

# Measures for Assuring Projects

APM toolkit

### **@Association for Project Management 2016**

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the express permission in writing of the Association for Project Management.

## **Contents**

1.	introduction and background	4
2.	Overview of the toolkit and its application	5
2.1	The toolkit components	5
2.2	Application of the toolkit	5
2.3	The 10 criteria	6
3.	Who should use the toolkit?	6
4.	Using the toolkit for independent or self-assessment	7
4.1	Planning assessments	7
4.2	Gathering evidence	7
4.3	Rating	7
4.4	Reporting the results	10
4.5	Using the results to drive improvement	10
5.	Using the toolkit in the development of the project team's approach to managing and assuring the project	12
6.	Considerations for assessing portfolios or programmes	13
7.	Appendix A – Summary sheet for measuring project assurance	15
8.	Appendix B – Detailed breakdown of evidence that could be sought when assessing assurance criteria	23
9.	References	60

### 1. Introduction and background

The APM Body of Knowledge 6th edition [1] defines assurance as: 'Project, programme and portfolio (P3) assurance is the process of providing confidence to stakeholders that projects, programmes and portfolios will achieve their scope, time, cost, quality objectives, and realise their benefits.'

A key part of the assurance process is the conduct of reviews, whether on specific elements or on the entirety of a programme or project. There has been increased awareness of the importance of assurance, partly because of an increased focus on infrastructure but also due to the need to increase the effectiveness of programme and project management in general.

The APM Body of Knowledge confirmed the need for assurance activity to be planned and coordinated.

The toolkit has been developed by the APM Assurance Specific Interest Group (SIG), a group of professionals with diverse backgrounds in the field of project and programme management and assurance. Along with other project management professionals, they have in the past been confronted by a fragmented approach to assurance shaped by the many different approaches taken across different industries and organisations in the UK.

The lack of a definitive framework and the resulting variation of approach reduces the confidence in assurance planning, management and outputs, increases the risk of duplication or material gaps, creates potential misunderstandings over common terminology and limits comparison of assurance outputs for projects, programmes and portfolios. This is especially so when assurance is being sought across multi-tier supply chains and partnering relationships.

This has left a gap and driven a desire to establish more consistency around the language being used, definitions of assurance terms, a framework capable of wide application, and outputs out of assurance work. The toolkit, including this guidance, is the product of the experience, skills and knowledge of the group who produced it, applied to address this challenge.

This document is the first of an intended suite of programme and project assurance-related guidance documents.

## 2. Overview of the toolkit and its application

### 2.1 The toolkit components

The toolkit consists of:

- this guidance;
- a summary sheet for rating project assurance (see Appendix A);
- a detailed breakdown of evidence that should be sought when rating each criterion (see Appendix B).

It is expected that a person/team performing the assessment will either use the summary sheet, referring to the detailed breakdown for further examples of evidence that could be considered, or use the detailed breakdown directly if a more thorough assessment is required.

### 2.2 Application of the toolkit

The assurance assessment toolkit is intended as a reference for assurance practitioners to help provide a measure of their confidence in the potential for a project (or programme or portfolio) to succeed. While assisting assurance practitioners to be thorough when performing assurance, we rely on their professionalism to adapt this guide to the circumstances of the project to be assured.

The assurance assessment toolkit provides a common generic basis for the assessment of portfolios, programmes and projects (hereafter generally referred to as projects) of all sizes, in all sectors, at any project life cycle phase and at all levels in the supply chain. The toolkit can also be successfully applied to sub-projects or work packages in a project.

It can be used by independent assurance providers or project teams both for self-assessment of their projects or as a checklist to support the development of their approach to managing and assuring the project.

This guidance is intended for experienced practitioners. For those who are new to this type of role this guidance will certainly be of use, but the guidance should be applied with the following points in mind:

- The assurance landscape of the organisation or industry sector should be fully understood. This includes identifying the assurers and stakeholders and how their roles are related, the scope of required outputs and related governance processes. This will help develop an integrated model of assurance activity which can be understood and accepted by key stakeholders to the project.
- This guidance should not be the sole reference used, and other concepts of project assurance are available. Those new to assurance roles should read a wide variety of material particularly information pertinent to the context where the assurance work will occur. This includes APM publications which address the concepts of assurance e.g. A Guide to Integrated Assurance [2] and Directing Change [3].
- Ultimately the assurance work is driven by the risks of the project concerned and the internal and external assurance requirements of the organisation, sponsors, funders and regulators.
- All assurance work needs to balance the assurance requirements, available resources and timescales to be met.

#### 2.3 The 10 criteria

The toolkit is based around 10 key criteria.

