

# REGULATORY IMPACT ASSESSMENT TOOLKIT

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A PRATTIONER'S GUIDE IN DEVELOPING  
COUNTRIES



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## *Introduction*

### **What is the Regulatory Impact Assessment Toolkit?**

When developing, implementing regulatory tools, governments work to ensure that these are of the highest quality and provide the greatest net benefits to society, estimating and taking into account the costs that society must pay for those potential benefits. To achieve this, analysis and assessment of regulatory proposals is important to estimate their impacts, both positive (success in achieving the objectives) and negative (the costs of the regulation). Almost all regulations increase costs for stakeholders in specific, and consequently to the economy general. Thus, it is important to identify those where the benefits justify those costs, and where they do not.

This toolkit provides a detailed guide for assessment of regulatory proposals to arrive at the most optimum solution. It discusses the manner in which governments can use Regulatory Impact Assessment (RIA) as a tool to improve the regulatory mechanisms along with the application of the tool. The process of RIA can be conducted while development as well as review of regulations. The former ensures selection of a regulatory proposal that produces good results at reasonable costs, while the latter helps in course correction on evaluation of actual impact, and identification of potential regulatory alternatives. However, failure to conduct RIA while developing regulations, which is often the case in developing countries, should not deter a RIA for review of existing regulations. Principles of RIA can be extremely helpful in conducting evaluation of existing regulations and correcting the errors in place. Thus, RIA can be extremely helpful for developing countries. This toolkit covers both these scenarios.

The methodology of conducting RIA is not standardized, is flexible among methods, and can be modified depending on the requirements and resources available. Though this tool is widely employed in most developed nations, many developing nations are still unaware of its benefits, and thus, its use is limited. The objectives and availability of resources differs in developed as well as developing countries. Even though the basic principles of conducting RIA would remain the same, certain modifications would be required to suit the needs of developing nations which face a crunch in terms of funding, analytical capacity, data availability, as well as time. Developing countries also have to deal with existing stock of regulations. Thus, though this toolkit is well-suited for use by any nation, it is tailor-made to account for the specific critical aspects prevalent in developing nations.

This toolkit is divided into three sections. The first chapter provides a basic understanding of RIA, its need and benefits. The second chapter explains the step-by-step approach for conducting such impact assessments while the third chapter deals with the adoption of RIA in the country.

### **Who should use this Toolkit**

This toolkit provides a simple and practical approach for conducting RIA and can be helpful for all key personnel involved in policy development, implementation, review and evaluation. These could include government and regulatory agencies, civil society organisations, and research institutions, media, among others.

## *Chapter 1: Understanding Regulatory Impact Assessment*

### **Introduction**

Governments work towards achieving greater growth and maximising society's economic and social welfare. Some of the ways to achieve this is by issuing regulatory interventions in form of policies, guidelines, legislations, rules, circulars, regulations, notifications, etc. The objective is to regulate market forces, which, when perceived that left to themselves, will fail in some circumstances to achieve greatest social welfare<sup>1</sup> as illustrated in the section below. Where markets work better to benefit citizens than regulation, regulation is not needed and should be avoided.

Regulatory interventions tend to alter the natural state of market and can impose burden on different stakeholder groups. Consequently, it is essential to ensure that only such regulatory interventions are utilised which are justified by market failures and, even then, should be designed to achieve greater social benefit at lowest cost. Regulatory impact assessment is a tool to achieve this. As the name suggests, it intends to assess positive and negative impacts of different policy interventions (not limited to regulations), proposed as well as in operation. The European Commission applies "integrated" impact assessment also to budget decisions and even to negotiate international treaties<sup>2</sup>. The US government requires that the RIA assess non-regulatory options as well as regulatory options<sup>3</sup>.

Though titled as regulatory impact assessment, the tool is applied to other regulatory interventions as well, such as policies<sup>4</sup>, rules<sup>5</sup>, legislations<sup>6</sup> etc. Thus, while, throughout the text of this document, the term regulations have been used, it must be interpreted to include different kinds of policy, non-regulatory, and regulatory interventions.

Regulations usually have widespread impacts which affect multiple stakeholder groups in different ways. Thus, it is essential to understand these impacts while formulating any regulation so as to achieve optimal outcomes. Governments should ideally work to ensure that the regulations are effective and efficient since the costs to society of poorly designed regulations can be extremely high, and can make life worse for those who the Government is trying to help. Such regulations can lead to higher costs of compliance, raise complexity and uncertainty associated with regulatory obligations, increase corruption, and limit the likelihood of achievement of intended objectives<sup>7</sup>.

### **Market/ Regulatory failure**

In cases where there exists a problem in a sector, the result usually is market/ regulatory failure which could mean that goods and services are either over or under produced/ provided, or that harm is not compensated. State intervention might be justified when the existence of a market/ regulatory failure has been established, although even in that case benefits of government

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<sup>1</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, October 2008

<sup>2</sup> Comparison of US and European Commission guidelines on Regulatory Impact Assessment/ Analysis, Close and Mancini, Enterprise and Industry Directorate-European Commission, 2007

<sup>3</sup> Ibid

<sup>4</sup> National Competition Policy (Draft) 2011, Ministry of Corporate Affairs; National MSME Policy-Draft Consultation Paper, Ministry of Micro, Small and Medium Enterprises

<sup>5</sup> Forest Conservation Rules, 2003, Ministry of Environment and Forests

<sup>6</sup> The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002

<sup>7</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, October 2008

intervention may not justify the costs. Market failure can be due to factors such as (i) asymmetric information availability, (ii) externalities, (iii) presence of market power, (iv) improper use of public goods, or (v) distributional or social justice values.

Regulatory failure is a condition wherein regulations fail to achieve desired results. Various contributing factors can cause regulations to deliver sub-optimal results, including failure to: (i) identify detrimental activities, (ii) design effective tools to deal with such activities, (ii) implement those tools and interventions or (iv) monitor and evaluate regulatory performance, and promptly correct policies that are not functioning well.<sup>8</sup>

At times, such failures can arise due to a situation called *regulatory capture* which means that a regulation created to serve the population at large, instead attends to the needs of a particular section on account of lobbying or corruption by such section. Alternatively, a regulation can fail on account of poor design which would signify lack of understanding of the problem at hand or ineffective implementation. It is essential that the root cause of the problem is identified to address/ resolve it effectively, which would involve in-depth analysis of the prevailing situation. Thus, regulatory failure can arise due to ineffective or inefficient performance on any of the above tasks or because they generate some undesirable side-effects.

A regulation is said to be effective if the benefits gained to society as a whole are higher than the costs incurred by society as a whole. A case of regulatory or market failure is described in the diagram below. In this example (Figure 1), it is assumed that the marginal social cost (MSC) and the marginal private cost (MPC) are equal due to no negative externalities from the production processes. However, there is an imbalance between the marginal social benefits (MSB) and the marginal private benefits (MPB). Taking the case of vehicle usage, the social benefit may be lower than the private benefit due to exhaust fumes. Thus, the level of equilibrium is point D with the number of cars produced at  $Q_2$ . This however, is not the socially optimum equilibrium, which lies at E. Thus, the level of production in this scenario is higher than the socially optimum level, leading to a deadweight loss (DWL) as shown. In another scenario, where the marginal private benefit is less than the marginal social benefit, the level of goods produced will be lower than the socially desirable level (for example, regulations related to health and safety which are not appropriately designed)<sup>9</sup>.

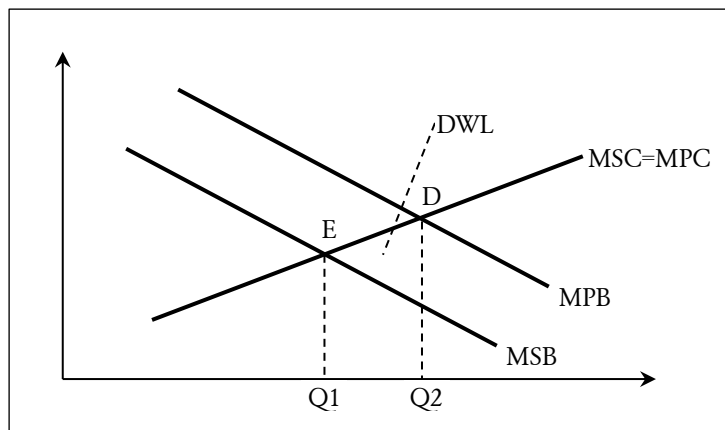
In all cases the role of the regulation is to equate the social and private costs as well as benefits of both production and consumption to arrive at the optimal level of social welfare.

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<sup>8</sup> Understanding Regulation, Theory, Strategy and Practice, Baldwin, Cave and Lodge, Oxford University Press, 2012

<sup>9</sup>Introducing Regulatory Impact Assessment in Developing Countries: The Case of Uganda, Darren Welch, Richard Waddington, Bannock Consulting., November 2005

Figure 1: Case of market/ regulatory failure



Source: *Introducing Regulatory Impact Assessment in Developing Countries: The Case of Uganda*, Darren Welch, Richard Waddington, Bannock Consulting, November 2005

The importance of an effective regulation has already been established. However, identifying the hidden or indirect cost/ benefits of externalities such as clean-up costs for society for air pollution, building of airports etc., can sometimes be challenging, but ascertaining these is imperative to the success of any regulation. This requires a careful estimation of all the major costs and benefits, direct as well as indirect, associated with the implementation of any regulation, so as to ensure an overall benefit for society<sup>10</sup>. Through such an analysis the most effective use of national resources and the least intrusive intervention on economic activities could be selected which would provide the required results. Thus, the first task is to identify any market/ regulatory failures or other root causes of the problem. The minimal intervention that can be adopted should then be selected to address the issue. Unfortunately this task is tedious and many countries, especially developing nations, lack the vision, necessary skills and resources needed for such an exercise.

### Regulatory Impact Assessment

One of the tools adopted by many countries for identifying and assessing the effects of a regulation is the Regulatory Impact Assessment (RIA). It is a process which helps in designing specific and targeted regulations to achieve the desired objectives while ensuring the minimum possible cost to society as a whole. RIA is not a substitute for political decision making however, it informs and acts as a guide for the policy makers to reject bad options and develop high quality regulations. It is a systematic process which helps to identify the costs (including hidden costs) and benefits to all relevant stakeholders. A critical aspect of this tool is that it is all-inclusive i.e. it is conducted keeping in mind the entire society rather than focusing on any particular group of stakeholders. It can thus, play a role in anti-corruption efforts.

RIA assesses the possible future impacts of policy options, as well as prevailing impacts and corrective actions required for existing regulations. It evaluates multiple policy interventions or scenarios that could meet the underlying objectives of the proposed or existing regulation, and through careful consideration and analysis, helps in selecting the most favorable option. While the basic RIA toolkit usually includes some form of benefits cost analysis, there is no standardised method of conducting RIA and it must be localised to select the most suitable methodology for a particular country/ situation.

<sup>10</sup> Revised RIA Guidelines, Department of the Taoiseach Dublin, June 2009

## Benefits of RIA<sup>11</sup>

The most important objective and benefit of RIA is its ability to help design the most effective and efficient policy design, regulatory or non-regulatory, or a mix, to ensure that the resources of the country are wisely used. Analytically, this test is met if costs to society are justified by the benefits to society.

- \* Primarily, RIA helps to design high quality regulations
- \* It clarifies problems, causes, and objectives
- \* It helps to identify the appropriate tools to solve the problem, that is, to achieve the said objectives
- \* It helps to improve the decision making process by making it more systematic, transparent, and scientific<sup>12</sup>
- \* It follows a data centric comparative approach for selection of the policy alternative, thereby improving the process of identifying the most optimum option
- \* It guides the policy makers to ask relevant questions to ensure that the impact of the proposed or existing regulation is effectively assessed<sup>13</sup>
- \* RIA involves extensive consultation with stakeholders, thus, making the process more democratic, participatory and transparent<sup>14</sup>
- \* It also helps to improve government accountability as the process, objectives and selection is more transparent<sup>15</sup>, and thereby reduces corruption and special interests in policy design.

## Process of RIA

Most forms of RIA evaluate the cost and benefits of the present or proposed regulation as well as alternative scenarios to select the most optimum solution to achieve the desired results. All forms of RIA would have two components – ex-ante and ex-post which are described below.

### Ex-ante

This form of RIA is forward looking and estimates change in behaviour of stakeholders and resultant future consequences. It would apply in case of a new regulation, revised regulation or even de-regulation, in all cases where the impact is likely to occur in the future. It helps in the process of systematically selecting the most efficient and effective regulation from a set of options to meet the desired objectives<sup>16</sup>. It helps to achieve a good understanding of likely future impacts of the proposed regulation and estimating which group of stakeholders will be impacted in what manner. A series of alternatives are assessed and the costs/ benefits associated with each alternative are identified and compared to help decision makers arrive at the most beneficial solution.

