

Table 1. Activities, key parameters and RAMP process in each stage of investment life-cycle

Investment stage/ Objective	Principal activities	Key parameters	RAMP process
Opportunity identification To identify opportunity and decide whether it is worthwhile conducting a full appraisal	Identify business need Define investment opportunity Make initial assessment Decide whether to proceed with appraisal	Broad estimate of capital cost and cash flows Cost appraisal	Preliminary review
Appraisal To decide whether the investment should be made	Define investment objectives, scope and requirements Define project structure and strategy Develop business case Identify funding options Conduct feasibility study Decide (in principle) whether to proceed with investment	Refined estimates of capital cost and cash flows Cost of investment planning phase	Full risk review
Investment planning To prepare for effective implementation of the project	Procure funding Obtain planning consents Preliminary design work Compile project implementation plan Place advance contracts (e.g. site preparation) Make final decision to proceed with investment	Financing cost Refined estimates of capital cost and cash flows	Risk review (prior to final decision)
Asset creation To design, construct and commission the asset, and prepare for operation	Mobilise the project team Detailed planning and design Procurement/tendering Construction Testing, commissioning and hand-over Ensure safety Prepare for operation	Project objectives: - scope* - performance/quality* - timing* - capital cost	Risk reviews (during or towards end of each activity) and risk management between risk reviews
Operation To operate the asset to obtain optimum benefits for sponsor and other principal stakeholders (including investors and customers)	Operate the service Derive revenue and other benefits Maintain and renew the asset	Operating cost Maintenance cost Cost of renewals Revenue Non-revenue benefits	Risk reviews (periodically)
Close-down To complete investment, dispose of asset and related business, and review its success	Sale, transfer, decommissioning or termination of asset and related business Post-investment review	Decommissioning cost Cost of staff redundancies Disposal cost Resale or residual value	Final risk review and RAMP close-down

* These have a potential impact on one or more financial parameters