

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
United Kingdom					
1. Axelos Common Glossary of Terms & Definitions, Version 1, 2012 (formerly the OGC Glossary of Terms – and so reflected in the publications below).	<p>Normative or descriptive - normative</p> <p>Applied at which level – project, program & portfolio</p> <p>Overview/Summary List of formal definitions of relevant terms e.g.</p> <p>Baseline – “<i>A measurement, calculation, or location used as a basis for comparison</i>” p8.</p> <p>Benefit – “<i>The measurable improvement resulting from an outcome perceived as an advantage by one or more stakeholders, and which contributes towards one or more organization objective(s).</i>” p9</p> <p>Benefits review plan – “<i>A plan that defines how and when a measurement of the achievement of the project’s benefits can be made.</i>” p9</p> <p>KPI – “<i>a measure of performance</i>”, p52</p> <p>Metric – “<i>something that is measured and reported to help manage a process, IT service or activity</i>”, p58</p> <p>Strategic objectives – “<i>measurable outcomes</i>”, p 101</p>	<p>When does measurement occur? Not addressed</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Cross-sector, global scope</p>	<p>What types of measure – quantitative / qualitative are used Not addressed</p>
2. OGC - Managing Successful Programmes (MSP®), 2011, London: TSO Guidance on benefits management at program-level – in particular Section 7 Benefits management & 18 Realizing the Benefits	<p>Normative or descriptive – normative</p> <p>Applied at which level - program</p> <p>Overview/Summary Benefits – “<i>The measurable improvement resulting from an outcome perceived as an advantage by one or more stakeholders, and which contributes towards one or more organization objective(s)”</i> p283</p> <p>“<i>One of the key areas of focus during the delivery step is the measurement of benefits: without this the realization of benefits cannot be managed. Benefits should always be quantifiable and measurable.”</i> p86</p>	<p>When does measurement occur? The Benefits Management Cycle is continuous and iterative throughout the program p82 (and measurement continues after the program – p78).</p> <p>BM cycle starts with ‘Identify benefits’ – by engaging key stakeholders. The identification of what measures are relevant is undertaken during ‘Defining a Programme’ and details are recorded in each benefit profile p220. Measurement should be defined at the start of the programme – with the baseline which is captured</p>	<p>Who measures the benefits? Business Change Manager identifies and quantifies the benefits; develops and maintains benefit profiles. During the programme the BCM will monitor business performance for evidence of benefits realisation. p87. The BCM should “<i>regularly test the validity and authenticity of information being provided and reported upon</i>” p220</p> <p><i>BCM is responsible for: Pre-transition - ‘Establish benefits</i></p>	<p>To whom is the guidance (project type, sector) directed? Transformational change programs. Non-sector specific.</p>	<p>What types of measure – quantitative / qualitative are used? “<i>Individual programmes must link their intended benefits clearly to corporate objectives</i>” – p78 & see Benefit Map format</p> <p>MSP states, “<i>best practice is to express benefits in financial terms wherever possible</i>”. P126</p> <p>Financial Impact - benefits can be categorised as cashable and non-cashable. p80 Refers to use of conversion ratios for non-cashable benefits. p80.</p> <p>...”<i>should be accompanied by a measurement</i></p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>Benefits should pass 4 tests – one of which is 'Measurement' – “<i>how and when will the achievement of the benefit be measured</i>” p85 – failure to define this at the start is a common cause of failure. Recorded in the benefit profile.</p> <p>“<i>measures are defined in each of the benefit profiles, and overall in the benefits management strategy.”</i> p219</p> <p>BMS includes – “<i>Measurement methods and processes that will be used to monitor and assess the realization of the benefits.</i>” This is required to prevent people, “<i>measuring the same benefit with different measures and reporting at different frequencies</i>” p84</p>	<p>in the blueprint 'as is' state p86, 193 (and ideally baselines should be established during 'Identifying a Programme' and included as part of the 'as is' state in the programme brief). Wherever possible measures should be those already in existence. p220.</p> <p>Baseline measurement occurs during pre-transition; measurement of actuals occurs during post-transition – measurement of benefits realisation should pass the following 3 tests: currency (up to date); accuracy; and relevance – p220. Reporting on benefits realisation occurs as part of the end-of-tranche reviews and other benefit reviews. p87.</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Refers to short and longer-term benefits in a causal chain – shown on the benefits map and the schedule for realisation will be shown on the BRP. p85 Short-term benefits can be important in demonstrating to stakeholders that the programme is making a difference p85.</p>	<p><i>measurements' & 'Monitor benefits realization'</i> <i>Post-transition - 'Measure benefits' & 'Monitor and report benefits realization'</i> p224</p> <p>Programme Office – monitors and reports on benefits realization. p90</p> <p>Are measures added over the project? Emergent benefits?</p> <p>“<i>Benefits can manifest themselves at any time</i>” p78</p> <p>The cycle is supported by continuing activities to optimize and identify further benefits. Captured by the BCM engaging with stakeholders – the cycle then starts again (identify, model and profile). p88 Unexpected benefits should be captured and reported. p78, 89</p> <p>Measurement post-project? After the programme responsibility for measuring benefits needs to be handed over to someone in BAU/operational managers – can be the BCM p78, 88, 89</p>		<p>(<i>such as percent, monetary value etc</i>)”</p> <p>Benefit Profile includes – “<i>measurement (financial wherever possible)</i>” and “<i>KPIs in the business operations that will be affected by the benefit</i>” p236</p>
<p>3. OGC - Management of Portfolios (MoP™), London: TSO, 2011.</p> <p>Guidance on benefits management at portfolio-level – in particular Sections 4.5 Strategy Alignment & 7.3 Benefits</p>	<p>Normative or descriptive - Normative guidance supported by organisational examples.</p> <p>Applied at which level - Portfolio</p> <p>Overview/Summary Portfolio-level Benefits Management Framework encompasses six main elements (p79-83) including:</p> <ul style="list-style-type: none"> Benefits eligibility rules including a consistent approach to benefits categorisation, 	<p>When does measurement occur?</p> <p>Measuring benefits across the project life cycle from business case to post-implementation review, and beyond it.</p> <p>Focus on outcome and/or intermediate benefits?</p>	<p>Who measures the benefits? Portfolio Benefits Manager (p102-103) – develops and maintains the organization's portfolio benefits management framework inc benefits eligibility rules on quantification and valuation of benefits; trains staff in applying benefits eligibility rules; works with BAU and PPM staff in</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Directed at Project, Program and Portfolio managers.</p> <p>Generic guidance applying across sectors.</p>	<p>What types of measure – quantitative / qualitative are used? Includes extracts from Standard Chartered benefits management guidelines – which includes baselining for tangible financial measures, tangible non-financially quantifiable measures and KPIs – leading indicators that demonstrate a change has occurred.</p> <p>Portfolio is defined as “<i>The totality of an</i></p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
Management.	<p>quantification and valuation – “<i>development of a consistent set of metrics to link benefits to strategic objectives</i>” p79. Metrics are seen as applying to each benefit category e.g. user benefits, efficiency benefits, effectiveness benefits – and should be expressed in terms that clearly demonstrate the impact on strategic objectives and BAU KPIs;</p> <ul style="list-style-type: none"> A Portfolio-level Benefits Realisation Plan – including the metrics that will be used to assess the impact of change initiatives on operational performance and strategic objectives. “<i>To summarise the benefits forecast to be realized in the year ahead and so provide a clear view of the planned returns from the organization’s accumulated investment in change.</i>” and “<i>To provide a baseline against which to assess the benefits actually realized.</i>” p116 Clear arrangements for benefits tracking and reporting at a portfolio level including via the portfolio dashboard – shows, “<i>Latest benefits forecast and realization to date compared with plan.</i>” p116; and Regular and robust post implementation reviews and feeding lessons learned back into forecasting (i.e. reference class forecasting) and leveraging unplanned benefits. 	Both – see final column re driver-based analysis.	<p>developing initiative-level benefits forecasts; co-ordinates production of the portfolio benefits realization plan; consolidates progress reports for the portfolio dashboard; maintains the portfolio-level benefits forecast.</p> <p>Are measures added over the project? Emergent benefits? Includes identifying and leveraging unplanned benefits</p> <p>Measurement post-project? One of the 6 main elements of the Portfolio-level Benefits Management Framework is ‘Effective arrangements to manage benefits post project / programme closure’ p81</p>		<p><i>organization’s investment in the changes required to achieve its strategic objectives”. p131</i></p> <p>MoP emphasises the role of benefits in strategic alignment (p32-34) – “<i>aligning change initiatives to strategic objectives can best be achieved via benefits i.e. by expressing the benefits anticipated from change initiatives in terms consistent with the organization’s strategic objectives and targets</i>”. This is facilitated where:</p> <ul style="list-style-type: none"> There are clear measures associated with the strategic objectives – for example, via the Balanced Scorecard – “<i>Where strategic objectives are expressed in clearly measurable terms, this provides a consistent basis for assessing the specific contribution of individual initiatives to the strategic objectives</i>” Driver-based Analysis is used to identify the logic or value chain underpinning the strategic objectives. Techniques include the Service Profit Chain, Service Value Chain and Value Profiling Benefits Mapping – to clearly identify which benefits contribute to which strategic objectives. <p>Note Highlights the importance of: Forecast benefits – validating impact with stakeholders and using reference class forecasting/optimism bias adjustments.</p>
4. Portfolio, Programme and Project Offices, London: TSO, 2008	<p>Normative or descriptive - normative</p> <p>Applied at which level – project, program and portfolio</p> <p>Overview/Summary Includes guidance on benefits roles within Portfolio, Program and Project Offices.</p> <p>Ref to PjM3 – LEVEL 4 – “<i>Systems will be in place to</i></p>	<p>When does measurement occur? Not addressed</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits?</p> <p>P3O Benefits role – provides support to programme managers, business managers, and business change managers (p57) and “<i>Facilitate the agreement of the Benefits Profiles between the SRO, programme manager and business change</i></p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Cross-sector, global scope – “<i>universally applicable advice</i>” (back cover).</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not addressed</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p><i>capture the measurement of benefits</i>" P169</p> <p>Ref to MSP documentation – Benefits Management Strategy, Benefits Realisation Plan and Benefit profiles.</p>		<p><i>managers...Track and report on the realization of benefits by the business...Work with the business managers or business change managers to identify additional opportunities for benefits realization</i>"</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>		
5. Management of Value, London: TSO, 2010.	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project and program.</p> <p>Overview/Summary</p> <p>Focuses on 'value' from the perspective of the Value Management discipline (based on the techniques of value analysis and value engineering used in construction and manufacturing), but also includes references to benefits and cost-benefit analysis.</p>	<p>When does measurement occur?</p> <p>Baselining before implementation and tracking post-implementation.</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Not specified.</p>	<p>Who measures the benefits? "One person should be tasked with monitoring all metrics reported to the organization" p52</p> <p>Are measures added over the project? Emergent benefits? Not addressed.</p> <p>Measurement post-project? Not addressed.</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Cross-sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Focus on measuring monetary and non-monetary value improvements (p95) via value metrics (linked to value drivers/primary functions) (p115) – "When setting metrics, it is preferable that they should be as objective as possible and essential that existing reporting systems are capable of producing them regularly." p52/124</p> <p>"Metrics may be set for hard and soft attributes and for monetary or non-monetary benefits"</p> <p>Measures are recorded on a value improvement tracking report p106.</p>
6. OGC Official Product – Bradley, G. (2010) Fundamentals of Benefits Realisation, London: TSO.	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project and program.</p> <p>Overview/Summary</p> <p>Includes comprehensive guidance on measuring benefits – goes beyond MSP.</p> <p>Min 1 measure for each benefit, p36</p> <p>Argues strongly that the majority of the benefits should be tracked (p55) – so that progress towards the end goal can be monitored p93.</p>	<p>When does measurement occur?</p> <p>"Monitor progress through the whole change lifecycle" p56</p> <p>Process of: Phase 2 Identify benefits and changes – identify measures p45 Phase 3 Define initiatives– establish baseline, predicted value (target), and benefit owners p45, - tracking starts in phase 3 p55 – "tracking and reporting of benefits should</p>	<p>Who measures the benefits?</p> <p>"Measure monitors" p39 – "person responsible for monitoring the measure" p90 and from the glossary – measure monitor "The role of gathering and consolidating the on-going monitoring and reporting of the raw measurement data" p121; Shared among the stakeholders, p37 – "spread the measurement load between interested</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Cross-sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>"All benefits should be valued in terms which are as close as possible to the way the benefit or its measure is described" p71</p> <p>Measures (and their trajectories and the relevant 'measure monitors') are included in the Benefits Realization Plan, p38 Benefit Profile includes – measures, baselines, predicted values and improvement timescales p44</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>The objectives of measurement are: monitor progress over time; inform decision-making and drive action; and encourage desired behaviours. p89</p> <p>Measure = “<i>the entity whose value is reported regularly to demonstrate the realization of a benefit</i>” p89. Normally computed from a combination of metrics (metric = a raw piece of data, p122) e.g., number of phone calls could be the metric, measure = calls per hour, time to answer, length of call etc</p> <p>Measure (from Glossary) = “<i>A quantity, derived from a set of metrics, whose change in the desired direction would help to confirm that the related benefit is being realized.</i>” p121 “<i>the thing that will be tracked and monitored</i>”.</p>	<p><i>commence as soon as the measures have been determined</i>” – quick wins Phase 4 Optimise Initiatives p55</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Benefits Dependency Map: Headings: Enabler, Business change, Intermediate benefit, End benefit, and Bounding objectives. P85</p> <p>Intermediate benefits – “<i>Benefits which will occur between the implementation of early changes and the realization of the end benefits.</i>” p121.</p>	<p>stakeholders” p56 “<i>Benefit owners, who may be tracking the benefits themselves</i>” p61; “<i>the responsibility for measurement must, ultimately, lie with the business...This business responsibility may be shared by various stakeholders provided they are motivated to see the benefits realized</i>” p94</p> <p>Identification of measures – in a workshop with benefit owners, p36.</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Benefits realization management – “<i>the process of organizing and managing, so that potential benefits, arising from investment in change, are actually achieved.</i>” p119</p> <p>Measurement post-project? Benefit owners – “<i>Their role will continue beyond the life of the programme</i>” p76</p>		<p>Argues that giving financial values to non-financial benefits is dangerous (distorts the truth, can lead to double counting, and is fraud if used for investment justification) p14 – so only do so where there is “<i>a real flow of money</i>”, p71 and distinguish between financial value and economic value, p72</p> <p>Note also ref to how the information is presented – “<i>utilize visual communication such as dashboards and maps – the latter with BRAG status applied</i>” p56</p>
7. Managing Successful Projects with PRINCE2: 2009 Edition London, TSO.	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project. Links with programmes recognised.</p> <p>Overview/Summary OGC guidance now Axelos, which, in benefits terms, provides guidance on how benefits relate to project management.</p> <p>Benefit – “<i>the measurable improvement resulting from an outcome perceived as an advantage by one</i></p>	<p>When does measurement occur?</p> <p>The Benefits Review Plan is the key document for benefits, from project initiation stage onwards (p235-237); defines how and when measurement of achievement of benefits can be made. Seen as possibly a programme function if there is a programme management level.</p> <p>Benefits are to be included in the</p>	<p>Who measures the benefits?</p> <p>The Senior User(s) is responsible for specifying the benefits on which the business case is approved, for ensuring that expected benefits are realized and providing actual v forecast benefits statements at benefits reviews (p28). Cross reference is made to MSP, and the responsibility for benefits</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Cross-sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Benefits can be financial or non-financial (cashable/non-cashable). Benefits should be aligned to corporate objectives, mapped from outputs and outcomes, quantified with tolerance levels, measurable and assigned P25.</p> <p>Apparently intangible benefits should be examined to see if they can be expressed in measurable ways (P26). For example, happier</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<i>or more stakeholders</i> " (P21 and 303)	<p>Business Case, identifying benefits, selecting objective measures, collecting baselines and deciding how, when and by whom the benefit measures will be collected (P24),</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Benefits are related to outputs and outcomes (p21/22). No splitting into intermediate and outcome benefits, or linking to specific stakeholders (except for internal responsibilities).</p>	<p>is identified with various roles at the programme level (p218)</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Closest to this is in post-project benefits reviews, identifying whether there have been any side-effects (beneficial or advserse) that may prove useful lessons for other projects P25</p> <p>Measurement post-project?</p> <p>The comparison of project and programmes identifies that benefits are often realized after project closure, and are realized during the programme and afterwards p25 and 218. The benefits that can be measured during the project life should be report by the project manager in the End Stage Report, and then post-project benefits reviews will be undertaken (P24-25).</p> <p>Handover includes Benefits Review Plan update, with responsibilities identified (P209). Check that BRP includes post-project activities to confirm benefits that cannot be measured until after the project's products have been in operational use for some time.p209.</p>		<p>staff translates into reduced turnover and less time off for stress, which can be converted into a likely monetary saving P26. Sensitivity analysis for benefits is recommended (linked to tolerance) P26.</p> <p>Investment appraisal techniques are listed on P27.</p>
8. Business Benefits through Programme and Project Management [London:	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project and specifically program.</p>	<p>When does measurement occur?</p> <p><i>"Benefits management MSP - a continuous management process running throughout the programme.</i></p>	<p>Who measures the benefits?</p> <p>The role of the Business Change Manager includes, <i>"defining the benefits, assessing progress</i></p>	<p>To whom is the guidance (project type, sector) directed?</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not noted although:</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
TSO, 2006]	<p>Overview/Summary Short book explaining how PRINCE2 and MSP support business benefits realisation (note aligned to previous versions of MSP & PRINCE2).</p> <p>Particular program focus as far as benefits are concerned – “<i>The identification, monitoring and measurement of benefits is a fundamental part of successful programme management.</i>” p51</p> <p>“<i>Benefit Profile (MSP) – The complete description of a benefit or dis-benefit</i>” p78</p>	<p><i>It provides the programme with a target and a means of monitoring achievement against that target on a regular basis.</i>”</p> <p>The business case includes describing “<i>what the benefits are</i>” p13 and for PRINCE 2 – “<i>A description of each benefit in measurable terms</i>” p65</p> <p>Managing benefits – main activities include “<i>Establishing benefits measurements, in particular ensuring that the ‘before’ state is measured so that an assessment can be made as to whether the ‘after’ measurements indicate an improvement or not</i>” p48</p> <p>Focus on outcome and/or intermediate benefits? Not noted.</p>	<p><i>towards realisation, and achieving measured improvements.</i>” p50</p> <p>Are measures added over the project? Emergent benefits? Not noted</p> <p>Measurement post-project? Not noted</p>	Project and program staff, non-sector specific.	Benefit(s) – “ <i>MSP -The quantifiable and measurable improvement resulting from an outcome which is perceived as positive by a stakeholder and which will normally have a tangible value expressed in monetary or resource terms.</i> ” p77
9. OGC - Business Benefits through Project Management [London: TSO, 2002] Short book explaining how PRINCE2 supports business benefits realisation.	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project.</p> <p>Overview/Summary Little of direct relevance except it refers to the, “<i>three key project variables of cost, time and quality or benefits</i>” and says, “<i>Measuring quality or benefits is the most difficult. In particular, measuring realised benefits is impossible if they have not been defined at the outset with clear performance targets that can be tracked back to improvements in the current operation.</i>” p57</p>	<p>When does measurement occur? Nothing noted other than emphasis on the importance of baselining.</p> <p>Focus on outcome and/or intermediate benefits? Nothing noted.</p>	<p>Who measures the benefits? Nothing noted</p> <p>Are measures added over the project? Emergent benefits? Nothing noted</p> <p>Measurement post-project? Nothing noted</p>	<p>To whom is the guidance (project type, sector) directed? Project Management, non-sector specific.</p>	<p>What types of measure – quantitative / qualitative are used? Nothing noted.</p>
<p>10. New Source</p> <p>OGC – Managing Business Benefits: Key Principles [old OGC guidance – undated] http://webarchive.nation</p>	<p>Normative or descriptive - normative</p> <p>Applied at which level – programs and projects</p> <p>Overview/Summary Provides a list of questions to be asked at different stages of the delivery lifecycle.</p>	<p>When does measurement occur? Throughout the delivery lifecycle –</p> <p><i>“anticipated benefits and measurement approach must be agreed with stakeholders from the earliest point and confirmed in the</i></p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Senior managers in the public sector to understand what is required to realise benefits from programs of change (p1).</p>	<p>What types of measure – quantitative / qualitative are used? Nothing noted.</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
alarchives.gov.uk/20100609103122/http://www.ogc.gov.uk/documents/KeyPrinciplesOfBenefitsManagementv1.pdf	'Areas to probe' include: "Are measurements straight forward, linked to existing performance measurement systems – or is a new set or subset necessary – e.g. benchmark survey or balanced scorecard?" p4	<i>business case</i> " p1 'Areas to probe' include: "Is measurement aligned with project stages (e.g. OGC Gateway Reviews)..." p3 <i>"Is in-flight measurement and adjustment feasible?"</i> p4 Focus on outcome and/or intermediate benefits? <i>"All identified major benefits can be linked to strategic goals or targets. Intermediate benefits provide early value."</i> p2 'Areas to probe' include: "Are leading indicators used as well as historical measurement?" p3	Measurement post-project? Not addressed		
11. New source Managing Portfolios of Change with MSP for programmes and Prince2 for projects [Venning, 2007, TSO/OGC]	Normative or descriptive – normative. Applied at which level – Portfolio. Overview/Summary Pre MoP guidance on Portfolio Management from the OGC.	When does measurement occur? Pre and post project/program – <i>"It is important that before-and after- measures are taken in the area targeted for improvement, and that any changes are directly attributable to the introduced changes. It is also important to ensure that the targeted area is sufficiently isolated such that other activities and changes do not impact what is to be measured before and after."</i> p72 Focus on outcome and/or intermediate benefits? Not distinguished.	Who measures the benefits? The Portfolio Office supports the Portfolio Board in benefits tracking p76. Refers to a Portfolio-level Benefits Realization Manager who provides assurance over the work at program level including the BCMs. He/she provides, <i>"an objective challenge of benefits, dependencies, measures, targets and the programme's approach to benefits"</i> p119. Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Nothing noted.	To whom is the guidance (project type, sector) directed? Project Portfolio management community	What types of measure – quantitative / qualitative are used? Not specified.
12. OGC (2005)	Normative or descriptive – Normative but with case	When does measurement occur?	Who measures the benefits?	To whom is the guidance	What types of measure – quantitative /

