Module 4 – Defining outcomes, intermediate outcomes and outputs

Overview

Module 1 outlined the three levels of performance:

- **outcomes**: the broad goals your agency is trying to achieve;
- **intermediate outcomes**: the crucial middle layer of the performance measurement framework, which articulates the effects your agency’s services and interventions are having on New Zealanders, and
- **outputs**: the services delivered by your agency.

Having determined what performance information you produce now (Module 2) and who your internal and external stakeholders will be (Module 3), you need to precisely define your outputs, intermediate outcomes and outputs.

The key to successful performance measurement is the effective articulation of outcomes, intermediate outcomes and outputs against which progress and costs are measured. This module describes how to define outcomes, intermediate outcomes and outputs in a way that enables effective performance measurement. In order to do so the module looks briefly at the characteristics of a good outcome, intermediate outcome and output, and how these are measured. The module also refers to tools that can help define these aspects of your measurement framework and concludes with some good practice examples.

The next module will then look in detail at constructing particular measures at each of the three levels.

Defining outcomes

**Characteristics of outcomes**

Outcomes are specific characterisations of what an agency or sector is working to achieve, rather than visionary or aspirational statements that are difficult to measure. Outcomes are defined as: “a condition or state of society, the economy or the environment, and include changes to that condition or state. In effect, outcomes are the end result we [want] to achieve for New Zealanders. Outcomes describe ‘why’ we are delivering certain interventions on behalf of New Zealanders”.

Outcomes must be clearly defined before you try to define what outputs and impacts will help achieve these outcomes. Outcomes and intermediate outcomes differ from outputs in that they do not specify what is being provided (goods and services), but rather the changes expected in users lives after outputs are delivered. By definition, intermediate outcomes and outcomes are future-looking, generally reflect how much value is delivered to users, and can be measured only after outputs are delivered.

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14 See the guidance developed by The Treasury on improving accountability information at: https://psg.govt.nz/iai/default.aspx
One key to performance measurement is to clearly define both the impacts at the intermediate outcome level and the long-term outcomes you are working towards in a way that represents reasonably the major results expected from your outputs. If your outcomes and impacts can be – poorly– described as a ‘grand vision’, they are not clearly defined and measuring progress against them will be difficult. If this is the case, it may be visible as a ‘disconnect’ between outputs and proposed intermediate outcome impact measures.

**Measuring outcomes**

Outcomes and intermediate outcomes measure or track our achievement of strategic (rather than delivery) goals. Results at these two levels thus shape policy and service development in the medium term.

Because an agency wants to know where outcomes are being achieved, as well as how interventions improve poor outcomes, multiple measures will typically be needed for each of the ‘vital few’ outcomes. These include both outcome indicators and impact measures.

It may seem counter-intuitive at first, but outputs can have a positive impact without contributing to the outcome sought. The disconnect may exist due to poor targeting, which can happen if outputs fail to reach the target population. Reasons can include capture by other populations, poor resource allocation processes, or insufficient outputs for the size of the target group.

Here is a theoretical example: the education sector seeks to lift the tail of under-achievement. Research shows that under-achievement is more prevalent in low-decile schools. Research also shows that intervention X can improve the educational achievement of individual children. However, measures show that intervention X does not contribute to improving the outcome sought, which is reduced rates of under-achievement. This may be because while intervention X helps average kids become excellent in high-decile schools, because of poor targeting, it was not delivered in sufficient volumes in low-decile schools.

**Defining intermediate outcomes**

**Characteristics of intermediate outcomes**

Intermediate outcomes or impacts are the critical middle layer of any measurement framework. Impacts are described as: “the contribution made to an outcome by a specified mix of interventions. It normally describes results that are directly attributable to the interventions of a particular agency. Measures of impact at the intermediate outcome level are the most compelling performance indicators for the State sector, as they demonstrate the change in outcome attributable to the specific interventions of the agency. Performance information around impacts enables Ministers and the public to determine the effectiveness of agency performance”.

The intermediate outcomes level is important as it allows leaders to track progress towards outcomes, assess what difference they are making in the short/medium term, check the right
mix of outputs is in place, and assess cost-effectiveness by direct or indirect means. Hence, the middle layer is crucial to an agency’s performance measurement process in multiple ways.

**Measuring intermediate outcomes**

A key challenge in developing any performance monitoring approach is to link outputs to the impacts at the intermediate outcome level and to outcomes expected, and (when feasible) costs. At this stage, the goal is simply to *propose* what the linkage is. Module 6 deals with proving that the linkage exists. This stage consists of considering how you will do this, and identify the data you will need. See ‘Definition tips’ on page 34 for specific tips to identify linkages.

**Defining outputs**

**Characteristics of outputs**

Outputs are “*those final goods and services that are produced by one organisation for use by another organisation or individual*”16. Outputs define your major products or services, the timeframe in which they are delivered and the cost to deliver them.

