CONSULTATION DOCUMENT

Consultation Paper on Recommendation for regulatory impact analysis framework

1. The National Telecommunications Regulatory Commission is in receipt of a submission from the Eastern Caribbean Telecommunications Authority ('ECTEL') containing a consultation paper on the Recommendation for **Regulatory Impact Analysis Framework**.

2. A copy of the consultation document is attached.

3. The initial comments period will run from ***26th June 2026 to 19th August 2026.***

4. The Comment on Comments period will run from ***24th August 2026 to*** **22nd September** ***2026***.

5. Following the period for Comments on Comments period, ECTEL's Directorate will revise and submit the Recommendation for **Regulatory Impact Analysis Framework** to the Council of Ministers for its recommendation for adoption in the ECTEL Member States

6. All responses to this Consultative Document should be written and sent by email to:-

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SUGGESTED GUIDELINES FOR RESPONSES TO CONSULTATION

In order to reduce administrative lags in ECTEL's public consultation processes and to enable a reasonable degree of transparency by sharing of views submitted, ECTEL hereby recommends that parties desirous of making contributions to the attached consultation follow the procedures outlined below:

1) Responses to consultations should be clearly labelled as a response to the particular ECTEL consultation and correctly referenced by title.

2) Documents should contain: the name of Party/Licensee/NTRC commenting, address, telephone, and email contacts of commentary author or corporate officer(s) responsible for the document. This information will enable ECTEL to clarify any comments where necessary, or to facilitate follow-up dialog by ECTEL where required.

3) The Consultation Document sets out questions on specific regulations/parts of the regulations. Commenting parties may indicate a response (concur or disagree) on the recommendation and provide explanations/reasons for each response.

4) Where parties have no view or interest in expressing a view on a specific recommendation, parties should indicate "no comment" and number appropriately.

5) Responses/comments to specific recommendations should be double spaced and numbered in sequence with the recommendation. Where comments are extensive, paragraphs should be numbered. Pages should be numbered.

6) Commenting parties should avoid making comments in the form of tracked changes to consultation documents.

7) Where possible, comment documents should be submitted in PDF format.

8) Where possible, parties should make explicit reference to academic articles, legislative provisions in other jurisdictions, or other sources relied on, and should provide copies of these together with comments. Accurate citations of resources relied on will suffice if copies cannot be provided.

9) If relevant, parties commenting on specific provisions of legal language should propose alternative language where possible. Such language should be appropriately highlighted and double spaced. Parties should avoid proposing alternative language in tracked changes to the consultation document.

10) Comments should be submitted via e-mail; only comments submitted via e-mail will be acknowledged.

11) Commenting parties should expressly indicate or highlight which parts of comment documents contain commercially sensitive or confidential information that should not be published.

ECTEL reserves the right to publish all the responses received to the consultation and provides no undertakings to refuse to publish such comments where requested, on its website or otherwise.

ECTEL is grateful to those parties adopting the recommended guidelines for submitting comments to this consultation.

EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY (ECTEL)

Consultation Document

Regulatory Impact Analysis Framework

June 2026

Executive summary

The objective of this document is to develop a framework and tools for regulatory impact analysis (RIA) in the ECTEL Contracting States. The purpose of RIA is to ensure that decisions are based on objective evidence, informed by an understanding of relevant impacts, trade-offs, and assumptions. As such, the effective application of RIA will strengthen the ability of decision makers to understand the likely effects of alternative options for regulatory interventions.

It is important to consider whether the effort, resources and expense involved in conducting an RIA are commensurate with the problem to be solved. Resources to develop policies and regulations may be limited and the efforts involved may place significant burdens on those resources. Thus it may not be feasible to conduct an RIA for every problem. It is anticipated that RIA approaches will be gradually introduced within ECTEL and National Telecommunications Regulatory Commissions (NTRCs) for those projects that are expected to have the most impact. For example, one or two key projects could initially be selected as test cases, however over time RIA may be applied to more projects and thus optimising resources will become more critical. As such, a 'triage system' proportionality test has been developed to aid in the selection of the initial test cases. This will also be useful over time to ensure efforts in conducting RIAs will be focused on regulatory proposals that have the most impact.

The proposed RIA framework, based on international best practice, encompasses a sequential process:

- defining the problem or issue
- establishing the objectives of the RIA
- identifying the policy options
- estimating the net benefit of each option
- determining the best option and implementation plan
- evaluating the chosen option.

Consultation is an additional key component of the process and best practice is to consult with stakeholders during the RIA development. The optimal timing of consultation should be determined on a case-by-case basis, as it is dependent on the nature of the problem being addressed and the information available to ECTEL and the NTRCs.

The appraisal step is generally the most resource-intensive part of the RIA process. For each option in a short-list of alternatives, the net benefit is estimated, by taking into account all the costs and benefits associated with each option. While there are various methods that can be used to estimate net benefit, the most common approach is cost-benefit analysis (CBA), however multi-criteria analysis (MCA) is often used in information and communications technologies (ICT) and has been recommended by the ITU for regulators.

Best practice for presenting an RIA – whether this is part of stakeholder consultation, an internal decision document or final decision – is to ensure transparency and understandability.

Finally, it is important to prepare both an implementation plan and an evaluation plan. The latter will describe how the chosen option will be monitored, in order to assess its success (or failure) in meeting the desired objectives.

Regulatory Impact Analysis Framework

Consultation paper

Contents

Glossary of terms and abbreviations

ACMA: Australian Communications and Media Authority; Australian regulator

CBA: Cost-benefit analysis

CEA: Cost-effectiveness analysis

DA: Distributional analysis

DPIA: Data Protection Impact Assessment

EC: Electronic Communications

ECTEL: Eastern Caribbean Telecommunications Authority

GDP: Gross Domestic Product

ICT: Information and communication technologies

ITU: International Telecommunication Union

LCA: Least-cost analysis

MCA: Multi-criteria analysis

MfE: Ministry for the Environment (New Zealand)

NBN: National Broadband Network; Australian wholesale operator

NP: Number portability

NPV: Net present value

NTRC: National Telecommunications Regulatory Commission

OECD: Organisation for Economic Co-operation and Development

OECS: Organisation of Eastern Caribbean States

QoS: Quality of Service

RIA: Regulatory impact analysis (or regulatory impact assessment)

RSP: Retail service provider

SMP: Significant market power

SOC: Social opportunity cost of capital

STPR: Social time preference rate

TCI: Turks and Caicos Islands

1 Introduction

The Caribbean Digital Transformation Project aims to increase access to digital services, technologies and skills by governments, business and consumers in participating Eastern Caribbean countries, namely the Commonwealth of Dominica, Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. A key component is the development of a digital enabling environment, promoting trust and security, to drive competition, investment, and innovation. This includes development of appropriate forward-looking regulatory settings and national / regional capacity for implementation and ongoing oversight.

Since 2000 the Eastern Caribbean Telecommunications Authority (ECTEL) has been responsible for facilitating a coordinated regulatory approach and technical leadership in Contracting States. Supported by the Digital Transformation Project, ECTEL is currently guiding a reform process in the region whereby legacy Telecommunications Acts are being replaced with broader modernised legislation encompassing electronic communications[1].

During this transitional phase it will be crucial to establish robust yet flexible guidelines and tools to enable regulatory authorities to undertake competition and regulatory impact analyses both effectively and efficiently.

This consultation paper outlines a framework for regulatory impact analysis (RIA, also known as regulatory impact assessment), for implementation in the ECTEL Contracting States. As noted by the Organisation for Economic Co-operation and Development (OECD):

> The quality of regulation strongly depends on the quality of the regulatory design process and, in particular, the ability of decision makers to understand the likely effects of regulatory interventions. Regulatory impact assessment (RIA) provides decision makers with the framework and tools for examining the impacts and consequences of a range of alternative regulatory interventions, encouraging them to challenge underlying assumptions. If used systematically, RIA can ensure better-quality regulation. Furthermore, a transparent, systematic and consistent RIA process and methodology will promote not only regulatory

1 OECS (2020), *Electronic Communications Bill – revised*, 3 July 2020.

> quality but also trust in the regulatory process and the institutions that carry out such activities.[2]

The RIA framework is based largely on best practice guidelines, as described by the OECD together with implementation practices in Australia, New Zealand and the United Kingdom.

This consultation document comprises eight sections and includes ten consultation questions. Following this introduction, the document covers:

- an overview of implementing the RIA process (Section 2)
- defining the regulatory problem (Section 3)
- establishing objectives (Section 4)
- identifying options (Section 5)
- estimating the net benefit (Section 6)
- the consultation process (Section 7)
- determining the best option and planning for implementation (Section 8).

The annexes to this document contain:

- a checklist of items to consider when undertaking an RIA (Annex A)
- a list of references for further reading about RIA (Annex B).

[2] OECD (2025), *Applying Regulatory Impact Assessment at Regulatory Authorities*, 15 October 2025, page 3. Available at https://www.oecd.org/en/publications/applying-regulatory-impact-assessment-at-regulatory-authorities_0b5ea522-en.html.

2 RIA: an overview

2.1 What is RIA?

The OECD describes RIA as:

> … specific processes that together ensure decisions are based on objective evidence and decision-makers and stakeholders are aware of the relevant impacts, trade-offs, and assumptions.[3]

It can be considered as both a 'toolbox' and a 'framework':

> As a "toolbox" it provides analysts with ways to structure, conduct and communicate their assessment of impacts, including ways to qualify and quantify impacts for the relevant context. As a "framework" RIA provides an overarching process for decision-making, integrating all necessary steps from the time of the initial identification of the regulatory problem, through the identification of possible solutions, their analysis, and stakeholder consultation, to the final decision.[4]

2.2 The RIA process

The RIA mechanism (Exhibit 2.1) is a useful tool to support policy and regulatory development. Ideally it should commence at an early stage of the creation of new policies and regulations. If it is applied only towards the end of policy and regulatory development, there is a risk that it may uncover options that had not previously been addressed, requiring the development process to be revisited.

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3 *Ibid*, page 11.

4 *Ibid*, pages 11-12.

