



Department  
for Environment  
Food & Rural Affairs



Llywodraeth Cymru  
Welsh Government

# **Reservoirs: Panel Engineer Capability Process England and Wales<sup>1</sup>**

**September 2023**

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<sup>1</sup> This Capability Process is in place for England and Wales. Scotland has separate panels, the Scottish Government and SEPA will adopt a similar process. Northern Ireland will also adopt a similar process once the legislation is made.

# 1. Introduction

Reservoir safety is about ensuring the physical structure of a reservoir, and its dams and embankments are safe. The Reservoirs Act 1975 confers a power on the Secretary of State (SoS) and Welsh Ministers jointly to determine panels of civil engineers. Reservoir Panel Engineers provide technical and expert advice to reservoir undertakers (owners). Panel engineers play a vital role in ensuring the safety of reservoirs by undertaking inspections and monitoring the conditions of these high-risk assets.

## 2. Reservoir Panels and the Institution of Civil Engineers' Reservoirs Committee

There are four panels of reservoir engineers – each panel has a specific role (see table below).

The Institution of Civil Engineers has a Reservoirs Committee that as set out in statute<sup>2</sup> advises the SoS for Environment, Food and Rural Affairs, Welsh Ministers, and Scottish Ministers on appointing or re-appointing engineers to the panels. The panels in the table are for England and Wales. Scotland has its own equivalent panels but uses the same assessment process with ICE. Panels for Northern Ireland are also expected to be established.

Panel engineers are appointed for a period of 5 years. After 5 years, they may reapply and will be assessed by the Reservoirs Committee again before advice about reappointment is given to the relevant Ministers.

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<sup>2</sup> **The Reservoirs Act 1975: Section 4 Qualification of Engineers**

4 (6) References in this section to consultation by the Secretary of State are references to consultation with the President of the Institution of Civil Engineers or, if that institution appoint a committee for the relevant purpose, with that committee.

Panels	Roles and Responsibilities	Type of reservoir it applies to
<p><b>All Reservoirs Panel Engineers</b> (ARPE)</p>	<ul style="list-style-type: none"> <li>• design and supervise the construction and alteration of a large raised reservoir</li> <li>• inspect, produce a report and make safety recommendations for a high-risk large raised reservoir</li> <li>• oversee and certify that safety recommendations have been carried out at a high-risk large raised reservoir</li> <li>• supervise a high-risk large raised reservoir and produce a statement once a year</li> <li>• act in an emergency to protect people and property against a possible escape of water from a large raised reservoir</li> <li>• bring an abandoned reservoir back into use as a large raised reservoir</li> <li>• design and supervise the alteration of a reservoir such that it is no longer a large raised reservoir</li> <li>• certify a flood plan for any large raised reservoir</li> <li>• may act as a referee</li> </ul>	<p><b>All large raised reservoirs</b></p>
<p><b>Non-impounding Reservoirs Panel Engineers</b> (NIR)</p>		<p><b>Non impounding reservoirs (NIR) including service reservoirs (SR)</b></p> <p>A non-impounding reservoir is a type of reservoir that does not obstruct the flow of a river and is normally filled by pumping water into it.</p>
<p><b>Service Reservoirs Panel Engineers</b> (SR)</p>		<p><b>Service reservoirs</b></p> <p>A service reservoir is a type of non-impounding reservoir that is built of bricks, masonry or concrete and normally enclosed with a roof</p>
<p><b>Supervising Engineers Panel</b> (SupE)</p>	<ul style="list-style-type: none"> <li>• supervise the reservoir at all times</li> <li>• produce a written report at least annually</li> <li>• provide directions as to visual inspection,</li> <li>• recommend a full inspection</li> <li>• certify a flood plan for any large raised reservoir in <u>England</u></li> </ul>	<p><b>All large raised reservoirs</b></p>

### 3. Capability Process

In the interests of public safety, reservoir undertakers must be confident that the engineers they engage are competent and capable of carrying out their work to a consistent professional standard. This capability process sets out the approach that Defra and the Welsh Government, along with the regulators - Environment Agency (EA) and Natural Resources Wales (NRW) - will apply if concerns arise about the capability and/or performance of an engineer on a panel.

The intention of the process is to support fair investigation of such concerns, help individuals make improvements if appropriate, and to determine whether an engineer is fit to remain on a panel. It aims to ensure each case is handled fairly, consistently, and transparently. Any ongoing criminal proceedings would not be considered within the scope of this process.