### Ex-post

Ex-post RIA looks at the past and evaluates the costs and benefits of the status-quo scenario, including existing regulations. It is helpful in ascertaining the baseline to understand the depth and trend of the problem. In case of an existing regulation it evaluates the costs/ benefits

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<sup>11</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, October 2008

<sup>12</sup> Building an Institutional Framework for Regulatory Impact Analysis, OECD, 2008

<sup>13</sup> Ibid

<sup>14</sup> Regulatory Impact Analysis in OECD Countries - Challenges for developing countries, OECD, June 2005

<sup>15</sup> Ibid

<sup>16</sup> Mapping of ex-ante Policy Impact Assessment Experiences and Tools in Europe, UNDP, BRC, 2007

accruing to society of the existing regulation. It then helps in estimating the costs/ benefits of maintaining the existing conditions, and possible changes in costs/ benefits of different regulatory options. The results are assessed viz-a-viz the objectives and whether maintaining status quo would meet the desired purpose.<sup>17</sup>Ex-post RIA can also be helpful to carry out any mid-course corrections to review any unsatisfactory provisions.

In case of conducting ex-post RIA the process can also increase the accountability of the governments as citizens can evaluate their performance specifically with respect to the benefits promised. This type of RIA can be extremely helpful for developing countries owing to the existence of multiple, archaic regulations, often prepared without having the clarity on objectives. This results in over-regulation or under-regulation, compelling the need for an ex-post impact assessment.

Invariably, every RIA would have an ex-post component to evaluate the baseline scenario and an ex-ante component to design regulatory alternatives estimating the respective costs/benefits in order to select the most suitable solution.

Some of the most common questions addressed in an ex-post RIA are:

#### Box 1: Questions addressed in ex-post RIA

- \* Have the original objectives been achieved in quality, quantity and time, when measured against the base of what would have happened without intervention?
- \* To what extent has the intervention brought about the achievement of the objectives or has it induced activity that would not otherwise have occurred?
- \* Has implementation been affected, adversely or advantageously, by external factors?
- \* Have any significant unexpected side effects resulted?
- \* Have all the inputs required from the Government and the private sector been made as planned?
- \* Have any of the allocated resources been wasted or misused?
- \* How efficient was the administration of the regulation?
- \* Has the regulation led to any unfairness or disadvantage to any sector of the community?
- \* What improvements could be made to the regulation which might make it more effective or cost efficient?
- \* Overall is the regulation well suited to meeting the desired objectives?

*Source: Mapping of ex-ante Policy Impact Assessment Experiences and Tools in Europe, September 2007, UNDP*

#### RIA in developing countries

RIA is sometimes perceived as a tool which is expensive and requires a level of expertise to conduct which is often lacking in developing nations. However, many developing countries are recognising the importance and benefits of RIA and are adopting this tool.

Multiple guidelines available for conducting RIA have been developed by countries, indicating that there is no standardised methodology for conducting RIA. This can be reformed and revised to suit the needs of the specific country while retaining the basic principles. This tool has been integrated in the policy making process in many developed countries and around 30 developing countries are also following this path.<sup>18</sup>

<sup>17</sup> Mapping of ex-ante Policy Impact Assessment Experiences and Tools in Europe, UNDP, BRC, 2007

<sup>18</sup> Improving Business Environments through Regulatory Impact Analysis, Peter Ladegaard, 2005



Regulations, policies etc. are often created without any analysis and evaluation in developing countries, sometimes imitating a good practice implemented elsewhere which may or may not be suitable for the country. This leads to poorly designed regulations which can have adverse impacts and not yield the desired outcomes, thus, further increasing the pressure on the nation. Another challenge is keeping up with the dynamic environment in terms of regulations as; a good regulation prepared in the past could have become inefficient with the passage of time. Hence, this tool is even more essential for developing nations undergoing rapid transitions in development strategies.

RIA as a tool can be utilised for assessing the impacts of existing regulations and also for proposed regulations. The former is of particular relevance to developing countries as the impact of sub-optimum regulations can be systematically analysed and revised to remove unnecessary burdens and provide an effective regulation.

Also, it is argued that developing countries do not possess the necessary skills to conduct RIA and the data availability is also limited which further complicates the process. However, efficient and effective regulation is the backbone of the regulatory process and this aspect should not be compromised. Additionally, the methodology as indicated earlier can be adapted and scaled to suit the needs and abilities of the country and the available data can become the starting point for the analysis. The system can then be strengthened with time to make it more robust.

### **RIA Tools**

The underlying methodology of most RIA tools is some kind of cost vs. benefits analysis. The process involves collecting the relevant information regarding the costs and benefits for all affected stakeholders and presenting them for each different regulatory alternative. Multiple scenarios and options can be compared and the most efficient regulatory alternatives in terms of cost and benefits could be selected. The data collected can be quantitative or qualitative in nature and the appropriate tool for analysis could be used.

There exist various tools to conduct RIA. However, for the purpose of this toolkit we would be focusing on two which are most often used to estimate the costs and benefits, keeping in mind the needs and challenges of a developing nation. The remaining tools are described in Annexure 2.

The most common RIA tool utilised for estimating costs is Standard Cost Model and the tool for assessing benefits is Multi-Criteria Analysis.

### **Standard cost models for administrative burdens**

A very simple RIA is called the Standard Cost Model. Businesses are required to comply with various regulations that collect information needed to regulate/ monitor their conduct or to inform consumers. Often the costs incurred due to such regulations can be burdensome and avoidable. The Standard Cost Model is a widely used tool to evaluate administrative costs related to the collection and reporting of information, and is an activity based measurement of the administrative burdens of businesses. It breaks down the administrative costs into activities

(or cost components) and the costs associated with these are then listed. This tool focuses on simplifying the administrative activities which would need to be undertaken to comply with the regulation<sup>19</sup>. Unlike various other forms of RIA, it does not ask if the administrative requirement is needed.

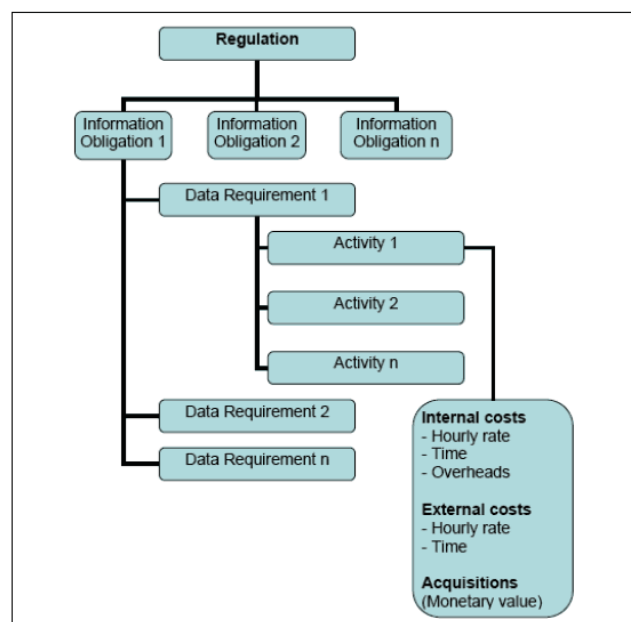
This model indicates the average costs per business incurred due to the administrative burdens. It takes into account the price of each activity over one year. The most common methodology involves multiplying a tariff which is based on the hourly cost of labour, with the time in hours required for each such action. Other types of costs are also accounted for wherever applicable, such as equipment costs, outsourcing costs etc.

The basic equation for calculation is  $\Sigma P \times Q$ , where<sup>20</sup>,

P (Price) = Tariff X Time (in hours per business)

Q (Quantity) = Number of businesses affected X Frequency (per year)

Figure 2: Measuring the cost of regulation



Source: *Measuring the Cost of Regulation*, New South Wales Government, June 2008

### MULTI-CRITERIA ANALYSIS (MCA)

This method is useful in cases wherein quantification of costs and benefits is difficult, or there are many kinds of impacts that cannot be easily expressed in a single metric. MCA allows systematic and objective decisions to be taken even in this scenario. The objectives are at first identified and all the criteria that define the fulfillment of the said objectives are listed. With the use of a matrix, the criteria are listed on one side while the regulatory options on the other as described in Illustration 1. Then the performance of each criterion is scored for each of the regulatory options. If required, weights can also be provided for each criterion depending on its relative importance for achieving the objectives. Then the total score of each alternative is

<sup>19</sup> International Standard Cost Model Manual, OECD

<sup>20</sup> [http://ec.europa.eu/smart-regulation/refit/admin\\_burden/scm\\_en.htm](http://ec.europa.eu/smart-regulation/refit/admin_burden/scm_en.htm)

calculated and the most acceptable option, given the combination of the criteria, can be chosen. This tool is usually used in conjunction with another quantitative tool and can be used as a basis to support the results. It is an important tool as it takes into account the qualitative factors which are often critical and treated as secondary while quantitative data dominates the analysis.

However, due to the nature of data utilised for this tool, the analysis and evaluation can be subjective and biases can govern the results. Consultations with experts and multiple stakeholders can minimise the impact of such biases to an extent. Also, this analysis cannot definitively ascertain if any action can have benefits greater than the costs, which is a drawback<sup>21</sup>. It simply ranks the selected options from highest to lowest score.

Illustration 1 below provides an example in relation to the use of multi-criteria analysis.

**ILLUSTRATION 1:**

In order to reduce the prevalence of road accident two proposals are to be evaluated on a set of indicators. They are given a score for each indicator in terms of its expected outcomes from -10 (negative outcomes) to +10 (positive outcomes).

Criteria	Weighting (%)	OPTION 1		OPTION 2	
		Assigned Score	Weighted Score	Assigned Score	Weighted Score
Reduction in road related accidents	50	+10	+4	+5	+2
Cost of compliance and administration	50	-5	-2.5	-3	-1.5
Improved traffic flow	10	0	0	-10	-1
TOTAL	100		<b>+1.5</b>		<b>-0.5</b>

Once the final weighted score is calculated for each option the most effective solution can be selected.

*Source: Victorian Guide to Regulation, Toolkit 2: Cost-benefit analysis, Department of Treasury and Finance, July 2014*

<sup>21</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, October 2008

## Chapter 2: Undertaking Regulatory Impact Assessment

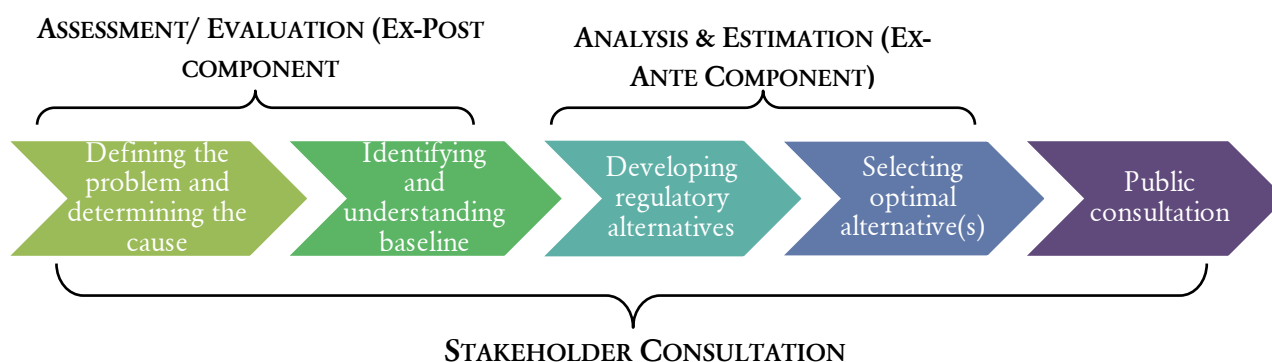
A well-functioning regulatory system is essential for government processes and systems to function and progress smoothly. One of the mechanisms for creating and maintaining such systems is RIA. The basic concepts regarding RIA have been explained in the previous chapter and this chapter would focus on the process of conducting RIA.

As discussed earlier as well, this toolkit is designed for scenarios there are no existing regulation (ex-ante) on the subject, as well as those wherein regulations exist (ex-post). Broadly, the process is similar and comprises assessment/ evaluation of existing scenario followed by designing of regulatory alternatives and estimation of costs and benefits. The difference in process, where applicable, has been highlighted. Notwithstanding the minor variance in process on account of review of proposed or existing regulation, the RIA process can be broadly classified in the following steps:

1. Defining the problem and determining the cause
2. Identifying and understanding baseline
3. Developing regulatory alternatives
4. Selecting optimal alternative(s)
5. Formal Public Consultation

While the first two steps could be understood as preparation for RIA, steps 3 and 4 relate to conducting RIA by utilising RIA tools, **while step 5 validates the entire RIA exercise by asking for formal input on the RIA work and for new information that might improve the design of options.**

Figure 3: Process of conducting RIA



Prior to discussing the step-by-step approach of conducting RIA, key aspects of one critical component of RIA that is pervasive throughout the process, i.e. *stakeholder consultation* needs be discussed. Stakeholders are those entities or groups which are affected, directly or indirectly, by the problem. These comprise producers, upstream and downstream entities, middlemen, consumers, relevant government departments at central and state level, regulators etc. While direct stakeholder interaction would be useful, relevant data and information should also be gathered from publicly available documents with respect to stakeholders, such as annual reports, filing with regulators, press releases, orders issued etc.

