Regulatory Impact Assessment

Methodology

Prepared for the Portuguese Energy Services Regulatory Authority

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OECD

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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.

Good 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 market 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.

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.

Background

This draft RIA methodology has been prepared by the OECD for the Portuguese Energy Services Regulatory Authority (*Entidade Reguladora dos Serviços Energéticos,* ERSE) as part of the Technical Support Instrument (TSI) project 24PT04 funded by the European Union: "Improving Regulatory Impact Assessment (RIA) Practices of the Portuguese Energy Regulator". Under this project, the OECD has been tasked to deliver several outputs and activities aiming to improve the robustness, transparency, and sustainability of ERSE's regulatory practices, through the consistent and comprehensive application of RIA to decision-making processes. The project foresees certain short- to medium-term outcomes:

- A standardised methodology for conducting Regulatory Impact Assessment is adopted by ERSE; and
- ERSE's capability (knowledge and skills) to directly implement, lead and maintain the use of a new RIA methodology is improved.

It is also expected that ERSE will be able to share learnings from the Project with other European energy regulators to foster a culture of RIA among their peers and facilitate knowledge exchange and capacity building.

By supporting ERSE to build its capacity and capability in RIA, the Project will contribute to the long-term improvement of regulatory decision-making in the Portuguese energy sector. As social, environmental, and economic factors are incorporated into decision-making by the authority, or by peers, decisions should more accurately reflect objectives under the European Green Deal and 2030 Agenda for Sustainable Development, resulting in regulation, and ultimately outcomes, that are aligned with progress toward those objectives, relative to current benchmarks. For more information on the background to the TSI project, please refer to the Detailed Project Description [REFORM/IM2024/002].

This draft methodology sets-out the key phases, options and considerations for conducting Regulatory Impact Assessment. The methodology has been tailored to the needs and specifications of ERSE but will be of relevance and interest to peer regulators, especially those active in 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 government.

This methodology is the second substantive output of the Project, following the delivery of an "AS-IS" report in March 2025. The methodology will be supplemented by a set of implementation guidelines – a further defined output of the Project. The methodology has been informed by two activities: first, a review of current institutional and governance mechanisms, including tools and methods, relating to RIA, and their readiness for formulating evidence-based and integrated regulatory decisions (the "institutional scan"), and second, a comparison of ERSE's current practices to international standards and good practice examples, especially those implemented by other regulatory agencies (the "gap analysis"). The findings from these two activities form the basis of the AS-IS report.

The Project commenced in September 2024, and the inception phase was finalised in December 2024. A summary of activities conducted during the inception phase and learnings from the fact-finding process are available in the project Inception Report.

The draft RIA methodology was circulated to project Advisory Group members and relevant stakeholders involved for comment in May 2025. The methodology will be finalised following a period of review and testing and is anticipated to be published in a generalised form as an OECD document and made available to all interested stakeholders before year-end 2025.

Introduction

The energy sector in Portugal plays a crucial, cross-cutting role in enabling social and economic activity and growth. At the same time, the sector is undergoing transformation and subject to disruption due to climate change policy and the use of emerging technologies. In Portugal, decarbonisation of the energy sector is one of the primary strategies to achieve emissions reduction targets (see National Energy and Climate Plan[1]), 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.

Such key decisions in the face of uncertainty requires public administrations, including 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. 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.

For ERSE, 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.

As a regulatory authority with duties within certain sectors, ERSE makes decisions that are different in scope and impact to those made by institutions operating in different sectors and at a different level of governance, for example policymakers in central government with responsibilities for passing primary legislation. As such, ERSE should proactively screen opportunities for when RIA can be applied across the authority 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 impact, based on principles of welfare economics. However, the use of CBA is but one form that RIA can take and applying the RIA mindset described above can include other less technical approaches, or qualitative comparison.

[1] National energy and climate plans (europa.eu)

What is a RIA methodology?

This RIA methodology establishes ERSE's RIA process and toolbox. As such, the methodology details the essential RIA steps that ERSE staff 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 ERSE processes. A final chapter in the document discusses the application of quality assurance mechanisms.

This first edition of ERSE's 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, and the enabling processes of data collection, consultation, and communication should be understood as a varying but continuous effort.

