Uisce Éireann

Project / Programme Workshop Procedure (I2O)

Revision Number	Description of Change	Author(s)	Approved By	Date of Approval
0.1	Draft for discussion	Gregory Sloane	Mark O'Connell	N/A
1.0	Approved Document	Gregory Sloane	Mark O'Connell	09/05/2017
1.1	Contact List updated & Invitees to WS 6	Gregory Sloane	Mark O'Connell	06/06/2017
1.2	Section 1 Flow Chart format amended. Section 8 Contact List updated. Responsibility of minutes updated in 5.2 & 6.6.	Gregory Sloane	Mark O'Connell	27/07/2017
2.0	Workshop Invitees/contacts amended. Workshop 7 procedure amended. IW Energy Efficient Design Standard referenced.	Gregory Sloane	Mark O'Connell	22/09/2017
3.0	Asset Operations requirements amended, removal of FM-002	Gregory Sloane	Mark O'Connell	12/01/2018
4.0	Amendments to workshop invitees/attendees, inputs and outputs throughout. Contact list updated. Minor amendments throughout.	Gregory Sloane	Mark O'Connell	05/07/2018
5.0	Minor amendments to flow chart, workshop 7 and contacts list.	Gregory Sloane	Mark O'Connell	03/08/2018
	Amendments to workshop invitees/attendees, inputs			

6.0	and outputs throughout. References to PEP, Project Estimating SOP, Project Progression and Project Escalation. Contact list updated.	Gavin O'Donovan	Mark O'Connell	14/11/2019
7.0	New Project Clarity Workshop SOP	Gavin O'Donovan	Mark O'Connell	04/09/2020
8.0	Environmental Regulation Updates	Gavin O'Donovan	Mark O'Connell	30/11/2020
9.0	Public Spending Code Update	Gavin O'Donovan	Mark O'Connell	22/07/2021
10.0	Continuous Improvement Update	Alan Morrissey	Mark O'Connell	18/07/2022
11.0	Continuous Improvement update	Emma Holdsworth	Mark O'Connell	06/12/2023

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1. DEFINITIONS

Term	Definition
Contractor	The Contractor employed by Uisce Éireann responsible for the design, construction and operation (where applicable) of the project.
Estimated Total Cost	The Estimated Total Cost, for the purpose of the financial thresholds in PD/03 and any supporting guidance, should encompass the full capital cost estimate of the project from identification to completion of construction/implementation including land costs, VAT, professional fees, materials, labour, and uncertainty/contingencies for risk, inflation, etc.
Cost Estimation SOP	The Standard Operating Procedure for developing Cost Estimates and is applicable to Uisce Éireann Asset Management, Infrastructure Delivery, Customer Operations and Asset Operations functions and any third-party service providers who are involved in the preparation of cost estimates.
Detailed Design Report	Prepared by the ESP this provides a comprehensive summary of the outcome of the FSR, any clarifications/amendments, design parameters, assumptions and technical considerations/methodologies undertaken as part of the detailed design process. Refer to the TOR for full requirements.
EnviroKit	EnviroKit is Uisce Éireann bespoke Environmental Screening tool designed to ensure that any environmental aspects and impacts related to a construction project are identified at the earliest stage of the project in a systematic and formalised manner. It consists of a series of checklists covering all the potential environmental topics that can be found through the construction lifecycle, and allows designers, contractors and project management teams to consider and address relevant environmental risks at the right stage of the project, avoiding potential regulatory breaches.
Opex	Operational Expenditure, to include Energy, Chemicals, Goods & Services and Labour.
Outcome	The effects, positive or negative, of the outputs on the targeted beneficiaries, in the context of strategic objectives.
Output	The tangible deliverables resulting from an investment
Priority	Ranking

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Programmes of Work	Programmes of Work have been established to deliver works that are repeatable in nature with the aim of delivering multiple interventions, standardising the assets and delivery method while achieving efficiencies.
Project Brief	A live document created by Asset Planning pre-WS0 to detail scope information at handover
Project / Programme Execution Plan	The Project/Programme Execution Plan is a live document that enables the Project Manager (PM) to track and manage key programme/project data and will be a key input to workshops and programme/project reviews
Project Escalation Path	UÉ process for approval of changes to 6 Dials
Schedule	Programme for delivery of planned works

Abbreviation	Definition
AG	Approval Gate The formal milestones at which the Approving Authority must decide whether to approve the project to progress to the next stage, seek refinement or abandon the proposal.
BEP	Building Information Modelling Execution Plan – Broken into pre and post-appointment outputs, this document defines how the projects information management will be carried out by the delivery team relating directly to the projects EIR
BIM	Building Information Modelling - a process supported by various tools, technologies and contracts involving the generation and management of digital representations of physical and functional characteristics of projects.
CDE	Common Data Environment - A single source of information for any given project or asset, used to collect, manage and disseminate all relevant approved project/asset information. Stored digitally, this is where information is shared collaboratively in a logical and accessible way to help all key

	parties readily gain access to information, using universal naming conventions, avoiding duplication and retaining ownership.
CPT	Core Project Team - Asset Planning (AP), Infrastructure Delivery (ID) & Asset Operations (AO)
DSR	Design Support Resources - Those employed by Uisce Éireann who have oversight of the design, programme/project management and/or construction of an Uisce Éireann Infrastructure Delivery project.
EAC	Expenditure Approval Committee
ECI	Early Contractor Involvement
ECM	Enterprise Content Management system: This is the internal Uisce Éireann system used to manage all content contained within the Document Management System.
EAAT	Estimate, Assumptions & Allowances Tracker
EED	Energy Efficient Design - The standard process for ensuring all energy efficiency considerations are fully integrated into Uisce Éireann capital projects and delivery programmes.
ESP	Engineering Service Provider, the Consultant employed by Uisce Éireann to complete the design and/or construction of an Uisce Éireann Infrastructure Delivery project.
FSR	Feasibility Study Report as detailed in the Terms of Reference.
IPS	Investment Planning System – MS Excel based system developed by Asset Investments to manage the overall Capital Investment Plan. It also contains the Project Costing Tool
I2O	Invest to Outcome
Opex	Operational Expenditure, to include Energy, Chemicals,

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	Goods & Services and Labour.
PSC	'Public Spending Code - A Guide to Evaluating, Planning and Managing Public Investment' from the Department of Public Spending and Reform

2. I2O MANUAL

The I2O Manual sets out Uisce Éireann approach to the planning, appraisal, delivery, evaluation and management of capital investment projects relating to water and wastewater assets. We use the term Invest to Outcome (I2O) process to capture the combination of processes over the project lifecycle.

The approach is framed by the asset management system that is being developed for Uisce Éireann under the Connecting our Utilities Capabilities (CoUC) project. The manual aligns with the integrated approach taken on the Invest to Outcome process under Project Clarity. Project Clarity integrated a number of concurrent drivers to update the Invest to Outcome process including improvements identified by Uisce Éireann, the Investment and Delivery Review by Scottish Water International and the revised Public Spending Code, December 2019.

The Invest to Outcome (I2O) project lifecycle comprises of 6 Stages.

2.1   Stage 1 Strategic Assessment

Strategic Assessment is the first phase of the project lifecycle and is critical for early scrutiny of objectives, demand analysis, developing a long list of potential options, assessment of affordability and identification of risks. This Stage forms an important element of the bridge between the policy and the project. Approval Gate AG0 is the final step in Stage 1.

2.2   Stage 2 Preliminary Business Case

Stage 2 should build on the Strategic Assessment and serve as a detailed appraisal of available options.

It should include consideration of strategic alignment, objectives, demand analysis, short list of options, options appraisal to determine the preferred option, assessment of affordability, risk assessment, procurement strategy, proposed approach to implementation.

Investment Appraisal has an important role at Stage 2. See Financial & Economic Appraisal

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sections of the I2O Manual to support this. The appraisals should be completed 3 weeks before Workshop 2 and used to aid in selection of the preferred option and not just as an activity to complete the approval gate paper.

Approval Gate AG1 is the final step in Stage 2.

2.3   Stage 3A Final Business Case

Stage 3 is more detailed than Stage 2 given that more information should be available at this later stage in the project.

At this stage in the process there will be much greater understanding of a range of critical issues including costs, benefits, risks, delivery and affordability. These elements provide a basis on which to decide whether to proceed with a project. Approval Gate AG2 is the final step in Stage 3A.

2.4   Stage 3B Final Business Case

This is the development of the Pre-Tender Contract documents and the contingency review stage.

2.5   Stage 3C Final Business Case, to AG3

This is the review of the tenders (Pre-Award review) and approval to proceed to Implementation.

Approval Gate AG3 is the final step in Stage 3C.

2.6   Stage 4 Implementation

The Implementation Stage of a project begins once final approval for capital budget for the estimated total cost of the project and the award of a contract has been secured. The critical tasks at this stage are to award the contract, manage and monitor the project to ensure that it is executed satisfactorily, within budget, to standard and on time. Approval Gate AG4 is the final step in Stage 4.

2.7   Stage 5 Review

The Review Stage is the penultimate stage of the project lifecycle and is critical for identifying lessons learned and driving the process of continuous improvement.

2.8   Stage 6 Review / Ex-Post Evaluation

The purpose of the Ex-Post Evaluation is to determine if the intended benefits and outcomes materialised and to judge the impact of the project or intervention.

3. WORKSHOP FLOW CHART

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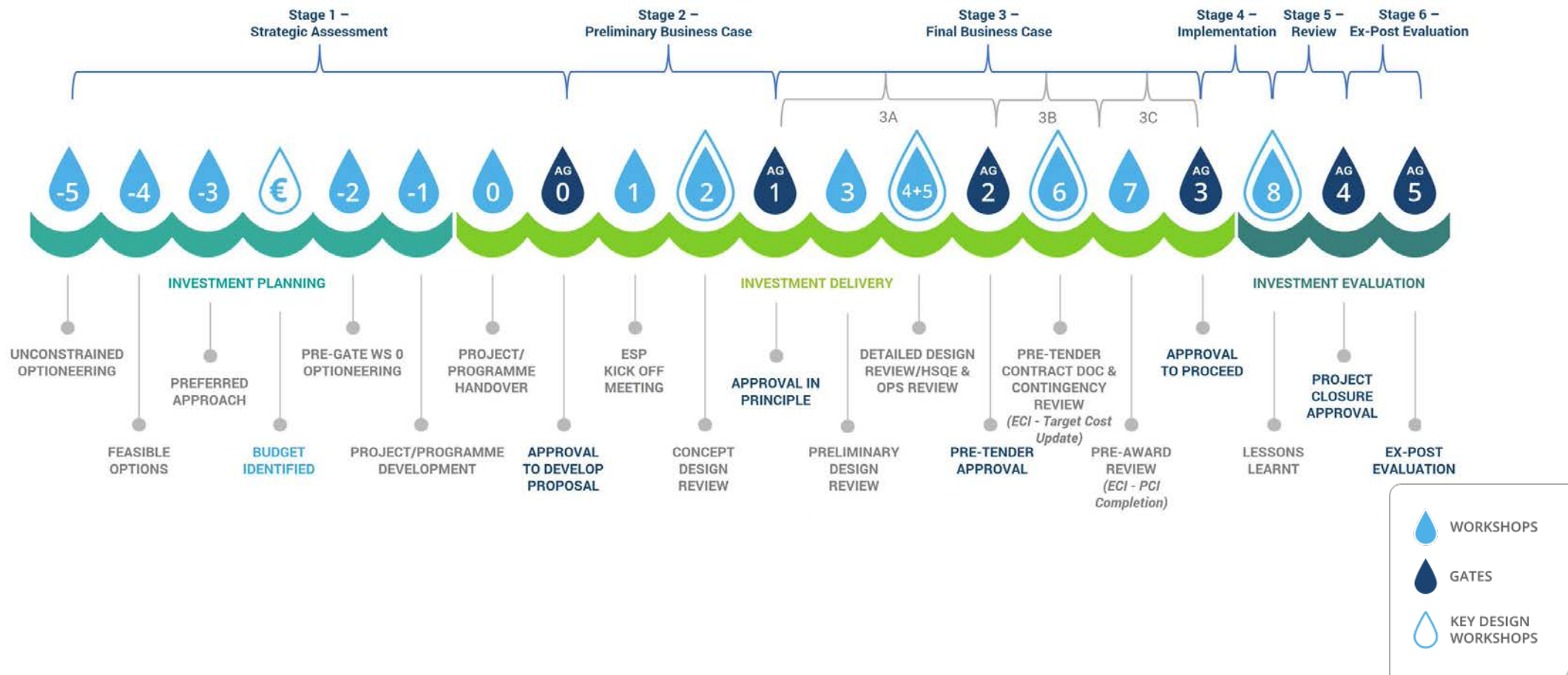
4. PURPOSE

The purpose of the workshop structure is to allow for oversight and control of the management of UÉ projects and programmes by ensuring that key deliverables are met at the various stages of a project. The objective is to provide:

- Consistent scoping of projects
- Consistent design and delivery approach across Uisce Éireann
- Transparency in the design development process
- An opportunity for relevant stakeholders to contribute to a collaborative cross functional the process.
- An auditable process
- Open and respectful challenges to the design development
- Change control with clear escalation points and paths.