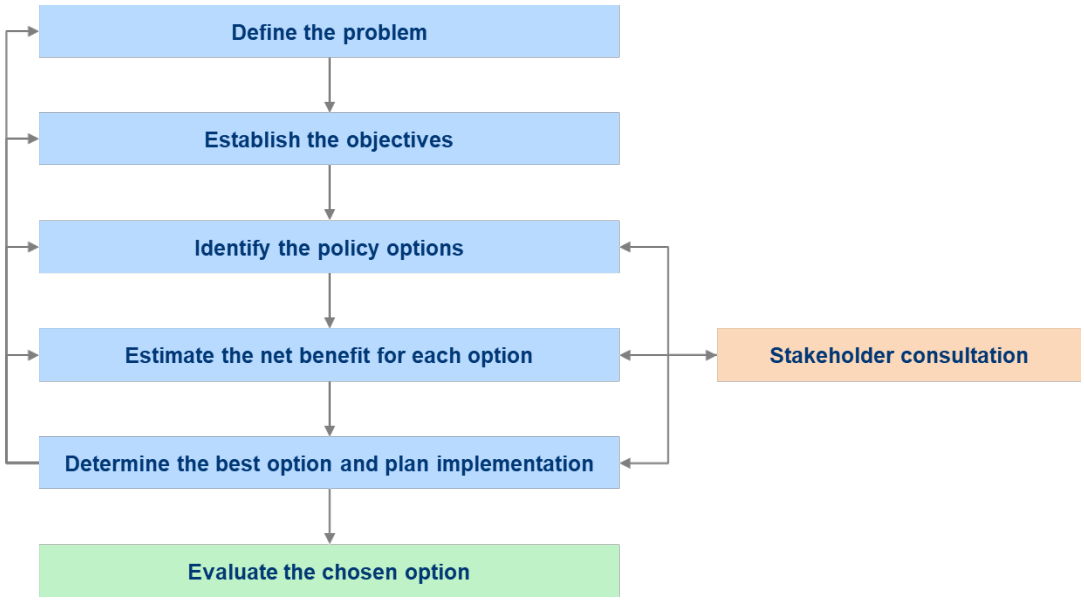

Exhibit 2.1: *The RIA process [Source: Network Strategies]*

Note that the RIA process needs the flexibility to allow for an iterative process. Within any single project, it may be necessary to return to earlier steps within the RIA process, for example if:

- new information becomes available
- new options are identified during the analysis or as part of the consultation process
- the analysis finds that impacts are higher than expected, requiring a more in-depth investigation.

However, when revisiting steps within the RIA unnecessary burdens on stakeholders should be avoided – in particular by participating in multiple rounds of consultations.

Q1. Are the steps in the RIA process framework clear and comprehensive or should additional / different components be included in the high-level overview?

2.3 Is an RIA required?

ECTEL and NTRCs should select an initial test case to gain experience in undertaking RIAs. Thereafter the use of RIAs to evaluate new regulation or regulatory changes should increase gradually over the next three to five years.

Governments in a number of countries require that most policy or regulatory proposals be supported by an RIA, however OECD best practice principles note that there are some instances where proposals can be exempt from undergoing an RIA.

Examples of jurisdictions that have implemented RIAs

Australia	Any policy proposal or action of Government, with an expectation of compliance, that would result in more than a minor change in behaviour or impact for people, businesses or community organisations must be accompanied by an impact analysis.
New Zealand	All policy proposals taken to Cabinet (or to a group of Ministers with delegated authority) for approval that include a government regulatory proposal must be accompanied by impact analysis, unless an exemption applies.
United Kingdom (Ofcom)	An impact assessment must be performed – unless it is impractical or inappropriate due to the urgency of the matter – if it is likely to involve one or more of: • a major change in Ofcom's activities • a significant impact on persons carrying on businesses operating in markets Ofcom regulates • a significant impact on the general public in the United Kingdom or a part of the United Kingdom.

Are RIAs used in small island states?

Regulatory resources in small island states are more limited than those in larger nations which typically restricts their capacity to conduct RIAs. Robust data to support cost-benefit analyses may also be scarce, which will affect the selection of analytical approaches.

Most instances of RIAs in small island states are sector-specific or applied only to individual, often donor-driven, projects with no standardised framework across government. Such examples may not necessarily be labelled as RIAs but can be viewed as belonging to the same family as RIA, using similar approaches and methodologies.

- Mauritius – a national RIA framework is under development with some pilot studies in the environmental sector completed[5]
- Fiji – RIAs have been conducted in the financial[6] and health[7] sectors
- Seychelles – Data Protection Impact Assessments (DPIAs) are mandatory under the *Data Protection Act 2023* whenever data processing operations are likely to result in a high risk to the rights and freedoms of individuals. This applies to both public and private organisations that collect, store and process personal data
- Jamaica – an RIA was conducted as part of a plastic waste minimisation project[8]
- Turks & Caicos Islands – a cost-benefit analysis of number portability was conducted by the Telecommunications Commission (see Section 6.4).

5 OECD (2022), *Establishing Regulatory Impact Assessment in Mauritius*, 5 April 2022, page 80. Available at https://www.oecd.org/en/publications/establishing-regulatory-impact-assessment-in-mauritius_2d072a27-en.html.

6 See for example BFA (2016), *Fiji Financial Inclusion Regulatory Impact Assessment*, 21 July 2016.

7 See for example Menzies Centre for Health Policy (2016), *A Health Impact Assessment (HIA) on the draft regulation 'Advertising and Promotion of Unhealthy Foods and Non-Alcoholic Beverages to Children Regulation' in Fiji*, April 2016. Available at https://ses.library.usyd.edu.au/bitstream/handle/2123/15014/hia%20fiji%20060616.pdf.

8 National Environment and Planning Agency (2020), *Plastic Waste Minimization Project: Final Regulatory Impact Assessment*, 31 July 2020. Available at https://www.nepa.gov.jm/sites/default/files/2021-01/Regulatory-Impact-Assessment-on-Plastics-including-Polystyrene_NEPA_Final_July-2020.pdf.

2.4 Exemptions from RIAs

Jurisdictions that require widespread use of RIAs, generally define a set of circumstances which are subject to exemptions. In its recommendations for an RIA framework for Mauritius[9], the OECD notes that valid reasons for exemptions from RIAs may include:

- emergencies – when a significant delay may affect the well-being of citizens
- regulatory proposals with no impact on regulated parties, such as:
  - internal processes of the administration
  - reorganisation of existing legal texts
  - direct transposition of international treaties into the domestic framework
  - government budgetary proposals.

Q2. Should a requirement be introduced that all regulatory proposals – with exceptions under defined circumstances – undergo RIAs? What criteria should apply for exemptions?

2.5 Proportionality and the RIA approach

It is important to ensure that the effort, resources and expense involved in conducting an RIA are commensurate with the problem to be solved. The OECD notes that resources to develop policies and regulations may be limited and the efforts involved may place significant burdens on those resources:

> Yes, policy makers must weigh the costs and benefits of different policy options and consult, but the process for analysing regulations must pass a cost-benefit test itself. It makes no sense to analyse regulations as if each proposal was identical. Besides wasting time and resources on relatively minor proposals, there is a risk that the government will not properly assess the

9 OECD (2022), *Establishing Regulatory Impact Assessment in Mauritius*, 5 April 2022, page 80. Available at https://www.oecd.org/en/publications/establishing-regulatory-impact-assessment-in-mauritius_2d072a27-en.html.

> consequences of regulations whose impact is potentially greater on wellbeing by giving equal importance to each regulation.[10]

This is often referred to as the principle of proportionality. But how should proportionality be assessed? According to the OECD:

> The time and resources devoted to the development of regulation and its analysis should relate to the size of the impacts, the size and structure of the economy, the impacts per capita, the possible flexibility of the policy, and the relative resources of the government…
>
> …The time and resources for regulation development and analysis should also scale with the capacities of the government.[11]

There are a number of proportionality tests that have been implemented by jurisdictions. These tests determine the level of effort and resources to undertake RIAs, however many tests have defined thresholds which would not be appropriate for ECTEL Contracting States.

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10 OECD (2020), *A closer look at proportionality and threshold tests for RIA*, 25 February 2020, page 6. Available at https://www.oecd.org/en/publications/regulatory-impact-assessment_7a9638cb-en/support-materials.html.

11 OECD (2025*), Introducing Proportionality to Thailand's Regulatory Impact Assessment: optimising analytical resources*, 30 April 2025, pages 15-16. Available at https://www.oecd.org/en/publications/introducing-proportionality-to-thailand-s-regulatory-impact-assessment-framework_f757c840-en.html.

