Better Regulation Victoria

Guidance Note: Multi-Criteria Analysis

1. Purpose of this note

The purpose of this guidance note is to provide consistent and clear advice to departments and agencies about:

- when it is appropriate to use multi-criteria analysis (MCA) as the decision tool in Regulatory Impact Statements (RISs) and Legislative Impact Assessments (LIAs); and

- the nature and level of analysis required when MCA is used in a RIS or LIA.

This advice is intended to be consistent with, and supplement, the discussion contained in the *Victorian Guide to Regulation*. It focuses on areas that, in BRV's experience of assessing RISs and LIAs, departments and agencies have found challenging when conducting MCA.

2. What is MCA?

The *Victorian Guide to Regulation* requires that a 'decision tool' be used to determine whether the benefits of a regulatory option outweigh its costs, and to 'rank' different options.

MCA is a decision tool that is used when it is not possible to quantify and value the main costs and benefits of an option. This includes situations where some data are available, but they provide information at too broad a level to enable the specific (narrower) effects of the proposal to be isolated.

MCA involves:

- specifying a number of assessment criteria;

- assigning a 'weighting' to each criterion;

- assigning scores for each option in relation to each criterion; and

- calculating a weighted score for each option.

MCA allows a decision to be made based on the weighted scores. The option assigned the highest weighted score is the 'preferred option'.

Although a degree of subjectivity is inherent in the MCA approach, when applied appropriately, MCA can provide a structured, systematic and transparent framework for comparing options with some non-quantified costs and/or benefits.

By identifying the basis on which options have been compared, it allows stakeholders and decision makers to see (and comment on) which factors were taken into account, the weight given to different aspects of a decision, and the logical path between the issues being addressed and the decision.

3.   When is it appropriate to use MCA?

Cost-benefit analysis (CBA) is the 'default' decision tool for RISs and LIAs. MCA should only be used where:

- it is not feasible or practical to quantify the main costs and benefits (having regard to the impact of the proposal, i.e. proportionality of analysis); and/or

- the main objectives and effects of the policy relate to social, equity or fairness issues, and there are no, or limited, robust techniques and/or information that would enable these effects to be monetised (i.e. expressed in dollar terms).

An MCA is also often an appropriate decision tool for RISs that consider regulations imposing fees and/or charges, where the fee structure is in part intended to achieve objectives other than efficiency (such as equity). In this case, the objective may be to fund the costs of efficiently administering the particular regulations through cost-reflective and equitable fees. An MCA allows the arguments for the proposed fee level (in particular, any divergence from full cost recovery) to be presented transparently.

4.   What standard of analysis is required of an MCA?

4.1.   Defining appropriate criteria

The criteria for the MCA must link closely to the identified problem/s and objectives.

Cost criteria should be defined as 'cost' not 'cost minimisation'. Therefore, an option that is more costly than the base case will receive a negative score.

Criteria must be specified in a way that avoids overlap between them.

4.2.   Choosing a scoring scale

A symmetric scoring scale ranging from -10 to +10 is simple to apply and understand, as well as allowing enough scope for differences across options to be distinguished. It is recommended that this range be used in all RISs and LIAs that use MCA as a decision tool.

4.3. Assigning appropriate weights to cost and benefit criteria

The weights assigned can have a significant effect on outcomes. For example, a high weighting on benefit-related criteria relative to the cost criteria biases the outcomes for a given set of scores:

- against options that have relatively low costs (the variable about which the evidence tends to be more robust); and

- towards options that rate highly on the benefits-related criteria (which tend to be measured on a more subjective basis).

Thus, neutral weights of 50 per cent in total for the cost-related criteria and 50 per cent in total for the benefit-related criteria should be applied.

4.4. Assigning scores

The scores assigned for each option against each criterion must be justified and be evidence-based, to the extent possible.

The scoring in the MCA needs to reflect all the relevant evidence presented in other parts of the RIS or LIA. The extent and nature of the evidence required to support the analysis will depend on the magnitude of the impact of the proposal.

The relative scores assigned to each option for each criterion must be consistent with the relative effects in relation to that criterion. For example, if one option would lead to costs being $10 million higher than in the base case, while another option would lead to costs being $1 million higher, it might be appropriate to assign scores of -10 to the first and -1 to the second option, but assigning scores or -10 and -9 respectively would not be appropriate.

4.5. What supporting discussion needs to be included in the RIS or LIA?

To enable the MCA to be transparent and provide sufficient information to inform stakeholders and decision makers, the following information needs to be provided.

- The reasons for including the selected criteria (and how they are defined) must be outlined clearly.

- The rationale for the weights assigned to each criterion must be clearly explained/justified.

- The reasons for the scores assigned for each option against each criterion must be explained clearly, drawing on the evidence presented in the RIS or LIA. As with all decision tools, where there is uncertainty about the costs and benefits of

options, this uncertainty (and the possible implications for the analysis) must be highlighted transparently in the RIS or LIA.

- Where the weighted total scores for some options are especially close (and, therefore, the results of the MCA are sensitive to the chosen weightings), this must be explicitly noted in the RIS or LIA, including in the executive summary.

5.   References and further reading

Government of Victoria 2024, *Victorian Guide to Regulation*, Better Regulation Victoria, Melbourne.