

TECHNICAL ASSURANCE

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1 Purpose & Scope

1.1 This is guidance on review of technical and legal reports that makes the review transparent, proportionate and reduces the potential for error in technical and legal decisions.

1.2 The Peer Review process is to:

1. ensure that technical and legal decisions, including decisions not to do work, are soundly based, consistent and proportionate;
2. ensure that the correct technical criteria have been correctly applied;
3. give managers confidence to permission appropriate licensee activities;
4. demonstrate the quality of our decision making to our stakeholders;
5. support staff in coming to a quality technical outcome.

2 Policy

2.1 Technical and legal outputs shall be proportionately reviewed before regulatory decisions are finalised.

2.2 Reviews will be:

- proportionate to the potential threats;

- transparent to the users and our stakeholders and;
- carried out by suitably qualified and experienced people.

2.3 All decisions affecting work selection (as opposed to sampling), including work not to be undertaken (deselecting work), will be recorded in a proportionate manner following a suitable consideration at management group(s).

2.3 This process may be applied to other activities such as reviewing Business Management System (BMS) documents with necessary changes.

3 Responsibilities

3.1 The allocated inspector has delegated responsibility from their line manager to select suitable peer reviewer(s). If the peer reviewer selection is unclear or potentially contentious they should consult their line manager. The inspector is then responsible for justifying the peer reviewer choice. In the event that the inspector's line manager wishes greater assurance, then a further, independent review may be carried out (AST/003).

3.2 The allocated inspector shall ensure that the output submitted for peer review is of sufficient quality.

3.3 Peer reviewer(s) will ensure that there is a clear and traceable peer review auditable trail. Where the peer review is external, suitable arrangements shall be made to ensure a clear auditable trail as part of any "contract".

3.4 Management Group leads are responsible for ensuring work de-selection is justified.

3.5 The Head of CALM is to ensure the periodic review and audit of this process.

3.6 The Head of Peer Review assurance is responsible for developing the annual assurance plan (integrated with similar corporate functions), its execution and reporting.

4 Definitions

4.1 Peer review - the process whereby reports are reviewed in a proportionate manner by an individual or group who are suitably qualified and experienced (see 5.1) to ensure proportionate quality.

4.2 Allocated Inspector - The staff member whose output is to be peer reviewed.

4.3 Peer reviewer(s) – The person or group carrying out the peer review

4.4 NTL/NTG – Nuclear Topic Lead / Nuclear Topic Group

4.5 CALM – Corporate Assessment Liaison Meeting.

4.6 ICG – Inspection Coordination Group

4.7 Management Group – Typically an Intervention Management Group formed in compliance with INS/008

4.6 TRIM - HSE's Document Management System

4.7 Auditable Trail – The collection of records held on TRIM or referenced from TRIM that demonstrate how a report and its peer review were progressed.

4.8 Peer Review Assurance – The activities that give corporate assurance that peer review is being adequately carried out.

5 Guidance

Proportionate Peer Review

5.1 Peer review should be proportionate and targeted:

- a. Day to day output in Other Reports (AST/003) which experienced inspectors normally provide may underpin decision making but, if the decision hangs on

that information it should be upgraded to an accepted report (a Routine or Major Report). Thus, peer review is not mandatory. However, for inspectors new to a role some form of checking is expected. This need not be recorded unless it adds proportionate value. Such checking would not be expected to take more than an hour in most cases.

- b. Routine Reports (AST/003) although acceptance review fulfils the peer review function. This does not preclude peer review which may include some or all of the following:
 - o key aspects should be reviewed and feedback resolved before the output is issued.
 - o Appropriate portions of the following guidance should be used.
 - o Such reviews should be signified by an entry on the output "This document has been reviewed by [Name]" with an associated date and suitable reference(s).
 - o Such work should take less than ½ day if undertaken.
- c. Major Reports will be peer reviewed before issue whether it is an assessment report or a Project Assessment Report (AST/003).
 - o This guidance should be used.
 - o The peer reviewer(s) will signify a completed, successful review by their signature on the front sheet of the report.
 - o These reviews should not normally take more than a working day and may be carried out as excepted work (AST/002).
- d. Where technical decisions are very finely balanced or the technical decision is extremely difficult and the nuclear hazard is significant, or there are matters that are likely to be very contentious there is a corporate need to ensure the best decision is made. In this case the allocated inspector informs the relevant NTL or their deputy so that a higher level review can be initiated.
 - The NTL when deciding which alternative to pursue shall:
 - i. decide if the matter(s) require their own decision, the support of the NTG and / or the use of external consultants.
 - ii. take into account
 - 1. the technicalities of the work
 - 2. any potential conflicts of interest and
 - 3. the other potential effects of such decisions.

The overall objective is to deliver a sound basis for regulatory decision making in a timely manner.

