First schedule of training actions and portfolio of possible contents

Deliverable 1.2

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First schedule of training actions and portfolio of possible contents

Deliverable 1.2: First schedule of training actions and portfolio of possible contents

Summary
Training is an essential element in the systemic innovation chain of B-WaterSmart, anchored in capacity building while corresponding to the stakeholders' needs and expectations. The B-WaterSmart training portfolio objectives are threefold: dedicated training actions to ensure capacity building on the water-smart solutions and products and maximisation of their value; promote transfer potential and ensure that the products developed meet stakeholder needs and expectations; contribute to the B-WaterSmart dissemination and communication strategy and knowledge portal to ensure knowledge accessibility and uptake. Besides these planned objectives, the portfolio integrates additional training actions to add value in supporting B-WaterSmart purposes, benefits, and knowledge, both to those directly involved in the project and to a broader public. This deliverable provides the first schedule of B-WaterSmart training activities and an initial portfolio of contents. As an introduction, chapter 1 presents the role of training in B-WaterSmart and the principles of the training portfolio. Chapters 2 and 3 present the portfolio structure and initial schedule of training actions. Chapter 4 presents the training actions, workflow, and guidance. Chapter 5 presents the planned assessment steps of the training activities and their contribution to key performance indicators.

Deliverable number	Work package
D1.2	WP1
Lead beneficiary	**Deliverable author(s)**
LNEC	Maria do Céu Almeida Margarida Rebelo
Quality assurance	
LNEC Adelphi	Rafaela Matos Anika Conrad
Planned delivery date	**Actual delivery date**
31/08/2021	30/08/2021

Dissemination level	☒ PU = Public □ PP = Restricted to other programme participants □ RE = Restricted to a group specified by the consortium. Please specify: _____ □ CO = Confidential, only for members of the consortium

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List of acronyms and abbreviations

BWS	B-WaterSmart (H2020 funded project)
CoP	Community of Practice
Dx.y	Deliverable y of Work Package x
GA	Grant Agreement
InAll	Innovation Alliance
L1	Level 1 actions
L2	Level 2 actions
L3	Level 3 actions
LL	Living Labs
M	Month
MS	Milestone
T	Task
WP	Work Package

Executive summary

The B-WaterSmart project aims at contributing to water-smart societies and economies by adopting a large-scale systemic approach to select, connect, and demonstrate tailored suites of innovative technology, management, and interoperable smart data solutions for multiple users and sectors. The systemic innovation approach builds on effective collaboration, communication, and knowledge exchange involving six European coastal cities and regions acting as Living Labs (LL) - Alicante, Bodø, Flanders, Lisbon, East Frisia and Venice - and supported by Communities of Practice (CoP) and an Innovation Alliance (InAll). CoP bring together relevant key actors and stakeholders to ensure co-development, acceptance, implementation, and systemic innovation in an interdisciplinary approach, promote mutual learning and incorporate stakeholder knowledge, identify commonalities and gaps between LL while ensuring solution transferability and replicability, and analyse barriers and drivers to innovation growth and market outreach. The InAll implementation aims at the peer-to-peer capacity building by testing and refining the water smartness assessment framework developed by B-WaterSmart and confirming its usability as key to strategic planning towards greater water smartness.

One of the core aims of WP1 - Co-create & demonstrate systemic innovation in six Living Labs is to ensure that the six B-WaterSmart LL are trained to use the project products relevant to their current or foreseen specific context and to optimize the value of the products. This will contribute to maximize the project impact during and beyond the duration of the project. Webinars with partners and other LL stakeholders are the preferred means, complemented by face-to-face training whenever appropriate. WP2 to WP6 will provide the list of topics to be addressed, including the intended timing, learning objectives, preferred means (webinar or face-to-face, and if so, location), responsible person and target audience.

This deliverable provides the first schedule of B-WaterSmart training activities and an initial portfolio of contents. It describes the role of training in B-WaterSmart, the principles of the training portfolio, the portfolio structure, and an initial schedule of training actions.

Acknowledgements

The authors thank the contributions to this deliverable from WP1 colleagues, from WP7 team members Anika Conrad and Ronjon Chakrabarti, and from Sofia Cordeiro, Lisbon Living Lab leader.

1 Introduction

1.1 Role of training in BWS

The B-WaterSmart project aims at contributing to water-smart societies and economies by adopting a large-scale systemic approach to select, connect, and show tailored suites of innovative technology, management, and interoperable smart data solutions for multiple users and sectors. The systemic innovation approach builds on effective collaboration, communication and knowledge exchange involving six European coastal cities and regions acting as Living Labs (LL) - Alicante, Bodø, Flanders, Lisbon, East Freesia and Venice - and supported by Communities of Practise (CoP) and an Innovation Alliance (InAll). CoP bring together relevant key actors and stakeholders to ensure co-development, acceptance, implementation and systemic innovation in an interdisciplinary approach, promote mutual learning and incorporate stakeholder knowledge, recognise commonalities and gaps between LL while ensuring solution transferability and replicability, and analyse barriers and drivers to innovation growth and market outreach. InAll implementation aims at the peer-to-peer capacity building by testing and refining the water smartness assessment framework developed by B-Watersmart, and at showing its usability as key for strategic planning towards greater water smartness.

