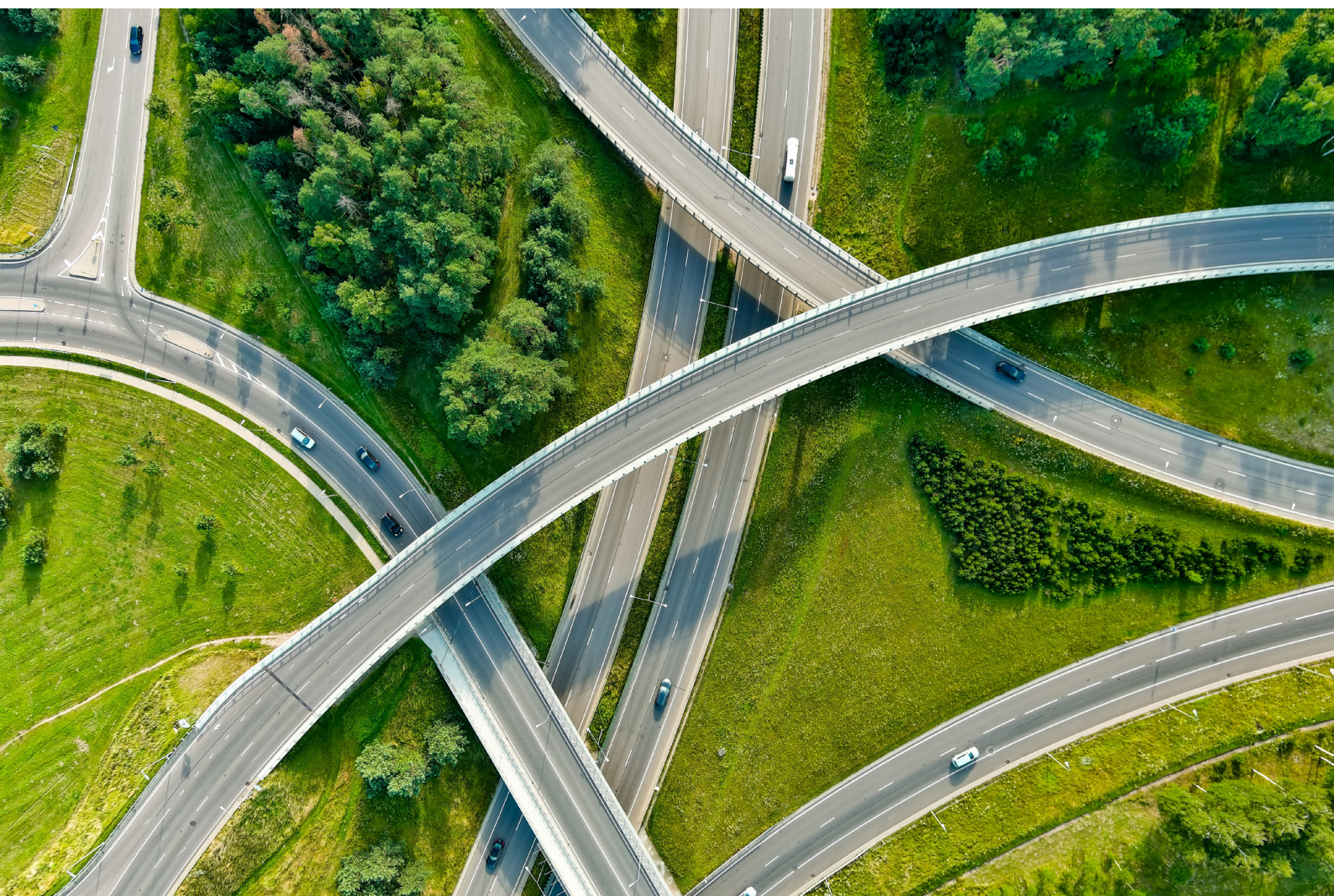


# APPLYING REGULATORY IMPACT ASSESSMENT AT REGULATORY AUTHORITIES

## A Methodology for Assessing the Economic, Social and Environmental Impacts of Regulation

TECHNICAL PAPER

October 2025



# **Applying Regulatory Impact Assessment at Regulatory Authorities**

A methodology for assessing the economic, social and  
environmental impacts of regulation

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# Foreword

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

Whilst some national regulatory authorities (NRAs) are advanced in their use of RIA and appraisal techniques, the reported prevalence of structured RIA processes to systematically inform decisions on regulatory design and delivery within NRAs remains low. Surveying suggests few NRAs report using more advanced quantitative-based methods for assessing the impact of their decisions or extending their impact assessment to cover social and environmental criteria.

The methodology set out in this technical paper has been prepared to help NRAs and other regulatory bodies implement regulatory impact assessment more systematically. It is based on a RIA methodology initially prepared by the OECD for the Portuguese Energy Services Regulatory Authority (*Entidade Reguladora dos Serviços Energéticos*, ERSE) as part of the project: “Improving Regulatory Impact Assessment (RIA) Practices of the Portuguese Energy Regulator” (TSI reference 24PT04). The project was funded by the European Union via the Technical Support Instrument, and implemented by the OECD, in co-operation with the European Commission. The project’s outcomes included the adoption of a standardised methodology for conducting regulatory impact assessment by ERSE. This technical paper also supports another aim of the TSI project, that is, to allow ERSE to share learnings with other European energy regulators to foster a culture of RIA among peers and facilitate knowledge exchange and capacity building.

The model methodology sets out the key phases, options and considerations for conducting RIA. The methodology has been tailored to the needs and specifications of NRAs. Given the origin of the paper, the examples provided throughout the methodology primarily derive from the electricity, gas, fuels, and electric mobility sectors. Two specific aims – to incorporate social and environmental criteria and build a methodology suitable for use by a regulatory authority (rather than a central government agency) – differentiate the scope of this methodology from other guidance provided by governments and the OECD.

The methodology contained in the technical paper was prepared by Alexander Roberts and Yola Thuerer, Policy Analysts, under the supervision of Giuseppa Ottimofiore, Senior Policy Analyst, and Daniel Trnka, Deputy Head of Division, Regulatory Policy Division, OECD Public Governance Directorate. Substantive comments and input were provided by Stéphane Jacobzone and Bagrat Tunyan, OECD Public Governance Directorate. Jennifer Stein and Andrea Uhrhammer co-ordinated the editorial process. Thanks are extended also to the staff and board members of the Portuguese Energy Services Regulatory Authority (ERSE) and the Advisory Group of TSI project 24PT04, the outputs of which formed the basis of this paper.

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# Key terms and abbreviations

**Appraisal:** the structured evaluation of the potential impacts and value of a proposed policy or regulation.

**Baseline:** the description, quantitative or qualitative, of the current situation prior to potential policy or regulatory intervention.

**Benefit-Cost Ratio:** a measure of value for money used in cost-effectiveness analysis calculated by dividing the quantified benefits by the costs to produce a ratio.

**Best Practice:** a method or approach that is widely recognised as the most effective based on evidence and experience.

**CBA, Cost-Benefit Analysis:** an appraisal method that compares the total expected costs and benefits of a policy in quantified, usually monetary terms, to determine the net value.

**CEA, Cost-Effectiveness Analysis:** an appraisal method that compares the cost of different options relative to a single, non-monetised outcome.

**Co-regulation:** a regulatory approach involving shared responsibilities for design and enforcement between government and industry or expert stakeholders.

**Counterfactual:** a hypothetical scenario used during appraisal to assess what would occur in the absence of the proposed regulatory intervention, incorporating and extending baseline measurements to consider how the status quo will evolve over time.

**Decision Proposal:** a formal recommendation outlining a preferred regulatory option and the supporting evidence.

**Economic regulation:** refers to the oversight of market functioning, behaviour and outcomes in a regulated economic sector, including network and utility sectors such as energy, and the relevant regulatory framework and functions.

**Effectiveness:** refers to the degree to which an intervention is achieving its objectives.

**Efficiency:** refers to the extent to which a regulation achieves desired outcomes considering the resources used. Efficiency is higher when a lower level of resources is used to achieve the same result, or a better result is achieved with the same level of resources.

**General Equilibrium Model:** refers to an economic model that evaluates the simultaneous interactions and adjustment across all markets in an economy, capturing both direct and indirect effects of a policy or regulatory change.

**LCA, Least-Cost Analysis:** An appraisal method that compares the cost of different options to achieve a specific objective, considering only costs, identifying the option that achieves the objective at lowest total cost.

**MCA, Multi-Criteria Analysis:** a hybrid appraisal method that evaluates options against multiple, often non-monetary, criteria, including economic, social, environmental dimensions. The method typically utilises a weighted scoring system rather than a single monetary metric.

**Means-based regulation:** a regulatory approach that prescribes specific inputs, actions, methods and technologies that must be used to achieve compliance or certain regulatory objectives.

**NPV, Net Present Value:** is the result of the present value of benefits minus the present value of costs, where present value is the current worth of a future impact (benefit or cost), discounted using a specific interest rate to account for time preference.

**NPSV, Net Present Social Value:** the discounted net benefits of a regulation to society as a whole, meaning social and environmental impacts are incorporated in the calculation.

**NRA, National Regulatory Authority:** an authority, usually an independent or autonomous ministerial body, with relevant responsibilities for the design, delivery and management of sectoral regulations for whom this methodology has been drafted.

**Partial Equilibrium Model:** refers to an economic model that analyses the impact of a policy or regulatory change on a specific sector or market in isolation, assuming other markets remain unaffected.

**Performance-based (outcome-based) regulation:** a regulatory approach, or set of approaches, concerned with achieving specific outcomes rather than prescribing how to achieve them (as in means-based regulation).

**Preferred Option:** the regulatory choice that is feasible and offers the best balance of benefits and costs, risks and uncertainties.

**Problem Definition:** a clear statement describing the issue a regulation seeks to address, including its scope and severity, who is affected and how.

**Process-based regulation:** regulation that specifies the procedures and methods that must be followed by regulated entities.

**Resource Cost:** the total cost of inputs used to implement or comply with a regulation.

**RIA:** regulatory impact assessment, an integrative tool and framework for supporting evidence-based regulatory design and decision-making utilising qualitative and quantitative assessment techniques

**Regulatory Delivery:** the implementation, including monitoring, enforcement and ongoing management of regulations to achieve policy and regulatory objectives.

**Self-regulation:** a regulatory approach or system where an industry or sector designs and enforces its own rules and standards, for example via codes of conduct, usually supported by reputational incentives and competition.

**Short-Listing:** the process of narrowing down regulatory options for more detailed analysis (appraisal) based on certain criteria.

# Executive summary

RIA is a valuable framework and tool for ensuring evidence-based decisions on the design, delivery, and management of regulation. This paper aims to help national regulatory authorities (NRAs) embed RIA in their decision-making processes by providing a model RIA methodology. As such, the methodology details the essential RIA steps that NRA practitioners should follow to integrate RIA into their regulatory decision-making processes, and the tools that are available to help achieve this. This model RIA methodology has been designed to be as simple and flexible as possible whilst covering all the key features of RIA. It assumes NRAs are not already subject to a prescribed or mandatory process for RIA and is intended to be applied in situations where the NRA has full decision-making authority, acknowledging that these situations tend to be sector- and authority-specific, and may focus on, for example, licensing, tariff-setting, pricing, and other aspects of economic regulation.

The paper is structured into five chapters, each corresponding to a key stage in the RIA process, as follows: problem definition; counterfactual and options identification; appraisal; design and delivery considerations; and decision proposal. At each stage, the methodology sets out the different tasks, options and approaches available, and signals relevant tools and resources to practitioners. Before discussing the RIA steps, the methodology addresses the issue of screening and the applicability of RIA to NRA processes. A final chapter discusses the application of quality assurance mechanisms.

## Key takeaways

- RIA can be understood as both a collection of tools (a “toolbox”) and a framework for better decision making – it involves adopting a mindset that sees an informed, evidence-based process as necessary for better regulation and better outcomes, whilst accepting such an approach can increase the time and resources required to finalise a decision.
- A full cost-benefit analysis (CBA) is not always necessary as part of RIA; other less technical or qualitative approaches may be valid, and appropriate for decisions carrying lower risk and lower anticipated impact.
- Adopting a proportional approach to RIA will ensure the framework and tools are used appropriately and that benefits are realised without disproportionately increasing burden.
- The RIA process is iterative – some steps may be performed repeatedly as feedback is received – and the processes of data collection, consultation, and communication should be understood as a varying but continuous effort.
- All the methodological steps detailed in the paper should be addressed in some form when a RIA is deemed applicable to the regulatory decision in question.

In addition to the guidance provided in relation to each of the RIA phases set out below, the paper’s annexes provide a RIA template, quality assurance checklist, and implementation toolbox to further support NRAs and practitioners to implement RIA in their institutional context.

For NRAs in the process of strengthening their RIA processes, it is recommended that supplementary materials are developed to support implementation and provide practitioners with additional guidance. This supplementary guidance may include information on the Better Regulation Framework of the relevant country and the implementation enablers (data collection, stakeholder engagement, and communication processes), as well as further technical guidance for conducting appraisal, using design principles, and behavioural insights.

The following tasks are identified and discussed within the paper as key components of implementing the RIA process in the NRA context:

### **Screening**

- Assess whether the decision or regulatory proposal is subject to a mandatory RIA. If so, identify in what form.
- Otherwise, develop a preliminary assessment of potential impact and apply screening criteria to judge whether the RIA framework should apply or not.
- Consult bodies responsible for the internal oversight of the RIA process on the rationale for not conducting RIA or inform of start of RIA process.
- Consult guidelines and scope out approach to RIA based on the principle of proportionality.

### **Problem definition**

- Describe the nature and extent of the problem to be addressed, preferably in quantitative terms.
- Establish the rationale for intervention by the NRA, considering the NRA's duties, organisational objectives and comparative practices. Informed by analysis of the regulatory stock and policy context, and leveraging stakeholder expertise and input.
- Define the objective(s) and goal(s) of the intervention.

### **Counterfactual and options definition**

- Define the counterfactual (or “do-nothing”) scenario, using evidence and analysis where possible.
- Develop intervention options, including non-regulatory and more flexible regulatory alternatives where relevant, leveraging stakeholder expertise and input.
- Define and justify a short-list of plausible and significantly different options for appraisal.

### **Appraisal**

- Identify the relevant impacts (costs and benefits) of the relevant short-listed options.
- Choose the appropriate appraisal methodology, considering both quantitative and qualitative approaches.
- Consider need for the analysis of specific impacts and wider impacts, including dynamic impacts for connected markets.
- Conduct analysis in line with NRA guidance, consulting experts when required.
- Summarise results.

### **Delivery and feasibility**

- Test delivery and feasibility from a policy and institutional perspective, engaging relevant stakeholders.
- Test coherence of preferred option(s) with good practices on the design of compliance and enforcement regimes.
- Assess feasibility of designing an appropriate monitoring and evaluation framework for the preferred option(s).

**Decision proposal**

- Identify the preferred option following appraisal / consultation.
- Draft a clear presentation of the RIA process and results for stakeholders (pre- / post-consultation).
- Align presentation and finalisation of RIA with the NRA's public consultation policy and communications guidelines.

# Introduction

Across OECD countries, network sectors like energy, water, transport and telecommunications play a crucial, cross-cutting role in enabling social and economic activity and growth. At the same time, these sectors are undergoing transformation and subject to disruption due to, among other factors, policy action on climate change and the use of emerging technologies. Decarbonisation of the energy sector, for example, is one of the primary strategies to achieve emissions reduction targets in many OECD countries, and future decisions around investment in transmission, distribution, and sustainable energy infrastructure, as well as the regulation of changing market operations, will impact upon the success of green transition (IEA, 2021<sup>[1]</sup>) (OECD, 2024<sup>[2]</sup>).

Such key decisions in the face of uncertainty requires sectoral regulators and independent regulatory authorities, to develop evidence-based processes that contribute to the design of regulation that is aligned with national objectives and assesses not only economic criteria but also the environmental and social impacts associated with a given course of action (OECD, 2023<sup>[3]</sup>). Regulatory impact assessment (RIA) is a critical tool for ensuring evidence-based decision-making and fostering accountability, transparency, and public trust in the regulatory process (OECD, 2020<sup>[4]</sup>). Whilst some national regulatory authorities (NRAs) are advanced in their use of RIA and appraisal techniques, the prevalence of structured RIA processes to systematically inform decisions on regulatory design and delivery within NRAs remains low, according to surveying of energy regulators in Europe (CEER, 2023<sup>[5]</sup>).

Assessing the impact of decisions that relate to the design of new regulation or changes to existing regulation can significantly influence how economic, social and environmental objectives are balanced, and how successfully decisions are implemented and delivered within the regulated sectors. By systematically evaluating regulatory impacts *ex ante*, RIA supports the development of regulations that are effective, transparent and inclusive.

Sectoral regulators, for examples those with responsibility for the energy sectors (including electricity, gas, fuels, and electric mobility), make decisions that are different in scope and impact to those made by institutions operating in different sectors and at a different level of governance (i.e. policymakers in central government with responsibilities for passing primary legislation) (OECD, 2024<sup>[2]</sup>). As such, NRAs should be proactive in screening for opportunities to apply RIA across their authorities to bring the greatest benefit to decision-makers, and ultimately to regulated entities, consumers and society as whole.

## What is RIA?

RIA can be understood as both a collection of tools (a “toolbox”) and “framework” for better decision-making. When following good practice, a RIA constitutes 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. 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.

Overall, RIA involves adopting a mindset that sees an informed, evidence-based process as necessary for better regulation and better results, whilst accepting such an approach can increase the time and resources required to finalise a decision. Due to a focus on cost-benefit analysis (CBA) in the literature, RIA is often associated with a technical quantitative assessment of impacts, based on principles of welfare economics. However, while the use of CBA is the main form that RIA can take and applying the RIA mindset described above, in some limited cases, alternative less technical approaches may be considered. Nevertheless, CBA, alongside other appraisal techniques involving economic modelling, remains an important and powerful tool for RIA practitioners.