Examples of proportionality tests[12]

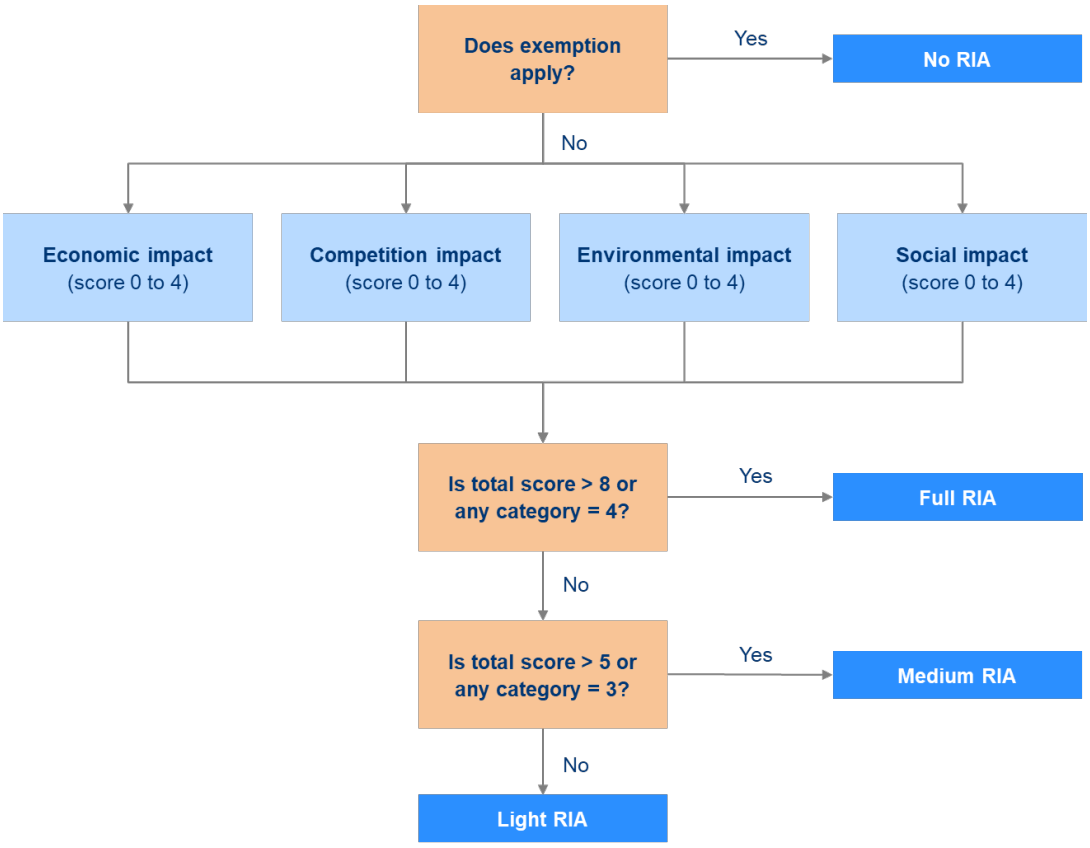
Canada	Proposed regulations with an impact of less than CAD1 million (USD881,000)[13] are required to be supported by, at a minimum, a qualitative analysis. Proposals with a greater impact require quantitative and monetised cost-benefit analyses wherever possible; in the absence of data rigorous qualitative analyses are required.
Denmark	For proposals expected to have running costs of over DKK4 million (USD642,000), more thorough RIAs are required, using external consultants to conduct interviews with businesses.
South Korea	A quantitative RIA is required if the proposal affects more than one million people, has an impact of more than KRW10 million (USD12,000), there is a clear restriction on market competition or a departure from international standards.

A gradual introduction of RIA approaches within ECTEL and NTRCs is anticipated. For example, one or two key projects will initially be selected as test cases, however over time RIA may be considered for more projects. Selection of such projects must consider if individual circumstances reflect optimal use of limited regulatory resources.

Thus a 'triage system' proportionality test may be useful for ECTEL and NTRCs (Exhibit 2.2). Firstly, such a test will aid in the selection of the initial test cases and then over time will ensure greater efforts will be focused on regulatory proposals that have the most impact.

12 *Ibid*, page 20.

13 Currency conversion is based on purchasing power parity rates, sourced from the World Bank.



Scores: 0 if there is no impact or the category is not applicable; 1 or 2 if there will be a low impact; 3 or 4 if there will be a high impact.

Exhibit 2.2: *Proportionality test for ECTEL and NTRCs [Source: Network Strategies, adapted from OECD]*

In the future, ECTEL or NTRCs may implement additional guidelines for the proportionality test, such as associating thresholds with the monetary value of the anticipated impact.

Q3. Should any additional factors be considered within the proportionality test?

The OECD provides a useful guide for adjusting the RIA according to the level of impact, which has been adapted to align with the above proportionality test (Exhibit 2.3).

Task	*Low RIA*	*Medium RIA*	*High RIA*
Problem definition	Clear description of the problem, and clear rationale and justification for intervention and its objectives. Clear description of impacted stakeholders.	As for low impact, but with quantitative measures included to better assess the scale of the problem.	A clear problem definition, rationale and justification for intervention, backed by thorough evidence.
Counterfactual and options definition	Brief description of counterfactual and what would happen in the absence of intervention. Considers a range of well-described, feasible options, including non-regulatory options and the counterfactual.	As for low impact, but with more detailed discussion of counterfactual and development of problem in the absence of intervention and more detail on justifications for option selection.	Full description of the counterfactual and evidence-based justification of options selection (based on theory and empirical evidence). Clear statement of assumptions on counterfactual and theory of change.
Appraisal	Not all impacts need to be monetised (best estimate for direct impacts), but all impacts should be described qualitatively and provide a sense of scale. Supported by readily available data and straightforward calculations. Each option should be analysed and discussed.	As for low impact but with quantitative estimates of option impacts (costs and benefits) using validated data, and greater (but not full) monetisation. Clearer discussion of risks and uncertainties for each option. Some sensitivity analysis or distributional analysis may be expected. Specific impacts should be included. Complex appraisal methodologies and modelling is not necessary.	Thorough appraisal using an appropriate quantitative or hybrid methodology to appraise costs and benefits of short-listed options is expected (aiming for the monetisation of all impacts where possible). Specific and wider impacts should be incorporated. Bespoke data collection and modelling may be appropriate. Assumptions should be fully explained.

Exhibit 2.3: *Adjusting RIA based on the proportionality test [Source: Network Strategies, adapted from OECD]*

Task	*Low impact*	*Medium impact*	*High impact*
Delivery and feasibility testing	The delivery and feasibility of each option should be screened at least qualitatively.	Full assessment of delivery and feasibility (see Section 8). Including potential for monitoring and evaluation of short-listed options.	As for medium impact, and some initial work on developing the monitoring and evaluation framework for the preferred option might be expected.
Decision proposal	The qualitative assessment should be clearly summarised, and the preferred option selection justified. Additional areas of risk and uncertainty should be qualitatively assessed and communicated.	As for low impact, a clear summary of any quantified costs and benefits should be provided.	As for medium impact, a clear summary of quantified costs and benefits, modelling assumptions, and sensitivity/scenario analysis should be provided.

Exhibit 2.3 (cont): *Adjusting RIA based on the proportionality test [Source: Network Strategies, adapted from OECD]*

2.6 Reporting and documentation

Best practice for presenting the RIA – whether this is part of stakeholder consultation, an internal decision document or final decision – is to ensure transparency and understandability.

Annex A contains a list of considerations and questions to guide ECTEL and NTRCs in their analyses and in presenting their results.

The OECD recommends[14] that communications involving RIAs should:

- use simple and accessible language whenever possible
- be comprehensive, in terms of setting out the full RIA process so that stakeholders may follow the decision-making process – including the definition of the problem, objectives and rationale for intervention, the definition of the counterfactual and options identified

[14] OECD (2025), *Applying Regulatory Impact Assessment at Regulatory Authorities*, 15 October 2025, page 41. Available at https://www.oecd.org/en/publications/applying-regulatory-impact-assessment-at-regulatory-authorities_0b5ea522-en.html

and appraised, the appraisal methodology, a clear summary of inputs and assumptions, a discussion of the delivery and feasibility tests applied, and the approach to proportionality

- clarify the risks and uncertainties associated with the preferred option, as well as other appraised options when those risks and uncertainties are a factor in the decision
- focus on the appraisal of direct impacts that relate to the regulation
- be made available in an accessible format and communicated through appropriate channels to reach the key stakeholders.

With regard to the results of the analysis, it is good practice to:

- clearly show the significance of the impacts in tabular form (scorecard)
- show the positive impacts (benefits) and negative impacts (costs) separately
- quantify in a comparable manner the positive and negative impacts, wherever possible.

3 Define the problem

3.1 Required tasks

With a well-defined problem, the analysis for the RIA is more likely to flow in a systematic and logical manner. If the problem is not well-defined, identifying valid alternative options will be difficult and the likelihood of achieving a successful outcome is reduced.

Problem definition should always take place at the start of a regulatory project, but it may need to be revisited if:

- new information emerges
- the situation changes
- further research is necessary to help formulate a proposal.

Defining the problem should be evidence-based and should outline the information already known. This definition of the problem is called the 'baseline' and describes the current situation.

What is the problem?

Describe the situation which is perceived to be unsatisfactory and potentially requiring a regulatory solution. Most situations that require government intervention will be due to:

- market failure – such as monopolistic and other non-competitive practices, externalities, and information asymmetries
- regulatory failure – such as ineffective legal frameworks, unintended consequences, regulatory incoherence, unjustified complexity and burden, regulatory capture, and compliance and enforcement failures.
- unacceptable hazard or risk – such as new or emerging public safety or environmental concerns

- societal goals – such as improving equity and welfare, or poverty alleviation.

A problem should not be described as an absence of a solution. It should describe undesirable outcomes or harm, not a regulatory gap.

Why is it a problem?

Provide evidence to support that there is a problem:

- What is already known about the problem?
- What are the risks of no action?
- What measures have previously been used to address this problem?
- Are there deficiencies with these previous approaches?
- Why is the problem not addressed by current measures?

Who is affected?

Describe the people or stakeholders that are affected by the problem and provide evidence regarding the extent to which they are affected.

What data is available?

- What data is currently known about the problem?
- How will any information gaps be closed?

Note that the information available or used to describe the problem may differ from the information required to solve it or to evaluate the success of any solutions.

In addition the effort needed to close any information gaps should be commensurate with the impact of the problem.

3.2 Problem trees

It may be helpful to define the problem using a 'problem tree' (Exhibit 3.1). This is a visual tool that can be used to map causes and effects associated with a problem. It can also be useful for:

- stakeholder engagement – as a visual representation in consultations
- generating options by identifying intervention points
- clarifying what happens if no action is taken.

