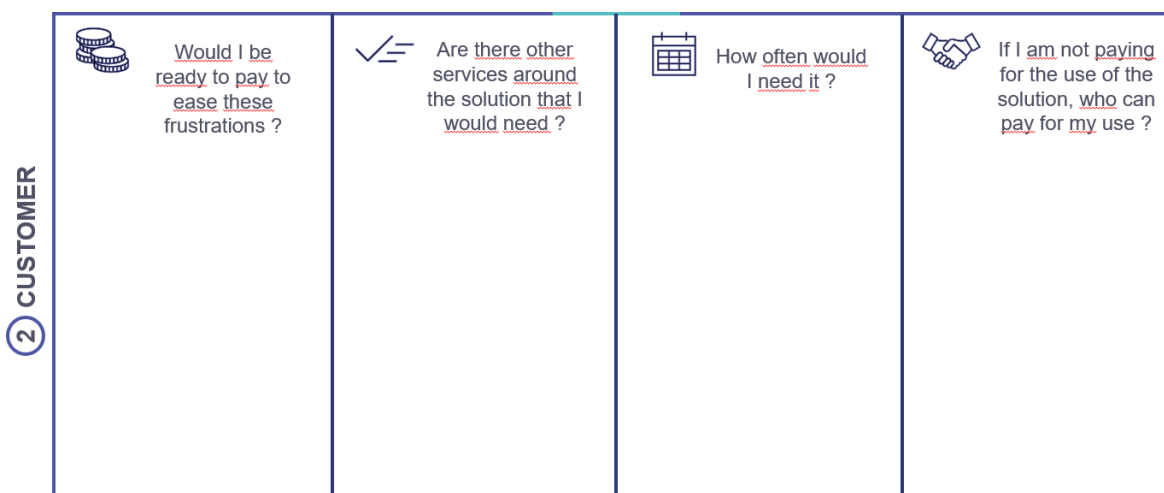


Figure 4: Second round of work in working groups



The participants had 15 minutes to complete their post-its responding to the four following questions:

- Would I be ready to pay to ease these frustrations (identified in the first round) ?
- Are there other services around the solution that I would need ?
- How often would I need it ?
- If I am not paying for the use of the solution, who can pay for my use ?

These 15 minutes were followed by 10 minutes of explanation of their answers and discussions.



Figure 5: Working group work in the internal exploitation workshop

The participants in the different working groups were then invited to gather together and listen to the restitution presentation given by the responsible for the different KERs so that all participants are also aware of the discussions in the other working group.

Dr Svetlana Klessova, from GAC Group then led general discussions about the TRL expected by the end of the project and the IP ownership, and presented her recent published paper¹ and explained the different steps corresponding to the different TRL and the corresponding required efforts and its increase alongside with the advancement of TRL, projecting the discussion for post-project exploitation.

¹ Klessova, S., Engell, S. Thomas, C. (2022). Assessment of the advancement of market-upstream innovations and of the performance of research and innovation projects. *Technovation*, Volume 116, 102495.

1.4. Outcomes

1.4.1. Outcomes of the first working group focusing on the UVPP

As explained above, the working group focusing on the UVPP focused their work on the first upper part of the persona canvas which led to in-depth discussions:

Concerning the identification of the **frustration and problems**, the results were as following:

- For the local public authority in the WEFE nexus:
 - o Lack of the updated civil defence plan for example flooding rivers, natural catastrophes, fires, etc.
 - o The water pollution and the pollution migration coming from transboundary rivers
 - o The reliability of water sources
 - o Climate change related phenomena as droughts, urban heat and heavy rainfalls
 - o The conflict with power authority and local implementation of national legislation
- For the national public authority in the WEFE nexus:
 - o Uncertainty about the authorities deciding upon the water related rights
 - o The expansion of the role of agriculture at GDP level knowing that there is not enough water and land
 - o Uncertainty about the land-use plan with protected areas
- For the water management organisation / river basin organisation:
 - o The ecological flow
 - o The water allocation based on the national decisions
 - o The water quality from mining and agriculture
 - o Water pollution and availability
 - o Invasion of the dams
 - o Other environmental concerns as droughts, water scarcity, etc.
 - o The updates of the policy
 - o The preservation of water
 - o Pollution prevention at the source and less waste of water
 - o Limited economic resources
 - o Conflicting policies creating problems during policy implementation stage

Concerning the **solutions and needs**, participants identified the following:

- Local public authority in the WEFE nexus:
 - o To know which policies would be available to mitigate the benefits and costs for stakeholders, so that integrated solutions can be used in negotiations and regional policy plans for the long term
 - o Better funding from the state, policy design and more policy coherence
 - o More consideration of the local possibilities in terms of implementation of national legislation
 - o More funding available to counter the effects of climate change at the local level
 - o More bottom-up initiatives
 - o Staff working at the municipality whose main task is to implement relevant policies

- Permission to extract more groundwater during droughts
- More water quantity from rivers for irrigation at the right time (summer)
- More support from regions, financing, capacities and knowledge
- National public authority in the WEFE nexus:
 - Design policies that help to increase agriculture productivity and sustainability
 - Overview of the main issues and contacts of those impacted by and impacting the resources availability
 - Specific guidelines on what is allowed or not in a protected area
 - A consistent platform for interactive visualisation of the consequences for different sectors of the policy decisions (from the SDG perspective)
- Water management organisation / river basin organisation :
 - A decision-support tool to mitigate the impact of water scarcity in key sectors
 - A visualisation tool of future scenarios
 - A smarter and more efficient use of water
 - More flexibility of resources use
 - Financial recourses, expertise and solid management strategies
 - Policy to address actual water availability in all basins (overallocation and underallocation)
 - Involvement of catchment management agencies in allocation plans

Then the discussion on exploitation path and adaptation to the needs of the future users was organised, which continued during the second internal exploitation workshop.

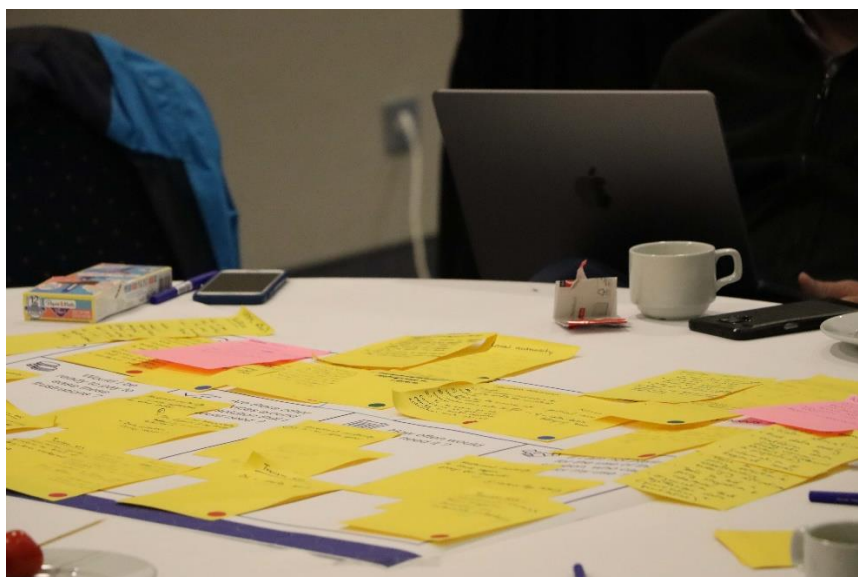


Figure 6: Work in the working group focusing on the UVPP

1.4.2. Outcomes of the work in the working group focusing on the NEXOGENESIS NEPAT

The second working group focusing on the NEXOGENESIS NEPAT were able to complete the whole persona canvas. Answers provided by each participant/role is provided in this section. Concerning the identification of the **frustration and problems**, the results were as following:

- For the national authorities, their frustrations are:
 - o Data is not easily available in one place
 - o There is a lack of communication and of relevant indicators available
 - o To perform integrated resource management in complex
 - o There are differences in local, regional & national needs & priorities
 - o Lack of policy integration and coherence
 - o A lot of silo thinking
- For local authorities, their frustrations are:
 - o No access to data and knowledge – they do not know what is out there
 - o Their hands are tied, they do not have to power to change current local situations
- For river basin authorities, their frustrations are:
 - o Lack of involvement in (EU) projects
 - o Not enough power on preventive drought actions
 - o Lack of cohesion among the many actors / water users
- For tourism associations, their frustrations are:
 - o Agrotourism – how to increase it
 - o Ecotourism – how to feel safe
 - o Concerns about the quality of the environment to serve specific activities
 - o Concerns about the climatic conditions to feel comfortable
 - o Aesthetic pollution
- For fisheries associations, their frustrations are:
 - o Inconsistency in the legislation across sectors
 - o They are asking themselves if they will still be able to fish in 2050 and what will happen to fish if they continue building dams
- For dam operators, their frustrations are:
 - o Not having sufficient supply to feed water to their user base which results in public complaints
 - o Contaminants in their dam from upstream agriculture, industry and mining
 - o Power cuts making it challenging to manage dam levels efficiently
 - o Invasion of plant species covering the surface of the dam, compromising water quality
- For NGOs, their frustrations are:
 - o Lack of collaboration with public authorities
 - o Not well recognised to get an access to resources