## What is a RIA methodology?

This RIA methodology establishes a model RIA process and toolbox. As such, the methodology details the essential RIA steps that NRA practitioners should follow to integrate RIA into their regulatory decision-making processes, and the tools that are available to help achieve this.

The document is structured into chapters, each corresponding to a key stage in the RIA process, as follows: Problem Definition; Counterfactual and Options Identification; Appraisal; Design & Delivery Considerations; and Decision Proposal. At each stage, the methodology sets out the different tasks, options and approaches available, and signals relevant tools and resources to practitioners. Before discussing the RIA steps, the methodology addresses the issue of screening and the applicability of RIA to NRA processes. A final chapter in the document discusses the application of quality assurance mechanisms. Various templates are provided in the document annex to help practitioners implement the standard assessments and tests required at each stage of RIA.

This model RIA methodology has been designed to be as simple and flexible as possible whilst covering all the key features of RIA. As such, the methodology describes the different options and approaches available at each stage without mandating any particular approach.

It should be noted, as for the policy and regulatory cycle in general, that the RIA process is iterative – some steps may be performed repeatedly as feedback is received, whilst some activities will be best performed in tandem. The enabling processes of data collection, consultation, and communication should be understood as a varying but continuous effort throughout the RIA.

Whilst choices can be made at each RIA stage regarding the specific analytical approach or relative effort invested, all the methodological steps detailed in the document should be addressed in some form when a RIA is deemed applicable to the regulatory decision. However, the principle of proportionality applies and is essential to the successful implementation of the methodology. The principle of proportionality is reflected in both the screening criteria and the listing of various options and approaches at each RIA stage. Furthermore, the methodology details several instances where RIA is not applicable and would likely introduce unnecessary burden. However, overall, use of the RIA methodology as a decision-making tool and framework should be embedded into an NRA's day-to-day activities. By default, a "de minimis" assessment, or assessment proportional with a low-impact intervention, is expected to be conducted, except where other criteria are met (see Screening).

### Box 1. Understanding RIA: Summary for practitioners

- RIA can be understood as both a **collection of tools (a “toolbox”)** and **“framework” for better decision-making** – it involves adopting a mindset that sees an informed, evidence-based process as necessary for better regulation and better results, whilst accepting such an approach can increase the time and resources required to finalise a decision.
- A full Cost-Benefit Analysis (CBA) is advisable as part of RIA, but may not always be fully feasible.
- Adopting a proportional approach to RIA will ensure the framework and tools are used appropriately and that benefits are realised without disproportionately increasing burden.
- **The RIA process is iterative** – some steps may be performed repeatedly as feedback is received – and the processes of data collection, consultation, and communication should be understood as a **varying but continuous effort**
- **All the methodological steps** detailed in the document **should be addressed** in some form when a **RIA is deemed applicable** to the regulatory decision in question.

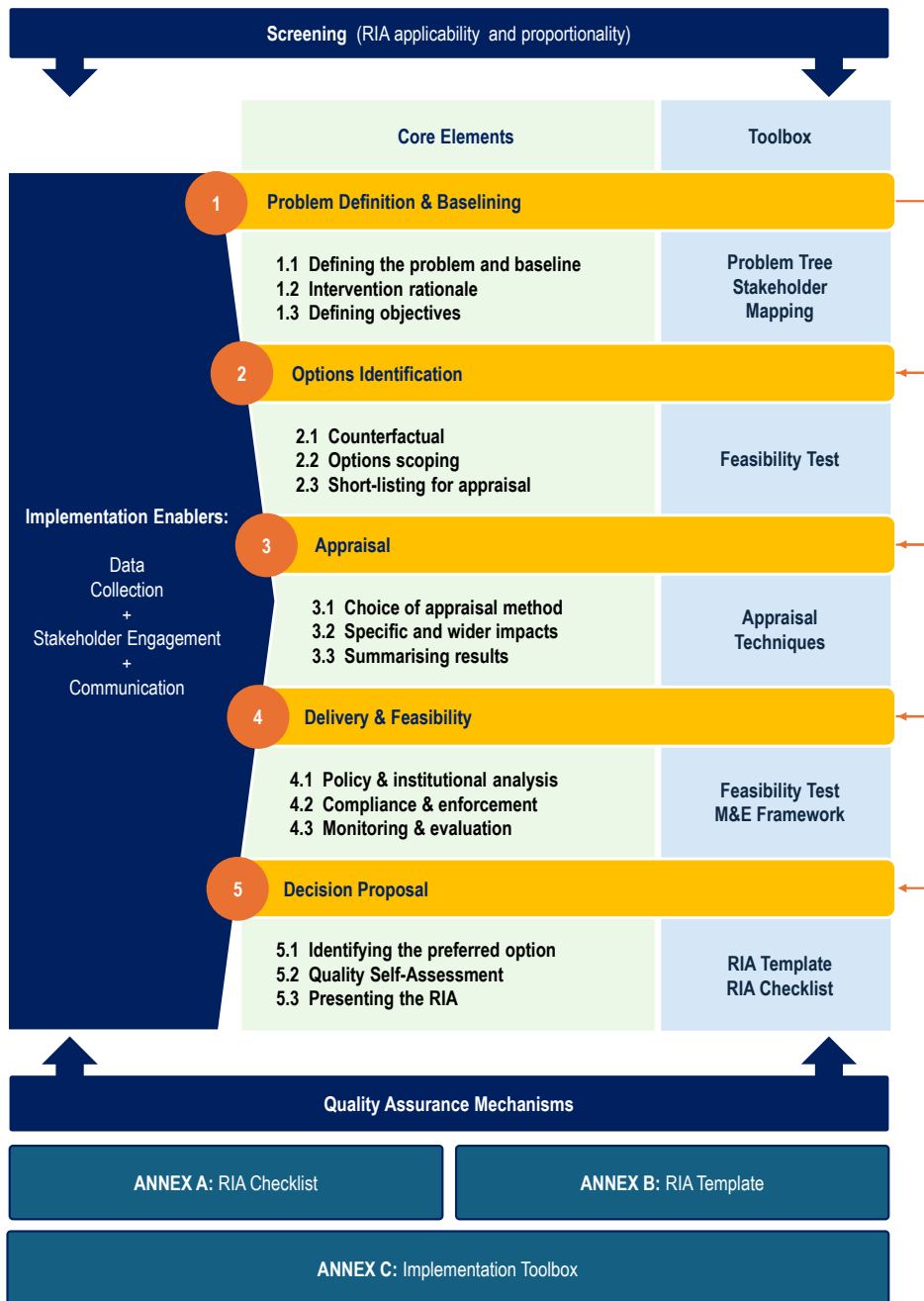
## Scope of the RIA methodology and its intended application by NRAs

The model methodology provided in this paper is not intended to substitute or impact existing mandatory, or non-mandatory, RIA processes led by government which apply to NRAs, nor interfere with the conduct of RIA as specified in legislation applicable to NRAs. It is intended as supplementary guidance to be considered by NRAs to support them embed RIA in their decision-making processes when this is lacking or under-developed. As such, the methodology details the essential RIA steps that NRA practitioners should follow to integrate RIA into their regulatory decision-making processes, and the tools that are available to help achieve this.

This model RIA methodology has been designed as a reference tool and to be as simple and flexible as possible whilst covering all the key features of RIA. It is applicable to NRAs that do not already follow a prescribed or mandatory process for RIA or are developing their RIA practices voluntarily to be more comprehensive and systematic. It is intended to be applied in situations where the NRA has full decision-making authority, acknowledging that these situations tend to be sector and authority-specific, and may focus on, for example, licensing, tariff-setting, pricing, and other aspects of economic regulation.<sup>1</sup>

In other words, the application of the RIA methodology is intended for NRA decisions (not executive or legislature processes), when NRAs hold discretion and are deciding on regulatory interventions or other non-regulatory actions within their remit. This includes decisions stemming from NRA functions defined in establishing legislation, as well as other functions provided for in later primary legislation (e.g. NRA proposals for secondary legislation or code modifications).

# Model RIA methodology



# Screening

## Tasks associated with screening

1. Assess whether the decision or regulatory proposal is subject to a mandatory RIA, considering the NRAs establishing legislation and obligations. If so, identify in what form.
2. Otherwise, develop a preliminary assessment of potential impact and apply screening criteria to judge whether the RIA framework should apply or not.
3. Consult internal oversight bodies on rationale for not conducting RIA or inform of start of RIA process.
4. Consult guidelines and scope out approach to RIA based on the principle of proportionality.

Not every NRA decision needs the same level of scrutiny or depth of analysis. The choice for the NRA to conduct RIA should itself be subject to assessment (“screened”) to ensure undue burden is not being placed on analysts, decision-makers, or stakeholders. However, in most cases, RIA will provide a useful framework with which to structure NRA decision-making and will act to organise activities that are already being followed or completed as part of the day-to-day work of the authority. Thus, utilising the RIA methodology in a proportional manner is recommended for the majority of the NRA’s decision processes.

This section describes the types of decision or processes where RIA is mandatory (according to law), where RIA is recommended, and where RIA may be excluded. The relevant screening criteria discussed in this section include: the application of mandatory RIA requirements, the extent to which an NRA has control over the design or delivery of the proposed regulatory change, and the importance and anticipated impact of the regulatory change to the NRA and its stakeholders, considering economic, social and environmental impacts, as well as significant changes to activities carried out by the NRA.

In the absence of a RIA, it is recommended that planned activities are still communicated through open letters, stakeholder events, public consultation documents and the advisory council structures, so that interested stakeholders can share their views on the impacts of the NRA’s decisions.

When considering targeting RIA and adjusting the approach to be proportional yet effective, it is important to consider RIA should always meet the following minimum requirements at some level:

- Always be conducted at the inception of the regulation-making process;
- Clearly identify the problem and desired goals of the proposal;
- Identify and evaluate all potential alternative solutions;
- Always attempt to assess all potential costs and benefits, both direct and indirect, using the best available techniques to encourage thoroughness, accuracy, and relevance;
- Be based on all available evidence and scientific expertise; and
- Be elaborated in consultation with stakeholders and well communicated.

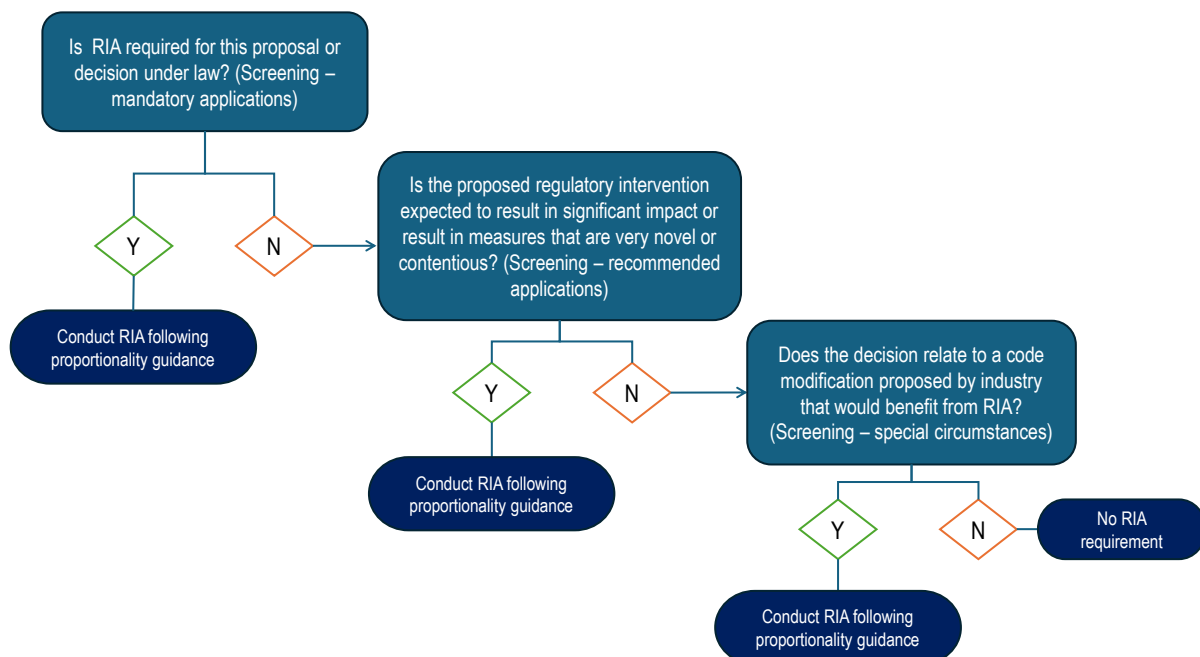
## When to conduct a RIA?

As illustrated in Figure 1 and described further below, RIA should be implemented in accordance with this methodology in cases where:

1. RIA is **mandatory** (i.e. imposed on the NRA as an obligation) under relevant laws, policies, agreements, or prior decisions, as part of a delegated decision to the NRA, and where a particular RIA methodology has not already been specified;
2. when an NRA's decisions meet screening criteria based on **relative importance** (scope and relation to the NRA's mandate and objectives) and **scale of anticipated impacts** (quantified impact and monetary costs); and
3. in some **special circumstances** when impact assessment would be beneficial to apply or to develop following earlier analysis, or to support anticipated post-implementation review (evaluations).

As noted in the Introduction, the RIA process set out in this methodology does not apply in cases when an NRA is obliged to conduct a RIA and an applicable RIA process has already been defined. The NRA should consider as a priority any existing national guidelines and legislation related to the conduct of RIA in the NRA's country before assessing how this proposed methodology may complement existing processes, without undermining the NRA's obligations.

**Figure 1. Decision tree for RIA screening**



### ***Mandatory applications***

There may be certain circumstances when the NRA is required to prepare a RIA as part of its own or wider decision-making process. These circumstances are rare but typically arise when requirements for RIA are specified in laws (e.g. EU legislation) which either directly identify the NRA as the responsible body, when new duties are being proposed that effect the NRA's mandate, or when such decisions have been

delegated to the NRA under national law due to the NRA's expertise. Examples in the energy sector include decisions relating to the implementation of REMIT or the roll-out of smart metering.

Typically, practitioners will be aware before commencing RIA screening of such mandatory applications, in which case legal requirements should be reviewed to help determine the design of the RIA and application of proportionality criteria. When it is not clear if a mandatory (legal) requirement to conduct RIA exists, practitioners should consult with their internal RIA specialists and legal advisors.

### ***Recommended applications***

RIA provides a useful set of tools and framework for structuring regulatory decision-making. There is an expectation that most regulatory analyses and decision-making processes at the NRA will benefit from following a structured RIA process. By default, NRA practitioners are encouraged to complete a RIA proportional with a “low impact” scenario (this “light” RIA option is described below – see Proportionality criteria and RIA approach), unless the criteria for not conducting RIA are clearly met (see When is RIA not required?).

Furthermore, the RIA methodology should apply when elements of either of the two following sets of criteria, based on relative importance and scale of impact (“de minimis” threshold), are met. Criteria are provided as guidelines only; each case is to be judged on its own merits with consideration for the options to adjust RIA implementation based on the principles of proportionality (see Proportionality criteria and RIA approach).

#### *Criteria for determining importance*

An in-depth analysis should be conducted in cases where a decision by the NRA is likely to result in one or more of the following significant outcomes:

- Result in a significant impact on stakeholders (businesses, consumers, or other market actors) within those sectors regulated by the authority (electricity, gas, fuels and electric mobility) or in directly related or connected sectors and markets<sup>2</sup>
- Result in a significant impact on citizens (or specific population groups) in the NRA's applicable jurisdiction or sub-region of the NRA's jurisdiction<sup>3</sup>
- Result in significant changes to the NRA's activities, including compliance and enforcement actions, with implications for the regulated sectors and stakeholders
- Result in significant impacts on the environment
- Result in significant economic impacts, including on trade and investment, incentive structures and the allocation of resources within the regulated sectors
- Result in significant distributional impacts (for instance age, gender, socio-economic status, or other factors).

It is also recommended for a full CBA to be conducted when regulatory proposals will result in measures that are either very novel, politically sensitive or contentious, and when the policy change will be subject to mandatory evaluation (post-implementation review). In the latter case, the analysis will help determine the appropriate components of the monitoring and evaluation framework.

In each case, it is recommended RIA is conducted as proposals are beginning to be developed and not yet formally proposed.

Defining what it means for an impact to be “significant” can be challenging and this aspect of screening can significantly adjust the volume of work requested of NRA staff. Whilst guiding quantitative thresholds are presented below, alternative approaches for structuring RIA work within NRAs can be appropriate, especially in the early stages of implementation. An alternative approach could be to map the regulatory

decisions to be made over the coming period and compare the potential impacts of these decision relatively. Then, informed by constraints and the NRAs level of ambition, a target number of decisions (starting with those of highest impact) could be prioritised to undergo a proportional RIA process. This ensures RIA is being consistently used from the start and can be improved as capacity and capability in the NRA increases. Whilst acknowledging constraints, the methodology still recommends NRA decisions carrying relatively high impacts should be subject to RIA proportionally.

### *Guiding quantitative thresholds*

RIA is recommended when known monetary or other impacts are anticipated to be above at least a “de minimis” or “low impact” threshold (see Table 1). Monetary impacts may be determined based on calculations of costs to business or the net present value of costs to business and society generally (NPV or NPSV) (as described in initial policy assessments or estimated by the NRA). These monetary impacts may also integrate the estimated value of known direct environmental impacts.

Based on the estimated monetary value of social, environmental, and economic impacts, a proportionate level of the RIA is recommended, as described in the following section.