This document sets out how the workshops should be undertaken, over the lifetime of a project or programme, including:

- Objectives of each Workshop
- The invitees to these workshops
- How the workshops should be organised.
- What information is to be in place prior to each workshop?
- What outputs are to be discussed and agreed?
- How these decisions should be recorded

This document also enables challenges to the design process from all stakeholders within the following guidelines.

- All parties at the workshop shall remain respectful and listen to the opinions of others with an open mind.
- All parties shall focus on the best design to achieve the outcomes of the project.
- All parties shall undertake to review the relevant documents / design data prior to the workshop.
- All parties shall attend as required or, if they fail to attend, the Chair shall seek agreement with those parties on workshop outcomes separately.
- The Workshop process is collaborative, decisions should be by agreement with Stakeholders and Project Team.
- Any changes to 6 dials as defined at WS 2 will result in recommendations being escalated through Approval Boards which will decide on the proposed change.
- The CPT have the authority to make decisions (subject to approval as required by Escalation process). If there isn't agreement across the three functions on key decisions, the AP Project Sponsor has overall authority, and their decision needs to be appropriately recorded.
- No party may issue an instruction to a contractor other than Infrastructure Delivery.

5. SCOPE

This procedure applies to all Uisce Éireann projects and programmes.

The projects and programmes covered under this SOP fall into three categories.

1. **Projects:** One-off projects that are designed to tender stage by an ESP and where the contractor takes over the design role after award of the contract. These Projects utilise all Workshops, as defined herein, from WS-5 to WS8.

2. **Programmes of Work:** Programmes of Work have been established to deliver works that are repeatable in nature with the aim of delivering multiple interventions standardising the assets and delivery method while achieving efficiencies.
   The number of workshops for a Programme of Work may be less than the 14 defined herein. The CPT should agree at the start of a programme which workshops are necessary and recorded the decision in the PGEP.

3. **ECI Projects:** One off projects or programmes of work that are delivered through the ECI target cost contracts where the contractor is involved at an early stage in the design, effectively carrying out much of the traditional ESP role. These Projects utilise all Workshops, as defined herein, from WS-5 to WS8.

A total of 14 number Workshops (Workshop -5 to Workshop 8) are identified throughout the lifetime of a Project or Programme. The inputs and outputs required for each workshop may differ depending on the delivery route adopted. These differences will be called out within this SOP under each workshop heading. Uisce Éireann reserves the right to combine or remove workshops as required. The Core Project Team are required to agree the proposed workshop schedule at Workshop 0 and reflect this in the PEP/PGEP. Workshops may also need to be repeated until outputs are agreed by UÉ. UÉ may choose to bundle projects within the programme and workshop them together.

These workshops do not replace day-to-day project management or on-going design review meetings on these projects.

6. RESPONSIBILITIES

6.1 Core Project Team (CPT)

The CPT is made up of nominated representatives from AP, IDD and AO and they have the authority to make decisions (subject to approval authority). The CPT provide sign off at WS -2, -1, 0, 2, 4, 6 & 8. This formal signoff must be captured in the workshop minutes and recorded on the Workshop Process Control Checklist (Workshop Checklist).

If there is not agreement across the three functions on key decisions the AP Project Sponsor has overall authority. These decisions need to be appropriately recorded. The CPT needs to agree any changes during the construction period, in particular any Value Engineering Proposals or scope changes that have an Operational impact. The CPT also needs to agree the final handover process, to Operations, at WS4.

6.2 ID Technical Assurance (UÉ TA)

The Technical Assurance team are responsible for:

- Checking / Auditing the application of design standards, codes of practice and specifications (with derogations approved through the Derogations Process **AD-EDS-SOP-005)**
- Maintaining the interface with Asset Planning in relation to technical standards through the end-to-end design process
- Chairing WS8 and leading the Lessons Learnt process.

6.3 Asset Planning Project Sponsor

The AP Project Sponsor (member of CPT) ensures alignment with the business case and is the overall owner of the project scope (Outcome and Output) and investment envelope. The AP Project Sponsor has the final decision authority and is responsible for:

- Scoping of works
- Agreeing preferred design including Opex impact assessment
- Sign off on issues of scope and specification changes
- Sign off on project completion and handover to AO
- Participate in Review / Lessons Learnt
- Final sign-off of Review /Lessons Learnt – WS8 (review scope from start to finish. Interactions between project delivery review and investment appraisal will be developed as part of ongoing work)
- Updating the AP Tactical Plan
- Update the Workshop Checklist for WS-5 to WS0.

6.4 Portfolio Manager

The Portfolio Manager is responsible for managing the delivery of the works under a Portfolio. All works delivered by Infrastructure Delivery are managed by one of the Portfolio Managers.

6.5 Programme Manager

The Programme Manager (member of CPT – can be delegated to PM) is responsible for managing the delivery of groups of projects and programmes and in some instances may act as a sub-Portfolio Manager.

The Programme Manager will liaise with the Project Manager regarding individual workshop requirements. They can   agree with the Project Manager if their attendance is required at specific Workshops.

6.6 Project Manager (PM)

The Project Manager is responsible for the management of the delivery of the project. The PM shall prepare the agenda and organise the workshops by co-ordinating all parties attending whilst ensuring all attendees understand their importance of attending. The PM has several responsibilities:

- Managing the project from workshop 1 to workshop 8 (Handover).
- for reviewing workshop documentation prior to each Workshop ensuring all inputs are met.
- for chairing (where relevant) the workshops. (Note: chair role can be delegated to ER).
- for following up with any meeting minute clarifications required of stakeholders.
- for collating comments from all attendees and circulating to all in advance of workshop.
- for updating the PEP / PGEP after every workshop apart from WS0.
- for following up on actions post workshop.
- maintaining all project records on ECM.
- for Programmes with no ESP support or under the ECI target cost contract, the PM is also responsible for taking and distributing the minutes at each Workshop.
- for applying the Escalation Criteria (across 6 dials) & Change Management processes (includes changes to spec and design (scope) during construction stage).
- Coordinate Review – WS8, with Core Team AP, AO, IDD.
- Project Budget Holder.
- Update the Workshop Checklist for WS1-WS8.
- Ensuring Asset Intelligence processes are followed by the Project Team for Asset Information validation and handover.
- Ensuring Estimated Total Cost is up to date and reflects the latest scope of the project option.

6.7   UÉ Engineering Service Provider (ESP)

The Engineering Service Provider is responsible:

- for preparing and progressing the design of the works proposed under one off projects or programmes where they have been appointed as the ESP
- ensuring the application and adherence to design standards, codes of practice and specifications *[for ECI projects this is the role of the Technical Assurance (TA) team as part of the PMO]*
- for the project design in line with the overall scope, budget and specifically the inputs and outputs for each workshop
- for taking minutes at each Workshop (with the exception of Workshops –5, -4, -3, -2, -1, 0 & 8) and sharing with the chair for review/distribution
- for the preparation and updating of the cost estimate in accordance with the UÉ Cost Estimation SOP. *[for ECI projects this is the role of the TA team as part of the PMO]*
- for design review of contractor designs on all projects. *[for ECI projects this is the role of the TA team as part of the PMO]*.

 For projects using BIM, the ESP is responsible for:

- for taking minutes at each Workshop (with the exception of Workshops –5, -4, -3, -2, -1, 0 & 8) and sharing with the chair for review/distribution
- for ensuring the projects asset information and BIM requirements are defined and unambiguous at Workshop 1.
- for ensuring the BIM requirements are incorporated and evaluated into the tendering process and further included in the projects contract.
- for ensuring the project team has the appropriate skills, competencies and technology to support delivery to the Uisce Éireann BIM requirements.
- liaising with Uisce Éireann Asset Management to ensure all asset data requirements, standards, processes and templates are included, communicated and used between AG0 and AG4.
- for reviewing the information model(s) against the UÉ BIM requirements, ensuring compliance and accepting contractual delivery on behalf of Uisce Éireann.
- for ensuring delivery of all information (graphical and non-graphical data) to Uisce Éireann at each information exchange.
- for ensuring all handover information represents the as-constructed asset(s), ensuring transfer of all information from the project CDE to the designated UÉ system in advance of final account.

6.8   Contractor

The Contractor is responsible:

- for preparing and progressing the project design, construction, commissioning, handover and operation in line with the overall scope and specifically the inputs and outputs for each workshop for certain programmes of work and for the ECI target

cost contracts.

6.9 Site Supervision Team

The Resident Engineer is responsible:

- for supervising the construction of the works proposed under a Programme or Project. Where relevant, the Resident Engineers input into the design/design review of the works may be sought at the Workshops.

6.10 Asset Planning

Uisce Éireann Asset Planning are responsible for:

- acting as the Client throughout the 'Invest to Outcome' process.
- preparing initial project scope, initial budget estimate, and expected performance requirements
- Assessing site specific risks, asset condition, operational risks and interface with existing assets through Workshops -5 to -1.
- reviewing and approval (in conjunction with the CPT) of any changes to 6 dials during the design workshop process. See Section 7.1 and 7.13 in relation to Asset Planning's role in preparing the Project / Programme Execution Plan, Project Brief and in dealing with scope change, respectively.
- Value Engineering assessments, where relevant.
- Confirm scope of BIM Requirements at WS0 taking into consideration inputs from Infrastructure Delivery, Asset Operations and Asset Intelligence, to clearly define and budget for level of graphical and non-graphical data for project delivery and handover.

6.11 Infrastructure Delivery Commercial Team

The Commercial Team are responsible for:

- Assessment and quantification of residual project risks as the design of the project develops.
- Assisting with all commercial issues on live contracts.

6.12 Infrastructure Delivery Cost Estimation and Intelligence Team

The Cost Estimation and Intelligence Team is responsible for:

- Providing cost estimating support to Asset Management, Infrastructure Delivery and Connection Developer Services; as well as cost insights and intelligence to enable Value for Money decision making.

- Manage the systems and processes required for 'industry best practice' regarding cost estimating and forecasting (CapEX, OpEx) - Implementing, improving, and driving

compliance with the Cost Estimation SOP.

- Provide insights into the carbon intensity associated to UÉ investment portfolio

- Establish communications and dashboards to improve cost knowledge of the assets that UÉ build, operate and maintain.

6.13 Infrastructure Delivery Project Scheduling Team

The Project Scheduling Team are responsible for managing the Monthly Update & Reporting Cycle within Infrastructure Delivery.

6.14 Asset Operations

Asset Operations are responsible for input into six key areas:

- The scope of the project and PEP
- Assessing the Opex and operational impact throughout
- Assessing the design options and preferred design
- Assessing any subsequent changes to the scope and design of the project which affect Operations
- Handover process
- The project review process

Asset Operations shall:

- Agree and sign off as part of the CPT on the scope and PEP at WS0.
- Challenge the design options in terms of operability and safety.
- Challenge the design options in terms of the OPEX impact.
- Agree the final design option with AP and IDD, as part of the CPT.
- Agree at workshop 4/5 how the project as designed will be commissioned and handed over.
- Challenge and agree with AP and IDD any subsequent changes to the scope and design during construction.
- Agree with IDD on the project completion and handover process and the formal transfer to Operations.
- Constructively engage with AP and IDD in the review process.
- Input into scope for WS0 to inform on level of BIM & Asset Information Requirements, taking into consideration the upkeep of the graphical and non-graphical data during operational phase.
- Undertake any additional operational interventions, outside the scope of the project, that are required to achieve project outcomes and set out in the Benefits Realisation Plan.

6.15   Asset Operations Portfolio Specialist

The Asset Operations Portfolio Specialist (member of CPT) is responsible for co-ordinating the Asset Operation requirements in relation to workshops. The Asset Operations Portfolio Specialist is responsible for representing and liaising with both the LA Operations staff and UÉ Asset Operations staff including SLA leads, Engineers, Process Ops, and Compliance.