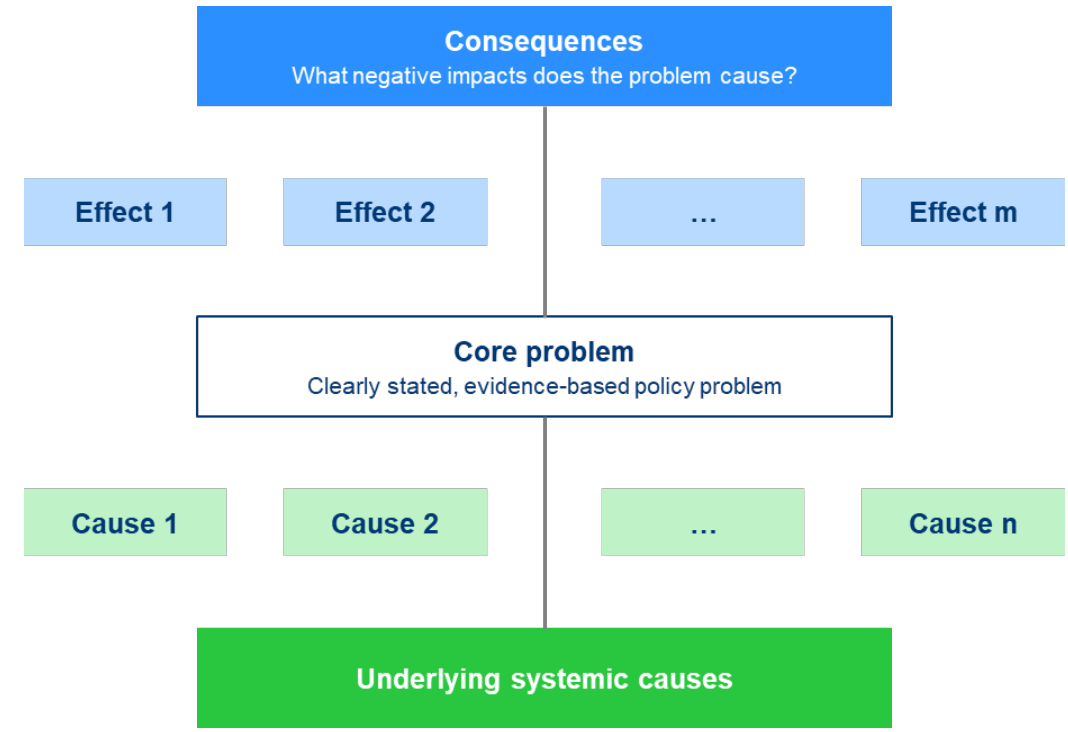


Exhibit 3.1: *Problem tree [Source: adapted from OECD]*

There are four steps to building a problem tree.

Clarify the core problem

The problem tree starts by identifying the central problem, usually a situation perceived as unsatisfactory that may justify regulatory intervention.

Identify causes

The causes of the core problem are often:

- immediate causes (direct, proximate)
- underlying systemic causes – for example, market failures, information asymmetries, institutional weaknesses

Identify effects

The effects or consequences of the core problem can be:

- social – for example exclusion, inequality
- economic – for example, inefficiency, loss of productivity
- environmental or other public policy impacts.

Understand linkages

Mapping cause-effect relationships helps to:

- further clarify or provide structure to the nature of the problem
- identify whether the problem stems from regulatory gaps, implementation or enforcement issues, or non-regulatory factors
- determine the appropriate level and type of intervention.

Note that these linkages may be extremely complex. They could involve feedback loops, multiple causes or cross-sectoral issues. For complex systems, additional tools may be required, such as systems mapping.[15]

15 Systems mapping covers a wide range of visual tools used to represent complex problems. It considers the various parts of a problem, their inter-relationships and interactions, together with the dynamics of the whole system. Some of the more common types of systems mapping are connection circles, cognitive maps, causal loop diagrams and stack and flow models.

4 Establish the objectives

Once a problem has been defined, the next step within the RIA is to establish the desired outcomes or objectives for government intervention through the following questions.

Why is government intervention needed?

An RIA must demonstrate that there is a real need for government to address the problem. Not every problem will require government intervention – not taking action can be a valid policy decision or there may be better alternatives to government intervention:

- the problem may be too small to justify government action
- the cost of intervention may be greater than the potential gain
- the likelihood of intervention having the intended outcome may be low
- the market or affected groups may be better able to address the problem.

What is the desired outcome?

Describing objectives is an essential step for formulating options. Without clear objectives, it will be impossible to formulate appropriate options or be able to identify if any solutions have been successful.

According to the OECD[16], objectives should be:

- **specific** – they should identify a quantifiable target at a key decision point, for example consumer take-up of broadband services due to the introduction of a broadband universal service scheme
- **measurable** – data and metrics associated with the target and any relevant user groups or stakeholders should be available

16 OECD (2025), *Applying Regulatory Impact Assessment at Regulatory Authorities*, 15 October 2025, pages 24-25. Available at https://www.oecd.org/en/publications/applying-regulatory-impact-assessment-at-regulatory-authorities_0b5ea522-en.html.

- **assignable** – where appropriate, objectives should focus on a specific user group, or relevant user characteristics
- **realistic** – targets should be realistic, for example if take-up is low then the specified increase should not be overly ambitious (a move from 10% to 20% may be appropriate, whilst achieving 100% is unlikely)
- **time-related** – the timeframe for measurement should be clearly specified.

What constraints or barriers exist?

Any constraints or barriers that may restrict the ability to achieve a successful outcome should be described. These may have previously been identified as part of the problem definition (see Section 3).

How can success be measured?

Objectives should be measurable, in order to determine whether a regulatory proposal has been successful. This measurement process should be outlined, together with the metrics to be used and the thresholds or target values that define success or failure. As noted above, any data or metrics must be readily available.

Q4. Are there any additional factors that should be considered when formulating objectives?

5 Identify the policy options

5.1 Required tasks

An RIA should encompass a range of policy options, with the output from this step being a short-list of viable options to be evaluated in the next step (estimating the net benefit, in Section 6).

Define the counterfactual option

A 'do nothing' or counterfactual option should always be included in an RIA. This considers what would happen if the *status quo* was maintained, in the absence of any action by the NTRC.

The counterfactual will be based on data collected when defining the problem (Section 3) which may be supplemented with additional information, such as major existing trends, expected technological shifts or changes in market structure, or anticipated policy changes from other organisations that may affect the market.

Develop intervention options

A range of alternative options should be identified, which may include:

- leveraging existing regulations or regulatory tools to address the problem or issue
- implementing non-traditional, non-regulatory or more flexible regulatory alternatives to address the identified problem – these alternatives could encompass:
  - quasi-regulation, such as industry codes of practice, guidance notes, industry-government agreements and accreditation schemes
  - co-regulation, whereby industry develops and administers arrangements with government providing legislation for enforcement

  - self-regulation, industry-written standards, rules and codes of conduct enforced by the industry
  - market-based economic instruments, such as taxes, subsidies, tradable permits, performance bonds and tradeable property rights
  - information and education campaigns
- introducing new regulation.

The impact of any option may be sensitive to the method of implementation, thus it may be worthwhile to compare options based on differing implementation approaches, for example:

- introducing a regulation for a short period of time
- experimenting with regulatory testbeds or sandboxes to trial new regulation before rolling out more broadly
- implementing regulation in phases over several years, to allow stakeholders to adapt.

Every option considered should be practical and implementable.

Non-viable options should not be included within the RIA, unless these have been canvassed publicly, in which case evidence may need to be provided of their non-viability.

If there are obvious options that have not been included within the appraisal process, the reasons for their exclusion should be explained and documented, supported by evidence.

Define a short-list of options for appraisal

From the intervention options considered, define a short-list of options for assessment. This should always include the counterfactual. Non-regulatory options can also be short-listed.

The number of options should be commensurate with the magnitude or impact of the problem identified.

Options within the short-list should:

- address the defined behaviours/causes of the problem with a clear and evidenced logic
- be effective in delivering the desired outcome
- be proportional to the problem and give good value for money – that is, the appraisal in the next step (Section 6) is anticipated to find that benefits will be greater than costs
- align with any wider social, economic and / or environmental policy objectives
- be deliverable and enforceable.

Q5. Are there any intervention options that would not be appropriate in ECTEL Contracting States?

5.2 Behavioural insights

The OECD notes that the range of options can be broadened by incorporating behavioural insights:

> …instead of relying only on formal rules and sanctions, policymakers can test complementary approaches such as clearer communication, simplified processes, reminders, or default options.[17]

As well as a tool for exploring non-regulatory solutions, behavioural insights may be helpful in designing more effective regulatory solutions by increasing the ease of compliance.

17 OECD (2025), *Applying Regulatory Impact Assessment at Regulatory Authorities*, page 29. Available at https://www.oecd.org/en/publications/applying-regulatory-impact-assessment-at-regulatory-authorities_0b5ea522-en.html.

The behavioural analysis framework outlined by the OECD[18] explores whether people:

- notice and pay attention to requirements (attention constraints)
- understand and trust the information provided (beliefs and perceptions)
- find the process simple enough to follow (choice environment and complexity)
- have the motivation and support to act consistently over time (determination and follow-through).

This framework[19] can identify barriers or constraints that a more traditional economic analysis may overlook. As an example, late reporting may be identified as a problem, but a behavioural analysis may detect that the reporting process is too complex and/or deadlines are poorly communicated. Potential solutions could include simplifying reporting forms, implementing reminder systems or adjusting deadlines.

18 *Ibid*, page 29.

19 Further details on applying behavioural insights to RIA can be found in OECD (2021), *Behavioural Insight and Regulatory Governance – Opportunities and Challenges*, 11 November 2021. Available at https://www.oecd.org/en/publications/behavioural-insight-and-regulatory-governance_ee46b4af-en.html.

Using behavioural insights to increase the ease of compliance in Australia

In 2018 the Australian Communications and Media Authority (ACMA) issued a series of rules specifying the information retail service providers (RSPs) were obliged to tell customers before they purchased a high-speed broadband plan over the national broadband network (NBN). The purpose of the *Telecommunications (NBN Consumer Information) Industry Standard 2018*[20] was to assist customers in making their purchase decision.

In addition, RSPs must provide information that complies with the Critical Information Summary as required in the Australian Telecommunications Alliance Industry Code C628:2025 Telecommunications Consumer Protections Code.[21]

To assist RSPs in both complying with regulations and providing information that is helpful and meaningful for consumers, the ACMA published a 'better practice guide' for RSPs to present the necessary information based on behavioural insights.[22]

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20 Australian Government Federal Register of Legislation, *Telecommunications (NBN Consumer Information) Industry Standard 2018*, available at https://www.legislation.gov.au/F2018L00814/.