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 ERSE's day-to-day activities. By default, a "de minimis" or low impact proportionate assessment is expected to be conducted, except where other criteria are met (see Screening).

This methodology is supported by accompanying **Implementation Guidelines** which provide supplementary guidance to practitioners on implementing the methodology within ERSE's organisational context. The supplementary guidelines include information on Portugal's Better Regulation Framework, on the implementation enablers (data collection, stakeholder engagement, and communication processes) and implementation toolkit referenced throughout the methodology, as well as further technical guidance for conducting appraisal, using design principles, and behavioural insights.

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 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 can be appropriate.
- Adopting a **proportional approach** to RIA will ensure the framework and tools are used appropriately and that benefits are seized whilst burdens do not grow disproportionately.

- **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.

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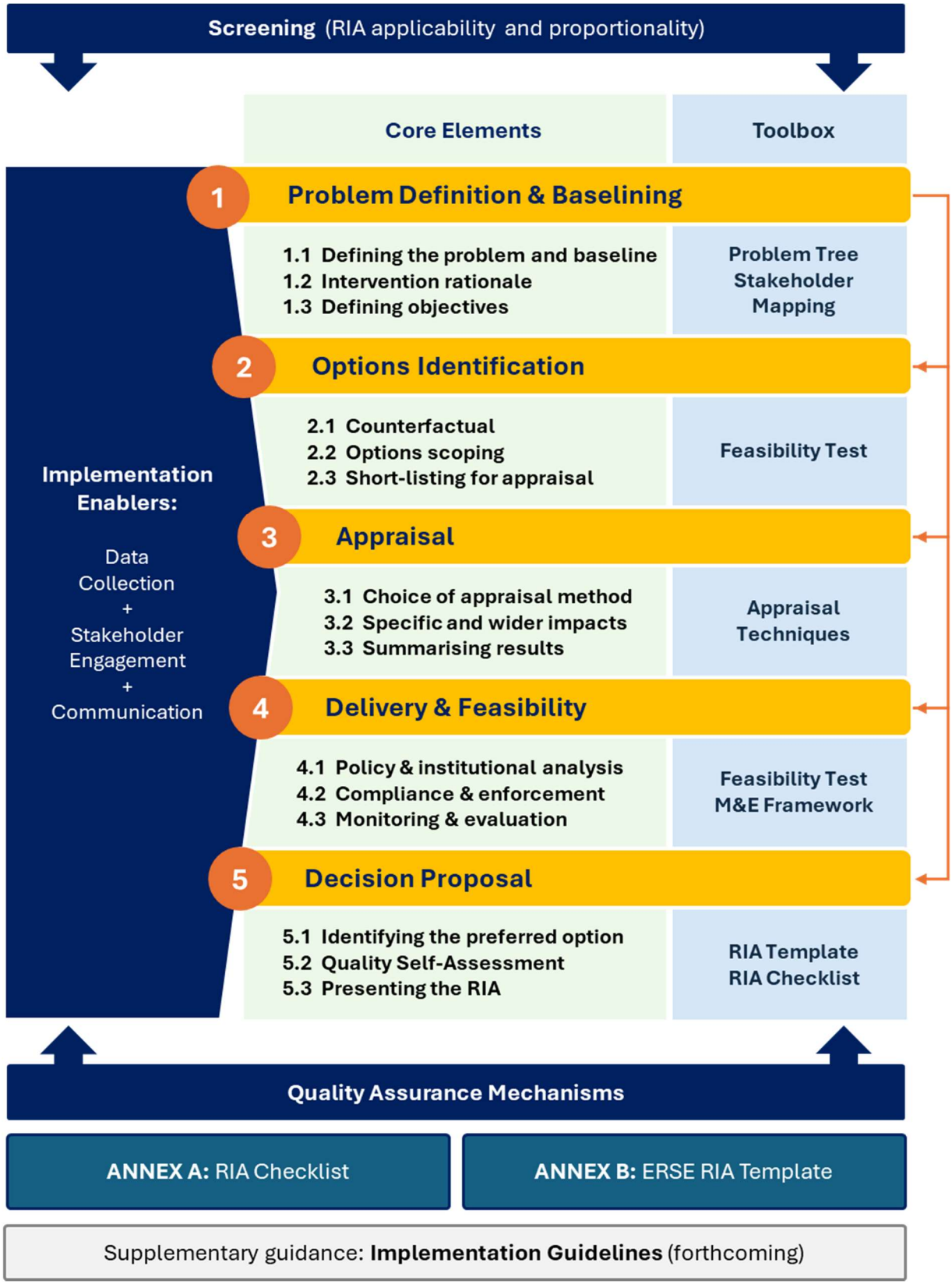
ERSE's RIA methodology