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
<p>Managing Benefits: An Overview, v1.0</p> <p>Short 'White Paper' summary of benefits management based on MSP with case studies.</p>	<p>studies – “<i>The examples provided...demonstrate the importance of linking benefits to outcomes through a measurement framework</i>” p14</p> <p>Applied at which level – references to project, program and portfolio.</p> <p>Overview/Summary</p> <p>Benefits – “<i>measurable improvements</i>” p2</p> <p>Benefits Management – “<i>aims to make sure that desired business change or policy outcomes have been clearly defined, are measurable, and provide a compelling case for investment – and ultimately to ensure that the change or policy outcomes are actually achieved.</i>” p2</p> <p>“<i>Outcomes are the key to unlocking benefits because they help formulate the answers to the following questions...How will all benefits be tracked and measured</i>” p6 – Note: Outcomes are seen as relating to the Departmental PSA Objectives & targets.</p> <p>The answer to the above will be recorded in the Benefits Management Strategy.</p> <p>Benefit Profile – purpose “<i>to describe all aspects of an benefit including ownership and measurement</i>” p8</p> <p>“<i>Once the Benefits Realisation Plan has been formally agreed (baselined) measurement may begin. This could take a number of forms, but the key principles are:</i></p> <ul style="list-style-type: none"> <i>keep measurement systems simple to use and understand</i> <i>where practical use existing information sources or performance measurement systems</i> <i>alternatively adapt or add to existing systems</i> <i>or as a last resort, construct new measurement systems being sure to include</i> 	<p>“<i>The planning process involves...developing measures and quantifying benefit opportunities</i>” p7</p> <p>“<i>any programme of change requires a constant focus on the intended benefits...if it is to deliver value ... Delivering value begins with defining the expected high-level outcomes before a programme is approved</i>” p2</p> <p>“<i>...The identification, tracking and realisation of benefits continues throughout the programme and will probably continue after it has formally closed</i>” p3</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>High-Level Benefits Map – “<i>showing the relationship between end benefits and a series of sequenced intermediate benefits and the enabling benefits that must be achieved first.</i>” p7</p> <p>Sample Benefit Profile Template (p16) includes – “<i>Describe the main attributes of the benefit and its relationship with other benefits and the eventual outcomes (e.g. as enabler, intermediate or end benefit)</i>”</p> <p>And headings for</p> <ul style="list-style-type: none"> Performance Measure(s) “KPIs now – or in the future. If not capable of direct measurement, what trend analysis or other test can be used to track achievement?” Measurement Source 	<p>Business Change Manager's responsibilities include quantifying and activities include – planning, monitoring and tracking p11.</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Ref to Portfolio Management enabling, “<i>It can also provide an opportunity to re-deploy resources freed up through the efficiencies being delivered, to derive new benefits in flight and to minimise unwanted side effects (dis-benefits)</i>” p2</p> <p>Periodic Benefit Reviews / Progress Reports are undertaken to assess progress in benefits realisation and include asking</p> <ul style="list-style-type: none"> “<i>Are there any further potential benefits</i> <i>Do the measures appear correct? Do they need refining? Is the measures process correct</i>” p10 <p>Measurement post-project?</p> <p>...<i>The identification, tracking and realisation of benefits continues throughout the programme and will probably continue after it has formally closed, when managers with responsibility for operations or service delivery increasingly take on the task of ensuring that the planned benefits are being monitored and optimised.</i>” p3</p>	<p>(project type, sector) directed?</p> <p>UK government – “<i>those involved in delivering programmes of change</i>” p2</p>	<p>qualitative are used?</p> <p>“<i>In reality, not all benefits can be measured financially: Qualitative or less tangible benefits, which are often more difficult to measure will also need to be identified, scoped and tracked.</i>” p5</p> <p>“<i>We should aim to express benefits in financial terms where at all possible, but in other cases they must be quantifiable in some acceptable way – for example, by tracking trends though a statistically valid survey. Where there is a mix of tangible and less tangible benefits, a Balanced Scorecard approach can be used to give sufficient weight to the overall mix of benefits. If baseline information is missing because the future state cannot be mapped onto the current situation, some form of statistical modelling may be required and expert advice should be sought.</i>” p9</p> <p>“<i>the objective is to concentrate measurement on the key benefits – those that deliver the greatest share of financial savings or those that contribute most directly to corporate goals and strategic outcomes and PSA or e-Delivery targets.</i>” p8</p> <p>“<i>Benefits from straightforward and predictable types of change...will be relatively easy to estimate and a high level of confidence can be attached to the measures and estimated result. Benefits derived from, for example, changing people's attitudes and behaviour, will have a far lower degree of probability and will require continual testing throughout the delivery phase. Pragmatic business-based judgements about what and when to measure depend on sound benefit profiles and a clear focus on what matters (outcomes)</i>” - p9-10 Note ref to probability/confidence assessments.</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<i>development and running costs in the business case</i> <ul style="list-style-type: none"> <i>document and revisit working assumptions</i> <i>concentrate on key benefits and establish key performance indicators for these</i> p9 	<ul style="list-style-type: none"> Measurement Frequency Measurement Roles 			
13. P3M3® Maturity Assessment - benefits management maturity assessments at project, program and portfolio levels. (Page refs to version published in Managing Benefits, 2012)	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project, program and portfolio.</p> <p>Overview/Summary 3PM Maturity Assessment based on 'best practice'. Includes benefits management maturity assessments at project, program and portfolio levels.</p> <p>The extracts included in Managing Benefits 1st edition were from the OGC version (now Axelos).</p>	<p>When does measurement occur? Not addressed.</p> <p>Focus on outcome and/or intermediate benefits? Not addressed.</p>	<p>Who measures the benefits? Not addressed.</p> <p>Are measures added over the project? Emergent benefits? At portfolio and program maturity level 4 – “Trend analysis and measurement undertaken on performance information to identify improvement opportunities.” p253 At portfolio maturity level 4 benefits are “actively measured” p252 Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Cross sector</p>	<p>What types of measure – quantitative / qualitative are used? At portfolio maturity level 4 p252</p> <ul style="list-style-type: none"> “Performance metrics tracked across the business to measure improvements against baselines and targets” “Benefits measurement tracks positive and negative effects on the business against a range of operational measures.” <p>At program maturity level 4 p254</p> <ul style="list-style-type: none"> “Use of industry techniques to assess and measure progress (e.g. Balanced Scorecard).” <p>At project maturity level 4 p258</p> <ul style="list-style-type: none"> “Complex variety of benefits measures designed and applied according to circumstances (e.g. Balanced Scorecard). Common, performance-based benefits measurement and assessment mechanisms in place.”
14. Gateway review guidance (Page refs to version published in Managing Benefits, 2012)	<p>Normative or descriptive - normative</p> <p>Applied at which level – project and program</p> <p>Overview/Summary Guidance includes coverage of benefits at each gate review including Gate 5 – Operations Review and Benefits Realisation.</p> <p>Key aspects relating to Benefit measurement:</p>	<p>When does measurement occur? Gates 3-5 – from Investment Decision to post-implementation review.</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed although note ref to service provider at Gateway 4.</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Cross-sector</p>	<p>What types of measure – quantitative / qualitative are used? Not addressed</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<ul style="list-style-type: none"> Gateway 3, p245: <i>"Agreed process for measuring benefit...Key measures of benefit agreed."</i> Gateway 4, p246: <i>"Is there a process to measure benefits?; Means of measuring performance agreed with service provider."</i> Gateway 5, p247: <i>"Assessment of benefits in current operating regime using the benefits-measurement basis defined at Gateway 4."</i> 				
15. DVLA Change Programme – Benefits Management (2005)	<p>Normative or descriptive - descriptive</p> <p>Applied at which level - program</p> <p>Overview/Summary Benefits Management Case study published by the OGC.</p>	<p>When does measurement occur? <i>"DVLA's Benefits Management approach covers the identification, measuring and tracking of benefits through the project lifecycle and then regular evaluation after go-live"</i> p2</p> <p>Lessons Learned include p3 – <i>"Baseline data for benefits was difficult to find. It became apparent that baseline data should always be sourced from statistics routinely collected wherever possible."</i></p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Not specified</p>	<p>Who measures the benefits? <i>"The senior business managers identify who in their organisation will be responsible for realising and measuring benefits"</i> p1</p> <p><i>"The benefits are tracked using a benefits monitoring system run by the Programme Management Office"</i> p2</p> <p>Are measures added over the project? Emergent benefits? Not specified</p> <p>Measurement post-project? Not specified</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Anyone with an interest in benefits management – but primarily public sector.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not specified</p>
16. Cabinet Office Major Projects Authority – Assurance of benefits realisation in Major Projects (2015)	<p>Normative or descriptive - normative</p> <p>Applied at which level – projects</p> <p>Overview/Summary</p> <p>The integrated assurance toolkit used by the Infrastructure and Projects Authority (IPA) includes guidance for departments on 'Assurance of benefits realisation in Major Projects' - for those undertaking assurance reviews such as gateway reviews.</p> <p><i>"This document contains guidance on best practice on benefits management in projects, for every stage"</i></p>	<p>When does measurement occur? Cross the project life-cycle</p> <p>Focus on outcome and/or intermediate benefits? Benefit Map format includes intermediate benefits and note ref to driver trees.</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Central Government</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not addressed</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>of a project's lifecycle." p4</p> <p>References to benefits measures are:</p> <p>Gate 2 – p14 re baselines “<i>Description of how new data will be measured, and over what timeframe, in order to establish baseline performance</i> “</p> <p>Gate 3 – p17 “<i>Have appropriate metrics and KPIs for tracking benefits during delivery been chosen?</i>” -</p> <ul style="list-style-type: none"> Description of planned metric, method of measurement and baseline for each benefit Evidence that metrics selected can be measured and give as unambiguous as possible assessment of current performance. This should include: <ul style="list-style-type: none"> consideration of all inter- related metrics (e.g. by using driver trees) to the extent possible, avoiding the use of any assumptions in the chosen metric (e.g. not using economic multipliers to monetise non-financial benefits; not netting off any baselines) where no perfect metric exists, proxy measures should be used, with justification Measures, KPIs and baseline agreed with provider and partners / delivery agencies, along with method for measurement” <p>And “are the measures embedded in any contract performance plan?”</p> <p>Gate 4 – p20 “<i>Is the approach to benefits management sound and robust?</i></p> <ul style="list-style-type: none"> Appropriate measures and KPIs for individual 				

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p><i>benefits</i></p> <ul style="list-style-type: none"> <i>Appropriate baselines for assessing benefit outturn against historical performance</i> <i>Measures, KPIs and baseline agreed with provider and partners</i> <i>For collaborative projects, all parties understand and agree their responsibilities and arrangements for benefits realisation</i> <i>Evidence of how the data is to be used to inform project decision making</i> <i>A plan for post implementation reviews, including specified review points “</i> <p>Gate 0 – p26 “<i>Is the approach to benefit management robust?</i></p> <p>Mid stage</p> <ul style="list-style-type: none"> <i>All stakeholders have been engaged sufficiently to develop the benefits plan</i> <i>A benefits management strategy, and a plan that sets out expected benefits, how they are delivered and measured</i> <i>Plans to identify appropriate baseline measures against which future performance will be assessed</i> <i>Appropriate accountabilities and responsibilities have been allocated for the business transformation phase</i> <i>Plans to carry out performance measurement</i> 				

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p><i>against the defined measures and indicators</i></p> <p>Late stage</p> <ul style="list-style-type: none"> <i>Benefits realisation planning is integrated into the overall programme planning</i> <i>The organisation has the capacity and capability to deliver the benefits</i> <i>Ongoing monitoring to assess realisation of benefits”</i> 				
17. Government Major Projects Portfolio - SRO Appointment letters (2015) – signed by MPA Chief Executive, Departmental Permanent Secretary, and the SRO. Page refs not noted as they vary from letter to letter.	Normative or descriptive - normative Applied at which level – project and program Overview/Summary Formal appointment letters for SROs of projects/programs included in the Major Projects Portfolio including specific personal responsibility for benefits realisation. Note – I reviewed 3 separate letters from 3 different departments and benefits measurement was not mentioned although reference is made to, “ <i>monitor delivery of the objectives and benefits, taking appropriate action where necessary to ensure their successful delivery.</i> ”	When does measurement occur? Not addressed. Focus on outcome and/or intermediate benefits? Not addressed.	Who measures the benefits? Not addressed. Are measures added over the project? Emergent benefits? Not addressed. Measurement post-project? “ <i>Ensure a plan for both long term benefits realisation and on-going sustainability is agreed with key stakeholders as part of the process of moving the project to “business as usual”.</i> ”	To whom is the guidance (project type, sector) directed? Government SROs.	What types of measure – quantitative / qualitative are used? Not addressed.
18. NEW SOURCE Project delivery capability framework November 2017 (version 1) Government Project Delivery Profession, part of the IPA (see below)	Normative or descriptive - normative Applied at which level – project mainly but also portfolio and programme Overview/Summary It provides a common language to describe job roles, and the knowledge, skills and abilities needed to perform project work across all areas of Government. There are three sections - careers, competencies and development.	Not specified	Who measures the benefits? SRO role includes ‘Ensure benefits are owned, delivered and measured during and after the project’ P36. Project manager role includes ‘ Ensure benefits are identified, understood, measured, tracked and owned’. P46. Benefits Manager - The Benefits	Not specified	Not specified