**Table 1. Impact categories based on quantitative thresholds**

	Low impact (“de minimis”)	Medium impact	High impact
Determining impact	<ul style="list-style-type: none"> <li>• Equivalent annual net direct cost to business above EUR 5 million</li> <li>• NPV or NPSV up to EUR 25 million</li> </ul>	<ul style="list-style-type: none"> <li>• Equivalent annual net direct cost to business above EUR 10 million</li> <li>• NPV or NPSV greater than EUR 25 million and less than EUR 50 million</li> </ul>	<ul style="list-style-type: none"> <li>• Equivalent annual net direct cost to business above EUR 50 million</li> <li>• NPV or NPSV greater than EUR 50 million</li> </ul>
Further quantifiable variables	<ul style="list-style-type: none"> <li>• Small number of organisations/households will be affected (hundreds)</li> <li>• Low complexity/risk of delivery and few factors to consider to estimate impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Considerable number of organisations/households will be affected (thousands)</li> <li>• Moderate complexity/risk of delivery and multiple factors to consider to estimate impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Large number of organisations/households will be affected (tens of thousands +)</li> <li>• High complexity/risk of delivery and wide range of factors to consider to estimate impacts</li> </ul>

Note: The threshold values provided in this table are inevitably arbitrary and should be considered and adjusted based on the size of the relevant NRAs market or equivalent PPP value. The values listed reflect figures used by the UK Regulatory Policy Committee to define their impact thresholds (noted here in EUR rather than GBP).

### ***Special circumstances (regulatory code modifications)***

It may be the case that an NRA is responsible for developing, approving and updating regulatory codes that govern various aspects of the energy sector, including electricity, natural gas, and electric mobility. As part of these responsibilities the NRA may propose minor modifications or receive proposals from industry that then require review (or where conducted analysis requires verification), and will have to process these changes within a shorter timeframe than applies to some other decisions.

In the context of code modifications and updates, the NRA may conduct a RIA to consider the impacts associated with making a modification or accepting or rejecting a proposed modification. In any case, the principle of proportionality should apply to the RIA conducted. Since modifications can relate to a very specific or narrow issue, or arise due to a need to correct errors, or clarify and update wording and figures, practitioners should consult the relevant criteria (see Recommended applications, and When is RIA not required?).

## Proportionality criteria and RIA approach

For those cases where RIA is mandatory or recommended, the choice on level of effort and depth of analysis is to be made by the responsible practitioner, based on the principle of proportionality. This decision will be informed by the expected level of impact, analytical constraints, and the nature of the RIA (for example, whether it is a first or repeated assessment). Under this methodology, it is recommended the choice be subjected to scrutiny by the relevant internal oversight body or specialist RIA unit within the NRA.<sup>4</sup> This oversight body or unit may then intervene and suggest a deeper analysis in case the proportionality principle has not been applied appropriately (see Quality assurance). To reiterate, where the relevant screening criteria have been met, some form of RIA is recommended.

Applying the principle of proportionality refers to the adjustment of the approach taken at each stage of the RIA to reduce the scope and complexity of the analytical effort. However, this should not result in any RIA stage being skipped, and the nature of the requirements under each stage remain constant.

Alternative approaches based on proportionality principles are summarised in Table 2 for each of the RIA stages. It is perhaps most relevant to consider proportionality when choosing the appraisal method and depth of analysis conducted during appraisal, to ensure accuracy but also avoid undue burdens and costs for the practitioner and involved stakeholders.

A minimum level of analysis is that which **ensures the impact assessment is accurate, evidence-based,<sup>5</sup> and fit for purpose in terms of enabling a decision**, as reviewed and validated through the relevant NRA quality assurance process. Almost every RIA will have certain data gaps, or areas that could be analysed in a greater amount of detail. The proportionate level of effort to invest in developing the evidence base for appraisal should follow the anticipated level of impact as identified during screening, as well as the nature of RIA being conducted (i.e. if the RIA is part of a multi-stage RIA process, whether it is to inform the initial decision for consultation or is a final or “revised” RIA post-consultation). Following consultation, it may be possible to revisit the RIA to develop a more detailed appraisal based on newly available evidence.

**Table 2. Adjusting RIA to the level of impact**

	Low impact	Medium impact	High impact
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 <b>with quantitative measures included</b> to better assess the scale of the problem.	<b>A clear problem definition, rationale and justification for intervention, backed by thorough evidence.</b>
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 <b>with more detailed discussion of counterfactual and development of problem in the absence of intervention and more detail on justifications for option selection.</b>	<b>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.</b>
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.	As for low impact but <b>with quantitative estimates of option impacts</b> (costs and benefits) using validated data, and <b>greater (but not full) monetisation. Clearer discussion of risks and uncertainties for each option. Some sensitivity analysis or</b>	<b>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</b>

	Low impact	Medium impact	High impact
	Each option should be analysed and discussed.	<b>distributional analysis may be expected. Specific impacts</b> should be included. Complex appraisal methodologies and modelling is not necessary.	wider impacts should be incorporated. <b>Bespoke data collection and modelling may be appropriate. Assumptions should be fully explained.</b>
Delivery and feasibility testing	The delivery and feasibility of each option should be screened at least qualitatively.	<b>Full assessment of delivery and feasibility (see Annex C). Including potential for monitoring and evaluation of short-listed options.</b>	As for medium impact, <b>and some initial work on developing the monitoring and evaluation framework for the preferred option might be expected.</b>
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.

## Multi-stage RIA and the policy and regulatory cycle

In practice, both the regulatory cycle and RIA process are iterative. New information and new options may be uncovered throughout the proposal development process and it is important that the RIA process is able to accommodate this reality. Whilst there should remain one clear overarching RIA process, the RIA document should be understood as a living document to update as the analysis and decision-making process progresses. Thus, the RIA document can be updated and enriched as part of the process. For example, a first iteration may present initial analysis of options associated with a given problem and their impacts, whilst a second iteration may follow further consultation and consolidate new insights from ongoing analysis. These iterations within the same RIA process may be published or not, depending on transparency requirements, but proactive communication and continuous engagement with stakeholders is encouraged to leverage available expertise and input.

Furthermore, as noted above, some decisions are complex and made up of multiple decision stages. In this case, one consolidating RIA document may be used to provide a view of the entire regulatory change proposal, to which individual RIA documents dealing with specific problems may contribute. These individual RIA documents might be developed and consulted on at each decision stage. Given NRAs typical functions and decisions (e.g. managing licensing, registration and permitting processes, enforcing and setting standards and pricing mechanisms, managing code modifications, monitoring market performance, and so on), this necessity may not arise very often. Nevertheless, it is important to judge when such flexibility is beneficial to the outcome of the RIA process and when it may create unnecessary burden on stakeholders to respond, utilising the some of the same proportionality criteria listed above.

## When is RIA not required?

RIA is intended to support regulatory decisions that fall within the scope of the NRAs s mandate and powers or relate to the delivery of the authority's strategic objectives. As such, it is not expected for a RIA to be conducted:

- When the NRA is implementing administrative actions required by law (set in primary or secondary legislation), unless the NRA holds significant discretion and the ability to change the nature of the

action or its implementation and there are associated impacts as defined above (examples may include adjusting RoR calculations or pricing formulae).

- Likewise, when the NRA is responsible for the implementation of government schemes already subject to regulatory impact assessment by government, assuming the RIA has dealt with major design and delivery choices
- When the NRA is taking enforcement action based on existing standards.
- When the NRA is resolving disputes and addressing complaints.

Where practitioners are uncertain regarding the need to conduct RIA or the design of the RIA, it is recommended practitioners consult the relevant specialists and discuss screening decisions with the NRA's internal RIA oversight body.

## Notes

<sup>1</sup> NRA decisions where RIA may be relevant might relate to the following typical NRA functions, among others: proposing secondary legislation, setting standards, licensing, registration and permitting, enforcement and sanctioning, dispute resolution and redress, designing data collection, performance monitoring, or other co-ordination mechanisms, or designing information and advisory services and strategies.

<sup>2</sup> Assuming the decision undergoing RIA still falls within the mandate of the relevant NRA.

<sup>3</sup> Depending on the mandate of the NRA, this may include current or future consumers and citizens

<sup>4</sup> For example, in GB's energy regulator (Ofgem), a specialist RIA unit is housed in the chief economists' office to support RIA quality assurance and implementation.

<sup>5</sup> Based on all available evidence as far as if feasible, with a proportionate level of effort extended to collect and analyse relevant data and expert input.

# 1 Problem definition

## Tasks associated with this RIA stage:

1. Describe the nature and extent of the problem to be addressed, preferably using quantitative data and evidence.
2. Establish the rationale for intervention by the NRA, considering the NRA's duties, organisational objectives and comparative practices. Informed by analysis of the regulatory stock and policy context, and leveraging stakeholder expertise and input.
3. Define the objective(s) and goal(s) of the intervention.

Good regulation is based on sound rationale for intervention and is undertaken with clear objectives in mind. To be efficient and effective in achieving its objectives, regulation should target the underlying cause of a problem whilst remaining proportionate, coherent with other regulation, and adaptable to changes in the regulated environment.

The first step of the RIA process involves understanding the rationale for intervention and defining the problem and regulatory objectives in clear terms:

### Defining the problem and baselining

Provide a detailed description of the problem, including its scope and severity, who is affected and how (see Annex B: RIA template).

To aid this task, it is recommended to complete a **problem tree** to systematically assess the causes of the problem and its effects (risks or consequences).

The key questions to answer at this stage are:

- What is the issue that may require action?
- Why is it a problem? How big is it?
- Who is affected, how, and to what extent? (Risks/consequences)
- Why is there a problem? (Causes)
- If not now, when will the issue materialise, and how will the issue evolve, all things being equal (e.g. for how long is it likely to persist)?

The resulting problem description should be specific and provide sufficient context to support the following analytical steps relating to the comparative regulatory context, the rationale for intervention, and definition of regulatory objectives. The problem should then be summarised in the form of a **problem statement** (see Annex B: RIA template).

### **Baseline and counterfactual scenario**

When formulating the problem statement, it is necessary to establish a “baseline” which describes the current state of play. The baseline differs slightly from the “counterfactual” or “reference scenario” identified later under Chapter 2, which describes the assumed future state of the world in the absence of the NRA’s intervention. During appraisal, it is ultimately the counterfactual that is used as a point of comparison to the alternative intervention options.

In other words, the counterfactual scenario will seek to understand how, starting from the defined baseline, the problem will evolve over time (e.g., considering changing economic conditions, consumer preferences, available technologies, etc.). This is essential for developing a meaningful assessment within the RIA framework (see Counterfactual and options definition).

The baseline should incorporate all of the relevant data collected at the problem definition stage, prior to the anticipated regulatory intervention. It should be based on the problem statement, establishing the baseline in quantitative terms. For example, the baseline may include the definition of:

- A rate of observed behaviour (e.g., compliance)
- A current level of cost, measurable burden or complexity
- Another outcome indicator relating to the defined problem

Establishing the baseline can also provide an opportunity to test the validity of the problem definition. For example, when the desired outcome occurrence is very high within the relevant population, the problem may be poorly defined (i.e. too broad or vague in its definition). In contrast, when occurrence is very low, there may be strong contextual factors at play that need to be explored (informational, behavioural, or regulatory) (i.e. even whilst there is a known problem, contextual factors may prevent or obscure observation of expected logical impacts and consequences of the problem).

### **Rationale for intervention**

Once the problem statement is established and there is a good understanding of the associated risks, consequences and causes, it is essential to clarify the rationale for intervention, even though the exact form of the intervention may not yet be known. Some of the insights from screening and problem definition will be relevant to this task and can be re-stated.

The key questions to answer during this task are:

- What is the risk of doing nothing?
- Why is intervention (by the NRA) necessary?
- Why is the problem not being solved by the current regulatory framework?

If a problem is too small to justify the cost of action by the NRA, or if preliminary analysis shows that no feasible intervention is likely to address the problem at reasonable cost, there may be a case for no action.

Other factors to consider as part of an assessment of the rationale for intervention include:

- The NRA’s (or relevant delivery bodies) ability to make and enforce regulations effectively
- The size of problem identified relative to others being considered as potentially requiring regulatory action
- The ability of affected groups to address the problem themselves
- Whether the problem is expected to be long-lasting or change quickly due to external factors
- Whether other regulations or laws are already addressing the issue, fully or partially. If yes, whether they can be amended to support the regulatory problem.

## ***Drivers of intervention***

Generally, intervention can be justified based on:

- **Market failure**, for example monopolistic and other non-competitive practices, externalities, and information asymmetries.
- **Regulatory failure**, for example ineffective legal frameworks, unintended consequences, regulatory incoherence, unjustified complexity and burden, regulatory capture, and compliance and enforcement failures.
- **Cross-cutting societal goals**, such as improving equity and welfare, poverty alleviation, ensuring public safety and security, or delivering green transition.

For NRA's, regulatory decisions and interventions derive from the authority's core duties, mandate, and objectives, and the RIA process should therefore consider these as rationale. Conducting RIA is also about considering the big picture. In other words, how the NRA continues to achieve its strategic objectives and contribute to wider societal goals. This is an important consideration both for defining the rationale for intervention and defining the objective(s) of intervention.

In addition to the justifications for regulatory intervention listed above, which cover the rationale for the NRA's economic regulatory interventions and tariff-setting objectives, the RIA process at an NRA may also consider the following:

- As relevant to the NRA's mandate, the need to (examples are listed):
  - Protect the interests of consumers, particularly the most vulnerable, and create conditions for their empowerment
  - Ensure user access to electricity and gas networks, other regulated networks and infrastructure and regulate third-party access
  - Promote the efficient development of the sector in the context of the energy transition, with an increasing share of renewable energy and more active consumer participation
  - Promote the efficient use of energy resources
- As relevant to the NRA's strategic objectives, issues under the themes of (examples are listed):
  - Participation and inclusion – consumer protection and empowerment and stakeholder involvement
  - Transition and transformation – future networks
  - Energy markets – effective and dynamic regulation
  - Knowledge and growth – independence, integrity and trust

## **Defining objective(s)**

Once the problem, rationale for intervention, and reference scenario have been clarified, the objective of the NRA's intervention should be defined. The objective should derive from the problem definition and set out simply what the intervention aims to achieve.

Furthermore, the RIA should be defined in the context of the NRA's strategic objectives and statutory duties. It should be stated which strategic objectives and duties the RIA relates to, and the objective of intervention should align to the organisational context.

Objectives should be SMART (Specific, Measurable, Assignable, Realistic, Time-related). This means that:

- the objective should specify a quantifiable target at a key decision point (e.g., increase uptake of a specific household energy support scheme);

- the objective should be specified to be measurable, with available data and metrics clearly attached to the relevant target and user groups;
- the objective should focus on a specific user group, or specify relevant user archetypes (e.g., low-income households);
- the target should then be realistic, for example if the base rate is low then the specified increase should not be overly ambitious (a move from 10% to 20% may be appropriate, whilst achieving 100% is likely not); and
- the objective should be time-related, with the timeframe for measurement clearly specified.

### ***Principles-based regulation***

It may be necessary to adjust the “SMART” framework in the case where overarching regulation is principles-based, since specific outcomes, as well as a relevant baseline, can be harder to define under these circumstances. Where relevant information does not exist to establish a baseline, for example on whether the regulated sector is suitably informed about current regulation, surveying and formal evaluation may be needed to first determine the baseline, and then assess whether the set principles had the desired result.

### **Stakeholder mapping**

Whilst a more detailed stakeholder mapping and analysis will be conducted when assessing delivery and feasibility of the preferred intervention options at a later stage, at problem definition, it is recommended to already identify key stakeholders.

Stakeholders have a right to participate in the regulatory process and can provide valuable input that can lead to better decisions on regulatory design and delivery. At this stage, it is possible to identify all actors that are the target beneficiaries of the regulatory intervention, may be directly subject to intervention (and subjected to costs), and involved in the regulatory delivery (public, private, and civil society). Stakeholders can be categorised and should be differentiated to a degree that is meaningful for analysis at the appraisal stage, considering the need to allocate costs and benefits or analyse capacity and readiness for delivery.

# 2 Counterfactual and options definition

## Tasks associated with this RIA stage:

1. Define the counterfactual (or “do-nothing”) scenario, using evidence and analysis where possible.
2. Develop intervention options, including non-regulatory and more flexible alternatives where relevant, leveraging stakeholder expertise and input.
3. Define and justify a short-list of plausible and significantly different options for appraisal.

The next stage in the RIA process explores the various options available to address the identified problem. All relevant options that align with the rationale and objectives for intervention and address the defined problem should be identified before structuring a short-list of options for appraisal. Doing so ensures the core aims of RIA are met – to identify the most beneficial regulatory or non-regulatory solution and provide sufficient justification for regulatory intervention.

At this stage, it is important to assess whether the RIA considers plausible alternatives or if it only presents the preferred regulatory approach. The following questions can direct this assessment:

- Do alternatives vary in their stringency?
- Are different regulatory instruments within the NRA’s remit to decide and implement considered?
- Is evidence presented that allows you to easily evaluate alternatives and their relative effect on human welfare?
- Does the RIA seem to focus on justifying a particular regulatory action?

Plausibility also entails delivery viability, considering the “pre-determining” choices made at the policy (primary legislation) design stage and the discretion that the NRA holds in determining the specific regulatory intervention. Not all the options listed below (e.g., introducing an effective ban, or leveraging market-based mechanisms) will be viable alternatives given an NRA’s typical mandate and functions, though they are still provided as part of the full spectrum of available interventions. Considering regulatory delivery and feasibility of implementation is a further test to apply iteratively, already at the stage of options short-listing (see below).