Outputs are the ‘building blocks’ we use to achieve impacts and outcomes. Therefore a clear picture of outputs must be provided early in the development process. This picture should draw heavily on accountability documents, output plans, business plans and other documents that articulate the services that agencies provide.

Outputs statements describe key goods and services in reasonable detail. Output statements and measures need not specify *everything* that an agency produces, but must define key goods and services in a manner that both complies with the relevant statute17, and is useful within the measurement framework. Outputs should be specific, homogenous and clearly articulated in terms of their nature and their performance dimensions.

**Measuring outputs**

Key measures of outputs typically assess: quality, quantity, targeting, timeliness, location, cost and coverage18. Coverage measures provide confirmation of services reaching key groups.

Trend information can also allow your agency to assess how production and efficiency have changed, and to test whether impacts or outcomes changed as predicted by the intervention logic.

Output measures are crucial when attribution of impact is poor or disputed. In such cases, output measures may be used as important proxy measures. They show whether, when impact is unknown, services reached the intended group, at the right time and price. They also show you managed your resources prudently, i.e. in an economical and efficient manner.

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**Definition tips**

**Prioritise and engage**

In developing your definitions, remember that you will need to assess what can be delivered in different timeframes, given current data and the data improvement plans you will put in place. Be realistic about what can be achieved in the time that you have available.

A key purpose of performance information is to get sensible reallocation of resources, that is to be able to reprioritise spending toward the activities that achieve the best outcomes. This requires open and engaged leaders. The governance structures you put in place will be critical to achieving this. At a working level, these structures may focus on delivering good information. At executive level you will need to engage the leaders with the right authority to make resource decisions about your agency or sector priorities.

**Reflect ministerial priorities**

Intermediate outcomes and outcomes should reflect ministerial priorities and both your ongoing operational and statutory responsibilities. They should also be coherent across your sector. Hence, the engagement strategy defined in Module 3 should be drawn upon at this step, to create effective engagements upon which shared impacts and outcomes can be constructed. Other strategy documents produced by agencies should also be coherent and clearly linked with the definition of the outcomes and impacts used within the performance measurement process.

**Confirm your framework is fit-for-purpose**

Before initiating the more labour and cost intensive processes of building data acquisition and measurement systems, confirm that your framework is coherent by using simple tests. You will have your own ideas on how to do this against the needs of your sector. Two generic sets of tests are, however, laid out below to help ensure you have ‘checked all the angles’.

The first test consists of answering some principle questions. Ask yourself if your measures:

- **Reflect key priorities** of Ministers, and your operational and statutory roles and goals.
- **Inform** strategy and policy choices, and resourcing decisions.
- **Are owned by stakeholders**, who must value, trust and use your information.
- **Are forward-looking**, ensuring that outcomes and intermediate outcomes reflect what New Zealanders want from you on an enduring basis (vs. what existing outputs might deliver).
- **Are coherent**, looking more broadly at your role in the sector, and sector goals.
- **Are disaggregated**, so that comparisons can be made over time, and across groups or areas.
- **Are clearly defined**, so that they are comprehensible to the public, and replicable over time.

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19 Including funding, infrastructure and capabilities more generally.
• **Connect outputs to intermediate outcomes and outcomes** through your intervention logic.

• **Link resources to results** at each of the three levels of measurement.

The second test uses the FABRIC touchstones\textsuperscript{20}, which are also qualities your leaders will typically look for from the measurement process as a whole:

• **Focused** on the agency’s and sector’s aims and objectives.

• **Appropriate** to, and useful for, the stakeholders who are likely to use it.

• **Balanced**, giving a picture of what you are doing, covering all significant areas of work.

• **Broad**, covering the different dimensions and levels of performance.

• **Robust**, in order to withstand organisational, output or personnel changes.

• **Integrated** into your business planning and management processes.

• **Cost Effective**, balancing the benefits of the information against the costs of producing it.

### Tools for defining outcomes and intermediate outcomes

Some of the techniques that can be used to specify outcomes, intermediate outcomes and outputs are outlined below. Other methods for specifying outcomes and impacts are described on the Pathfinder site\textsuperscript{21}.

#### Scenario-based planning

Scenario-based planning can be a useful tool for identifying and testing the outcomes, impacts and outputs you need to measure. It may also help identify risks that need monitoring.

Scenario-based planning can be especially useful for defining outcomes as it can provide the user with a detailed view of a range of possible futures. These preferred futures can then be linked back to the present day to assess how feasible it is to achieve them. A detailed articulation of outcomes can then be generated, based upon those preferred futures which are deemed achievable. The scenario-based planning process will thus help the user see how these futures might be achieved, starting from a present day context, and what may threaten or hinder progress towards these futures.