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	Benefits management is No.18 in the technical competencies required, and is defined as 'Benefits management is the ability to identify, quantify, map and track project benefits to justify investment in the project, and to provide assurance that the benefits identified can be realised' P18).		<p>Manager ensures that a 'fit for purpose' approach to benefits measurement and realisation is used to provide assurance that the benefits identified can be achieved P75.</p> <p>The portfolio manager (P40) and programme manager (P42) also has a key role for benefits realization, which varies according to the complexity of the project.</p> <p>Measurement post-project?</p> <p>Portfolio Manager/Director has role for overseeing tracking of benefits over multiple years for complex projects (P40)</p>		
<p>19. NEW SOURCE</p> <p>Infrastructure and Projects Authority (IPA)</p> <p>Guide for effective benefits management in major projects</p> <p>October, 2017</p> <p>See also APM webinar 9/11/17</p>	<p>Normative or descriptive - normative</p> <p>Applied at which level – mainly projects but also programme and portfolio. There is a specific section for the Portfolio level</p> <p>Overview/Summary 2.1 This guide for Effective Benefits Management in Major Projects aims to provide structure and set expectations for major project teams when undertaking benefits management.</p> <p>2.2 These guidelines are primarily aimed at Senior Responsible Owners (SROs), Programme and Project Directors, Benefits Managers and Business Change Managers working on major projects. They are also relevant for Benefits Owners who are responsible for the realisation of benefits from major projects that have been assigned to them. Benefits Leads and Portfolio Directors, Managers and Offices within Departments looking to strengthen their benefits management approach will also find this</p>	<p>When does measurement occur?</p> <p>The Benefits Cycle Practices, which are aligned to the project life-cycle, are</p> <ul style="list-style-type: none"> - Define success - Identify and quantify - Value and appraise - Plan to realise - Work to realise - Review performance <p>Measurement of benefits is a developing process during these practices. (P57 – Annex B provides a summary)</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>The Benefits Map will typically include</p>	<p>Who measures the benefits?</p> <p>Section 8 covers roles and responsibilities. Benefits management is not the responsibility of one person alone, but a combined effort of project and BAU roles.</p> <p>Programme Director has a key overarching role with Benefits Owners responsible for specific benefits.</p> <p>A suggested RACI (responsible, accountable, consulted and informed) matrix for the key roles involved in benefits management (P9 and Annex C). The example in Annex C refers to 7 different individuals and groups.</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Primarily anyone in Government involved with major projects.</p> <p>'The guidance is invaluable for anyone needing to know how to apply benefits management to a government policy or major project' Bridget Jackson, Head of BM, HS2 Ltd. P8</p> <p>Also endorsed by the APM, and has wider applicability than government projects.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>IPA Benefits Categories are summarised on P27. Key processes are outlined on P28 and 29.</p> <p>The glossary defines the following</p> <p>Financial Benefits - Benefits that can be quantified and expressed in monetary terms.</p> <p>Measure/metric - A quantity that is measured on a regular basis, and direction of travel confirms the realisation of the benefit.</p> <p>Monetise - Converting benefits into money so that they can be appraised in the Economic Case</p> <p>Non-financial benefits - Benefits that cannot be quantified and assigned a monetary value, but</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	document useful. 2.3 The scope of this guide covers: <input type="checkbox"/> key activities to be undertaken for effective benefits management; <input type="checkbox"/> principles and good practice to adopt to ensure benefits are managed and realised; <input type="checkbox"/> how benefits management fits within IPA's assurance process; <input type="checkbox"/> how benefits management fits within the Green Book Business Case process; <input type="checkbox"/> a suggested RACI (responsible, accountable, consulted and informed) matrix for the key roles involved in benefits management <input type="checkbox"/> a glossary of terms; <input type="checkbox"/> suggested benefits management cycle and practices.	<ul style="list-style-type: none"> Intermediate benefits, which arise directly out of changes in practice enabled by the delivery of the project, and collectively inform the end benefits End benefits, which are the final benefits arising from delivery of the project, and collectively prove that the strategic objectives have been met (P47) <p>A distinction is made between lead and lag indicators, with a preference for lead indicators because they are more immediate and more easily attributed. Lead indicators influence lag indicators.</p> <p>See Page 26 for a detailed explanation and an example.</p> <p>Linking to specific stakeholders</p> <p>Prioritisation criteria include stakeholder perceptions during benefits identification P25.</p> <p>Three key stakeholders are government, private sector partner and wider UK public (P27).</p>	<p>Are measures added over the project? Emergent benefits?</p> <p>A distinction is made between using existing measures and developing new measures (P15).</p> <p>Under 'Work to realise' there is a role of 'identify and measure emerging benefits' (Annex C), but this process is also seen as a process throughout the benefits cycle (P19-20)</p> <p>Measurement post-project?</p> <p>Under 'review performance is 'identify actions for further benefits realization'. Benefits reporting needs to continue, at intervals agreed in the benefits Realization Plan (P41).</p>		<p>may still be meaningfully measured.</p> <p>Qualitative - Whereby something is better measured through its quality rather than a quantitative measure. Something which is subjective or difficult to verify but is useful in understanding experiences and attitudes</p> <p>Quantified - An aspect of performance that can be easily and consistently measured through a numerical or volume metric</p> <p>Wider benefit - The 'ultimate' benefit that is often hard to attribute but the project knows it is contributing towards it in some way.</p> <p>CBA and NPV are also defined.</p> <p>Quantification and target setting are key processes, but they may happen at different times for different benefits (P29)</p>
20. HM Treasury, The Green Book – Appraisal and Evaluation in Central Government, 2003 (+ 2011 update)	<p>Normative or descriptive - Normative</p> <p>Applied at which level – “<i>policy, project or programme</i>” p2</p> <p>Overview/Summary Cost-benefit analysis is the recommended appraisal technique (based on NPV) - “<i>quantifies in monetary terms as many of the costs and benefits of a</i></p>	<p>When does measurement occur?</p> <p>Focuses on project appraisal (ex ante – at the start) and evaluation (ex post – at the finish)</p> <p>Focus on outcome and/or intermediate benefits?</p>	<p>Who measures the benefits?</p> <p>Not addressed</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Not addressed</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>UK Central Government</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Quantitative and Qualitative – 4 categories of benefit are identified (p44):</p> <ul style="list-style-type: none"> Financial - Quantitative;

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p><i>proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value” p4</i></p> <p>Alternatives include cost-effectiveness analysis and multi-criteria analysis (for benefits that are unvalued)</p> <p>Includes guidance on optimism bias – the “<i>tendency for project appraisers to be overly optimistic...appraisers tend to overstate benefits</i>”. Consequently adjustments should be made i.e. decreasing and delay the receipt of estimated benefits. Such adjustments “<i>should be empirically based, (e.g. using data from part projects or similar projects elsewhere) and adjusted for the unique characteristics of the project in hand</i>” although note no benefits adjustments are included p29.</p> <p>Specific guidance is provided for benefits in relation to: valuing time, health benefits, prevented fatality or injury, design quality, environmental impacts, impact on greenhouse gas emissions, vulnerability to climate change, air quality, landscape, water, biodiversity, noise, recreational and amenity values for forests, and disamenity (Annex 2).</p>	<p>Focus is on valuing (£ terms) outcome benefits, although also states, “<i>There is usually a hierarchy of outcomes, outputs, and targets that should be clearly set out in an appraisal. Outcomes are the eventual benefits to society that proposals are intended to achieve. Often, objectives will be expressed in terms of the outcomes that are desired. But outcomes sometimes cannot be directly measured, in which case it will often be appropriate to specify outputs, as intermediate steps along the way. Outputs are the results of activities that can be clearly stated or measured and which relate in some way to the outcomes desired.</i>” p13</p> <p>Note – also says, “<i>It is also useful to identify financial savings that release cash for other uses</i>” p44</p>	<p>Measurement post-project?</p> <p>Guidance encompasses post-project evaluation.</p>		<ul style="list-style-type: none"> Non-financial - Quantitative; Non-financial - Qualitative; Outcomes – Quantitative and Qualitative <p><u>Measurement</u></p> <ul style="list-style-type: none"> Benefits should normally be valued using (real or estimated) market prices p19 In the absence of market prices (e.g. “<i>wider social and environmental costs and benefits for which there is no market price</i>” p19), econometric techniques are used to value benefits in monetary terms e.g. people's willingness to pay (WTP) or accept (WTA) is ascertained via stated preference (via surveys – contingent valuation or choice modelling) or revealed preference (by observing behaviour) techniques. Time savings can be valued using the DfT approach which distinguishes between employer's time (valued at the opportunity cost of the time to the employer = marginal cost) and own time (p23 & Annex 2); other approaches (2011 update – p57-58) include – the life satisfaction approach looks at people's reported life satisfaction in surveys such as the ONS's Integrated Household Survey, which began including questions on respondents' subjective well-being in April 2011. This approach “<i>uses econometrics to estimate the life satisfaction provided by certain non-market goods, and converts this into a monetary figure by combining it with an estimate of the effect of income on life satisfaction.</i>” Values should be adjusted for (p53): <ul style="list-style-type: none"> Leakage (impact on others beyond those intended), deadweight (benefits that would have occurred anyway – e.g. from the 'do minimum' case), and displacement/substitution (benefits are offset by reductions elsewhere) Distributional impacts – the effects of

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<ul style="list-style-type: none"> proposals on different sections of society <ul style="list-style-type: none"> Relative price movements – so all benefits are valued in present value terms Optimism bias Use of weighting and scoring techniques/multi-criteria analysis to take unvalued benefits into consideration e.g. Design Quality Indicators. p35 Targets should be SMART (specific, measurable, achievable, relevant and time-bound. p13
21. New Source Supplementary Green Book Guidance – Optimism Bias (2013) https://www.gov.uk/government/collections/the-green-book-supplementary-guidance	Normative or descriptive - normative Applied at which level – project or program Overview/Summary – part of a series of guides issued to support the Green Book (see entry above). Other guides include: 'multi-criteria decision analysis' and 'stated preference techniques'. <i>“In the absence of a more specific evidence base, departments are encouraged to collect data to inform future estimates of optimism, and in the meantime use the best available data.”</i> p1	When does measurement occur? Not addressed – this document is specifically about optimism bias Focus on outcome and/or intermediate benefits? Not distinguished	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Public sector Business cases writers	What types of measure – quantitative / qualitative are used? Focus of guidance is generic optimism bias adjustments derived from study by Mott MacDonald (2002) Review of Large Public Procurement in the UK – see next entry below. Upper bound (average level at outline business case stage) and lower bound (to ideally be reached by contract award stage) optimism bias adjustments are identified for Works Duration and Capital Expenditure across a range of project categories (Standard Buildings, Non-standard Buildings, Standard Civil Engineering, Equipment/Development, and Outsourcing). Optimism bias adjustments can be reduced from the upper bound level by a mitigation factor (ranging from 0-1) to reflect the extent to which the contributory factors (specified on pages 13-15) have been mitigated p3/15. Note – <i>“Due to a lack of available data, Mott MacDonald was unable to recommend sound upper and lower bound optimism bias levels for operating expenditure (except for outsourcing projects) or benefits shortfall. Optimism bias should still be considered for these parameters. If there is no other evidence to support adjustments</i>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<i>to operating costs or benefits, appraisers should use sensitivity analysis to check switching values.” p5/15</i>
22. New Source Mott McDonald (2002) Review of Large Public Procurement in the UK. Commissioned by UK Treasury	Normative or descriptive - descriptive Applied at which level – project or program Overview/Summary Research study into project delivery performance compared with plan. Data collected was used for the generic optimism bias adjustments referred to in the entry above. Found benefits shortfall of only 2% (pS/2) but in most cases the benefits were not quantified in the business case and there was no review to see if they had been realised. Consequently no optimism bias data for benefits could be provided. p10 – “It was assumed that the actual benefits would be compared to the benefits estimated in the business case. However, some business cases did not give any indication of the benefits estimated. Moreover most projects did not have any post project appraisal that could provide an indication of how successful the delivery of benefits had been. ” P18 – “The data collection process revealed difficulties with respect to gathering information on operating expenditure and benefits shortfall. Firstly, data on operating expenditure and benefits shortfall was broadly unavailable and, secondly, determining benefits shortfall was based on personal interpretation as benefits estimated at business case were not clearly defined.” P27 “The key features of a clear governance process include... Ensuring that there are criteria established for measuring performance, i.e. can the benefits be measured” P33 “With the exception of outsourcing projects, the	When does measurement occur? Focuses on measurement prior to investment and at post-implementation review Focus on outcome and/or intermediate benefits? Not distinguished	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Public sector Business cases writers	What types of measure – quantitative / qualitative are used? Quantitative adjustments – but not identified for benefits due to data not being available on the projects sampled.

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<i>information gathered on operating expenditure and benefits shortfall was based on best judgement and was available only on a small number of projects... As a result this paper is unable to recommend sound upper and lower bound optimism bias levels for the operating expenditure (except for outsourcing projects), project duration and benefits shortfall for all project types.</i>				
23. Public Sector Business Cases - Using the Five Case Model. Green Book Supplementary Guidance on delivering public value from spending proposals (2013) – note the document reviewed is the 2015 update (previous study used the 2013 version).	<p>Normative or descriptive – normative.</p> <p>Applied at which level – project and program.</p> <p>Overview/Summary Part of the 'Better Business Case' initiative promoted by English, Welsh and New Zealand Governments and exam certification scheme from APMG – see next entry and refs to equivalent guidance below in Wales and New Zealand.</p> <p>Includes guidance on cost-benefit analysis, valuing benefits, weighting and scoring non-monetised benefits, addressing optimism bias and coverage of benefits in each iteration of the business case (Strategic Outline Case [SOC], Outline Business Case [OBC] and Full Business Case [FBC]) etc.</p>	<p>When does measurement occur? Focus here is on measurement in financial terms for the cost benefit appraisal.</p> <p>Focus on outcome and/or intermediate benefits? p33 <i>“It is what a public organisation is seeking to achieve in terms of identifiable, measurable outcomes that is important, this is what constitutes public value in terms of return for money spent.”</i></p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Focus is on realisation of planned benefits: p139 – <i>“Questions to be answered in full at each stage and revisited thereafter”</i> include: <i>“Do we have effective systems for measuring and tracking the realisation of benefits in the business case?”</i></p> <p>Measurement post-project? Not addressed.</p>	<p>To whom is the guidance (project type, sector) directed? Public sector</p>	<p>What types of measure – quantitative / qualitative are used? Both - p35, <i>“ascertain whether the benefits are economic (non-cash releasing) or financial (cash releasing); measurable, but not in cash terms; or simply qualitative.”</i></p> <p>Refers to measures being SMART p11</p> <p><i>“However, as a general rule every effort should be made to quantify benefits financially wherever possible and proportionate to do so”</i> p54</p> <p><i>“Performance measures are recorded in the Benefits Register”</i> – p100</p> <p>P149 – 3Es/Value for Money for measurement:</p> <p>Economy – <i>“A measure of the extent to which the costs associated with a project, programme or policy are reduced.”</i></p> <p>Efficiency – <i>“A measure of the extent to which a project, programme or policy’s associated throughputs are increased.”</i></p> <p>Effectiveness – <i>“A measure of the extent to which a project, programme or policy achieves its desired outcomes/outputs.”</i></p>
24. HM Treasury Guide: Assessing Business	Normative or descriptive - Normative	When does measurement occur?	Who measures the benefits?	To whom is the guidance (project type, sector)	What types of measure – quantitative /

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
Cases 'A Short Plain English Guide' (from the HMT Green Book webpage)	<p>Applied at which level – policy, project or program</p> <p>Overview/Summary From a benefits perspective the focus is on the following 2 cases from the 5 case Business Case framework:</p> <ul style="list-style-type: none"> Strategic Case – should include the main benefits and objectives should be SMART (p5) Economic Case – the cost-benefit analysis based on NPV (p5) <p>Management Case - includes: “<i>the detailed plans for delivery and arrangements for the realisation of benefits, management of risk; and post evaluation are recorded.</i>” p4 – and should include a benefits realisation plan and benefits register – p8</p> <p>Note the Business Case should include a ‘do nothing’ or ‘do minimum’ option which aids assessing deadweight. Key questions – has every effort been made to quantify all relevant benefits and are any unquantified benefits explained; have benefits been adjusted for optimism bias and distributional impacts? p6.</p>	<p>Not addressed – this document is about review of the business case</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Not distinguished</p>	<p>Guidance generally – “<i>all business cases should include a plan for monitoring their effects and a plan for subsequent evaluation covering when and by whom this is to be undertaken.</i>” p7</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Not addressed – this document is about review of the business case</p> <p>Measurement post-project? Includes requirements for the Business Case to specify arrangements for monitoring impact and for post-implementation review. p9</p>	<p>directed? Reviewers of business cases – specifically those in HM Treasury</p>	<p>qualitative are used?</p> <p>Not distinguished</p>
25. HM Treasury (2003) <i>Measuring the Expected Benefits of e- Government</i> , August, V1.4.	<p>Normative or descriptive - Normative</p> <p>Applied at which level - Focused on e-gov initiatives.</p> <p>Overview/Summary Another publication examining benefits from e-gov. Closely aligned with HM Treasury Green Book.</p>	<p>When does measurement occur? Sees benefits being measured as part of project appraisal (forecasts) and evaluation.</p> <p>Favours valuation in monetary terms for part of the NPV calculation.</p> <p>Argues for ‘bottom up’ forecasting – with “<i>examples from other services</i>” providing a “<i>useful sanity check</i>”. p13</p> <p>Focus on outcome and/or intermediate benefits? Note reference to, “<i>Where cost saving depends on redeploying human resources, departments will need to consider how they will realise</i></p>	<p>Who measures the benefits? Nothing noted – the guidance is more about what benefits can be expected rather than their management.</p> <p>Are measures added over the project? Emergent benefits? Nothing noted</p> <p>Measurement post-project? Nothing noted</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>e-Gov initiatives.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>The framework for Customer Benefits includes quantitative and qualitative benefits and some guidance on measures, p18-19:</p> <ul style="list-style-type: none"> Monetary e.g. Tangible savings of transport/postage costs [measured by market rates] Non-Monetary Time-based e.g. greater accessibility; reduced travel time, faster transaction times [measured by assigned monetary value of time saved – guidance on how to calculate this is included along with a conservative standard rate of £20/hour at 2002 prices for working time and £3.74 at