Stakeholder consultation is central part to the RIA process and is one of the most effective methods for gathering valuable information and opinions to support and conduct RIA. This allows stakeholders to voice their views as well as concerns and participate in the regulatory process. As the first step it is essential to identify the key stakeholders impacted by the existing or proposed regulation. One of the limitations of RIA is that it might be biased i.e. taking into account concerns of a few stakeholder groups, while disregarding other groups, resulting in development of a skewed picture about the problem and formulation of ineffective regulatory alternatives. Consequently, while it is necessary to interact with stakeholder groups which seem to be most affected, it must be kept in mind that interests of other stakeholder categories are

not undermined. Care must be taken to take into account the opinions and views of relevant stakeholder groups so as to get complete information. The main objective of such stakeholder consultations is not only to collect relevant information but also to reach the widest audience and gather quality data to support RIA findings.

The objective and method of consultation may vary from one stage to another and its role and significance has been detailed in the relevant sections, as discussed later in this chapter. Stakeholder consultations are undertaken at various stages of the RIA process from identifying the problem, gathering relevant data on cost and benefits, designing alternatives as well as selecting the most effective solution. Thus, at any stage it is important to develop a well drafted document for the purpose which covers all the necessary information areas. The objectives of the consultation process need to be clearly set to assist with the impending processes. People are more likely to participate if the objectives are clearly stated and all the essential information is provided. The document needs to be complete in all respects and have adequate information to provide a clear picture to the reader.

While the elements detailed in this toolkit have been designed keeping in mind the requirements of a developing country, it is well suited to the needs of developed countries as well.

The complete process of RIA would be explained taking the example of two sectors - *finance and energy*. Throughout this chapter for each stage of the process the corresponding analysis for these two sectors in India would be described. While the RIA in the finance sector<sup>22</sup> deals with only primary legislations, RIA in the energy sector<sup>23</sup> is a mix of both - primary as well as secondary legislations.

#### (i) DEFINING THE PROBLEM AND DETERMINING THE CAUSE

##### **Problem Definition**

As discussed in the previous chapter, regulatory interventions may be required when the market is not operating optimally, resulting in failure to achieve the greatest social benefit. In order to solve any problem it is important to first determine it accurately. Thus, the primary and extremely critical step of any RIA is defining the problem and objective correctly and clearly. This involves secondary research as well as stakeholder interactions to gain an understanding of the prevailing scenario. An error at this stage would mean that the post the entire assessment, the final solution adopted may still not solve the existing problem.

Thus, in order to understand the problem, assessment of market efficiency is necessary in the specific sector. This could be initiated with **secondary research**, on the basis of data, information and literature available in the public domain. Such market assessment through secondary research and analysis of anecdotal evidence is expected to result in identification of several existing or imminent problems. Care must be taken to ensure that the issues identified are not specific to a certain entity or group of entities but are impacting the sector as a whole. For instance, in the former case the group's inability to effectively compete in the market may be due to technological innovation, increased competition etc. and regulatory interventions may not be needed to resolve the issue.

In order to gain further understanding of the critical concern areas as well as validate the findings of the secondary research the next step is **stakeholder interaction**. This will aid in validating the problems identified through secondary research and prioritising critical areas of concern. Stakeholder interaction also helps in dealing with the challenge of unavailability of quality and relevant data in public domain, which often, may be case in developing countries.

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<sup>22</sup> For further information: <http://www.cuts-ccier.org/BHC-RIA/>

<sup>23</sup> For further information: <http://www.cuts-ccier.org/ADB-RIA/>

However, as stated earlier, stakeholder interaction will remain ineffective unless the views of all the relevant stakeholder groups are taken into account. Thus, stakeholder mapping is essential and is undertaken so that all relevant stakeholder categories are identified. A correct stakeholder mapping at this stage will ensure interaction with a healthy mix of stakeholders to gain an overall perspective.

*The stakeholder mapping for our two sectors, finance and energy, have been detailed below:*

STAKEHOLDERS: INSURANCE	STAKEHOLDERS: BANKING	STAKEHOLDERS: ENERGY
<p><i>Market players:</i> Public and private sector insurers, intermediaries</p> <p><i>Consumers:</i> Consumers availing insurance services, and potential consumers</p> <p><i>Regulators:</i> Reserve Bank of India</p> <p><i>Government:</i> Ministry of Finance, Government bodies/ Departments</p>	<p><i>Market players:</i> Public and private sector banks, intermediaries</p> <p><i>Consumers:</i> Consumers availing banking services, and potential consumers</p> <p><i>Regulators:</i> Insurance Regulatory and Development Authority of India</p> <p><i>Government:</i> Ministry of Finance, Government bodies/ Departments</p>	<p><i>Market players:</i> Power producers and transmission companies</p> <p><i>Consumers:</i> Consumers availing electricity, and potential consumers</p> <p><i>Regulators:</i> Electricity Regulatory Commissions (Central/ State)</p> <p><i>Government:</i> Ministry of Power, Government bodies/ Departments</p>

Collection and analysis of secondary data and stakeholder interaction will aid in defining the problem prevailing in the sector.

DEFINITION:	PROBLEM DEFINITION: BANKING	PROBLEM DEFINITION: ENERGY
<p><i>Problem:</i> Low investments in and inadequate coverage of insurance</p> <p><i>Supporting data:</i> Low levels of insurance premium and density<sup>24</sup> and investment required<sup>25</sup> in the sector.</p>	<p><i>Problem:</i> Slow and low recovery of debts by banks</p> <p><i>Supporting data:</i> The recovery rate of debt due to banks was merely 18 percent in 2013-14, and the non-performing assets have risen substantially<sup>26</sup>.</p>	<p><i>Problem:</i> Delay in decision making with respect to environment clearances of power plants</p> <p><i>Supporting data:</i> As on 20 November 2014, 326 proposals of environment clearance are pending, and the speed of decision making has substantially reduced (Ministry of Environment, Forests and Climate Change)<sup>27</sup>.</p>

<sup>24</sup>IRDAI Annual Report, 2014-15, January 2016

<sup>25</sup>Asia Insurance Review, December 2015

<sup>26</sup>Statistical tables relating to banks in India, Available at

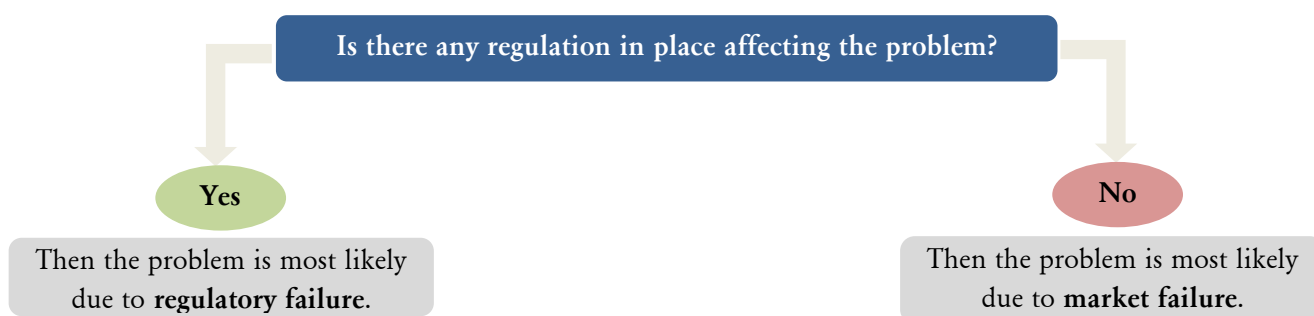
<http://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Statistical%20Tables%20Relating%20to%20Banks%20in%20India>

<sup>27</sup> <http://environmentclearance.nic.in/#>

The problem might not be novel and might have existed in the past. Consequently, it is possible that regulations are already in place to address the problem statement. Persistence of problem despite existence of regulations indicates that there exists regulatory failure which needs to be addressed. In such scenario, evaluation of impact of existing regulations is necessary to identify problematic regulatory provisions.

However, in case no regulations are present to tackle the problem, it most likely indicates the existence of a market failure and could require regulatory intervention. Also, at times, there might be a situation that the problem identified is an imminent one, and has not yet materialised and in such a situation, it is most likely that regulations will not be in place.

**Figure 4: Determining the nature of RIA**



**PROCESS**

1. Understanding the baseline:
  - a. Identification and prioritisation of relevant regulations
  - b. Undertaking impact assessment of regulation through data collection and stakeholder validation
2. Development of regulatory alternatives
3. Undertake impact assessment of alternatives
4. Selection of optimal regulatory alternative

**PROCESS**

1. Understanding the baseline through data collection and stakeholder validation
2. Development of regulatory proposals
3. Undertake impact assessment of regulatory proposals
4. Selection of optimal regulatory proposal

**Identifying the Cause of the problem**

The next, extremely critical step is to identify the causes that may be contributing to the problem. It is important to undertake thorough analysis to ensure all possible issues are covered as the ensuing solutions and their effectiveness are dependent on the correct identification of the cause(s) of the problem.

In a scenario, where the regulations are already in place the first step is to identify the relevant regulations and consequently analyse which could be the critical ones resulting in the defined problem. In case of a new regulation, the causes need to be ascertained through secondary research as well as stakeholder consultations.

The steps below describe the process of identifying causes in case regulations are already in place so as to determine which of these (if any) could be contributing to the problem at hand.

## Preparation

### a) Identifying regulations

The first step would be to identify the relevant regulations that are in place to deal with the problem stated above. The regulations which directly or indirectly, wholly or partially, intend to deal with the problem must be shortlisted for further scrutiny.

The regulations could be identified on the basis of its stated objectives, scope of operation, issues it intends to cover, and entities it intends to regulate. Once these have been identified, the next step would be to understand its ambit, underlying procedures and processes, in order to obtain an overall understanding of the existing regulatory scope and enable effective comparison and prioritisation of regulations.

REGULATIONS: INSURANCE	REGULATIONS: BANKING	REGULATIONS: ENERGY
<p>Relevant regulations in the life insurance sector:</p> <ul style="list-style-type: none"> <li>• Insurance Act, 1938, and Insurance Laws (Amendment) Act, 2015</li> <li>• Insurance Rules, 1939</li> <li>• IRDA (Linked Insurance Product) Regulations, 2013</li> <li>• IRDA (Non-linked Insurance Product) Regulations, 2013</li> <li>• IRDA Guidelines on Persistency</li> <li>• IRDA Master Circular on preparation of financial statements and filing returns of life insurance business, 2013</li> </ul>	<p>Primary regulations pertaining to debt recovery:</p> <ul style="list-style-type: none"> <li>• Sick Industrial Companies (Special Provisions) Act, 1985</li> <li>• Legal Services Authorities Act, 1987</li> <li>• Recovery of Debts Due to Banks and Financial Institutions Act, 1993</li> <li>• Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002</li> <li>• Chapter XIX of the Companies Act, 2013 – Revival and Rehabilitation of Sick Companies</li> </ul>	<p>Regulations pertaining to environment clearance of power plants:</p> <ul style="list-style-type: none"> <li>• Water (Prevention and Control of Pollution) Act, 1974</li> <li>• Air (Prevention and Control of Pollution) Act, 1981</li> <li>• Environment (Protection) Act, 1986</li> <li>• Environment Impact Assessment Notification, 2006</li> </ul>

### b) Comparing the regulation(s)

Developing countries are usually faced with three major challenges – (i) funding (ii) capacity and (iii) time. The process of RIA could be time consuming in nature and may not be feasible for all the identified regulations. More the regulations covered, greater the time and investment required to undertake RIA. Thus, it becomes important to select a few critical regulation(s) which potentially have the maximum negative impact with respect to the problem statement. Further, a complete RIA could be conducted only for these as this most likely would result in effectively addressing the problem as well.

In order to compare regulations, it is important to understand the overall impact of the regulation on all stakeholders, including operational, economic as well as social impacts. Certain metrics can be developed for comparison based on requirements of the problem. There are several international precedents which provide metrics used to compare legislations and policies. For instance, World Bank group while assessing ease of doing business in various countries makes its comparison on the basis of three broad indicators, viz. time, costs, and procedures. Time includes average time to obtain the approval or comply with the requisite procedure; costs include fees paid to the regulatory authorities and compliance costs; and



procedures include documentation and authorities involved in complying with the regulations under consideration<sup>28</sup>. Thus, depending on the scope of the problem and resources available such indicators need to be defined. Consequently, these indicators can be ranked on the basis of their importance and impact on stakeholders. It must be noted that the indicators developed and ranked should be on the basis of literature review as well as stakeholder opinions and validation.