There could be many reasons for beginning an investigation. A valid reason is required, for example:

- Reasonable grounds for believing that work delivered by an engineer for an undertaker has not met the technical standards required;
- Reasonable grounds for believing an engineer is no longer able to fulfil the requirements of the role;
- Reasonable grounds for believing of professional standards not being met; or
- Complaint received against the engineer (such as: unsatisfactory reports; late reports; failure to complete timely site inspections; failing to respond to requests from undertakers).

The list above is not exhaustive. Each case will be assessed on an individual basis, considering all factors relevant to the investigation, offering an individual the opportunity to present their own evidence or respond to any concerns.

As the panels are jointly convened for engineers operating in both England and Wales, the lead regulator and lead Government for each case will be decided based on where issues have arisen.

The process includes gathering evidence and an initial assessment by the regulator, where necessary, and escalation involving ICE, Defra, and the Welsh Government.

Below is the step-by-step process for Phases 1 and 2. The lead regulator is responsible for Phase 1, and the lead department Phase 2.

## Lead Regulator Investigation: Phase 1

1. Concern is raised. This could be via a complaint, regulator-recognised performance concerns, or other routes.
2. The regulator conducts a primary investigation. This may involve site visits, conducting flood studies, appointing an independent ARPE to issue reports, or interviews with relevant parties. This list is not exhaustive.
3. The regulator decides whether the primary investigation's outcome fulfils the capability process criteria (Appendix 1).
4. If it does not meet the criteria, the lead regulator responds to the complainant highlighting the initial investigation has found no further action to be necessary.
5. If it meets the criteria, the regulator informs the lead department and other regulators and assigns a Case Officer (a member of the reservoir safety team within the regulator). A log is created.
6. The lead regulator informs the engineer in writing that the capability process has been enacted.
7. The Case Officer gathers further evidence. This may consist of information from:
  - other Regulators
  - other UK Governments,
  - undertakers,
  - the engineer in question
  - other engineers, or
  - any other relevant party.
8. Once the Case Officer has gathered and reviewed all the appropriate evidence, the regulator will decide whether to invite the engineer to provide a written statement to provide their representation, or to invite the engineer for an interview to provide further evidence.
9. The lead regulator decides whether escalation is needed (if yes, go to step 13). The regulator decides on their recommendation of which options on [page 7](#) they feel are suitable to consider.

10. If the decision is not to escalate, the lead regulator provides a response based on the evidence presented.
11. If no action is required, the lead regulator informs the engineer of the decision in writing. A response will also be provided to the complainant (if applicable).
12. If minor action or continued monitoring is required, the lead regulator informs the engineer in writing regarding what is needed to improve the engineer's performance and provides a timescale for this. The engineer will also be informed of the consequences of not complying and making improvements.

Other options to consider may be one or more of the following:

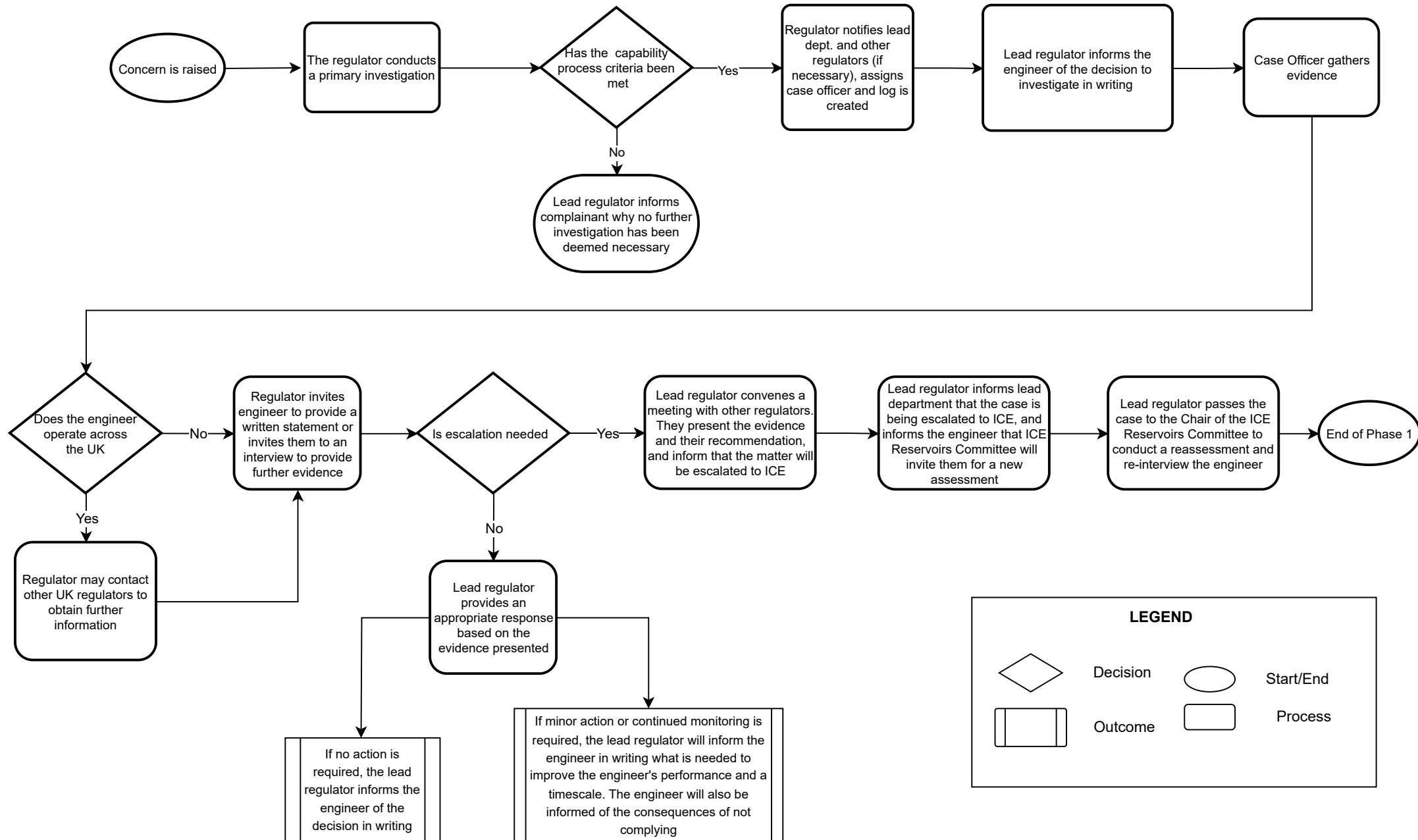
- a. No specific actions needed but a period of increased monitoring by the regulator will occur (this may also result from a Phase 2 outcome where performance requires ongoing assessment following conditions being set)
- b. ICE, the Reservoirs Committee, and/or the regulator to offer coaching, guidance, or targeted advice to help engineers improve
- c. Written warning that specific improvements are required. If the required improvements are not met, the case will re-open and will escalate to Phase 2, which may result in the engineer being removed from the panel.

**The process ends here where no further escalation is required**

**If the decision is to escalate further (still part of Phase 1)**

13. The lead regulator convenes a meeting with the other regulators. They present the evidence and their recommendation and inform them that this will be escalated to ICE.
14. The lead regulator informs the lead department that the case is being escalated to ICE and informs the engineer that ICE Reservoirs Committee will invite them for a new assessment.
15. The lead regulator passes the case to the Chair of the ICE Reservoirs Committee to conduct a reassessment and re-interview of the engineer (including representations made by the engineer).

# Engineer Capability Assessment - process diagram (Phase 1)





## Reservoirs Committee and Lead Department: Phase 2

1. ICE recommends to the SoS and Welsh Ministers whether or not the engineer's appointment should continue. They also inform the lead regulator. This recommendation should typically be made within 25 working days. (If appropriate, the chair of the ICE Reservoirs Committee may forward information about the case to the relevant professional body for separate consideration under their processes).

	<b>ICE's RECOMMENDATION OPTIONS TO MINISTERS</b>
<b>Option 1</b>	<b>Engineer fit to remain on the panel</b> , and no further action is needed.
<b>Option 2</b>	<b>The engineer can continue as a panel member, subject to conditions.</b> This may, for example, be a requirement for further training/experience; additional supervision, or appointment conditions.
<b>Option 3</b>	<b>The engineer is not fit to remain on the panel.</b>