- **1. Client and scope** clear and controlled baseline requirements, objectives, success criteria, business case, terms of reference, contracts and benefits realisation.
- **2. Risks and opportunities** management of risk and opportunity through the life cycle of the project.
- **3.** Planning and scheduling appropriately detailed execution strategies, plans and schedules.
- **4. Organisational capability and culture** people, behaviours, teams, processes, systems and the working environment.
- **5. Supply chain** procurement processes, engagement with, and capability of, both the internal and external supply chain.
- **6. Solution** the deliverables and outcomes that meet the client requirements. This includes product and/or service quality and the impact of the finished product or service on the social, physical and economic environment.
- **7. Finance** commercial management and administration.
- **8. Social responsibility and sustainability** managing the impact of project delivery on the social, physical, ecological and economic environment; this includes health and safety.
- **9. Performance** measuring all facets of performance against the baseline requirements, variance analysis and management action.
- **10. Governance** the processes to align the interests and strategic direction of sponsors and stakeholders.

### 3. Who should use the toolkit?

The toolkit can be used by:

- a) independent assurance providers;
- b) project teams for self-assessment;
- c) project teams for the development of their approach to managing and assuring the project.

## 4. Using the toolkit for independent or self-assessment

### 4.1 Planning assessments

It is essential that the assessment is planned and that this toolkit is adapted to take account of:

- project scope and risk factors the Office of Government Commerce (OGC) Gateway risk assessment process could be used;
- timing of assessment work relative to project life cycle and key milestones, and gateway reviews;
- sources of information and availability;
- uncertainty should be recognised in assessing and rating criteria;
- assurance activities of others and the need to integrate those activities (ref. A Guide to Integrated Assurance [2], published by APM).

Adaptations may include amendments to the criteria that are to be assessed and/or the evidence that is to be sought. In the event that one or more of the criteria is deemed irrelevant the criteria may be ignored; the potential maximum score being reduced by 10 points for each criterion that is ignored.

### 4.2 Gathering evidence

When carrying out an assessment the assessor should seek objective evidence to support the evidence requirements and then score each criterion using the guidance provided.

The assessor should look first for up to date and relevant documentary evidence from the project under review; this should have the following characteristics:

- agreed with the client/stakeholders;
- shared with and accessible to the project team;
- fit for purpose i.e. it has a level of detail and structure that is in proportion to the project;
- uncertainty over key points and the potential impact on the risk of failure should be considered in the assessment against the criteria.

If documentary evidence is not available the assessor could conduct interviews to establish the extent to which the requirements for each criterion are met, but the scoring should reflect the lack of documentation.

Evidence should relate to:

- processes which are communicated, proportionate and founded on good practice;
- project team activity which is exercised in an appropriate and timely manner.

The output/outcome from the combination of processes and project team action should be effective in reducing the risk of failure.

#### 4.3 Rating

The primary rating for each category will be given on both a red/amber/green/blue (RAGB) basis and a 0 to 10 score.

- Red 0-2 where critical issues that require urgent attention exist.
- Amber 3-5 where significant issues exist that need to be addressed.
- Green 6-9 for broadly adequate practice with some scope for improvement.
- Blue 10 for best practice.

A combination of colours and numbers are used because the scores for each category are added to provide an overall score out of 100 for the project. The RAGB status is used such that if a project has any one item that is marked red, the project is red overall, or if there are no reds but at least one amber rating then the project is rated amber overall; otherwise, unless all criteria are rated blue, the project is rated green.

It is fundamental to the assessment that the rating given to any category is objective, evidence-based and conservative in order to highlight to everyone where the weaknesses in a project lie and where improvement/corrective actions should be focused. If the assessor believes that an element of the project is weak, then it must be scored appropriately.

It is possible for a project to receive an overall numerical score in excess of 90 with a red RAGB status (indicating that, while project performance is best practice, the project is undermined by a low score for one of the criteria). It is equally possible for a project to receive an overall score as low as 60 with a green RAGB status (indicating that the project is at the bottom end of the green band across all criteria).

A high rating will indicate that there is less likelihood of failure, but it will not guarantee success. Equally, a low rating will not guarantee failure, but failure is more likely.

For individual projects the assessment will identify:

- the overall likelihood of success or failure;
- the relative strength of each of the criteria, drawing attention to those areas that need the most attention.

When used for multiple projects in a programme or portfolio the assessment will identify:

- which projects are at greatest risk of failing;
- which projects are weaker than others, drawing attention to those projects that need most attention.

It is recommended that the results should be included in project reports. An overview of the scoring scheme, which considers the overall performance of the project in terms of evidence and achievement, is given in Figure 1.