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<i>the saving"</i>			<p>1998 prices for non working time]</p> <ul style="list-style-type: none"> Non-Monetary - Value-based e.g. greater choice and functionality; ability for customers to monitor, access and alter data held by govt; greater convenience; & faster service delivery [measured by willingness to accept/pay, revealed preference and cojoint analysis]. <p>Document also includes</p> <ul style="list-style-type: none"> Checklist of Potential Customer Benefits, p36 – Business Customer and Citizens; <p>Checklist of Potential Benefits to Government and Society, p40-42.</p>
26. Kelly, G., Mulgan, G. and Muers, S. (2002) <i>Creating Public Value An analytical framework for public service reform</i> , Strategy Unit, Cabinet Office.	<p>Normative or descriptive - Both normative and descriptive (case studies included).</p> <p>Applied at which level - Applies to public services generally (whether delivered by projects and programs or BAU).</p> <p>Overview/Summary - Note links to Mark Moore's work in the US on 'public value' and other publications such as the OECD funded report by Foley below. Proposes a value/benefits framework in terms of outcomes, services and trust.</p>	<p>When does measurement occur? Not specifically addressed.</p> <p>Focus on outcome and/or intermediate benefits? Not distinguished – although the public value concept sees the 3 categories of value as linked/reinforcing (at least partly) – p21.</p>	<p>Who measures the benefits? Not specifically addressed – but note emphasis on engaging with the public to find out what it thinks and values. Co-production mentioned (p26).</p> <p>Are measures added over the project? Emergent benefits? Not specifically addressed.</p> <p>Measurement post-project? Not specifically addressed</p>	<p>To whom is the guidance (project type, sector) directed? Guidance is directed at public policy makers</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Benefits measures (specific to particular public services) but under the same 3 headings are proposed:</p> <ul style="list-style-type: none"> Value of Services – User satisfaction p11 Value of Outcomes – Service specific p15 Value of trust, legitimacy & confidence p17– Surveys, participation. <p>Specific reference to the use of both revealed and stated preference approaches and Quality adjusted life years to measure health and travel time for transport.</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					Also suggests Balanced Scorecard reporting and earned autonomy.
<p>27. Cabinet Office, Office of the Third Sector (2009) <i>A guide to Social Return on Investment</i>. Available at: http://socialvalueuk.org/what-is-sroi/the-sroi-guide</p> <p>Also new source reviewed – Measuring Value: a guide to Social Return on Investment (SROI), 2ND ed, 2008, NEF – a consultancy but included here for ease of understanding.</p>	<p>Normative or descriptive - The guidance is normative although case studies are available on the associated websites.</p> <p>Applied at which level - organisational or project level.</p> <p>Overview/Summary SROI is a standardised framework for p3 “<i>measuring social and environmental value</i>.” Similar to Green Book in that, “<i>both use money as a proxy of cost and benefits arising from an investment, activity or policy</i>” p95</p> <p>Note SROI tends to use the term Outcome rather than benefit – where outcome is defined as “<i>The changes resulting from an activity</i>” p85</p> <p>The guidance centres around completing an Impact Map (Theory of Change, p29) consisting of: stakeholder, inputs (resources used for activities), outputs, outcomes, indicators, and impacts - the % of the outcome the organisation or project can take credit for i.e. the actual outcome (change) is adjusted for:</p> <ul style="list-style-type: none"> ‘Deadweight’ (the change that would have happened anyway – estimated by reference to comparison groups or benchmarks; ‘Displacement’ (where a change is at the expense of someone else e.g. where crime shifts from one area to another); ‘Attribution’ (% change caused by us compared with others – found by asking stakeholders and consulting with other organisations involved); and ‘Drop off’ over time. <p>Then the outcome is valued in monetary terms – by</p>	<p>When does measurement occur?</p> <p>2 Types of SROI are identified, p8:</p> <ol style="list-style-type: none"> Forecast (pre-investment) - helps identify what should be measured. Measures are identified in consultation with stakeholders (e.g. interviews, focus groups, surveys) and data sources e.g. GP appointments. This includes identifying “<i>benefit period</i>” p43, for each outcome via research from similar projects or asking stakeholders. Evaluative (post-investment). <p>Focus on outcome and/or intermediate benefits? Specific focus on Outcome (outcome benefit) measurement - “<i>SROI is an outcomes-based measurement tool</i>” p33. Although note that the guidance recognises that there are often a series of outcomes in a chain including intermediate outcomes (p34). The guidance recommends that they be monitored to provide a measure of ‘distance travelled’.</p> <p>Outcomes can be p22:</p> <ul style="list-style-type: none"> Positive and Negative (i.e. disbenefits); Intended and Unintended (i.e. emergent) 	<p>Who measures the benefits? Reference to:</p> <ul style="list-style-type: none"> SROI trained practitioner as a facilitator. It places “<i>stakeholders at the heart of the measurement process</i>” (NEF, p1). <p>Are measures added over the project? Emergent benefits? Note unintended benefits are specifically included (p22) – to be measured in the evaluative stage.</p> <p>Measurement post-project? “<i>It may be that once the data collection mechanisms are in place the responsibility for assessing SROI can sit with your finance team and become integrated with the financial accounting system.</i>” NEF, p45</p>	<p>To whom is the guidance (project type, sector) directed? Written for 3rd sector but also applicable to public and private sectors to demonstrate social impact; originated in work by the Roberts Enterprise Development Fund, a San Francisco-based venture philanthropy fund – example of how methodologies cross sectors and countries.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Note the SROI Network (website shut) developed an Outcomes Indicator Bank (sponsored by the Scottish Government) – information requested but no reply was received.</p> <p>A mix of subjective or self-reported (e.g. what the stakeholder says) and objective indicators (data) are recommended.</p> <p>Indicators (“<i>Information that allows performance to be measured</i>” – NEF, p48) and data sources (research, surveys/questionnaires, interviews) are recorded on the Impact Map. An outcome indicator is defined as a “<i>Well-defined measure of an outcome</i>” p85</p> <p>One or more indicators should be identified for each outcome to tell you “<i>whether the outcome has occurred, and by how much</i>” p38. A mix of subjective or self-reported and objective indicators (data) are recommended (p38-39).</p> <p>Note the guidance recognises that measuring outputs can lead to perverse incentives (e.g. pushing people into low value jobs) so recommends measuring both quantity and quality. Xref to literature on targets leading to perverse incentives?</p> <p>Guidance on measurement of different types of benefit in monetary terms – see column 2.</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>assigning a monetary value where there isn't a market price e.g. financial proxies. Methods include:</p> <ul style="list-style-type: none"> Contingent valuation – ask people about their willingness to pay or accept an outcome. Revealed preference – infer valuations from prices of related market-traded goods e.g. house prices re environmental conditions (hedonic pricing); Travel cost method for time savings. Financial benefits – based on marginal not unit costs (which include fixed costs). <p>The SROI ratio is then calculated = PV of impact/PV of investment.</p>				
28. NAO Delivering Major Projects (2015 & 2016) Briefing for the PAC.	<p>Normative or descriptive - descriptive</p> <p>Applied at which level – projects and programs</p> <p>Overview/Summary A relatively recent indication as to whether any of the above guidance has actually made a positive difference. Now updated to include the 2016 briefing. Finds significant failures to measure benefits:</p> <p>Findings include: <i>“Measuring costs and benefits – departments often could not track costs and benefits or measure the impact of their projects... Departments often overlook whether the project has realised the intended benefits.”</i> p14 & p20</p> <p>Departmental data on benefits realisation is poor</p> <p>2.17 <i>If projects do not deliver their intended benefits they are unlikely to have provided value for money. The Authority collects information but does not report on projects’ progress towards achieving intended benefits as these data are not included in the scope of the Cabinet Office’s transparency policy.</i></p> <p>2.18 <i>Departments are responsible for monitoring whether projects realise their intended benefits once</i></p>	<p>When does measurement occur? Not addressed</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Public sector.</p>	<p>What types of measure – quantitative / qualitative are used? Not addressed</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Publication number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p><i>they are completed. We have reported in the past that they often do not do this. One issue is that of accountability as often those responsible for delivering a project are not those who will be monitoring the project once it is complete, or accountable for the end-user benefits, which can span decades into the future."</i></p> <p>2016 Briefing p14 – <i>"Measuring costs and benefits – departments often could not track costs and benefits or measure the impact of their projects."</i></p>				
29. New Source NAO (2013) over-optimism in government projects	<p>Normative or descriptive – descriptive.</p> <p>Applied at which level – project and program.</p> <p>Overview/Summary Report on the NAO's views on the causes of over-optimism in forecasting/estimating (including of benefits) - <i>"all too frequently over-optimism results in the underestimation of the time, costs and risks to delivery and the overestimation of the benefits. It undermines value for money at best, and in the worst case leads to unviable projects."</i> p3</p> <p>Solutions include – <i>"This is about more than changing processes, although there is considerable scope for improvement. At the heart of the issue are also organisational behaviours and incentives and the strength of personal accountability."</i> p3</p> <p>Factors that contribute to over-optimism (p5):</p> <ul style="list-style-type: none"> lack independent challenge and accountability failure to engage stakeholders outside the project weaknesses in the evidence base complexity behaviour and incentives – <i>"Over-optimism can be unconscious or deliberate. Reasons for the latter, known as strategic misrepresentation, may include a desire of</i> 	<p>When does measurement occur? Not addressed</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Public Sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not addressed</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<i>individuals to protect and boost their own prospects or the desire to secure investment for a project.” p9</i>				
30. NAO (2009) <i>Helping Government Learn.</i>	<p>Normative or descriptive – both.</p> <p>Applied at which level – project and program.</p> <p>Overview/Summary Includes lessons learned regarding benefits realisation.</p> <p>Report notes p33, “<i>Gateway Reviews are considered by departments to be effective in providing external challenge and input to project and programme delivery efforts. However, the process is inconsistently applied across departments. Gate 5, for example, which assesses whether the benefits of a programme or project are being fully realised, are only applied by 20 per cent of departments. Without examining the realisation of benefits, the likelihood is that lessons are not being properly identified and, therefore, not shared. OGC is also aware that Government departments are not systematic enough in completing post-implementation reviews on projects or programmes that have gone particularly well, or badly.</i>”</p>	<p>When does measurement occur? Not addressed</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Public Sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not really addressed but note - “<i>Linking initiatives to a measurable return on investment helps bring legitimacy and cultural change, developing greater entrepreneurial spirit.</i>” p6.</p>
31. NAO (2006) Delivering Successful IT-enabled business change.	<p>Normative or descriptive – descriptive.</p> <p>Applied at which level – project and program.</p> <p>Overview/Summary Includes lessons learned and case studies of success in relation to benefits realisation.</p> <p>Emphasises importance of “<i>Projected benefits are measurable</i>” – p16</p>	<p>When does measurement occur?</p> <p>“<i>Benefits realisation is an ongoing process that begins at the earliest stage of any change programme. Organisations must understand what they are trying to achieve and the costs and benefits of achieving it, and put in place measures to determine that the benefits have been realised. Otherwise, there is no obvious driver to push and promote the purpose of the planned business change.</i>” p49</p> <p>Focus on outcome and/or</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project?</p> <p>“<i>Successful change programmes...continued to optimise the benefits after completion of the programme or</i></p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Central Government Accounting Officers and SROs.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not addressed.</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		intermediate benefits? Not addressed	<i>project.” p39</i> DWP Case Study refers to a benefits realisation plan that assigns responsibility for securing benefits to named individuals – benefits owners – over the medium-term of the first few years' following implementation. p41. This was then added to the report recommendations – “ <i>and to require all business cases to be accompanied by a benefits realisation plan, based on Office of Government Commerce best practice and endorsed by the Accounting Officer, that identifies benefits, how ownership and accountability for benefits delivery is to be assigned across the department, how customers and other users are to be persuaded to adopt any new IT-enabled services, and how benefits will be tracked in the short and medium term of up to five years' after implementation.</i> ” p22		
32. Wales Delivering Public Value From Spending Proposals - Green Book Guidance On Public Sector Business Cases Using The Five Case Model, Oct 2012	Normative or descriptive - normative. Applied at which level - project and program. Overview/Summary This document does not appear to be available on-line currently. But this is similar guidance to that issued by HM Treasury and by the NZ Treasury – part of the BBC initiative led by the UK Treasury, Welsh and NZ governments. See detailed entries above under UK HM Treasury for Green Book and New Zealand below (this is essentially the same guidance re-badged as Welsh Govt guidance) and BBC scheme	See HM Treasury and NZ entries and BBC initiative	See HM Treasury and NZ entries and BBC initiative	See HM Treasury and NZ entries and BBC initiative	See HM Treasury and NZ entries and BBC initiative.

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	(below). The Welsh Govt website includes a page on 'Better Business Cases – using the Five Case Model' with links to guides for: developing project and programme business cases (see entry below re BBC exam scheme); the 5 case model summary; and templates.				
33. New Source Better Business Case Exam/Accreditation Scheme The Wales Government website* includes: <ul style="list-style-type: none"> Guide to Developing the Project Business Case International Guide to Developing the Project Business Case v3.8 Guide to Developing the Programme Business Case v4.0 International Guide to Developing the Programme Business Case * http://gov.wales/funding/wales-infrastructure-investment-plan/better-business-cases/?lang=en	Normative or descriptive – normative. Applied at which level – project & program. Overview/Summary Examination/accreditation scheme managed by APMG and sponsored by English, Welsh and NZ governments. The exam scheme is based on the two international guides. Page refs are to the International Programme Guide (in black) and the Project Guide (in blue) – although most references are common to both guides. The focus is on measuring benefits in monetary terms in the Business Case NPV calculation (using market prices or stated and revealed preference techniques) and adjusting them for optimism bias (by reducing and delaying them) - p53: <i>“Adjustments should be empirically based – for example, using data from past projects or similar projects elsewhere, and adjusted for the unique characteristics of the project. Guidance for generic projects is available (see below) and should be used in the absence of more specific evidence.”</i> But note the generic guidance referred to does not include optimism bias adjustments for benefits – so, p68: <i>“The application of optimism bias should also be considered for operating costs and benefits. If there is no evidence to support adjustments to operating costs or benefits, appraisers should use sensitivity analysis to check switching values”</i> p10 <i>“The approach to benefits identification and measurement should be prudent, proportionate and</i>	When does measurement occur? Focus on measurement in terms of monetisation for calculating NPV in the Business Case with reference also to post evaluation review which is undertaken, <i>“to determine the extent to which the programme has delivered its anticipated benefits.”</i> p94 (p106) Focus on outcome and/or intermediate benefits? Not distinguished – categorisation / classification prescribed is as follows (p22 & 47-48) (p31-32 & 58-59) <ul style="list-style-type: none"> “Public Sector benefits – those falling to the spending organisation, over which it has direct control of their realisation (Direct Benefits) and those falling to other parts of the public sector (Indirect Benefits). Wider Social benefits – those other indirect benefits falling to other sectors, including the private sector. <i>These benefits will fall into the following classes:</i> <ul style="list-style-type: none"> cash releasing benefits (CRB). These benefits reduce the costs of organisations in such a way 	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? No guidance on how this should be done but the guidance refers to post evaluation review (a description of which should be included in the Management Case) which is undertaken, <i>“to determine the extent to which the programme has delivered its anticipated benefits.”</i> p94 p90 (p102) - Programme Benefits Register should include: <ul style="list-style-type: none"> “Performance measure/Key Performance Indicator” 	To whom is the guidance (project type, sector) directed? Public sector business case writers and appraisers.	What types of measure – quantitative / qualitative are used? Measurement in this context refers to valuing benefits in monetary terms and adjusting them for optimism bias. p23: <i>“Cash releasing benefits (CRB) can be monetised, by definition, and include improved economy. Non cash releasing benefits (non CRB) can be monetised and include improved efficiency. Quantifiable benefits (QB) can be measured but not (meaningfully) monetised Qualitative benefits (Qual) cannot be measured nor monetized (meaningfully).”</i> P48 (p59): <i>“Market prices, real or estimated, are the prime reference for the valuation of benefits. Where valuing at market prices is not possible, value based on forms of preference are the way in which public welfare values are calculated and include:</i> <ul style="list-style-type: none"> stated preference which has two forms: willingness to pay and willingness to accept (i.e. estimation of a price by means of carefully constructed questionnaires and interviews to indicate how much people are prepared to pay for a thing or how much they would pay to avoid it; for example, improved access to services or to avoid undesirable outcomes), and revealed preference approach (i.e. inferring a price from consumer

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<i>appropriate."</i>	<p><i>that the resources can be re-allocated elsewhere. This typically means that an entire resource is no longer needed for the task for which it was previously used. This can be staff, cash or other assets.</i></p> <ul style="list-style-type: none"> <i>non-cash-releasing benefits (non-CRB). This often involves reducing the time that a particular resource takes to do; but not sufficiently to re-allocate that resource to a totally different area of work</i> <i>quantifiable benefits (QB). These benefits can be quantified, but not always easily. The extent to which QBs are measured will depend on their significance. However, as a general rule every effort should be made to quantify benefits monetarily wherever possible</i> <i>non-quantifiable benefits (non-QB). These are the qualitative benefits, which are of value that cannot be quantified.</i> <p><i>All the benefits – cash releasing and non-cash releasing – must be accounted for in the economic appraisals to derive the net present value (NPV) for the programme."</i></p>			<p><i>behaviour)."</i></p> <p>p52 – “The main aim is to identify benefits that are quantifiable and can be expressed in monetary equivalent terms and to avoid defining benefits that cannot be measured, assessed or evaluated in any realistic way because there is no established evidence base. Every reasonable attempt should be made to quantify benefits, even if they cannot be expressed in monetary equivalent terms. For example, the benefit of an intervention that increases people’s propensity to exercise might be quantifiable but not readily expressible in monetary terms. Where quantification is particularly challenging, because the evidence base is spurious or the research costs would be disproportionate to the expenditure, it may be acceptable to express a benefit in qualitative terms; but even then it should be possible to provide evidence on the likely order of magnitude of the benefit. When a qualitative or non monetised benefit is considered too important to be ignored in the decision, a separate calculation and judgement needs to be made about whether its cost is “a price worth paying” in terms of its additional value. This calculation provides the basis upon which alternative options without these benefits can be generated and appraised. In all cases, the appraisal of benefits that cannot be expressed in</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<i>monetary equivalent terms should be grounded in a review of the best available evidence. The evaluation of similar interventions previously undertaken usually provides a particularly important source of evidence. The quantifiable (non monetised) and qualitative benefits must be recorded in the Benefits Register with their sources and assumptions."</i>
34. N Ireland Department of Finance & Personnel Guidance No page refs as review is of on-line materials at https://www.finance-ni.gov.uk/articles/programme-and-project-benefits-management	Normative or descriptive - Normative. Applied at which level - project and program. Overview/Summary Guidance on business cases, cost-benefit appraisal and programme and project benefits management – broadly based on MSP and PRINCE2 and also references to APM. Suggests the following benefits categorisation: <ul style="list-style-type: none"> Direct monetary benefits (tangible) – those benefits that can be quantified and valued in financial terms, for example cost savings, revenue generation, cost reductions Direct non-monetary benefits (tangible) – those that can be quantified but are difficult or impossible to value in financial terms, for example fewer customer complaints, productivity gains, greater accuracy, lower staff turnover, increased response times Indirect benefits (intangible) - can be identified, but cannot be easily quantified for example end user satisfaction, better access to information, organisational image, customer service, better morale, better perceptions Dis-benefits - negative consequences from the 	When does measurement occur? Focus on baselining and post-implementation measurement with review at summary review points – “A pre-implementation baseline measurement followed by defined actual measurements at relevant points during, and post, implementation.” Focus on outcome and/or intermediate benefits? Benefits Maps – with headings for <ul style="list-style-type: none"> Enablers, Intermediate benefits (“these describe the actual operational improvement resulting from the programme or project, for example quicker access to information, improved financial management, faster turnaround times; these functional or operational benefits must be able to be measured and if an intermediate benefit can’t be measured then it isn’t a useful benefit - an individual benefit profile is produced for each intermediate benefit and 	Who measures the benefits? “Affected business areas always own the benefits and are responsible for ensuring they are managed and realised long after programmes and projects are complete and the structures are dismantled.” “ operational benefit owner – a business representative who is responsible for benefit measurement and the management of any activities required to ensure benefits are realised” Contrast with “A senior benefit owner is a senior business representative responsible for ensuring that the benefit is achieved once handover from the programme or project is complete.” “the actual measurement, monitoring and management of benefits will be done by named operational benefit owners and	To whom is the guidance (project type, sector) directed? Public sector	What types of measure – quantitative / qualitative are used? Both – “Quantitative benefits can easily be measured numerically; qualitative benefits are normally measured with a questionnaire and the response is measured numerically.”