The AO Portfolio Specialist has 7 key areas of input and decision:

- Represents or ensures AO representation and input throughout the project – scope is from workshop -5 to handover
- Sign off on Project Brief (scope of works)
- Sign off on preferred design option and Opex Impact assessment.
- Agrees handover process at workshop 4/5
- Agrees with Project Sponsor and Project Manager scope changes and operational impacts during delivery of project.
- Coordinates execution of any operational interventions set out in the Benefits Realisation Plan
- Signs off on handover as part of the CPT
- Signs off on review at Workshop 8

6.16   Infrastructure Delivery Land & Utilities Team

The Land & Wayleaves Team are responsible for informing and supporting IDD Project Teams at the relevant workshops in implementing the policies and procedures put in place for the purposes of Uisce Éireann land and wayleave acquisition together with statutory agency/utility applications.

6.17   HSQE

Uisce Éireann HSQE are responsible for providing input on HSQE relevant issues surrounding project design and operation ensuring HSQE concerns are incorporated in the project design and are adequately addressed in the Contract Documents.

6.18   Supply Chain

Supply Chain provides all procurement and contract strategy support for the business. They ensure that there is strict compliance with the Uisce Éireann purchasing policy PD/02 and applicable Irish and EU procurement law, rules and guidelines. They are also the first point of contact for any contract strategy/ policy queries and will coordinate any related tasks which need to be escalated to Legal Services.

Their primary role is to support the business pre-Workshop 6 and then manage the tendering and contract execution activities.

Where BIM has been identified as a scope deliverable, Supply Chain shall ensure the BIM requirements and UÉ EIR are incorporated into the procurement procedures, tender documentation and addressed within supplier BEP(s) (BIM Execution Plans). The BEP(s) shall be assessed to ensure the supplier is capable and competent to deliver to the UÉ BIM requirements and further included in the projects controls.

6.19   Environmental Regulation & Compliance

The Environmental Regulation and Compliance Team (Regional and HQ) is the relationship owner and primary interface with the Environmental regulator – the EPA. The team is responsible for:

- Identification and/or confirmation of public health and/or environmental risk, and advise how a project / programme will address, manage, or reduce that risk.
- Providing guidance throughout the workshop process on regulator expectations with reference to EPA Advice Notes, Treatment Manuals, Handbooks etc.
- Advising on the regulatory and enforcement landscape, including the likelihood and/or ramifications of further EPA enforcement action.
- Inputting into the detailed design with reference to achieving compliance with regulatory standards at the customer tap and /or discharge to the environment.
- Advising / consulting on Contract requirements to ensure incident management / notification requirements are met, in line with regulator expectations.
- Coordinating EPA audits as required / applicable during or after a project / programme.
- Coordinating all verification monitoring, data gathering, and assessment, where the project / programme is linked to an EPA enforcement action. This may include actions that are required to achieve project outcomes set out in the Benefits Realisation Plan.

6.20   Infrastructure Delivery Construction Specialist

The Infrastructure Delivery Construction Specialist is responsible for providing guidance and opinion on constructability and construction related issues.

6.21   Infrastructure Delivery Solutions Team – RCMS Administrator

The Infrastructure Delivery Solutions team RCMS administrator is responsible:

- Creating an entry in the RCMS for each option shortlisted in the IPS so that risks can be logged against it.
- for ensuring that the risk register for the preferred option is moved from the Asset Planning Workspace to the appropriate Infrastructure Delivery Workspace.

6.22   Infrastructure Delivery Project Planning

Infrastructure Delivery Project Planning are responsible for providing guidance and opinion on planning strategy and planning applications for individual projects.

6.23   Asset Investments

The Asset Investments Team are responsible for managing the capital investment portfolio. They team are responsible for reviewing and monitoring of programmes and projects, against defined baselines e.g., Strategic Funding Plan, Business Funding Plan, Revenue Control Determination, Capital Governance Board in line with the strategic objectives and capacity to deliver in conjunction with Asset Planning, Asset Operations, and Infrastructure Delivery. The Investment Appraisal team are responsible for supporting planning and delivery teams in preparing business cases on matters relating to investment appraisal, including management of models for financial and economic analysis.

6.24   UÉ Asset Strategy

Uisce Éireann Asset Strategy are responsible for the development, implementation, communication and guidance of policies and strategies required by Uisce Éireann and the Government to deliver a sustainable water and wastewater service.

6.25   UÉ Security Department

Uisce Eireann Security Department are responsible for providing input on physical and electronic systems issues surrounding project design and operation ensuring security concerns are incorporated in the project design and are adequately addressed in the Contract documents.

6.26   Infrastructure Delivery Capital Controls

Project Controls are responsible for providing both scheduling and cost information. This information is normally provided in terms of performance against both schedule and cost baselines. Standard schedule durations are provided for large one-off projects and the workshop milestones are included as part of these baselines. Similarly, approved budgets are applied to the schedules and any forecast changes are measured against these baselines. Any project reforecasting of cost or schedule needs to be reflected in project controls reporting. The Infrastructure Delivery Capital Controls team include the IDD Central Project Scheduling team.

6.27   Asset Intelligence

The Asset Intelligence Team are responsible for:

- Confirming all relevant Asset Information, Data and Model requirements at the initial project scoping stage (Workshop 0).
- BIM Execution Plan (BEP) evaluation where required.
- Providing guidance and direction on the required project asset data through the project lifecycle.
- Supporting Infrastructure Delivery in technical matters in relation to information management.
- Supporting Infrastructure Delivery with the standardisation, communication and validation of the BIM & Asset Information processes to Project Teams.
- Managing and updating the asset information and Asset Information Models (AIM) following handover.

6.28   Delivery Support Resources

The Delivery Support Resources consist of Technical Assurance, Project Management and Commercial Support. They are responsible for oversight of the design, programme/project management and/or construction of ECI projects.

7. ORGANISATION OF WORKSHOPS

7.1 Project / Programme Execution Plan (PEP / PGEP)

The specific purpose of the Project / Programme Execution Plan within Uisce Éireann is to provide a document that covers the life of a project or programme from AG0 to AG5. It aims to define the Outcome, Output, Cost Estimate, Schedule, Priority, Delta Opex (6 Dials) and risks through engagement with the main stakeholders, namely Asset Operations, Asset Planning, Customer Operations, Infrastructure Delivery, Environmental Regulation and Compliance, Asset Investments, Asset Intelligence, Asset Strategy, Communications, HSQE and Local Authorities. The Project Execution Plan (**IW-AD-EDS-FM-009** & **IW-AD-EDS-FM-008** for Programmes) is a live document created by Asset Planning pre-WS0 and updated at each subsequent workshop post WS0 by the PM. For projects, updates to the PEP are to be completed within **5 working days** post Workshop including Core Project Team sign off. For Programmes, the PGEP should be updated in advance of the next site/project workshop or quarterly at a minimum. Updates to cost estimates are to be completed in accordance with the Uisce Éireann Cost Estimation SOP.

7.2 Project Schedule

Workshops and EAC approval gates shall be included in the overall Project Design Schedule developed by the ESP or Contractor on appointment with envisaged dates for each workshop to be supplied for monitoring of the overall design process timelines. Updates to the Project Design Schedule are to be completed in accordance with Infrastructure Delivery Capital Controls guidance. Scheduling across a portfolio of projects needs to ensure that those required for workshops are available to attend (e.g., avoid multiple workshops within a region in a short time frame requiring many of the same people to attend).

7.3 Location

Workshops should be arranged over Zoom where possible to reduce unnecessary travel. However, at the time of the site walkthrough the workshop can be held in offices close to the project location.

7.4 Invitees / Attendees

The Chair shall schedule the workshops and send invites by e-mail (Standard templates linked in Appendix A herein and available through the Workshop Process Control Checklist site) as early as possible (no later than 2 weeks prior to the workshop). The individual workshop structures detailed in Section 8 highlight the list of invitees for each workshop including

personnel t h a t   are required and those who have indicated that they require the ability to review the project information.

These reviewers should also be included on the invite list but should not attend unless there are very strong reasons. If a reviewer feels they need to attend they should agree this with the project manager.

All invitees (both required and reviewers) should be notified of each workshop (the reviewers can agree attendance with the project manager if they have inputs that they feel require them to attend. They are also required to confirm with the Chair if they wish to attend). Where key required personnel are not available to attend, they should send a deputy rather than postpone the meeting. Invitees that are required at a workshop need to confirm that they will / will not be attending, and they shall, in accordance with Section 7.7, upload their comments at least 1 week in advance of the workshop date. All attendees should be empowered to make the necessary decisions on behalf of their department, and they should be clear on their role in the workshop process.

At WS0, the full CPT will be established.

7.5   Agenda

The Workshop agenda shall be aligned with the specific workshop inputs and outputs and with any other project specific requirements.

7.6   Chairperson

The Chairperson for each workshop is given in the Invitees/Attendees list associated with each workshop (see Section 8). In general, this role falls to the PM except for WS-5; -4; -3; -2; -1 and 0, which are to be chaired by AP, WS8 is to be chaired by Infrastructure Delivery Technical Assurance Team. However, on projects of a complicated or specific nature it may be beneficial to pass the chairperson responsibilities to another UÉ business unit or indeed an outside facilitator for individual workshops. This decision can be made by the Programme Manager in conversation with the identified UÉ functions. The Chairperson is responsible for ensuring the expected workshop inputs and outputs are realised (and completing the Workshop Process Control Checklist to record this) as well as controlling the flow of discussions to ensure all items are addressed in the allotted time.

7.7 Workshop Inputs & Outputs

The meeting agenda, along with an ECM link to all the relevant documents shall be circulated to all invited attendees at least **2 weeks** in advance of the meeting. Comments should be returned and tracked using **IW-AD-EDS-FM-003** (Workshop Comments Tracker) at least 1 week prior to the workshop to allow the ESP to address any issues in their documentation or provide feedback on comments for discussion at workshop. **If no comments are provided by reviewers, then it is assumed that they have nothing to add and will therefore, not be required to attend the workshop.** As outlined in Section 7.4, reviewers who feel that their attendance at a workshop would be beneficial will need to agree this in advance with the Chair. Invitees may make comments/ tracked changes directly to a specific document as long as a link to this document is provided on the Comments Tracker.

Each workshop structure (see Section 8 below) outlines the documents that will need to be in place prior to scheduling. Workshops should be postponed until such time as documents are ready for discussion. The workshop structure also highlights expected outputs from each meeting.

For ECI projects the Contractor is not required to develop any of the 'internal' Workshop Inputs. These will be developed by Uisce Éireann and Delivery support resources. These inputs will be discussed by the Uisce Éireann Project Team following completion of the Workshop with the Contractor.

7.8 Workshop Records (Non-BIM Projects)

Following creation of the ECM project IDD folder, and folder structure contained therein, the Project Manager (PM) should ensure that all records required during the design review workshop procedure are located (as per the Project Records List) in the relevant and correct ECM project folder (at least 2 weeks before workshop).

The Project Manager shall ensure that the relevant Sharebox links are provided to the Engineering Service Provider at the earliest possible stage in advance of the requirement for records to be provided in accordance with the Uisce Éireann Infrastructure Delivery Project Records Governance Procedure (**IW-AD-EDS-SOP-004**). The PM in conjunction with the Programme Manager shall ensure that all required external users (e.g., ESP) have the required access to Sharebox for record transfer at Design, Construction and Completion/Handover stages.

The project records shall be maintained and updated by the Project Manager and stored as live documents on ECM until such time as our Engineering Service Providers have

Sharebox access to enable transfer to the ECM project folder and folder structure system. In the event the PM does not have ECM access, the Programme Manager will be required to maintain these records in ECM until access is provided.

The Engineering Service Provider will be responsible for recording decisions in the Workshop minutes/actions log with the Project Manager being responsible for circulating to all attendees and invitees within **5 working days** of the workshop.

7.9   BIM Workshop Records

Where BIM is scoped and included, BIM Workshop records shall be uploaded and managed by the Contractor within their own common data environment (CDE), as per UÉ EIR, Document No. IW-TEC-100-012. The Contractor shall manage, extend invites and licences to the nominated UÉ members & representatives and provide the necessary training required to enable them to fulfil their role within the CDE. Workshop documents should then be transferred to the designated UÉ system by the nominated representative, three weeks in advance of a workshop.