*For our examples on the financial and energy sectors the indicators were developed on the basis of secondary research as well as stakeholder interactions to determine the most critical factors for effective functioning of any regulation.*

INDICATORS FOR COMPARISON: BANKING	INDICATORS FOR COMPARISON: ENERGY
<p><i>Indicators:</i></p> <ul style="list-style-type: none"> <li>• Time required for compliance</li> <li>• Procedures/ authorities involved in the process</li> <li>• Cost of compliance</li> <li>• Rate of recovery of debt</li> <li>• Focus on debt recovery</li> <li>• Evidence of implementation of regulation</li> </ul> <p><i>Scoring scale:</i></p> <ul style="list-style-type: none"> <li>• Less burden: 1</li> <li>• Reasonable burden: 2</li> <li>• Significant burden: 3</li> </ul> <p>Regulations with highest score is expected to impose maximum burden on stakeholders</p>	<p><i>Indicators:</i></p> <ul style="list-style-type: none"> <li>• Time period for decision making</li> <li>• Procedures/authorities involved in process</li> <li>• Cost of compliance</li> <li>• Number of approvals required</li> <li>• Documentation involved</li> <li>• Additional conditions</li> <li>• Effect on ease of entry</li> </ul> <p><i>Scoring scale:</i></p> <ul style="list-style-type: none"> <li>• Less burden: 0</li> <li>• More burden: 1</li> </ul> <p>Regulations with highest score is expected to impose maximum burden on stakeholders</p>

However, it might be the case that key regulations impacting the issue under consideration can be identified upfront. In case sufficient *prima facie* evidence (on the basis of secondary research and stakeholder interaction) is available in relation to the regulations identified and problem that needs to be addressed, comparison and prioritisation for selection might not be required.

### c) Selection of regulation(s)

Once the regulations are scored and ranked, the ones with the highest score are expected to have the greatest impact on the sector, as per secondary research and stakeholder interactions. As it may not be feasible to conduct RIA on all these regulations few need to be selected based on available resources of funding, time as well as capacity.

*The overall score for each of the identified regulations on the basis of the indicators developed was calculated for the two sectors. In the financial sector the two regulations which could cause the greatest impact according to the analysis were selected for conducting a detailed RIA. Only one regulation in the energy sector had a score of '5' while the others were low, thus only this regulation was selected.*

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<sup>28</sup> www.doingbusiness.org

### SELECTION OF REGULATION: BANKING

*Scores:*

- Sick Industrial Companies (Special Provisions) Act, 1985 - 5
- Legal Services Authorities Act, 1987 - 7
- Recovery of Debt due to Banks and Financial Institutions Act, 1993 - 8
- Securitisation and Reconstruction and Financial Assets and Enforcement of Security Interest Act, 2002 - 7
- Companies Act 2013 - 4

*Selection:*

- Securitisation and Reconstruction and Financial Assets and Enforcement of Security Interest Act, 2002
- Recovery of Debt due to Banks and Financial Institutions Act, 1993

### SELECTION OF REGULATION: ENERGY

*Scores:*

- Water (Prevention and Control of Pollution) Act, 1974- 2
- Air (Prevention and Control of Pollution) Act, 1981 - 2
- Environment Impact Assessment Notification, 2006 - 5

*Selection:*

- Environment Impact Assessment Notification, 2006

However, in situations wherein regulations are not required to be compared, and identified regulations are selected for conducting RIA, this step could be omitted.

#### d) Theoretical analysis of selected options(s)

Subsequent to the identification of regulation(s) having the potential to impose maximum burden on the stakeholders, it is necessary to identify the source of the burden. This could be emanating from sub-optimal provisions within the regulation or even absence of necessary provisions in the regulation. Consequently, it would be necessary to undertake a rigorous analysis of selected regulation(s). The theoretical analysis must be backed by literature review and a comparative analysis of similar regulation in other jurisdictions.

The theoretical analysis must result in development of hypotheses with respect to sub-optimal provisions or issues not covered under the regulations. In addition, it must aid in development of questionnaire for stakeholder consultations, which would be undertaken for data collection and validation of issues identified in theoretical analysis.

However, more rigorous the analysis, greater would be the time required to conduct it. Thus, the rigorousness of theoretical analysis must be dependent on time and resources available to undertake impact assessment.

A rigorous theoretical analysis of the regulation must answer the following:

1. Potential sub-optimal provisions which need to be immediately addressed
2. Sub-optimal provisions which if not addressed could result in future problems
3. Critical issues that remain unaddressed under the regulations
4. Stakeholders adversely affected by sub-optimal provisions
5. Queries which require stakeholder and expert validation
6. Data and information required from stakeholders and experts to validate the hypothesis developed under the theoretical analysis

On the basis of the analysis thus far, the objective of the RIA must be defined on the basis of the problem definition as well as the causal factors identified. The objective must not only intend to address the singular problem or its symptoms, but must aim to address its root cause, to prevent resurrection of problem in some other form. However, the objective must not be too wide, which could result in losing focus, and development of regulatory alternatives beyond the scope of problem.

For instance, India is suffering with the menace of illicit money circulation entities, in form of pyramid schemes and unregistered money collection entities. An objective of addressing specific firm structures such as pyramid schemes might not be enough, yet encompassing regulation of entire fundraising within the objective, would make it too wide.

*The key issues identified on the basis of theoretical analysis of the regulations identified are listed below. Thus these are the critical factors causing the problem identified earlier. Analysing and evaluating these will most likely lead to the development of a solution that will effectively address the problem.*

ISSUES IDENTIFIED: INSURANCE	ISSUES IDENTIFIED: BANKING	ISSUES IDENTIFIED: ENERGY
<p><i>Problem:</i> Low investments and inadequate access in the insurance sector</p> <p><i>Objective:</i> Facilitating investments and enabling access</p> <p><i>Causal factors:</i></p> <ul style="list-style-type: none"> <li>• Unreasonable regulatory restrictions for investments</li> <li>• Regulatory cap on allowable expenditure by insurers</li> <li>• Lack of incentives for customer retention</li> </ul>	<p><i>Problem:</i> Delay and low recovery of debts due to banks is adversely affecting them</p> <p><i>Objective:</i> Improving the debt recovery process</p> <p><i>Causal factors:</i></p> <ul style="list-style-type: none"> <li>• Sub-optimal provisions in relation to staffing and operation of recovery tribunals</li> <li>• Lack of performance review and accountability provisions for recovery tribunals</li> <li>• Sub-optimal provisions in relation to taking over of assets</li> </ul>	<p><i>Problem:</i> Delay in decision making with respect to environment clearances of power plants</p> <p><i>Objective:</i> Addressing delays in decision making process in environment clearance process</p> <p><i>Causal factors:</i></p> <ul style="list-style-type: none"> <li>• Absence of direct regulation of EIA consultants</li> <li>• Absence of accountability mechanisms for regulatory agencies</li> <li>• Sub-optimal public consultation process</li> </ul>

## (ii) IDENTIFYING AND UNDERSTANDING THE BASELINE

### Estimating the Baseline

The next step is evaluating the baseline i.e. as-is or status quo scenario. This includes ascertaining the cost and benefits of the existing scenario on stakeholders, in particular, and economy, environment and society, in general. This stage is important to enable effective comparison with the regulatory alternatives which will be developed at a later stage to select the most effective solution.

Data analysis and interaction with key stakeholders is necessary for validation of the findings of secondary research, and plug the information gaps. It is also necessary to validate the problem definition and the causal factors identified on the basis of review of existing literature and existing regulations, if any.

To this effect, it is critical that all relevant stakeholder groups are identified and their opinions sought in order to determine the overall costs and benefits to society as a whole. If certain group or groups is overlooked and their costs/benefits are not accounted for, the final suggestions proposed may not resolve the identified problem. Thus, the relevant stakeholders need to be mapped for the purpose of data collection. However, it must be remembered that the ultimate objective of RIA is to benefit the economy and society and not to appease a particular stakeholder group.

STAKEHOLDER VALIDATION: INSURANCE	STAKEHOLDER VALIDATION: BANKING	STAKEHOLDER VALIDATION: ENERGY
<p>Relevant Stakeholders: Insurance companies (Private and Public Sector), legal practitioners and consultants, insurance intermediaries, agencies government, regulatory bodies and sector experts.</p>	<p>Relevant Stakeholders: Banks (Private and Public Sector), legal practitioners and consultants, Rating agencies, government, regulatory bodies and sector experts.</p>	<p>Relevant stakeholders: 11 coal based power plants having applied for environment clearance during the relevant period; Ministry of Environment, Forests and Climate Change; members of Expert Advisory Committees, experts, EIA consultants, research and civil society organisations.</p>

While the data collection and stakeholder interaction during this stage must be focused on developing a baseline in relation to current scenario, it should also give indicators to develop regulatory alternatives. In addition, while collecting secondary data, it must be ensured that sources are reliable, verifiable, publicly available, and commonly used by researchers. Market studies and research reports could also be relied to undertake data collection. However, caution must be practiced to identify the authors/ financiers of the research reports and market studies, as they could have vested interests to commission/ undertake the relevant studies.

In developing countries, secondary data collection could be a challenge as publicly available database are usually rare or not up to date. In such a scenario, stakeholder consultations need to be efficiently designed to get relevant data and information with respect to baseline.

Stakeholder consultations such as focus group discussions, one-to-one interviews, business panels etc. with stakeholders and experts could be an effective mechanism to undertake data collection. However, it may be possible that in developing countries, owing to limited understanding about RIA and its benefits certain stakeholders may not be forthcoming to share relevant data or confidential business related information needed for estimation of costs and benefits. In such cases in order to ensure stakeholder cooperation, they must be made comfortable about their anonymity, and about confidentiality of the data and information.

### Identifying a time frame

The costs/ benefits estimated from various stakeholders would need to be added to calculate the costs/ benefits to society as a whole. Thus, in to gather relevant data it would be essential to identify the time period for which the data is required. A reasonable time horizon must be identified which should aid in proper assessment of costs and benefits on stakeholders<sup>29</sup>. The time period needs to be selected keeping in mind the issues under investigation, data availability and relevance to the exercise. This should be decided post review of available information/ data and post consultations with stakeholders/ experts.

<sup>29</sup> Regulatory Impact Analysis: A Primer, The White House

For instance, if the data needs to be collected in relation to delays in the approval process, the statutorily mentioned time period for grant of approval must factor into the exercise. If this period is stated to be one year, it would make limited sense to consider applications made during the past one year, since the statutorily stated period for approval is not yet complete and hence does not qualify as a delay yet.

ESTIMATING TIME FRAME: INSURANCE	ESTIMATING TIME FRAME: BANKING	ESTIMATING TIME FRAME: ENERGY
Relevant period - 2014 onwards (as relevant regulations came into operations in 2014)	Relevant period - 2010-2014	Relevant period - 2009-2014 (other than in case of hydel power applications wherein the time period was 2009-2013, as the statute prescribes one year time period for approval).

### Data Collection and Tabulation

The first step before proceeding for data collection is to map out the data requirements for each stakeholder groups so resources are not wasted collecting data which is not required. Key indicators can be developed on the basis of theoretical understanding, secondary research as well as consultations with stakeholders and experts.

There are various means of reaching out to stakeholders for the purpose of data collection. This could include direct interviews, face to face interactions, meeting with organisations of stakeholder forums, test panels or focus group discussions. The mode of data collection would be dependent upon factors such as availability of stakeholders, subject matter and resources available etc. Use of electronic modes (such as emails or online questionnaires) could also be made to solicit information. Some of the developed countries make use of 'Business Test Panels' to undertake stakeholder consultation. In this, a set of companies which agree to be a part of the panel are approached by government to assist in the RIA process<sup>30</sup>. They provide information regarding the probable costs and benefits of an existing or proposed regulation. In such cases, since these companies become familiar with the process, conducting RIA becomes easier; however care needs to be taken against biased responses. This could vary for different stakeholder groups as well and the most efficient and effective mode of data collection should be selected.

The next step is to develop the necessary document for the purpose of data collection on the basis of indicators listed earlier. This would be dependent on the mode of data collection as well. Thus, while direct face-to-face interviews would need a structured/ semi structured questionnaire, group discussions would need a discussion guide<sup>31</sup>, online questionnaires would make use of a structured questionnaire. (Refer to Annexure 1 for sample questionnaires for RIA conducted in the Electricity Generation Sector and for sample broad questionnaire for RIA conducted in Insurance Sector.)

The document prepared for the purpose of data collection should be clear, easy to comprehend and respond as the person preparing the material may not be the one conducting the interviews. These should be designed such that the questions asked are easy to understand as well as feasible for stakeholders to answer. One of the methods for ensuring this is conducting trials of the document with mock respondents.

The documents should be structured in a manner so as to obtain widest information about the direct and indirect impacts of the existing scenario. These should include economic and

<sup>30</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, 2008

<sup>31</sup> Discussion Guide is an outline of the key indicators and areas of questioning which is used to guide a qualitative interview or group discussion

financial impacts on markets, consumers and business, labour, upstream and downstream industries, impact on social health, well-being, urban and rural areas, environment impacts etc.