21 Australian Telecommunications Alliance (2025), *Industry Code C628: 2025 Telecommunications Consumer Protections Code*, section 5.1. Available at https://www.austelco.org.au/wp-content/uploads/2025/06/Att.-B-TCP-Code-2025-clean.pdf.

22 Australian Communications and Media Authority and Department of the Prime Minister and Cabinet (2019), *A better practice guide for NBN providers: Improving information provision to customers using behavioural insights*. Available at https://www.acma.gov.au/sites/default/files/2019-10/ACMA_BETA_Better_Practice_Guide.pdf.

6 Estimate the net benefit for each option

6.1 Overview

This appraisal step is generally the most resource-intensive part of the RIA process. It is important to ensure that the effort required is commensurate or proportionate to the problem being addressed. The number of options under consideration should be limited – too many options will also increase the difficulty for decision-makers.

For each option in the short-list of alternatives, the net benefit is estimated, by taking into account all the costs and benefits associated with each option. The output from this step should include, for each option:

- a clear estimate of the net benefit of each option
- a description of those likely to be affected and assessment, where significant, of the economic, competition, social, environmental or other costs and benefits as well as how those costs and benefits are likely to be distributed – which may include both quantitative and qualitative impacts
- a description of the methods used to conduct the analysis.

While there are various methods that can be used to estimate net benefit (Exhibit 6.1), the most common approach is cost-benefit analysis (CBA), however multi-criteria analysis (MCA) is often used in information and communications technologies (ICT) and has been recommended by the ITU for ICT regulators.[23]

[23] ITU (2014), *Using Regulatory Impact Analysis to improve decision making in the ICT sector*, September 2014, page 39. Available at https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-BB.RPT5-2014-PDF-E.pdf.

Appraisal method	*Application*	*Description*	*Complexity*
Least-cost analysis (LCA)	Suitable when benefits are fixed and only the means to achieve an objective are being selected.	Compares the cost of alternative options to achieve a specific objective, considering only costs. No benefits beyond cost savings are considered.	Low complexity – quantification of costs only.
Cost-effectiveness analysis (CEA)	Suitable when benefits cannot be easily monetised but are still quantifiable.	Compares the cost of different options relative to a single, non-monetised outcome. Benefits are quantified and divided by the costs to produce a benefit-cost ratio which can provide a relative measure of value for money.	Medium complexity – quantification and calculation of benefit-cost ratio.
Cost-benefit analysis (CBA)	Suitable when all main impacts can be monetised, and can be applied when one or more options are compared to the counterfactual.	Compares all costs and benefits of an intervention by monetising both, allowing for a direct comparison in net present value (NPV) terms or benefit-cost ratios.	Higher complexity – monetisation of all (or most important) costs and benefits, discounting, probabilistic/sensitivity analysis
Multi-criteria analysis (MCA)	Suitable when there are competing objectives (e.g. trade-offs between environmental and economic factors) and a need to score and weight heterogenous criteria which cannot be comparatively monetised/quantified.	Compares multiple dimensions (economic, social, environmental) using a weighted scoring system rather than a single monetary metric.	Variable – requires stakeholder input and weighting criteria, but does not always require rigorous statistical analysis.
Qualitative approaches	Suitable in limited cases only (and preferable only) when data is scarce or unreliable, when impacts are non-quantifiable, or when there is a need to explore complex causal relationships or pathways that are not easily modelled statistically.	Compares options based on the insights gained through qualitative research: • comparative case study analysis of evidence on regulatory impacts • structured expert interviews or surveys (Delphi method) • extended or participatory stakeholder consultation.	Variable – ranges depending on research design and methodology, and requirements for qualitative analysis.

Exhibit 6.1: *Appraisal methods [Source: OECD]*

6.2 Costs

Often government intervention may impose a range of costs (Exhibit 6.2), on businesses, individuals and communities, as well as on government itself. The appraisal process should quantify these costs, based on firm evidence. That supporting data can be collected from various sources, such as national statistical offices, surveys, market research, stakeholder consultation, previous studies and literature reviews. Data sources, limitations and assumptions should be clearly stated while assumptions and uncertainties should be tested through risk analysis and stakeholder consultation.

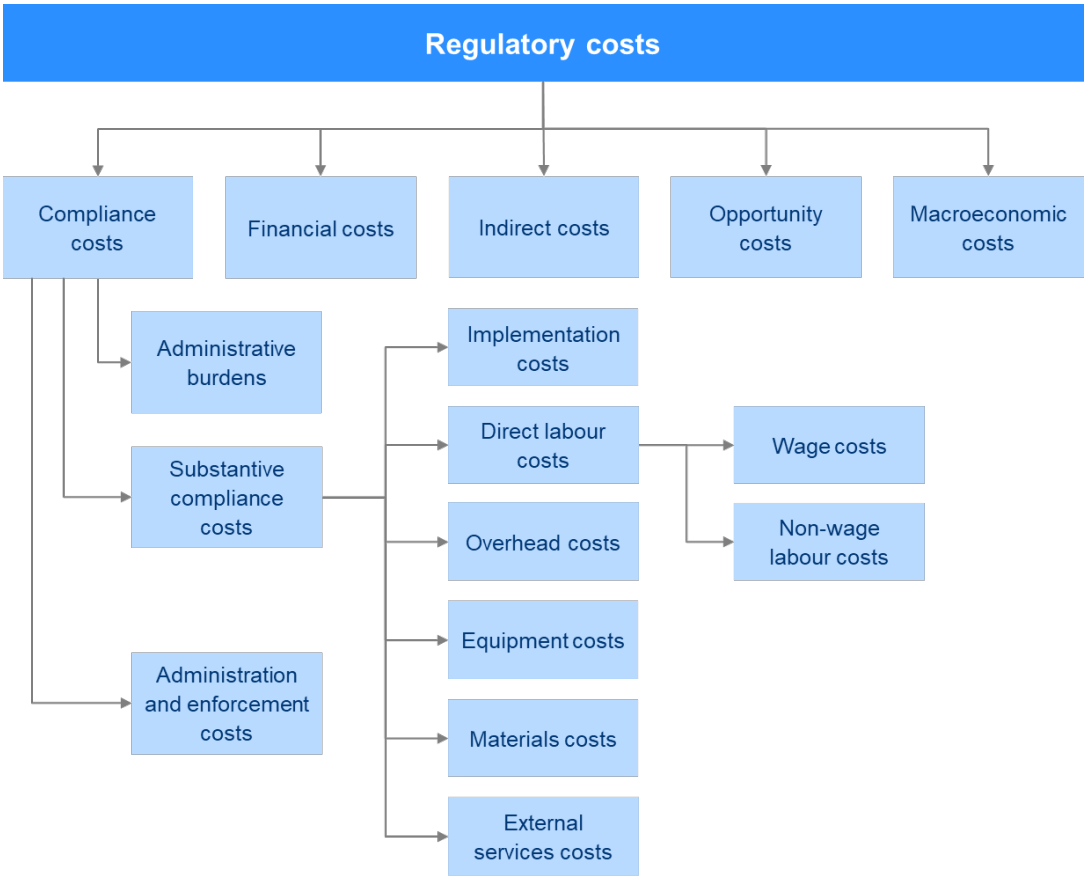

Exhibit 6.2: *Components of regulatory costs [Source: OECD]*

In identifying and quantifying the costs for an RIA, a number of questions should be considered.

Government / regulator costs	• What are the implementation and ongoing costs for the option? • Will any costs be recovered directly from regulated entities or will they be borne by government / regulators (and indirectly, taxpayers)? • Are education campaigns required to provide information to affected stakeholders? • What will be the costs of enforcement, if required? • Does the option shift costs or risks from one government entity to another?
Business costs	• What are the characteristics of the businesses that will be affected? • What is the size of the affected cohort? • What compliance costs will be borne by businesses? • Will any new burdens have a greater effect on certain types of business? • What proportion of any new costs is expected to be passed on to business customers or consumers? • Will businesses be prepared for any new requirements? • What changes, if any, will be required in business processes or production? • What impact will there be on competition or potential new entrants? • Will prices or quality of service be affected?
Consumer costs	• What are the characteristics of the people that will be affected? • What is the size of the affected cohort? • How will consumers be affected?
Societal costs	• Does the option shift costs from one group of entities to another? • Will employment levels be affected? • Will the option have an impact on the economy? • Are there health and safety costs that need to be considered? • Are there any environmental impacts?

It is also essential that the appraisal considers and compares the feasibility of the various alternative options. This may need to address factors such as available resources and realistic timeframes for implementation.

6.3 Benefits

As well as costs, the appraisal should consider benefits from the option's outcome. These may be more difficult than costs to measure, however they must be included in the analysis in order to effectively assess and compare the outcomes of the various options.

These benefits may include:

- a better or wider range of government services
- improved competition, lower prices, availability of better products, improved productivity or the creation of new jobs
- economic benefit through a reduction in risk or improvement in safety
- other benefits to affected groups – for example, introduction of eGovernment services may reduce the time required to attend government offices for administrative tasks
- windfall gains to any group – note that these may not be distributed fairly so there may be equity issues to be considered
- savings to government
- reduction in the regulatory compliance burden.

CAUTION: Behavioural research has found that it is common to over-estimate potential benefits and under-estimate potential costs.

6.4 Cost-benefit analysis

The cost-benefit analysis estimates the net benefit – benefits less costs – over a defined timeframe (typically several years). The analysis timeframe may be determined by the nature of the problem, a period of time that has been specified for a desired outcome, or may be guided by government recommendations for assessment of investments.

Annual costs and benefits, together with the net benefit, will need to be estimated for each year of the timeframe. The NPV is calculated from the annual net benefits, using an assumed discount rate.

If the NPV is greater than zero, then the option is considered to be viable. The option with the highest NPV will generally be the recommended solution, subject to other considerations, such as intangibles (Section 6.8), constraints and an assessment of the option's feasibility (Section 8.2).

Assessing net benefit of Number Portability in Turks & Caicos Islands

In response to a proposal to implement number portability (NP), in 2022 the Turks & Caicos Islands Telecommunications Commission undertook a consultative process which included an analysis of the costs and benefits of the proposed new policy[24]. This required a comparison of the likely costs of implementing and operating an NP service with anticipated competitive and consumer benefits.