The Uisce Éireann BIM naming convention shall be used in line with the UÉ EIR, Document No. TEC-100-012-FM-02.

7.10   Workshop Duration

Sufficient time should be allotted to each Workshop. The duration of the workshop shall be defined by the Chair. For key Workshops (WS2, WS4 and WS6) the suggested timeframe is at typically half a day (may require more time depending on details of specific projects). Availability of required participants should be taken into consideration when deciding on workshop duration. If the workshop outputs are not attained, there may be a requirement to hold a follow up workshop before progressing to the next stage of the project. This decision should be reached by attendees before completion of each workshop. This is particularly true of WS4, where if insufficient time is given to discuss the defined handover related items in the workshop, a follow-on session must be held. Having the comments recorded on the Comment Tracker for the ESP in advance of the Workshop, as outlined in Section 7.7 above, should ensure the Workshop is run efficiently.

7.11   Constructability

Discussions should take place during design development to ensure safety measures are fully incorporated in the design and construction of new projects. The workshops should ensure the specification of methods of construction for high-risk activities are examined in advance of tender stage to facilitate contractor pricing for safest rather than cheapest option. The focus should be on ensuring that the specimen design can be safely constructed while also allowing for the consideration of different construction techniques such as precast options, tunnelling etc. These 'Constructability' assessments are identified as inputs to a number of workshops in the structure and shall be undertaken in accordance with A Guide to Undertaking Constructability Assessments (IW-AD-EDS-GL-09). The Constructability assessment must be completed on RCMS, as outlined in the guidance document.

7.12   Sustainability

Sustainability measures are to be fully incorporated in the planning and delivery of all projects. The I2O workshops should be used to consider measures that improve the long-term sustainability of our water and wastewater services. The measures adopted to improve sustainability should be discussed, quantified and recorded as part of planning and delivery of all projects. Data and information to demonstrate the full implementation of the Energy Efficiency Design Standard, the Circular Economy Design Standard and the Biodiversity Action Plan shall be provided for all projects.

7.13   Changes to 6 Dials

If, during the design process, there is a need to change, add, or delete scope item(s) including any change that may impact the output performance targets, a follow up meeting will need to be arranged with Asset Planning and Asset Operations for their review.

Approval, via Capital Governance Board, of any changes to the 6 Dials is dealt with via the Project Escalation Path as outlined in IW-AMT-GL-020. In accordance with Section 7.1 above, the PEP (**IW-AD-EDS-FM-009**) will need to be revised to account for and track these changes.

Updates to project cost estimates are to be completed in accordance with the Cost

Estimation SOP.

Note also the process for ensuring value for money and alignment with requirements of the Public Spending Code. The Cost Estimation SOP details the requirement for independent cost estimate reviews for projects over €20m ETC.

7.14 Project Escalation Path

As per Sections 7.1 and 7.13 above, updates to the 6 dials are to be recorded in the PEP / PGEP. These changes will require formal approval prior to advancing the project to the relevant next stage. The approval process is as per Uisce Éireann's Project Escalation Path.

7.15 Project Progression

The Chair, in conjunction with the CPT are responsible for ensuring the required inputs   and outputs for each workshop is sufficiently completed to UÉ standards at Workshop 2, 4 & 6 to allow the project to progress to the next stage in the project lifecycle and highlight where projects require escalation. (See Section 7.14 for details).

7.16 Lessons Learnt

UÉ Project Lessons Learnt form an integral part of the process, ensuring continuous improvement in new projects. As part of the Project Lessons Learnt process, key findings during the development and management of a project/programme are recorded and subsequently updates are made to Standards, Specifications, Contracts, ways of working etc. Lessons Learnt can be recorded at any stage of the project/programme lifecycle but at a minimum, they are formally recorded following the completion of a project.

(Workshop 8) and these lessons learnt form part of the AG4 Project Close EAC papers. Lessons Learnt are recorded on the Lessons Learnt Tracker IW-AD-EDS-FM-007. In order to ensure that the lessons learnt are fed back into the overall process, this document is included as an input to a number of Workshops. In addition, the Lessons Learnt Sharepoint page ID-PO-FM-010 can be accessed via the UÉ Standards & Specifications Website.

On Programmes, there's benefit in lessons learnt workshops being held repeatedly throughout the lifecycle in addition to the formal workshop 8 at close out. These workshops won't align to the inputs or outputs listed for workshop 8 and should instead follow CPT direction.

7.17   HAZOP

During Stage 4 the Contractor is obliged to host a HAZOP meeting for the plant design, as outlined in Uisce Éireann's HAZOP Procedure (Document No IW-HSQE-PR-001). The Contractor shall conduct their own pre- HAZOP design activities prior to engaging the Employer and his team at a HAZOP meeting. The HAZOP meeting shall be carried out when a significant amount of detailed design work has been done. The Contractor shall submit a HAZOP Design Pack of documents with sufficient time for review prior to the HAZOP session. The HAZOP pack (P&ID and control philosophy) should include full project scope with NODES detailed. The HAZOP Recommendation Report shall be distributed by the HAZOP chairperson and recommendations and actions shall be incorporated by the Contractor into the respective design documents and drawings ahead of the next workshop.

7.18   Derogation Process

Derogations to UÉ Standards and Specifications are approved through the Derogations Process (**AD-EDS-SOP-005).** In order to facilitate the roll out of Uisce Éireann standards to the supply chain (including Local Authorities) there is a need to support them through a system of Derogations/Queries/Change requests. There is also a need to harness the information being gathered from the various users to facilitate continuous improvement of the standards documents.

Any material derogations or changes from this SOP will require approval and clarification should be sought from IDD Technical Assurance.

7.19   Training

Training will be provided on the use of these workshop procedures. It is recommended to complete the training prior to participating in a Workshop.

8. WORKSHOP STRUCTURE

8.1 Workshop -5 – Unconstrained Optioneering (Stage -5)

- Purpose

  Note: this stage, which may take the form of a workshop for larger projects or an internal consultation for smaller projects, takes place when it is deemed necessary by Asset Planning. However, all required inputs and outputs need to be documented.

  - **Problem**: Review investment need and quantification of failure
  - **Review:** Consider any plans, projects or programmes relevant to the site/need alongside all sources of other potential **known** needs on the site
  - **Solution:** Discuss any options for addressing the need
  - **Plan:** Summarise all unconstrained options and the plan for assessing these options

- Invitees/Attendees (if Workshops deemed necessary) *

  > Workshop - 5 Calendar
  > Invite Template

Business Unit	Projects	Programmes	ECI
Asset Planning (Chairperson)	Required	Required	Required
Asset Operations (incl. Process Optimisation) (Optional <€500K project)	Required	Required	Required
Environmental Regulation	Required	Required	Required
Operational Staff	Reviewer	Reviewer	Reviewer
Asset Strategy	Reviewer	Reviewer	Reviewer
Asset Planning Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin**	Required	Required	Required

* Invites to be issued to Reviewers as deemed appropriate by Asset Planning. When invited, Reviewers are to decide if they have inputs that require them to attend.

** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Inputs

  To be available 2 weeks before workshop takes place (See Section 7.7).

  - Available asset & water/wastewater quality data
  - Available Risk Assessments, site reports, improvement plans & inspections
  - Needs analysis
  - Demand/growth projections
  - Summary of need
  - Relevant plans
  - Unconstrained options list

- Outputs

  - Confirmation of need
  - Long-list of potential options
  - Six dial assessments (in so far as it is possible at the unconstrained options stage)
  - Update AP Tactical Plan information, as required.
  - Complete [Workshop Checklist](#)

Project/Programme Workshop Procedure (I2O)

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8.2 Workshop -4 – Feasible Options (Stage - 4)

• Purpose

Note: this stage, which may take the form of a workshop for larger projects or an internal consultation for smaller projects, takes place when it is deemed necessary by Asset Planning. However, all required inputs and outputs need to be documented.

- **Problem:** Review investment need and quantification of failure
- **Review:** Assess the outputs from Stage -5 (i.e., unconstrained options list) for feasibility
- **Plan:** Summarise selected long list of potential options and discuss plan for developing further
- **Develop:** Commence outline design and costings

• Invitees/Attendees (if Workshop deemed necessary)

> Workshop -4 Calendar
> Invite Template

Business Unit	Projects	Programmes	ECI
Asset Planning (Chairperson)	Required	Required	Required
Asset Operations (incl. Process Optimisation) (Optional <€500K project)	Required	Required	Required
Environmental Regulation	Reviewer	Reviewer	Reviewer
Operational staff	Reviewer	Reviewer	Reviewer
Asset Strategy	Reviewer	Reviewer	Reviewer
Asset Planning Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin	Required	Required	Required

*Invites to be issued to Reviewers as deemed appropriate by Asset Planning. When invited, Reviewers are to decide if they have inputs that require them to attend.

** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

• Workshop Agenda

- Summary of investment need
- Review unconstrained options list
- Feasible options

- Inputs

  To be available 2 weeks before workshop takes place. (See Section 7.7)

    - Long list of potential options with costs/six dial assessment

- Outputs

    - Long list of potential options with outline scope and risks assessed plus six dial assessment
    - Confirmation of outcome
    - High level Estimated Total Cost & OPEX in line with UÉ Cost Estimation SOP
    - Update AP Tactical Plan information, as required
    - Complete Workshop Checklist

8.3   Workshop -3 – Preferred Approach (Stage -3)

- Purpose

  Note: this stage, which may take the form of a workshop for larger projects or an internal consultation for smaller projects, takes place when it is deemed necessary by Asset Planning. However, all required inputs and outputs need to be documented.

  - **Problem:** Review investment need and quantification of failure
  - **Review:** Assess the outputs from Stage -4 (i.e. long list of potential options)
  - **Develop:** Project brief (Scope, Cost, RSS, Outcome, Expected Risk Reduction)

- Invitees/Attendees (if Workshop deemed necessary) *

> Workshop -3 Calendar
>
> Invite Template

Business Unit	Projects	Programmes	ECI
Asset Planning (Chairperson)	Required	Required	Required
Asset Operations (incl. Process Optimisation) (Optional <€500K project)	Required	Required	Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Environmental Regulation	Reviewer	Reviewer	Reviewer
Operational staff	Reviewer	Reviewer	Reviewer
Asset Strategy	Reviewer	Reviewer	Reviewer
Asset Planning Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin	Required	Required	Required

* Invites to be issued to Reviewers as deemed appropriate by Asset Planning. When invited, Reviewers are to decide if they have inputs that require them to attend.

** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Workshop Agenda

  - Summary of need
  - Review potential options list

- Inputs

  To be available 2 weeks before workshop takes place. (See Section 7.7)

- Developed long list of potential options including high level Estimated Total Costs (refer to Cost Estimation SOP) and 6 dials assessment
- IPS entries for long list of potential options
- Confirmation of Appropriate Estimation Approach as agreed with Estimation Team in advance
- Required delivery date.

- Outputs - Agreed at end of Workshop-3

  - Investment rationale
  - Long list of potential options assessment; this assessment should take account of any guidance provided on the generation of options. Based on the assessment, the long list of options may be amended e.g.:
    - To include a viable, Do Minimum option
    - To include operational interventions
    - To include non-infrastructure options, where appropriate
    - To improve alignment of options with the project outcomes
    - To address value measures as appropriate to the project e.g. amend option/s to deliver improved outcome on biodiversity
    - Agreed Estimation Approach for each Option
    - Updated CapEx & OPEX, including updated EAAT, for each option in line with UÉ Cost Estimation SOP
    - Agreement on Estimated Total Cost to be included against overall investment.
    - Update AP Tactical Plan information, as required.
    - Complete Workshop Checklist

8.4   Workshop -2 – Pre AG0 Optioneering Workshop

- Purpose

   Note: this stage, which may take the form of a workshop for larger projects or an internal consultation for smaller projects, takes place when it is deemed necessary by Asset Planning. However, all required inputs and outputs need to be documented.

   The purpose of the workshop is to:

   - Review the identified need
   - Carry out pre AG0 optioneering to facilitate Asset Planning Estimated Total Cost development.
   - Review project outcomes and preliminary outputs

- Timing

   Pre-development of PEP (as required by Asset Planning). This workshop takes place when it is deemed necessary by Asset Planning.