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Screening

Tasks associated with screening:

1. **Assess whether the decision or regulatory proposal is subject to a mandatory RIA. 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 regulation or decision issued by ERSE needs the same level of scrutiny or depth of analysis. The choice 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 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 ERSE's decision processes.

This section describes the types of decision or processes at ERSE 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 ERSE has control over the design or delivery of the proposed regulatory change, and the importance and anticipated impact of the regulatory change to ERSE and its stakeholders, considering economic, social and environmental impacts, as well as significant changes to activities carried out by ERSE.

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 ERSE'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;
- Be based on all available evidence and scientific expertise; and
- Be elaborated in consultation with stakeholders and well communicated.

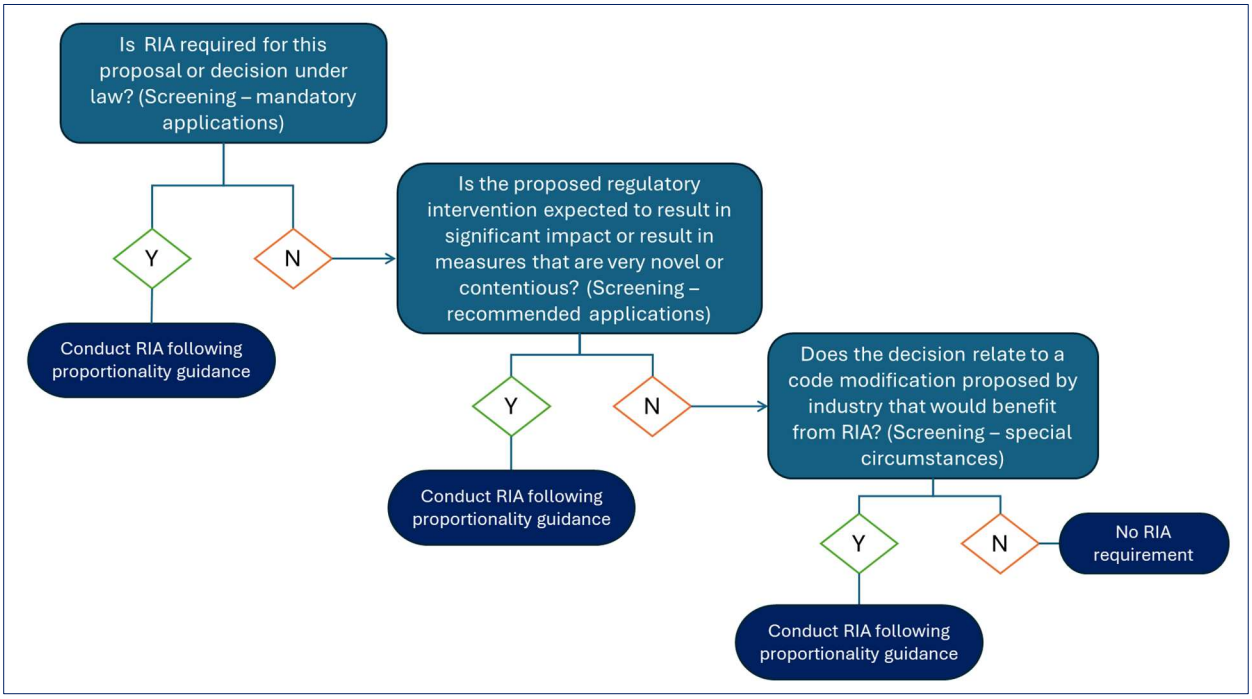
When to conduct a RIA at ERSE?

As illustrated in the following logic diagram (Figure 1) and described further below, RIA should be implemented in accordance with this methodology in cases where:

1. RIA is **mandatory** under relevant laws, policies, agreements, and prior decisions;
2. When ERSE decisions meet screening criteria based on **relative importance** (scope and relation to ERSE'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).