RAGB	Score	Description
		These descriptions relate to the project as it is at the time of the assessment, the arrangements that are in place and the likelihood of their being effective given performance to date.
Red	0	Significant lack of recognisable effective processes or compensating skills within the project team.
Red	1	Critical issues threaten the success of the project. The project team, if it recognises the issues, may have implemented plans for corrective action and
Red	2	may have developed ad hoc approaches to prevent reoccurrence.  There is limited confidence of success.
Amber	3	Similar procedures are followed by different people undertaking the same task and responsibility is left to the individual. There is no formal training or communication of standard procedures.
		There is a high degree of reliance on the knowledge of individuals and, therefore, significant deviations and errors are likely, and may not be detected.
Amber	4	Major problems regarding adequacy of processes, their application and project performance exist but corrective actions are in place with reasonable confidence of success.
Amber	5	Care should be exercised before major commitments are made.
Green	6	Procedures have been standardised, documented, and communicated through training and it has been mandated that the processes are to be followed.
		Some significant deviations may not have been detected by the project team and minor problems are occurring, but there is little risk of the project failing.
		Documents are, at a minimum:
		<ul><li>agreed with the client/stakeholders;</li></ul>
Green	7	shared with and accessible to the project team;
		fit for purpose i.e. have a level of detail and structure that is in proportion to the project.
Green	8	Management monitors and measures compliance with procedures and takes action where processes appear not to be working effectively. Processes are under constant improvement and provide good practice; automation and business system tools are used.
Green	9	Progress and achievement on the project is at target or better. Management is proactive in leading the project.
Blue	10	Processes have been refined to be best practice. IT is used in an integrated way to automate the workflow, providing tools to improve quality and effectiveness. The project is demonstrating innovative techniques, thought leadership and best practice.

**Figure 1:** Scoring scheme overview

### 4.4 Reporting the results

The results can be reported as indicated in Figure 2.

Report type	Description
Top level summary	Red, amber, green or blue status of the project as a whole.
Top level summary and score	Red, amber, green or blue status with total score for the project as a whole.
Detail (tabular or spider's web)	Red, amber, green or blue status and score for each criterion – see details in section 4.5 below.

Figure 2: Report types

### 4.5 Using the results to drive improvement

It is recommended that the results of the assessment are shared with the project manager. Typically such sharing of results, while involving some debate about the veracity of the scores, gives rise to the identification of areas for improvement. For any criteria rated red or amber, formal corrective actions should be initiated, with agreement that the action will move the project to green, although at project start-up, the corrective action may be necessary to complete the project's start-up process.

Improvements benefit will be realised if assessments are carried out on a regular basis with results reported as in Figure 3. This shows the historical status of the project, enabling trends to be identified and the forecasts, linked to project improvement objectives, to be made on the same chart. See also Section 5 (using the toolkit in the development of the project team's approach to managing and assuring the project) on page 12.

														Client	Client name
															Project name
														Project	Project reference number
														PM	Project manager name
														Reviewer	Reviewer's name
														Date	Date of review
	Category	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Current status/changes	Improvement plan
1	Client and scope	7	8	8	9	9	9	9	9	9	9	9	9		
2	Risk and opportunities	9	9	9	9	9	9	9	9	9	9	9	9		
3	Planning and scheduling	4	5	6	6	7	7	8	8	8	9	9	9		
4	Organisational capability and culture	5	6	7	8	8	4	5	6	7	8	9	9		
5	Supply chain	2	2	5	6	8	10	10	10	10	10	10	10		
6	Solution	1	2	2	3	3	5	6	8	8	8	8	8		
7	Finance	9	9	9	9	9	9	9	9	9	9	9	9		
8	Social responsibility and sustainability	8	8	8	8	8	8	8	8	8	8	8	8		
9	Performance	8	8	8	8	8	8	8	8	8	8	8	8		
10	Governance	1	3	5	5	5	1	3	5	7	8	8	8		
	Overall	<	His	tory			70				Fore	cast	>		

Figure 3: Tabular reporting of results

Some audiences will prefer a 'spider's web' chart (seen in Figure 4) because this highlights the weaker elements of the project in a visual, rather than numeric, format.