Further, it is also possible that findings of stakeholder interaction reveals issues hitherto uncovered under the theoretical analysis. To such extent, RIA exercise will have to be refocused to accommodate the new findings.

**Box 2: Key Considerations for data collection**

**Key Consideration prior to undertaking data collection**

- Map out data needs.
- Estimate the expected quality of data which would be collected
- Analyse the available tools for data collection and select the ones to be employed based on the available resources
- Estimate the cost of data collection activities
- Assess the non-response rates, in case of primary data collection, and the expected level of errors
- Evaluate the probable time taken for the data collection
- Ensure the tools employed account for all the necessary information areas identified

*Source: Tax Administration Reform in India- Spirit, Purpose and Empowerment, Third Report of TARC, Ministry of Finance, Government of India, November 2014*

The next step is data collation and tabulation. Success of RIA exercise is dependent on the quality of data collected, whether it is qualitative or quantitative. Tabulation of data collected is as important as data collection. Data tabulation should be segregated on the basis of stakeholders, issues covered; costs and benefits experienced by stakeholders, and information on existing provisions, if applicable, and proposed alternatives.

*The data mapping created for the finance and energy sectors on the basis of secondary research and stakeholder interactions are listed below:*

<b>DATA COLLECTION: INSURANCE</b>	<b>DATA COLLECTION: BANKING</b>	<b>DATA COLLECTION: ENERGY</b>
<p><i>Quantitative data:</i></p> <ul style="list-style-type: none"> <li>• Foreign investment proposals in insurance sector</li> <li>• Domestic investment proposals in insurance sector</li> <li>• Average commission/remuneration to intermediaries in different product segments</li> <li>• Average management expenses in different product segments</li> <li>• Categorisation of life insurers</li> <li>• Average persistency rates in insurers</li> <li>• Average conservation ratios</li> </ul>	<p><i>Quantitative data:</i></p> <ul style="list-style-type: none"> <li>• Number of recovery tribunals/ appellate tribunals set up</li> <li>• Number of adjudicating officers</li> <li>• Time taken to obtain decree</li> <li>• Time taken to recover outstanding debts</li> <li>• Cost involved in recovery</li> <li>• Staff at recovery tribunals/ appellate tribunals</li> </ul> <p><i>Qualitative data:</i></p> <ul style="list-style-type: none"> <li>• Qualification/ experience of</li> </ul>	<p><i>Quantitative data:</i></p> <ul style="list-style-type: none"> <li>• Time taken to grant of terms of reference</li> <li>• Time taken to grant environment clearance</li> <li>• Remuneration paid to officers of regulatory agencies</li> <li>• Number of government officers dealing with different sectors</li> <li>• Time period between grant of ToR and public hearing</li> </ul> <p><i>Qualitative data:</i></p> <ul style="list-style-type: none"> <li>• Quality of Environmental Impact Assessment (EIA)</li> </ul>

in insurers

- Average surrender payout ratio by insurers

*Qualitative data:*

- Relation between investment in insurance companies and expenditure by insurance companies
- Relation between incentives to insurance intermediaries for retention of consumers

adjudicating officers

- Qualification/ experience of recovery officers
- Composition of Selection Committee

consultants

- Quality of decisions of Expert Advisory Committees
- Technical capacity of offices of relevant officers
- Quality of public engagement

### Ascertaining impact

Subsequent to data collection and tabulation, the next step is ascertaining costs and benefits imposed. Costs and benefits imposed could be direct or indirect in nature which will be explained below:

#### Identifying costs and benefits

*Direct costs* entail cost of compliance with the regulation, administrative cost, cost of enforcement of regulation etc<sup>32</sup>. These include regulatory charges such as fees, levies and fines paid directly to the government, in addition to costs of legal, accountancy, consultancy required to prepare relevant documents. Compliance costs include capital and production costs required by regulation, such as installation of equipment and provision of training. Administrative burdens include costs associated with record keeping and reporting, including inspection and enforcement of regulation.

*Indirect costs* include the costs which are additional costs that are not accounted for by the direct costs<sup>33</sup>. These include impact of regulation on market structures, consumption patterns and the costs of delays. Some other costs could also be costs due to entry barriers through licensing, holding costs and restrictions on innovation are also included in indirect costs. In addition, effect on competition of the existing scenario must also be assessed. Indirect costs would also include the time costs to obtain approvals, with specific focus on cost of delays in obtaining approvals. This could be calculated as revenue loss per day of delay.

Similarly, *direct benefits* are those which can be directly accounted for by the regulations, such as, revenue benefits to government. *Indirect benefits/ spill-over effects* are favorable impacts which might not be directly related to the regulatory objectives, such as health benefits to society, environment<sup>34</sup>. The overall idea behind benefit assessment is the need to capture the total economic value of a given resource including its use and non-use value. Thus, in order to ensure a precise and accurate analysis, all major costs/ benefits should be accounted for in the evaluation.

While determining costs and benefits, recurring costs and benefits of the regulatory measure (in case of existing regulations) or the absence thereof (in case in case regulations are not in place) must be recorded. In addition, economic transfers should be included as a cost to the organisation bearing the cost and as a benefit to those receiving the transfer.

In addition, often, the stakeholders bearing the costs of regulation might be different from the stakeholders which are enjoying the benefits of regulation. This is known as distributional

<sup>32</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, 2008

<sup>33</sup> Ibid

<sup>34</sup> Regulatory Impact Analysis: A Primer, The White House

effect of costs and benefits, which must be considered while developing costs and benefits of regulatory alternatives<sup>35</sup>. These can be considered as transfer payments from one group to another through the regulatory channel. It must be noted that basic objective of ascertaining costs and benefits is to identify the incentives and the consequent change in behaviour of the stakeholders.

One of the ways to estimate the costs of regulations is detailed below. This also includes the key factors that need to be accounted for while calculating the costs of any regulation.

### **Box 3: Calculation of costs of regulation**

#### **1. Annual Administrative costs = Unit Cost X Quantity**

(where Unit Cost = inputs x time and Quantity = population x frequency)

Inputs = hourly wages costs (including overhead) or the cost of an external service provider (hourly).

Time = time required to complete the activity (in hours)

Population = the number of businesses affected in the country

Frequency = the number of times the activity is completed each year

#### **2. Substantive compliance costs = Unit Cost x Quantity**

(where Quantity = population x frequency)

Unit Cost = cost of training, equipment or other expenditure

Population = number of businesses affected

Frequency = amount of training or the number of equipment required each year

#### **3. Annual Regulatory Charges = Unit Cost x Quantity**

(where Quantity = population x frequency)

Unit Cost = cost of the fee/licence/permit

Population = the number of businesses affected

Frequency = the number of times that the fee for the licence or permit is required to be paid per year

#### **4. Indirect Costs = Unit Cost x Quantity**

Unit Cost = annual capital value of approvals x estimate of percentage

borrowed/spent x annual interest rate/365

Quantity = average delay (in days) to process or gain approvals

*Source: Measuring the Cost of Regulation, New South Wales Government, June 2008*

Any major cost or benefit, even qualitative, must be recorded so that all aspects are considered as it facilitates the decision making process. However as far as possible, the data collected should be quantitative in nature and in the same units of measurement (Rs, number of days etc.) as it helps validate the results. In case this is not possible, the element should be quantified in any terms possible, for instance, it may not be possible to monetize certain

<sup>35</sup> Regulatory Impact Analysis: A Primer, The White House



aspects but in such cases other elements such as number of beneficiaries could be stated. Quantitative data in the same units is preferred since then the magnitude of costs/ benefits can be assessed, and also increases the accuracy of the results. However, in case the quantification is not possible, qualitative costs and benefits must be estimated<sup>36</sup>. The qualitative data can be evaluated using Multi Criteria Analysis described in Chapter 1.

### Calculating Net Present Value

As indicated earlier, the data will be collected for a specified time period in the past. However, the value of money changes over time and a simple addition of the costs over time would not provide us with the precise figure. Thus, in order for greater accuracy we would need to convert the value of the costs into present terms so as to be able to compare them. It is similar to having data in the same units. Thus, in order to understand the current costs, it would be necessary to calculate the net present value. Adjusting the costs and benefits occurring over a period of time for inflation/ deflation, as the case may be will make them comparable in terms of today's currency<sup>37</sup>.

In a normal inflation scenario, it is reasonable to expect that any idle money in past would have been invested in risk-free securities (to prevent depreciation in the value of money). Consequently, to determine the present value of such money, return expected at risk free interest rate/ rate of inflation, whichever is lower, could be added to the principal amount.

*The costs (direct as well as indirect) estimated for the selected key variables identified for the finance and energy sectors are detailed below:*

IMPACT OF EXISTING PROVISIONS: INSURANCE	IMPACT OF EXISTING PROVISIONS: BANKING	IMPACT OF EXISTING PROVISIONS: ENERGY
<ul style="list-style-type: none"> <li>• Higher commission expense ratio and operating expense ratio for non-linked products than linked products in life insurance companies</li> <li>• High upfront costs for insurers owing to high first year commissions to insurance intermediaries.</li> </ul>	<p><i>Direct costs:</i></p> <ul style="list-style-type: none"> <li>• Application fees under DRT route = Rs. 15,000 (maximum)</li> <li>• Administrative cost</li> <li>• Infrastructure cost</li> </ul> <p><i>Indirect cost for delay in recovery:</i></p> <ul style="list-style-type: none"> <li>• Opportunity cost of amount stuck in NPA cases (considering the time taken in disposal of cases by DRTs) = Rs. 35,000 crore</li> </ul>	<p><i>Direct costs for power plant:</i></p> <ul style="list-style-type: none"> <li>• Application fees for environment clearance, cost for preparation of Environment Impact Assessment Report, and consultation fee paid to EIA consultant = Rs. 500,000 per plant</li> <li>• Environment Management Plan cost = 2.5 percent of the project cost</li> </ul> <p><i>Indirect cost for power plant:</i></p> <ul style="list-style-type: none"> <li>• Delay in commissioning in the concerned year = 36 days</li> <li>• Revenue generation in 329 days = Rs. 1706.57 crore</li> </ul> <p>Revenue loss on account on delay = Rs. 186.73 crore</p>

<sup>36</sup> Regulatory Impact Analysis Handbook, New Zealand Government, 2013

<sup>37</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, 2008

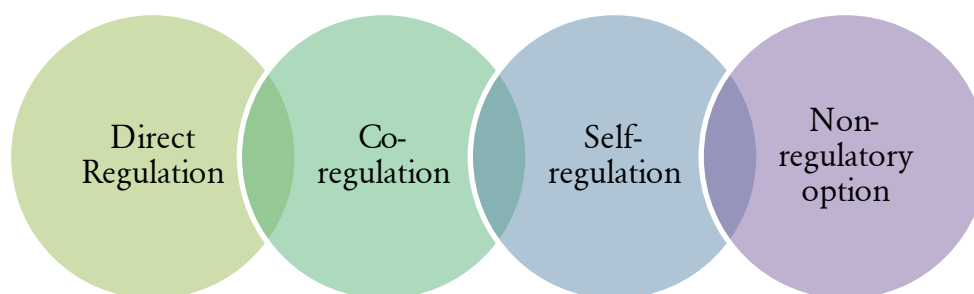
**(iii) DEVELOPMENT OF REGULATORY AND NON-REGULATORY OPTIONS**

After development and understanding of the baseline situation, the next step is to develop a range of possible regulatory and non-regulatory options which could address the problem. The alternatives developed must be based on the findings and analysis of data collected and stakeholder consultation exercise. This would provide a range of alternatives and most effective and efficient solution can then be selected.

In most of the developing countries, it might be the case that existing provisions are not sub-optimal per se, but ineffective execution and compliance is the problem area. Consequently, while the alternatives are being developed, the implementation process, capacity of government agencies and stakeholders must be kept in mind.

The problem statement and the objective intended to be achieved must also while development of alternatives. Adopting an alternative with regulatory approach must generally be viewed as a last resort, when the outcomes are not likely to be achieved by other non-regulatory approaches such as self-regulation, co-regulation etc.<sup>38</sup>.

**Figure 5: Few non-regulatory approaches**



Source: Regulatory Impact Analysis (RIA) Manual, USAID, 2011

It is advisable to develop multiple alternatives for a particular issue. The relevant alternatives might involve different approaches, with distinct advantages and disadvantages. In developing alternatives, approaches which are feasible and plausible ways of meeting the regulatory objective must be considered. For example, if banning the sale of a potentially unsafe product is being considered, an alternative could be disclosure of health risks to the public, as with many kinds of food additives such as salt. While developing alternatives, market oriented approaches rather than direct controls; performance standards rather than design standards; default rules rather than mandates; requirements based on risk assessment, firm size and geographical areas, rather than one-size fits all approach; are likely to produce higher benefits at lower cost, and so should be favoured. Needless to mention, the basic purpose of development of alternatives is to ensure greater net benefits than that are being experienced under the status quo. The alternatives developed must be validated through interaction with stakeholders and experts.