Figure 1 Decision tree for RIA screening



Mandatory applications

There are certain circumstances when ERSE is required to prepare a RIA as part of its own or wider decision-making process. These circumstances typically arise when requirements for RIA are specified in EU law 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 include decisions relating to the implementation of the Regulation on Wholesale Energy Market Integrity and Transparency (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 the ERSE RIA Project Team and ERSE's 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 ERSE will benefit from following a structured RIA process. By default, ERSE practitioners are expected 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[2]).

Criteria for determining importance

An in-depth analysis should be conducted in cases where a decision by ERSE 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)
- Result in a significant impact on citizens in Portugal or in a region of Portugal
- Result in significant changes to ERSE'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.

It is also recommended for a full CBA to be conducted when regulatory proposals will result in measures that are either very novel or very 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 that RIA is conducted as proposals are beginning to be developed and not yet formally proposed.

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 ERSE). 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[3].

[2] Additionally, please refer to the supplementary guidance, examples, and further resources provided in the Implementation Guidelines.

[3] Table 1 provides quantitative thresholds that may be identified as relevant for business, such as changes to allowed revenues, or to consumers or society in general (calculated in NPV/NPSV terms), such as tariff adjustments. In other cases, it may be more suitable to think in terms of the number of households impacted or the level of risk and complexity attached to the proposal.

Table 1 Impact categories based on quantitative thresholds

	Low impact ("de minimis")	Medium impact	High impact
Determining impact	▪ Equivalent annual net direct cost to business above 4 million EUR ▪ NPV or NPSV up to 20 million EUR	▪ Equivalent annual net direct cost to business above 8 million EUR ▪ NPV or NPSV greater than 20 million EUR and less than 40 million EUR	▪ Equivalent annual net direct cost to business above 40 million EUR ▪ NPV or NPSV greater than 40 million EUR
Further quantifiable variables	▪ Small number of organisations/households will be affected (hundreds) ▪ Low complexity/risk of delivery and few factors to consider to estimate impacts	▪ Considerable number of organisations/households will be affected (thousands) ▪ Moderate complexity/risk of delivery and multiple factors to consider to estimate impacts	▪ Large number of organisations/households will be affected (tens of thousands +) ▪ High complexity/risk of delivery and wide range of factors to consider to estimate impacts

Special circumstances (code modifications)

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

In the context of code modifications and updates, ERSE 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 criteria listed for recommended applications and when RIA is not required.

Applying the RIA process to code modification proposals helps the ERSE practitioner assess whether a type of modification is necessary, by encouraging identification of an underlying problem. To reduce burden, it may be possible for multiple modification proposals to be grouped, for example by theme or code area, and then assessed based on the RIA criteria. It may be possible for ERSE to introduce a new proposal that aims to improve on stakeholder proposals by better targeting an identified issue. Where distinct code modification proposals do not meet the screening criteria, the practitioner is not expected to conduct a RIA. In reverse, for code modification proposals that have significant potential impacts, the practitioner would be expected to undertake impact assessment before accepting such a proposal.

It is recommended stakeholders be requested to provide all necessary data, information, and initial assessment together with their code modification proposals to reduce potential burden on ERSE practitioners.

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, the choice requires the scrutiny of an oversight body, who may intervene and suggest a deeper analysis in case the proportionality principle has not been applied appropriately (see Quality Assurance Mechanisms). 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 and fit for purpose in terms of enabling a decision**, as reviewed by the ERSE Board and through the ERSE RIA quality assurance process, as relevant. 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 **with quantitative measures included** to better assess the scale of the problem.	**A clear problem definition, rationale and justification for intervention, backed by thorough evidence.**
Counterfactual and options definition	Brief description of counterfactual and what would happen in the absence of intervention. Considers a range of well-described, feasible options, including non-regulatory options and the counterfactual.	As for low impact, but **with more detailed discussion of counterfactual and development of problem in the absence of intervention** and **more detail on justifications** for option selection.	**Full description of the counterfactual and evidence-based justification of options selection (based on theory and empirical evidence). Clear statement of assumptions on counterfactual and theory of change.**
Appraisal	Not all impacts need to be monetised (best estimate for direct impacts), but	As for low impact but **with quantitative estimates of option**	**Thorough appraisal using an appropriate quantitative or hybrid**