- Invitees/Attendees*

> Workshop -2 Calendar
> Invite Template

Business Unit	Projects	Programmes	ECI
Asset Planning (Chairperson)	Required	Required	Required
Asset Operations (incl. Process Optimisation)	Required	Required	Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Asset Strategy	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Programme Manager	Reviewer	Reviewer	Reviewer
Environmental Regulation	Reviewer	Reviewer	Reviewer
Asset Planning Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin	Required	Required	Required

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Workshop Agenda

  - Review and agree justification for need
  - Agree pre WS0 short list of potential options
  - Review potential impact on Operational activities
  - Review extent of asset investment (new/upgrade/make redundant)
  - Review land, legal, planning and environmental barriers known at pre-WS0 stage
  - Agree draft outputs required to meet stated outcomes
  - Agree Estimated Total Cost for the Investment to present at AG0

- Inputs

  To be available 2 weeks before workshop takes place. (See Section 7.7)

  - Statement of Needs (or equivalent)
  - Priority of Need
  - Draft shortlist of Pre-WS0 potential options to be considered
  - CapEx and OpEx including an EAAT for each option
  - Clear view of proposed outcome and how it aligns with business objectives (e.g. deliver compliance)
  - Other supporting information (e.g., compliance reports, GIS details, wayleaves, rights of way, ownership clarification, Capital maintenance issues, SIMs issues, SDB deficit report, Process Optimisation reports)

- Outputs

  Agreed at end of WS:

  - Agreement on problem and cause
  - CapEx & OPEX including EAAT for each option in line with UÉ Cost Estimation SOP
  - Estimated Total Cost for the Investment to inform Governance requirements
  - Relevant Lessons Learnt recorded
  - Comment on fitness of asset for hand over to Infrastructure Delivery
    - Note HSQE issues (e.g., handrail or platform issues) where known
  - Risks recorded on RCMS, where relevant, as per UÉ Risk & Contingency Management SOP
  - Capital efficiencies to be recorded
  - CPT to be established
  - Update AP Tactical Plan information, as required
  - Complete Workshop Checklist, including formal CPT signoff. Signoff must also be captured in the minutes.

Project/Programme Workshop Procedure (I2O)

Document No. ID-PO-PR-02 Revision: 11.0

Approved by: Mark O'Connell Effective Date: 06/12/2023

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8.5 Workshop -1 – Pre AG0 Workshop

- Purpose

  The purpose of the workshop is to:

  - CPT agree if Estimation Method still appropriate for each option
  - Review long list of potential options and CAPEX estimates with IDD
  - Review potential operational impact and Delta OPEX requirements
  - Review delivery constraints
  - Review Estimated Total Cost for Investment

- Timing

  Pre-development of PEP (as required by Asset Planning). This workshop takes place when it is deemed necessary by Asset Planning.

  ```
  Workshop -1 Calendar
  Invite Template
  ```

- Invitees/Attendees*

Business Unit	Projects	Programmes	ECI
Asset Planning (Chairperson)	Required	Required	Required
Infrastructure Delivery Programme Manager	Required	Required	Required
Asset Operations (incl Process Optimisation)	Required	Required	Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Project Controls Team	Reviewer	Reviewer	Reviewer
Environmental Regulation	Required	Required	Required
AP Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin	Required	Required	Required

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Workshop Agenda

  - Review and agree any new information from previous WS
  - Ensure appropriate consideration has been given to Land and Wayleave Acquisition,

Planning requirements and possible environmental constraints. These must be included in the scope and cost impacts accounted for.

- Ensure scope includes dealing with redundancy, demolition and end of life of existing assets, in line with UÉ Cost Estimation SOP, where known.
- Review and agree potential opportunities for energy saving energy generation as part of works where relevant.
- Review potential delivery streams and likely timelines for works.
- Establish BIM & AIR requirements. Where BIM is to be utilised, review and ensure scope includes for delivery of Asset Information Model & Requirements to the level of information needed and confirm whether the model needs to be maintained by the contractor during the operational period.
- Review and agree CapEx and delta OpEx estimates for all options.

- Inputs

    To be available 2 weeks before workshop takes place. (See Section 7.7)

    - IPS up to date with
        - Draft Estimated Total Cost for each potential option with proposed CAPEX and OPEX in line with UÉ Cost Estimation SOP.
        - Service measures, outcomes, outputs, investment drivers, etc (6 Dials)

- Outputs

    Agreed at end of WS

    - Understanding of estimated delivery schedule and spend profile (To be agreed with IDD Project Scheduling Team)
    - IPS updated with CapEx & OpEx, incl EAAT for each option in line with UÉ Cost Estimation SOP.
    - Agreement on any changes to the PEP / PGEP ahead of WS0
    - Project Brief completed by Asset Planning
    - Identify requirement for escalation (e.g. budget constraints)
    - Risks updated and recorded on RCMS for each shortlisted option, as per UÉ Risk & Contingency SOP
    - Capital efficiencies to be recorded
    - Update AP Tactical Plan information, as required
    - Complete Workshop Checklist including recording formal CPT signoff. Signoff must also be captured in the minutes.

    To be completed between WS-1 and WS0

    - Complete template document 'Workshop 0 - Output data requirements'

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8.6   Workshop 0 - Design Inputs & Strategy / Performance Requirements

- Purpose

  Identify and agree the preferred long list of potential options as informed by Asset Planning & Asset Investments. Agreement on approved **Estimated Total Cost.** The above information is captured on the PEP / PGEP (**IW-AD-EDS-FM-009 / 008**) and IPS. Review, discuss and update the risks recorded on the RCMS for each potential option.

  For Programme of Works, this Workshop is used to agree the scope of works to be included in the Programme, to define the appropriate Programme Type to be utilised for delivering the works and to identify Programme risks.

- Timing

  Following completion of PEP and prior to AG0 EAC approval

  > Workshop 0 Calendar
  > Invite Template

- Invitees/Attendees*

Business Unit	Projects	Programmes	ECI
Asset Planning (Chairperson)	Required	Required	Required
Infrastructure Delivery Programme Manager**	Required	Required	Required
Project Manager			Required
Portfolio Manager**	Required	Required	Required
Asset Operations	Required	Required	Required
Asset Investments	Reviewer	Reviewer	Reviewer
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Planning	Reviewer	Reviewer	Reviewer
Asset Intelligence	Reviewer	Reviewer	Reviewer
Asset Strategy	Reviewer	Reviewer	Reviewer
Environmental Regulation	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Land & Wayleaves	Reviewer	Reviewer	Reviewer
Asset Planning Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin***	Required	Required	Required

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager, and the Portfolio Manager only in absence of both the Project and Programme Managers.
*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Inputs

  To be available 2 weeks before workshop takes place. (See Section 7.7)

  - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
  - Project Brief
  - CapEx and Delta OpEx including EAAT for each option.
  - Estimated Total Cost and Delta OpEx for the Investment.
  - Pre-Gate approval submission paper
  - Confirmation that Project is included in Portfolio Model
  - Confirmation of Asset Information & BIM Requirements and their inclusion in the Scope and Cost
  - Populated risk register on RCMS for each shortlisted option.

- Outputs

  Agreed at end of WS

  - CPT to be confirmed
  - Outcome agreed and documented on PEP / PGEP IW-AD-EDS-FM-009 / 008
  - Sign off of PEP/PGEP & Project Brief by CPT, captured in the minutes
  - Known Project Risks identified as detailed in Gate approval paper and RCMS populated in accordance with UÉ Risk & Contingency Management SOP, including key acceptable risks not being transferred to the Contractor, where appropriate.
  - Estimated Total Cost & Delta OPEX for the overall Investment in line with UÉ Cost Estimation SOP.
  - Operational Impact Assessment
  - Set Energy Efficient Design Objectives (in accordance with IW-TEC-600-004)
  - Nominated points of contact in AP & AO
  - Capital efficiencies to be recorded
  - Sustainability measures to be recorded
  - Generation of the Project Brief and PCI Pack *[for ECI projects only]*

  To be completed between WS0 and WS1

- Complete Workshop Checklist, including recording formal CPT sign off.
- Asset Planning bring Gate paper for budget approval.

8.7　　Workshop 1 – Kick Off Meeting

• Purpose

To inform ESP of project scope and provide guidance on development of a short list of potential options to be considered as part of their FSR / Concept Design Report.

Agree approach to developing CapEx and Delta OpEx Cost Estimates for each option in line with Cost Estimation SOP.

Agree the contractor's methodology for the delivery of the Project Commencement Instruction (PCI) for ECI Projects.

• Timing

Within 2 weeks of ESP appointment.

Within eight weeks of issuing a PCI to the Contractor, or as detailed in the form of PCI for ECI Projects

• Invitees/Attendees*

> Workshop 1 Calendar
> Invite Template

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Required	Required
Programme Manager**	Required	Required	Required
Engineering Service Provider - Consultant	Required	Required (Type A)	
Contractor			Required
Delivery Support Resources- Technical			Required
Delivery Support Resources – Commercial			Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Planning	Reviewer	Reviewer	Reviewer
IDD Capital Controls Scheduling Team	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Project Controls Team	Reviewer	Reviewer	Reviewer
Asset Planning Performance Specialist	Reviewer	Reviewer	Reviewer
Workshop Admin***	Required	Required	Required

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

** the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Inputs

  To be available 2 weeks before workshop takes place. (See Section 7.7)

  - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
  - Scope and project budget as per Project Brief.
  - Risk register for each shortlisted option on RCMS in line with UÉ Risk & Contingency Management SOP
  - Updated CapEx & OPEX estimates.
  - Review of relevant UÉ Lessons Learnt (ID-PO-FM-010)
  - Contractors PCI Delivery Plan including deliverables listed in the form of PCI required prior to Workshop 1. *[for ECI Projects only]*
  - Contractor's Cost Cap estimate for undertaking the PCI. *[for ECI Projects only]*
  - Project Shared Risk/Opportunity Register and assumptions/ inclusions. *[for ECI Projects only]*
  - BIM Requirements:
    - Confirm list of nominated UÉ personnel to be invited to contractors CDE *[for ECI Projects]*
    - Ensure the ESP understands the BIM & AIR requirements. *[for non-ECI Projects]*

- Outputs

  Agreed at end of WS

  - Agreed short list of potential options to be pursued by the ESP in the Feasibility Study Report.
  - Discussion on alternative options/ innovations.
  - Update of RCMS in line with UÉ Risk & Contingency Management SOP

  To be completed between WS1 and WS2

  - Complete Workshop Checklist.
  - Workshop Minutes/Action Log.
  - Project Schedule including future WS dates.
  - Escalation pathways to be followed for changes to any of the 6-dials.
  - ESP/Contractors independent CapEx and OpEx cost estimates for each option per Cost Estimation SOP.
  - Estimated UÉ CapEx & OpEx estimate's including updated EAAT for each option in line with UÉ Cost Estimation SOP.
  - Agreement on ETC and Delta OpEx for overall Investment.

To be closed out within two weeks of the completion of Workshop1 *[ECI Projects only]*

- Agreed methodology for delivery of the PCI (PCI Delivery).
- Contractors updated PCI Delivery Plan and Cost Cap Estimate.
- Agreed alternative options/ innovations to be considered during PCI.
- Organisation of Site Walkthrough and meeting with Operations Staff.
- Update ECI Project Shared Risk/Opportunity Register and assumptions/ inclusions.
- BIM Requirements for the Project confirmed, and Contractor CDE set up.

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Project/Programme Workshop Procedure (I2O)

Document No. ID-PO-PR-02   Revision: 11.0
Approved by: Mark O'Connell   Effective Date: 06/12/2023

Uisce
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Irish Water

8.8   Workshop 2 – Concept Design Review

- Purpose

  To assess the short list of options put forward by the ESP (detailed in their Feasibility Study Report – FSR or Concept Design Report or Design Assessment Report for certain ECI Projects, Proposal of Works for some Programmes) with a view to comparing project risks, cost benefits, design issues, constructability, options appraisal and value engineering proposals across the potential options. The workshop should finish with a preferred option identified to progress to detail design (AG1 EAC approval to progress to Stage 3).

  For ECI projects where an existing FSR issued out as part of a PCI the following applies:

  If a Feasibility Report for the project has been prepared by others and provided to the Contractor with the PCI the purpose of the workshop is to assess alternative design options put forward by the Contractor having considered the options appraisal with a view to comparing project risks, cost benefits, design issues and constructability across the options. The Contractor should present this information by compiling a Design Assessment Report, which should clearly outline the benefits of the alternatives proposed over the FSR preferred option

  In general, there should be a minimum of 3 options in the short list; the number will depend on scale, complexity and the viability of the options in the long list.