Concerning the **solutions and needs**, participants identified the following:

- For the national authorities, their needs are:
 - o Better water allocation
 - o Find data easily
 - o A platform to integrate data from various sectors (historical & projected)
 - o Information at regional levels is needed
 - o Tools to aid in policy selection and understanding underlying motivation are needed
 - o Tools to aid in policy integration and coherence are needed
 - o Organisation that synthesizes data (quantitative and qualitative) is needed
- For local authorities, their needs are:
 - o Clear, relevant data and knowledge (via a platform) to fill in the capacity gaps



- A tool to help to prioritise decisions
- More funding
- Cap and work with people to know their problems
- A tool to see the impact of policies and climate change
- For tourism associations, their needs are:
 - Information and indicators for the water quality for recreational activities
 - Alerts for the possible extreme weather events
 - 15 minutes routes to access open green spaces
 - To be aware of the condition of water and energy to built recreational activities
- For river basin authorities, their needs are:
 - Have a political voice
 - Development of a water-basin belonging sense
- For fisheries associations, their needs are:
 - Ecological flow in the context of climate, land-use scenarios
 - Suitability of fish species in the context of climate, land and socio-economic context according to their reproduction period, types and size
 - Better water quality
- For dam operators, their needs are:
 - Information and data on upstream and downstream users
 - Management of the usage of fertilisers and how waste products are released into the system that feeds their dam
 - Less conflicts and more power to limit and optimise water allocation under water scarcity
- For NGOs, their needs are:
 - Clear management
 - Better resources allocation (both natural and monetary)
 - Regulation within river basin aligned with the local situation
 - Better involvement of the NGOs in the decision-making process

Would they be ready to pay to ease their frustrations:

- For national authorities:
 - Yes, but they need to evaluate the relevance of the proposed tools and if the value justifies the costs and if the tool covers the needs at their scale, they would be willing to pay.
 - Yes, if the tool is applicable to different regions
- For local authorities:
 - Yes but the tool needs to be demonstrated to be useful in terms of pay off, of increased efficiency for decision making and increased knowledge as well as of societal impact
- For the river basin authorities:
 - They would pay if the tool is developed from the existing and applied water management tools
 - They think national authorities should pay for it
- For the tourism associations:
 - Yes, because it would be supporting the project of a viable tourism-environment concept which would bring long-term beneficial results both to the environment and to touristic flourishing
- For the fisheries association:



- No, governments, ministries or dam operators should pay
- For the dam operators:
 - Yes, to ensure consistent supply to users and to enable effective planning
- For NGOs:
 - Not willing to pay

To the question regarding the services needed around the solutions, the answers were as following:

- For national authorities: it would need to be applicable to other areas
- For local authorities:
 - Technical support including database and reporting possibilities
 - Solutions for data collection (surveys, measure percentages, etc.)
- For river basin authorities: no answer were provided
- For tourism associations: a monitoring system to inform them about the long-term sustainability regime
- For fisheries associations:
 - Easy to opt out
 - Information for their province
 - Indicators to check water quality and quantity
 - Alerts to know when it is not possible to fish
- For dam operators:
 - Training to use the tool
 - Forecasts of combination of bulletins, marinas and of risk to downstream supply due to scarcity
- For NGOs:
 - Training on how to use which data and on how to exploit results

To the question regarding the frequency of their use of the tool, the answer were as follows:

- For national authorities: 3-4 times per year
- For local authorities: it depends on the tool's time span, probably every year
- For river basin authorities: no answer provided
- For tourism associations: on a daily basis
- For fisheries associations: on a daily basis
- For dam operators: one a year
- For NGOs: every 6 month or more depending on the current projects

Participants were then asked to identify who will be able to pay for their use of the tool. The answers were as follows:

- For national authorities: each region pays for their use
- For local authorities: national or regional authorities
- For river basin authorities: no answer was provided
- For tourism associations and fisheries associations: government, through nexus projects or subsidiaries on sustainable solutions
- For dam operators: regional water authorities through structural funds or downstream users like industry or farmers to enable sustainable management of allocations or environmentalists looking to maintain minimal environmental flows or authorities seeking knowledge
- For NGOs: national authorities or private sectors

1.5. Bridging to the external exploitation workshop

These findings are planned to be crossed with the findings from the second exploitation workshop (see below).