ALTERNATIVES: INSURANCE	ALTERNATIVES: BANKING	ALTERNATIVES: ENERGY
<p><i>Regulating expenditure by insurance companies:</i></p> <ul style="list-style-type: none"> <li>Regulatory suggestion: Capping the expenditure</li> <li>Alternative 1:</li> </ul>	<p><i>Long pendency of Debt Recovery cases</i></p> <ul style="list-style-type: none"> <li>Alternative 1: Establishment of additional DRT/ DRAT</li> <li>Alternative 2: Appointing extra/ additional PO/</li> </ul>	<p><i>Sub optimal regulation of ELA Consultants</i></p> <ul style="list-style-type: none"> <li>Alternative 1: Direct registration and supervision by Ministry of Environment, Forests and</li> </ul>

<sup>38</sup> Regulatory Impact Analysis (RIA) Manual, USAID, 2011

<p>Disclosure of comparative costs to consumer</p> <ul style="list-style-type: none"> <li>Alternative 2: Checking surrender and misselling</li> <li>Alternative 3: Disallowing high upfront commissions</li> </ul> <p><i>Promoting customer retention:</i></p> <ul style="list-style-type: none"> <li>Alternative 1: Commission claw-backs</li> <li>Alternative 2: Enforcing suitability requirements</li> <li>Alternative 3: Incentivising industry led initiative for customer retention</li> </ul>	<p>Chairperson DRT/ DRAT as the case may be</p> <p><i>Sub optimal performance</i></p> <ul style="list-style-type: none"> <li>Alternative 1: Appointing one technical member in addition to judicial member</li> <li>Alternative 2: Inclusion of independent member in Selection Committee</li> <li>Alternative 3: Linking remuneration with performance</li> </ul>	<p>Climate Change</p> <ul style="list-style-type: none"> <li>Alternative 2: Assignment of projects by independent panel</li> </ul> <p><i>Ineffective public hearing</i></p> <ul style="list-style-type: none"> <li>Alternative 1: Involvement of public from development of terms of reference to decision making</li> <li>Alternative 2: Grievance redressal cell for interested persons</li> </ul> <p><i>Abuse of discretion</i></p> <ul style="list-style-type: none"> <li>Alternative 1: Reasoned decision making and disclosure in annual report</li> <li>Alternative 2: Grievance redressal at National Green Tribunal</li> </ul>
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### Ascertaining costs and benefits of regulatory alternatives

In order to select the most optimal regulatory alternative, it would be necessary to estimate the costs and benefits of the alternatives so developed, for inter-se comparison and comparison with costs and benefits of baseline scenario. The alternatives developed and the costs and benefits estimated of the alternatives must be validated by stakeholder and expert consultations. For instance, a regulation in the form of smoking ban will increase costs to pubs, hotels, as they will have to make arrangements to ensure no smoking in their premises. However, long term benefits (indirect) to such pubs and hotels would be in form of healthier work force.

However, while determining the costs and benefits of regulatory alternatives, only the costs and benefits in addition to those of the baseline scenario are estimated. In other words, only incremental or marginal costs and benefits compared to the baseline are estimated. If business costs are currently Rs.40000, then an alternative costing Rs.30000 would have a cost in the RIA of negative Rs.10000.

In addition, some transitionary costs and benefits will be unique to the regulatory alternatives. These are transient, or one-off costs or benefits that occur, which normally relate to the implementation of the measure, i.e. the costs and benefits in relation to making transition from as-is to the proposed scenario.

The Standard Cost Model, as discussed in the earlier chapter, could be utilised to estimate the costs while multi-criteria analysis can be used to estimate the benefits of alternatives.

#### Selecting the time frame for analysis

As while estimating the baseline, here too a time-frame for analysis is required. The complete impact of any regulation will only be evident over a period of time and thus, any impact assessment must account for the costs/ benefits during the period and a time-frame should be selected accordingly. The time frame selected, ideally should be long enough to account for all

the benefits and costs of the regulation, however adequate consideration must be given to the ability of reliably predicting the future estimates of costs and benefits which can be a challenge.

### Discounting

Since the costs and benefits of regulatory alternatives are estimated for a time period in future, it is necessary to discount them to arrive at figures for current scenario in order to compare with the costs and benefits of baseline scenario<sup>39</sup>. In addition, typically there are differences in time in which benefits and costs occur. For instance, a regulation may stipulate technology upgradation for businesses to reduce pollution which would cause fiscal impacts in the first few years, however, the benefits will be observed after a passage of time and will also last for a significant number of years.

This technique provides a single figure which summarises the total costs accrued and the benefits gained over the time frame in future in present value terms. Thus, a discount rate must be used to convert the future value to money to today's equivalent values.

COSTS AND BENEFITS OF ALTERNATIVES: INSURANCE	COSTS AND BENEFITS OF ALTERNATIVES : BANKING	COSTS AND BENEFITS OF ALTERNATIVES: ENERGY
<p><i>Costs of alternatives:</i></p> <ul style="list-style-type: none"> <li>• Increase in cost of doing business for insurers</li> <li>• Increased monitoring and supervision burden on regulator</li> <li>• Reduction in high upfront commission for intermediaries</li> <li>• Increase in the cost of law making for policy makers</li> </ul> <p><i>Benefits:</i></p> <ul style="list-style-type: none"> <li>• Reduction in information asymmetry</li> <li>• Increase in sale of suitable products to consumers</li> <li>• Enabling access to insurance products and facilitating investments</li> </ul>	<p><i>Costs of alternatives:</i></p> <ul style="list-style-type: none"> <li>• Infrastructure Cost for setting up additional DRT / DRAT</li> <li>• Additional office and administrative cost</li> </ul> <p><i>Benefits:</i></p> <ul style="list-style-type: none"> <li>• Improved recovery rate</li> <li>• Speedy recovery of debts due to banks and financial institutions</li> <li>• Significant benefits as a result of stakeholders buy-in</li> </ul> <p><i>* The Government has announced setting up of six new DRTs, in the Union Budget 2014-15.</i></p>	<p><i>Registration and supervision of ELA consultants with government:</i></p> <ul style="list-style-type: none"> <li>• Annual basic remuneration cost to government – Rs. 60 lacs</li> <li>• Average annual fee – Rs. 5 crore</li> </ul> <p><i>Public consultation throughout the clearance process:</i></p> <ul style="list-style-type: none"> <li>• Annual basic remuneration cost to government – Rs. 8.20 crore</li> </ul> <p>Significant benefits as a result of improved public consultation process</p>

In developing countries, more often than not, the alternatives are likely impose costs on governments, nudging them towards efficiency and better performance, and the benefits would be qualitative in nature, in form of significant improvement in the regulatory governance.

Consequently, accurate and verifiable data in respect of costs and benefits of alternatives may not be available. The impact assessment for these alternatives will be largely based on assumption, and qualitative in nature, though validated through stakeholder consultations. It must be remembered that while estimating costs and benefits of different options on select stakeholders is necessary, the impact of the alternatives on overall economy should not be ignored. Once all the costs and benefits of each of the alternatives (and no change scenario) are computed, the next step would be to compare these to select the most optimum solution.

<sup>39</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, 2008

### Risk Analysis

Conducting any impact assessment would involve some extent of risk in estimating the costs and benefits of the options provided, on account of implementation uncertainty, likelihood of compliance etc. and thus, a risk analysis is essential. This form of analysis helps to identify the risks involved and possibly reduce them by developing strategies to deal with them. Thus, though it may not be possible to eliminate all the risks, this tool can help reduce the probability of such unwarranted events occurring or reduce their negative impact<sup>40</sup>.

- Identify the relevant risks and its possible consequences
- Determine the chance of risk occurrence and the extent of negative impacts
- Identify alternative means to reduce the chance of risk occurrence
- Estimate the resources (cost, time etc.) required to mitigate the risks

#### **(iv) SELECTING OPTIMAL REGULATORY ALTERNATIVES**

The next step involves selection of the best regulatory alternative.

In order undertake effective comparison, typically, one or more tables should generally be used to report the benefits and costs of baseline option and of the alternatives. For each of the regulatory alternatives, benefits and costs relative to a common baseline, must be calculated.

In case of qualitative impacts, it would be advisable to rank them in terms of their importance (e.g., certainty, likely magnitude, and reversibility), to enable effective comparison. In addition, separate notes could be added to aid in comparison and selection of alternatives. For example, when there is significant uncertainty to estimates, a caveat describing the nature of the uncertainty should be provided in the notes. As with every stage, it is essential to validate the findings through stakeholder engagement.

*On the basis of comparison of the costs/ benefits of the alternatives with the baseline scenario, the key solutions for resolving the identified problem are listed in the table below:*

<b>SELECTION OF ALTERNATIVES: INSURANCE</b>	<b>SELECTION OF ALTERNATIVES : BANKING</b>	<b>SELECTION OF ALTERNATIVES: ENERGY</b>
<ul style="list-style-type: none"><li>• Improving the law making process</li><li>• Checking surrender and mis-selling</li><li>• Enforcing suitability requirements</li></ul>	<ul style="list-style-type: none"><li>• Setting up of additional DRTs</li><li>• Appointment of additional technical members at DRTs</li><li>• Increase in cost of obtaining adjournments</li><li>• According priority of charges with date of registration in the registry</li></ul>	<ul style="list-style-type: none"><li>• Registration and supervision of EIA consultants with government</li><li>• Public consultation throughout the clearance process</li></ul>

### Preparation of the RIA Document

Once the RIA process is complete a draft document detailing not just the results but the complete methodology and step by step procedure should be prepared. It should be presented to stakeholders and public at large in an easy to understand and unbiased manner. This would aid in enhancing transparency in the RIA process and enable experts to comment on the

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<sup>40</sup> Tax Administration Reform in India- Spirit, Purpose and Empowerment, Third Report of TARC, Ministry of Finance, Government of India, November 2014

methodology/ alternatives. This is expected to generate inform debate on the best possible alternative to address the problem, and also stakeholders realising the benefits of RIA process.

#### **(v) PUBLIC CONSULTATION**

The next critical stage of any RIA is formal public engagement. Thus, once the most optimal alternative(s) has been selected (in the view of agency conducting RIA) and the draft RIA document has been prepared it needs to be shared with stakeholders for their views and comments prior to presenting it to the policy-makers. One of the most common method adopted is placing the document in public domain for consultation for instance, on the website, where it can be accessed by a wider audience. In order to gather quality information from stakeholder groups it is critical that they are provided with sufficient time to peruse through the document and provide their feedback. Usually, a minimum of 30 days is needed for adequate response. Post this process, the collected information needs to be logically organised, the data analysed and the draft should be revised accordingly. This version then can be presented to the policy-makers.

#### **COMMUNICATING THE RESULTS**

The results of RIA are only as effective as its adoption and implementation. Thus, effective communication is an essential and integral part of the RIA process. The audience of such a study is often policy makers who may or may not be aware of the technical aspects of such a study. In order to encourage them to implement the findings, it should be presented in an easy to understand and clear format<sup>41</sup>. Additionally, the format of presentation of findings could also be adapted according to the needs of the audience. Thus, in case of policy makers etc. who may not have the necessary time, the findings should be presented in concise manner. Consequently, apart from the detailed report, formats such as executive summary, policy briefs, briefing papers, can be utilised to reach out to different audiences. Another critical aspect is the timely dissemination of the findings so that they can have a real impact on the scenario and the results should be provided in the public domain. The results should also be communicated to the stakeholders to keep them informed and also promote acceptance and gather support/ stakeholder buy-in for the recommendations and policy changes required.

In developing countries this step is critical since RIA, as a tool, is not widely known or adopted. Thus, communication and advocacy of the results is essential to encourage acceptance of the tool.

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<sup>41</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, 2008

### *Chapter 3: Adoption of RIA in policy making*

The importance of quality regulations and the role of RIA in achieving this goal have been discussed in previous chapters. Many developed countries have adopted this tool for policy making and few developing countries have also followed in their footsteps. Though these economies may not have fully integrated RIA in their principles of policy making, they are utilising it intermittently or in some modified manner. Some of these include Sri Lanka, Malaysia, etc. More importantly, these developing economies have understood the cost of non-adoption of RIA in policy decisions.

Various other tools exist for undertaking RIA apart from Standard Cost Model and Multi-Criteria Analysis, as described in Chapter 1. Thus, while the broad steps as detailed in Chapter 2 remain consistent for undertaking RIA, the tools to estimate costs and benefits may vary depending on the requirements. Countries can start small by first applying RIA in few cases, building capacity, developing country guidelines and finally fully integrating in the policy making processes of the country.

The impact of a regulation is visible only after a significant passage of time and similarly the effect of RIA, if conducted, will only be visible after sometime. Countries and policy makers thus, should not expect quick results from RIA and be discouraged.

#### **Political commitment**

This is one of the most essential issues to ensure adoption of RIA in the policy making processes of the country. Political commitment at the highest level can help maximise awareness of this tool and subsequently increase adoption for policy decisions. This system can cause significant changes in the processes existing in the country and thus, it is essential that policy makers accept the RIA principles. Political commitment could be showcased by governments issuing a clear statement/ notification for the adoption and development of a RIA system in the country<sup>42</sup>.