Where there is still significant uncertainty or a need for further advice then CALM and / or the Management Board should be consulted.

- e. Where there are difficult legal decisions the inspector brings this to the relevant management group(s) (INS/008) having taken advice from our lawyers.
- The management group then decide if the matter can be handled at its level, referred to the ALARP NTG, ICG and / or management board.
 - For particularly difficult decisions ICG or management board may commission a group of external, independent, suitably qualified and experienced expert(s) to advise. Such advice must be taken into account and should not be rejected without justification.
- f. Deselecting work (work that is not to be undertaken as planned) is acceptable provided this is the outcome after consideration under the assessment activity planning process (AST/002) and/or the intervention planning process (INS/008). This shall be subject to a proportionate challenge and review in the relevant management group. The outcome should be unambiguously recorded.
- Major differences of professional opinion shall be resolved through the INS/031 process.

Whatever process is used, the associated, agreed documents shall be finalised on TRIM so that no further revisions can be made.

5.2 Where decisions are needed quickly e.g. when licensees request a decision:

- Inspectors should avoid committing to any line that has not been previously agreed through due process. Rather they should proffer advice stressing that advice is given in good faith to move matters forward but is not binding on either party (PI/FWD).
- Where this is not possible and a decision must be made for safety reasons, the inspector involved should contact their line manager as soon as possible and explain what has happened.
- The line manager should then consult as appropriate using paragraph 5.1 as guidance and clarify the way forward with the inspector.
- The matter should then be reviewed in line with the process above and a “learning from experience” meeting held.
- In all cases the auditable trail should be completed as soon as possible, the outcome unambiguously recorded and finalised in TRIM.

Peer Reviewer Selection

5.3 Major Reports should conform as closely as possible to the following with greater adherence for more significant work. When Routine Reports are reviewed they should utilise an applicable selection of the process. Other Reports may take account of it.

Peer reviewer selection should be justified using the following:

- a) The allocated inspector should consult and be able to justify their choice of reviewer(s).
- b) The more significant or potentially contentious the work, the more important it is that the peer reviewer(s) should not be directly involved in the particular aspects being reviewed. In this way the peer review can be seen to be proportionately

independent. In cases of uncertainty, line managers and / or NTLs should be consulted.

- c) The peer reviewer(s) should either be in the same or very similar technical specialism. They should have sufficient background and experience to be able to select the key aspects of the safety arguments independently from the allocated inspector and be able to add value through constructive comment.
- d) In some instances it may be more appropriate to select another member of the team working on that task to carry out the review when familiarity is more important than matching the specialism.
- e) Where the allocated inspector is a “singleton” and therefore there is no other inspector with appropriate technical knowledge the choice of peer reviewer(s) may need to include consultants or other external experts depending on the significance of the work to the permissioning decision. Such external peer reviewers would only be expected for Major Reports and they should be independent of the matters under consideration. In a few cases, this may not be practical. In such cases, the inspector should consult their line manager and / or NTL.
- f) Security implications will be taken into account when choosing the peer reviewer.
- g) The peer reviewer(s) should have enough time to carry out the task. If this is likely to take more than a working day overall then the allocated inspector may need to agree the effort allocation with each peer reviewer’s Unit Head. Otherwise, it should be carried out as excepted work (AST/002).

Performing Peer Review

5.4 The following should be proportionately carried out (see 5.1). Peer review should be carried out on near final or final reports (AST/003). The peer reviewer should, independently, identify the key arguments in the allocated inspector’s report including likely omissions that could be significant to the outcome, test these and, if satisfied these are adequate (fit for purpose), the allocated inspector should be informed and a suitable record made in the report (see 5.11).

Peer review on Major Reports is different to line management acceptance review or Originator review and should be carried out by a different person as far as possible. A useful benchmark is the IET code of practice for independent safety assessors [1, 2].

5.5 If there are points of difference, these should be discussed between the allocated inspector and the peer reviewer. If these are resolved, the report should be changed as agreed, a suitable record made of the discussion and changes to form the auditable trail (see 5.12). If the differences are significant and cannot be resolved by discussion, they should be dealt with by unit heads, management group or NTLs as appropriate. If that fails then the INS/031 process should be followed.

5.6 Staff should allow time in their forward programmes for carrying out peer review both for their own work, the work of others and to assist in the corporate assurance function (see 5.14). This last should not require an explicit time provision but should be included in the allowance for continuous improvement in personal plans.