According to the different perspectives of the different consortium members embodying different roles, the UVPP answers to their needs. They are mainly related to water preservation, use, distribution, quantity and quality as well as to the related policies.

Concerning the NEXOGENESIS NEPAT, it was clearly identified that there is a lack of data and knowledge availability as well of coherent and integrated policies. Moreover, there would be an interest of all the roles to have access to a tool as the NEXOGENESIS NEPAT and more precisely the different sectorial associations would use it on a daily basis as well as national and local authorities. Concerning the payment for the use of such a tool, there has been a consensus on the fact that it should be the public authorities paying for their use by the different bodies.

Based on these affirmations the external co-creation exploitation workshop was build. The goal for this second workshop was to test these affirmations and to be able to finetune them in order to propose a pathway towards exploitation of the two exploitable results.

2. The external co-creation exploitation workshop

The external co-creation exploitation workshop was held on the 27th of September 2023 in Split, Croatia as a side event of the “Nexus Regional Stakeholder Forum – From nexus thinking to nexus implementation in South Europe and beyond – Mutual learning between practitioners and policy makers” organised by NexusNet Cost Action. This event put the focus on practitioners, those who affect the WEFE nexus and are affected by the WEFE nexus. It brought together the WEFE nexus community of practitioners to discuss the challenges and opportunities for supporting the implementation of WEFE nexus approaches, to exchange experiences and to support mutual learning between practitioners and policy makers. The invited practitioners were of particular interest for the NEXOGENESIS team to invite them to the external exploitation workshop.

The goal of this external exploitation workshop was to gather the feedback from WEFE nexus related practitioners on their needs, how and why they would use the NEXOGENESIS NEPAT and the UVPP as well as how it could be proposed to them.



2.1. Agenda

The external exploitation workshop took place on the 27th of September 2023 and lasted for 3,5 hours. The agenda was composed as follows:

Time	Session
15 :00 – 15 :05	Welcome <i>Dr Svetlana Klessova, G.A.C. Group</i>
15:05 – 15:15	Presentation of the NEXOGENESIS project <i>Dr Stefania Munaretto, KWR</i>
15:15 – 15:25	Objectives of the workshop <i>Dr Svetlana Klessova, G.A.C. Group</i>
15:25 – 15:40	Presentation of the NEXOGENESIS tool What is the NEXOGENESIS tool? Why is it important? How will it be used after the end of the project? Who will use it? For Whom will it benefit? <i>Nuria Nievas, EURECAT</i>
15:40 – 16:25	Discussions around the NEXOGENESIS tool <i>Moderated by Dr Svetlana Klessova, G.A.C. Group</i>
16:25 – 16:45	Coffee Break
16:45 – 17:00	Presentation of the User-Validated Policy Package What is the User-Validated Policy Package? Why is it important? How will it be used after the end of the project? Who will use it? For Whom will it benefit? <i>Dr Stefania Munaretto, KWR & Dr Sabina J. Khan, UFZ</i>
17:00 – 17:45	Discussions around the User-Validated Policy Package <i>Moderated by Dr Svetlana Klessova, G.A.C. Group</i>
17:45 – 18:10	General discussions on the implementation and use of innovative WEF E Nexus related tools <i>Moderated by Dr Svetlana Klessova, G.A.C. Group</i>
18:10 – 18:20	Conclusions <i>Dr Svetlana Klessova, G.A.C. Group</i>

2.2. Preparation

The preparation of this external exploitation workshop was focused on gathering external stakeholders pertinent to discuss the implementation and use of the NEXOGENESIS exploitable results after the end of the project. The external stakeholders targeted for this workshop were WEF E nexus related practitioners, affected by or affecting the WEF E nexus. On the one side, collaboration with the NexusNet COST Action allowed to identify WEF E nexus related practitioners invited to participate at the Nexus Regional Stakeholder Forum which would also be of interest to be invited to the external exploitation workshop. This allowed to identify and invite the practitioners relevant for the discussions around the NEXOGENESIS KERs. Moreover, joint communication of the event as well as the logistics were organised, and efforts were shared between the NEXOGENESIS team and the NexusNet COST Action.