A core aim of WP1 - Co-create & demonstrate systemic innovation in six Living Labs is to ensure that the six B-WaterSmart LL are trained to use the project products relevant to their current or foreseen specific context and to optimize the value of the products. Webinars with partners and other LL stakeholders are the preferred means, complemented by face-to-face training when appropriate. WP2 to WP6 will provide the list of topics to be addressed, including the topic, intended timing, learning objectives, preferred means (webinar or face-to-face, and if so, the location), responsible person and target audience.

Training is an essential element in the systemic innovation chain of B-WaterSmart, while corresponding to the stakeholders' needs and expectations (Rebelo et al., 2021). Training will contribute to maximize the impact of project work and results during and beyond the project among B-WaterSmart partners, other LL stakeholders and potential followers. With this intent, the training content was designed and planned in close cooperation with the dissemination and exploitation activities in the project.

The BWS training portfolio objectives are threefold:

- Develop dedicated training actions to ensure capacity building on the water-smart solutions and products and optimisation of their value.
- Promote transfer potential and ensure that products correspond to the stakeholders' needs and expectations.
- Contribute to the B-WaterSmart dissemination and communication strategy and knowledge portal to ensure knowledge accessibility and uptake, and to reach actors and stakeholders outside the consortium, as part of the knowledge creation and sharing, training and education aims of the project.

Besides these planned objectives, supplementary training actions are incorporated to integrate in a coordinated way all initiatives, further adding value in expanding BWS objectives, benefits, and knowledge, both to those directly involved in the project and to a vaster public as well.

1.2 Principles of the training portfolio

The training portfolio comprises a collection of training actions to respond to the set objectives in a tangible way. During the project, the training activities support the developments; at the end of the project, the final portfolio (D1.6 – Final portfolio of training actions) will include the validated set of training activities to ensure capacity building on the water-smart solutions and products and optimise their value.

Relevant principles to building the portfolio are:

- Respond to training needs and expected outcomes, as expressed by partners and stakeholders.
- Incorporate project training actions in a shared harmonised plan aligned with project dissemination and exploitation activities.
- Consider target audience profiles, namely partners, LL stakeholders, interested parties not involved in the project.
- Contribute to a component of the regularly curated knowledge portal during and after project conclusion.
- Provide the training and corresponding materials in English, as a common language for European and non-European countries, complemented by translated versions to foster project impact when found adequate.

2 B-WaterSmart training portfolio contents and structure

2.1 The 3-level approach

The approach selected to structure the BWS training portfolio integrates three levels of training actions. The levels are defined as:

Level 1 (L1): short courses on BWS products and solutions (e.g., guidelines, governance, policies, technologies) as included in the GA as the training portfolio backbone.

Level 2 (L2): state-of-the-art and brainstorming sessions on topics relevant to the core objectives and developments of BWS (e.g., brine disposal aligned with issues in WP2, performance assessment approaches as part of WP6 developments). These sessions complement L1 short courses.

Level 3 (L3): thematic webinars outside the work of BWS but on related topics (e.g., promoted by the LL owners).

An example of the L2 initiatives is the first test training action on "Guidance on building a BWS assessment system" as part of the development of the water smartness assessment framework within B-WaterSmart. The learning objectives for participants included to understand and select adequate assessment criteria, metrics, reference values and targets; to interpret the results of the application of an assessment system; to deal with accuracy and reliability issues. Figure 1 provides information about this training event proposal.

B-WaterSmart — Proposed event information — T 1.3

Completed by:	Helena Alegre			Date:	2021-06-17	
Event title	Guidance on building a BWS assessment system			Responsible person	Name:	Helena Alegre
					Institution:	LNEC
Event level	Level 2: state-of-the-art and brainstorming sessions				Email:	halegre@lnec.pt
Intended timing	Project month (PM)	PM11	Possible dates (max 3)	2021-07-01; 2021-06-30	Duration	Up to 3 hours
					Details on duration	About 1:30
Main target audience	WP2		Notes:	Also to WP5 partners; involvement also of all those participating in assessment criteria and metrics definition or selection		
	WP4					
	Minimum:	Maximum:	Expected number		Participation fee (€)	0
					Number of editions	-
Participants	3 (WP leaders)	-	out/15			
Language	English		Preferred means	Web-based	Location	-
	Synchronous	Asynchronous				
Learning modes	Yes	Yes	Details if asynchronou	The live session will be recorded to be made available as asynchronous.		
List of topics to be addressed	- Introduction to assessment systems (objectives, uses, structure) - How to define assessment criteria - How to define metrics - Data accuracy and reliability: assessment and implications - How to set reference values and targets - Reporting and evaluation of results - Avoiding common mistakes - Hands-on exercise				Learning objectives	After this training event, participants should be able: - to understand and select adequate assessment criteria, metrics, reference values and targets; - to interpret the results of the application of an assessment system; - to deal with accuracy and reliability issues

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Figure 1: Lisbon Living Lab session fitting on L2 type of action

As an example of the L3 initiatives, Lisbon Living Lab organises a bi-monthly seminar to support the partners' work not only for BWS people but also beyond. These seminars aim at facilitating the integration of BWS into the partners' long-term strategy and activities and allow partners to become more familiar with each other's work, helping to foster durable synergies. Figure 2 illustrates two sessions organised by Lisbon Living Lab.