	all impacts should be described qualitatively and provide a sense of scale. Supported by readily available data and straightforward calculations. Each option should be analysed and discussed.	**impacts** (costs and benefits) using validated data, and **greater (but not full) monetisation**. **Clearer discussion of risks and uncertainties for each option**. Some **sensitivity analysis or distributional analysis may be expected**. **Specific impacts** should be included. Complex appraisal methodologies and modelling is not necessary.	**methodology to appraise costs and benefits of short-listed options is expected (aiming for the monetisation of all impacts where possible).** Specific and wider impacts should be incorporated. **Bespoke data collection and modelling may be appropriate. Assumptions should be fully explained.**
Delivery and feasibility testing	The delivery and feasibility of each option should be screened at least qualitatively.	**Full assessment of delivery and feasibility in line with the implementation guidelines. Including potential for monitoring and evaluation of short-listed options.**	As for medium impact, **and some initial work on developing the monitoring and evaluation framework for the preferred option might be expected.**
Decision proposal	The qualitative assessment should be clearly summarised, and the preferred option selection justified. Additional areas of risk and uncertainty should be qualitatively assessed and communicated.	As for low impact, a clear summary of any **quantified costs and benefits** should be provided.	As for medium impact, a clear summary of quantified costs and benefits, **modelling assumptions, and sensitivity/scenario analysis** should be provided.

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. Therefore, whilst one RIA process is run, more than one RIA report may be developed. For example, a first document may present initial analysis of options associated with a given problem and their impacts, whilst a second document 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 and the need for stakeholder input. Considering ERSE's current two-step consultation process, an initial RIA may be published at consultation launch, with a request for stakeholder feedback, and a final updated RIA published with the closing report. However, where there are significant data gaps, uncertainties, and stakeholder input would prove valuable, calls for evidence or a targeted consultation process for the RIA document may be merited.

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.

Furthermore, as noted above, some decisions are complex and made up of multiple decision stages. In this case, one final RIA may consolidate a view of the entire regulatory change proposal, but smaller RIA documents may be developed and consulted on at each decision stage.

When is RIA not required?

RIA is intended to support regulatory decisions that fall within the scope of ERSE'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 ERSE is implementing administrative actions required by law (set in primary or secondary legislation), unless ERSE holds significant discretion as to the nature of the actions or their implementation.
- Likewise, when ERSE 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 ERSE is taking enforcement action based on existing standards.
- When ERSE 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 accompanying implementation guidelines and discuss screening decisions with the ERSE's internal RIA oversight body.

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 ERSE, considering ERSE's duties, organisational objectives and comparative practices. Informed by analysis of the regulatory stock and policy context.**
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 ERSE 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 ERSE RIA Template).

Baseline and counterfactual scenario

When formulating the problem statement, it is possible based on the questions above to establish the baseline, which describes the current state of play. The “baseline” differs slightly from the counterfactual or “reference scenario” identified under Chapter 2, which describes the assumed future state of the world in the absence of ERSE’s intervention. It is the counterfactual that forms the point of comparison during the assessment of options at the appraisal stage.

Therefore, the appraisal will understand how, starting from the 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 appraisal 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., whilst there is a known problem, some factors may obscure observation of the 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 from 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 ERSE) 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 ERSE, 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:

- ERSE’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 ERSE, 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 ERSE continues to achieve its strategic objectives and contribute to wider societal goals. This is an important consideration both for defining the rational for intervention and defining the objective(s) of intervention.

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

- In accordance with ERSE's mandate, the need to:
    - Protect the interests of consumers, particularly the most vulnerable, and create conditions for their empowerment
    - Ensure user access to electricity and gas networks and infrastructure
    - 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
    - Affirm excellence in the defence of the public interest
- In accordance with ERSE's strategic objectives, issues under the themes of:
    - 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 ERSE'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 ERSE'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 suitable 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 regulatory alternatives where relevant**
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 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 ERSE 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 ERSE's 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 ERSE 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. These include the following intervention approaches:

- **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 ERSE'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.

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 ERSE has in designing the solution.

It may be the case that certain alternative options are not within the powers of ERSE to introduce or implement, for example there may be a dependency on changes to primary legislation. In this case, ERSE 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[4]. The short-list of options should feature feasible regulatory and non-regulatory interventions that are within ERSE's mandate to issue or implement, considering ERSE'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 that 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).