On the other side, the NEXOGENESIS team screened the Tier 2 stakeholders identified in the framework of WP5 and identified a list of practitioners to be invited to the external exploitation workshop. In collaboration with Case study leaders and the NEXOGENESIS coordinator, 10 practitioners from the Tier 2 level were invited to participate to the external exploitation workshop. In addition, to the WEFEX nexus related practitioners, through a discussion with project partners it was identified as interesting to invite international insurance companies which could also be targeted as potential users of the NEXOGENESIS KERs. Therefore, 2 representatives of international insurance companies were invited to join the workshop. Moreover, all project partners were invited to suggest additional practitioners to be invited. All invited practitioners were invited to register through a form that was created for this purpose: <https://forms.gle/ub2kVcu2pmuzD9ug8>

Finally, 62 practitioners were invited and 42 confirmed their on site presence.

In parallel, preparation of the agenda as well as organisation and content of the workshop were discussed.

2.3. Course of the event

The external exploitation workshop started with welcome words given by Dr Svetlana Klessova from G.A.C. Group as organiser of the workshop, expert in exploitation and Task 6.4 leader. Then, a short presentation of the NEXOGENESIS project was provided by Dr Stefania Munaretto in order to set the basis and explain the background for the development of the two discussed solutions, the NEXOGENESIS NEPAT and the UVPP. Following this presentation, Svetlana Klessova explained to objectives of the workshop in a way that it provides also benefits from the present practitioners.

Afterwards, a first round of discussions around the first NEXOGENESIS KER, the NEXOGENESIS NEPAT was organised. It started with a presentation of the tool provided by the developer and responsible for the NEXOGENESIS NEPAT, Nuria Nuevas from EURECAT. This presentation was focused around the five following questions:

- What is the NEXOGENESIS NEPAT?
- Why is it important?
- How will it be used after the end of the project?
- Who will use it?
- Whom will it benefit?

This was followed by a discussion led by Dr Svetlana Klessova in order to gather practitioners' feedback on their frustrations, their needs, their interest in using such a tool and identifying who will be able to pay for the use of such a tool based on the assumptions gathered through the first internal exploitation workshop. As the two exploitable results are linked it has been decided to forward the presentation of the UVPP and to discuss both results at the same time. The presentation of the UVPP was given by the developers and responsible partners for the UVPP, Dr Stefania Munaretto from KWR Water and Dr Sabina J. Khan from UFZ following the five same questions than for the NEXOGENESIS NEPAT.



After a short coffee break, the discussions about the exploitation of the two results took place. Discussions with practitioners to gather their feedback were moderated by Dr Svetlana Klessova allowed to validate assumptions made in the first internal exploitation workshop and to identify new key elements.

The workshop ended with a general discussion on the implementation and use of innovative WEF Nexus related tools as well as the related barriers, opportunities and conditions followed by a conclusion by Dr Svetlana Klessova.



Figure 7: NEXOGENESIS external exploitation workshop presenters and moderators



2.4. Outcomes

Through the discussions it has been clarified that to use the NEPAT the user should firstly define its goal, define the needed models and find the available data. Therefore, a certain amount of time and data is required to be able to fully use the NEPAT and UVPP methodology. Thanks to the presence of the Case study #3 leader, Florentina Nanu it has been identified that there is a need for a multi-disciplinary team, stakeholder dialogue, work which can take between 6 months and 1 year.

Feedback from practitioners allowed us to make the following conclusions:

- There is a real interest for the use of the UVPP and NEPAT by consultants, river basin management planning organisations, insurance companies, public authorities, etc.
 - The amount of the time needed to collect and entry data (relevant to the new region/area/river basin) is high, and shall be indicated in the guidebook. This is expected to be a potential bottleneck for the further exploitation.
 - In order to become “sellable” tools, we need to make it marketable, to talk money and show that they can generate monetizable outputs for the customers, and explain how (case examples).
 - In order to keep the NEPAT updated, there is a need for maintenance (not only IT but also content / models, etc). This could be a service to be sold aside from the tool itself.
- Cost estimation



Figure 8: NEXOGENESIS external exploitation workshop in Split, Croatia

- It has also been mentioned that the structure of the NEPAT is of high interest and that the outcomes it provides can be adapted according to the needs (not only related to

WEFE nexus, but for other policy developments). This presents a pathways towards upscaling the tool.