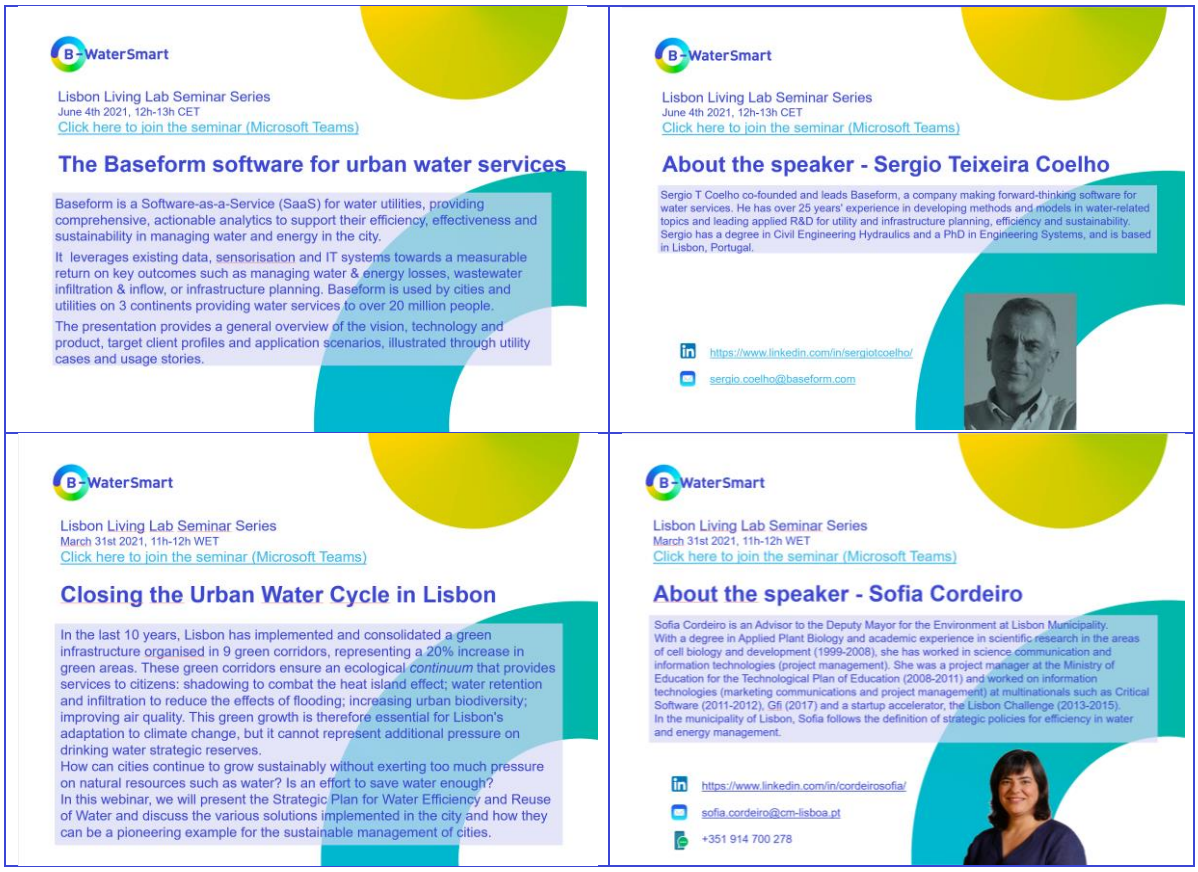

Figure 2: Lisbon Living Lab session fitting on L3 type of action

For each of the levels of action, the characteristics to be defined include the list of topics to be addressed, the learning objectives, the target audience, and the type of action.

The final training portfolio (D1.6) will include the validated versions of L1 actions and selected L2 and L3 actions. The contents of the portfolio will be more diverse and richer with the L2 and L3 additions.

2.2 Assessing training needs

The training needs for B-WaterSmart solutions and products identified, associated with developments under WP2 (Water-smart technologies and concepts), WP3 (Water-smart applications and data), WP4 (Circular economy value chains) and WP5 (Society, governance, policy), are presented in the project GA and included as L1 actions. Assessment of these needs will be carried out with a survey to be responded to by the mentioned WP teams. A first list of the L1 training actions will be provided in M16. In Table 1, the list of technology and data application products under L1 actions is presented.

