

Ministry of Finance and Economic Development  
(MOFED)

Guidelines for Infrastructure Planning

**Extract for Workshop on 3 June for Steps 1 to 3 only**

(To be read in conjunction with Infrastructure Planning Templates)

May 2011

## **Instructions for completing steps 1 to 3 of the planning framework**

### **Step 1: Goal Identification**

All activities undertaken by Government need to work towards achieving national goals. A goal-orientated approach will help to direct decision-makers' focus towards the achievement of outcomes which can be delivered through a range of mechanisms, and away from decision making that is too readily directed towards investment oriented solutions. It is therefore essential that the National Goals and Strategic Priorities are the starting point for identifying proposals for inclusion within the National Infrastructure Plan.

Proponents are to identify from the list of goals and strategic priorities those that their Ministry/Department is seeking to address and to define for each of these their related objectives. Objectives should be SMART (Specific, Measurable, Achievable, Relevant and Time-bound). An example of a SMART Objective would be: "to achieve 35% self-sufficiency in energy supply in Mauritius by 2025".

### **Step 2: Problem Identification**

An appreciation of the problems which are currently affecting performance, and those which are likely to affect the delivery of the related strategic objective, are critical parts of the planning process. A good initial understanding of the problems will improve decision-making at later stages and lead to the development of more effective initiatives, particularly by ensuring that a broad range of interventions are investigated in the Options Generation Stage.

For this to be achieved, it is essential that the problems are identified from a good evidence base. Problem identification should therefore be based on robust data provided through empirical observations, which may include findings from surveys, interviews or studies from a wide range of recognised sources.

The focus of Step 2 is on the identification of problems that are preventing (or are likely to prevent) the strategic objectives defined in Step 1 from being achieved. Crucially, this stage, which is similar to a 'gap' analysis, should look not only at current problems, but also future or emerging issues.

## **Current Problems**

Current problems need to be identified before their causes and effects can be analysed. This requires the objective and evidence-based identification of deficiencies with the services provided by existing infrastructure which are currently hindering progress towards the achievement of the objective(s) set out in Step 1.

## **Future Problems**

The problems we face today may persist and become more difficult in the future, or they may diminish. Other problems may arise, even though they do not exist at present.

Infrastructure planning has often been criticised for the failure of initiative proponents to fully consider a range of scenarios and in particular the factors (or 'drivers') that are largely outside the control of individual governments and others who make infrastructure decisions. If we do not expressly consider those drivers, we run the risk of making sub-optimal infrastructure decisions.

To understand how problems may evolve, it is important to consider how current problems would be affected by different future scenarios. Scenario analysis commonly uses some or all of the six drivers of change set out below:

- Socio-demographic change – total population, population mix (especially age profile), population distribution, values;
- Economic change – size and mix of the economy, growth, globalisation, labour markets;
- Energy prices – particularly the potential mix and cost of energy sources for various sectors of the economy;
- Climate change – the impact of change in climate patterns such as temperature, run-off projections, sea level rise and storm surge probabilities on the demand for infrastructure and the maintenance of our existing infrastructure networks;
- Technological change – whether change in technology will reduce or increase the demand for certain infrastructure systems, create entirely new demands; and/or change the way infrastructure systems are built, managed and operated; and
- Governance change – changes in the wider system of government (not individual initiative governance) that may shape the demand for services and/or the way in which government respond to those demands.

Proponents will therefore need to assess whether the problems we face are likely to be enduring and significant under a range of scenarios. Proponents should identify future scenarios that are likely to have an impact on the current problems they have identified (not limiting these scenarios to those listed above if others are appropriate). For each scenario, consideration should be given to whether the current problems are likely to change and identify any new problems which would likely emerge.

## Step 3: Problem Assessment

Having identified all the problems that are both affecting performance now and are likely to do so in future, it is important to consider how significantly each problem will impact on the attainment of the objective(s).

The Problem Assessment stage involves the calculation of the economic, environmental and social costs of current and emerging problems to determine the extent of their impact upon the objectives. This appraisal should primarily be in the form of quantified estimates. Qualitative descriptions will also play an important role, since problems may not be quantifiable given the lack of quality information and data.

As with Step 2, proponents should initially assess the current and future problems independently. Having quantified the problems, it should then be possible to rank the problems to determine the 'Priority Problems' relating to each of the objectives (i.e. those which represent the greatest barriers to attaining the objective).