- Moreover, in order to exploit fully its potential in terms of positive impact on the resources management and preservation in regional policy making, incentives at the national or European levels are needed.
- Both NEPAT and UVPP are the one future product and could be marketed firstly together, once they reach the high TRL. The UVPP are tailored to specific case studies, these are solutions to adapt by the potential customers which will require important input (see the second point of the feedback, above).
- Therefore, startup creation (to commercialise the NEXOGENESIS results) is premature, as the results are not at high TRL yet. This would require continuation (an IA for instance) to bring the results closer to the market.
- However, services around NEXOGENESIS activities could be provided by the project partners after the project end, if they wish. Services could include e.g. support to the local consultants, universities or staff of the client on data collection, stakeholder engagement process, use of modelling tools etc. This will require that the community of actors, across Europe and beyond, is aware about the NEXOGENESIS approach and tools, and is sensibilised. Also, showcase of examples and support from NEXOGENESIS partners, including coaching and training, is required (for instance, how the city X or the water management agency in a country Y would know about the services proposed by the NEXOGENESIS partners, if they are not specifically showcased, and value proposition is explained in a simple way?

This means that the community of practice around environmental nexus-related issues would be needed to be set up as a first step towards exploitation, with (light) moderation from one of the NEXOGENESIS partners. This should be considered during the second internal exploitation workshop, and shall go beyond the web site of the project.

Additionally, to the outcomes on the exploitation of the NEXOGENESIS results, the workshop allowed to contribute to the NexusNet Cost Action as it allowed to introduce and feed the discussions on the barriers and opportunities towards the application of WEFE nexus related tools.

2.5. NEXOGENESIS contribution to the WEFE Nexus Forum of stakeholders

In addition, the NEXOGENESIS contributed to the WEFE Nexus Forum of Stakeholders organised by NexusNet COST action in collaboration with/participation of NEXOGENESIS and other nexus-related projects. The intermediary results (work in progress) of the qualitative study on nexus-related stakeholders and their collaboration, where stakeholders involved in three case studies of NEXOGENESIS contributed alongside with other case studies provided or to be provided by NexusNet and ARSINOE, has been presented by Dr Svetlana Klessova on behalf of the team of 4 co-authors, and a discussion has been organised around three main questions:

- why WEFE nexus stakeholders collaborate?
- how, in which framework they collaborate?



- what do they consider the success of this WEFE nexus related collaboration?

This analysis and discussion are directly relevant to the exploitation activities: without understanding of the driving forces, motivation, framework and ways of collaboration between stakeholders, the exploitation of the NEXOGENESIS results after the project end is likely to be difficult. The audience of the Forum also voted on-line whether they agree with the presented intermediary findings (the results shows that they almost totally agree, especially about the “why” and “how”). The results of this analysis will be included in the future papers and will be presented in 2025. They also help to provide direction to the exploitation activities in the NEXOGENESIS project.

2.6. Conclusion and next steps

The external exploitation workshop allowed the NEXOGENESIS team to confirm the conclusions of the internal exploitation workshop and to go even further.

It allowed to identify the needs and shape the next steps. Indeed, to prepare the exploitation of the tools beyond the project’s lifetime, work needs to be performed to monetize the outputs of the tools and the impact of using the tools to make it attractive and sellable. It also gave the team some ideas of the services to be sold around the different tools (maintenance services, stakeholders engagement services, etc.). Finally, it allowed to identify the upscaling potential of the tool. Indeed, the structure of the tool is interesting for a lot of stakeholders as it shows the impact of different variables. This could be used for numerous different purposes.

Moreover, to continue the discussions on the exploitation of the NEXOGENESIS results as well as to organise and plan the work and activities in Year 4 which will lead to the exploitation of the NEXOGENESIS results beyond the end of the project a second internal exploitation workshop will be organised during the general assembly in Year 3, in September 2024.

General conclusions

The first internal exploitation workshop allowed to set the foundation of the exploitation of the NEXOGENESIS results and to provide some insights about their users and clients. Moreover, it allowed to bring all the project partners to think about the notion of exploitation and integrate it in the upcoming activities and development of the tools.

The assumptions made during the internal exploitation workshop were then tested in the external exploitation workshop and set the basis for the discussions. The external exploitation workshop allowed the team to go even further and to gather the feedback of potential users of the tools. It provided some insights on the requirements to bring the tools on the market and upscaling them.

The two exploitation workshops allowed the team to identify the exploitation potential and pathways of the two NEXOGENESIS main results, the UVPP and NEPAT. It was also clearly identified that startup creation, initially planned, is premature, and would requires significant efforts into the community of practice around nexus.

The next steps will be to discuss the conclusions with the consortium and to define a plan of implementation of the activities required during the last year of the project.