### **Project assessment**

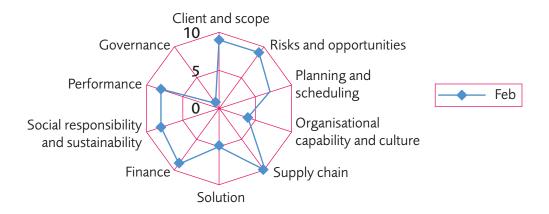


Figure 4: Spider's web reporting of results

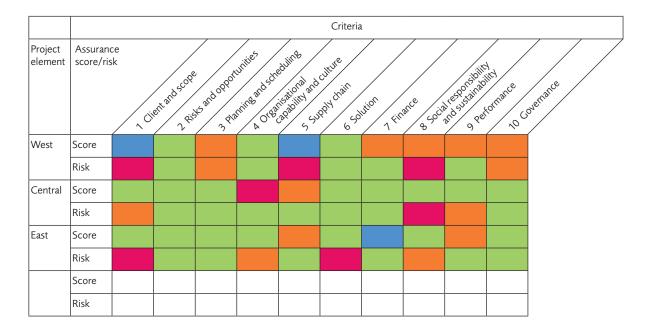
## 5. Using the toolkit in the development of the project team's approach to managing and assuring the project

The project team can apply the toolkit over the life of the project in a number of ways.

It is recommended that, as a minimum, an assurance management plan is created, showing how assurance of each of the 10 criteria in Section 2.3 (on page 6) will be addressed to the satisfaction of sponsors and stakeholders. This assurance could come from the existence of defined independent processes, or from the project team itself using the toolkit for self-assessment, and reporting the results on a regular basis (see Section 4 on page 7).

Development of the plan could be underpinned using the toolkit as follows: for example, the toolkit can be used as a checklist in developing an approach by the project team to managing and assuring the project. In addition workshops could be held by the project team to identify how the team will satisfy the assurance requirements, and what criteria and evidence should be assessed.

The output from either independent or self-assessments, as outlined in Section 4, can also be used to target areas for improvement. The suggested tool for this is an assurance prioritisation matrix. The matrix can be developed – mapping each of the criteria against the assurance score and risk for each element (or phase, or sub-phase) of the project – see Figure 5. The matrix can then be used to develop a prioritised plan targeting areas of weak assurance and greatest risk, in the context of the project. As the project progresses and evolves and as the risk profile changes, the matrix should be reviewed to reflect such changes, and the assurance management and implementation plans amended accordingly.



**Figure 5:** Assurance prioritisation matrix

## 6. Considerations for assessing portfolios or programmes

A programme or portfolio is more than an aggregation of its constituent parts. While the constituent parts should be assessed individually it is also necessary to assess the overall management of the portfolio or programme. The results for managing the programme or portfolio can then be combined with the assessments of the constituent parts. As an example, if a programme has good plans with an assessment of 8, but one of its projects has poor plans with an assessment of 4, the overall programme is given a score of 4. Conversely, if portfolio management has a poor set of plans and is assessed at level 4 then the overall portfolio is assessed as a 4, even if all of its constituent programmes or projects have excellent plans (see Figure 6).

When assessing the overall management of portfolios or programmes it is essential that the assessment requirements defined in appendices A and B are applied in the context of a portfolio or programme. For example, when assessing the solution criteria with respect to a portfolio, the approach to prioritising portfolio components is also considered.

Key factors to consider when performing a programme or portfolio assessment are:

- a programme/portfolio can have many stakeholders, so managing client/stakeholder relationships, satisfaction and expectations are critical topics that a programme/portfolio manager must treat as a high priority;
- due to the large scope, complexity and multiple inter-dependencies between elements of a programme or portfolio, the programme/portfolio manager needs to maintain a clear vision of the overall objectives and priorities of the programme/portfolio, be well organised, and have clear visibility/control of what the project teams are doing;
- consideration should be given to the overall management of the portfolio/ programme, particularly with regard to the prioritisation of components and the mechanism by which overall risk is managed;
- the programme/portfolio manager must demonstrate excellent coaching and leadership skills.

		Çik	nt and scope	Sand opport	united organization	Ediling and Sur	deliture Solitain	tion fina	rie sois	responsibilities of the state o	armance Cov	ernance	Zoź	(Somments
Project	Last month	9	8	5	6	9	8	7	8	6	7		73	
Á	This month	9	8	5	6	9	8	7	8	6	7		73	Need to identify resources to meet forward load
Project	Last month	7	8	5	6	9	8	7	8	6	7		71	
В	This month	5	8	5	6	9	8	7	8	6	7		69	Client is trying to increase scope at no cost
Project	Last month	7	7	7	8	8	8	9	8	6	8		76	
c	This month	8	7	7	8	8	4	9	8	6	8		73	Solution performance is much worse than expected
	Last	7	7	_				7			7			
Portfolio	month	7	7	5	6	8	8	7	8	6	7		69	
	This month	5	7	5	6	8	4	7	8	6	7		63	
	Last	7.7	7.7	5.7	6.7	8.7	8.0	7.7	8.0	6.0	7.3		73	
Average across	month	7.,		J.1	0.7	0.7	0.0	7.7	0.0	0.0	7.5		,,	
	This month	7.3	7.7	5.7	6.7	8.7	6.7	7.7	8.0	6.0	7.3		72	