- Timing

  Following completion of workshop 1 discussions (and any intermediate workshops, such as WS1.1 as detailed above) and preparation of ESP's Feasibility Study Report (30 weeks after Kick Off – Workshop)

  For ECI Projects this is to be agreed at Workshop 1, or as detailed in the PCI Instruction.

- Invitees/Attendees*

Workshop 2 Calendar
Invite Template

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Required	Required
Programme Manager**	Required	Required	Required
ESP – Consultant	Required	Required	

Contractor		**Required**	**Required**
Asset Planning	**Required**	**Required**	**Required**
Asset Operations	**Required**	**Required**	**Required**
Resident Engineer		**Required**	
Delivery Support – Technical			**Required**
Delivery Support – Commercial			**Required**
Cost Estimation Team	**Reviewer**	**Reviewer**	**Reviewer**
Asset Investments	**Reviewer**	**Reviewer**	**Reviewer**
UÉ HSQE	**Reviewer**	**Reviewer**	**Reviewer**
Infrastructure Delivery Planning	**Reviewer**	**Reviewer**	**Reviewer**
Asset Intelligence	**Reviewer**	**Reviewer**	**Reviewer**
Asset Planning Performance	**Reviewer**	**Reviewer**	**Reviewer**
Workshop Admin*	**Required**	**Required**	**Required**

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar.

The invite must be sent to designstandards@water.ie

- Inputs

  To be available 2 weeks before workshop takes place (See Section 7.7).

  - Minutes of any offline optioneering Workshop (WS1.1, see Appendix B)
  - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
  - FSR or Concept Design Report completed including OPEX & CAPEX costings for each feasible option. For sites within programmes, Capex & OPEX are required unless the CPT decide otherwise due to specific given circumstances. [Proposal of Works for some Programmes; Design Assessment Report for certain ECI projects] (Cost estimates to be prepared in accordance with UÉ Cost Estimation SOP)
  - An independent estimate (CapEx, OpEx) must be provided by the ESP/Contractor for each option.
    [For Programmes, if required Contractor estimate based on agreed rates where available]

  - Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008)
  - Update Project Brief (AP) if required
  - Completed Constructability Assessment on Design Options
  - Options appraisal, including financial and economic analysis (refer to the Investment

Appraisal SOP and guidance in the I2O Manual)
- Sustainability review on Design Options
- EnviroKit process (or similar) begun on options within FSR *[For programmes, Envirokit will not be required unless deemed necessary by CPT]*.
- Statutory Requirements identified
- Project Schedule inc. future Workshop Dates
- Completed Energy Balance assessment of concept design(s) (in accordance with IW-TEC-600-04)
- Completed review of Lessons Learnt relevant to Concept Design Stage (ID-PO-FM-010)
- Risks recorded on RCMS in accordance with UÉ Risk & Contingency SOP *[Project Shared Risk/Opportunity Register for ECI Projects]*
- Methodology for delivery
- BIM Data Drop (Stage 3 – per UÉ EIR) when required, and provision of post contract BEP *[for ECI Projects only]*

- Outputs

  Agreed at end of WS

  - Preferred Option/ Scope of Works identified, including outcomes and outputs, to progress to detail design. CPT sign off required.
  - Agreed Estimated Total Cost for the preferred option based on the agreed outputs and outcomes
  - Agreement on required updates (changes to 6 dials) to PEP / PGEP (IW-AD-EDS-FM-009 / 008)
  - Agreement on Opex Impact Assessment
  - Land & Statutory Requirements identified/progressed as appropriate
  - Confirm Existing Operational issues with LA operations team
  - Project Risks identified and updated on RCMS in line with UÉ Risk & Contingency SOP *[Project Shared Risk/Opportunity Register for ECI Projects]*
  - Organisation of Site Walkthrough *[already completed on ECI Projects]*
  - Capital efficiencies to be recorded
  - Sustainability benefits to be recorded
  - Information required for Gate Paper available
  - Complete Workshop Checklist, including recording formal CPT signoff.

  To be completed between WS2 & WS3

  - Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008),
  - Project Schedule (milestone dates to be captured as per P&G Scheduling guidelines)
  - Relevant Lessons Learnt captured in minutes
  - Workshop Minutes/Action Log. CPT signoff must be recorded in the minutes.
  - Escalation pathways followed (up to Capital Governance Board where necessary) for changes to the 6-dials

- Gate approval
- Estimated Total Cost & OPEX including the EAAT to be updated where required, as per Cost Estimation SOP.
- Site walkthrough *[already completed on ECI Projects]*
- Internal Quantitative Risk Assessment (QRA) carried out on ECI Project Shared Risk Register
  [for ECI Projects only]

8.9 Workshop 3 – Preliminary Design / Risk Review

- Purpose

  Review of the preliminary design / Design Inception report to identify and discuss the key risks after commencement of planning / design activities.

  Agree CapEx and OpEx Estimation Method with Estimation Team

- Timing

  Following commencement of Planning Process and preparation of preliminary design drawings.

  > Workshop 3 Calendar
  > Invite Template

- Invitees/Attendees*

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Required	Required
Programme Manager**	Required	Required	Required
ESP – Consultant	Required	Required	
Contractor		Required	Required
Asset Operations	Required	Required	Required
Delivery Support – Technical			Required
Delivery Support – Commercial			Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Asset Planning	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Land & Wayleaves	Reviewer	Reviewer	Reviewer
Infrastructure Delivery Project Controls Team	Reviewer	Reviewer	Reviewer
Workshop Admin***	Required	Required	Required

*All business units to be invited, reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar.

The invite must be sent to designstandards@water.ie

- Inputs

    To be available 2 weeks before workshop takes place (See Section 7.7).

    - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
    - Design Inception Report and Preliminary Design Drawings
    - Update estimates in accordance with UÉ Cost Estimation SOP
    - AA/ EIA Screening Report, where required.
    - Updated EnviroKit (or similar). *[For programmes, Envirokit will not be required unless deemed necessary by CPT]*
    - Details of issues raised on Site Walkthrough e.g., Constructability, Land Access etc.
    - Agree Energy Opportunities to be progressed (in accordance with IW-TEC-600-04)
    - Completed review of Lessons Learnt (ID-PO-FM-010) relevant to Preliminary Design Stage
    - Updated Risk Register on RCMS in accordance with UÉ Risk & Contingency SOP *[Updated Project Shared Risk/Opportunity Register for ECI Projects]*
    - BIM CDE invites and training updates. [for ECI Projects only]

- Outputs

    Agreed at end of WS

    - Scope and timeframe for investigative contracts required in accordance with IW-AD-EDS-GL-10, *A Guide to Undertaking a Site Investigation*.
    - Scope & timeframe for all reports / deliverables required for detail design
    - Statutory Processes/Timelines
    - Engagement with LA (reinstatement/road closure etc.) expected timelines
    - Land and Wayleave acquisition process begun, where necessary.
    - Capital efficiencies to be recorded
    - Sustainability measures to be recorded
    - Agreement on Capex and OpEx estimation requirements in line with Cost Estimation SOP.
    - Scope and timeframe for required investigative contracts.

    To be completed between WS3 and WS4

    - Complete Workshop Checklist
    - Project Schedule updated (as per P&G Scheduling guidelines)
    - Risk Register on RCMS updated (including constructability/operational considerations)
    - Relevant Lessons Learnt captured in minutes
    - Workshop Minutes/Action Log
    - Update of PEP / PGEP as appropriate
    - Escalation pathways to be followed for changes to any of the 6-dials.

- Updated Risk Register on RCMS in accordance with UÉ Risk & Contingency Management SOP *[ECI Project Shared Risk/Opportunity Register updated [for ECI Projects]*
- Project Estimated Total Cost & OPEX including EAAT to be updated where required, as per Cost Estimation SOP.
- PM to set up project on MapRoad Licensing (MRL) system in accordance with IDD Road Opening Licence Procedure STEP 1.
- Agree date for HAZOP *[for ECI Projects only]*

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8.10   Workshop 4 – Detailed Design / Risk Review

- Purpose

  Review of ESPs Detailed Design Report, and completed drawings, specifications etc. This Workshop is used to ensure that the Detailed Design is sufficiently completed with all design issues fully addressed and the 'leanest' design solution is identified (value engineering) in order to allow the Project advance to WS6 and tender *[to construction for ECI Projects]* without delay. *For ECI Projects it is also used to agree and set the programme for delivery of the project and Target Cost.*

  WS4 should also be used to set expectations for project handover to Asset Operations. Where there is insufficient time dedicated to discussing project handover at WS4 due to time constraints or project complexity, an additional meeting must be held.

  NOTE: Depending on the complexity of a project, Workshop 4 and Workshop 5 can be combined into one workshop that can be held on the same day. If so, the inputs, outputs, invitees etc from both workshops (Section 8.10 and 8.11 herein) are also to be combined. *[Note that this is the case for ECI Projects where this Workshop is also used to ensure both HSQE and Operations inputs to the design are captured and addressed prior to progressing to construction].*

- Timing

  Within 3 weeks following completion of the Detailed Design Report including all investigative reports needed to inform the Detailed Design Report.

- Invitees/Attendees*

| Workshop 4 Calendar |
| Invite Template |

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Required	Required
Programme Manager**	Required	Required	Required
ESP – Consultant	Required	Required	
Contractor		Required	Required
Asset Planning	Required	Required	Required
SCCap	Required	Required	
Infrastructure Delivery Commercial	Required	Required	

Environmental Regulation	Required	Required	Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Delivery Support – Technical			Required
Delivery Support – Commercial	Required	Required	Required
Asset Operations	Required	Required	Required
UÉ HSQE		Required	Required
Resident Engineer		Required	Required
Infrastructure Delivery Technical Assurance	Reviewer	Reviewer	Reviewer
Senior Construction Specialist	Reviewer	Reviewer	Reviewer
Asset Intelligence	Reviewer	Reviewer	Reviewer
UÉ Security Department	Reviewer	Reviewer	Reviewer
Workshop Admin***	Required	Required	Required

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Inputs

  To be available 2 weeks before workshop takes place (See Section 7.7).

  - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
  - Detailed Design Report including Draft Estimated Total Cost for each potential option with proposed CAPEX and OPEX in line with UÉ Cost Estimation SOP. For sites within programmes, Capex & Opex are required unless the CPT decide otherwise due to specific given circumstances. *[For Programmes, if required Contractor estimate based on agreed rates where available].*
  - Service measures, outcomes, outputs, investment drivers, etc (6 Dials)
  - Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008)
  - Updated Envirokit (or similar) *[For programmes, Envirokit will not be required unless deemed necessary by CPT].*
  - Confirmation of action plan to address all Statutory Processes and Land & Wayleave issues.
  - Details of interactions with Utility agencies and LA (reinstatement/road closures) with a view to closure/mitigation of these risk items.
  - Completed review of Lessons Learnt (ID-PO-FM-010) relevant to Detailed Design Stage.
  - Set Minimum Achievable Energy Performance (in accordance with IW-TEC-600-04).
  - Updated Risk Register on RCMS in accordance with UÉ Risk & Contingency SOP *[Project Shared Risk/Opportunity Register for ECI Projects]*
  - Preliminary Safety and Health Plan (in accordance with UÉ guidance document IW-AD-EDS-GL-008)

- Completed Pre T1 Meeting Form including T2 tab on reinstatement details
- Contractors Target Cost Pricing Document and supporting Information *[for ECI Projects only]*
- Updated PCI Programme and indicative Construction Programme *[for ECI Projects only]*
- BIM Data Drop (Stage 4 – per UÉ EIR) where required, transferred to designated UÉ system, and validated for level of detail/information. BIM Model in NWD format transferred to the designated UÉ system for UÉ HSQE/Asset Operations review and navigation.
- Confirm if any derogations from UÉ Standards/Specifications will be required. If yes, ESP to follow AD-EDS-SOP-005.