#### **Developing Guidelines**

Guidelines have an important role to play for the adoption and implementation of RIA. There exist many such guidelines globally for conducting RIA. However, the capability and capacities of each country are different and thus, a guideline taken from one country may not be entirely suited to the needs of the other. As discussed earlier, the RIA objectives are constant; however, the process of achieving the objectives can vary. Thus, the country should focus on creating an analytical system which takes into account the needs as well as abilities of the country. These guidelines then could be used not only for implementation but also capacity building of the relevant stakeholders.

Further, these guidelines should cover a wide range of issues, explaining RIA, its importance as well as need and finally the detailed process to undertake RIA. This should act as a guiding document for the policy makers for implementation of RIA.

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<sup>42</sup> Building an Institutional Framework for Regulatory Impact Analysis, OECD, 2008

## Advocacy and Training

Only political commitment is not sufficient for the adoption of RIA, relevant stakeholders, including government officials, also need to be trained on the nuances of the tool and how to use it. Thus, extensive advocacy and training programmes should be organised to not only increase their knowledge base but also to provide the regulators with the necessary skills to conduct RIA. Best practices should be reviewed and assistance should be taken from international experiences to create a programme that adapts to the needs of the country. Such an exercise might put significant strain on the exchequer but the expected benefits gained from an improved regulatory structure are likely to outweigh the costs, over time, by efficient implementation of RIA.

## Integrate RIA in the regulatory mechanism

RIA need not be fully integrated into the policy making processes from the beginning. Countries can start by undertaking RIA for certain key regulations which are likely to have a significant impact. The scope can then be expanded gradually until it becomes a mandatory part of the policy making process. In developing countries, a plethora of regulations exist, most of which may have been developed without the use of any analytical tool. Such sub-optimal regulations/ provisions are likely to lead to misaligned incentives in the relevant sectors. Thus, in order to address and rectify these concern areas, the country could also apply RIA to existing regulations. This will help evaluate the performance of these regulations in terms of their objectives and identify provisions that could be causing the regulatory failure, if any. Thus, RIA should be applied not only to new but also existing regulations<sup>43</sup>.

Below are mentioned some good practices identified for effective use of RIA.

### Box 4: Good Practices for effective RIA

1. Maximise political commitment to RIA
2. Allocate responsibilities for RIA programme elements carefully.
3. Train the regulators.
4. Use a consistent but flexible analytical method.
5. Develop and implement data collection strategies.
6. Target RIA efforts.
7. Integrate RIA with the policy-making process, beginning as early as possible.
8. Communicate the results.
9. Involve the public extensively.
10. Apply RIA to existing as well as new regulation.

*Source: OECD (1997), Regulatory Impact Analysis: Best Practice in OECD Countries*

## Challenges in conducting RIA

Some of the major challenges in conducting RIA are:

- \* **Lack of Political Will:** Political will is extremely crucial. The lack of political will can hamper the success of the tool. In developing countries, where RIA is not adopted in the policy making process, the greatest challenge is enhancing knowledge and encouraging adoption<sup>44</sup>.

<sup>43</sup> Building an Institutional Framework for Regulatory Impact Analysis, OECD, 2008

<sup>44</sup> Ibid



- \* Problem Identification: Correct identification of the problem and the underlying causes is essential to begin the RIA process. Further, in case of ex-post RIA, evaluation and selection of the most sub-optimal regulations is crucial.
- \* Data Collection: Data collection and analysis is the most critical aspect while conducting RIA. The accuracy of the results depends on the quality of data which is often a challenging task,<sup>45</sup> especially in developing countries. Owing to lack of awareness of benefits of RIA, stakeholders might not be comfortable in sharing confidential or correct data
- \* Dealing with different types of data: Often, the data available is a mix of qualitative and quantitative data, which poses a challenge at the time of comparison as interpretation of qualitative data can differ from person to person.
- \* Stakeholder Mapping: Another demanding task is listing all the relevant stakeholders who are likely to be impacted, and then accounting for all the costs and benefits (direct and indirect) for each of these, and also estimating the impact on economy, environment and society.
- \* Dealing with biased results: Stakeholder interactions tend to be biased at times and the challenge is to limit these biases to obtain accurate data. Often another limitation is convincing stakeholders of the importance and benefits of RIA and further, assuring them confidentiality of data would be maintained.
- \* Ascertaining Impact: When conducting, ex-post RIA, at times an impact is caused due to various reasons and it becomes difficult to account for the contribution of a single provision/ regulation.
- \* Challenges in estimation: Estimating the costs accrued over the entire time-frame can be a challenge. Also, arriving at an inflation/ discounting rate is also a critical factor in the analysis which can at times prove difficult.
- \* Customising RIA: There is no one defined or established method to conduct RIA and the process is flexible. Thus, customising the tool according to the ground realities and availability of data can sometimes be a formidable task.
- \* Lack of adequate knowledge: Further, limited knowledge among the policy makers and stakeholders, of the tool and its processes can often result in erroneous decision making and implementation<sup>46</sup>.

### **Limitations of RIA**

The regulatory impact assessment tool, though widely adopted for its role in creating good quality regulations, also has certain limitations which should be understood.

Lack of awareness/ acceptability: Political will and a legal mandate are critical for the adoption and implementation of RIA in policy making. However, one of the challenges, especially in developing countries, is the lack of awareness and understanding regarding the tool. Thus, this is the first hurdle in the success of RIA as a tool for policy making<sup>47</sup>. There is a possibility that RIA can add a layer to regulatory decision making and might degenerate into a procedural compliance issue.

Decision making tool: RIA as a tool can support policy makers in selecting the most optimum regulatory option. However, it should not be treated as a substitute for decision making. Its role is limited to being an assistive tool which can provide greater clarity to decision makers.

<sup>45</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, 2008

<sup>46</sup> Building an Institutional Framework for Regulatory Impact Analysis, OECD, 2008

<sup>47</sup> Integrating the Environment in Regulatory Impact Assessments, OECD, 2011

Assessment made on assumptions: Due to the nature of the methodology, assumptions and judgments are likely to be a part of the assessment. However, any such uncertainties which are often unavoidable, should be clearly recorded and clarified during the assessment. This final decisions taken, accounting for such uncertainties and their consequences, would still provide for an accurate assessment with RIA, rather than without adopting RIA.

Lack of resources: This tool requires time, a trained team and budgets to conduct the assessment. These are often scarce resources which could delay the adoption of the tool. In many instances, the regulatory decisions need to be taken within a limited time period, which may not leave sufficient time for a comprehensive RIA to be conducted. In developing nations, the availability of people with a working knowledge of RIA processes is limited and thus, capacity building becomes essential<sup>48</sup>.

Implementation Quality: As mentioned earlier, there is no particular correct methodology of conducting RIA. The process can vary from economy to economy depending on the available capacities and can also evolve with time. Thus, the results from this tool would be as good as the implementation of the processes. Hence, if the problem identification is not accurate or stakeholder mapping is not complete, the results would also be a reflection of these data points and may not provide precise results.

## **Conclusion**

The benefits of the RIA tool have been elucidated through this toolkit; however the adoption remains low in developing nations. This is not a decision making tool, it can only assist the policy makers in taking a balanced decision post a comprehensive assessment of the impacts. Thus, the foremost requirement for greater usage of RIA is political will, which is often lacking, especially in developing nations. There is a legal/policy mandate for RIA in many developed nations which is needed in developing nations as well. However, this can only come from greater awareness and understanding of the tool, especially from the political class. Even in countries where policy mandate is at place,<sup>49</sup> it would be necessary to build capacity/awareness in relation to implement such mandate. This toolkit is a modest attempt in such direction.

In developing nations such as India, where various poorly framed regulations exist, there is a need to conduct RIA on these regulations in order to understand the implications of these regulations as well, in order to resolve the problems. With time the goal should be to conduct RIA prior to development of these regulations so as to select the most optimum alternative. Thus, capacity building, first of the policy makers, is essential for the adoption of RIA. Subsequently, training and capacity building of other stakeholders would be required to develop resources to implement RIA.

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<sup>48</sup> Integrating the Environment in Regulatory Impact Assessments, OECD, 2011

<sup>49</sup> Pre-legislative consultation Policy, Ministry of Law and Justice, Legislative Department, February 2014

### *Further Reading*

- Introductory Handbook for Undertaking Regulatory Impact Analysis (RIA), OECD, October 2008
- Regulatory Impact Analysis: A Primer, The White House
- Regulatory Impact Analysis Handbook, New Zealand Government, 2013
- IA Toolkit - How to do an Impact Assessment, HM Government, August 2011
- Building an Institutional Framework for Regulatory Impact Analysis (RIA)OECD, 2008
- Current Trends in Regulatory Impact Analysis: The Challenges of Mainstreaming RIA into Policy-making, Jacobs & Associates, May 2006
- Mapping of ex-ante Policy Impact Assessment Experiences and Tools in Europe, UNDP BRC, September 2007
- Revised RIA Guidelines, Department of Taoiseach, Dublin, June 2009
- Regulatory Impact Analysis (RIA) Manual, USAID, November 2011
- Improving Business Environments through Regulatory Impact Analysis-Opportunities and challenges for developing countries, Peter Ladegaard, December 2005
- Victorian Guide to Regulation, Toolkit 2-Cost-benefit Analysis, Department of Treasury and Finance, July 2014

## *Annexures*

### ANNEXURE 1

#### 1. IMPACT ASSESSMENT IN INDIAN ELECTRICITY GENERATION SECTOR

##### ASSESSMENT OF ENVIRONMENT IMPACT ASSESSMENT NOTIFICATION, 2006 IN RELATION TO COAL BASED POWER PRODUCTION IN RAJASTHAN

#### Consultation with power producers

##### 1. About the company

- Location, turnover, revenue, employees, number of coal based power plants
- Plants in Rajasthan, and size
- Plants in other states, and size

##### 2. About the experience of obtaining environment clearance

- Difficulties faced (most cumbersome stage)
- Time delays (on account of EAC, public consultation or regulator)
- Turnover/ revenue lost + idle employee cost incurred on account of time delay
- Cost incurred (fee, external consultant, documents, public consultation, EMP)
- Complicated requirements (multiplicity of documents, dealing with multiple authorities/local agencies, public consultation)
- Role of external consultants
- Conditions precedent (other clearances, inspections by EAC)
- Comparison with experience in other states

##### 3. Is public sector differentially treated from private sector in the clearance process?

- Preferential treatment of private sector (findings of project)
- Reasons (inefficiency of PSEs/ government apathy)

##### 4. How could the clearance process be made better?

- Legislative changes (time period, reduction and standardization of documents, deemed consent)
- Non-legislative changes (compliance with statutory time periods, transparency)
- Independent regulator
- Expected costs and benefits
- Time savings
- Cost savings

##### 5. Impact of recently instituted online clearance management (by MoEF only)

- Cost and time reduction
- Reduced human interaction/difficult technology

##### 6. Compliance with conditions under the clearance

- Status of compliance
- Difficulties in compliance
- Cumbersome, Irrelevant/archaic conditions
- Half yearly reports

##### 7. How could the conditions be rationalised

- Reduction in conditions without diluting sanctity
- Costs and benefits to different stakeholders

##### 8. Experience with inspection, monitoring, supervision

- Difficulties
  - Utility
9. How could the inspection/supervision be rationalised
- Random but reduced number of checks
  - Costs and benefits to different stakeholders
10. Government understanding, capacity to monitor and supervise
- Need for training, capacity building
11. Specific data requirement:
- Number of employees employed to deal with one application
  - Average salary of one employee dealing with one application
  - Time devoted by one employee in dealing with one application
  - Average direct cost (fees + consultant + printing and publication) in relation to one application
  - Average cost of compliance with conditions (one time and recurring EMP cost + installation of chimneys etc.) in relation to one application
12. Data attribution in case of CPPs
- Distinction from principal activity (such as, cement plant)

**Consultation with Ministry of Environment and Forests (MoEF)/ State Environment Impact Assessment Authority (SEIAA)**

1. About the regulator
- Composition, vacancies, expertise
2. Role in environment clearance process
- Involvement at different stages
  - Average number of applications processed in a month
  - Process of review of applications/ amended applications
  - Site inspection
  - Calculation of EMP cost
  - Factors considered while providing clearance
  - Relationship with EAC
  - Comparison with applicants of other states
3. Observations about environment clearance process
- Compliance with statutory time frame
  - Delays and reasons for delays
  - Which stage is most cumbersome
  - Why is it cumbersome (capacity, expertise, manpower, resources, financial limitations)
  - Time and cost incurred
4. Is public sector differentially treated from private sector in the clearance process?
- Preferential treatment of private sector (findings of project)
  - Reasons (inefficiency of IPPs/ government apathy)
5. How can the clearance process be improved?
- Increasing manpower, fund allocation, resources training, capacity building
  - Simplification of the process
  - Resultant costs and benefits
6. Impact of recently instituted online clearance management (by MoEF only)
- Cost and time reduction

- Reduced human interaction/difficult technology
7. Quality of applications/clarifications received
- Completeness and adequacy
  - Kind of clarifications sought
  - Time taken by IPPs to provide clarifications, and quality of clarifications
8. Compliance with conditions under the clearance
- Role in reviewing compliance
  - Status of compliance
  - Types of non-compliance
  - Reasons for non-compliance
9. How could the compliance process be improved?
- Increasing manpower, fund allocation, training, capacity building
  - Rationalisation of conditions
  - Resultant costs and benefits
10. Inspection, monitoring, supervision
- Role in inspection, monitoring, supervision
  - Utility
  - Difficulties
  - How to increase effectiveness
11. Regulator's understanding, capacity to monitor and supervise
- Need for training, capacity building
12. Specific data requirement:
- Number of employees employed to deal with one application
  - Average salary of one employee dealing with one application
  - Time devoted by one employee in dealing with one application
  - Average direct cost (resources invested, printing and publication, etc.) in relation to one application

## **2. RIA IN LIFE INSURANCE SECTOR**

A regulation could impede investment by: i) requiring business to allocate capital inefficiently, thereby reducing the capital available for productive uses; ii) restricting investments in specific activities; or iii) not providing adequate incentives to invest.