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	intended change.	<p><i>this is used to record the benefit, allocate responsibility for measuring it and to identify any activities required to manage benefit delivery")</i></p> <ul style="list-style-type: none"> End benefits (<i>"these are strategic or organisational level benefits or benefits linked to the wider NICS and are generally aligned with organisational strategy and corporate plans; end benefits usually describe what the organisation is seeking to achieve as a result of the business changes and measurement is achieved through the measurement of its component intermediate benefits"</i>). 	<p><i>overseen by senior benefit owners."</i></p> <p>Are measures added over the project? Emergent benefits?</p> <p>Yes – reference to identifying them at summary review points: <i>"As part of these summary review points the SRO must ensure that any new benefits or dis-benefits are captured and, where appropriate, developed and included in the overall benefit portfolio."</i></p> <p>Measurement post-project? Sits with the operational benefit owner.</p>		
United States					
<p>35. CIO Council (2002) Value Measuring Methodology – How-To-Guide & Highlights Guide. Approved by the CIO Council Best Practices Committee.</p> <p>Also New Source</p> <p>BAH 'Building a Methodology for Measuring the Value of E-Services'</p> <p>Of historical interest but not current. It was primarily focused on capturing the full benefits from ICT i.e. a useful insight into ways</p>	<p>Normative or descriptive - The guidance is normative although based on case studies.</p> <p>Applied at which level - Applied at program level but can be applied at the, <i>"agency, portfolio or enterprise-wide levels"</i> – <i>"in some instances, [standardized] measures may be defined at a higher level to be applied across a related group of initiatives, such as government-wide or across a focus-area portfolio."</i> p8</p> <p>Overview/Summary</p> <p>A measurement methodology designed by Booz Allen Hamilton, in association with Harvard University's Kennedy School of Government (and adopted by the Federal CIO Council) to identify a methodology for measuring the value of e-government initiatives unaccounted for by traditional cost-benefit and return-on-investment methodologies.</p>	<p>When does measurement occur? Measures are identified at the planning stage – <i>"at the very conception of an e-Government initiative"</i> p1 – but it adds that measures can be used at any point in the program lifecycle and that quantified measures of value, cost and risk guide the continuing selection, management and evaluation of an investment.</p> <p>Focus on outcome and/or intermediate benefits? Not distinguished.</p>	<p>Who measures the benefits? Specifically refers to 'program managers' and skilled, experienced facilitators (p29) to engage the user and stakeholder communities (during facilitated group sessions) to prioritise/weight the value factors and measures – <i>"Valid results depend on project staff working directly with representatives of user communities and partner agencies to define and array the measures in order of importance"</i>. p8</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Not addressed.</p> <p>Measurement post-project?</p>	<p>To whom is the guidance (project type, sector) directed? Written for e-Government programs/initiatives in the USA.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Quantitative and qualitative, <i>"both financial and non-financial, from multiple points of view"</i> p32; measures are combined using a normalized scale in calculating the value score – <i>"the normalized scale provides a method for integrating objective and subjective measures of value into a single decision metric."</i> p9</p> <p>The How-To-guide includes a table of sample measures (p94-95) for each value factor and by type (Govt to Citizen; Govt to Govt; Govt to Business; and Internal Efficiency and</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
in which assessments of social value can be combined with more traditional cost-benefit analysis. Links to the DVAM Australia.	<p>It combines assessment of cost, value and risk. The value score is calculated as follows:</p> <ul style="list-style-type: none"> The five value factors [Direct User (Customer) value; Social (non-direct user/public) value; Government operational/foundational value; Government financial value; Strategic/political value] are prioritized/weighted reflecting the organisation's priorities. It is recommended that this be done using the Analytical Hierarchy Process (AHP) based on pair-wise comparisons. Measures of success as perceived by stakeholders, are identified and prioritized for each value factor and each user group and must include: a metric (based on what customers and stakeholders want and what is important to them), a performance target and a normalized scale (out of 100). As above, it is recommended that prioritisation be done using the Analytical Hierarchy Process (AHP) based on pair-wise comparisons and led by a trained facilitator The value score (out of 100) is calculated and adjusted for risk. A 'bang for buck' score is also calculated (total value vs cost required). <p>Note use of normalized scale; and reference to the use of Contingent Valuation in BAH 'Building a Methodology for Measuring the Value of E-Services' (see also SROI and HMT Green Book).</p>		No specific guidance.		<p>Effectiveness)</p> <ul style="list-style-type: none"> Social Value measures – under headings of equity, access to government information and Privacy/Security. p96 Government Financial Value – Cost savings and costs avoided. p97 Government Operational Value – capacity for future and build workforce for the future. p97 Strategic/Political Value – measures of the agency's purpose. p97-98 <p>So whilst normalized ratings can be used for investment appraisal purposes, use of measurements can be used to assess the scale of benefits realisation.</p>
36. Intergovernmental Advisory Board, Federation of Government information Processing Councils (May 2003) ' <i>High Payoff in Electronic Government Measuring the Return on E- Government Investments</i> '	<p>Normative or descriptive – descriptive.</p> <p>Applied at which level – e-gov initiatives.</p> <p>Overview/Summary Another study of the benefits of e-government i.e. what benefits are seen in practice and how they are measured.</p> <p>Concludes that benefits can be represented in 5 categories, p1: 1. Financial: reduced costs of government operations/enhanced revenue collection 2. Economic development</p>	<p>When does measurement occur? Emphasis on "<i>E-gov managers must continuously assess the citizens' level of acceptance through preference polling, customer satisfaction surveys and online trend monitoring.</i>" p4</p> <p>Focus on outcome and/or intermediate benefits? Nothing noted.</p>	<p>Who measures the benefits? Nothing noted.</p> <p>Are measures added over the project? Emergent benefits? Nothing noted.</p> <p>Measurement post-project? Nothing noted.</p>	<p>To whom is the guidance (project type, sector) directed? Directed at US e-gov community.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Common approaches to benefits measurement identified in practice include:</p> <ul style="list-style-type: none"> Measuring cost-savings - Cost-Benefit & Rol Non-financial benefit categories <ul style="list-style-type: none"> Customer satisfaction

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	3. Reduced redundancy: Consolidating and integrating government systems 4. Fostering democratic principles 5. Improved service to citizens and other constituencies.				<ul style="list-style-type: none"> Balanced Scorecard
37. National Electronic Commerce Coordinating Council (2002) ROI Lessons Learned for E-Commerce or E-Government Projects, Exposure Draft, December 5, 2002.	<p>Normative or descriptive – descriptive.</p> <p>Applied at which level – egov initiatives.</p> <p>Overview/Summary White paper examining trends in approaches adopted to justifying e-gov projects. Finds an increased adoption of ROI (at project appraisal stage) and also focus on qualitative measures (customer satisfaction) in post project evaluation.</p>	<p>When does measurement occur? Focus on pre-investment appraisal and post-implementation evaluation.</p> <p>Focus on outcome and/or intermediate benefits? Focus is on use of ROI in investment justification and customer satisfaction measures in post-project evaluation.</p>	<p>Who measures the benefits? Nothing noted</p> <p>Are measures added over the project? Emergent benefits? Nothing noted</p> <p>Measurement post-project? As part of post-project evaluation.</p>	<p>To whom is the guidance (project type, sector) directed? Directed at US e-gov community.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>The paper notes that customer benefits fall in terms of three categories, p9:</p> <ul style="list-style-type: none"> <i>“customer convenience (availability of 24/7/365 access);</i> <i>improved customer service (customers can perform simple transactions on their own through self-service options and free up staff time for value-added service to customers); and</i> <i>increased access to more and better information”</i> <p>Mixed use of qualitative as well as quantitative benefits was found in practice – the report notes (p19), “softer measures such as constituent and user satisfaction surveys” were being increasingly used.</p> <p>Approaches adopted included, p10:</p> <ul style="list-style-type: none"> <i>“Arizona and Iowa, use a mathematical formula to calculate ROI, while other states, including Iowa, assign a point value for a project’s percentage ROI.</i> <i>Tennessee develops a cost/benefit analysis of only “hard dollar” values such as increased agency revenue and/or decreased costs. Tennessee’s model subtracts a project’s cumulative costs from its cumulative benefits to determine overall value.</i> <i>Utah has implemented an online planning tool to assist agencies in calculating ROI</i> <i>Pennsylvania outsources ROI or Total Cost of Ownership (TCO) analysis for certain high-</i>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<i>profile projects.</i> <ul style="list-style-type: none"> <i>New Mexico provides for a periodic review of intangible benefits to see if a once intangible benefit has become tangible and hence, more quantifiable.</i> <i>New Mexico and Tennessee also categorize benefits according to whether they enhance services or revenues or whether they are quantifiable or non-quantifiable."</i>
38. Program Management Improvement and Accountability Act of 2015 (PMIAA) – builds on the Federal Information Technology Acquisition Reform Act (FITARA) 2014.	Normative or descriptive – normative Applied at which level – program Overview/Summary Requires: <ul style="list-style-type: none"> Adoption of government-wide standards for program and project management Establishment of a federal program mgt job series along with improved training and accreditation; and A Program Management Policy Council with oversight of high risk programs. But no references to benefits/benefits realization/benefits management were found and none for 'measures/measurement'.	When does measurement occur? Not addressed Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Public sector	What types of measure – quantitative / qualitative are used? Not addressed
39. PMI White Paper - Using PMI Standards Framework to Improve U.S. Federal Government Capital Investment outcomes (March 2015))	Normative or descriptive - Normative Applied at which level - program Overview/Summary 1 reference to measurement – not related to Benefits.	When does measurement occur? Not addressed Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? US Federal Govt	What types of measure – quantitative / qualitative are used? Not addressed
40. Circular No. A-94 Revised The White House https://www.whitehouse.gov/omb/circulars_a094/ . This was issued in	Normative or descriptive - normative Applied at which level – projects and programs Overview/Summary Provides, “ <i>general guidance for conducting benefit-</i>	When does measurement occur? Focus on appraisal stage Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed	To whom is the guidance (project type, sector) directed? US Federal Govt	What types of measure – quantitative / qualitative are used? Focus on quantitative (mainly monetary but also

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
1992 but appears still to be current – it is on the White Office website.	<i>cost and cost-effectiveness analyses.</i> ” (Section1 – no page numbers) i.e. similar to HMT Green Book i.e. focus on using cost-benefit analysis to inform investment appraisal and decision-making – including guidance on social costs and benefits; measuring benefits using market prices and willingness to pay techniques.		Measurement post-project? Not addressed		non-monetary). Recommends assigning monetary values to benefits – “ <i>Although net present value is not always computable (and it does not usually reflect effects on income distribution), efforts to measure it can produce useful insights even when the monetary values of some benefits or costs cannot be determined. In these cases:</i> <i>A comprehensive enumeration of the different types of benefits and costs, monetized or not, can be helpful in identifying the full range of program effects.</i> <i>Quantifying benefits and costs is worthwhile, even when it is not feasible to assign monetary values; physical measurements may be possible and useful.</i> Other summary effectiveness measures can provide useful supplementary information to net present value, and analysts are encouraged to report them also. Examples include the number of injuries prevented per dollar of cost (both measured in present value terms) or a project's internal rate of return.” Section 5 Section 6b - Measuring Benefits and Costs. Focus on market prices and willingness to pay to measure/value benefits.
41. Government Performance and Results Modernization Act of 2010	Normative or descriptive - normative Applied at which level - programs Overview/Summary No specific mention of benefits or benefits management was noted – but such legislation prescribes a performance management regime	When does measurement occur? Not addressed Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project?	To whom is the guidance (project type, sector) directed? Federal Government	What types of measure – quantitative / qualitative are used? Refers to a balanced set of performance goals/indicators including, “ <i>as appropriate, customer service, efficiency, output, and outcome</i> ”

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	encompassing: setting goals; measuring results; and reporting progress. So may be considered as consistent with a planned approach to benefits realisation from projects and programs.		Not addressed		<i>indicators</i> " P9.
42. Government Performance and Results Act of 1993	Normative or descriptive - normative Applied at which level – government programs Overview/Summary No specific mention of benefits or benefits management was noted aside from 3 references to cost-benefit analysis – but such legislation prescribes a performance management regime encompassing: setting goals in measurable terms; measuring results; and reporting progress. So may be considered as consistent with a planned approach to benefits realisation from projects and programs.	When does measurement occur? Not addressed Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Federal Government	What types of measure – quantitative / qualitative are used? Requires – “Express such goals in an objective, quantifiable , and measurable form” & “establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity” Section 4.
43. Office of Management and Budget (OMB) 2016 (previous study used 2014 version), Circular No. A-11: Preparation, submission, and execution of the budget.	Normative or descriptive - normative Applied at which level - program Overview/Summary No specific mention of benefits or benefits management or measurement was noted aside from references to cost-benefit analysis. Appdx J Costs and Benefits. This section emphasizes that the asset should be justified primarily by benefit-cost analysis. It also refers to Circular A-94 – see above.	When does measurement occur? Not addressed Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Federal Government	What types of measure – quantitative / qualitative are used? Not addressed
44. Government Accountability Office (GAO) (2011). Information technology: Critical success factors underlying successful major acquisitions.	Normative or descriptive - descriptive Applied at which level – projects and programs Overview/Summary Lessons learned report.	When does measurement occur? Not addressed Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Federal Government	What types of measure – quantitative / qualitative are used? Not addressed
Canada					
45. Outcome Management as	Normative or descriptive – normative.	When does measurement occur?	Who measures the benefits?	To whom is the guidance (project type, sector)	What types of measure – quantitative /

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
<p>promoted by the Treasury Board Secretariat - http://www.tbs-sct.gc.ca/hgw-cgf/oversight-surveillance/itpm-itgp/pm-gp/index-eng.asp & presentation to the OECD E-government meeting 6.2.2006: 'Benefits Realisation: Government of Canada Experience'</p> <p>Note – no page references as quotes are from on-line document so section refs are shown.</p> <p>Note comprehensive guidance similar to New Zealand</p>	<p>Applied at which level – projects and programs</p> <p>Overview/Summary</p> <p>Outcome management extends traditional cost-benefit analysis by identifying hard and soft/intangible benefits and including methods to manage benefits realization.</p> <p><i>“an outcome involves an intentional change being imposed on the system (people, processes, technology), with a resulting end state that can be measured.”</i> Section 2.1. Note use of term Outcome rather than benefit to highlight both positive and negative outcomes/benefits.</p> <p><u>4 stage model:</u></p> <p>Stage 0: Launch Outcome Management</p> <p>Stage 1: Develop Outcome Realization Model</p> <p>Stage 2: Develop Outcome Realization Plan</p> <p>Stage 3: Monitor Delivery of Outcomes</p> <p>Stage 4: Realize and Optimize Outcomes.</p> <p>Outcomes are classified as (Appdx C):</p> <ul style="list-style-type: none"> Direct Quantitative – labour savings Direct Quantitative – other direct savings Indirect Qualitative <p>The Outcome Register (Appdx E) includes details of: metrics used; frequency; measurement method; cost of measurement; baseline; target; and responsibility</p>	<p>Across the 4 stage Outcome Management Process.</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Both – a Results Chain Model is used – activities lead to outputs which lead to intermediate outcomes which lead to ultimate outcomes. Section 2.1.</p> <p>Benefit: “Direct and indirect positive consequences resulting from an action. Includes both financial and non-financial information.” Appdx N</p> <p><i>Outcome Management includes: “identification of intermediate outcomes that serve as milestones or leading indicators towards attaining the outcomes and to permit tracking of progress towards the final outcomes”</i> Section 1.3</p> <p><i>“To achieve the end results of an initiative, it is crucial to identify and track intermediate outcomes that can be used as milestones along the road.”</i> Section 2.1</p> <p>Intermediate outcomes are “A capability delivered by a project or a business impact resulting from a group of projects within the initiative.” Appdx N</p>	<p>Specified in the Outcome Register and Outcome Realization Plan. Section 3.3. refers to outcome owner's who are <i>“responsible and accountable for achieving his or her target. In addition, there is often an additional accountability for reporting on the metric, to distinguish between the two activities and responsibilities.”</i></p> <p>Are measures added over the project? Emergent benefits?</p> <p>Section 3.5 recognises emergent benefits – <i>“These actions can be remedial or opportunistic, allowing the organization to take advantage of opportunities to realize additional or unanticipated outcomes.”</i></p> <p>Measurement post-project? <i>“The Outcomes Realization Plan indicates the expected timing when outcome target values or levels are to be reached. The outcomes monitoring and reporting process continues until all outcomes are realized and stable, particularly if the benefit pertains to a measurable performance level.”</i> Section 3.5</p>	<p>directed? Public Sector</p>	<p>qualitative are used?</p> <p>Both - Benefit: <i>“Direct and indirect positive consequences resulting from an action. Includes both financial and non-financial information.”</i> Appdx N</p> <p><i>“Financial outcomes can be measured in dollars and many can be fed into additional evaluative criteria used in cost-benefit analyses, such as Net Present Value (NPV), Present Value Ratio (PVR), Internal Rate of Return (IRR), and Return on Investment (ROI). Non-financial outcomes are measured in non-dollar terms, with examples such as reduced complaints, increased employee satisfaction, and increased throughput. It is possible to extrapolate financial benefits to some of these measures; however, this is not necessary in the Outcome Management process. What matters most in the process is whether or not an outcome measurement makes sense, and if it is possible to affect the outcome through an initiative.”</i> Section 2.1</p> <p>“Adopting both quantitative and qualitative measures for outcomes presents a broader view of expected value... Quantitative outcomes are measured in numeric terms; for example, dollars, hours, or turnover rates. Qualitative outcomes are measured in non-numeric terms, which are often monitored through in-depth interviews, direction observation, and/or written documentation.” Section 2.1</p> <p><i>“Outcome measures can be:</i></p> <ul style="list-style-type: none"> Binary – yes/no Quantitative – measured in numeric terms, such as dollars, hours, or turnover Qualitative – measured in non-numeric terms obtained through interviews, documentation, or direct observation”