## Defining the counterfactual for appraisal

A “do-nothing option” – the assumed state of the world in the absence of the regulation (the “counterfactual” or “reference scenario”) should always be included as an option in the appraisal.

The RIA process occurs before a regulatory decision has been made. Hence, the first option should consider what would happen if the status quo was maintained and the NRA took no action. This helps to determine whether the problem would potentially solve itself in time, or whether those affected would find their own solutions.

Information gathered at the problem definition stage in relation to the baseline should be incorporated at this stage, including any quantitative baseline measurement and information to help understand how the problem will evolve over time without intervention (e.g., trends in underlying factors, such as demographics, or the impacts of other planned policies or regulations taking effect). It should be understood how the impacted parties, whether regulated entities or consumers, will deal with the problem if not addressed by interventions, and what the further costs or consequences of those actions may be. This will help to weigh-up also the net-benefit of intervention against the “do-nothing option”, accounting fully for the costs in each scenario.

## Developing options for appraisal

Several types of option may be identified as alternatives for appraisal. The relevance and feasibility of each option should be considered against the NRAs given mandate and scope of action. Depending on the scope and specifications of primary legislation that sets the mandate for the sectoral energy regulator, the following intervention approaches may apply:

- **Leveraging existing regulations or regulatory tools** (e.g., standards, industry codes, etc.), including international instruments, to address the identified problem, without introducing any new regulations.
- Intervening with **non-traditional or more flexible regulatory alternatives** to address the identified problem, including non-regulatory interventions:
  - Co-regulation or enforced self-regulation
  - Voluntary approaches and self-regulation
  - Performance-based or outcome-based regulations
  - Process-based regulation
  - Information and education
  - Behavioural interventions
- Introducing **new means-based and prescriptive regulation, or economic regulation**:
  - Means-based regulation, also known as technology-based regulation, command-and-control regulation, specification standards, design standards or perspective standards
  - Economic regulation, such as price caps and controls, licensing and access rules, tariff-setting, and active market supervision
  - Outright/effective ban

When not already assessed at the policy design stage, and if relevant to the identified problem and within the NRA’s mandate, a further non-regulatory option to consider is the use of market-based economic instruments, such as taxes, subsidies, tradable permits, vouchers and so forth. The use of such economic instruments should a priori be the preferred means of achieving policy objectives in a wide range of situations since they operate directly through the market, thus minimising the risk of distorting market incentives inherent to most forms of regulation.

As part of the assessment of existing regulations or regulatory tools, practitioners should also consider relevant international regulatory settings when developing regulations. By default, existing national and international instruments should be used, and departing from these agreed approaches should be justified as part of the RIA.

Intervention options may be further differentiated based on:

- **Implementation approach.** Even if few plausible alternatives have been identified (e.g. due to clear requirements set out in primary legislation), there may be options presented by different implementation approaches:
  - Introducing a regulation for a short period of time.
  - Experimenting with regulatory testbeds or sandboxes to trials new regulation before rolling out more broadly.
  - Implementing regulation in phases over several years, to allow businesses to adapt.

The regulatory impacts may be very sensitive to the implementation approach selected.

- **Flexibility (prescriptiveness).** The efficiency and cost of regulation can also vary depending on how prescriptive the regulatory intervention is, considering both the requirements placed on administrators and the regulated entities. Within the spectrum of regulatory interventions, the most restrictive options are outright bans and means-based regulation, and the least restrictive forms of co-regulation or self-regulation. Non-regulatory options will be less prescriptive again.

Flexible approaches are likely to be more relevant and efficient in cases where there is uncertainty, and the external regulated environment is dynamic and subject to change.

### ***Complementary tools to support option definition***

At this stage of the RIA process, there are several tools practitioners can use to develop options that not only address the defined problem but remain efficient, sustainable, and adaptable once delivered. These tools include risk assessment, anticipatory tools, such as horizon scanning, and behavioural diagnosis and analysis.

The development of options for appraisal should be underpinned by a collaborative approach that leverages stakeholder expertise and input whenever feasible. The different tools are grouped and discussed further as part of an agile regulatory toolkit described under the OECD's *Framework for Anticipatory Governance of Emerging Technologies* (OECD, 2024<sup>[6]</sup>).

#### *Risk assessment*

Risk assessment helps practitioners understand the scale, likelihood, and distribution of potential harms or failures if the problem is not addressed. It clarifies what is at stake, who is most affected, and which risks require urgent regulatory attention. By mapping risks, NRAs can avoid designing measures that are either disproportionate to the problem or blind to important vulnerabilities. For example, risk assessment may show that certain risks are concentrated in specific groups, markets, or processes, guiding the search for targeted solutions rather than broad, unfocused rules. Risk assessment may be particularly useful for NRA decision making, for example in relation to decisions to introduce or change licensing arrangements.

For more information on designing risk-based regulatory interventions please refer to the *OECD Regulatory Enforcement and Inspections Toolkit* (OECD, 2018<sup>[7]</sup>) and *Best Practice Principles for Licensing and Permitting* (OECD, 2025<sup>[8]</sup>).

### *Behavioural insights*

Incorporating behavioural insights into RIA can help broaden the range of solutions considered: instead of relying only on formal rules and sanctions, policymakers can test complementary approaches such as clearer communication, simplified processes, reminders, or default options.

Behavioural diagnoses and analyses focus on why a problem persists, especially where human behaviour is central. Instead of assuming that non-compliance or low uptake stems from deliberate defiance, a behavioural lens asks 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), or
- Have the motivation and support to act consistently over time (determination and follow-through).

This diagnosis points directly to practical barriers and opportunities that purely legal or economic analysis might overlook. For example, a risk assessment might identify late reporting as a significant problem in a regulated sector, while behavioural analysis could reveal that the reporting process is too complex and deadlines are poorly communicated. The combined insight suggests options such as simplifying digital forms, setting reminder systems, or adjusting deadlines – interventions that are both targeted to the risk and feasible to implement.

For more information on applying behavioural insights to regulation and RIA, please refer to the OECD's working paper: *Behavioural Insight and Regulatory Governance – Opportunities and Challenges* (Drummond, Shephard and Trnka, 2021<sup>[9]</sup>).

### *Anticipatory tools*

Anticipatory tools, such as horizon scanning and strategy/technology road mapping, help regulators look beyond current conditions to the most plausible futures. These two tools can help RIA practitioners sharpen option definition in the following ways:

- **Horizon scanning** surfaces emerging risks, opportunities, and trend breakpoints (e.g., new business models, data practices, supply bottlenecks). This widens the option set beyond “fix yesterday's problem,” and highlights interventions that are robust across scenarios (no-regret measures).
- **Strategy & technology roadmaps** align interventions with expected capability and market milestones (what becomes viable in 1–3–5 years). This supports staged options (e.g., guidance, then pilots/sandboxes, then graduated obligations) that minimise lock-in, avoid stranded compliance costs, and remain deliverable with available capacity.

Embedding use of these tools at this stage of the RIA process can ensure options remain sustainable (work across plausible futures), efficient (target the right levers at the right time), and feasible (sequenced to the authority's and industry's readiness).

For further information on using anticipatory tools in the regulatory context, please refer to the OECD *Framework for Anticipatory Governance of Emerging Technologies* (OECD, 2024<sup>[6]</sup>).

## **Short-listing for appraisal**

A short-list of **plausible and significantly different alternative options** should be determined before moving to the appraisal stage of the RIA. By default, one option should be the counterfactual (the “do-nothing” option), whilst the other appraised options should be interventions that:

- Address the defined behaviours/causes of the problem with a clear and evidenced logic
- Will be effective in delivering the desired outcome (effective)
- Are proportional to the problem and give good value for money (benefits are expected to be greater than the costs following appraisal)
- Fit with wider social, economic and environmental policy objectives
- Are deliverable and enforceable (see also Delivery and feasibility).

Based on the above criteria, it follows it is valid during short-listing to eliminate certain options from further consideration (i.e. from being subject to a detailed appraisal using impact assessment) due to the anticipated costs of certain options being too great (disproportionate to the anticipated benefits), un-deliverable, or misaligned with wider policy objectives. However, anticipated costs and benefits should in this case be justified by some form of qualitative or quantitative comparison that sufficiently illustrates the scope and scale of impacts supporting the decision to disregard the option.

Ensuring “significant difference” between the appraised options is context dependent. In cases where a wide range of alternative options have been identified that take different approaches, significant difference would entail appraising distinct approaches (e.g. a means-based approach versus co-regulation), whereas in the case where one distinct approach has already been prescribed in primary legislation, significant difference may mean a comparison of forms (e.g. forms of co-regulation) or varying implementation factors. Thought should be given as to whether conducting a multi-stage RIA would be beneficial. In other words, whether an initial appraisal should be used to determine the broad regulatory approach, followed by a second appraisal of more detailed options under the selected approach to account for variations in implementation. This choice will be shaped by the problem at hand and the level of discretion that the NRA has in designing the solution.

It may be the case that certain alternative options are not within the powers of the NRA to introduce or implement, for example there may be a dependency on changes to primary legislation. In this case, the NRA may deem it suitable to engage with the relevant government authority to identify alternatives, however, these options should be discarded for the purposes of the internal RIA process.<sup>1</sup> The short-list of options should feature feasible regulatory and non-regulatory interventions that are within the NRA’s mandate to issue or implement, considering the NRA’s legal powers and scope of action.

As listed above, short-listed options for appraisal should be deemed feasible and deliverable. Options should be developed already with a view as to which measures will be required to support compliance (e.g. information campaigns, documented guidance, helpline support, digital tools, etc.).

In conjunction with the formal appraisal process, it is important to test options align with the policy landscape, that the institutional arrangements allow for effective delivery, that effective compliance, monitoring, and evaluation mechanisms can be designed-in and thus compliance can be assured. Whilst appraisal and delivery and feasibility testing are presented as separate stages in this methodology, in practice the process is iterative, and feasibility testing is important to shape the RIA from options definition through to final decision proposal (see Delivery and feasibility).

## Note

<sup>1</sup> In the interest of transparency, the practitioner may wish to make stakeholders aware of all such alternative options by including the facts in the appropriate part of the RIA template, which asks for an overview of long-list options and more information on the treatment of short-listed options. The RIA template is expected to be included in the relevant consultation package.

# 3 Appraisal

## Tasks associated with this RIA stage:

1. Identify the relevant impacts (costs and benefits) of the relevant short-listed options
2. Choose the appropriate appraisal methodology, considering both quantitative and qualitative approaches
3. Consider need for the analysis of specific impacts and wider impacts, including dynamic impacts for connected markets
4. Conduct analysis in line with NRA guidance, consulting experts when required.
5. Summarise results

Once the counterfactual and short-listed options have been identified, it is necessary to examine the options in more detail and provide a formal comparison before identifying a preferred option.

Appraisal is the process of examining the different intervention options and comparing their relevant costs and benefits, as well as other positive or negative factors, risks and uncertainties, and perhaps distributional impacts. The appraisal process might involve qualitative and quantitative assessment methods, including cost-benefit analysis and multi-criteria methods, and may equate to a partial or general equilibrium model. One of the challenges in conducting RIA is determining the most appropriate methodology to use to assess the impacts and compare alternative options.

As far as is feasible, impact assessments should attempt to understand the costs and benefits of the different options in welfare terms. In other words, costs should be measured in terms of opportunity cost, and benefits in terms of consumer and producer surplus (economic welfare) for the relevant geographic area or jurisdiction (which may national or subnational level). Furthermore, general equilibrium analysis is preferred to partial equilibrium analysis.

However, due to the complexity of modelling requirements or a lack of valid data, it may not be possible to conduct a full cost-benefit analysis in practice. Alternative options (still with a suitably comprehensive set of criteria) then could be more appropriate. For example, cost-effectiveness analysis can be used to assess the which way of achieving the desired objective represents best value for money, though many decisions can require weighing-up other impacts that may be monetary or non-monetary, and quantifiable and non-quantifiable.

The following sections provide an overview of available appraisal methodologies and initial guidance as to their selection and application.

## Choice of appraisal method

This section introduces the various methods of appraisal, starting with core impact assessment methodologies involving analyses of quantified or monetised costs and benefits (Table 3.1), then mixed methods and qualitative methods (Table 3.2), and finally methods used to explore specific impacts and complementary analyses that can be run in parallel to provide additional insights (Table 5).

For a more in-depth guide on quantitative appraisal methods, including cost-benefit analysis, please refer to the relevant OECD publications: *Cost-Benefit Analysis and the Environment* (OECD, 2018<sup>[10]</sup>) and *Regulatory Impact Assessment* (OECD, 2020<sup>[4]</sup>).

**Table 3.1. Quantitative methods for appraising impact**

Appraisal method	Application	Methodology description	Complexity
Least-cost analysis (LCA)	Suitable when <b>benefits are fixed</b> and only the means to achieve an objective are being selected.	Compares the cost of different options to achieve a specific objective, considering only costs. No benefits beyond cost savings are considered.	Lower complexity – quantification of costs only
Cost-effectiveness analysis (CEA)	Suitable when <b>benefits cannot be easily monetised</b> but are still quantifiable	Compares the cost of different options relative to a single, non-monetised outcome (e.g. emissions avoided). 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 <b>impacts can be monetised</b> , and can be applied when <b>one or more options are compared</b> to the counterfactual.	Compares all costs and benefits of an intervention by monetising both, allowing for a direct comparison in NPV terms or benefit-cost ratios	Higher complexity – monetisation of all (or most important) costs and benefits, discounting, probabilistic/sensitivity analysis

When it is difficult to comprehensively weigh-up options based only on costs and benefits, perhaps due to the need to account for multiple, conflicting objectives that cannot be easily reduced to a single monetary or equivalent numerical value, alternative methods such as multi-criteria analysis (MCA) can be used. Multi-criteria analysis can also be useful to promote a participatory and flexible approach to the decision-making process, however, MCA is at the same time less standardised, may be perceived as more subjective by stakeholders, and can become complex considering the need to score and weight criteria.

Hybrid approaches can be valid also, where the above quantitative-focused approaches are efficiently combined with qualitative methods to provide insight to guide comparison, drawing upon all available data and resources. For example, CBA may be complemented by stakeholder or expert interviews to capture non-monetised social impacts, highlight areas of risk and uncertainty, and test modelling assumptions.

Purely qualitative approaches to impact assessment may be used when quantitative data is unavailable or unreliable, and when scoring may be deemed inappropriate. These approaches focus on descriptive analysis, expert input and stakeholder feedback rather than numerical or monetised evaluation. Qualitative approaches can provide insight on issues that raise complex social and ethical issues. However, conducting tailored primary research of a qualitative nature can involve significant time and resource and should be screened for appropriateness and proportionality. There may be a range of existing studies that practitioners can use to support qualitative analysis, for example, on the gender and youth impacts of regulatory design (see below).

**Table 3.2. Mixed methods and qualitative appraisal methods**

Appraisal method	Application	Methodology description	Complexity
Multi-criteria analysis (MCA)	Suitable when there are <b>competing objectives</b> (e.g., trade-offs between environmental and economic factors) and a <b>need to score and weight heterogenous criteria</b> 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: <ul style="list-style-type: none"> <li>• Comparative case study analysis of evidence on regulatory impacts</li> <li>• Structured expert interviews or surveys (Deplhi)</li> <li>• Extended or participatory stakeholder consultation</li> </ul>	Variable – ranges depending on research design and methodology, and requirements for qualitative analysis

### ***Proportionality in appraisal***

The choice of appraisal method can make a significant difference to the nature and amount of evidence and analysis that could be pursued. It is therefore prudent to ask what is proportional in order to ensure analysts and stakeholders are not unduly burdened.

Whilst the appraisal method should be selected first based on suitability, following the application guidance noted above, the depth of RIA can be varied in proportion to the scale of impact, and considering the benefits brought by conducting deeper analysis (for example to conduct statistical analysis, comparative case study analysis, or to quantify wider impacts or general effects as described further below). This will have to be assessed on a case-by-case basis for each RIA (refer to Screening for further examples of variation based on the proportionality principle).

#### *Specific and wider impacts*

As part of a multi-criteria analysis or hybrid approach, the NRA may be required to look at specific impacts in line with the regulator’s duties and strategic objectives, for example affordability, security of supply, and competitiveness, or wider (general) system impacts, such as economic growth, innovation capacity, and cross-border trade may be an important concern. In these cases, complementary analytical methods and resources, or moving from a partial to general equilibrium analysis, may be relevant to provide the required insight.

It is important to judge how applicable indirect and wider impacts (including modelling unintended consequences) are to the regulatory intervention in question, considering the NRA’s and the regulation’s objectives, to keep the RIA proportional and feasible. It is also important to understand whether some impacts have been addressed, or will be addressed, by other impact assessment processes (e.g., Environmental Impact Assessments completed by other NRAs or government entities), which can then be taken as input into the NRA’s RIA processes when relevant, thereby removing the need for further assessment. Where there are significant spillover effects and system-level impacts, it is then advisable to conduct a general equilibrium analysis using economic models, rather than a partial, sector-focused analysis.

In some cases, these specific and wider impacts may act as a feasibility test – testing that final regulatory outcomes are positively affected – rather than as a source of qualitative or quantitative metrics for the applied RIA methodology. In other cases, the specific impacts will relate directly to the intervention and its objectives, in which case the associated costs and benefits will need to be explored and included.

It is recommended to always complete some form of risk and uncertainty assessment. This can be helpful to guide implementation decisions, stakeholder engagement and the communication and presentation of the RIA. It is also recommended to identify potential unintended consequences and consider the need to model wider (general) impacts beyond the primary objective and sector (Table 3.3).