### **I. Regulations resulting in inefficient allocation of capital**

1. What are major cost heads of your department/ business?
2. What proportion of the cost would you attribute towards compliance with regulatory provisions? Please provide examples of costs along with highlighting relevant regulations.
3. Do you think some of such regulations are not justified and costs could be reduced by making appropriate changes to the regulations, without dissolving their ultimate objective and balancing interest of all the stakeholders? Please provide examples along with possible alternatives to the existing regulatory provisions.
4. Should such regulatory provisions be reformed, resulting in savings, where would you invest such funds productively? How much savings, and consequently, additional investments, do you estimate as a result of such reforms?

### **II. Regulations restricting investments**

5. Are there some regulatory provisions which directly or indirectly restrict some expenditure you would like to make? Please provide examples of investments you would like to make and highlight relevant restrictive regulations?
6. Do you think some of such regulations are not justified and investments could be enabled by making appropriate changes to the regulation, without dissolving their ultimate objective and balancing interest of all the stakeholders? Please provide examples along with possible alternatives to the existing regulatory provisions.
7. How much additional investments do you estimate as a result of such reforms?

### **III. Lack of regulatory incentives to invest**

8. Are there some areas wherein you are holding back investments owing to lack of regulatory incentives to invest? Please provide examples.
9. What incentives would you require to nudge investments? Kindly provide examples of specific regulatory incentives you would like, including the regulations in such incentives could be incorporated.
10. How much additional investment do you estimate as a result of such regulatory reforms?

### **IV. Regulations impeding foreign investment**

11. Do you think that the lack of regulatory reforms, as discussed in the parts I, II and III above, are impeding domestic as well as foreign investments in the sector.
12. Are there any other specific regulatory restrictions which might impede foreign investment in the sector?
13. Any other information with respect to regulatory scenario and investments which is not covered above.

## ANNEXURE 2

### REGULATORY IMPACT ASSESSMENT TOOLS

#### **Cost Benefit Analysis (CBA)**

This is an economic assessment tool and in terms of methodology is probably the most comprehensive for conducting RIA. It is the preferred RIA approach in most RIA countries. It is based on quantifying the costs and benefits for a suitable period of time, in monetary terms or any other clear metric, and comparing alternatives which can help guide decision makers on the likely impact of these options. The application of this tool has been described in Illustration 1 below.

While it is impossible to be comprehensive in a RIA, it must be ensured that all major stakeholders are mapped and the significant costs/ benefits to each are identified. Then all the alternatives are compared on the basis of the total costs accruing to all stakeholders and the overall benefits. Even where costs and benefits are presented in qualitative terms, this helps in easy comparison and analysis for decision makers, who can then select the most optimum alternative. When the data are in the same units for instance currency, time, the cost- benefit comparison can be easily made. However, most RIAs do not present impacts in the same metrics, leaving room for subjective weighting and judgment by the reader, such as the political decision maker. Even where metrics differ, this analysis can separate clearly inferior solutions from clearly superior solutions.

There are scenarios where the costs and benefits have been identified but these cannot be monetised, for instance the impact on human health or the environment. In most cases, these impacts can be quantified using other metrics, such as life-years saved. Using qualitative data is also possible, such as by weighting or another method of generating comparable numbers, but the difficulty in using qualitative information is a major limitation of this methodology. Also, this can be a more expensive and time consuming tool compared to the others. Even in cases where complete quantitative data is not available a *partial* cost benefit analysis can be conducted<sup>50</sup> or which is also known as “soft benefit cost analysis.”<sup>51</sup>

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<sup>50</sup> Introductory Handbook for Undertaking Regulatory Impact Analysis, OECD, October 2008

<sup>51</sup> Scott Jacobs, “Current Trends in Regulatory Impact Analysis: Mainstreaming RIA Into Policy-Making,” Jacobs and Associates Reports, 2006



Illustration 1 below provides an example in relation to the use of cost-benefit analysis.

**ILLUSTRATION 1:**

Multiple options were developed to address the issue of business licensing reform in Montenegro. The costs and benefits of each option were assessed to evaluate the net benefits in order to select the most suitable option.

Proposal	Private Sector Savings (recurring benefits)	Set-up Costs/ Recurring Costs	Net Benefits
Licensing E- Registry	In a range from 37,500 to 75,000 Euros	78,800/16,000 Euros	Positive
Licensing center as an independent institution (Licensing E-Registry included)	In a range from 93,000 to 188,000 Euros	272,700/168,000 Euros Regional offices not Included	Negative or barely positive
Licensing center as a part of existing institution + ERegistry	In a range from 93,000 to 188,000 Euros	181,900/118,000 Euros Regional offices not Included	Probably positive

Once the costs and benefits of the three proposals were computed and evaluated, the option with the highest net benefits would be the most optimum solution.

*Source: Regulatory Impact Analysis Manual, USAID Montenegro, November 2011*

**Cost-effectiveness Analysis**

This is a very common RIA method, since it examines “value for money,” a widely accepted criterion for public policy decisions. This method is typically used to compare a set of regulatory options with similar objectives and expected outcomes. While the cost-benefit analysis answers whether an action should be taken this tool only addresses the question relating to the kind of action to be taken.<sup>52</sup> Thus, while CBA can result in rejection of the alternatives if costs exceed the benefits, this tool proceeds with the assumption that action is needed, and hence the focus is on choosing the best alternative.

This tool ranks set of options which have a similar metric to measure benefits. This methodology ranks options according to cost per metric of benefit<sup>53</sup> as illustrated in the example below. However, this tool does not answer whether problem identification and selection of objectives is accurate. Also, the focus is on a single or a set of benefits and any other side-effects of the regulation are not taken into account.

Illustration 3 below provides an example in relation to the use of cost-effectiveness analysis.

**ILLUSTRATION 3:**

There are three proposals to be evaluated which impact the health of the population. The corresponding costs and benefits in terms of life years gained are given below -

Proposal	Cost (C)	Impact on health (life years gained) (E)	Cost-effectiveness ratio (C/E)
A	1,50,000	1,700	88.23
B	1,00,000	1,150	83.33
C	1,20,000	1,450	82.75

Once the cost-effectiveness ratio is calculated the most cost-effective proposal can be selected which in this case is proposal A.

<sup>52</sup> Regulatory Impact Analysis Training Course, Putting RIA into Practice, Jacobs, Cordova & Associates

<sup>53</sup> Regulatory Impact Analysis Training Course, Putting RIA into Practice, Jacobs, Cordova & Associates

### Least cost Method

This method is similar to the cost-effectiveness analysis as this tool also helps to choose from a set of options while the overall objective/ benefit are the same. In this methodology, the costs of achieving the same level of benefits are compared and the one which has the least cost is chosen. This tool does not evaluate whether the regulation should proceed or not, rather it aims to choose the option with the lowest cost assuming the benefits derived are similar. Thus, this tool analyses the costs of the various options and is useful where the level of benefits is pre-defined (such as by a government commitment to achieve specific outcomes). This instrument is useful when the various options are likely to provide a similar level of benefits, thus costs are the only differentiator<sup>54</sup>.

Similar to the cost-effectiveness method, this tool also does not address the issues in problem identification or selection of objectives.

Illustration 4 below provides an example in relation to the use of least-cost analysis.

#### ILLUSTRATION 4:

The objective to be achieved through regulatory intervention is set to reduce emissions by 50 percent. In the case the benefit remains the same for all proposals and they can be evaluated in terms of their costs.

Objective	Proposal	Cost
Reduce emissions by 50%	A	4,50,000
	B	3,25,000
	C	4,75,000

Thus, the final comparison has to be made in terms of cost and the one with the lowest cost i.e. B would be selected in this case.

Source: Regulatory Impact Analysis Training Course, Putting RIA into Practice, Jacobs & Associates

### Business (or small business) Impact Analysis

This is a form of partial analysis of RIA which looks at specific impacts on businesses. It is broader than the Standard Cost Model discussed earlier. One of the aims is to increase competitiveness, and improve microeconomic policies to minimise business costs. It identifies the costs of regulation on businesses including the operational and organizational impacts, the effects on the firm's ability to innovate etc. Any of the methods described above can be used to ascertain the costs and benefits to society. This method has its advantages as well as disadvantages<sup>55</sup>.

While it shows political commitment to address the requirements of businesses, since this is a partial analysis, it can weaken RIA if not conducted with care, and result in regulatory capture. Thus, it is recommended that all stakeholders should be considered while conducting any RIA, and focusing only on businesses to assess the impact of any regulation could have an

<sup>54</sup> Regulatory Impact Analysis Training Course, Putting RIA into Practice, Jacobs & Associates

<sup>55</sup> Current Trends in Regulatory Impact Analysis: The Challenges of Mainstreaming RIA into Policy-making, Scott Jacobs & Associates, 2006

unjustified impact on policy decisions. It would address the needs of the specific group and fail to take into account the side effects of the regulations which may have a negative impact on another group of stakeholders.

However, this type of partial analysis could be the first step towards the adoption of full RIA, since it is cost and time effective. Thus, BRIA could be undertaken on certain regulations which have significant impacts on businesses and once benefits of the RIA process have been established, practice of conducting a full-fledged RIA could be adopted.

### Summary

The table below provides a summary of the major tools for conducting RIA.

Tool	Type of Data*	Advantage	Disadvantage
Cost Benefit Analysis	Quantitative or precise qualitative	<ul style="list-style-type: none"> <li>- Comprehensive tool - compares all the costs and benefits of the regulation</li> <li>- Takes into account all the positive as well as negative impacts</li> <li>- Answers whether to go ahead with the regulation or not, i.e., is action needed?</li> </ul>	<ul style="list-style-type: none"> <li>- Cannot account for factors which cannot be measured</li> <li>- Data needs to be in the same units for comparison which can be a challenge, but forms of soft benefit cost analysis can be used to address this problem</li> <li>- Can be time consuming and costly</li> </ul>
Cost-Effectiveness Analysis	Quantitative	<ul style="list-style-type: none"> <li>- Relatively easier to undertake as compared to CBA</li> <li>- Can be used to compare alternatives which have similar kinds/ levels of benefits</li> </ul>	<ul style="list-style-type: none"> <li>- Cannot answer whether the regulation should be undertaken or not</li> <li>- Focuses largely on a single benefit and can miss out of possible side effects</li> </ul>
Least Cost Method	Quantitative	<ul style="list-style-type: none"> <li>- Relatively easier to undertake as exact benefits do not need to be computed (but are provided by policy)</li> <li>- Can be used to compare costs of alternatives which have similar outcomes</li> </ul>	<ul style="list-style-type: none"> <li>- Cannot answer whether the regulation should be undertaken or not</li> <li>- Focusses largely on a single benefit and can miss out of possible side effects</li> <li>- Cannot identify where changes in benefits would result in greater social net benefits</li> </ul>
Multi-Criteria Analysis	Qualitative	<ul style="list-style-type: none"> <li>- Can be used for qualitative data</li> <li>- Enables comparison of different types of data as well</li> </ul>	<ul style="list-style-type: none"> <li>- Is a subjective analysis and results can vary from reader to reader</li> <li>- Cannot conclude if benefits outweigh the costs</li> <li>- Time preferences may not be reflected</li> </ul>

\*this indicates major type of data employed in the tool, however in case additional data (qualitative or quantitative) is available, the same can be used to support the analysis

Source: *Regulatory Impact Analysis Manual, USAID, November 2011*

Each of the tools described have their own advantages, disadvantages and impact on resources. Moreover it is not necessary to follow one particular method for conducting RIA. Depending on the availability of data, time, capacity and objectives, one of the tools or even a mix of tools could be adopted.