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>for measurement etc.</p> <p>Measurement (metrics, responsibilities) also addressed in the Outcome Realisation Plan (Appdx I).</p> <p>Appendix J: Performance Metrics: Traps to Avoid – include:</p> <ul style="list-style-type: none"> Measures without Owners – measures should be agreed with the Outcome Owners. Mistrust in Qualitative Outcomes – “<i>Qualitative measures may be subject to more debate, as they are perceived as being less “solid” than quantitative measures. Soundness of the qualitative measures can be assessed according to four criteria:</i> <ul style="list-style-type: none"> <i>Credibility: establishing that the results are believable</i> <i>Transferability: the degree to which the results can be generalized or transferred to other contexts or settings</i> <i>Dependability: the degree to which the results are repeated or replicated</i> <i>Confirmability: the degree to which the results can be corroborated by others.</i> 				<p>Section 3.3</p> <p><i>“Quantitative measures can be fairly simple to identify and agree upon, while qualitative outcomes can have a more descriptive metric and be based more anecdotal evidence. Since an outcome can have more than one measure, anecdotal metrics can be used in conjunction with quantitative metrics to provide a more complete context around the realized outcome.”</i> Section 3.3</p> <p>Presentation to OECD 6.2.2006 included 10 lessons learned, including: “<i>Outcome Management provides clear definition of soft benefits.</i>”</p>
Australia					
<p>46. Australian Federal Government</p> <p>Assurance Review Process – lessons learned: Benefits Realisation Management, July 2012</p>	<p>Normative or descriptive - normative</p> <p>Applied at which level – projects and programs</p> <p>Overview/Summary Lessons learned report arising from the Australian Govt’s Assurance Review Process</p>	<p>When does measurement occur? Lessons learned – benefits realisation is maximised where: p1 “<i>Benefits are measured routinely and are part of normal planning and reporting functions—not regarded as an optional and stand alone exercise;</i></p>	<p>Who measures the benefits? BMS template p10 – “<i>The measurement approach that the XXX Project/Program intends to use to measure its benefits should be clearly explained in the Benefit</i></p>	<p>To whom is the guidance (project type, sector) directed? Federal Government</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>P4 – “<i>Measurement of benefits may not always be easy, as some benefits cannot be easily quantified. However, there are ways of taking intangibles and turning them into measurable</i></p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
And Benefits Management Strategy template	<p>The Benefits Management Strategy template covers:</p> <ul style="list-style-type: none"> "When and how reviews and assessments concerned with measuring benefit realisation will be carried out, and who is to be involved; Measurement methods and steps that will be used to monitor and assess the realisation of benefits; <p><i>The tool(s), system(s) and source(s) of information that may be used to enable benefit measurement" p4</i></p>	<p><i>"The Benefits Realisation Plan should clearly articulate...the timeframe for measuring progress" p4</i></p> <p>BMS template p10 – "To be effective, measurements are to be made pre and post the transition"</p> <p>BMS P12 – at end of tranche.</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Refers to: Interim benefits (p4 & 7)</p> <p><i>"A Benefit Map illustrates the relationship between outputs produced from programs, the business changes required to take on the new capability and the achieved outcomes, the intermediate and end benefits anticipated to be realised and lastly, the agency strategic objectives achieved."</i> p6</p>	<p><i>Profiles"</i></p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? BMS template p10, "In some cases, where agreed, "post measurements" may occur after the XXX project/program has closed. This recognises that some benefits may take years to fully realise. Where this happens, the XXX Project/Program is to ensure that the responsibilities for measurement are transferred to an appropriate (Agency) corporate area as part of its project/program closure activities."</p>		<p><i>benefits, for example: client satisfaction can be mapped by taking surveys at regular intervals."</i></p> <p>BMS P11 – "Also remember that just because a benefit may be difficult to measure, it should nonetheless be done. Proxy measures (i.e. indirect measures) and even quantitative (sic) measures are better than none at all."</p>
<p>47. Demand & Value Assessment Methodology, May 2004 - developed for the Australian Government Information Management Office (AGIMO)</p> <p>Of historical interest as it was derived from DMR (Fujitsu)/J Thorp's work (see practitioner survey), but not current - replaced by the 'ICT</p>	<p>Normative or descriptive - The guidance is normative although based on case studies.</p> <p>Applied at which level - e-gov project/program level.</p> <p>Overview/Summary Similar to US VMM – both developed around the same time and sought to address the issue that traditional ROI measures did not fully account for the value from e-government I.e. non-financial benefits and broader social benefits needed to be recognized.</p> <p>The D&VAM encompasses five forms of value:</p> <p>1. Agency benefits/value p94</p>	<p>When does measurement occur? Methodology focuses on the investment decision.</p> <p>Focus on outcome and/or intermediate benefits? Not distinguished</p>	<p>Who measures the benefits? Emphasis on user involvement in identifying benefits, rating/scoring them and assessment of performance.</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Written for business managers in govt responsible for investigating, planning and implementing on-line programs.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Note spreadsheet to capture demand was provided. The 5 forms of value encompass financial and non-financial benefits.</p> <p>Measurement is based on ratings out of 5 (see below) to determine comparative value as follows:</p> <ul style="list-style-type: none"> <u>Social Value</u> – p81-82, 3 components: Social Value, User Financial Value and Governance

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
<i>Business Case Guide and Tools'</i> – see entry below.	2. Strategic value p95 3. Consumer financial benefits p83 4. Social benefits p81 5. Governance value – 3 indicators, p84-85: increased community participation in democratic processes; increased transparency of government processes; and increased accountability. Each indicator is then scored in terms of reach and consequence – see last column.				<p>Value – benefits to each stakeholder group are assessed in terms of reach Reach [scored between 1 (less than 5%) and 5 (greater than 50%)] and consequence (impact on the target group) scored between 1 (minimal impact) and 5 (significant impact)</p> <ul style="list-style-type: none"> <u>Financial benefits</u> (increased revenue, cost reductions and cost avoidance) – are used in ROI calculations. <u>Agency (internal) Value</u> – reflecting financial benefits and 'Level of contribution' & 'Degree of importance' (each assessed on a 5 point scale) <u>Strategic value</u> i.e. scale of strategic alignment of initiatives with departmental/agency and WOG strategic objectives – assessed in terms of 'Degree of Contribution' (on a 5 point scale). <p>i.e. more a comparative Investment Appraisal tool than a benefits realisation assessment methodology.</p>
48. NOIE (2003) E- Government Benefits Study, April 2003. Joint study by AGIMO and DMR consulting (Fujitsu)	<p>Normative or descriptive – Descriptive: The guidance describes the benefits of e-gov that were identified and a case studies document was also published.</p> <p>Applied at which level – e-gov program level.</p> <p>Overview/Summary</p> <p>Forerunner of the Demand & Value Assessment Methodology outlined above.</p> <p>Benefits were identified in 4 categories (p13):</p> <p>1. Agency Value/benefits - cost reductions; increased revenues; improved price to output</p>	<p>When does measurement occur? Not specifically addressed</p> <p>Focus on outcome and/or intermediate benefits? Not distinguished</p>	<p>Who measures the benefits? Not specifically addressed</p> <p>Are measures added over the project? Emergent benefits? Not specifically addressed</p> <p>Measurement post-project? Not specifically addressed</p>	<p>To whom is the guidance (project type, sector) directed? e-Gov initiatives – particularly at the appraisal stage</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Quantitative (based on objective and subjective data) measures for each benefit category were as follows (p13):</p> <ul style="list-style-type: none"> Agency Value – Benefit:Cost ratio Consumer financial value – net user benefit:cost ratio Social - reach (% of stakeholders affected) x impact

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>performance (efficiency); improved effectiveness (changing the demand profile for outputs); and improved service or cycle times.</p> <p>2. Consumer Financial Value/benefits - time savings for users; cost savings delivered to citizens; cost savings delivered to businesses; cost savings delivered to intermediaries; revenue generation opportunities for intermediaries, citizens or business; and financial benefits obtained from leveraging improvements in government service levels, integration and effectiveness.</p> <p>3. Social Economic Value/social benefits - consist of contributions made by government online services to the quality of life of citizens, businesses and intermediaries that are not easily measured in financial terms; triggers to take action which would not otherwise be made as a result of information that is easier to find and use; information to help in decision making by people, community groups or businesses; and integration of public sector and private sector delivery to increase new business or work opportunities</p> <p>4. Governance worth - Contribution to broader government objectives - greater take-up of information and communications technology in the information economy including macro-level improvements in economic, social and technological development; improvements in information availability and more open government; and improvements that support a more democratic government.</p>				<ul style="list-style-type: none"> WOG – reach x impact
49. ICT Business Case Guide	<p>Normative or descriptive - normative</p> <p>Applied at which level – projects and programs</p> <p>Overview/Summary Guide to Business Case development for ICT projects. p25 includes reference to a Benefits Realisation Plan which includes, “<i>how benefits will be measured</i>”</p>	<p>When does measurement occur? P29 “<i>You can also use costing or measurement data from comparable projects or similar entities.</i>”</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Federal Government ICT projects and programs</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Includes the following as part of benefits categorisation for ICT projects: p44</p> <ul style="list-style-type: none"> <i>Qualitative – Refers to non-financial benefits that can be measured including strategic and policy results, governance value and</i>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<i>social/service delivery value."</i>
50. Finance Circular 2006/01 - Archived guidance on cost- benefit analysis and alternative evaluation methodologies. Includes Introduction Guide and Handbook to Cost- benefit analysis	<p>Normative or descriptive - normative</p> <p>Applied at which level – projects and programs</p> <p>Overview/Summary Focus is on - Cost-benefit analysis (CBA) “<i>CBA attempts to measure the value of all costs and benefits...</i>” p5.</p> <p>Also includes guidance on cost-effectiveness analysis.</p> <p>i.e. similar to HMT Green Book in content and advice.</p>	<p>When does measurement occur? Pre and post investment.</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Federal Government</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Favours quantitative valuation in monetary terms – p11: “<i>In each of these cases, quantification of the effects in money terms is an important part of the evaluation. However, projects or proposals frequently offer benefits that have no market value and are difficult to quantify. For example, the benefits of a health programme that is designed to improve the quality of human life lend themselves more readily to a qualitative rather than quantitative assessment. In this instance, a cost-effectiveness analysis based on ‘number of lives saved per dollar spent’ could be employed (see Section C). However, there are various techniques for making quantitative estimates, which allow more proposals to be appraised using CBA. The two main general approaches are known as ‘revealed preference’ and ‘stated preference’ methods.</i>”</p>
51. New South Wales Treasury (2008) Guidelines for Capital Business Cases Policy & Guidelines Paper	<p>Normative or descriptive - normative</p> <p>Applied at which level – project and programs</p> <p>Overview/Summary Guidelines for Capital Business Cases</p>	<p>When does measurement occur? Focus on appraisal and evaluation – “<i>identify performance measure or service level before and after the service change</i>” (p38). Note – “<i>Where anticipated benefits include</i></p>	<p>Who measures the benefits? “<i>Within the established governance arrangements, it is the responsibility of senior management to ensure the benefits can be measured</i>” p27</p>	<p>To whom is the guidance (project type, sector) directed? Public sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Objectives should be SMART p15 (where M =</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
		<p><i>longer term savings for government or other benefits achieved through prevention and early intervention strategies, the benefits realisation strategy should include measures to evaluate the effectiveness of these strategies, and realise these savings</i>" p27</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Are measures added over the project? Emergent benefits? Note focus on ensuring anticipated benefits are realised - <i>"Benefits realisation is an established practice of ensuring that projects or programs produce the anticipated benefits claimed in the project's economic appraisal".</i> p26</p> <p>Measurement post-project? Not addressed</p>		<p>measurable).</p> <p>P34 – <i>"Objectives (Section 4.1) – What objectives will the proposal be measured and evaluated against?</i></p> <ul style="list-style-type: none"> <i>document the full range of objectives to measure and evaluate the options</i> <i>the objectives must contribute to the performance of agency service delivery</i> <i>objectives must be expressed in results logic or be specific, measurable, achievable, relevant and timely"</i> <p>Page 38 – <i>"Identify the person responsible for implementation and what will be managed and measured during implementation. This is to ensure that the objectives and/or benefits will be achieved and to track whether the project is being implemented in a way to give assurance that the benefits will be achieved. This will be a set of measurable KPIs that have a results logic to the post-implementation benefits".</i></p>
<p>52. New South Wales</p> <p>Benefits Realisation Management Framework</p> <p>Note – NSW Government are currently developing a Measures Dictionary for the NSW Government Digital Strategy (correspondence with SJ</p>	<p>Normative or descriptive - normative</p> <p>Applied at which level – project and programs</p> <p>Overview/Summary</p> <p>Benefits Realisation Management Guidance and templates - 5 documents are published: Principles, Process, Guidelines, Tailoring and Glossary.</p> <p>Principle 10 <i>"Benefits must be measurable."</i> (Principles document p4).</p>	<p>When does measurement occur?</p> <p>Principle 3 (p4 Principles document) – <i>"Benefits realisation is an end-to-end process during the full lifecycle of the investment. Benefit measurement, reporting and evaluation will occur during and after the project / program has delivered its capabilities and change."</i></p> <p>P9 – <i>"It is critical that baseline measures and target values are</i></p>	<p>Who measures the benefits?</p> <p><i>"The business / benefits owners in consultation with project / program team need to reconfirm what benefits to measure."</i> p10</p> <p>The name of the person responsible for measurement and the measures to be used are recorded on the Benefit Profile.</p> <p>Are measures added over the</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Public sector</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Both – Principles document p8:</p> <p><i>"Financial benefits are readily quantifiable. Examples are cost savings or increased revenues.</i></p> <p><i>Non-financial benefits are also readily quantifiable and will often be related to the measurable effect</i></p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
26.6.17 refers).	Benefit – “ <i>The measurable improvement...</i> ” (Principles document p4).	<i>established.”</i> Focus on outcome and/or intermediate benefits? Principles document page 8 – “ <i>Intermediate outcomes are often non-financial indicators of benefits realisation</i> ” P9 – “ <i>Unless intermediate outcomes and their associated benefits are progressively tracked and reported then there is no opportunity for management to implement corrective measures (if need be).</i> ”	project? Emergent benefits? Benefits Realization Management – “ <i>The process of organising and managing so that potential benefits arising from investment in change, are actually achieved.</i> ” Glossary, p4 Measurement post-project? Principles p6 – “ <i>In order for benefits to be tracked after a program has ended there needs to be clear identification of the owners of benefits within the business, and effective handover of benefits measurement and reporting to the business owner.</i> ”		<i>on the business key performance indicators.</i> <i>For service-oriented benefits, the level of client satisfaction could be measured via the use of surveys at regular intervals.</i> <i>Non-financial benefits are not always seen to be easily quantifiable; however, there can often be ways of turning them into measurable benefits. Workshopping with relevant subject matter experts can often assist in identification of appropriate measures.</i> <i>Care should be taken if trying to give financial values to non-financial benefits as this can be misleading if the value is used as part of an investment justification, but will not be able to be realised and measured.”</i>
53. Queensland Project assurance Framework – 1. Cost Benefit Analysis July 2015 https://www.treasury.qld.gov.au/publications-resources/project-assessment-framework/paf-cost-benefit-analysis.pdf	Normative or descriptive - normative Applied at which level – project and program Overview/Summary Guidance on cost-benefit analysis for investment appraisal purposes. Also includes cost-effectiveness analysis and summary guidance on including financial, social and environmental costs and benefits. P12 i.e. “ <i>Cost-benefit analysis is a method used to make decisions about alternative courses of action based on the net welfare gain to the community as measured by criteria such as net present economic value (NPEV) and benefit cost ratio (BCR). Benefits and costs are ‘social’ in that they are measured irrespective of how they are distributed and they are not limited to actual market transactions. Cost-benefit analysis is particularly relevant to public sector decision making where the costs and benefits of a project are often not reflected in market transactions.</i> ”	When does measurement occur? Focus on pre-investment Focus on outcome and/or intermediate benefits? Not addressed	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? State Government	What types of measure – quantitative / qualitative are used? Both – but with the assumption that qualitative benefits will still be included in the CBA via the use of revealed and stated preference techniques in estimating willingness to pay and accept.