Table 1: BWS technology products and data application products - candidates for L1 actions

#	Technology / tool / demonstration activity	T
	Technologies | Reuse of water and wastewater	
1	**Water reclamation protocol for potable water reuse in beverage industry**: showcase safe potable water reuse by food & beverage industry compatible with certification by health and environmental authorities, increase industry resilience to climate change by introducing a climate independent water source (Lisbon).	2.4.1
2	**High-recovery reverse osmosis**: integration in existing drinking water treatment train. Showcase high recovery reverse osmosis as a solution to increase robust water production by decreasing the raw water quality demands for intake in drinking water production, hence increasing regional system resilience. [Description differs from the GA. The version presented here is in line with the one in the request for the first amendment of the GA, approval pending]	2.3.1
3	**Effluent reuse for drinking water production**: technology demonstration of effluent reuse for drinking water, introducing alternative drinking water resources to increase regional resiliency. Implementation of quality (nutrients and emerging contaminants) and safety (pathogens removal) controls (Flanders).	2.3.2
4	**Compact combinatory treatment technologies for industrial water reuse**: demonstration of the possibility of extending water reuse at industrial level by applying a chosen multiple treatment sequence (including ultrafiltration, nanofiltration and reverse osmosis) (Venice).	2.6.1
5	**Urban water reuse for agriculture**: technology demonstration of urban stormwater reuse for agriculture, introducing alternative water resources for irrigation. Implementation of quality (nutrients and emerging contaminants) and safety (removal of pathogens) controls (Flanders).	2.3.2
6	**Combined treatment of vapour condensate and milk/whey permeate for reuse in dairy industry**: higher stability and flexibility of the process, more efficient and competitive, exportable into markets with high barriers for approval by authorities. Enables quick shift between different qualities fit for different purposes. Better control of hygiene status of treated water through smart monitoring. Lower barrier for approval by health/food authorities (East Frisia).	2.5.1
	Technologies | Recovery of energy and materials from water and wastewater	
7	**Nitrate-selective EDR**: separate nitrates from wastewater effluents, manage separately for: nutrient recovery, water reuse in fertigation. Recovery of nutrients in WWTP effluents for irrigation instead of spending energy in eliminating nutrients (Alicante).	2.1.3
8	**Brine electro-chlorination**: use of brines from RO in tertiary treatment of WWTP, generate hypochlorite for effluent disinfection and membrane cleaning. Lowering dependence in hypochlorite purchased externally, lowering of salinity in brines to be disposed of (Alicante).	2.1.4
9	**Ammonia evaporation CEVAP**: evaporation and recovery of liquid ammonia from sludge returns. Recovery of nutrients from the sludge to avoid disposal of ammonia-rich sludges. Use of liquid ammonia in DENOX industry (Alicante).	2.1.5
10	**Oil & fat co-digestion technology**: use of waste from primary treatment to promote co-digestion and increase biomethane generation. Lowering disposal of waste from the WWTP (Alicante).	2.1.1
11	**Ammonia recovery from concentrated WWTP streams**: pilot phase, optimise anaerobic digestion of mixtures of sludge and liquid special waste, enhance ammonia concentrations before stripping. Demonstration of nutrients recovery by integration at WWTP (Venice).	2.6.2
12	**Efficient small-scale biogas production at small WWTP**: distributed energy provision from small WWTP will save energy provided by traditional sources (i.e., electricity system), e.g., in thermal energy for domestic and underground heating systems for de-icing of roads (Bodø).	2.2.2
13	**Microturbines for energy recovery**: use of microturbines to recover energy from the WWTP effluent for internal reuse of the generated energy (Alicante).	2.1.2

Table 1 (cont.): BWS technology products and data application products – candidates for L1 actions