Three types of benefits were identified:

- Type 1: benefits accruing to customers who switch operators but retain their number
- Type 2: efficiency improvements and any associated price reductions which result from increased competitive pressure
- Type 3: other resource savings that arise from fewer number changes, including fewer misdialled calls and changes to information stored in customer equipment.

The Commission focussed on Type 2 benefits on the basis that overseas experience suggested that the greatest benefits from introducing NP services are driven by market wide price and value enhancement. To estimate these benefits the Commission relied on benchmarks from similar overseas jurisdictions and defined a counterfactual: electronic communications markets with NP and markets without NP. Fixed and mobile products or bundles were then identified in each market and prices in the Turks and Caicos Islands

24 Turks & Caicos Islands Telecommunications Commission (2022), *Commission Assessment & Summary of Stakeholder Responses to the Number Portability Consultation Document issued by the Turks & Caicos Islands Telecommunications Commission on December 08, 2021,* 4 August 2022.

(TCI) were compared to prices in markets with and without NP. Scenario analysis was undertaken to determine potential realistic minimum and maximum estimates of the potential five-year pricing and value benefits to consumers and to the TCI fixed and mobile sectors.

On the cost side potential NP minimum and maximum implementation costs were estimated for fixed and mobile operators, the Commission and other potential stakeholders over a five-year period.

The Commission adopted conservative assumptions, finding that NP could deliver consumer and market benefits of between USD8.1 million and USD11.2 million over five years, while implementation costs were estimated at between USD3.35 million and USD4.70 million over the same time-period. As such the policy could be expected to generate a net benefit and therefore implementation was justified on the basis of the net economic and competition benefits to the sector. Following the consultation process, a decision was taken to implement NP with immediate effect[25].

6.4.1.1 Discount rate

A key input to NPV analysis in RIAs is the assumed discount rate. This reflects the opportunity cost of funding a particular project or business venture. An RIA aims to assess the societal benefits and costs of a proposed policy. As such typically it is appropriate to apply a social discount rate rather than a private sector or company-specific discount rate.

There are two main theoretical approaches:

- social opportunity cost of capital (SOC) – the foregone return to society incurred when public funds are used for a government project rather than invested privately

25 Turks & Caicos Islands Telecommunications Commission (2022), *Final Commission Assessment & Summary of Stakeholder Responses & Decision - Number Portability Consultation DECISION NOTICE 2022-3*, 20 October 2022.

- social time preference rate (STPR) – the rate of return for a public project which is judged to be acceptable for trading off current against future consumption / benefits.

The SOC is estimated with reference to market-based measures, such as the rate of return on low risk Government bonds[26]. There are alternative approaches such as the use of historical data and / or future expectations. A risk premium may be included.

The STPR is estimated using data on time preference, the elasticity of marginal utility of consumption, and the growth rate of the economy – the latter indicating the expected growth in consumption[27]. As this discount rate is not based on market risk, there is no intrinsic risk component.

The STPR approach normally yields lower values than the SOC approach and is more commonly used in the context of RIAs. The SOC approach is more appropriate for decisions involving public investment in projects that are essentially of a commercial nature.

Careful consideration must be given to selecting the appropriate approach and deriving an assumption for the discount rate as the chosen value has a significant impact on the results of an NPV calculation. Best practice is to undertake sensitivity testing of results using alternative assumptions for the discount rate.

Some governments and institutions have provided guidance on appropriate social discount rates, with the SOC ranging from 7% to 9% and the STPR ranging from 2% to 6% (Exhibit 6.3).

Q6. What would be an appropriate range for the discount rate for use in ECTEL Contracting States?

26 International Monetary Fund (2022), *PIMA Handbook: Public Investment Management Assessment*, 8 July 2022. Page 66.

27 *Ibid*.

Jurisdiction / source	*Social discount rate (real)*	*Notes*
Australia[28]	7% (SOC)	Applicable for years 1 to 30 and falling rates thereafter; sensitivity tests at 3% and 10%.
Canada[29]	7% (SOC)	Used for CBAs of regulatory proposals
	3% (STPR)	Used when factors other than economic opportunity cost are considered.
Denmark[30]	3.5% (STPR)	Applicable for years 1 to 35, 2.5% for years 36 to 70 and 1.5% thereafter.
Ireland[31]	4% (STPR)	Applicable for years 1 to 30, then declining rates.
New Zealand[32]	8% (SOC)	Remains constant over time.
	2% (STPR)	Applicable for years 1 to 30, 1.5% for years 31 to 100.
Peru[33]	8% (SOC)	Applicable for years 1 to 20; falls to 5.5% for years 21 to 49, 4.0% for years 50 to 74, 3.0% for years 75 to 99 and 2.0% for years 100 to 199.
United Kingdom[34]	3.5% (STPR)	Applicable for years 1 to 30; assumed to fall to 3.0% for years 31 to 75, and 2.5% thereafter.
Asian Development Bank[35]	9.0% (SOC)	Standard minimum acceptable rate of return.
	6.0% (STPR)	Standard for social sector projects (e.g. poverty alleviation).
		Country-specific rates may be applied.

***Exhibit 6.3**: Social discount rates for selected jurisdictions [Source: regulatory authorities, Asian Development Bank]*

28 Australian Government Office of Impact Analysis (2023), *Cost-benefit analysis*, July 2023. Available at https://oia.pmc.gov.au/resources/guidance-assessing-impacts/cost-benefit-analysis.

29 Treasury Board of Canada Secretariat (2022), *Canada's Cost-Benefit Analysis Guide for Regulatory Proposals*, 28 March 2022.

30 Finansministeriet (2023), *Vejledning I samfunds økonomiske konsekvensvurderinger*, June 2023.

31 See Evaluation/Appraisal: Applicable Rates published by the Irish Department of Public Expenditure. Available at: https://www.gov.ie/en/department-of-public-expenditure-infrastructure-public-service-reform-and-digitalisation/policy-information/project-evaluationappraisal-applicable-rates/.

32 See https://www.treasury.govt.nz/information-and-services/public-sector-leadership/guidance/reporting-financial/discount-rates.

33 Ministerio de Economia y Finanzas (2019), *Directiva General del Sistema Nacional de Programación Multianual y Gestión de Inversiones*, *Resolución Directoral N° 001-2019-EF/63.01*, 21 January 2019. Anexo 11: Parámetros de Evaluación Social.

34 This guidance was originally set in the 2003 Green Book for appraisal of alternative options for achieving Government objectives. A review of this guidance is currently underway. See: https://www.gov.uk/government/publications/green-book-discount-rate-review-2026/review-of-discounting-in-the-green-book-terms-of-reference.

35 Asian Development Bank (2017), *Guidelines for the economic analysis of projects*, 2017.

6.5 Multi-criteria analysis

Multi-criteria analysis (MCA) is a decision support tool that assesses and scores options based on a range of decision criteria. It can be used in cases where:

- it is not possible or feasible to conduct a CBA
- decision criteria are qualitative in nature, rather than quantitative
- decision makers need to consider a mix of qualitative and quantitative criteria.

The ITU notes that:

> Multi-Criteria Analysis is particularly useful when RIA has to be reconciled with specific policy objectives, and as such is used as an instrument of policy coherence. This method is more likely to capture distributional impacts, although this crucially depends on the criteria chosen for evaluating options. For example, in the ICT sector the criteria chosen to analyse options could include universal access, affordability, incentives to invest in new technologies/infrastructure, interoperability, etc.[36]

Indeed, the ITU recommends that ICT regulators use MCA for RIAs.[37] However, MCA has limitations:

- it can be highly subjective and open to bias
- it cannot undertake a 'value for money' assessment.

An RIA could use both tools, with both outputs being used in the decision-making process. For example, CBA could be used to quantify the net benefits, while MCA could undertake an assessment of qualitative factors.

An MCA will be based on the set of defined options (Section 5), with the components of the MCA being: objectives, criteria, measures, scoring system and weights.

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36 ITU (2014), *Using Regulatory Impact Analysis to improve decision making in the ICT sector*, September 2014, page 12. Available at https://www.itu.int/dms_pub/itu-d/opb/pref/D-PREF-BB.RPT5-2014-PDF-E.pdf.

37 *Ibid*, page 39.

All elements of the MCA should be clearly documented.

Objectives

An MCA can have just a single objective – this results in a single score for each option.

Alternatively, an MCA can include multiple objectives (as an example, social impact, economic impact, ease of delivery). This may be useful if the decision maker requires a breakdown of the MCA results at an intermediate level of granularity rather than just a single overall score or the individual criteria.

Criteria

The criteria are the outcomes or indicators used to compare how the various options perform in relation to the stated objective.

These criteria can be organised into mutually exclusive groups, with the groups being associated with separate objectives, as described above.

Measures

The measures are the metrics used to rate each criterion for the option. Each criterion may have a single measure, or it may have multiple measures, in which case they are combined to give a single criterion measure using defined weights.

Ideally measures should be quantifiable metrics, however in some cases qualitative metrics may be required. These metrics can come from a variety of sources, including national statistical offices, stakeholder consultation, surveys, expert judgement, previous analyses and literature searches.

Weighting

The weights represent the relative importance of each element to its parent in the MCA hierarchy (Exhibit 6.4). They are generally expressed as a percentage and are used to derive a combined metric (measure or score) for the parent element.

Scores

The score – for criteria, objectives or the option – is determined from the measures and weights:

- for a criterion, its score is the sum of the individual underlying measures multiplied by their associated weights
- for an objective, it is the sum of the individual underlying criteria scores multiplied by their associated weights
- for an option, it is the sum of the individual objectives scores multiplied by their associated weights.

In general, the option with the highest score will be the recommended solution, although decision makers may wish to take into account the separate objective scores (if multiple objectives are present).