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
54. Project Assurance Framework – 2. Benefits Realisation, July 2015	<p>Normative or descriptive - normative</p> <p>Applied at which level – project and program</p> <p>Overview/Summary Treasury guidance on conducting <u>assessment reviews</u> of benefits realisation i.e. equivalent to the OGC Gateway 5.</p> <p>Benefits Management Plan – p2 “<i>providing an overview and summation of the profiled benefits and how they would be measured and supported. Over the lifecycle of the project, this benefits management plan should have been refined and refreshed to reflect continuing change management activities</i>”</p> <p>Benefit profiles – p2 “<i>Supporting the benefits management plan are benefit profiles outlining all aspects of the benefit, including responsibility and measurement.</i>”</p>	<p>When does measurement occur? Focus of this guidance is on post-project evaluation – p1 “<i>This document provides guidance regarding the range of issues to consider in assessing the benefits realised at the operational stage of a project. The purpose of the Benefits realisation post-project stage is to confirm that the benefits established and defined in the business case are being achieved and that the operational service or asset is running smoothly. This stage assesses the contribution of business change resulting from the project investment in achieving the outcome sought by the agency and the Queensland Government. It is also used to determine lessons learned so that improvements can be made not just for the current project but for future projects.</i>”</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? P3 – “<i>The objective of periodic reviews is to determine if planned or unplanned benefits continue to be achieved</i>”</p> <p>Measurement post-project? Process includes assessing – p2 “<i>a succession plan to handover any benefits management plans, supporting benefit profiles and reporting responsibilities to the appropriate business owner</i>”</p>	<p>To whom is the guidance (project type, sector) directed? State Government</p>	<p>What types of measure – quantitative / qualitative are used? Not addressed</p>
<p>55. New Source</p> <p>Benefits Management Framework, Building Queensland</p> <p>Release 2 Dec 2016</p> <p>http://buildingqueensland.qld.gov.au/wp-content/uploads/2016/12/Benefits-Management-</p>	<p>Normative or descriptive - normative</p> <p>Applied at which level – project and program</p> <p>Overview/Summary Building Queensland was established under the Building Queensland Act 2015 to provide independent advice to the Queensland Government about infrastructure. This document forms part of the Building Queensland Business Case Development Framework. It is consistent with other referenced guidance: ILM/IMS (Victoria); NSW Benefits Management Framework; and Queensland Project Assurance Framework – see separate entries for each of these.</p>	<p>When does measurement occur? Prior to investment and post-project.</p> <p>P5 “<i>Baselining the existing situation is essential so that benefits realisation can be measured and reported.</i>”</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? State Government</p>	<p>What types of measure – quantitative / qualitative are used? Benefits Management principles include – “<i>Benefits must be aligned to strategic goals and performance measures (i.e. the agency, State or Federal government).</i>” p4</p> <p>P8 “<i>An important aspect of benefits identification and analysis is the establishment and agreement of the metrics for measuring the benefits. Establishing a baseline and target measures enables the extent of benefits realisation to be measured. Multiple measures can be used for a single benefit. Where there is alignment to</i></p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
Framework-1.pdf					<p><i>strategic goals and objectives, measures should also align with the key performance indicators (KPIs) for those strategic goals. A firm concept of how benefits are to be measured may not be able to be fully articulated until the DBC stage. Identification of benefits throughout the investment lifecycle must have consideration for the cost and complexity of measuring the benefits realisation to ensure measurement is practical."</i></p> <p>P11 <i>"Benefits and the measures should be integrated with an agency's performance management systems."</i></p> <p>Benefit measures are recorded in the Benefit Profile and Benefits Register.</p>
56. Western Australia Program Evaluation Guide, July 2015	Normative or descriptive - normative Applied at which level – program Overview/Summary Guidance on program evaluation with heavy focus on SMART measures.	When does measurement occur? Refers to periodic evaluation p2. Focus on outcome and/or intermediate benefits? Uses a framework based on Inputs, Outputs and Results (P.27)	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? State Government	What types of measure – quantitative / qualitative are used? P4 – SMART – where measurable means p7 – <i>"The need for concrete criteria for measuring progress and to know when it has been achieved."</i> Guidance on qualitative analysis encompasses: (p38-39) <ul style="list-style-type: none"> Pareto Analysis Content Analysis; Thematic Coding; and Most Significant Change.
57. Tasmania Government Project Management Guidelines Version 7.0 (July 2011) – issued by Department of Premier	Normative or descriptive - normative Applied at which level – project, program and portfolio Overview/Summary Comprehensive (194 pages) Government guidance	When does measurement occur? Across the project life-cycle & P12 <i>"appropriate methods for measuring and reporting the progress toward achieving these benefits, are documented in the Outcome</i>	Who measures the benefits? Measures should be agreed with benefit owners. p29 Are measures added over the project? Emergent benefits? Not addressed	To whom is the guidance (project type, sector) directed? State Government	What types of measure – quantitative / qualitative are used? Both – <i>"specified Project Outcomes should be plausibly connected to utilisation of the Project Outputs and if possible defined in measurable terms, quantitatively or qualitatively (e.g.</i>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
and Cabinet		<i>Realisation Plan.</i> Focus on outcome and/or intermediate benefits? Not addressed	Measurement post-project? <i>"Closing a project involves the handover of the Project Outputs to the Business Owner(s) for utilisation by the project customers, in order to realise the Project Outcomes. The strategies to support the change management process, and appropriate methods for measuring and reporting the progress toward achieving these benefits, are documented in the Outcome Realisation Plan."</i> p12		<i>improved, reduced, increased, maintained).</i> " p29 Ref to SMART – P29 P64 – <i>"Each Project Outcome should have one specific Target Outcome as its quantifiable measure that can be used as evidence that the Project Objective has been achieved. Larger projects will have more but it is not recommended to target more than about five for measurement."</i>
58. Victoria Investment Management Standard version 5	Normative or descriptive - normative Applied at which level – project and program Overview/Summary Includes benefits management templates (Benefits management plan, Benefit Map and the Investment Logic Map (developed from the Cranfield Benefits Management methodology – see academic source list.) IMS is based on 7 practices – 1 of which is <i>"monitor and measure the delivery of benefits"</i> p1 Benefit: <i>"The value that the investment will provide to the organisation or its customers. Benefits are normally a positive consequence of responding to the identified driver. Each claimed benefit must be supported by key performance indicators that demonstrate the investment's specific contribution to the identified benefit."</i> p34 Benefit Map: <i>"A one-page document that depicts the logical connection of an investment's benefits to the KPIs, measures and targets."</i> p34 Benefit management plan: <i>"A short document that specifies the benefits an investment will need to</i>	When does measurement occur? P19 – The 'monitor and measure the delivery of benefits' practice – <i>"Provides a continuous focus on benefits during the implementation of an investment and determines whether the expected benefits were delivered. "</i> Focus on outcome and/or intermediate benefits? Benefit Management Plan records 'interim targets' – <i>"Are there interim targets to ensure things are on track (value, date mm/yyyy)?"</i>	Who measures the benefits? Recorded on the Benefit Management Plan. Measures are developed with business stakeholders - <i>"A benefit definition workshop is used to identify the KPIs, measures and targets that must be met to mitigate the effect of the problem. This workshop produces the first iteration of the benefit management plan that, like the Investment Logic Map, evolves as the investment is shaped."</i> p6 Benefit specialist: <i>"A person who has expertise in the definition, management and evaluation of the benefits of an investment. People responsible for program evaluation have this expertise."</i> p34 Benefit data provider: <i>"A person who has been identified as the custodian of data that will be required as evidence that a KPI</i>	To whom is the guidance (project type, sector) directed? State Government	What types of measure – quantitative / qualitative are used? Not really addressed except: Benefit Map shows: Benefit, KPIs, Measures, Baseline and Target. P19 <i>"Once funded, with the inevitable challenges and stresses that occur as the investment is implemented, the focus on benefits is often lost. This is exacerbated by the difficulty in measuring and tracking benefits and evaluating the real effectiveness of an investment."</i> Key performance indicator (KPI): <i>"A measure that has been selected to demonstrate that a benefit expected from an investment has been delivered. The KPI must be directly attributable to the investment."</i> p35 Page 33 advises, <i>"Any KPI selected must be meaningful, attributable and measurable."</i>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p><i>deliver to successfully address an identified problem. It includes the measures to be used as evidence that the benefits have been delivered. These measures are initially used to select the most suitable response to the problem. The BMP also defines the dates the benefits are expected to be delivered, who is responsible for their delivery and how they will be reported.</i>" p13 – shows:</p> <ul style="list-style-type: none"> baseline, target, interim target, source; reporting – forum (where reported), start date, frequency, end date responsibility. <p><i>"Outcome management plan: A document that specifies the benefits that an organisation is expected to deliver and the measures, baseline and target dates and values that will provide the evidence the benefits have been delivered. It also specifies the forum for reporting progress, the frequency of reporting and responsibility for reporting."</i> p36</p>		<p><i>has been met."</i> p34</p> <p>Are measures added over the project? Emergent benefits? Not addressed.</p> <p>Measurement post-project? Not addressed.</p>		
New Zealand					
<p>'59. Managing Benefits from Projects and Programmes: Guide for Practitioners' (April 2016) – managed by The Treasury.</p> <p>Other materials in the on-line Benefits Library include: document templates (benefit profile & realisation plan) and guides to benefits measurement in Education and from Australia.</p> <p>There is also a PowerPoint</p>	<p>Normative or descriptive – normative.</p> <p>Applied at which level – primarily projects, programs with some guidance applying for portfolios.</p> <p>Overview/Summary Treasury also have a short PowerPoint presentation on 'what does good look like' – includes:</p> <ul style="list-style-type: none"> Benefits are "a measurable gain from an investment which is perceived to be advantageous by a stakeholder" (p8 of guidance) Measures should be SMAART - specific, measurable, achievable, attributable, relevant and time-bound. Each benefit must have one but may have more than one measure – shown on the Benefit Profile (guidance p15) <p>Guidance p8 – "Measures are required to</p>	<p>When does measurement occur?</p> <p>PowerPoint presentation/Guidance: measurement occurs across the BM life cycle and are refined as we progress through the cycle:</p> <p>Identification – determine how they will be measured. Guidance p 19 – "Importantly, the benefits should be agreed by stakeholders and supported by measures that provide collective and substantiated evidence for achieving each benefit." & "The importance of alignment of measures with Strategic Objectives is shown in the figure below." P20 – "Benefit Measures include the data used as evidence to confirm that the benefits</p>	<p>Who measures the benefits?</p> <p>PowerPoint presentation: Benefit profile is prepared by the benefits analyst (equivalent to MSP BCM) Benefit Owner is accountable.</p> <p>Guidance p45 Benefit Owner – "Collects and reports data to evidence benefits realisation"</p> <p>Business Change Manager "The person responsible for benefits management from identification to realisation" p45</p> <p>Guidance p34 – "Benefits Realisation Plan A short</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Public sector project and program managers and staff</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Both – and the terms are defined in Guidance p 37</p> <p>"Qualitative (intangible) categorisation Benefits expressed in descriptive terms e.g., satisfaction rating.</p> <p>Quantifiable (tangible) categorisation Measures expressed in numerical terms e.g., hours saved, income generated etc."</p> <p>Guidance p19 – "This guidance recommends categorisation is used and should be aligned to the agencies own schema (e.g., Monetary / Non-monetary, Quantifiable / Non-quantifiable,</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
<p>presentation on measurement that was supplied to SJ for this review.</p> <p>Note the NZ government are planning on updating benefits guidance late in 2017, "and develop a practitioner course on all the steps in measuring benefits." (e-mail 26.6.17 to SJ refers)</p>	<p><i>demonstrate that a benefit has been delivered."</i></p> <p>Guidance p 14 & 41– "Scrutinise benefit measures to demonstrate they can be achieved and are relevant. At least one measure per benefit is necessary."</p> <p>Rationale All assumptions about how the benefits will be realised should be analysed and proven to ensure the benefits are achievable and can be measured throughout their life. It also confirms that the benefit can be attributed to the relevant project or programme and is aligned to the strategy.</p> <p>Implications Poorly defined benefit measures are difficult to measure and may collect incorrect or misleading information. A lack of robust measures may contribute to failing to achieve the planned potential benefits as delivery progress cannot be accurately monitored. Benefits that are not aligned to the strategy are wasteful of scarce resources."</p> <p>Guidance p42 – "Baseline measures should be taken for all tangible benefits at the earliest opportunity. The baseline provides an independent and credible position with assumptions to both set targets and demonstrate that benefits have been delivered as proposed."</p> <p>Templates for a Benefit Profile and BRP are provided.</p> <p>The 'Benefit Library' also includes:</p> <ul style="list-style-type: none"> a 3 page paper entitled 'Benefits Measures' from the 'benefitsinstitute' (Australian consultants) – lists benefit types, measures and KPIs e.g. <ul style="list-style-type: none"> Benefit - Staff satisfaction Measure - Survey question responses and tracking over time; staff turnover KPI - % of responses; change in survey ratings; % change in workforce placements. 	<p>are achievable (Note: Once measures are identified if a baseline measure is not available and is required, the process to establish the baseline should be incorporated into the Benefits Realisation Plan.) Measures allow progress towards strategic objectives to be assessed as the benefits are realised and help to establish a sense of 'magnitude'. Measures also help to inform the initiative's alignment with, and level of contribution towards, strategic objectives."</p> <p>Analysis – prove they can be measured; baseline data. Guidance p27 – "After the analysis stage is completed, measures should be fully formed and understood. They can be tested for sensitivity and risks pertaining to each measure should be understood, with mitigation plans in place. It is important to ensure that the measures remain appropriate to support the benefit and are supported by the analysis."</p> <p>Planning – review benefit profiles and realisation plan and consider 'booking' benefit in financial plans</p> <p>Realisation & Reporting – monitor and report; identify emerging benefits and consider if they should be pursued.</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>Not specified</p>	<p>document that defines the pre-requisites for delivering each expected benefit, how the delivery of each benefit will be measured, and who will be responsible for measuring and realising each benefit."</p> <p>Are measures added over the project? Emergent benefits?</p> <p>PowerPoint presentation: Realisation & Reporting stage includes "identify emerging benefits and consider if they should be pursued."</p> <p>Guidance p15 also refers to identifying 'emerging' or 'new potential' benefits across the BM lifecycle.</p> <p>Guidance p 31 – "If sufficient information is known a new benefits profile may be created."</p> <p>Measurement post-project?</p> <p>PowerPoint presentation: BCM is accountable following the programme.</p> <p>Guidance p28 "Tracking of benefits...continues after the project has completed to the timeframe indicated in the Benefits Realisation Plan."</p>		<p>Qualitative / Quantitative, beneficiary, strategic alignment)."</p> <p>PowerPoint presentation: "Business cases generally provide the benefits in monetary terms. But, some of the benefits may not be suitable to measure in monetary terms. However, they can be measured e.g.</p> <ul style="list-style-type: none"> Staff satisfaction: % improvement in customer satisfaction Regulatory compliance: Improved compliance rating over time Security breaches: Count of the reduction in volume of breaches over time Risk reduction: Reduction of the organisation's risk exposure score over time Yes / no: sometimes it can be this simple!" <p>Guidance p9 "Benefits should not be limited to financial benefits. Although many benefits can be quantified financially, there are others where it is difficult, undesirable, or insensitive to attribute a financial value. These benefits are called non-monetary." & "All benefits, including benefits that are unable to be expressed in monetary terms, are analysed in the Economic case (using assessment techniques such as cost-benefit and multi-criteria decision analyses)."</p> <p>Guidance p24 – "Often non-monetary benefits can be monetised using CBA techniques such as those in the CBA guidance. While this is an excellent technique for being able to compare projects across varying outcomes to aid decision makers, this monetised outcome should not be used for benefit realisation purposes as there is usually no associated cash flow impact." – "A road known as a black spot for injury and fatal road accidents requires visibility, cornering and evenness of the road issues addressed. For prioritisation/assessment purposes, a monetary</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<p><i>value is assigned for a reduction in accidents, injuries and fatalities. For benefit purposes, these projects shouldn't measure realisation against a monetary figure. Realisation instead should be measured against a reduced accident rate, reduced injuries, reduced fatalities, and decreased emergency call-outs; being all non-monetary measures that have a secondary monetary impact."</i></p> <p><i>P25 – "the key to identifying the appropriate non-monetary metric is to ask; "What is the change the project will initiate, and how will we observe and measure this change?"</i></p> <p><i>P25 "As with all benefits, whether monetary or non-monetary, there are limits as to what can be measured. It is not always cost effective or worthwhile to track every benefit of a project. If monitoring a benefit requires the creation of a recording system that out- weighs the benefit expected, then the project needs to be transparent regarding the inability to measure rather than persevere with raising a benefit expectation for a benefit it will ultimately never monitor. Simple proxies are useful."</i></p>
60. Cab circular CO(15)5 – Investment Management and Asset Performance in the State Services	<p>Normative or descriptive – normative</p> <p>Applied at which level – project & program</p> <p>Overview/Summary</p> <p>Cabinet Office circular that defines expectations regarding the identification and reporting of benefits realisation to the centre.</p>	<p>When does measurement occur? Focus on pre-investment and post-implementation although measurement is not addressed.</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p> <p>Measurement post-project? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Government Departments and Agencies</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not addressed</p>
61. Better Business Cases - Guidance on Using the Five Case Model: An Overview. Feb 2014	<p>Normative or descriptive – normative</p> <p>Applied at which level – project & program</p> <p>Overview/Summary</p> <p>Guidance issued as part of the BBC initiative -</p>	<p>When does measurement occur? Not addressed</p> <p>Focus on outcome and/or intermediate benefits? Not addressed</p>	<p>Who measures the benefits? Not addressed</p> <p>Are measures added over the project? Emergent benefits? Not addressed</p>	<p>To whom is the guidance (project type, sector) directed? Government Departments and Agencies</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Not addressed</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	http://www.treasury.govt.nz/statesector/investmentmanagement/plan/bbc . <i>"The New Zealand version of the Better Business Case guidance is based on international guidance available here http://gov.wales/funding/wiipindex/5cmodel/?lang=en."</i> - see entry above under UK heading. This document does not address benefits measurement.		Measurement post-project? Not addressed		
Additional Note: NZ Treasury has issued: 1. Guidance on social cost benefit analysis including monetary values for a variety of impacts: <i>"To help compare different options in New Zealand, the Treasury has developed a CBA tool called CBAX. CBAX is a spreadsheet model that contains a common database to help agencies monetise impacts and do return on investment analysis. CBAX contains a database of New Zealand specific publicly available data that organisations can use to value impacts. An impact value provides a numerical value in relation to one or more impacts of an initiative. In some situations a value may be a cost, in others it could be a benefit or a saving. Examples include the costs of an emergency department visit, the cost of the Jobseeker Support benefit and increased income for individuals. The values are adjusted to reflect a common time period."</i> 2. The Government Outcomes Catalogue Tool which includes measures for a variety of social outcomes - <i>"The Treasury and Superu have developed a catalogue of the social outcomes for government priority programmes. The catalogue maps government priorities, outcomes, and proposed or actual measures (where available) for a range of social sector programmes. It also lists how the data is collected, when and by whom. This catalogue is extremely helpful when developing the benefits for new social investments"</i>					
Germany					
62. Wibe framework http://wibe-tco.com - claims to be <i>"the recommended official framework for the German Public Administration"</i> and to be widely used at federal, state and municipal levels in Germany.	Normative or descriptive - normative Applied at which level – project and program Overview/Summary Economic efficiency assessment model (i.e. an extension of CBA) - A multi-criteria framework for investment appraisal of ICT projects.	When does measurement occur? Model focuses on pre-investment appraisal but can also be applied to post-investment evaluation. Focus on outcome and/or intermediate benefits? Encompasses quantitative and qualitative measures of economic efficiency.	Who measures the benefits? Not addressed Are measures added over the project? Emergent benefits? Not addressed Measurement post-project? Not addressed	To whom is the guidance (project type, sector) directed? Public sector	What types of measure – quantitative / qualitative are used? Encompasses assessment of monetary (quantitative) and non-monetary (qualitative) impacts as follows: <ul style="list-style-type: none"> Monetary economic efficiency [WiBe KN] – development and operating costs and benefits expressed in NPV terms. Extended economic efficiency – non-monetary factors including: <ul style="list-style-type: none"> Urgency of the measure (e.g. replacement of the existing system) – [WiBe D]. Assessed using 11 weighted criteria, including the stability and flexibility of the current system and compliance with the law. Qualitative strategic importance (the