**Table 3.3. Methods for appraising specific impacts and complementary analyses**

Appraisal method	Application	Methodology description
Distributional analysis	Suitable when there is a need to assess the <b>impacts of a regulatory change on consumers at a granular level</b> , for example, households on a particular <b>tariff and vulnerable customers</b> . Distributional analysis is relevant for impacts affecting <b>total domestic consumption</b> and complements the general welfare analysis conducted at consumer / producer level.	Examines the impact of the proposed regulatory change on different consumer groups, commonly through the use of domestic consumer “archetypes”, constructed on the basis of common characteristics and socio-economic data, and energy bills.
Gender and youth analysis	As a targeted form of distributional analysis, suitable when the proposed regulatory change or intervention will directly impact consumers (including household expenditure), security of supply, employment, as well as health, safety and quality of life.	Examines, through relevant qualitative or quantitative analysis, whether the design of the regulation could mean some groups benefit more due to gendered social norms; whether the regulation supports the equal distribution and use of energy resources and employment opportunities; and whether the regulation could have negative unintended consequences for certain groups of people such as women or youth; and if so, how these can be redressed.
Environmental impact analysis	Suitable when there are significant wider and material effects on emissions, landscape, biodiversity, and environmental capital, and potentially also indirect effects (depending on feasibility to conduct general analyses, scope of the NRA’s mandate and whether other EIAs have been conducted separately)	GHG emissions impact should be identified for the period, valued using applicable carbon values, and included in the assessment as a quantified/monetised measure (see <b>Annex B</b> ). (If not already valued within modelling). Wider environmental impacts can be qualitatively assessed, but if measurable also have the potential to be quantified/monetised and included in quantitative and MCA methods.
System security, resilience, and competition analysis	Suitable when the proposed regulatory change will directly impact grid and market operations, infrastructure development, security of supply, market competition, financing, access, and so forth. Understanding cross-border impacts may be important when connected markets influence security of supply, competition, and other outcomes.	A variety of methods are available to assess and measure the impact of regulatory changes on security of supply, competition, and resilience, depending on the centrality of these issues to the impact assessment in question. A qualitative assessment may be proportional, unless these issues reflect the central aim and objective of the regulatory intervention (see <b>Annex B</b> ).
Risk and uncertainty analysis (sensitivity testing)	Suitable for all RIAs – focuses on assessing uncertainty around the inputs for the relevant costs and benefits and communicating the knowns, known unknowns, and unknown unknowns. Application should be proportional to level of risk and uncertainty.	A series of techniques may be used based on the quantification of uncertainty. Simpler forms of uncertainty analysis include RAG ratings. More complex forms include Monte Carlo simulations, break-even analysis, etc. Expert interviews, scenario analysis, and literature reviews are further techniques.
Wider impacts assessment (unintended consequences)	Suitable for all RIAs to identify potential unintended consequences within the same or closely related markets, and wider spillover effects. Application should be proportional to expected impacts.	Depending on the scale of spillover effects, the assessment of wider impacts may remain qualitative (as a form of feasibility test) or may involve the use of computable general equilibrium (CGE) models for a comprehensive analysis.

## Integrating gender and youth assessment

There is an array of strategic tools available to support NRAs to consider the impacts of regulation on different groups.

Women are vital energy consumers, producers, and decision-makers who make crucial contributions to global energy security and the transition to sustainable energy. Young people are also energy consumers and are at the heart of the energy transition. Energy policies and regulations therefore significantly affect the everyday lives of both women and men and girls and boys. However, they are not always gender neutral. The design of EU country regulations, particularly those relating to prepayment meters and disconnection, tariff pricing methodologies, and price caps have been criticised for being too regressive. In these areas, single parent (single mother) households, who are at greater risk of experiencing energy poverty, are more sensitive to interventions. From a regulatory design perspective, targeted assessments during RIA can test how measures need to be targeted, or what safeguards can help reduce impacts and improve net benefits.

When these policies overlook gender or age-based inequalities embedded in society, they risk perpetuating and reinforcing disparities. Additionally, such regulations can be perceived as unfair or favouring only certain groups.

To ensure decisions are aligned with applicable policy objectives that foster more gender-equal and inclusive societies, NRAs can incorporate targeted assessment tools within RIA methodologies. Tools like gender and youth impact assessments help ensure that regulatory design in the energy sector considers the potential effects on the lives of women, men, girls and boys, promoting fairness and equity. For further information please refer to the OECD's *Toolkit for Mainstreaming and Implementing Gender Equality* (OECD, 2023<sup>[11]</sup>), the *OECD Youth Policy Toolkit* (OECD, 2024<sup>[12]</sup>).

Additionally, consulting with national women's and youth machinery and representative groups such as national women's and youth organisations on potential impacts can be a cost-effective way of accessing deep, on-the-ground knowledge to identify potential pitfalls early.

### *Impacts relevant to RIA within NRAs*

The following impacts (Table 3.4) are relevant to RIA considering duties of NRAs, particularly those NRAs with responsibilities in the energy sectors. That is not to say they must all be accounted for in a RIA. As noted above, depending on the intervention in question, different impacts will rise as direct or indirect (i.e. general or second order effects). In the context of partial analysis, the responsible analyst should judge whether certain impacts should be appraised or not based on relevance, proportionality and the available evidence-base, and whether the same approach can be taken to compare alternative options. The focus of the appraisal should primarily be on the direct impacts of the proposed regulatory or non-regulatory intervention (i.e. those costs and benefits associated with and realised by the design and implementation of the intervention), considering the intervention logic and actions identified within the theory of change.

The impacts are organised based on whether they relate to more economic, environmental or social criteria, and whether they are essentially qualitative, quantitative (non-monetary), or quantitative (monetary). There may still be potential for some qualitative impacts to be quantified (by proxy) and included in, for example, MCA approaches. However, as noted in the context of specific and wider impacts, the analyst should assess based on the subject of the RIA and the proportionality principle whether such an effort would be beneficial. The assortment of economic, environmental, and social impacts and relative scale of each impact that stems from an intervention will differ in each case.

**Table 3.4. Potential economic, social, and environmental impacts featuring in NRA RIAs (examples from the energy sector)**

	Quantified (monetary)	Quantified (non-monetary)	Unquantified
Economic (incl. infrastructure & innovation)	<ul style="list-style-type: none"> <li>• Consumer welfare (e.g. price change)</li> <li>• Producer welfare</li> <li>• Socio-economic welfare</li> <li>• System Costs (may include emergency preparedness)</li> <li>• Optionality</li> <li>• Infrastructure upgrading &amp; resilience (investment level and cost levels)</li> <li>• Innovation investment (R&amp;D)</li> <li>• Cost of compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Competition indicators (market concentration (e.g. HHI), market power and dominance (e.g. pricing power/PCM), switching and contestability)</li> <li>• Security of supply (adequacy)</li> <li>• Network reliability (Outages, SAIDI/SAIFI indices) and system losses</li> <li>• Technology uptake (distributed energy resources)</li> </ul>	<ul style="list-style-type: none"> <li>• Security of Supply (strategic)</li> <li>• Financial Resilience</li> <li>• Learning by doing</li> <li>• Investment incentives (directional)</li> <li>• Innovation incentives (directional)</li> <li>• Dynamic efficiency gains and future cost reduction (sandbox initiatives)</li> <li>• Supply chain resilience</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• GHG emissions impact (CO<sub>2</sub>e * carbon value)</li> <li>• Non-carbon environmental impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Cross-border carbon impacts</li> <li>• GHG emissions impact (non-monetised) + lifecycle emissions impacts</li> <li>• Local air/soil/water pollutant levels</li> </ul>	<ul style="list-style-type: none"> <li>• Land-use and biodiversity impacts</li> <li>• Waste and recycling implications</li> </ul>
Social	<ul style="list-style-type: none"> <li>• VOLL (Value of Lost Load) x Loss of load expectation (LOLE)</li> <li>• Distributional impacts (bills/tariffs affordability)</li> <li>• Value of life</li> </ul>	<ul style="list-style-type: none"> <li>• Accessibility (e.g. cooking fuels)</li> <li>• Job creation/displacement from energy transition or electrification</li> <li>• Public health and safety impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Trust in energy suppliers</li> <li>• Lock in impacts</li> <li>• Perceived fairness and transparency of regulation</li> <li>• Public acceptance of new energy infrastructure</li> </ul>

### *Summarising appraisal results*

When summarising the results of the appraisal process, practitioners should ensure:

- The results of the assessment are described and explained in the text of the RIA
- The significance of the impacts are clearly shown in tabular form
- The positive impacts (benefits) and negative impacts (costs) are displayed separately
- Positive and negative impacts are quantified, wherever possible
- The uncertainty of the assessed impacts should be clearly described, usually through a range of potential impacts and their probability.

Further guidance on identifying the preferred option and presenting the results is provided below under Chapter 5 and Annex B (RIA Template).

# 4 Delivery and feasibility

## Tasks associated with this RIA stage:

1. Test delivery and feasibility from a policy and institutional perspective
2. Test coherence of preferred option(s) with good practices on the design of compliance and enforcement regimes
3. Assess feasibility of designing an appropriate monitoring and evaluation framework for the preferred option(s)

The short-listed options and final preferred option should be feasible in terms of their ability to be implemented, complied with, enforced, monitored and evaluated.

As part of an iterative appraisal and design process, it is essential to ensure options align with the policy landscape, that the institutional arrangements allow for effective delivery, that effective compliance, monitoring, and evaluation mechanisms can be designed-in and thus compliance can be assured. Each of these aspects can be elaborated and tested with stakeholders during and outside of formal consultation. Delivery considerations should be tested for all potential short-listed options, and any significant delivery costs identified should be incorporated in the appraisal as a comparative factor and as a means to judge option feasibility. Whilst presented in this paper as a separate stage, in practice, delivery and feasibility testing should occur simultaneously and be embedded within the main qualitative or quantitative appraisal methodology to ensure insights are considered during option comparison.

Delivery and feasibility testing should be thought of as an early-stage rehearsal for roll-out – the goal is to anticipate and address potential delivery bottlenecks and make adjustments before the regulation is proposed and adopted. For complex and contentious interventions, or where there are significant unknowns, regulatory experimentation tools can be useful and might be integrated into the proposal following the RIA process. The potential for regulatory experimentation may be integrated within the delivery and feasibility assessment, in the same way the potential for developing a suitable M&E (monitoring and evaluation) framework should be tested.

As for other parts of the appraisal, the depth of analysis conducted at this stage should be proportionate to the anticipated scale of impacts. However, at a minimum, analysis should **ensure the impact assessment is accurate and fit for purpose in terms of enabling a decision**, and thus flag any major delivery and feasibility barriers.

### Policy and institutional analysis

The purpose of policy and institutional analysis is to understand the capacity, alignment, and readiness of implementing institutions and partners to deliver and support the preferred regulatory intervention. This analysis may involve legal analysis (e.g. of mandates and operating agreements), policy document

reviews, and interviews with implementation agencies to assess implementation challenges. The key considerations and areas of analysis include:

- **Institutional capacity:** Do the responsible authorities have the resources, skills, and infrastructure to implement and oversee the regulation?
- **Stakeholder mapping and analysis:** Who will be involved in delivery, what are their roles and interests? What are their relative levels of importance for successful delivery?
- **Legal and regulatory coherence check:** Does the preferred regulatory intervention align or conflict with existing laws, policies, and mandates?
- **Process mapping:** Is it clear how the regulation will be operationalised from start to finish at a high level? Does the necessary process appear logical and efficient?

## Compliance and enforcement

In conjunction with policy and institutional analysis, it is necessary to assess the likelihood the potential regulated entities will comply with the proposed regulation and how enforceable the regulation will be in practice. Ideally, the preferred regulatory option will be one that allows for good enforcement practices to be deployed. For example, the preferred option should:

- Allow for a proportional monitoring and compliance testing regime that is targeted or risk-based
- Allow for flexibility and adaptability, to adjust to different and changing circumstances considering the needs of the different regulated entities and the administration
- Allow for alternatives to enforcement to take effect when more efficient, e.g. market incentives, reputational incentives, litigation, etc.

As noted at the options definition stage, options should have been defined already with a view on which measures will be required to support compliance (e.g. information campaigns, documented guidance, helpline support, digital tools, etc.). These measures should be evaluated against the above principles.

To better understand the likelihood of compliance and the level of enforceability of an option, it may be useful to:

- Calculate the cost of compliance and enforcement by estimating the regulatory burden for business and the administrative cost for regulators (if not already completed for the appraisal)
- Identify barriers to and drivers of compliance with behavioural analysis (focusing on costs, awareness, incentives, and complexity)
- Determine whether obligations are clear, measurable, and monitorable (also the basis of the monitoring and evaluation framework – see below), and assess the availability of enforcement tools (fines, licenses, inspections)
- Test risk-based scoring methods to see if enforcement efforts can be prioritised based on high-impact or high-risk cases
- Consider empirical evidence on observed levels of compliance for comparable interventions in other regions or countries.

## Monitoring and evaluation

As part of the RIA process, it is possible and recommended to identify how the impacts of the proposed regulatory intervention will be monitored and evaluated.

At the problem definition stage, the RIA has already described the “SMART” objective(s) that the regulatory intervention is seeking to achieve. This forms the basis of a monitoring and evaluation (“M&E”) framework that can be elaborated later in the RIA process, once the preferred option has been identified. However, it is important to test all appraised options (all alternatives) from a feasibility perspective, to understand if a suitable M&E framework can be developed for each option.

Following appraisal and the selection of the preferred option, the M&E framework can then be developed further. Such frameworks support successful implementation and the efficient and responsible management of the NRA’s and stakeholders’ resources. Again, monitoring and evaluation activities should be proportionate to the importance and anticipated impacts of the intervention.

The potential of the short-listed options to be effectively monitored and evaluated should be assessed within the RIA process and at the same time, initial groundwork to develop the M&E framework can be done, particularly for the preferred option. The full M&E framework will be finalised after the final decision is taken and implementation planning is in process.

At a minimum, the following components should be clarified by the practitioner to assess whether the preferred options can be effectively monitored and evaluated over the relevant time period:

- Can the impact logic or theory of change for the given regulatory option be clearly articulated? How is the regulatory intervention expected to achieve its outcomes and what assumptions underlie that logic?
- What indicators will apply for measuring inputs, outputs, outcomes, and impacts within the framework? What baseline and targets have been provided by the RIA?
- What data is needed, is the necessary data available or can it be collected reliably? What systems need to be accessed or put in place? What is a suitable timeline for data collection?
- How will unintended consequences for businesses or households be assessed, including any unexpected administrative costs?
- How will stakeholders provide ongoing feedback? Through which methods and tools?

## Regulatory experimentation

One of the outcomes of the RIA process may be to suggest a period of regulatory experimentation – the launching of sandboxes, testbeds, and pilot programmes – to learn from and adapt regulatory approaches before full implementation. This may be particularly relevant when there are significant “unknowns” around the effectiveness of a preferred option, the costs and effectiveness of different compliance regimes, the possible wider impacts or distortions stemming from intervention, and other areas of risk and uncertainty.

An alternative approach is to design regulation with built-in mechanisms for feedback, adjustment, and learning. Or, where there is sufficient time, to run experimentation in parallel, or before a final proposal, to provide input to the RIA process. In this scenario, certain experimentation protocols should be followed to provide meaningful input, including establishing criteria and metrics for testing that directly relate to the options being assessed under RIA.

# 5 Decision proposal

## Tasks associated with this RIA stage:

1. Identify the preferred option following appraisal / consultation
2. Draft a clear presentation of the RIA process and results for stakeholders (pre- / post-consultation)
3. Align presentation and finalisation of RIA with the NRA's public consultation policy and communications guidelines

### Identifying the preferred option

The preferred option should address the defined problem, meet the intervention objectives, and align with the rationale for intervention, as well as the NRA's strategic objectives. It should also be judged as feasible to implement, considering available knowledge of delivery costs and process requirements.

Compared to the other appraised options and the counterfactual, the preferred option is expected to provide the most optimal outcome considering one or more of the following:

- Greatest overall monetised or quantified net benefits (as relevant), combining economic, social, and environmental criteria, or lowest net costs (as relevant)
- Greatest qualitatively assessed net benefits (scored or compared as relevant), or lowest net costs (as relevant)
- More acceptable and manageable profile considering risks and uncertainty (including implementation risks, and considering the available mitigation measures)
- Limited or lowest net specific and wider impacts (including distributional effects, unintended consequences).

There may be cases where the result of appraisal shows a negative net present value. It is possible for a preferred option to be identified that has a negative NPV, based on the fact it meets the primary objectives of intervention and there are non-monetised benefits in play. The narrative for judging the preferred option should remain clear, as should the appraisal process.

### Presenting the RIA

When it comes to presenting the RIA, either as part of a public consultation document, internal decision document, or final decision, it is important to ensure transparency and understandability.

Annex B: RIA template provides a pre-filled template with a set of considerations and questions to guide practitioners and encourages the summarisation of the RIA process for a wider, non-technical audience.

RIA communications 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. This will include the definition of the problem, objectives and rationale for intervention, the definition of the counterfactual and options identified and appraised, the appraisal methodology, including 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, and other appraised options when a deciding factor
- While being comprehensive, communications should focus on the appraisal of direct impacts that relate to the regulation. For example, the regulatory intervention may aim to address distributional effects, and thus key messages should be focused on the appraisal of impacts in this area
- Should be uploaded in an accessible format and communicated through appropriate channels to reach the key stakeholders (as mapped and analysed).

As outlined in RIA template, the results of the assessment should be described and explained in the text of the RIA. Furthermore, it is good practice to:

- Clearly show the significance of the impacts in tabular form (scorecard)
- Separately show the positive impacts (benefits) and negative impacts (costs)
- Quantify in a comparable manner the positive and negative impacts, where-ever possible.