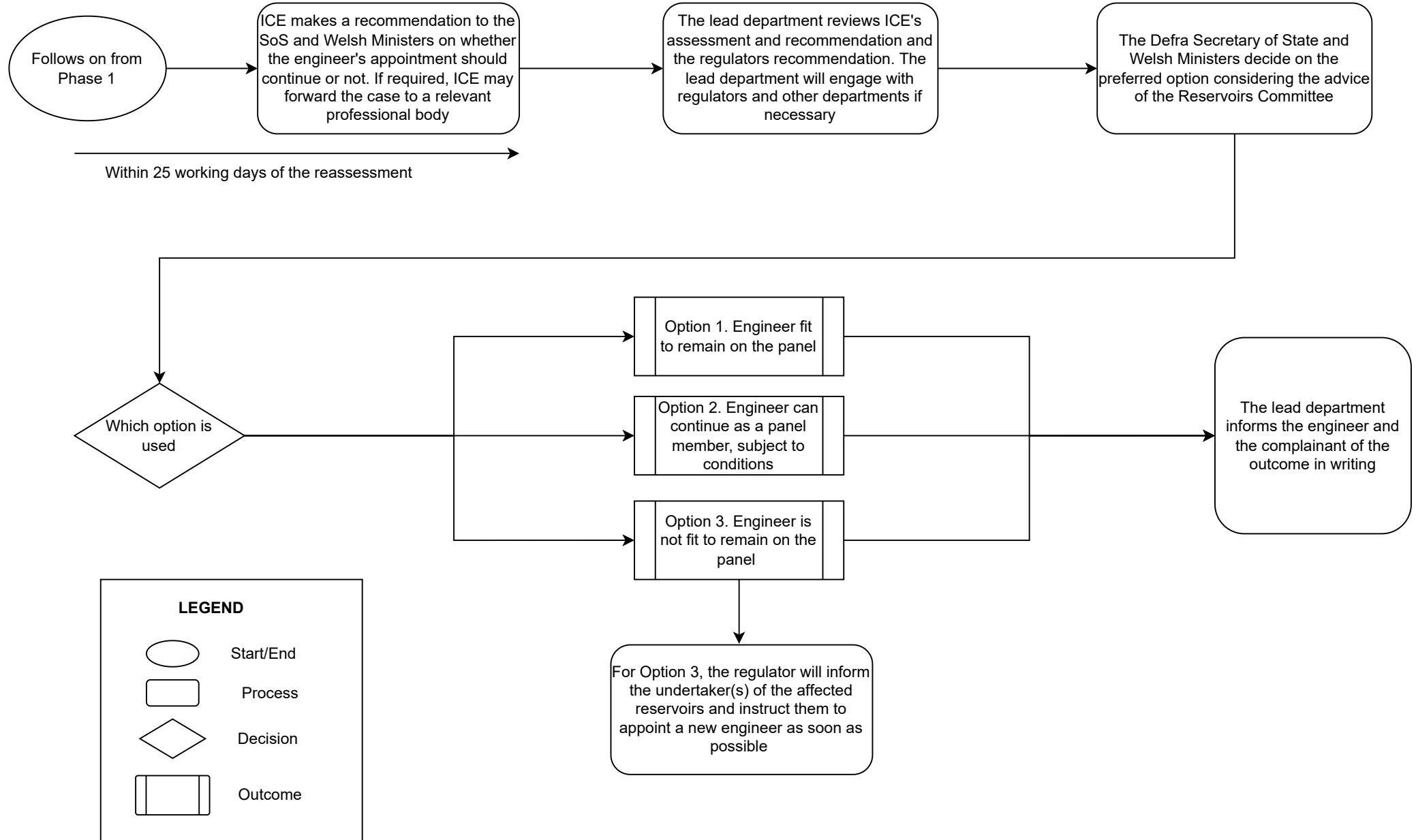
2. The lead department reviews ICE's assessment and recommendation and the regulator's recommendation. The lead department will engage with regulators and other departments if necessary.
3. The Defra Secretary of State and Welsh Ministers decide on the preferred option considering the advice of the Reservoirs Committee.
4. The next steps will the depend on the Minister's decision see table below.
5. The lead department informs the engineer of the outcome in writing.
6. The lead department informs the complainant of the outcome.



## Ministerial Decision and Next Steps

	MINISTERIAL DECISION	NEXT STEPS
Option 1	<b>Engineer fit to remain on the panel</b> and no further action is needed.	Lead department writes to the engineer confirming the appointment continues, and the investigation has been concluded.
Option 2	<b>The engineer can continue as a panel member, subject to conditions.</b> This may be a requirement for further training/ experience; or appointment conditions.	<p>The lead department writes to the engineer setting out the conditions of continued appointment.</p> <p>The engineer may be provided with advice and support.</p> <p>The regulator monitors the implementation of these requirements, and ongoing performance, and updates the lead department and/or ICE as appropriate regularly.</p>
Option 3	<b>The engineer should be removed from the panel.</b>	<p>The lead department writes to the engineer stating appointment is withdrawn.</p> <p>The work undertaken by the engineer in that capacity must stop with immediate effect.</p> <p>The regulator will inform the undertaker(s) of the affected reservoirs and instruct them to appoint a new engineer as soon as possible.</p> <p>The engineer may appeal the decision. The engineer remains a panel member during the appeal period. However, there may be conditions applied to their appointment during this time. For example, a condition that they may not take on any new appointments.</p>

# Engineer Capability Assessment - process diagram (Phase 2)



## 4. Eligibility for an Appeal

If an engineer disagrees with a decision that they should be removed from a panel (**option 3**), an appeal can be requested.