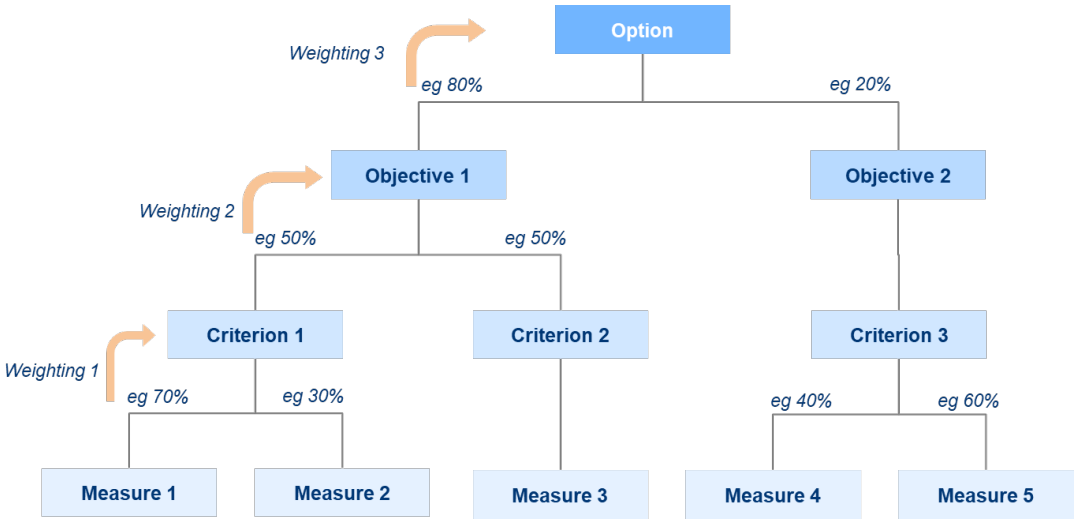

Exhibit 6.4: *Sample MCA process for an option with two objectives [Source: Network Strategies]*

Evaluating infrastructure sharing regulations in Peru using MCA

Since the introduction its RIA guidelines in 2018, the Peruvian regulator OSIPTEL has conducted RIAs to support the establishment of almost all new regulations, mainly using MCA.

One example was an investigation in 2022 to assess the introduction of regulations for sharing of towers and poles owned by electricity companies.[38] At that time, infrastructure sharing agreements between electricity companies and telecommunications operators was commercially negotiated. However there had been a significant increase in the number of requests to OSIPTEL to resolve disputes over negotiation of infrastructure sharing agreements which was causing delays in the deployment of networks and requiring significant OSIPTEL resources to resolve. OSIPTEL sought measures to reduce the period of negotiation and implementation of agreements, as well as to lessen its operational burden.

OSIPTEL identified four options for evaluation:

- Option 1 – *status quo* (no intervention)
- Option 2 – establish a single Sharing Offer with technical, economic and legal procedures, as well as rules applicable to the negotiation process
- Option 3 – each infrastructure service provider to implement its own Sharing Offer, that includes the maximum considerations and rules applicable to the negotiation process, as defined by OSIPTEL
- Option 4 – establish a Reference Sharing Offer, with legal, technical and economic terms approved by OSIPTEL, which could be used and tailored to the operations of individual infrastructure service providers.

38 OSIPTEL (2022), *Informe que sustenta la norma que establece la Oferta Referencial de Compartición (ORC) aplicable a la compartición de infraestructura eléctrica utilizada para el despliegue de redes de telecomunicaciones*, Informe No 139-DPRC/2022, 25 August 2022. Available at https://www.osiptel.gob.pe/n-143-2022-cd-osiptel/.

Five assessment criteria were defined. Each criterion was scored between +3 (highest positive rating) and -3 (lowest negative rating), with zero denoting a neutral score. The scores were assigned according to an evaluation by OSIPTEL.

- Criterion 1 – the degree to which the proposed option reduces discrepancies in the negotiation process.
- Criterion 2 – the extent to which the proposed option establishes measures to ensure the availability of timely information for the access seeker, in order to be able to specify in detail their request for access and use of infrastructure.
- Criterion 3 – the degree to which the proposed option allows a more rapid signing of contracts or the implementation of mandates
- Criterion 4 – the degree to which the proposed option encourages the deployment of broadband networks by telecommunications operators.
- Criterion 5 – the degree to which the proposed option is efficient in its implementation.

Each criterion was assigned an equal weight. The results of the MCA (Exhibit 6.5) identified Option 4 as the preferred option.

Criterion		*Option 1*	*Option 2*	*Option 3*	*Option 4*	*Weighting*
1	Reduced discrepancies in operating procedures and pricing	0	+2	+2	+1	0.2
2	Improved availability of information	0	+1	+1	+1	0.2
3	Speed for the signing of contracts and mandates	0	+2	+1.5	+2	0.2
4	Incentives for the use of existing infrastructure for broadband network deployment	-2	+2	+1.5	+2	0.2
5	Efficiency in the process for the implementation of a solution	0	+2	+1	+3	0.2
Weighted score		**-0.4**	**+1.8**	**+1.4**	**+2.0**	

Exhibit 6.5: *MCA analysis for infrastructure sharing options [Source: OSIPTEL]*

6.6 Risk and uncertainty

It is recommended that the appraisal includes an assessment of risk and uncertainty. The appraisal will involve a number of assumptions and inputs in the quantification of both costs and benefits. It is therefore important to explore the sensitivity of the results to this data.

Steps for a risk analysis may include:

- Identify assumptions and inputs that may be subject to uncertainty.

- Sensitivity testing – test the impact on results if key inputs or assumptions are adjusted, one at a time. If the results are particularly sensitive to the adjustments, assess whether it is proportionate to improve the input to reduce uncertainty – for example, through further research, stakeholder consultation or literature reviews – or to specify mitigation procedures in the implementation plan (Section 8.2) to reduce risk.

- Scenario analysis – test the impact on results for a range of different combinations of values for the inputs and assumptions. Assess the likelihood that the actual result will fall within the range of the scenario outputs.

- Worst case – substitute the most pessimistic estimates for all key assumptions and inputs. Assess the likelihood of the worst case occurring.

Note: Sensitivity analysis can be used in both CBAs and MCAs.

6.7 Distributional analysis

The impact of a proposed option may not be spread evenly across affected stakeholders. These distributional effects could be aligned with factors such as geographic location, industry sector, business size or population characteristics (such as age, income or household size).

Decision makers may often be concerned about the distributional impacts of proposed policies and regulations. In cases where a proposal may have disproportionate impacts on different groups, it is important that the RIA considers these effects.

A CBA does not incorporate any assessment of distributional impacts. Where these are material, it may be necessary to supplement the CBA with a distributional analysis in order to ensure that decisions are supported with relevant information. MCA may be more suitable than CBA in incorporating distributional analysis, however this depends on the definition of the criteria used in the analysis.

Distributional analysis is also recommended for proposals that have a re-distributional objective.

This analysis seeks to identify the impact of the proposed option on different population segments. It may be quantitative or could incorporate qualitative assessments of the impacts on the different segments.

When following a CBA, there are four steps in a distribution analysis:

- identify the key stakeholder groups that stand to gain or lose
- allocate the quantitative and qualitative costs and benefits (including transfer payments) identified in the impact analysis to one or more of these groups
- consider whether any of these costs or benefits may be shifted to another group
- address any uncertainty in the distribution of costs and benefits to stakeholders.

With appropriately defined criteria, MCA can be used for a distributional analysis. This can be a separate analysis (if following a CBA), or the criteria can be included within the MCA used for the RIA.

6.8 Qualitative impacts

Some potential effects of proposed policies might be expected to have a significant impact on outcomes, yet these may be difficult or even impossible to quantify or monetise. Examples include:

- **welfare effects:** changes in consumer and / or producer welfare, or total societal welfare (aggregate net consumer and producer welfare, taking into account any externalities[39])
- **spillover effects:** a form of externality, these are indirect consequences of the proposed regulation which manifest in sectors or markets other than the target sector or market
- **intangibles:** non-market effects which are not directly observable, such as:
  - the impact on consumers of increased network reliability
  - the influence of the policy or regulation on perceptions of privacy issues, digital trust and security
- **unintended consequences:** market, technical or behavioural responses which may compromise or undermine the objectives of the proposed regulation.

Best practice is to attempt quantification where at all possible, but otherwise to adopt a structured method of qualitative analysis, such as MCA (Section 6.5). Note that while there are potential pathways for quantification of some of the above, in many instances these are not practical for the purposes of RIA.

As an example, economists often endeavour to quantify welfare effects using approaches based on consumer and producer surplus. Consumer surplus is the maximum price that consumers are willing to pay for a good or service less the price actually paid. Producer surplus is the difference between the minimum price that producers are willing to sell their product and the actual price. In the context of an RIA an economist would seek to estimate the change in consumer and producer surplus resulting from the new regulation.

Some RIAs incorporate such analysis, although this is by no means a common occurrence for a number of reasons – in particular:

- difficulties in assembling the required data – for example, demand elasticities
- constraints on time and resources for completing the RIA – inclusion of consumer / producer surplus estimation typically requires significant primary research.

Nevertheless the underlying reasoning used in this type of analysis may be applied qualitatively in an MCA. For example, the proposed policy or regulation may be likely to

39 An externality is a cost or benefit associated with the production of a good or service which is not captured in the price. It may be welfare enhancing (positive) or detrimental to welfare (negative).

incentivise service providers to reduce prices which will in turn increase consumer surplus while simultaneously decreasing producer surplus. The benefit to consumers is highly likely to outweigh the cost to producers as consumers of key electronic communications services tend to be relatively price-sensitive, so that even a small price reduction may have a significant impact on demand. This means that decreased margins for suppliers may be accompanied by increasing sales volumes, reducing the overall loss to service providers. Therefore a net welfare gain may be expected. Note that these are static (short-term) efficiency gains, and it may also be important to consider the impact on the market via the impact on dynamic efficiency (longer-term investment and innovation).

Q7. Are the processes described in this section for assessment of net benefit / cost sufficiently clear and workable or is further clarification required? Are there any additional tools which would add value to the appraisal process if included in the RIA framework?