#	Technology / tool / demonstration activity	T
	Technologies | Smart management of water systems and infrastructure	
14	**IoT sensors for infiltration detection**: to improve information available for detection of I/I sources in wastewater networks, improved signal transmission and energy solutions (Bodø).	2.2.1
15	**Smart water meters for leak detection**: demonstration of leak detection and water quality sensors in an integrated solution with microturbine capabilities to generate enough power to transmit auxiliary data from household smart water meters. This gives significantly improved and more distributed information available for leak detection of water supply networks (Bodø).	2.2.1
	Tools | Monitoring, negotiation, and decision support tools	
16	**Water reuse strategic platform**: FIWARE–based Platform based on ENG's Digital Enabler to support standardized/ transferable evaluations and communication among stakeholders for the assessment of economical/ environmental sustainable water reuse opportunities. Will provide a shared evaluation model to support objective, traced and updatable decisions (Venice).	3.1, 3.7
17	**Environment for decision support and selection of alternative courses of action**: city and sector prioritization and decision-making environment, based on sets of key analytics, including water, energy, and nutrient balances; performance, risk, and cost analytics. Expressed numerically and graphically on a georeferenced 2D/3D cityscape environment. (Lisbon).	3.5
18	**RE-ACTOR: Smart water allocation and negotiation tool for water reuse**: real time water quality and risk monitoring to ensure acceptability of the different water end-users and to visualize the economic and environmental benefits of using the water. Engagement of stakeholders in decision-making through simulation of potential water reuse scenarios (Alicante).	3.2
19	**Sludge management platform**: based on ENG's Digital Enabler, development of FIWARE–based Platform to support the identification of the optimum sewer sludge valorisation system, to foster energy and resource reuse/recovery. Platform will allow evaluation and ranking of treatment options, considering geographical, environmental, economic, social, and political barriers (Venice).	3.7
20	**Urban water cycle (UWC) observatory**: tool to develop balances for urban water/resource management, integrating data from different water sources (availability, use, losses, nutrient flow) and creating datasets for multiple users (e.g., municipalities, researchers, water utilities) (Lisbon).	3.5
21	**Stormwater reuse management system**: system combining operational management of a stormwater basin and a connected sub-irrigation system for groundwater recharge and direct irrigation; optimises system functioning, based on real time data and model predictions (Flanders).	3.4
	Tools | Water cycle modelling and assessment tools	
22	**UWOT: model for simulation of the urban water cycle from source-to-treatment-to-tap**: UWOT will be extended as part of the Responsible Reuse Framework and the Regional Demand-Supply Matching GIS Tool, acting as an urban water cycle simulation engine for both, to explore alternative scenarios for reuse for changing scales, climatic conditions, and legal/ environmental requirements (Flanders, East Frisia).	3.4, 3.6
23	**Regional demand-supply matching GIS tool**: tool for GIS-based analysis of optimal demand-resource patterns, to identify communal and industrial water requirements and matching with available water resources, calculating, where necessary, transport and treatment requirements. The UWOT model allows to simulate alternative demand & supply options for climate and demand scenarios to rate the resistance of partially decentralized water supply systems (East Frisia).	3.6
24	**Reclaimed water distribution network water quality model**: hydraulic and water quality modelling of reclaimed water distribution network, capable of exporting files to Epanet and incorporating sensor data (e.g., chlorine residuals, temperature, turbidity, pH). Compatible with other Baseform modules in the project. (Lisbon).	3.5
25	**Water-energy-P balance planning module**: module for planning support, extending network water and energy balance analytics to include P balance, mapping supply-demand and alternative sources. Compatible with other Baseform modules in the project (Lisbon).	3.5

Table 1 (cont.): BWS technology products and data application products – candidates for L1 actions

#	Technology / tool / demonstration activity	T
	Tools | Risk assessment tools	
26	**QMRA+: Quantitative microbial risk assessment for water reuse and agriculture**: expansion of AquaNes tool QMRA for drinking water, for application of water reuse and in agriculture (Flanders).	3.4
27	**RA-Reuse: Risk assessment for urban reuse module**: tool based on European regulation and ISO standards to facilitate risk assessment and management for safe water reuse. Deals with health and environmental (surface and ground water) risks (Lisbon).	3.5
	Tools | Water demand analysis and natural resource management tools	
28	**Short-term demand forecasting tool**: calculates a high discretization of water demand analyses and allocation of water resources, based on smart meter data (East Frisia).	3.6
29	**iWidget+ Platform online platform for water information at utility and customers premises**: better information (flow, pressure, temperature, quality) available for leak detection of water supply networks as well as demand management. Builds on past EU projects and delivers a modular FIWARE enabled multi-dashboard (Bodø).	3.3
30	**iWidget+ Platform online platform about I/I for wastewater networks**: better information (energy provision, signal transmission, information management) available for detection of I/I sources in wastewater networks. Delivers a modular FIWARE enabled multi-dashboard (Bodø).	3.3
31	**ASR-pro tool: predicting water quality after subsurface storage**: easy to use hydro-chemical tool for fast prediction of water quality after ASR (Flanders).	3.4
	Tools | Enabling technology	
32	**Digital enabler: integrated digital support system to enable RR and CE at regional scale**: evolve the Digital Enabler Platform from Smart City market from smart agriculture and industry to include water domain. FIWARE based Internet of Everything platform (Venice).	3.7
	Tools | Other	
33	**Climate readiness certification tool**: combine water & energy efficiency (incl. simulator & app). Water/energy efficiency certificates and calibration in pilot municipal facilities/housing (Lisbon).	3.5
34	**Water smartness assessment framework and tool**: a tool to assess the overall gain in water-smartness and sustainability for the LL. Advanced visualisation techniques provide a gamified immersive environment for users to interact with the framework (all LL).	3.9

Planning of training at L2 (state-of-the-art and brainstorming sessions) and L3 (thematic webinars) levels allows more flexibility but ought to be defined, using periodic surveys to partners, to ensure proper planning and divulging. Biannual plans are the basis for these actions, but it is possible to fit in actions planned with shorter notice, schedule permitting.

3 First schedule of training actions

The first schedule of the training actions provides a broad and preliminary calendar for the periods when the different training actions will take place (Figure 3).

For level 1 training actions, the first schedule basis is the project timeline as presented in deliverable D1.7 (Schmuck and Wencki, 2021). Flexibility to accommodate specific products development phases and avoiding an undesirable concentration of training actions in the schedule is achieved by assuming two rounds. These rounds correspond to different products. The first round during a full year is for those BWS products expected to be available earlier, typically after the first quarter of the project's second year and the start of the third year (2022). The second round is mainly for products with longer development and pilot implementation periods. Given the number of products, this division in two rounds allows avoiding the concentration of short courses for the same targets. Replication of training is also planned as required. Subsequent courses can benefit from additional quality control actions.