## Public consultation

For those regulatory decisions where RIA has been identified as mandatory or recommended (following screening) it is expected that a RIA report (i.e. completed RIA Template) will eventually be included in a consultation package, i.e. published alongside the regulatory proposal or integrated into the proposal document, and a final RIA (adjusted for stakeholder feedback) included in the final closing report.

The RIA process should align with the NRA's existing public consultation policies and practices.

Additionally, where an impact assessment is complex, controversial, or requires significant stakeholder input, a dedicated public consultation may be run on the RIA process, as a supporting engagement mechanism. Again, the NRA's existing public consultation policies and practices would apply to such a consultation.

Alternatively, the practitioner may consider organising open letters, calls for evidence, workshops with key stakeholder groups, or surveys to gather information for the RIA process. Stakeholder engagement is a key enabler of RIA implementation and should be incorporated in some form at each stage of the RIA process. It is recommended that practitioners consider consulting with national bodies representing diverse groups, such as national women's organisations, to input to targeted distributional analysis, for example.

The public consultation is only one such form and can be limited to testing initial proposals, final proposals, or sub-proposals as part of a multi-stage RIA. Public consultation, and stakeholder engagement more broadly, can be guided by stakeholder mapping (see Annex C).

# Quality assurance

It is recommended that NRAs assign an internal body to be responsible for RIA oversight and quality control, considering the national procedures and standards that may apply to NRA processes. This body would oversee the quality of RIA across NRA departments, ensure alignment with the NRA's objectives, and consistency with international best practices and the application of the NRA's own guidelines and tailored methodology. This model of assurance is especially important for mandatory RIAs and decisions with significant identified impacts, which may use more advanced appraisal methodologies. For lower effort and voluntary RIA processes, an alternative process based on peer review could be designed. The peer review process would ensure RIA documents are still assured whilst sharing responsibility and reducing dependency and burden on NRA staff.

This model methodology assumes the existence of a relevant quality assurance body, in which case the completed RIA template should be provided for quality assurance to the body as a final step in the RIA process (considering proportionality). This body should also be kept informed as the RIA process is launched and develops, with any major issues and assumptions communicated to allow the body to intervene to assure quality.

As noted above, stakeholder engagement and public consultation are considered fundamental elements within the RIA process and provide another quality assurance mechanism for the NRAs work. Appropriate stakeholder engagement and public consultation should be present in RIA processes when proposed interventions carry significant impacts.

## Quality self-assessment

As part of the implementation toolbox, a RIA checklist is available to guide practitioners. This is provided in Annex A. The RIA checklist is provided to practitioners to self-assess whether key tasks of the RIA process have been followed, and considerations made, as recommended by the model RIA methodology presented in this paper.

# References

- CEER (2023), *Benchmarking Report on Regulatory Impact Assessment Methodologies*, CEER, [http://\(Available on request\)](#). [5]
- Drummond, J., D. Shephard and D. Trnka (2021), “Behavioural insight and regulatory governance: Opportunities and challenges”, *OECD Regulatory Policy Working Papers*, No. 16, OECD Publishing, Paris, <https://doi.org/10.1787/ee46b4af-en>. [9]
- IEA (2021), *Net Zero by 2050: A roadmap for the global energy sector*, <https://www.iea.org/reports/net-zero-by-2050#downloads>. [1]
- OECD (2025), *Licensing and Permitting: How to Manage Risks While Supporting Growth*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, <https://doi.org/10.1787/68fc3301-en>. [8]
- OECD (2024), “Framework for Anticipatory Governance of Emerging Technologies”, *OECD Science, Technology and Industry Policy Papers*, No. 165, OECD Publishing, Paris, <https://doi.org/10.1787/0248ead5-en>. [6]
- OECD (2024), *OECD Youth Policy Toolkit*, OECD Publishing, Paris, <https://doi.org/10.1787/74b6f8f3-en>. [12]
- OECD (2024), *The Role of Economic Regulators in the Green Transition: Driving Sustainable Change in Network Sectors*, The Governance of Regulators, OECD Publishing, Paris, <https://doi.org/10.1787/7d4704c9-en>. [2]
- OECD (2023), “Better regulation for the green transition”, *OECD Public Governance Policy Papers*, No. 40, OECD Publishing, Paris, <https://doi.org/10.1787/c91a04bc-en>. [3]
- OECD (2023), *Toolkit for Mainstreaming and Implementing Gender Equality 2023*, OECD Publishing, Paris, <https://doi.org/10.1787/3ddef555-en>. [11]
- OECD (2020), *Regulatory Impact Assessment*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, <https://doi.org/10.1787/7a9638cb-en>. [4]
- OECD (2018), *Cost-Benefit Analysis and the Environment: Further Developments and Policy Use*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264085169-en>. [10]
- OECD (2018), *OECD Regulatory Enforcement and Inspections Toolkit*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264303959-en>. [7]

## Annex A. RIA checklist

The following checklist is provided to practitioners to self-assess whether key tasks of the RIA process have been followed, and considerations made, as recommended by the NRA's RIA methodology. Since each RIA will be tailored to the context and vary based on proportionality, not all questions will be relevant.

### Screening and general design

- Is the decision or regulatory proposal subject to a mandatory RIA? If so, what form of RIA is mandated?
- Where RIA is not mandated, has a preliminary assessment of potential impact been made? Have the methodology screening criteria been used to assess how the RIA framework should apply?
- Have internal oversight bodies been consulted on the rationale for not conducting RIA, or otherwise informed of the start of the RIA process?
- Have the guidelines been consulted and an approach to RIA scoped out, based on the principle of proportionality? Is the appraisal approach proportionate to the decision?
- Is the RIA approach consistent with the country's Better Regulation Framework guidance (as relevant)?
- Does the scope of the RIA and its design support a clear and simple narrative that will be understood by key stakeholders?
- Have the requirements of the RIA, including any inputs and dependencies, been mapped out and planned?

### Problem definition

- Has the problem to be addressed been clearly identified and described? Has the problem been quantitatively described as far as possible?
- Has a clear rationale for intervention by the NRA been identified, considering the NRA's duties, organisational objectives and comparative good practices?
- Is the problem definition and rationale for intervention based on robust evidence? Have stakeholders had the opportunity to provide input?
- Is there evidence explaining how the status quo (current market functioning, market and regulatory failures) causes the observed behaviour?
- Have SMART objectives and goals of the intervention been adequately described? Where there are multiple objectives, has a hierarchy of outcomes been set out?
- Has a baseline been established for the state of play and integrated into the problem statement?
- Have all impacted and influential stakeholders been identified?

## Counterfactual and options definition

- Has the counterfactual scenario been well defined, including a view of how the problem will evolve over time in the absence of intervention?
- Has a range of meaningful alternative intervention options (long-list) been developed? Or does the RIA seem to focus only on justifying a particular regulatory action or set of actions?
- Do the alternative options vary in their stringency, are different regulatory instruments considered, are non-regulatory instruments considered?
- Is evidence available that allows the evaluation of the alternatives and their relative effect?
- Has a short-list of options been defined for appraisal? Has short-listing been based on sufficient reasoning?
- Are the following criteria met by the short-listed options:
  - a) Address the defined behaviours/causes of the problem
  - b) Will be effective in delivering the desired outcome (effective)
  - c) Are proportional to the problem and give good value for money (benefits are expected to be greater than the costs following appraisal)
  - d) Fit with wider social, economic and environmental policy objectives
  - e) Are deliverable and enforceable
- Has stakeholder input been considered in the development of alternative options?

## Appraisal

- Has the appropriate appraisal method been selected based on the RIA requirements and principles of proportionality?
- Have all the relevant impacts (costs and benefits) of the short-listed options been identified? Have any major indirect impacts been identified, including environmental, social, and economic impacts?
- Has need for the appraisal of specific or wider impacts been assessed? Has this appraisal been completed? Have all significant risks, areas of uncertainty, and unintended consequences been identified?
- Have opportunities to outsource analysis been identified that may enhance the quality and depth of the RIA?
- If the appraisal involves quantification, monetisation and the calculation of net present values, has the supplementary guidance been followed?
- Where modelling is used, has the model been quality assured?
- Are key assumptions communicated and have they been subject to sensitivity tests? Is the data used in the appraisal transparent?
- Have impacts relating to the NRA's stated strategic and organisational objectives been considered?
- Has input or data from relevant stakeholders, from initial consultations, open letters and calls for evidence, been incorporated?
- Are non-monetary impacts important? If so, have they been appropriately and thoroughly appraised to inform decision-making?
- Is the direction and result of the appraisal clearly summarised, presented and explained? In this regard, are the following practices followed:
  - a) The results of the assessment are described and explained in the text of the RIA

- b) The significance of the impacts are clearly shown in tabular form
- c) The positive impacts (benefits) and negative impacts (costs) are displayed separately
- d) Positive and negative impacts are quantified, wherever possible
- e) The uncertainty of the assessed impacts should be clearly described, usually through a range of potential impacts and their probability

## Delivery and feasibility

- Have the alternative options been tested from a delivery and feasibility perspective? Has this test been completed at the appropriate time to inform short-listing and appraisal?
- Has delivery and feasibility testing been informed by inputs from the relevant stakeholders?
- Are the preferred option(s) feasible from a policy and institutional perspective, considering capabilities and capacity, processes, dependencies, etc.?
- Are the preferred option(s) coherent with the good practices listed in the methodology relating to the design of compliance and enforcement regimes?
- Do the preferred option(s) allow for the specification of a monitoring and evaluation framework? Has an initial proposal been developed for this framework in consultation with relevant stakeholders?
- If no arrangements for monitoring and evaluation are specified, what is the justification?
- Have regulatory experimentation tools been considered in the context of the implementation of the preferred option(s) or as a method to gather further input to inform the RIA process?

## Decision proposal

- Has the RIA template been used to structure the decision communication?
- Have the communications good practices outlined in the methodology been followed?
- Does the decision clearly identify the preferred option following appraisal? Are the following aspects clearly summarised:
  - a) Overall monetised or quantified net benefits (as relevant), combining economic, social, and environmental criteria
  - b) Qualitative costs and benefits (as relevant)
  - c) Risks and areas of uncertainty (including implementation risks, and considering also available mitigation measures)
  - d) Specific and wider impacts (including distributional effects, unintended consequences)
- Has the presentation of the RIA been aligned with the NRA's public consultation policy and communications guidelines?

# Annex B. RIA template

## Reference information

<b>RIA Title</b>	[Insert descriptive title for the RIA]
<b>Decision process</b>	[Note the relevant NRA decision/process]
<b>Type of proposed measure</b>	[Add details for the preferred option]
<b>Lead analyst</b>	[Add lead analyst]
<b>Further contacts</b>	[Add contact info]
<b>Date</b>	[Add date RIA drafted]
<b>Consultation</b>	[Add any information related to the accompanying completed/planned consultation process]

## Key information on the RIA process

*[Explain why the NRA has conducted the RIA, the fact that the RIA is provided for transparency for stakeholders to understand the evidence-based rationale for intervention, and the fact that stakeholders may provide comments on the RIA or additional information. Note any important decisions relating to the RIA screening and selected approach (proportionality, analytical methods, etc.)]*

## Summary of proposal

*[Insert summary of the proposed intervention, including key stakeholder and implementation information]*

- Describe the intervention and impacted stakeholders
- Identify who is responsible for delivery and when the proposed arrangements are expected to come into effect
- Explain the status of the proposal and procedural situation

## Case for intervention

*[Insert description of the problem and the rationale for regulatory (or non-regulatory) action by the NRA]*

- What is the problem or issue to be addressed and what evidence supports its identification?
- Why is NRA intervention necessary? What would occur if intervention is not actioned?
- Has existing regulation been reviewed, and what were the key findings from that review?

## Intervention objectives

*[Insert the SMART (Specific, Measurable, Assignable, Realistic, Time-related) objectives for intervention]*

- What are the regulatory objectives of the intervention and the intended effects and outcomes?
- Can these be described in a specific, measurable, achievable, realistic and time-limited (SMART), or similar, way?
- Are there any other indicators of success that should be considered?
- How do these objectives align with the NRA's strategic and organisational objectives?

## Intervention logic and theory of change

*[Describe how the preferred option achieves the stated objectives of intervention together with any key assumptions, dependencies, risks and uncertainties]*

- Explain whether the option involves the revision of existing legislation or otherwise involves the application of tried-and-tested methods.
- Explain the logic underlying the preferred option and how the intervention will address the identified problem. If helpful, include a theory of change diagram or process map illustrating the relationship between the intervention and the desired outcomes (this may follow an input, activity, output, outcome framework, in which case the regulatory intervention will be the activity in the diagram).
- When relevant, evidence and explanation of behavioural factors and assumptions should be provided (for example, the evidenced reluctance of retail consumers to regularly switch provider).
- Any key dependencies or risks associated with the preferred option that may interfere with the attainment of the desired outcomes should be clearly explained as well as any potential unintended consequences that have the potential to undermine outcomes.

## Options identified and alternatives selected for appraisal

*[Provide a summary of the long-list of options and alternatives identified, as well as a detailed description of the short-listed options for appraisal, and the process of short-listing (criteria used to determine short-list)]*

- Provide an overview of long-list options, or relevant selection or typology, and a brief explanation as to why these were not taken forward for appraisal
- Provide the full list of the short-listed options appraised alongside the preferred option, and provide a detailed reason as to why they were disregarded in favour of the preferred option (based on criteria such as delivery and feasibility, relevance for addressing underlying behaviour/causes of the problem, proportionality, value for money, alignment with wider social, economic and environmental policy objectives, etc.)

## Preferred option scorecard

*[To be adjusted based on scope of appraisal and type of appraisal method used]*

Overall impacts		Assessment
Qualitative description of overall expected (net) impact	[Qualitative description of overall expected impact of the regulatory intervention in social welfare terms, flagging any adverse distributional effects, and considering environmental, social, and economic impacts]	[Positive / Negative / Neutral / Uncertain]
Monetised impacts	[Total NPSV with sensitivity ranges]	[Positive / <b>Negative</b> (EUR NPSV)]
Quantified (non-monetised) impacts	[Quantified measurement (scale) of any non-monetised costs/benefits]	[Positive / Negative / <b>Neutral</b> / Uncertain]
Specific impacts		Assessment
Distributional impacts (businesses, households, regions)	[Qualitative summary + monetised or quantified measurement of impacts in EUR NPV, indicating pass-through costs]	[Positive / Negative / <b>Neutral</b> / Uncertain]
Environmental impacts	[Summary of relevant direct environmental impacts]	[Positive / Negative / <b>Neutral</b> / Uncertain]
Energy system/market impacts	[Summary of relevant impacts for the energy market, grid operations, etc. (may also be assessed under unintended consequences)]	[Positive / Negative / <b>Neutral</b> / Uncertain]
<i>[Add additional lines as necessary]</i>		
Other impacts and analysis		Assessment
Cost of delivery	[Estimated ongoing administrative cost of implementation (including/excluding compliance costs for business depending on above)]	[Positive / Negative / <b>Neutral</b> / Uncertain]
Delivery feasibility	[Summarise results of qualitative feasibility assessment in line with methodology]	[Positive / Negative / <b>Neutral</b> / Uncertain]
Sensitivity analysis	[Summary of input sensitivities, modelling assumptions and resulting estimate ranges (as used above)]	[Positive / Negative / <b>Neutral</b> / Uncertain]
Unintended consequences	[Summary of any potential unintended consequences within the same or closely related markets, and wider spillover effects.]	[Positive / Negative / <b>Neutral</b> / Uncertain]
<i>[Add additional lines as necessary]</i>		

## Comparative scorecard for appraised options

*[May be adjusted to present comparison of options along different impacts or cost/benefit metrics (e.g. administrative costs, or significant un-quantified benefits and costs)]*

	Overall impacts (NPV, NPSV, or other relevant comparative impact measure)	Specific impacts	Other (wider impacts and other analysis)
Counterfactual (No intervention)	[...]	[...]	[...]
Preferred option	<i>[Provide scoring in line with above]</i>	[...]	[...]
Option B	<i>[Summary of assessment relative to preferred option and any additional appraisal results]</i>	[...]	[...]
Option C	<i>[Summary of assessment relative to preferred option and any additional appraisal results]</i>	[...]	[...]
<i>[Add additional lines as necessary]</i>			

## Delivery and feasibility

*[Provide a summary of any key findings from the delivery and feasibility assessment conducted as part of the appraisal. It is recommended that stakeholders are informed of relevant information regarding the delivery and feasibility of the preferred option, as far as is possible, to provide relevant feedback. Acknowledging that a final delivery and implementation plan will be developed following final decision.]*

- Does the preferred option pass feasibility assessment? [Attach completed Option Feasibility Test – see Annex C]
- What are the key elements of the delivery and implementation plan for the preferred option?
- Who are the key institutional stakeholders and what is their anticipated involvement in delivery of the preferred option?
- Who will be responsible for the ongoing operation and enforcement of the new arrangements?
- What delivery dependencies are there?
- Does the approach enable sufficient flexibility and scope for experimentation?

## Monitoring and evaluation framework

*[Provide a description of any findings during the RIA process that may inform the develop of the M&E framework for the preferred option at the time of implementation. Again, it is recommended that stakeholders are provided with relevant information, especially regarding data provision requirements, to enable feedback. Acknowledging that a final M&E framework will be developed following final decision]*

- Has the preferred option passed the M&E feasibility test? [Attach completed Option Feasibility Test – see Annex C].
- Attach the completed draft M&E framework template – see Annex C.
- What indicators will apply for measuring inputs, outputs, outcomes, and impacts within the framework? What baseline and targets have been provided by the RIA?
- What data is needed, is the necessary data available or can it be collected reliably? What systems need to be accessed or put in place? What is a suitable timeline for data collection?
- How will stakeholders provide ongoing feedback? Through which methods and tools?
- How will unintended consequences for businesses or households be assessed, including any unexpected administrative costs?
- How will stakeholders provide ongoing feedback? Through which methods and tools?