Peer Review Content

5.7 Peer review should consider the following questions for a Major Report. For all other reports any review should take due account of these aspects:

- a) Is the scope adequate for the declared subject or purpose?
- b) Does the output or decision meet the intent?
- c) Are the assumptions and inputs reasonable and justifiable?
- d) Is the technical / legal content soundly based or is there an explanation of any uncertainties? Are such uncertainties acceptable in the light of the output / outcome?
- e) Is the sampling reasonable and does it cover the critical aspects?
- f) Has the allocated inspector demonstrated ALARP principles have been applied in their report and, where appropriate, consideration given to possible improvements?
- g) Does the output show a balanced, objective and well argued course of action?
- h) Is there a resolution route for unresolved issues – are these likely to compromise the output / outcome and thereby the regulatory decision?
- i) If novel techniques are used, are they acceptable, valid and justified (further specialist advice and support may have to be sought in some cases)?
- j) Have the contributions to the outcome / output of the duty holder's submission been proportionately reviewed and are these consistent with good practice?
- k) Is the output or outcome of the allocated inspector's report consistent with previous practice or has any significant deviation been justified?
- l) Are the methods and information used acceptable and proportionately applied?

5.8 There will be occasions when these questions cannot be reasonably resolved and the work warrants further consideration. In such cases an appropriate management group should review the overall balance of all the arguments across the entire project to come to an objective, reasoned decision for the way forward.

5.9 The peer review content should be based on:

- a) The reviewer(s) particular skills and background;
- b) The experience and track record of the allocated inspector;
- c) Safety significance – safety critical aspects should always be included;
- d) Past precedent and accepted good practice;
- e) Novelty and complexity related to the hazard level under consideration;
- f) The quality of underpinning research and consultation (if applicable);
- g) The quality of any independent nuclear safety assessment (INSA) carried out on the reference documentation by the applicant / licensee;
- h) Potentially contentious matters, particularly if they are likely to set a precedent.

Peer reviewers should also bring any generic matters to the attention of the appropriate NTG and / or management group to engender learning.

5.10 Peer review is not:

- a) An editorial activity (although editorial comments for clarity are helpful) but rather the application technical and legal judgement to check outputs/outcomes.
- b) A way of iterating towards a final product (although there may need to be iterations to bring out all the evidence in a transparent proportionate manner).
- c) About “collecting signatures on the front page” – the peer review should add value.
- d) Independent nuclear safety assessment (INSA) or equivalent.

Peer Review Feedback

5.11 To facilitate proportionate feedback the following categories may be used:

Reservation	Major matter that must be resolved before the output is signed. {sub divided under the following heads - technical, process, publication}
Observation	Minor matter such that overall adequacy is not compromised but could do with attention e.g. matters of clarity. The report may be signed and the observation recorded (with the report if appropriate).
Comment	Provided for author’s information. The report may be signed. No formal record is required unless it adds value.

Such a feedback form (or equivalent) is only mandatory for Major Reports. It may be appended to the report where considered necessary or desirable. For particularly important or potentially contentious reports it may be necessary to have signed copy(ies) of the feedback on the paper file referenced in TRIM.

5.12 Each of the observations and / or reservations should be referenced to the underpinning evidence. The table (or equivalent) should stand alone and make clear what each matter is about and how it was resolved without the need to refer to the underpinning justification or the report being reviewed. The underpinning headings for Reservations should use the following:

- a) Technical – where there is a shortfall in the underpinning science, engineering or legal judgement(s). This includes application of technical guides.
- b) Process – where the procedure has not been followed.
- c) Publication – where the decision outcome is not in a suitable form for open publication. This excludes outcomes withheld for security or similar reasons.

5.13 If the matters raised in the peer review are accepted, then resolution may be tracked using the same form with the resolution recorded under each matter in italics. If appropriate, once all such matters are resolved, the final record may show nothing outstanding.

Assurance

5.14 The head of assurance shall draw up an audit plan against the operational plans drawn up by programmes to gain assurance that peer review is being carried out:

- a) consistently,

- b) to appropriate standards to ensure quality decision making, and
- c) that the auditable trail is traceable.

This plan will be executed using the auditing principles in DBP/004.

5.16 The head of peer review assurance will:

- a) Develop the annual peer review plan ensuring a representative, proportionate sample of work is included in the plan. This should include an allowance for monitoring work deselection decisions.
- b) Ensure that corrective actions and learning are provided to programmes for promulgation to promote improvement.
- c) Provide management board, CALM and ICG with feedback to promote improvement.
- d) Provide a regular report in a suitable form for publication either on its own or as part of an annual report for the organisation.
- e) Feed back learning into the peer review processes and guidance to engender improvement and consistency.

6. References

6.1 The Code of practice for Independent safety assessors
<http://www.theiet.org/factfiles/isa/isa-code2008.cfm?type=pdf>

6.2 Competency framework for ISAs
<http://www.theiet.org/factfiles/isa/isa-comp-frame.cfm?type=pdf>

7. Associated documents

AST/003	Permissioning Reports
AST/002	Inspectorial work management
INS/031	Resolving Differences of Professional Opinion in ONR
DBP/004	Auditing