For level 2 and 3 training actions, the schedule is more flexible, allowing for shorter planning time for organisers but enough time for those who want to benefit from a plan set ahead in time, typically up to six months, and dissemination on the BWS website and other project dissemination resources.

This timeline is coordinated with other project activities (e.g., activities for exploitation and route to the market), where workshops with training aspects at promising new application sites outside the LL are envisaged for M33 to M38, enabling utilization of produced training materials.

The consistency of the training timeline with other activities planned under BWS communication, exploitation and replication activities will be verified regularly during the project development.

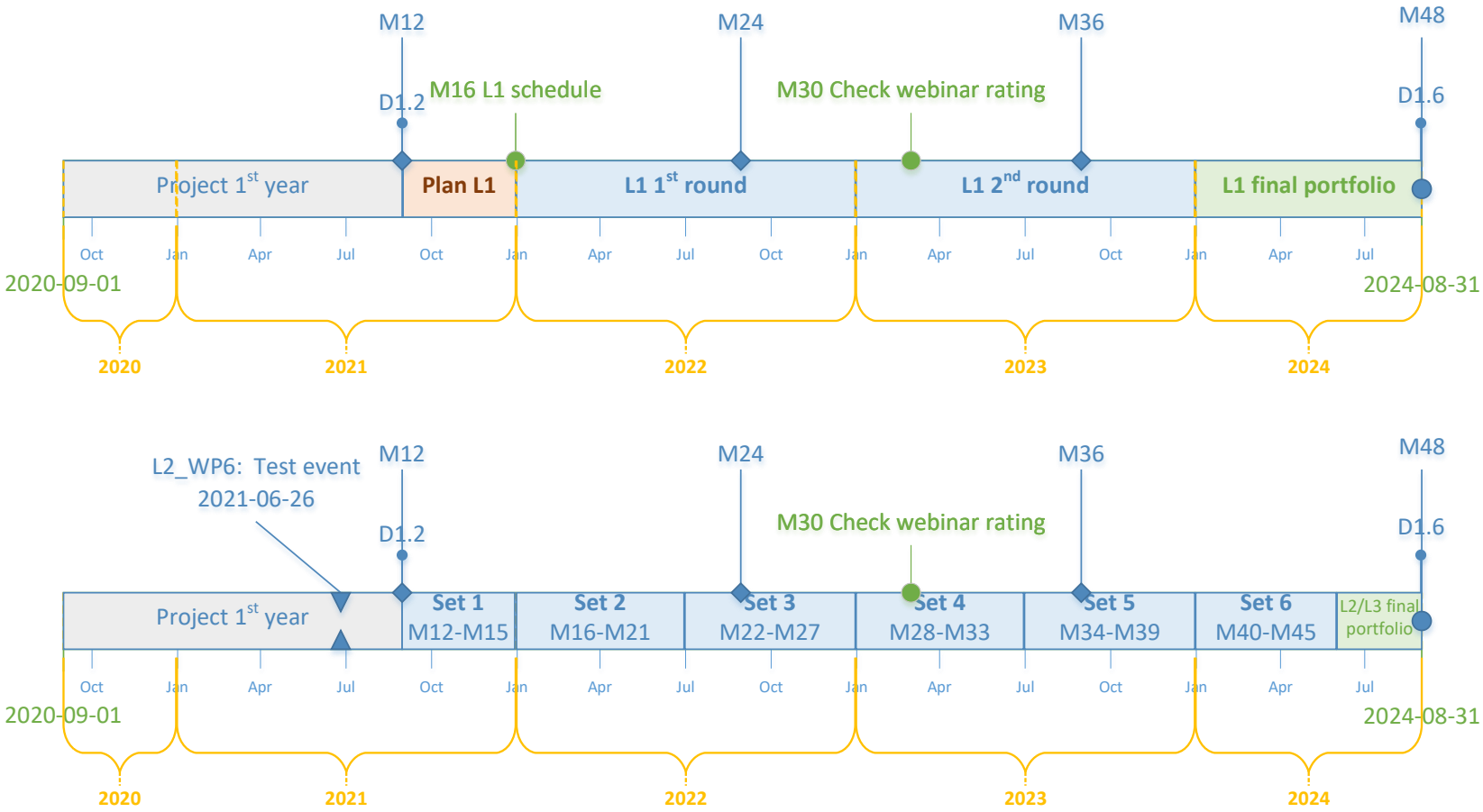

Figure 3: B-WaterSmart first training actions schedule: L1 (top); L2 and L3 (bottom)

4 B-WaterSmart training actions workflow and guidance

4.1 Planning the BWS training actions

Planning the BWS training actions involves the collaboration of partners responsible or willing to organise a short course, state-of-the-art presentations, brainstorming sessions, or thematic webinars. Together with the T1.3 and WP7 teams, main workflows, guidance, and quality control will be progressively improved to maximise the benefits of the training actions during the project and beyond.

In the following section, some guidance is provided. Further developments up to M16 (December 2021) include quality control guidance, presentation templates and the basic structure of the short training course.