## Next steps

*[Provide a summary of any procedural steps following this proposal (provide information relevant for internal and external stakeholders)]*

## Supporting evidence

*[Attach appropriately formatted evidence and detailed analytical outputs supporting the RIA as an annex to the main template]*

## Annex C. Implementation toolbox

### Leveraging problem trees in RIA

The first step of the RIA process involves understanding the rationale for intervention and defining the problem and regulatory objectives in clear terms. The model RIA methodology promotes the use of problem trees as a common, useful diagnostic tool that helps the practitioner identify and structure the causes of a problem and its effects. A problem tree is therefore most appropriate to build at the problem definition stage of RIA and should be used as input when summarising the problem in the form of the problem statement. As the practitioners understanding of the context develops, problem trees should be revisited and updated, in line with the iterative approach that characterises the overall RIA process.

As well as their use for problem definition, problem trees may be helpful for:

- stakeholder engagement, by providing a visual and participatory tool for workshops and consultations;
- option generation, by identifying intervention points—whether at the root cause level or in mitigating impacts; and
- baseline assessment, by clarifying what happens if no action is taken (status quo or “do nothing” scenario).

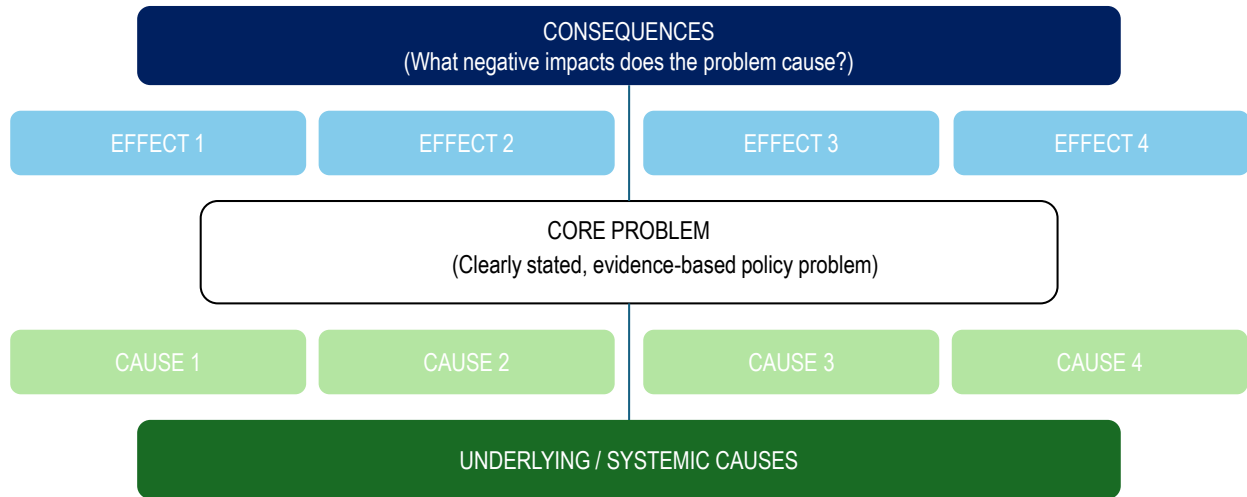
When used appropriately, problem trees strengthen the analytical foundation of RIA and improve policy or regulatory coherence. However, they require careful, evidence-based use to avoid oversimplification and bias.

#### *How to build a problem tree*

1. **Clarify the core problem:** A problem tree starts by identifying a **central problem**—this is usually a situation perceived as unsatisfactory that may justify regulatory intervention. This “core problem” is placed at the center of the tree diagram (see below).
2. **Identify causes (roots):** The causes of the core problem are placed below the core problem on the tree diagram. These are often:
  - a. Immediate causes (direct, proximate)
  - b. Underlying systemic causes (e.g., market failures, information asymmetries, institutional weaknesses)
3. **Identify effects (branches):** The effects or consequences of the core problem are placed above the core problem on the tree diagram. These effects can be:
  - a. Social (e.g., exclusion, inequality)
  - b. Economic (e.g., inefficiency, loss of productivity)
  - c. Environmental or other public policy impacts

4. **Understand linkages:** Mapping cause-effect relationships helps in:
  - a. Structuring the problem narrative
  - b. Identifying whether the problem stems from regulatory gaps, implementation or enforcement issues, or non-regulatory factors
  - c. Determining the appropriate level and type of intervention

**Figure A C.1. Problem tree diagram template**



**Further considerations for practitioners**

1. **Avoid framing solutions as problems**
  - a. A common mistake is expressing the problem as the absence of a solution (e.g., “lack of a regulation”).
  - b. Problems should describe undesirable outcomes or harm, not regulatory gaps per se.
2. **Be clear and evidence-based**
  - a. Causes and effects should be supported by evidence, not just assumptions.
  - b. Use data, evaluations, and stakeholder input to validate the tree – use workshops to build the tree with regulators, utilities, and consumers.
3. **Engage stakeholders early**
  - a. Involving those affected (citizens, businesses, regulators) can uncover hidden causes and build consensus.
  - b. Avoid technocratic top-down diagrams that ignore ground-level realities.
4. **Don't oversimplify complex systems**
  - a. While diagrams simplify reality, complex policy problems often involve feedback loops, multiple causes, or cross-sectoral issues.
  - b. Use supplementary tools (e.g., systems mapping) if needed.

## 5. Keep it dynamic

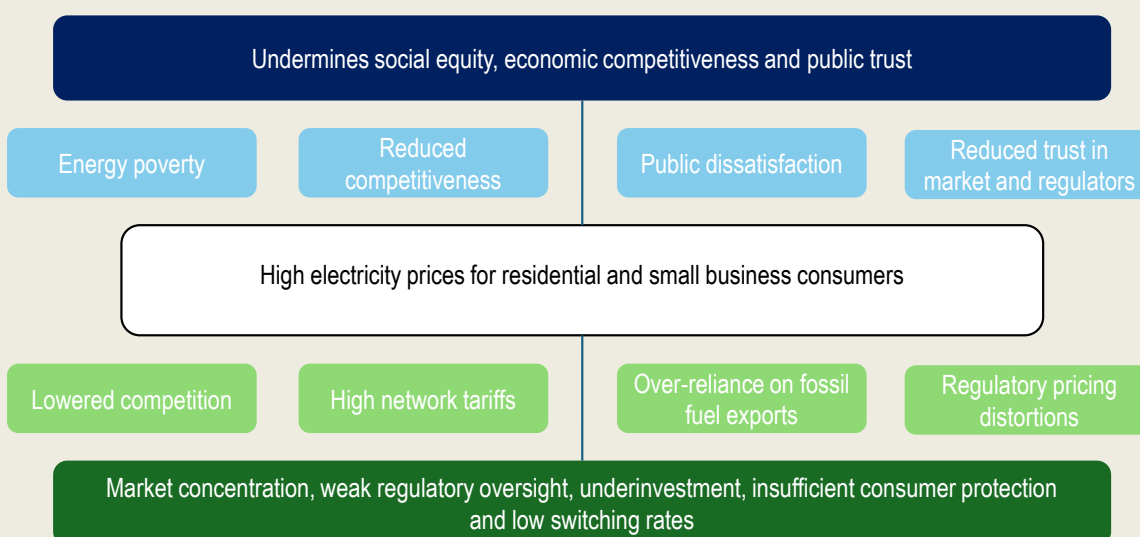
- a. Problem trees should be revisited as understanding deepens or as new evidence emerges during the RIA process. Update the tree as **impact assessment progresses** and more data is collected.

## 6. Consider political framing

- a. Be aware of how the “problem” is framed. Different stakeholders may define the same situation differently, affecting which options are considered acceptable or legitimate. Pair the problem tree with a **logic model** or **theory of change** when evaluating possible regulatory options.

### Box A C.1. Problem example: High electricity prices for consumers

Figure A C.2. Example problem tree diagram



**Core problem:** High electricity prices for residential and small business consumers

**High-level consequences:** High electricity prices undermine social equity, economic competitiveness, and public trust in energy governance

#### Effects:

- Energy poverty among low-income households
- Reduced competitiveness of small businesses
- Public dissatisfaction and pressure for government subsidies
- Reduced trust in regulators and energy markets

#### Immediate causes:

- Limited retail competition in the electricity market
- High network tariffs due to inefficient grid investments
- Over-reliance on fossil fuel imports, driving up generation costs
- Regulatory pricing distortions (e.g., cross-subsidies, outdated cost-recovery models)

**Underlying/systemic causes:**

- Market concentration in generation and supply sectors
- Weak regulatory oversight or outdated rules limiting tariff reform
- Lack of investment in renewable energy and local generation
- Insufficient consumer protection and low switching rates

**How this supports RIA:**

- Clarifies whether regulation is the right tool (vs subsidies, investment policy)
- Helps assess whether the issue is due to market failure, regulatory failure, or both
- Supports development of targeted options such as:
  - Introducing retail market liberalisation
  - Reforming network tariff structures
  - Improving transparency and consumer switching tools
- Investing in grid modernisation

Source: Developed by OECD authors.

## Stakeholder mapping

The model RIA methodology promotes stakeholder analysis iteratively throughout the RIA process starting early, already at the problem definition stage, and considers it essential at the stage of feasibility and delivery testing and as part of the quality assurance process.

Stakeholder analysis is a key input for planning stakeholder engagement and communications and thus must also be done prior to these processes and updated when relevant learnings become available. It is expected that practitioners will be able to update (or should reconsider) stakeholder analysis following option development, appraisal, delivery and feasibility testing, and when designing the monitoring and evaluation framework. (Noting revising stakeholder analyses does not necessarily have to lead to further stakeholder engagement or communications.)

The purpose of stakeholder analysis is to:

- **Identify** who is affected by the proposed regulatory intervention(s), how, and to what extent
- **Understand** sources of influence, whether supportive or not, and anticipate potential conflicts
- **Inform** stakeholder engagement that can improve legitimacy, transparency, and the RIA evidence base
- **Tailor** consultation processes and communication strategies related to the RIA or future implementation of the preferred options

To meet the various objectives listed above, it may be useful to analyse a range of factors, for which different inputs, research methods and analytical techniques may be appropriate. Aside from validating stakeholder identity, the way they will be impacted, and their attitude toward the intervention, it may be necessary to delve deeper and understand stakeholders':

- stake in the issue, what drives their positioning and attitude
- their power to shape or block regulation
- their knowledge and resources, if they hold important data or expertise

## How to analyse stakeholders

For the purposes of conducting RIA, the most relevant analytical methods for analysing stakeholder range from developing a simple stakeholder inventory to more complex social network analysis (where regulatory interventions are far reaching, impacting complex sector systems and digital platforms). The different methods are presented in the table below, together with relevant input gathering (research) methods, which in turn can range in complexity and may involve primary or secondary research methods:

Analytical methods	Information sources
<ul style="list-style-type: none"> <li>• <b>Stakeholder inventory/listing:</b> Comprehensive list of all potentially affected parties</li> <li>• <b>Stakeholder profiling:</b> Qualitative descriptions of each stakeholder's role, interests, and influence</li> <li>• <b>Impact vs. Influence Matrix</b> (most relevant and efficient option in most cases – detailed below)</li> <li>• <b>Social network analysis</b> (for complex systems or digital platforms)</li> </ul>	<ul style="list-style-type: none"> <li>• Policy documents, regulatory drafts</li> <li>• Prior consultation/RIA outcomes</li> <li>• Industry/market reports</li> <li>• Stakeholder submissions and surveys</li> <li>• Expert interviews</li> <li>• Media coverage and academic studies</li> <li>• Direct consultation (form of “call for interest”), surveying, stakeholder workshops</li> <li>• Advisory councils and association networks</li> </ul>

Practitioners should avoid conducting the stakeholder mapping and analysis process in isolation, or in ways that may introduce bias. It is recommended practitioners plan an appropriate amount of time to conduct stakeholder analysis, combine multiple information sources, validate their analysis with colleagues or appropriate networks, and reflect upon and test assumptions and inclusivity (are marginalised and vulnerable groups represented in the analysis?). When there are doubts about the comprehensiveness of the analysis, practitioners may wish to consider planning bespoke research or an initial phase of engagement to help identify stakeholders.<sup>1</sup>

## How to map stakeholders

A key technique for stakeholder mapping is the influence/impact matrix, which maps stakeholders into four groups. This mapping can help inform how stakeholder engagement and communications are structured throughout the RIA process, as well as provide a sense-check on the appraisal process (during which it is essential that all direct and material impacts are appraised, as accurately as possible).

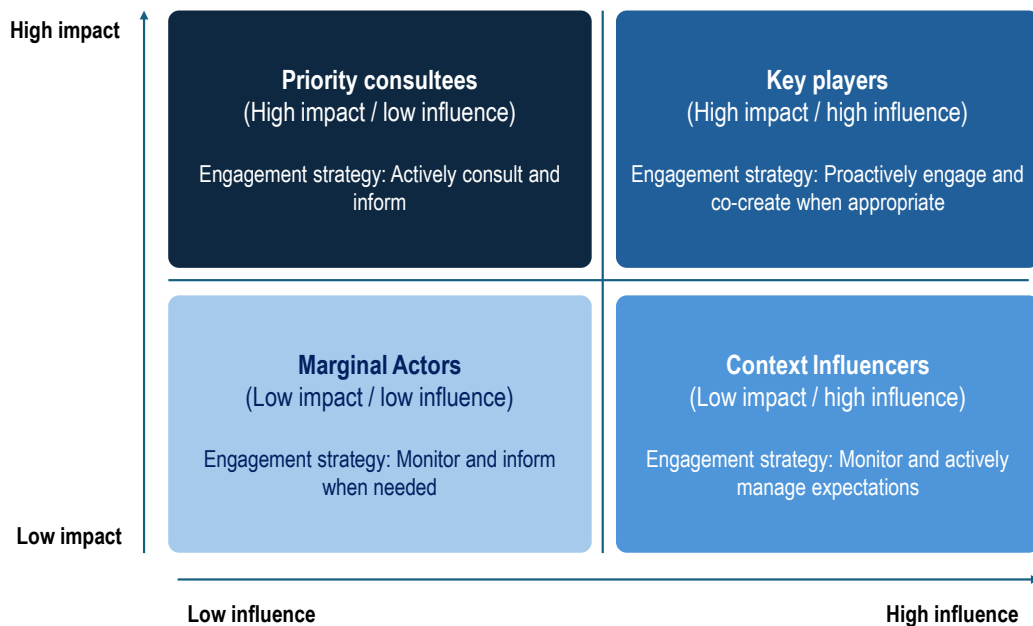
The 2x2 matrix is constructed by plotting stakeholders according to:

- on the X-axis, how much the stakeholder is impacted by the proposed intervention options (impact); and
- on the Y-axis, how much power the stakeholder holds to influence/affect the outcome of interventions (influence)

The resulting matrix (see below) maps stakeholders into four groups as follows: key players; priority consultees; context influencers; and marginal actors.

- **Key players** should be closely involved in regulatory design, consultations, and option testing
- **Priority stakeholders** may lack voice but are significantly affected, so targeted outreach or tailored mitigation is essential
- **Context influencers** can shape debate, provide resources or expertise, but are not core to implementation
- **Marginal actors** may need minimal effort now but should be monitored as their role could grow with system changes or political pressure.

Figure A C.3. Stakeholder matrix



A wide-ranging stakeholder map supports good RIA practice by allowing:

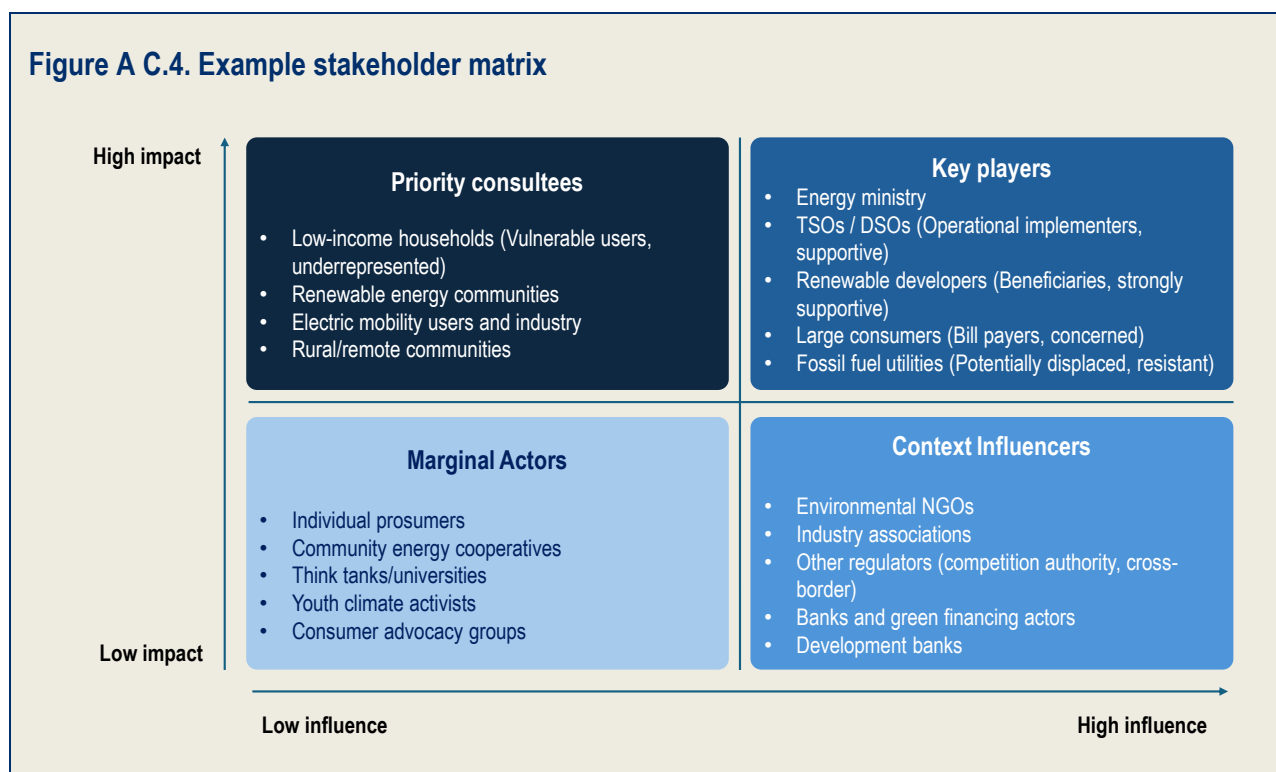
- Identification of distributional impacts (who gains/loses)
- Recognition of justice and equity issues
- Inclusion of technical, social, environmental perspectives, alongside standard economic assessments
- Anticipation of resistance or support that may affect implementation.