The engineer must identify valid grounds for why the original decision was incorrect. The following grounds would be deemed valid:

- the correct procedure was not followed
- the engineer was not allowed to make a representation of themselves.

If an engineer disagrees with the decision but cannot raise concerns on either of the above points, the appeal would not be deemed valid.

A request for an appeal must be submitted within **28 calendar days** of the decision letter about being withdrawn from the panel being sent to the engineer by the department. The appeal request must be sent to the following email addresses:

- **Defra:** [reservoirfm@defra.gov.uk](mailto:reservoirfm@defra.gov.uk)
- **Welsh Government:** [FloodCoastalRisk@gov.wales](mailto:FloodCoastalRisk@gov.wales)

## 5. Handling of Appeals

Appeals will be handled by a Defra or Welsh Government.

1. The relevant appeal team will assign a Case Officer to the case and will acknowledge the appeal within 14 calendar days of receipt. **To Note:** the appeal team and lead official responsible for the appeal will be separate and not involved during the investigation and decision-making.
2. Within 21 calendar days of receiving the appeal, the Case Officer will inform the engineer whether the grounds for an appeal have been met, and the appeal will be taken forward.

**If the appeal is taken forward,**

3. The Case Officer will review the evidence provided and cross-check all previous information and documentation (within 28 calendar days from receiving evidence).
4. The engineer will be invited to another interview with the Reservoirs Committee. The Reservoir Committee members undertaking the interview will differ from those who would have completed the assessment and interview which led to the decision to remove the engineer from the panel. The Case Officer will be present during the interview.

5. The Reservoir Committee provides advice to the Case Officer on whether the original decision should be upheld.
6. SoS and Welsh Ministers decide whether to overturn their original decision.
7. The lead department writes to the engineer explaining the outcome of the appeal. An outcome of the appeal is to be determined within 60 working days of the appeal team confirming the appeal will be taken forward.

## 7. Appeal Outcomes

<b>Option 1</b>	The original decision is upheld
<b>Option 2</b>	The original decision is not upheld. The appeal team (based on the advice from the Reservoirs Committee) recommends to the SoS and Ministers that the engineer is fit to continue as a panel member. The continuation of the appointment may be subject to conditions, e.g., further training /experience or conditions for the appointment, which the regulator will monitor and update the lead department regularly. In a scenario where the appeal was upheld due to a procedural error, the case may fall under remittance (i.e., resubmitted) and will resume from step 15 in Phase 1

## Appendix 1

### Environment Agency and Natural Resources Wales criteria for investigation of an engineer

The capability process has been designed to create a mechanism to follow in light of concerns over an engineer's performance or capability to perform their role.

Many factors could trigger the process, including circumstances where Defra, Welsh Government, ICE, the Environment Agency, or Natural Resources Wales directly receive a formal complaint about an engineer's performance. These criteria set out what would also be accepted as a means for using the capability process. Each case will be viewed and assessed on an individual basis, considering the specific details relevant to the engineer to ensure consistency and fairness.

The regulator will initiate an investigation into an engineer's performance or capability to perform their role at any one of the following times:

- Where reports of repeated poor performance are received by the regulator or identified by the regulator;
- Where a single report of poor performance of sufficient severity is received by the regulator or identified by the regulator;
- Where the regulator receives a complaint from an undertaker or multiple undertakers about an engineer's conduct that is sub-standard and which may put the safety or compliance of a reservoir at risk;
- Where there is evidence to suggest that an engineer is not meeting or considering the appropriate technical standards in their reports or work being carried out;
- Where evidence arises that suggests an engineer is allowing a reservoir to operate in an unsafe condition by action or omission;
- Where Defra, Welsh Government, or ICE consider that there are reasonable grounds to suggest that continuing to permit an engineer under review to continue acting would be likely to result in safety risks to those in the vicinity of a reservoir;
- Other factors may be considered in determining whether an investigation is warranted, which will be on a case-by-case basis.

If a concern is raised that does not fully meet any one of these criteria, the regulator may nonetheless increase monitoring of that engineer's submissions, which may result in a future investigation. Concerns around professional conduct may be passed on to the relevant professional body.