[4] 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**
4. **Conduct or outsource analysis in line with ERSE guidance**
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 Portugal (or for the relevant region of Portugal or regulated geography). 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. Further guidance on methods, tools and resources for appraisal at ERSE will be provided in the supplementary implementation guidelines.

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), then mixed

methods and qualitative methods (Table 4), and finally methods used to explore specific impacts and complementary analyses that can be run in parallel to provide additional insights (Table 5).

Supplementary guidance and resources are available in the accompanying **implementation guidelines** relating to those appraisal factors which commonly apply to ERSE RIA's utilising to the quantitative-based methods described below. The accompanying implementation guidelines also provide supplementary guidance on appraising specific **environmental and social impacts** that may feature as part of a multi-criteria or single-criteria quantitative assessment, as well as **energy system specific** tests and **wider impacts** that may be mandatory to assess based on the regulators' duties, strategic objectives or due to legislation (e.g., assessing impacts on small and medium enterprises).

Table 3 Quantitative methods for appraising impact

Appraisal method	Application	Methodology description	Complexity
Least-cost analysis (LCA)	Suitable when **benefits are fixed** and only the means to achieve an objective are being selected.	Compares the cost of 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 **benefits cannot be easily monetized** 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 **impacts can be monetised**, and can be applied when **one or more options are compared** to the counterfactual.	Compares all costs and benefits of an intervention by monetising both, allowing for a direct comparison in 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.

Table 4 Mixed methods and qualitative appraisal methods

Appraisal method	Application	Methodology description	Complexity
Multi-criteria analysis (MCA)	Suitable when there are **competing objectives** (e.g., trade-offs between environmental and economic factors) and a **need to score and weight heterogenous criteria** which cannot be comparatively monetised/quantified.	Compares multiple dimensions (economic, social, environmental) using a weighted scoring system rather than a single monetary metric.	Variable – requires stakeholder input and weighting criteria, but does not always require rigorous statistical analysis
Qualitative approaches	Suitable when data is scarce or unreliable, when impacts are non-quantifiable, when there is a need to explore complex causal relationships that are not easily modelled statistically, or when quantitative analysis may benefit from additional targeted insights from stakeholders and subject experts, for example to aid foresight and model assumptions.	Compares options based on the insights gained through qualitative research: • Comparative case study analysis of evidence on regulatory impacts • Structured expert interviews or surveys (Deplhi) • Extended or participatory stakeholder consultation • Ethical and normative impact assessment	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, and to the accompanying Implementation Guidelines for examples of applying proportionality to RIA).

Specific and wider impacts

As part of a multi-criteria analysis or hybrid approach, ERSE 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 ERSE'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 authorities), which can then be taken as input into ERSE 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, 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 5**).

ERSE's duties include protecting the interests of consumers, particularly the most vulnerable, and ensuring user access, which mean analysis of distributional impacts may be particularly relevant and important.

Table 5 Methods and resources for appraising specific impacts and complementary analyses

Appraisal method	Application	Methodology description
Distributional analysis	Suitable when there is a need to assess the **impacts of a regulatory change on consumers at a granular level**, for example, households on a particular **tariff** and **vulnerable customers**. Distributional analysis is relevant for impacts affecting **total domestic consumption** and complements the general welfare analysis conducted at consumer / producer level.	Examines the impact of the proposed regulatory change on different consumer groups through the use of domestic consumer "archetypes", constructed on the basis of common characteristics and socio-economic data, and energy bills.
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 ERSE'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 **Annex 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 **Annex 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.

Impacts relevant to ERSE RIA

The following impacts (Table 6) are relevant to ERSE RIA considering ERSE's duties and regulatory objectives. 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 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 6 Potential economic, social and environmental impacts featuring in ERSE RIAs