RIA for new technical standards for telecoms facilities in New Zealand

In 2025 the New Zealand Government reviewed options for amending technical standards for telecoms facilities[40] encompassing a *status quo* and two other options:

- Option 1: updating existing activity standards to better reflect current technology
- Option 2: expanding the scope of regulations to permit various low impact telecoms facilities in more areas, supporting broader housing / growth objectives.

In preparing an RIA for consultation, the difficulty of quantification of opportunity costs and dynamic efficiencies in the analysis was acknowledged.

> Based on the evidence provided by telecommunication providers and drawn from MfE's [Ministry for the Environment's] resource management consents dataset, the status quo is resulting in costs and delays in rolling out or upgrading necessary telecommunication services. It is likely that these cost inefficiencies contribute to price increases for telecommunication services for households and businesses. This has cost-of-living implications for New Zealanders. These cost inefficiencies also increase the likelihood that network operators forgo or delay important investment in upgrading or expanding telecommunications networks. However, it is difficult to quantify the impact of these inefficiencies or lost opportunities on New Zealand households and businesses.

Largely based on qualitative analysis option 2 was recommended. The cost-benefit analysis encompassed identifying possible effects and commenting on the likelihood of an impact and whether the impact is likely to be low, medium, or high. Option 2 involves reducing consenting and planning costs and providing process certainty. As such, more efficient deployment of telecoms services was identified as a key non-monetised benefit, including roll-out of 5G services to more locations, battery upgrades for resilience, and rural connectivity enhancements.

40 Ministry of Business, Innovation and Employment and Ministry for the Environment (2025), *Interim Regulatory Impact Statement: Amendments to the Resource Management (National Environmental Standards for Telecommunication Facilities) Regulations 2016*, 16 April 2025.

7 Stakeholder consultation

7.1 Overview

Consultation is an important component of RIA. While the EC Bill requires that public consultation is to take place in relation to obligations on parties with significant market power[41] and universal service[42], best practice is to consult with stakeholders during the development of the RIA.

Outcomes will be improved with consultation, as it will:

- test the accuracy of the underlying data and assumptions
- ensure that every practical and viable policy alternative has been assessed
- demonstrate that a range of stakeholder views has been considered
- assist in ensuring that there are no barriers to implementation or unintended consequences.

7.2 Consultation: how and when

While consultation can take many forms (Exhibit 7.1), it must be appropriate for stakeholders, including those that could be affected by the policy alternatives. Stakeholders must also be given sufficient time to respond to the information provided within the consultation process.

41 OECS (2020), *Electronic Communications Bill – revised*, 3 July 2020, Section 95(6).

42 *Ibid*, Section 99(2).

	When is it appropriate?	*What forms can it take?*
Full public consultation	• **Default approach** • When transparency and public accountability of decision making is the most important priority. • When the integrity of the decision process will not be compromised by early public scrutiny.	• Public meetings and briefings. • Calls for submissions. • Industry or sectoral meetings and briefings. • Direct communications to affected entities. • Media and advertising. • Large scale social media activities.
Targeted consultation	• When an affected group of stakeholders is in a small or well defined geographic area or business sector. • When consultation should be contained so that effort is not wasted involving unaffected parties.	• Face-to-face meetings, or telephone surveys of affected people. • Other direct communications to affected entities. • Small scale social media activities. • Direct public engagement of peak bodies or other representative groups.
Confidential consultation	• When the sensitivity of the issues requires an assessment of public sentiment or to inform affected entities discreetly without needlessly triggering widespread concern, anger or confusion among affected households or businesses.	• Narrow or in-camera consultation of select groups of opinion leaders or peak bodies. • Quantitative research into the general views and likely responses of affected entities or areas in which two-way dialogue is not sought. • Alternative forms of consultation must be followed by broader post-announcement consultation on transition or implementation issues.

***Exhibit 7.1**: Consultation approaches [Source: Australian Government Office of Impact Analysis]*

At what stages in the RIA process should consultation occur? This will depend upon the nature of the problem being addressed and the information available to ECTEL and the NTRCs. Key points within the RIA process for which consultation may be valuable include:

- identifying policy options
- data collection for estimating the net benefit
- reviewing draft decisions.

Note that after consultation it may be necessary to revisit previous steps in the RIA process, in order to take into account any new information or stakeholder views, including potential new options.

The consultation process should be documented, to provide decision makers with information on:

- the nature and format of the consultation
- the range of views – both positive and negative – expressed by stakeholders
- areas of agreement or disagreement
- whether any changes have been made to the RIA as a result of the consultation.

Q8. At what stages during the RIA process would it be appropriate to conduct stakeholder consultation?

8 Determine the best option and plan implementation

8.1 Making a recommendation

The option with the greatest net benefit will normally be the recommended solution, however there may be other factors to be considered in making the decision:

- ease of implementation
- delivery
- cost minimisation
- budgetary, resource or other constraints
- Government priorities
- international standards or obligations

In these cases, judgement will be required with the reasons clearly explained.

Q9.	Are there any other factors that should be considered as part of the decision making process?

The decision and supporting evidence should be fully documented, including:

- recommended option
- alternative options considered
- methodology
- data inputs and assumptions
- risk analysis
- any caveats associated with the methodology or data
- consultation processes and feedback received
- impact upon business and the community and how this will be mitigated.

8.2 Implementation plan

An implementation plan is essential for successful delivery of the recommended policy option. It should include:

- project schedule and timeline
- resource requirements
- governance arrangements
- critical success factors
- potential challenges and mitigation strategies
- stakeholder engagement strategy, if required.

8.3 Evaluation plan

In addition to the implementation plan, it is essential to prepare an evaluation plan prior to implementation. This will describe how the chosen option will be monitored, in order to assess its success (or failure) in meeting the desired objectives.

The evaluation plan should address:

- how the chosen option will be monitored and evaluated against the project objectives
- success metrics
- data requirements and definitions
- data sources
- treatment of confidential or sensitive data
- frequency of reporting
- distribution of reports
- information gaps and how these will be addressed.

If information is to be collected from stakeholders, it is important that the reporting requirements do not impose an unreasonable burden.

Q10. Data requirements involve balancing the need for timely information against the costs and burden of data collection. What would be a realistic schedule for supplying data – monthly, quarterly, annually?

Annex A: RIA checklist

This checklist for conducting and documenting RIAs is largely based on the RIA processes used in Australia and New Zealand.

A.1 Define the problem

- Clearly identify and define the problem to be solved.
- Demonstrate why it is a problem: are there risks or other dangers to be mitigated?
- Offer evidence about the magnitude of the problem and the costs of not doing anything.
- Describe the people, businesses or community organisations affected by the problem.
- Identify if there is any existing legislation that has sought to address the problem and explain how it is being enforced at present.
- Describe any other government measures that have sought to address the problem.
- Have any non-regulatory measures been attempted?
- Establish why existing legislation or other measures are not working.
- Identify the available data and set out a plan to close any gaps that need to be addressed within the RIA process and / or for subsequent project evaluation.

A.2 Establish the policy objectives

- Describe why there is a legitimate reason for government to intervene, including demonstrating that government has the capacity to intervene successfully.
- What are the intended outcomes of the change?
  - clearly identify any objectives, outcomes, goals or targets – these must be specific enough to be weighed up against each other and the costs of each option.
- Identify any constraints or barriers to achieving the desired outcome.
- How will success or failure be measured?
  - what indicators (and targets) will be used to measure this?
- Identify alternatives to government action – or explain why there are no alternatives.

A.3 Identify the policy options

- Identify a range of genuine and viable alternative policy options.
  - include a 'do nothing' or *status quo* option (the counterfactual)
  - consider non-regulatory options
- Demonstrate that each of the viable options can achieve the stated policy objectives.
- Give the decision maker confidence that all of the available options open have been identified.
- Distinguish the context for the options considered (for example, the policy may be an election commitment).

A.4 Estimate the net benefits for each option

- Provide a clear estimate of the net benefit of each option. Where a monetised net benefit has not been established, provide a detailed explanation of the steps taken to try to establish a net benefit figure and the reasons why this has not been possible.
- Identify who is likely to be affected by each option and assess, where significant, the economic, competition, social, environmental or other costs and benefits as well as how those costs and benefits are likely to be distributed.
- Describe the methods used to conduct the analysis.
- Analyse qualitative impacts as well as quantitative impacts.
- Assess the feasibility of each option
  - can it be implemented within the required timeframe?
  - what constraints or barriers may affect implementation?
- Provide information on any applicable international standards and whether the policy proposal differs from or adopts those standards.

A.5 Stakeholder consultation

- Explain the purpose and objectives of consultation.
  - if no consultation was conducted, explain the reasons.
- Outline the format of the consultation and the length of the consultation period.
- Outline the principal views of stakeholders

  - summarise the areas of agreement as well as areas of difference.
- Describe how the preferred option has been modified to take account of stakeholder views, or why dissenting views have not been adopted.

A.6 Determine the best option and plan implementation

- Indicate which of the identified options is recommended.
- Explain the decision making process and clearly outline any:
  - caveats or qualifications
  - assumptions
  - unresolved issues
  - weightings applied to evidence or arguments.
- Plan the approach for closing any information gaps during implementation to support successful evaluation.
- Explain the extent to which each option achieves the objectives (Section 4) and the balancing of costs and benefits against these objectives.
- Explain how the recommended option will be implemented, including a detailed plan for complex proposals, and covering:
  - any potential implementation challenges
  - implementation risks: assess their likelihood, consequences and management
  - any transitional arrangements in moving to the new arrangement.

Annex B: Further reading

Australian Government Office of Impact Analysis (2023), *Australian Government Guide to Policy Impact Analysis*, March 2023. Available at https://oia.pmc.gov.au/resources/guidance-impact-analysis/australian-government-guide-policy-impact-analysis.

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OECD (2022), *Establishing Regulatory Impact Assessment in Mauritius*, 5 April 2022, page 80. Available at https://www.oecd.org/en/publications/establishing-regulatory-impact-assessment-in-mauritius_2d072a27-en.html.

OECD (2025), *Introducing Proportionality to Thailand's Regulatory Impact Assessment: optimising analytical resources*, 30 April 2025. Available at

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