For example, there are a number of trends currently in play in the sustainability sector that will shape the way the global and local environments play out in the long-term. By considering these trends and drivers, and the range of both positive and negative ‘worlds’ that may be realised, you can begin to identify what will shape a positive future for New Zealand. You can then characterise this future as an outcome with specific definitions about what it will look like. At the same time, knowledge will have been built around what risks will threaten the realisation of that future and what intermediate outcomes need to occur in order to achieve the overarching, long-term outcome.

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\textsuperscript{20} After the United Kingdom’s FABRIC principles. See [www.hm-treasury.gov.uk/media/3/7/229.pdf](http://www.hm-treasury.gov.uk/media/3/7/229.pdf)

Visioning to generate outcomes

Scenario-based planning can be time intensive and may not be appropriate for all agencies. A more rapid but less robust way of looking to the future is visioning. The basic approach is to hold participative, facilitated sessions with relevant stakeholders. The sessions encourage creative thinking about desirable futures and focus on bringing convergence among the group around these futures. The process also promotes more detailed generation of outcomes and impacts by focusing on analysis of future contexts, based on what is known about the present and any prominent trends shaping the future.

Examples of good practice

Outcome Example 1: facilitation at the border

The following example is a shared outcome of the border sector group of government agencies led by New Zealand Customs. It provides a description of the rationale for having this outcome, along with details of what realising this outcome will look like. It should be noted that this outcome is draft and work in progress.

Sector outcome: Facilitation

“New Zealand’s economic and social interests are enhanced by facilitating the flow of legitimate trade and travel across the border.”

Why this outcome?

At the physical border, all three main border agencies are involved in similar high volume capital and labour intensive transactional processing of people, goods and craft in a common space (ie ports and airports). While not identical, agency border operations share many common attributes. Even modest efficiency improvements can be expected to result in significant cost savings to Government and industry stakeholders.

Facilitation of legitimate trade and travel has been an outcome with which border agencies have been associated for a long period of time. Government has a sovereign need to place controls on flows across its borders, meaning traders and travellers cannot cross New Zealand’s borders without having to undertake some control activities. There are also obligations under a range of international agreements New Zealand has to meet for trade, immigration and travel. However, the Government wishes to reduce border-related compliance costs for legitimate traders and travellers as much as possible. To do so is good for the economy and good for New Zealand’s international reputation.

In the border sector context, this outcome is focused specifically on where border agencies’ activities and interests intersect, and where dealing with them from a sector perspective will create greater efficiencies and effectiveness of trade and travel flows than from agencies working independently of one another or even less closely together.
Collaborative and coordinated management of trade flows can provide the following benefits:

- **Increase competitiveness** for New Zealand products through increased speed of and cohesiveness of information relating to trade flows. This will also contribute positively to New Zealand’s reputation as a good nation with which to trade. Border processes also impact on New Zealand’s attractiveness as a tourist destination and for attracting immigrants with the skills New Zealand needs. One specific objective is for Trans-Tasman trade and travel becoming as close to domestic as it can without broader policy harmonisation.

- **Reduce the costs of trade and travel to individual traders and travellers and to New Zealand** through the use of streamlined border processes and compliance requirements and through minimising delays. This includes sustainably managing border flows feeding into and out of the transport stream. (This will be particularly important as changes in international transport routes and methods impact on New Zealand’s national port structure and resulting transport routes.)

- **Contribute to New Zealand’s national identity** through providing for overseas travellers a positive first impression of New Zealand, and for returning New Zealanders, reinforcing the sense that they are coming ‘home’.

**What will achievement of this outcome look like?**

The objectives of this outcome are to:

- minimise compliance costs for industry stakeholders (both monetary and opportunity cost)
- minimise the compliance costs for travellers (in terms of time and effort to fulfil Government’s requirements of them)
- realise opportunities for border agency to increase cost-effectiveness for Government

The principles for this outcome are for:

- all information about ‘at the border’ processes to be available from any border information portal
- trade-related border sector industry stakeholders to meet border requirements with one set of actions
- decisions made by border agencies relating to ‘at-the-border’ processes, systems and stakeholder requirements to be consistent with one another
- border sector agencies and key stakeholders to work collaboratively on major changes to ‘at-the-border’ processes and systems.

**Accessing and providing information**

The only thing users will need to know to access information and services about the border is the word ‘border’. That will give them access to a ‘portal’ where they will get all the necessary information via phone, the internet and border service counters.
Importers and exporters will also only have to provide border-related information once – from entry and exit clearances, security clearances, fees and levies, to phytosanitary and food safety certificates.

Where some requirements need reviewing, or documents haven’t been completed correctly, traders and travellers will be dealt with in a coordinated manner, so all errors and omissions from all agencies’ perspectives can be dealt with in the same interaction.

Importers and exporters will be able to track on-line the progress of their various documents.