### Box A C.2. Example: Mapping stakeholders impacted by grid decarbonisation regulations

An illustrative example of a completed matrix mapping is provided below for a hypothetical case where the regulator is developing new regulation to accelerate grid decarbonisation. In addition to mapping the stakeholders based on influence and impact, it is possible to add some qualitative data, such as the stakeholder's role and positioning versus the proposed regulation. As noted, this analysis would help NRAs design targeted outreach, anticipate opposition, and explore mitigation strategies.

A comprehensive stakeholder list for grid decarbonisation should reflect the full ecosystem affected by the transition, from core operators and regulators to vulnerable or underrepresented communities. There are likely many more stakeholders to include in this example to ensure a comprehensive mapping.

Figure A C.4. Example stakeholder matrix



## Delivery and feasibility testing

At the delivery and feasibility testing stage of the RIA process, the model RIA methodology sets out several ways in which the short-listed options should be tested to ensure they can be implemented, complied with, enforced, monitored and evaluated.

As for formal appraisal, the depth of analysis conducted during feasibility testing should be proportionate to the anticipated scale of impacts. However, at a minimum, analysis should ensure the impact assessment is accurate and fit for purpose in terms of enabling a decision, and thus flag any major delivery and feasibility barriers, as well as risks and uncertainties, which should be explained when presenting the preferred option.

With this in mind, the template provided below guides practitioners through each of main delivery dimensions, ensuring the main areas of risk are considered, an overall feasibility rating is assigned, and the key delivery risks and mitigation measures are identified. The costs associated with delivery should be estimated and considered within the main appraisal of quantified costs and benefits.

The first part of the template (Sections 1 – 4) encourages practitioners to provide a “yes/no” response to target questions, testing the fundamental feasibility of both the preferred option and alternative options. Some assessment questions may require greater consideration or require the practitioner to conduct further analysis.

Once this initial assessment is complete, the practitioner is encouraged to complete an overall feasibility rating (Section 5), scoring each option from one to five – “high” (4-5), “medium” (2-3), or “low” (0-1) – against the overarching criteria, as well as summarise the key risks and their mitigation measures (Section 6). Both sections provide appropriate input to the main RIA Template (“Delivery and feasibility”) for the purposes of communicating feasibility and delivery risk assessment to wider stakeholders. The entire template may be annexed to the final RIA report for consultation if stakeholder input is considered valuable to finalise this part of the RIA.

Before finalising the assessment and potentially removing a short-listed option as “non-deliverable”, it is recommended that practitioners consider evaluate any “no” response, considering the underlying reason why the option is judged unfeasible versus the relevant criteria and the possible mitigation measures.

**Table A C.1. RIA Option Feasibility Test**

Criteria	Assessment questions	Preferred option	Alternative option A	Alternative option B ...	Comments
<b>Section 1: Policy and institutional feasibility</b>					
Legal feasibility	Does the option function within the current legal framework / can legislation be adjusted or introduced?	Feasible [Y/N?]	[Y/N?]	[Y/N?]	...
Institutional fit and capacity	Are the responsible bodies clearly identified? Do they have the mandate and capacity?				
Policy and regulatory alignment	Does the option align with government and sectoral priorities? Is it compatible with EU or other relevant laws?				
Inter-agency co-ordination	Will successful delivery require multiple institutions to co-ordinate? Are co-ordination mechanisms viable?				
<b>Section 2: Compliance and enforcement feasibility</b>					
Stakeholder compliance likelihood	Is compliance voluntary or enforceable? Is it politically/socially acceptable?	Feasible [Y/N?]	[Y/N?]	[Y/N?]	...
Cost of enforcement	Are enforcement costs proportionate and sustainable?				
Risk of circumvention	Is the option vulnerable to avoidance or gaming? Can these risks be mitigated by appropriate monitoring and enforcement design?				
Supervisory mechanisms	Are appropriate supervisory or audit systems in place, or can they be introduced?				
Alternative enforcement mechanisms	If no to above, are effective and proportionate alternatives in place, or can these be introduced? (e.g., market-based incentives, litigation, reputational incentives?)				
Enforcement flexibility and adaptability	Can flexible and adaptable arrangements be designed-in considering the option and needs of administration/regulated entities?				
<b>Section 3: Monitoring and evaluation (M&amp;E) feasibility</b>					
Impact logic	Can the impact logic or theory of change for the regulatory option be clearly articulated? Are the assumptions clear?	Feasible [Y/N?]	[Y/N?]	[Y/N?]	...
Measurability	Are the inputs, outputs, outcomes measurable? Is a baseline defined or available? Are relevant indicators already being tracked?				
Data availability	Are there existing data sources to support monitoring?				

Criteria	Assessment questions	Preferred option	Alternative option A	Alternative option B ...	Comments
M&E integration and capacity	Can monitoring be integrated into existing regulatory or operational processes? Does the NRA or implementation partners have the capacity for expanded monitoring and evaluation?				
Feedback	Could evaluation results lead to meaningful revision or recalibration of the regulation?				
<b>Section 4: Potential for regulatory experimentation</b>					
Scope for piloting	Can the option be tested on a small scale before full rollout?	Feasible [Y/N?]	[Y/N?]	[Y/N?]	...
Experimental space	Is there legislation, and the legal and institutional conditions, allowing for experimentation (e.g., pre-existing sandbox). Can these be created if not?				
Learning potential	Could a pilot generate lessons to inform better regulation or scaling decisions?				
Adaptability	Can the option accommodate iterative adjustment based on observed results?				
<b>Section 5: Overall feasibility ratings</b>					
Option	Technical feasibility	Legal/institutional feasibility	Deliverability (resources)	Stakeholder acceptability	Overall score
Preferred option A	[Score 1-5]	[Score 1-5]	[Score 1-5]	[Score 1-5]	[Score 1-5]
Alternative B ...	...				
Alternative C ...	...				
<b>Section 6: Summary of key delivery risks and mitigation measures</b>					
Risk description	Affected options	Likelihood (H/M/L)	Impact (H/M/L)	Mitigation strategies	Mitigation feasibility (Y/N)
(E.g. stakeholder resistance from DSO operators)	(e.g., Options A and C)	[High/Medium/Low]	[High/Medium/Low]	(e.g., early engagement, phased roll-out)	[Yes/No]
...	...				

## M&E framework development

Developing a monitoring and evaluation (M&E) framework helps ensure that regulatory interventions achieve their intended objectives and can be adjusted based on evidence. The framework provides a structured approach to tracking performance, assessing outcomes, and learning from implementation. For NRAs, this helps provide accountability by demonstrating the effectiveness of regulation, but also supports learning, adaptation, and transparency, and the efficient and responsible management of NRAs and stakeholders' resources.

The model RIA methodology asks that a test of the potential of the short-listed options to be effectively monitored and evaluated be done within the RIA process and suggests some initial groundwork to develop an M&E framework is completed for the preferred option. The full M&E framework should be finalised after the final decision is taken and implementation planning is in process, but starting it early ensures smoother implementation.

The preceding section (see Delivery and feasibility testing) covers the testing of the short-listed options from an M&E feasibility perspective, whereas this section considers how practitioners can begin work within the RIA process (i.e. at the initial design phase) on developing the M&E framework. The section provides a full M&E framework template, which provides practitioners with a view of both what can be developed during RIA and what is expected as part of a full M&E framework. This template applies only to the preferred option, and it is not expected that practitioners complete a framework for all short-listed options.

In practice, it is beneficial to complete M&E framework development and feasibility testing in tandem, as part of the iterative RIA process, and the effort should remain proportional to the scale of the RIA and impact of the option being considered.

Table A C.2 clarifies the differences between M&E feasibility testing and the full M&E framework that will be defined prior to delivery:

**Table A C.2. Understanding the difference between the M&E feasibility test and M&E framework**

Aspect	M&E Feasibility Test	Full M&E Framework
<i>Purpose</i>	To assess whether it is practical and possible to monitor and evaluate a regulatory option	To define how monitoring and evaluation will be carried out if the regulation is implemented
<i>Timing</i>	During option appraisal in the RIA process (ex-ante)	After a preferred option is selected, as part of implementation planning (ex-ante or early implementation)
<i>Focus</i>	Viability: Are there indicators, data, resources, systems?	Operational detail: What to monitor, how, when, who, and how to act on findings
<i>Depth</i>	High-level check of feasibility (e.g. is it measurable?)	Comprehensive plan (e.g. logframe, KPIs, data sources, baseline, frequency)
<i>Output</i>	Simple assessment (RIA Option Feasibility Test template)	Full M&E plan (often a section of the regulatory implementation plan or a stand-alone annex)

### ***M&E framework template***

The aim of the M&E framework following the RIA process is to provide the implementation roadmap for tracking whether the selected regulatory option is achieving its objectives and how it might be adjusted. As such, the framework should detail:

- Objectives and outcomes
- Indicators and data sources
- Roles and responsibilities
- Baselines and targets
- Frequency of review
- Evaluation questions and methods
- Learning and feedback loops (including engagement methods and tools)

The M&E framework template provided below considers each of these elements in more detail (see Table A C.3).

During the RIA, the focus should be on the initial design for the preferred option to define key outcomes, indicators, and monitoring needs. Special attention should be given to the data and capacity requirements and gaps that may hinder effective evaluation later (also part of the delivery and feasibility test).

Most of the material required to develop the initial M&E framework will have been considered during the early stages of the RIA. For example, defining the key outcomes, indicators and theory of change is part of the problem definition and option definition stages. The M&E framework consolidates and repurposes this information for evaluation planning.

**Table A C.3. Developing the M&E framework for the preferred option**

Key questions and considerations	Elements to develop during the RIA process (during initial design)	Elements to develop for implementation
<b>Section 1: Objectives and outcomes</b> <i>Describes the regulatory purpose and the specific results expected from implementation.</i>		
<ul style="list-style-type: none"> <li>What is the core objective of the regulatory intervention?</li> <li>What changes should result in the short, medium, and long term?</li> <li>Are the outcomes specific enough to measure?</li> </ul>	<ul style="list-style-type: none"> <li>Clear problem statement linked to objectives</li> <li>Initial outcome statements aligned with policy goals</li> </ul>	<ul style="list-style-type: none"> <li>Logic model or results chain (inputs → activities → outputs → outcomes)</li> <li>Classification of outcomes (short-, medium-, long-term)</li> <li>Definitions of each outcome</li> </ul>
<b>Section 2: Indicators and targets</b> <i>Establishes how progress will be tracked using measurable signs of change, with targets to define success levels.</i>		
<ul style="list-style-type: none"> <li>What metrics can capture progress on each outcome?</li> <li>Are they reliable and accepted in the sector?</li> <li>What is a reasonable level of change to expect?</li> </ul>	<ul style="list-style-type: none"> <li>Draft indicators for key outcomes</li> <li>Initial view on what data may be used to measure them</li> <li>Preliminary performance targets (if available)</li> </ul>	<ul style="list-style-type: none"> <li>Finalised indicator list with definitions and formulas</li> <li>Baseline and target values</li> <li>Indicator owners and update frequency</li> </ul>
<b>Section 3: Baseline and data sources</b> <i>Defines the starting point for measurement and where data will be sourced from.</i>		
<ul style="list-style-type: none"> <li>Is the current situation (baseline) for each indicator known?</li> <li>What are the available data sources?</li> <li>Are there quality or access constraints?</li> </ul>	<ul style="list-style-type: none"> <li>Check data availability for key outcomes</li> <li>Identify known gaps or uncertainties</li> <li>Note possible sources (e.g. operator reports, existing systems)</li> </ul>	<ul style="list-style-type: none"> <li>Baseline values established or a plan for collection</li> <li>Verified data sources and access arrangements</li> <li>Documentation of data quality or limitations</li> </ul>
<b>Section 4: Monitoring plan</b> <i>Outlines how information on implementation will be collected and reported.</i>		
<ul style="list-style-type: none"> <li>What needs to be tracked regularly to ensure proper delivery?</li> <li>How often should data be collected and analysed?</li> <li>Who will report, and to whom?</li> </ul>	<ul style="list-style-type: none"> <li>High-level idea of what needs to be monitored</li> <li>Preferred frequency and reporting needs</li> <li>Note whether monitoring can be integrated into existing structures</li> </ul>	<ul style="list-style-type: none"> <li>Reporting schedule (monthly, quarterly, annually)</li> <li>Monitoring tools (templates, dashboards, etc.)</li> <li>Assigned responsibilities and co-ordination channels</li> </ul>
<b>Section 5: Evaluation plan</b> <i>Specifies how and when regulatory performance will be evaluated (formally assessed).</i>		
<ul style="list-style-type: none"> <li>When should the regulation be reviewed?</li> <li>What evaluation questions need to be answered?</li> <li>Will it be internal, external, or independent?</li> </ul>	<ul style="list-style-type: none"> <li>Recommend if and when an evaluation is needed (e.g. 3 years post)</li> <li>Suggest key questions (e.g. Did this reduce emissions? Was cost justified?)</li> <li>Identify any methodological issues (e.g. difficulty attributing impact)</li> </ul>	<ul style="list-style-type: none"> <li>Evaluation timing (e.g. mid-term, ex post)</li> <li>Scope and methodology (e.g. theory-based, counterfactual)</li> <li>Roles, resources, and use of findings</li> </ul>
<b>Section 6: Roles and responsibilities</b> <i>Clarifies who is responsible for monitoring, analysis, reporting, and acting on findings</i>		
<ul style="list-style-type: none"> <li>Which organisations or units are best placed to manage M&amp;E?</li> </ul>	<ul style="list-style-type: none"> <li>Suggest responsible institutions or units</li> </ul>	<ul style="list-style-type: none"> <li>Organisational map of responsibilities</li> <li>Contact points and escalation paths</li> </ul>

Key questions and considerations	Elements to develop during the RIA process (during initial design)	Elements to develop for implementation
<ul style="list-style-type: none"> <li>Do they have the capacity and mandate?</li> <li>Is co-ordination required across agencies or levels?</li> </ul>	<ul style="list-style-type: none"> <li>Identify whether legal mandates or agreements are required</li> </ul>	<ul style="list-style-type: none"> <li>Capacity-building needs or inter-agency protocols</li> </ul>
<b>Section 7: Feedback and learning mechanisms</b> <i>Ensures that findings from monitoring and evaluation are used to improve regulatory performance.</i>		
<ul style="list-style-type: none"> <li>How will findings be used in practice?</li> <li>Who needs to be informed for action to occur?</li> <li>Is there a structured process for learning?</li> </ul>	<ul style="list-style-type: none"> <li>Propose how RIA results and monitoring should feed into revision cycles</li> <li>Identify decision-making points that could trigger a review</li> </ul>	<ul style="list-style-type: none"> <li>Formal feedback loops (e.g. annual learning reports, update workshops)</li> <li>Decision-use plans for internal and external audiences</li> <li>Mechanisms for public transparency or parliamentary accountability</li> </ul>
<b>Section 8: Resources and budget</b> <i>Estimates the resources needed to carry out the M&amp;E framework effectively.</i>		
<ul style="list-style-type: none"> <li>What are the human, financial, and technical needs?</li> <li>Can we leverage existing resources or need new capacity?</li> <li>Is the M&amp;E process scalable and proportionate?</li> </ul>	<ul style="list-style-type: none"> <li>Identify likely resource demands of basic monitoring</li> <li>Flag whether additional budget will be needed for evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Budget breakdown by M&amp;E activity (data collection, reporting, etc.)</li> <li>Resource mobilisation plan or internal allocation</li> <li>Capacity building and training needs</li> </ul>
<b>Section 9: Risk and mitigation measures</b> <i>Anticipates problems that may affect M&amp;E quality or delivery and outlines response measures.</i>		
<ul style="list-style-type: none"> <li>What could prevent effective M&amp;E?</li> <li>Are there legal, institutional, or technical risks?</li> <li>How can these be reduced or managed?</li> </ul>	<ul style="list-style-type: none"> <li>Identify key risks to feasibility or success of M&amp;E</li> <li>Suggest basic mitigation strategies (e.g. piloting, partnerships)</li> </ul>	<ul style="list-style-type: none"> <li>Risk register with likelihood/impact scoring</li> <li>Mitigation and contingency plans</li> <li>Assignment of risk monitoring responsibility</li> </ul>

## Note

<sup>1</sup> The OECD's *Good Practice Principles for Deliberative Processes for Public Decision Making* provides useful information on how public bodies can ensure inclusive representation, available at: <https://www.oecd.org/content/dam/oecd/en/topics/policy-issue-focus/innovative-citizen-participation/good-practice-principles-for-deliberative-processes-for-public-decision-making.pdf>.