4.2 BWS training action workflow

For each action, the workflow involving the T1.3 team and the action organisers are presented in Figure 4. Periodic data gathering by the T1.3 team on planned training actions occurs every six months (see form extract in Figure 2). However, partners can send the completed form as soon as they decide to organise a training action. The required form will be available in Nextcloud®. The organisers will provide participants with a link to ensure anonymous responses in the activity assessment.

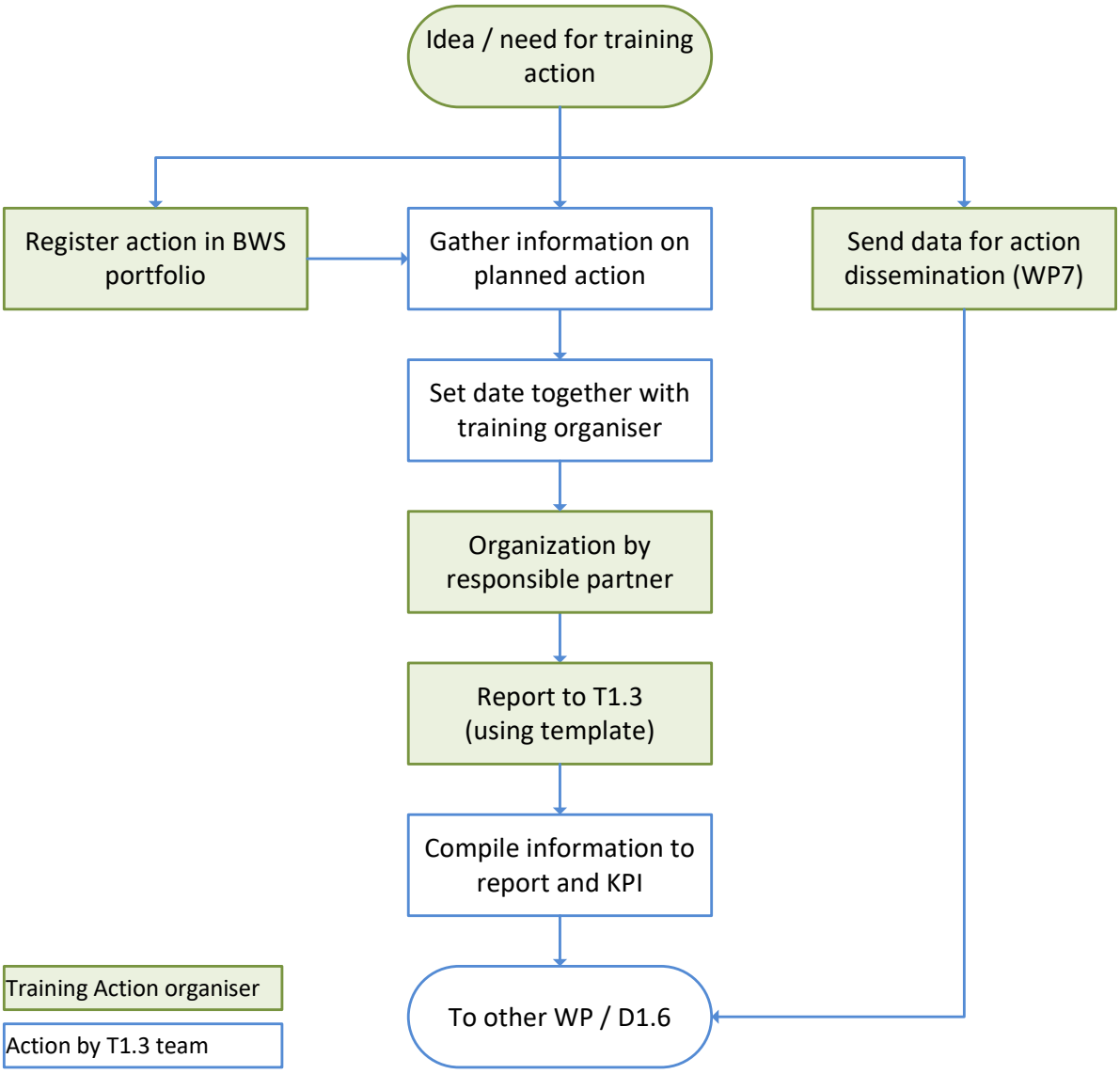

Figure 4: B-WaterSmart training actions workflow

Information on building the BWS Training Portfolio

This workbook is a form to collect information on training actions under the BWS project and is intended to build a common schedule for the project to avoid undesired overlaps.
For each event, the "proposed event form" sheet needs to be filled by the event organisation responsible person and sent to the T1.3 team (mcalmeida@lnec.pt).
The T1.3 team confirms the action date after verification.

Currently, three types of actions are identified:

- Level 1: short courses on BWS products/solutions (e.g., guidelines, governance, policies, technologies) (as per DoW)
- Level 2: state-of-the-art and brainstorming sessions (e.g., brine disposal WP2, performance assessment approaches WP6) (new)
- Level 3: thematic webinars outside the work of BWS but on related topics (e.g., promoted by the LL owners such as those suggested by Lisbon LL - CML) (new)

Responsible partner by level 1 actions should preferably provide a first version of the training sessions planned (as perDoW) until September 30th. Please fill one form per action and alter the file name to: T1.3_Data_TA#_#, where the first # refers to the work package number and the second to the action sequence numbering for that WP.
Organisers can send updated versions of the action info up to six months before the set date. The date should be agreed upon up to 5 months before.