**Paying fees**

Traders and travellers required to pay border fees from different agencies will get consolidated accounts which they will be able to pay into a single bank account.

**Physical inspection**

Inspections by different agencies will be carried out on the same visit, which will enable traders to manage their business more efficiently. In time, where appropriate, inspection will be by one officer covering the interests of all the relevant border agencies.

**Trans-Tasman**

Unless selected for inspection or questioning, traders and travellers leaving New Zealand or Australia will not have to complete arrival requirements, as their departure information will be used as their arrival information. Automated biometric checks will enable passengers to complete their own check-in.

**Outcome Example 2: reduced risk from insecurity**

Figure 10 illustrates the characteristics for a particular intermediate outcome for the New Zealand Defence Force (NZDF), related to managing regional and global risks. The diagram articulates as to how the services NZDF provides contribute to the intermediate outcome, and what activities it needs to undertake in order to achieve it. The activities have been articulated within a range of ‘Employment Contexts’ (ECs). These are given on the table to the right of, and below, the diagram. In summary, the figure gives an overall picture of what will need to be achieved to realise the intermediate outcome. By doing so, it gives the intermediate outcome definition, context and a logical basis.
MODULE 4 – DEFINING OUTCOMES, INTERMEDIATE OUTCOMES AND OUTPUTS

Intermediate Outcome 2: Reduced risks from regional and global insecurity

- Secure, Peaceful & Stable South Pacific
  - Constitutional Responsibilities to Cook Islands, Niue & Tokelau
    - ECs 2A, 2B, 2C, 2D, 2E
  - NZ & Other Nationals Extracted in Civil Emergency
    - ECs 2A, 2B, 2C, 2D, 2E
  - Maintain Order
    - ECs 2A, 2C, 2D, 2E
  - Conduct Surveillance of EEZs
    - ECs 2A, 2C, 2D, 2E
  - Search and Rescue
    - EC 2B

- Secure, Peaceful & Stable Australia
  - Effectively assist with deterrence of threats to Australia
    - ECs 2A, 2B, 2C, 2D, 2E
  - Effective, collaborative operational response
    - ECs 3A, 3B, 3C, 3D

- A Secure, Peaceful & Stable Asia-Pacific Region
  - Effectively assist with mitigation of threats to Australia
    - ECs 4A, 4B, 4C, 4D, 4E, 4F, 4G
  - Effective, collaborative operational response
    - ECs 4A, 4B, 4C, 4D, 4E, 4F, 4G

- A More Secure, & Stable World
  - Deterrence of threats
    - ECs 5A, 5B, 5C, 5D, 5E, 5F, 5G
  - Mitigate conflict & tension

- Secure, Peaceful & Stable Australia
  - Assist development of indigenous capability
    - ECs 2A, 2B, 2C, 2D, 2E

- Conduct Surveillance of EEZs
  - Effective response to emergencies (medical evacuation)
    - EC 2B

- Effective, collaborative operational response
  - ECs 3A, 3B, 3C, 3D

- Effective, collaborative operational response
  - ECs 4A, 4B, 4C, 4D, 4E, 4F, 4G

- Mitigate natural disasters
  - EC 2B

EC2 - Security Challenges to New Zealand’s Interests in the South Pacific
- Illegal exploitation of marine resources within the South Pacific EEZ’s and low level threats to South Pacific nation’s sovereignty
  - A
  - Natural or manmade disasters
  - B
  - State failure or fragility leading to internal conflict and/or humanitarian crisis
  - C
  - Challenges to legitimate governments, including war and secessionist conflict
  - D

EC3 - Challenges to New Zealand and Australian Common Security Interests
- Illegal exploitation of marine resources within the Australia’s EEZ and other low level threats to Australian territorial sovereignty
  - A
  - Natural or manmade disasters
  - B
  - External aggression against Australia
  - C
  - Terrorist or Asymmetric threats
  - D

EC4 - Security Challenges to New Zealand’s Interests in the Asia-Pacific Region
- Illegal exploitation of marine resources within the Australia’s EEZ and other low level threats to Australian territorial sovereignty
  - A
  - Natural or manmade disasters
  - B
  - State failure or fragility leading to internal conflict and/or humanitarian crisis
  - C
  - Terrorist or Asymmetric threats
  - D

EC5 - Security Challenges to New Zealand’s Interests in Global Peace and Security
- Aggression to alter maritime boundaries or seize resources, or threats to freedom of navigation
  - A
  - Unresolved conflict or conflict resolution process where protagonists have sought third party resolution assistance
  - B
  - State failure or fragility leading to internal conflict and/or humanitarian crisis
  - C
  - WMD proliferation
  - D
  - Contention of international norms that triggers a multi-national response
  - E
  - Major breakdown in international security leading to wide-scale war
  - F

Source: New Zealand Defence Force