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<p>benefits to be realized by the proposed new system) – [WiBe Q]. Assessed using 13 weighted criteria, including impacts on strategy, task fulfilment, staff and job performance.</p> <p>Economic efficiency from an external point of view focusing on the benefits to other institutions, companies and to the user/citizen – [WiBe E]. Assessed using 11 weighted criteria, including user friendliness and any direct economic gain to the user.</p>
Cross-jurisdictional government reports					
63 Organisation for Economic Co-operation and Development (2006) <i>E-Government Project, Benefits Realisation Management</i>	<p>Normative or descriptive - Descriptive inter-country study (US, Canada, Korea, Europe, UK etc)</p> <p>Applied at which level – eGov initiatives</p> <p>Overview/Summary</p> <p>Study addresses:</p> <p>1. How initiatives (projects and programs) are appraised by adapting cost-benefit analysis methodologies to egov – including what indicators are used in assessing e-gov initiatives?</p> <p>2. How countries approach ensuring projected benefits are realised by BRM and what measures are used.</p>	<p>When does measurement occur? Focus on investment appraisal and use of BRM. Report refers to (mainly UK and Canada) – “<i>Active use of measurement and evaluation as a management tool.</i>” p38</p> <p>Focus on outcome and/or intermediate benefits? Not distinguished</p>	<p>Who measures the benefits? The ‘who’ is not addressed specifically.</p> <p>Are measures added over the project? Emergent benefits? The conclusions of the Feb 2006 OCED meeting in Paris included:</p> <p>“<i>Take an active approach to benefits management and realisation: benefits actually realised are often different from those forecast in original business case.</i>” p37</p> <p>Measurement post-project? Not specifically addressed</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>Directed at IT and program staff engaged in eGov initiatives.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Both qualitative and quantitative measures are identified. Benefits were categorised into the following categories:</p> <ul style="list-style-type: none"> Benefits to Government – 37 indicators were identified under the following headings: Direct Cash benefits, Efficiency savings (monetisable benefits) and other non-monetisable benefits Benefits to Citizens/Users - 29 indicators were identified under the same framework included in HM Treasury (2003) <i>Measuring the Expected Benefits of e-Government</i>, August (see above) i.e. Monetary benefits; Non Monetary - Time-based; & Non Monetary - Value-based. <p>Recommends the use of “<i>standardisation of measures and methodologies</i>” p38 (enables comparison and aggregation) & “<i>The inclusion of both qualitative and quantitative measures of</i></p>

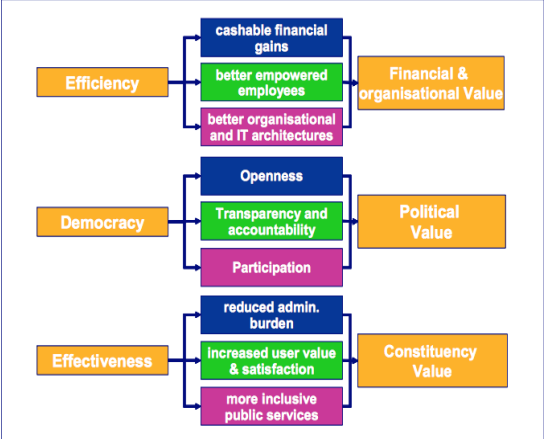
Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
					<p><i>benefits.” p38 & “Flexible measures that evolve with changing circumstances and political priorities” p38.</i></p> <p>Conclusions include, “<i>many of the benefits considered are not easily quantified. Benefits realisation methodologies either seek to include soft, non-financial benefits qualitatively...or else try to create proxy indicators of these benefits for decision-making purposes.</i>” p39</p> <p>Note the conclusions of the Feb 2006 OCED meeting in Paris included, p37:</p> <ul style="list-style-type: none"> “<i>Be careful about how benefits are valued: not all time gains are valued the same way in different organisations.</i>” <i>Watch out for dispersed benefits that cannot be harnessed (i.e. three minutes saved per transaction can add up to a significant amount, but is difficult to re-allocate).”</i>
64. Evaluating e-government: Identifying non-financial benefits – report by Paul Foley, March 2005 - project funded by the OECD.	<p>Normative or descriptive - descriptive</p> <p>Applied at which level – e-gov initiatives.</p> <p>Overview/Summary</p> <p>Another paper looking at e-gov benefits and from a public value perspective – i.e. encompassing Mark Moore’s work on public value deriving from services, outcomes and trust & legitimacy. So – another paper highlighting the importance of a framework for measuring benefits (including a categorisation framework + example indicators).</p> <p>The paper encompasses:</p> <ol style="list-style-type: none"> 1. A literature review of public value concepts in measuring non-financial benefits (service quality, transparency and environmental 	<p>When does measurement occur? Not specifically addressed.</p> <p>Focus on outcome and/or intermediate benefits? Not specifically addressed – although the public value concept sees the 3 categories of value as linked/reinforcing (at least partly).</p>	<p>Who measures the benefits? Not specifically addressed.</p> <p>Are measures added over the project? Emergent benefits? Not specifically addressed.</p> <p>Measurement post-project? Not specifically addressed.</p>	<p>To whom is the guidance (project type, sector) directed?</p> <p>E Gov community – with specific focus on the measures of non-financial benefits of eGovernment.</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>The paper’s focus is on non-financial benefits and ‘soft indicators’ of user satisfaction and trust. 76 measures are identified:</p> <ol style="list-style-type: none"> 1. <u>Services and operational efficiencies measures</u> p20 – employees (9 measures); management (18 measures); suppliers (2 measures); technology (11 measures) 2. <u>Outcome measures</u> p21 – environmental considerations (6 measures); supplier

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
	<p>benefits) of eGov; and</p> <p>2. A review of balanced scorecard techniques – 76 measures for public benefits are identified (see final column):</p> <p>Measures are proposed under 3 headings:</p> <ol style="list-style-type: none"> Services and operational efficiencies (40 measures) Outcomes (21 measures) Trust and Legitimacy (15 measures) 				<p>services (1 measure); user services (14 measures)</p> <p>3. <u>Value and trust measures</u> p22 – community consultation and partnership (4 measures); supplier services (2 measures); user consultation and communication (7 measures); user complaints (2 measures).</p>
65. eGovernment Economics Project – Measurement Framework Final Version (2006)	<p>Normative or descriptive – normative.</p> <p>Applied at which level. Focus is on measuring the benefits of e-Gov rather than from projects or programs.</p> <p>Overview/Summary The Economics of eGovernment research project was funded by the European Commission. The reports produced included a Measurement Framework Model developed from measurement models used in Denmark, France, Germany, Netherlands and the UK. It is built around the three value drivers of efficiency, democracy, and effectiveness (with benefits being identified under each heading) and elaborated in such a way as to produce a multidimensional assessment of the public value potentially generated by eGovernment:</p> <ul style="list-style-type: none"> Efficiency: Financial & Organisational Value – cashable financial gains, better empowered employees, and better organisational and IT architectures Effectiveness: Constituency Value – reduced admin burden, increased user value & satisfaction, more inclusive public services Democracy: Political Value – inter-operable administrations, openness and participation, transparency & accountability. 	<p>When does measurement occur? Not specifically addressed.</p> <p>Focus on outcome and/or intermediate benefits? Not distinguished</p>	<p>Who measures the benefits? Not specifically addressed.</p> <p>Are measures added over the project? Emergent benefits? Not specifically addressed.</p> <p>Measurement post-project? Not specifically addressed.</p>	<p>To whom is the guidance (project type, sector) directed? Directed at those involved in eGov initiatives</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Specifically goes beyond financial measures to include qualitative measures where market prices are absent. Driven by the, “<i>awareness of the fact that traditional ROI investment measures do not fully account for the public value potentially accruing from eGovernment, since many of its benefits are non-financial and qualitative/intangible and contribute to a greater social value than can be measured using only financial metrics.</i>” p9</p> <p>92 Measures/Indicators are identified under 9 main headings</p> <p>Page 47:</p>

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the ‘state of the art’ in measuring benefits? <ul style="list-style-type: none">Normative & descriptive guidance on how to measure benefitsApplied at project, program, portfolio level?	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?																														
	Page 15: eGEP Measurement Framework Analytical Model 				<table><tr><th colspan="2">EFFICIENCY BENEFITS</th></tr><tr><th>Type of benefit</th><th>Type of measurement</th></tr><tr><td>Cashable Financial Gains</td><td>K€ Full Time Equivalent gains</td></tr><tr><td>More empowered employees</td><td># of public administration trainees</td></tr><tr><td>Better organizational architectures</td><td># of in case handled protocols in a given time of period</td></tr></table> <table><tr><th colspan="2">EFFECTIVENESS BENEFITS</th></tr><tr><th>Type of benefit</th><th>Type of measurement</th></tr><tr><td>Reduced Admin. Burden</td><td>Khr time saved by citizen & business</td></tr><tr><td>Increased User Value and Satisfaction</td><td>eGovernment users satisfaction index</td></tr><tr><td>More inclusive public services</td><td># of inclusion related e-services</td></tr></table> <table><tr><th colspan="2">DEMOCRACY BENEFITS</th></tr><tr><th>Type of benefit</th><th>Type of measurement</th></tr><tr><td>Openness</td><td># of government business processes open to the public (tendering, procurement, recruitment, etc.)</td></tr><tr><td>Transparency and Accountability</td><td># of services involving a two-way interaction with users</td></tr><tr><td>Participation</td><td># queries submitted online</td></tr></table> Note that the methodology also includes normalisation of the different measures by focusing primarily on relative improvements, expressed in percentage terms – p14.	EFFICIENCY BENEFITS		Type of benefit	Type of measurement	Cashable Financial Gains	K€ Full Time Equivalent gains	More empowered employees	# of public administration trainees	Better organizational architectures	# of in case handled protocols in a given time of period	EFFECTIVENESS BENEFITS		Type of benefit	Type of measurement	Reduced Admin. Burden	Khr time saved by citizen & business	Increased User Value and Satisfaction	eGovernment users satisfaction index	More inclusive public services	# of inclusion related e-services	DEMOCRACY BENEFITS		Type of benefit	Type of measurement	Openness	# of government business processes open to the public (tendering, procurement, recruitment, etc.)	Transparency and Accountability	# of services involving a two-way interaction with users	Participation	# queries submitted online
EFFICIENCY BENEFITS																																			
Type of benefit	Type of measurement																																		
Cashable Financial Gains	K€ Full Time Equivalent gains																																		
More empowered employees	# of public administration trainees																																		
Better organizational architectures	# of in case handled protocols in a given time of period																																		
EFFECTIVENESS BENEFITS																																			
Type of benefit	Type of measurement																																		
Reduced Admin. Burden	Khr time saved by citizen & business																																		
Increased User Value and Satisfaction	eGovernment users satisfaction index																																		
More inclusive public services	# of inclusion related e-services																																		
DEMOCRACY BENEFITS																																			
Type of benefit	Type of measurement																																		
Openness	# of government business processes open to the public (tendering, procurement, recruitment, etc.)																																		
Transparency and Accountability	# of services involving a two-way interaction with users																																		
Participation	# queries submitted online																																		
66. eGovMoNet project funded by the EC to examine and promote e-government impact and customer satisfaction measurement. Report issued in 2012	Normative or descriptive - descriptive Applied at which level – egov initiatives. Overview/Summary eGovMoNet was a European Thematic Network to stimulate development and take-up of good practice for eGovernment measurement of user-satisfaction and impact. The network was co-funded by the European Commission under the CIP, and designed to create a broad and sustainable community across academia, industry, and public agencies.	When does measurement occur? Not specifically addressed. Focus on outcome and/or intermediate benefits? Not distinguished.	Who measures the benefits? Not specifically addressed. Are measures added over the project? Emergent benefits? Not specifically addressed. Measurement post-project? Not specifically addressed.	To whom is the guidance (project type, sector) directed? eGov appraisers and evaluators	What types of measure – quantitative / qualitative are used? Both - distinguishes between customer perceived benefits and impact measurements. Hence focus on approaches adopted to customer satisfaction measurement and seeking some standardisation to enable inter-jurisdictional comparisons.																														

Appendix 1 Government Body Benefits Measurement Literature Search

Pubilcation number (cited in the report as GSR1-67) and source details	What is the 'state of the art' in measuring benefits? <ul style="list-style-type: none"> Normative & descriptive guidance on how to measure benefits Applied at project, program, portfolio level? 	At what point(s) in the project are outcome benefits measures developed, defined and selected? Also address intermediate benefits measures, interdependencies between intermediate & outcome benefits, and linking to specific stakeholders	Who assesses the benefits and at what point during the project are they assessed? a. Are measures added over the life of the project and/or beyond? e.g. recognition of emergent benefits b. How far after the close-out of the project are benefits continued to be assessed, and at what intervals?	Does this vary by project type (e.g., change project, innovation or new product development, etc.) or by industry, project size, potential social impact, or even who the customer is? i.e. to whom is the guidance directed?	What kinds of measures are typically used to assess benefits, specifically Quantitative and/or Qualitative, and which are more frequently used?
67. World Bank – 'Monitoring and Evaluation - some Tools, Methods and Approaches', 2004	<p>Normative or descriptive - descriptive</p> <p>Applied at which level – public programs</p> <p>Overview/Summary Descriptive summary of various approaches to monitoring and evaluation including – KPIs, Log frame, Surveys inc client satisfaction, Cost-benefit and cost-effectiveness appraisal, and Impact evaluation.</p>	<p>When does measurement occur? Methods cover pre-program appraisal and post-program evaluation.</p> <p>Focus on outcome and/or intermediate benefits?</p> <p>The log frame entry refers to, “<i>the following results chain: inputs, processes, outputs (including coverage or “reach” across beneficiary groups), outcomes, and impact.</i>” and the identification of performance indicators at each stage in this chain. p8</p>	<p>Who measures the benefits? Not addressed – although note reference to involving stakeholders (see final column).</p> <p>Are measures added over the project? Emergent benefits?</p> <p>Not addressed.</p> <p>Measurement post-project? Not addressed.</p>	<p>To whom is the guidance (project type, sector) directed? World Bank program appraisers and evaluators</p>	<p>What types of measure – quantitative / qualitative are used?</p> <p>Both - “<i>Performance indicators are measures of inputs, processes, outputs, outcomes, and impacts for development projects, programs, or strategies. When supported with sound data collection—perhaps involving formal surveys—analysis and reporting, indicators enable managers to track progress, demonstrate results, and take corrective action to improve service delivery. Participation of key stakeholders in defining indicators is important because they are then more likely to understand and use indicators for management decision-making.</i>” p6</p> <p>Surveys (p12)</p> <ul style="list-style-type: none"> “<i>Providing baseline data against which the performance of the strategy, program, or project can be compared.</i>” “<i>Providing a key input to a formal evaluation of the impact of a program or project.</i>” <p>Participatory methods - Evaluating a project, program, or policy. Includes (p17)</p> <ul style="list-style-type: none"> Beneficiary assessment “<i>involves systematic consultation with project beneficiaries and other stakeholders to identify and design development initiatives, signal constraints to participation, and provide feedback to improve services and activities.</i>” Participatory monitoring and evaluation “<i>involves stakeholders at different levels working together to identify problems, collect and analyze information, and generate recommendations.</i>”



Measures for benefits realization.

BREESE, Richard <<http://orcid.org/0000-0003-1283-0354>>, JENNER, Stephen, SERRA, Carlos, THORP, John, BADEMI, Amgad and CHARLTON, Michael

Available from the Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/18957/>

Copyright and re-use policy

Please visit <http://shura.shu.ac.uk/18957/> and <http://shura.shu.ac.uk/information.html> for further details about copyright and re-use permissions.