8. Conducting Technical Review

In order to determine whether an assessment report is consistent with ICAT key recommendations, technical reviewers conduct several activities. Reviewers conduct all activities according to the technical review plan prior to forming a technical review statement.

Figure 8.1: Overview of steps in the chapter

Checklist of key recommendations

- Conduct a desk review to evaluate whether the assessment report is consistent with the ICAT key recommendations upon which the assessment was based and/or any other criteria for technical review
- Undertake a field visit to support the review

8.1 Conduct technical review

All technical reviews involve a desk review. Field visits are also recommended. Both desk reviews and field visits can be further supported by interviews and surveys as described in the sections below.

Desk reviews

It is a key recommendation for the reviewer to conduct a desk review to evaluate whether the assessment report is consistent with the ICAT key recommendations upon which the assessment was based and/or
any other criteria for technical review. Desk reviews are the main way in which assessment reports are evaluated. A desk review is an examination of documents and supporting evidence that is done away from the user’s place of work (i.e., the review is done remotely, most likely at the office of the technical reviewer in the case of second- or third-party). It also includes phone calls and emails between the reviewer and user.

Documents to review include the assessment report, supporting evidence, and the methods, models tools and assumptions applied. Descriptions of the relevant policies including detailed explanation of objectives, implementation plans, progress reports, limitations observed, and key institutional arrangements can strengthen technical reviewer understanding and improve their review.

Field visits
Desk reviews can be strengthened through field visits. A field visit entails an evaluation of the impact assessment (possibly including examination of documents and supporting evidence) at the user’s place of work, and/or the place of work of the entity that prepared the assessment report if not prepared by the user.

It is a **key recommendation** for the reviewer to undertake a field visit to support the review. This allows for face-to-face discussions between the user and the technical reviewer and enhances the reviewer’s understanding of the assessment report. These conversations can occur while the desk review is being conducted.

The visit may include visits to multiple offices or field sites relevant to the collection of data and other information for the assessment report. Depending upon the type of policy, it may be beneficial to visit a sample of facilities, natural areas (e.g., agricultural lands and forests), and/or communities affected by the policy.

Technical reviewers should independently collect data to confirm the reported information and/or results. Data collection can be done at a selective or random sample of facilities within the relevant industry, supply-chain or governmental agency. For example, in the United States, the Wage and Hours Division (WHD) selectively inspects production facilities that use low-wage labour to ensure that they are following a range of state and federal laws (e.g. Fair Labor Standards Act). The UN Law of the Sea allows for state-sponsored officers to inspect any foreign boats of states that are signatories of the UN Law of the Sea for violations of the Fish Stocks Agreement. The Comprehensive Nuclear Test Ban Treaty Organization (CTBTO) conducts facility inspections and on-site environmental sampling to verify no current or past chemical activity occurred in non-compliance with the CTBTO.

Data collection can be done outside of specific facilities when a) data is needed to measure large natural areas; b) data is needed to measure the greater impact, independent of specific facilities; or c) access to facilities is limited or prohibited. The International Atomic Energy Agency (IAEA) uses satellite imaging to

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1 United States Wage and Hour Division 2015.
2 UN General Assembly 1995 and 2010.
monitor facility activity and detect radioactivity. Equipment and software that make verification cheaper and thus more accessible are being developed, such as the drone technology being used by countries receiving UN REDD+ funding for verifying that their forests are being managed in accordance with UN REDD requirements.

Interviews and surveys

Interviews and surveys can be conducted to understand more completely the policy that was assessed and improve the technical review process as a whole. Interviews and surveys can be conducted to confirm previously asserted information and can be conducted face-to-face or through digital means. These can be targeted to the user directly or can involve external experts, community members and other representative and identified stakeholders.

When conducting interviews and surveys with stakeholders, consider the following:

- Feedback on the assessment report can be solicited from stakeholders through various consultation methods, including through an online survey and/or through meetings or workshops with different stakeholder groups. Refer to the ICAT Stakeholder Participation Guidance Chapter 8 for guidance on designing and conducting consultations.

- All the feedback received from stakeholders should be collated and taken into account. Share with stakeholders (those involved in the technical review and others) and publish the methods followed to process feedback received, as well as at least a summary of the inputs received and how they were taken into account.

- Seek the support of stakeholders, for example through a multi-stakeholder body, to resolve differences of opinion among stakeholders and to validate reports. These can include both the final report of stakeholder participation in the policy design, implementation and evaluation and also the report of the technical review, including methods, process followed, participation, feedback received and how it was taken into account.

Chapter 8 of the ICAT Stakeholder Participation Guidance contains additional guidance for designing and conducting consultations, including interviews and surveys.

**Box 8.1: Examples of using interviews and surveys in technical review**

Example 1: The World Health Organization (WHO) in its fight against measles and rubella conducts vaccinations surveys amongst treated communities. These surveys are used to triangulate reported data on vaccination rates and to verify that their vaccination programmes are reaching the estimated number of people.