Handover specific inputs

- Templates for Commissioning Plan, Tests on Completion Checklist, Observation List and Final Handover Checklist to be shared in accordance with IW-TEC-600-05
- HAZOP & ALM Report (where applicable)
- Info/data location structure & hard copy requirements confirmed
  Safety file and O&M structure templates

- Outputs

  Agreed at end of WS

  - Agreement on Detail Design & Output Specification (This may necessitate a further workshop) CPT sign off required.
  - Confirmation from ESP that UÉ CIVIL & MEICA specs have been utilised for all proposed materials to be incorporated into the works.
  - Agreement on constructability/operability of Design.
  - Agreement on required updates to CAPEX and OPEX estimates.
  - Planning Application / Pack updates with earliest possible commencement date.
  - Indicative Construction programme (highlighting restricted work times and required start dates) and Site Supervision Requirements
  - Agreement on required updates (6 dials) to PEP (IW-AD-EDS-FM-009 / 008)
  - Closeout/Mitigation of identified design risks identified on RCMS, as per Risk & Contingency Management SOP *[Shared Risk/Opportunity Register for ECI Projects]*
  - Capital efficiencies to be recorded *[Updated ECI Programme Capital Efficiencies Tracker for ECI Projects]*
  - Sustainability Measures to be Recorded
  - Information required for Gate Paper available
  - Send Pre T1 Meeting Form to the Roads Authority. Follow up with meeting, in accordance with IDD Road Opening Licence Procedure STEP 1.
  - Complete Workshop Checklist, including recording formal CPT signoff.
  - HSQE Actions / Outputs Agreed *[for ECI Projects and some Programmes of Work only]*

Handover specific outputs:
- Site specific risks identified and recorded on RCMS
- Agreement of live working arrangements, detailing any known site-specific conditions
- CPT to agree the need for and a recommended length of a contracted O phase.

To be completed between WS4 and WS6

- Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008), when required.
- Project Schedule (milestone dates to be captured as per P&G Scheduling guidelines)
- Relevant Lessons Learnt captured in minutes.
- Escalation pathways to be followed (up to Capital Governance Board where necessary) for changes to any of the 6-dials.
- Workshop Minutes/Action Log. CPT signoff (including those surrounding handover expectations) must be recorded in the minutes.
- SSOD to be sent to SCCap
- Updated risks captured on RCMS, as per Risk & Contingency Management SOP *[Project Shared Risk/Opportunity Register for ECI Projects]*
- Updated Estimated Total Cost and OPEX including EAAT, in accordance with UÉ Cost Estimation SOP,
- Internal QRA carried out on ECI Project Shared Risk Register *[for ECI Projects only])*
- Updated Target Cost Estimate *[for ECI Projects only]*
- HAZOP Outputs Agreed *[where appropriate]*

8.11   Workshop 5 – HSQE & Operations Detail Design Review

- Purpose

  To ensure both HSQE and Operations input to design process are captured and addressed prior to finalisation of documents.

  NOTE: Depending on the complexity of a project, Workshop 4 and Workshop 5 can be combined into one workshop that can be held on the same day. If so, the inputs, outputs, invitees etc from both workshops (Section 8.10 and 8.11 herein) are also to be combined.

- Timing

  Following update of Detail Design Report incorporating Infrastructure Delivery comments.

> Workshop 5 Calendar
> Invite Template

- Invitees/Attendees*

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Covered under WS4 – *unless agreed otherwise by CPT and held separately*	Covered under WS4 – *unless agreed otherwise by CPT and held separately*
Programme Manager**	Required		
ESP - Consultant	Required		
UÉ HSQE	Required		
Asset Operations	Required		
Workshop Admin ***	Required		

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar.

The invite must be sent to designstandards@water.ie

- Inputs

    To be available 2 weeks before workshop takes place (See Section 7.7).

    - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
    - Detailed Design Report (Updated following Detail Design Review – Workshop 4)
    - Updated Envirokit (or similar) [For programmes, Envirokit will not be required unless deemed necessary by CPT]
    - Risk Register updated on RCMS in accordance with UÉ Risk & Contingency Management SOP
    - Set Minimum Achievable Energy Performance (in accordance with IW-TEC-600-04)
    - Latest Delta OpEx Estimate
    - BIM Model in NWD format transferred to the designated UÉ system for UÉ HSQE/Operations review & navigation.

- Outputs

    Agreed at end of WS

    - Closeout/Mitigation of identified design risks on RCMS, as per Risk & Contingency Management SOP
    - HSQE Actions / Outputs agreed
    - Opex Impact Assessment agreed
    - Agreement on Handover process (CPT to agree)
    - Capital efficiencies to be recorded
    - Sustainability measures to be recorded

    To be completed between WS5 and WS6

    - Workshop Minutes/Action Log, including recording CPT signoff and relevant Lessons Learnt. Risks updated on RCMS in accordance with UÉ Risk & Contingency SOP Update of PEP, if required.
    - Updated Estimated Total Cost and OPEX including EAAT, in accordance with UÉ Cost Estimation SOP.
    - Escalation pathways to be followed for changes to any of the 6-dials
    - Complete Workshop Checklist, including recording formal CPT signoff.

8.12 Workshop 6 – Pre-Tender Contract Document & Risk Contingency Review / Finalise Target Cost

- Purpose

  Review of Draft Contract Documents prior to issue to Market and to allow quantification of residual risks to inform contingency allowance.

  All project risks should have a mitigation strategy in place and a workshop review should take place to ensure the effectiveness of this strategy.

  For ECI Projects the purpose of this workshop will be to update and finalise (if required, e.g., due to planning conditions received or amount of time lapsed since Workshop 4) the Target Cost and PDI Pack, so that it can be brought through Uisce Éireann Governance.

  Note: *For ECI Projects Workshop 4 & 6 can be held at the same time depending on the nature of the project.*

- Timing

  Workshop should be held once Contract Documents are complete allowing 3 weeks for document review, however time should be allowed to cover any issues identified that may require another workshop to ensure documents are to an agreed standard prior to final issue to market. *For ECI Projects the Workshop should be held within 4 weeks of completing all statutory approvals*

- Invitees/Attendees*

  > Workshop 6 Calendar
  > Invite Template

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Required	Required
Programme Manager**	Required	Required	Required
ESP - Consultant	Required	Required	
Contractor			Required
SCCap	Required	Required	
Infrastructure Delivery Commercial	Required	Required	
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Delivery Support - Technical			Required
Delivery Support - Commercial			Required
Asset Operations	Required	Required	

Infrastructure Delivery Technical Assurance	**Reviewer**	**Reviewer**	Reviewer
Environmental Regulation	**Reviewer**	**Reviewer**	
Asset Planning	**Reviewer**	**Reviewer**	
Resident Engineer		**Reviewer**	
Senior Construction Specialist	**Reviewer**	**Reviewer**	
Asset Intelligence	**Reviewer**	**Reviewer**	
Programme Manager		**Reviewer**	
Workshop Admin***	**Required**	**Required**	**Required**

*All business units to be invited, optional participants will decide if they have inputs that require them to attend

** the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

- Inputs

   To be available 2 weeks before workshop takes place (See Section 7.7).

   - Comments from business units tracked and addressed on the Comments Tracker IW-EDS-FM-003
   - Completed Contract Documents (Drawings, Specifications etc.)
   - Updated EnviroKIT (or similar) *[For programmes, Envirokit will not be required unless deemed necessary by CPT]*
   - Confirmation of action plan to address all Statutory Processes and Land & Wayleave issues.
   - Confirmation the BIM requirements including UÉ EIR and requirement for pre-contract BEP are incorporated into the tender documents where BIM has been identified as a scope deliverable *[for non-ECI Projects]*
   - Updated Estimated Total Cost and OPEX including EAAT, in accordance with UÉ Cost Estimation SOP.
   - Independent 3rd part cost estimate, if required.
   - Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008)
   - Identified outstanding constructability constraints included in the tender documents.
   - Completed review of Lessons Learnt (ID-PO-FM-010) relevant to Tender Stage
   - Identified risks updated on RCMS in accordance with UÉ Risk & Contingency SOP *[Project Shared Risk/Opportunity Register for ECI Projects]*
   - Confirmation/ Agreement from Roads Authority on Pre T1 Meeting Form in accordance with IDD Road Opening Licence Procedure, STEP 3.
   - Final Contractors Proposals to form part of the PDI *[for ECI Projects only]*

- Updated Contractors Target Cost Pricing Document and supporting Information (if required) *[for ECI Projects only]*
- Redline PDI Pack *[for ECI Projects only]*
- BIM Data Drop where required *[for ECI Projects only]*

- Outputs

  Agreed at End of WS

  - Agreement on suitability of Contract documents to progress to market (further workshop may be required)
  - Risks updated on RCMS and associated risks quantified for contingency management, as per Risk & Contingency Management SOP
  - Construction Delivery Dates
  - Finalise Site Supervision Requirements
  - Agree tender and contract conditions for energy efficient design (in accordance with IW-TEC-600-04)
  - Capital efficiencies to be recorded
  - Sustainability measures to be recorded
  - Target Cost and Opex impact updated and agreed [for ECI Projects only]
  - Updated ECI Project Shared Risk/Opportunity Register [for ECI Projects only]
  - Final PDI Pack and associated Target Cost [for ECI Projects only]
  - Internal QRA carried out on ECI Project Shared Risk Register [for ECI Projects only]
  - Agree date for QRA workshop [for ECI Projects only]

  To be completed between WS6 and Issue for Tender

  - Updated Estimated Total Cost and OPEX including EAAT, in accordance with UÉ Cost Estimation SOP.
  - Relevant Lessons Learnt captured in minutes
  - Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008), where required
  - Escalation pathways to be followed for changes to any of the 6-dials.
  - Confirmation on prioritisation and budget availability from the Business prior to tender issuance.
  - Project Schedule (milestone dates to be captured as per P&G Scheduling guidelines)
  - Workshop Minutes/Action Log Completed Pre T1 Meeting Form (incl T2 Tab) to be included in Contract Documents as appendix to Part3. CPT signoff must be recorded in the minutes.
  - Complete Workshop Checklist, including recording formal CPT signoff.

8.13   Workshop 7 – Pre-Award Document Review / Pre AG3 contingency quantification

• Purpose

Finalisation of contract / risk details prior to AG3 paper for EAC, based on the successful tender submission.

For ECI Projects the purpose is to review Contractor's Project Execution Plan. Finalisation of Contract/ Risk details. To agree and set the programme for construction of the project.

Note: Any changes during construction to be approved by CPT

• Timing

Following identification of successful tenderer and at least 1 week prior to AG3 EAC papers.

For ECI Projects the Workshop is to be held within 2 weeks of issuing a PDI or as stated on Form of PDI.

• Invitees/Attendees*

Workshop 7 Calendar
Invite Template

Business Unit	Projects	Programmes	ECI
Project Manager (Chairperson)	Required	Required	Required
Programme Manager**	Required	Required	Required
ESP - Consultant	Required	Required	
Contractor			Required
Infrastructure Delivery Commercial	Required	Required	
Delivery Support - Technical			Required
Delivery Support - Commercial	Required	Required	Required
Asset Operations	Required	Required	Required
Resident Engineer			Required
Cost Estimation Team	Reviewer	Reviewer	Reviewer
Workshop Admin***	Required	Required	Required

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager

*** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar.

The invite must be sent to designstandards@water.ie

- Inputs

  To be available 2 weeks before workshop takes place. (See Section 7.7)

  - Comments from business units tracked and addressed on Comments Tracker IW-EDS-FM-003
  - Estimated Total Cost & OPEX in accordance with UÉ Cost Estimation SOP
  - Completed Contract Documents and Contractors Submission (Drawings, Specifications etc.)
  - Updated PEP / PGEP (IW-AD-EDS-FM-009 / 008)
  - Detailed Programme (milestone dates to be captured as per P&G guidelines)
  - Risks updated on RCMS in accordance with UÉ Risk & Contingency Management SOP [Project Shared Risk/Opportunity Register for ECI Projects]
  - Contractor Project Execution Plan [for ECI Projects only]
  - PDI Stage BIM & CDE training updates [for ECI Projects only]

- Outputs

  - Agreement on Project Contingency figure
  - High impact risks identified and recorded on RCMS for inclusion in Gate Paper
  - Risks on RCMS updated and quantified for contingency management following contractor submission
  - Construction Delivery Dates updated
  - Capital efficiencies to be recorded
  - Sustainability measures to be recorded
  - Agree methodology for delivery of the PDI Construction Plan (Updated plan as required) [for ECI Projects only]
  - Agreement of the commencement date [for ECI Projects only]
  - Confirmation date for submission of Post Contract BEP [for non-ECI Projects]

  To be completed post WS7

  - Budget approval
  - Updated Estimated Total Cost & OPEX as per UÉ Cost Estimation SOP, including populated EAAT
  - Workshop Minutes/Action Log (Updated Risk Register may suffice if no HSQE input is required).
  - Escalation pathways to be followed for changes to any of the 6-dials.
  - Information required for Gate Paper available

- Complete Workshop Checklist
- Updated Programme (milestone dates to be captured as per P&G guidelines) [for ECI Projects only]
- Updated ECI Project Shared Risk/Opportunity Register [for ECI Projects only]

8.14 Workshop 8 – Project Validation Review / Lessons Learnt

- Purpose

All party, open forum discussion on the project at close out to inform on lessons learnt as well as confirming that the project conforms to defined user requirements. The workshop shall provide for a full review of the entire project including the progression of the 6 dials and operational impact.