	Quantified (monetary)	Quantified (non-monetary)	Unquantified
Economic (incl. infrastructure & innovation)	▪ Consumer welfare (e.g. price change) ▪ Producer welfare ▪ Socio-economic welfare ▪ System Costs (may include emergency preparedness) ▪ Optionality ▪ Infrastructure upgrading & resilience (investment level and cost levels) ▪ Innovation investment (R&D) ▪ Cost of compliance	▪ Competition indicators (market concentration (e.g. HHI), market power and dominance (e.g. pricing power/PCM), switching and contestability) ▪ Security of supply (adequacy) ▪ Network reliability (Outages, SAIDI/SAIFI indices) and system losses ▪ Technology uptake (distributed energy resources)	▪ Security of Supply (strategic) ▪ Financial Resilience ▪ Learning by doing ▪ Investment incentives (directional) ▪ Innovation incentives (directional) ▪ Dynamic efficiency gains and future cost reduction (sandbox initiatives) ▪ Supply chain resilience
Environmental[5]	▪ GHG emissions impact (CO2e * carbon value) ▪ Non-carbon environmental impacts	▪ Cross-border carbon impacts ▪ GHG emissions impact (non-monetised) + lifecycle emissions impacts ▪ Local air/soil/water pollutant levels	▪ Land-use and biodiversity impacts ▪ Waste and recycling implications
Social	▪ VOLL (Value of Lost Load) x Loss of load expectation (LOLE) ▪ Distributional impacts (bills/tariffs affordability) ▪ Value of life	▪ Accessibility (e.g. cooking fuels) ▪ Job creation/displacement from energy transition or electrification ▪ Public health and safety impacts	▪ Trust in energy suppliers ▪ Lock in impacts ▪ Perceived fairness and transparency of

[5] The environmental impacts addressed by ERSE RIA should be those directly related to the proposed intervention. The RIA may be informed in this regard by analysis completed by Environment Impact Assessments (EIAs), as conducted by environmental authorities (e.g., for infrastructure development), when this analysis provides information on the specific impacts identified as relevant to the ERSE RIA. However, RIA is not expected to incorporate or replace the EIA process.

			regulation ▪ Public acceptance of new energy infrastructure

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 is 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

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. Ideally, 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.

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 monitoring and evaluation (M&E) framework should be tested.

As for formal 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 & 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 & 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 short-listed options (the preferred option and all alternatives) from a feasibility perspective, to understand if a suitable M&E framework can be developed for each option. This M&E feasibility test is included in the accompanying implementation guidelines alongside tests relating to the other feasibility areas noted in this section.

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 ERSE's and stakeholders' resources. Again, monitoring and evaluation activities should be proportionate to the importance and anticipated impacts of the intervention.

The accompanying implementation guidelines provide more information on elaborating an M&E framework within the RIA context. 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, focusing on 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 option 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 ERSE'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 ERSE's strategic objectives. It should also be judged as feasible to implement.

Compared to the other appraised options and the counterfactual, the preferred option will provide the most optimal outcome considering:

- Overall monetised or quantified net benefits (as relevant), combining economic, social, and environmental criteria
- Qualitatively assessed costs and benefits (as relevant)
- Risk and uncertainty (including implementation risks, and considering also available mitigation measures)
- 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.

ERSE's 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 ERSE's 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 the consultation package, 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 ERSE'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, ERSE'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. 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. Further guidance on the use of stakeholder engagement at each RIA stage is provided in the accompanying implementation guidelines.

Quality Assurance

At the time of drafting this first edition of the ERSE RIA methodology, the implementation of ERSE's internal quality assurance mechanisms for RIA are not finalised. Please contact the ERSE RIA Project Team for further information.

For further guidance on implementing the RIA stages detailed within this methodology, it is recommended that practitioners consult the accompanying implementation guidelines (forthcoming).

Quality self-assessment

As part of the implementation toolbox, a RIA checklist is available to guide practitioners. This is provided in the Annex to this document.

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 ERSE's RIA methodology. The checklist is not mandatory but is provided as a tool that practitioners may have at-hand to help guide them through the RIA process. Since each RIA will be tailored to the context and vary based on proportionality, not all questions will be relevant and thus may be skipped.

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 RIA 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 Portugal's Better Regulation Framework guidance?
- ☐ 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 ERSE been identified, considering ERSE'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 ERSE'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 ERSE 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 ERSE's public consultation policy and communications guidelines?