Example 2: ICF International, in their verification of Entergy’s Corporate Greenhouse Gas Inventory, interviewed key personnel to understand the emissions monitoring system, and gain insight into margins of error within the system.

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5 Zwick 2011.

6 World Health Organization 2014.

7 ICF International 2016.
8.2 Evaluate consistency with key recommendations and other criteria

Key recommendations and other criteria

Technical reviews are conducted according to the criteria for review (Section 5.2 provides information about criteria for technical reviews). In general, this is an evaluation of the assessment report for consistency with ICAT key recommendations and any other criteria. The assessment report contains an assessment statement, which lays out the key recommendations that the user has followed along with any other criteria with which consistency is to be assessed in the technical review. For example, if using the ICAT Renewable Energy Guidance and the Sustainable Development Guidance, this will include the relevant key recommendations from those guidance documents. Some key recommendations in the guidance documents may not be relevant to the particular policy or impact assessment, and the assessment statement explains and justifies why such recommendations have not been followed.

The purpose of the technical review is to evaluate whether the assessment report is consistent with the ICAT key recommendations upon which the assessment is based and/or any other criteria. This includes evaluating whether the impact assessment is consistent with the principles set out in the relevant guidance documents.

Reviewers should evaluate whether the user has interpreted the key recommendations correctly, stepping through each key recommendation one by one. The ICAT guidance documents provide supporting guidance for each key recommendation, which provides the basis for the reviewer to evaluate whether the recommendation has been interpreted correctly and the assessment report is consistent with it. Where other criteria are specified as part of the scope of the review, reviewers should evaluate all supporting evidence and determine whether the assessment report is consistent with the criteria.

Reviewers should also draw upon their own experience, expertise and professional judgment, and relevant norms and good practice. In undertaking this evaluation, reviewers should also keep in mind the technical review principles set out in Section 2.3.

Reviewers should evaluate whether the assessment report contains sufficient information to explain and justify how each key recommendation and other criteria was followed. Written explanation should be supported by reference to evidence such as the outputs of methods and tools, and analysis and other studies.

Application of principles

The ICAT impact assessment guidance documents provide a set of principles for impact assessments, and the documents state that it is a key recommendation to base the impact assessment on these principles. The principles are relevance, completeness, consistency, transparency and accuracy. In addition, the principle of comparability can be relevant sometimes. The ICAT Transformational Change Guidance provides an additional principle on reflection on action. Reviewers should ensure that any key recommendations relating to impact assessments (followed by the user) have been interpreted consistent with these assessment principles. Each guidance document discusses the principles in full and reviewers should use those discussions as their guide for interpreting the principles.

The ICAT Stakeholder Participation Guidance provides a set of principles for stakeholder participation, and the document states that it is a key recommendation to base stakeholder participation on these principles. The principles are inclusiveness, transparency, responsiveness, accountability and respect for
rights. Reviewers should ensure that any key recommendations relating to stakeholder participation (followed by the user) have been interpreted consistent with these principles. The principles are discussed in full in the Stakeholder Participation Guidance and reviewers should use this as their guide for interpretation of them.

Reviewing adherence to the intent of assessment principles takes place at an overarching level. It is not a review of each individual key recommendation against each principle. Nor would all key recommendations that a user followed lend themselves to clear-cut evaluation.

8.3 Evaluate underlying data and assumptions

It is important for the technical reviewer to cross-check the underlying data and assumptions used to estimate impacts with other independent sources. The purpose of cross-checking is to confirm that data and assumptions are appropriate for the country and context to which they are being applied. Reviewers can cross-check through consultations with experts (e.g., academic and NGO researchers), published literature or specialised websites. Field visits, interviews and surveys, and field-based observations can be used. For example, if a user conducts a financial feasibility analysis the reviewer can check whether the discount rate used in the analysis is appropriate for the country context. Population growth and GDP data are other examples of data that can be cross-checked with domestic and global databases to determine the appropriateness of the assumptions made in the impact assessment.

8.4 Assess materiality (if relevant)

The technical review should be conducted according to the agreed-upon materiality threshold. The reviewer should conduct the review to either a reasonable or limited level of assurance or according to the agreed-upon procedures. Where a materiality threshold was established, the reviewer should ensure that all results are free from material misstatement. Materiality has both qualitative and quantitative aspects. Certain qualitative discrepancies such as a discrepancy with respect to ownership must always be noted as a material issue. In other cases, qualitative discrepancies will be less definite and may ultimately manifest themselves as quantitative discrepancies. When considering less definite qualitative discrepancies, reviewers should use their professional judgment to determine the issues that immediately need to be identified as material and which require further investigation through sampling and testing.

When assessing quantitative materiality of data errors, omissions or misrepresentations, reviewers should assess materiality with respect to the aggregate estimate of results, such as the GHG emission reductions and removals, set out in the assessment report. Uncertainties inherent in methodologies are not to be considered.

All material errors, omissions and misrepresentations should be addressed before a technical reviewer issues a conclusion with the desired level of assurance on an assessment report. Where non-material errors are found in the assessment report, reviewers should ensure that such errors are addressed by the user where practicable.