For Programmes, lessons learned workshop/s may be held repeatedly through the lifetime of a programme and will not necessarily fulfil the requirements listed below. CPT decision should be followed.

NOTE: This workshop is to be split into 3 separate meetings, first with UÉ business units, then with external parties (Consultant and Contractor) and a subsequent final review with just the CPT and final sign off on agreed lessons learnt on project, by Project Sponsor. It is intended that this '3 part' workshop would be held on the one day.

- Timing

Following agreement of Final Account. *For ECI Projects following Final Outturn Costs and submission of the project completion report.*

Workshop 8 Calendar Invite Template

- Invitees/Attendees*

Business Unit	Projects	Programmes	ECI
Infrastructure Delivery Technical Assurance (Chairperson)	Required	Required	Required
Project Manager	Required	Required	Required
Infrastructure Delivery Programme Manager	Required	Required	Required
ESP - Consultant	Required	Required	
Contractor	Required	Required	Required
Resident Engineer	Required	Required	Required
Infrastructure Delivery Commercial	Reviewer	Reviewer	
Cost Intelligence Team	Reviewer	Reviewer	Reviewer
Delivery Support - Technical			Reviewer
Delivery Support - Commercial			Reviewer
Asset Operations	Required	Required	Required
Asset Planning	Required	Required	Required

Environmental Regulation	**Reviewer**	**Reviewer**	**Reviewer**
Asset Intelligence	**Reviewer**	**Reviewer**	**Reviewer**
HSQE	**Reviewer**	**Reviewer**	**Reviewer**
Portfolio Manager		**Reviewer**	
Senior Construction Specialist	**Reviewer**	**Reviewer**	**Reviewer**
Workshop Admin **	**Required**	**Required**	**Required**

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

** 'Workshop Admin' must be sent an invite for every workshop to ensure it is added to the workshop calendar. The invite must be sent to designstandards@water.ie

Note: the below inputs & outputs are only relevant to workshops being held at project/programme close out.

- Inputs

  - To be available 2 weeks before workshop takes place (See Section 7.7).
  - Final Account Agreement
  - PM to confirm with IDD Solutions Project Records Team that all project records are in place
  - Initial sections of Gate approval paper (IW-AD-PG-SOP-001-FM-03) to be completed by PM
  - High Level Talking Points supplied in advance of workshop by Client, Consultant and Contractor identifying project 'wins' and project 'issues'.
  - Final Outturn Cost (including value engineering & innovation savings)
  - Measure, verify and report energy performance (in accordance with IW-TEC-600-04)
  - Confirmation from UÉ IDD Project Records Specialist that all handover documents are in place on the designated UÉ system
  - BIM Data Drop (Stage 8 – per UÉ EIR) incorporating confirmation of validation of Asset Information Model. [for ECI & non-ECI BIM projects)

- Outputs

  2 weeks after WS

  - Feedback from Delivery Partners logged (Minutes and any Lessons Learnt) and shared with attendees and other appropriate UÉ business units
  - CPT signoff must be recorded in the minutes
  - Update of UÉ Lessons Learnt
  - Close of Project Risk Register on RCMS

- Where relevant update of Drinking Water Safety Plan following project completion
- Complete Workshop Checklist, including recording formal CPT signoff.
- Capital efficiencies to be recorded [Updated ECI Programme Capital Efficiencies Tracker for ECI Projects]
- Sustainable measures and benefits to be recorded

9. BUSINESS UNIT CONTACTS LIST

The CPT points of contact will be nominated at WS0. For all other UÉ Functions please reference the link below which lists nominated points of contact.

- **Link to Contact List**

10. REFERENCED DOCUMENTS

Document Number	Document Title	Link
	I2O Manual & PM Handbook	I2O Manual SharePoint site
	Workshop Process Control Checklist (Workshop Checklist)	New Workshop Process Control Checklist
	Should you need to confirm your username and password to access the UÉ S&S website please email designstandards@water.ie	
IW-AD-EDS-FM-009	PEP (Projects)	UÉ Standards & Specifications website
IW-AD-EDS-FM-008	PGEP (Programmes)	UÉ Standards & Specifications website
IW-AMT-FM-036	Project Brief	UÉ Standards & Specifications website
IW-AD-EDS-FM-003	Project Design Review Contract Document and Comments Tracker (comments tracker)	UÉ Standards & Specifications website
IW-AD-IP-SOP-001	Management of Construction Contract Claims, Variations & Scope Change Procedure	UÉ Standards & Specifications website
IW-AD-EDS-SOP-004	Infrastructure Delivery Project Records Governance Procedure	UÉ Standards & Specifications website
ID-PO-FM-010	Uisce Éireann Lessons Learnt	UÉ Standards & Specifications website
IW-AD-EDS-FM-007	Uisce Éireann Lessons Learnt Workshop Review	UÉ Standards & Specifications website
IW-AD-C-FM-001	Infrastructure Delivery Risk Register QRA Template	UÉ Standards & Specifications website
IW-TEC-600-04	Energy Efficient Design Standard	UÉ Standards & Specifications website
IW-AD-EDS-GL-008	Preliminary Safety & Health Plan Contents List	UÉ Standards & Specifications website

AD-EDS-SOP-005	Derogations Standard Operating Procedure	UÉ Standards & Specifications website
IW-AMT-GL-020	6-Dials & Escalation Criteria, Thresholds & Approvals Guidelines	UÉ Standards & Specifications website
IW-AMT-SOP-013	Cost Estimation Standard Operating Procedure	UÉ Standards & Specifications website
IW-AD-PG-SOP-002	UÉ Risk & Contingency Management SOP	UÉ Standards & Specifications website
IW-AMT-FM-001	Capital Investment Output and Outcomes Definitions and Picklist	UÉ Standards & Specifications website
IW-AD-EDS-GL-09	A Guide to Undertaking Constructability Assessments	UÉ Standards & Specifications website
IW-AD-EDS-GL-10	A Guide to Undertaking a Site Investigation	UÉ Standards & Specifications website
IW-AD-ES-PR-01	AD Road Opening Licence Procedure	UÉ Standards & Specifications website
IW-AMT-GL-021	Biodiversity Guidance for Uisce Éireann Developments	UÉ Standards & Specifications website
IW-TEC-100-012	IW Information Management using BIM: - Exchange Information Requirements (EIR)	UÉ Standards & Specifications website
IW-TEC-100-012-FM-01	Building Information Modelling (BIM) Execution Plan (BEP) Template	UÉ Standards & Specifications website
IW-TEC-100-012-FM-02	Uisce Éireann BIM Naming Convention	UÉ Standards & Specifications website
IW-TEC-100-012-FM-03	Uisce Éireann BIM MIDP Template	UÉ Standards & Specifications website
IW-AD-ES-MAN-002	Uisce Éireann Asset Delivery BIM Manual	UÉ Standards & Specifications website
IW-HSQE-PR-001	HAZOP Procedure	UÉ Standards & Specifications website
AMS-AMT-GL-025	Guide on Investment Appraisal: Approach and Assumptions	UÉ Knowledge Base
AMS-AMT-FM-003	Financial Appraisal Model	UÉ Knowledge Base

AMS-AMT-FM-039	Multi-Criteria Analysis Model - Water	UÉ Knowledge Base
AMS-AMT-FM-038	Multi-Criteria Analysis Model - Wastewater	UÉ Knowledge Base
AMS-AMT-FM-037	Multi-Criteria Analysis Model – Non-Network	UÉ Knowledge Base
IW-TEC-600-05	Design Specification – Commissioning, Testing and Handover General Specification	UÉ Standards & Specifications website
	Investment Appraisal SOP	tbc

11. APPENDIX A – LINKS FOR STANDARD WORKSHOP MEETING INVITES

Workshop number	Standard Workshop Meeting Invite Template
Workshop -5	link
Workshop -4	link
Workshop -3	link
Workshop -2	link
Workshop -1	link
Workshop 0	link
Workshop 1	link
Workshop 2	link
Workshop 3	link
Workshop 4	link
Workshop 5	link
Workshop 6	link
Workshop 7	link
Workshop 8	link

12. APPENDIX B - EXAMPLE (ROUTE SELECTION) OF SUPPLEMENTARY WORKSHOP (WS1.1) TO DETERMINE OPTIONS TO BE CONSIDERED AT WS2

FSR Preliminary Assessment Review – Meeting Structure

Site/Route Selection Review

- Purpose

  To assess the process and outputs for site/route selection put forward by the ESP (detailed in the relevant section(s) of their Draft Feasibility Study Report - FSR) with a view to confirming the shortlisted site(s)/route(s) to be brought forward to Detailed Assessment ahead of Workshop 2. The UÉ Route and Site Selection Guidelines are to be followed by the ESP, and the first 4 steps in the process (shown in Figure 4-1 from the UÉ Route and Site Selection Guidelines) are to be completed in advance of the Review meeting. The objective of the Review meeting is to review and confirm the results of the Options Shortlisting. A Draft FSR with the Site/Route Selection section(s) completed in full is to be submitted by the ESP in advance of the Review meeting. The sections of the FSR relating to the detailed assessment will be incomplete at this stage.

  The aim of the Review meeting is to challenge and review the process followed (including the rationale for ruling out site/route options) in the site/route screening and to agree on the shortlisted option(s) to progress for detailed assessment in advance of Workshop 2.

Figure 4-1: Recommended Site / Route Selection Process

- Timing

  Following completion of the screening and assessment of all possible sites/routes and completion of this section(s) in the Draft FSR.

- Invitees/Attendees*

Business Unit	Projects
Project Manager (Chairperson)	**Required**
Infrastructure Delivery Programme Manager **	**Required**
Engineering Service Provider - Consultant	**Required**
Asset Planning	**Required**
Asset Operations (include LA Ops where required)	**Required**
Infrastructure Delivery Planning and Ecology	**Required**
Infrastructure Delivery Land & Wayleaves	**Required**

*All business units to be invited, Reviewers will decide if they have inputs that require them to attend

**the Programme Manager is only a Required attendee in absence of the Project Manager

- Inputs

  To be available 2 weeks before Review meeting takes place.

  - Site/route selection section(s) of the Draft FSR Completed.

- High level whole life costs to be included in the site/route selection. (Cost estimates to be prepared in accordance with IDD Cost Estimation SOP).
- Planning, ecology, and land & wayleaves preliminary assessments to be completed and included in the site/route selection. Note: Following the Review, detailed assessments of Planning, Ecology and Land & Wayleaves are to be completed on the agreed shortlisted site(s)/route(s).
- Site/route selection matrix (including the Technical/Economic, Environmental, Planning, and Landowner criteria in the UÉ Guidelines) and supporting documents including Constraint Mapping. These are to be included in or appended to the Draft FSR.
- Completed Constructability Assessment on Design Options.
- Comments from business units tracked and addressed (Section 6.7) on IW-AD-EDS-FM-003.
- Project Schedule inc. future Workshop Dates.
- Project Risk Register on RCMS, as per Risk & Contingency SOP.
- Completed Energy Balance assessment of concept design(s) (in accordance with IW-TEC-600- 04).

- Outputs

  Agreed at End of Review meeting:

  - Shortlist of optimal solution(s) identified, to progress to Detailed Assessment stage.
  - Agreement on required updates (Budget and scope comparison) to PEP (IW-AD- EDS-FM-001).
  - Project Risks Identified and register updated on RCMS as per Risk & Contingency SOP.
  - Confirm Existing Operational issues with LA operations team.

  To be completed between Review meeting & WS2:

  - Detailed Assessment of agreed Shortlisted Option(s) including ecology, planning, land & statutory requirements to identify recommended preferred option.
  - Project Schedule (milestone dates to be captured as per P&G Scheduling guidelines).
  - Draft FSR in full – all sections complete.
  - Workshop Minutes/Action Log.

The following documents are to be completed for the preferred option. Note the timing of the completion of these documents is to be agreed with Uisce Éireann on a project-by-project basis; these are only to be completed in advance of WS2 if the recommended preferred option is signed off by Uisce Éireann (such as at interim progress meetings):

- Planning Strategy and supporting maps with Redline Boundary(s). showing any areas within the site/route with planning requirements
- Land & Wayleaves tracker and drawings.