Annex B. ERSE RIA Template

[Note for practitioners: Instructions in square brackets indicate the template sections that apply, depending on the status of the RIA or the level of impact of the assessed intervention (low, medium, high). Please refer to the Implementation Guidelines for further guidance on completing the Template and the referenced analysis and tests]

Reference information [All RIA]

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

Key information on the RIA process [Encouraged for all RIA and mandatory for all RIA included in public consultation]

[Explain why ERSE has conducted the RIA, the fact that the RIA is provided for transparency for stakeholders to understand the evidence-based rational 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 [All RIA]

[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 [All RIA]

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

- What is the problem or issue to be addressed and what evidence supports its identification?
- Why is ERSE 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 [All RIA]

[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?
- How do these objectives align with ERSE's strategic and organisational objectives?

Intervention logic and theory of change [All RIA]

[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 [All RIA]

[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 [Relevant for all RIA, to be tailored based on scope of analysis and type of appraisal method used]

Overall impacts		**Assessment**
Qualitative description of overall expected (net) impact [All RIA]	[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 [as relevant]	[Total NPSV with sensitivity ranges]	[Positive / **Negative** (EUR NPSV)]
Quantified (non-monetised) impacts [as relevant]	[Quantified measurement (scale) of any non-monetised costs/benefits]	[Positive / Negative / **Neutral** / Uncertain]
Specific impacts		**Assessment**
Distributional impacts (businesses, households, regions) [as relevant]	[Qualitative summary + monetised or quantified measurement of impacts in EUR NPV, indicating pass-through costs]	[Positive / Negative / **Neutral** / Uncertain]
Environmental impacts [as relevant]	[Summary of relevant direct environmental impacts]	[Positive / Negative / **Neutral** / Uncertain]
Energy system/market impacts [as relevant]	[Summary of relevant impacts for the energy market, grid operations, etc. (may also be assessed under unintended consequences)]	[Positive / Negative / **Neutral** / Uncertain]

[Add additional lines as necessary]

Other impacts and analysis		**Assessment**
Cost of Delivery [Encouraged, not mandatory]	[Estimated ongoing administrative cost of implementation (including/excluding compliance costs for business depending on above)]	[Positive / Negative / **Neutral** / Uncertain]
Delivery feasibility [All RIA]	[Summarise results of qualitative feasibility assessment in line with methodology]	[Positive / Negative / **Neutral** / Uncertain]

Sensitivity analysis [as relevant]	[Summary of input sensitivities, modelling assumptions and resulting estimate ranges (as used above)]	[Positive / Negative / **Neutral** / Uncertain]
Unintended consequences [as relevant]	[Summary of any potential unintended consequences within the same or closely related markets, and wider spillover effects.]	[Positive / Negative / **Neutral** / Uncertain]
[Add additional lines as necessary]		

Comparative scorecard for appraised options [All RIA, to be tailored to scope of analysis and appraisal method used]

[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	*[Provide scoring in line with above]*	*[…]*	*[…]*
Option B	*[Summary of assessment relative to preferred option and any additional appraisal results]*	*[…]*	*[…]*
Option C	*[Summary of assessment relative to preferred option and any additional appraisal results]*	*[…]*	*[…]*
[Add additional lines as necessary]			

Delivery and feasibility [Relevant to all RIA, mandatory options highlighted in box. Please refer to the Implementation Guidelines for guidance on completing the referenced tests]

[Provide a summary of any key findings from the delivery and feasibility assessment. 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.]

- [Mandatory] Does the preferred option pass feasibility assessment? [Attach completed Option Feasibility Test from Implementation Guidelines]

[Detailed questions:]

- *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? [Optional] How will administrative and compliance costs be minimised for the preferred option?*
- *[Optional] Who will be responsible for the ongoing operation and enforcement of the new arrangements?*
- *[Optional] What delivery dependencies are there?*
- *[Optional] Does the approach enable sufficient flexibility and scope for experimentation?*

Monitoring and evaluation framework [Relevant to all RIA, mandatory options highlighted in box. Please refer to the Implementation Guidelines for guidance on completing the referenced tests]

[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]]

- [Mandatory] Has the preferred option passed the M&E feasibility test [Attach completed Option Feasibility Test from the Implementation Guidelines (as above)].
- [Optional] Attach the completed draft M&E framework template from the Implementation Guidelines.

[Detailed questions:]

- 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?
- [Optional] How will unintended consequences for businesses or households be assessed, including any unexpected administrative costs?

Next steps [For RIA included in public consultation]

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

Supporting evidence [Encouraged for all RIA, especially complex RIA, but not mandatory]

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