For level 2 and 3 training actions, the filled form should be sent to the T1.3 team as soon as possible, preferably not afte 1 month before the event.

After the action, for all levels, the report template should be filled and sent to the T1.3 team.

B-WaterSmart

Proposed event information to T1.3

Completed by:	<Please fill in your name>			Date:	yyyy-mm-dd		
Event title	<Please fill>			Responsible person	Name:	<Please fill>	
					Institution:	<Please select>	
Event level	<Please select>				Email:	<Please fill>	
Intended timing	Project month (PM)	<Please fill>	Possible dates (max 3) <Please fill>	Duration	<Please select>	Details on duration	<Please fill>
Main target audience	<Please select>		Notes:				
	<Please select>						
	Minimum:	Maximum:	Expected number	Participation fee (€)	<Please fill>	Number of editions	<Please fill>
Participants	<Please fill>	<Please fill>	<Please fill>				
Language (English and ...)	<Please select>		Preferred means <Please select>	Location	<Please indicate if face-to-face selected>		
	Synchronous	Asynchronous					
Learning modes	<Please select>	<Please select>	Details if asynchronous				
List of topics to be addressed	<Please fill>			Learning objectives	<Please fill>		

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MCA@LNEC

Figure 5: Extracts of the training action data template

4.3 Role of T1.3 team

The T1.3 team is responsible for the following:

- develop and coordinate the training schedule and portfolio building;
- decide on the action dates with organisers taking into account the set action schedule;
- collect the relevant information for each training action;
- develop and make available documentation to support planning of training actions;
- gather the contributions of project partners to the training portfolio;
- provide guidance on quality control to the action organisers;
- develop a L1 presentation templates including general contents about the project, and a typical short course structure with the collaboration of courses organisers;
- develop a guidance document for trainers.

4.4 Role of training action organizers

The training action organizers are responsible for the following:

- register the action in BWS portfolio using the action data template available in the Nextcloud® platform;
- define the action dates together with T1.3 team, taking into account the global training action schedule and action priorities (level 1 actions have higher priority);
- send action information to WP7 team for dissemination and materials for asynchronous training, as applicable;
- organise the action and prepare all the support materials;
- fill the action report using the action report template available in the Nextcloud® and return it to T1.3 team;
- supply the link for action evaluation to the participants;
- collaborate with T1.3 team in the preparation of presentation templates, guidance documents and final BWS training portfolio.

5 Assessment of B-WaterSmart training activities and key performance indicators

The assessment of BWS training activities will take place at the end of each action, using an assessment template developed by T1.3 to be returned by participants, anonymously and voluntarily. The analysis of the results together with the action report form will allow the identification of opportunities for improvement. The report form is to be sent to the T1.3 team after the training. Feedback is provided to the organising team to promote improvement in replications of the action.

These activities contribute to the B-WaterSmart objectives, mainly to objective 1 (BWS O1: enable systemic innovation through CoPs and LL, by co-creating, implementing and strengthening local and regional strategies for water-smartness in coastal Europe, with high transfer potential to national and European scales, and capacity building of society and decision-makers, CoPs, LL & collaborative approach in WP1, addressing a broad range of sectors and scales and matching local challenges with opportunities and solutions) and to objective 8 (BWS O8: boost European and international accessibility and replication, exchange, and uptake of innovations in water management and CE, enabling a benchmarking of solutions and their effect at local, regional and national scales, assessing the transfer potential of solutions, by customising and expanding an existing knowledge portal into activities to connect, communicate and replicate in WP7). The contribution of training can influence two main project key performance indicators, as presented in Table 2, especially on the items highlighted in bold.

Table 2: B-WaterSmart training activities: key performance indicators

Project KPI	Description	Targets
KPI_2: Systemic innovation through capacity building and training > BWS O1	Ensure that the products developed meet stakeholders' needs and expectations. Two metrics are used: **KPI_2.1: percentage of webinars receiving at least a '4 in 5' average rate by the participants.** KPI_2.2: percentage of problem-owners effectively engaged in the Innovation Alliance with a positive self-assessment.	KPI_1.1: ≥ 80% by M36 KPI_1.2: ≥ 80% by M40
KPI_10: Knowledge accessibility and uptake > BWS O8	Provide a web-based and continuously curated knowledge portal for solutions, information, training, and a marketplace for water-smart CE solutions. Three metrics are used: **KPI_3.1: Number of individuals registered in the portal.** KPI_3.2: **Number of organisations registered in the portal**. KPI_3.3: long-term business plan & operation model for adoption and curation of the portal, by the European Sector organisation Water Europe beyond the project.	KPI_1.3: ≥ 200 by M36 KPI_1.4: ≥ 50 by M36 KPI_1.5: 100% by M48

6 References

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