Figure 6: Tabular reporting for a portfolio of projects

## Appendix A – Summary sheet for measuring project assurance

		10	8,0	2,6	5,4,3	2,1,0	
	Assurance criterion	Best of breed (best practices plus demonstrated achievement)	Good (practices plus achievement) proactive Score 9 if approaching best of breed, otherwise score 8.	Acceptable (practices plus achievement) reactive Score 7 if approaching good, otherwise score 6.	Poor (minimal practices/control) Score 5 if approaching acceptable, 4 if corrective actions are being implemented but have not taken effect yet, otherwise 3.	Red Score 2 if approaching poor, 1 if corrective actions are being implemented but have not taken effect yet, otherwise score 0.	
-	Client and scope	Clear scope aligned with business need, deliverables, schedule, acceptance process and benefit realisation.	Clear scope aligned with business need, deliverables, schedule, outline acceptance process and benefits realisation.	Scope aligned with business need, deliverables, schedule, benefits and acceptance criteria are articulated but lack clarity.	Scope lacks sufficient definition for acceptance criteria and for confident implementation or benefit realisation.	Scope does not contain acceptance criteria or sufficient detail for implementation.	
		Clear sponsor and customer obligations.	Clear high level sponsor and customer obligations – some ambiguity in detail.	Sponsor and customer obligations apparent, but lack clarity.	Sponsor and customer obligations are vague and benefits are not fully articulated.	Sponsor and customer obligations are not stated; benefits are not articulated.	
		Recognised standard of change control.	Change control process essentially sound but may be slow or fail to fully communicate consequences of change.	Change control in place, but with some clear shortcomings.	Informal or ineffective change control.	No change control process.	
7	Risks and opportunities	Red, amber, green or blue status and score for each criterion - see details in section 4.3 above.	Risk and opportunity management built in to day-to-day business.	Up-to-date risk registers in place, identifying actions, with monthly review cycle.	Risk registers exist, but may not be up-to- date and risks not well articulated.	No risk register or plan to address risks.	

major project elements. Project control information is used to drive management action.

Project and business Frobjectives aligned and cofully understood by the obteam and achievements business and process and management systems esbeing followed and accredited as an industry exemplar.	7 2 4 4 F E 8 6	Fully understood and communicated project objectives; aligned with business objectives. Project process and management systems established and being followed.	Project and business objectives aligned and fully understood by the team. Project process and management systems established.	Project objectives not fully understood; possibly misalignment to business objectives. Project process and management systems being established.	Project objectives not communicated; possibly not aligned to business objectives. No project process or management systems being followed.
Adequately staffed and trained project team trained by sith development plans progrand minimum turnover planned; integrated with all key functions; represented with a track record of success from acc previous projects.	Adec acc	Adequately staffed, trained and aligned project team - tested by survey: integrated with all key functions; represented with decision-making accountability.	Plans to adequately staff, train and align project team - being tested by survey; integrated with all key functions; to be represented with decision-making accountability.	Some gaps in staffing of the project team; variable decision making/accountability and lack of team alignment - not tested by survey.	Insufficient resources; the project team has inadequate skills and experience.
All roles and responsibilities resp documented and published; main tasks documented with documented with glan planning and tracking.	Key resp docu publ docu plan	Key roles and responsibilities clearly documented and published; main tasks documented with action planning and tracking.	Key roles and responsibilities documented and main tasks documented with action planning and tracking of critical path.	Roles and responsibilities partially documented and main tasks partially documented with action planning and tracking.	Communication gaps or concerns; unclear leadership; unclear or shifting objectives.

hain	Decisions made on robust analysis, and delivery and commercial models reflect best practice.	Decisions made on complete and reliable analysis.	Decisions made on analysis addressing all of the key requirements.	Delivery and commercial models based on limited analysis of the requirement.	Decisions made on poor analysis and/or key assumptions remain unchallenged.
	Delivery organisation co-ordinated and fully integrated.	Organisation highly competent, managing key decisions and supply chain.	Organisation has basic competency to manage key decisions and the supply chain.	Limited skills, co- ordination and team working to drive key activity and decisions.	Poor level of competency or capacity. Action not co-ordinated. Stakeholders not sufficiently engaged.
	Contract enables optimised delivery.	Contract has well defined deliverables, management processes and incentives.	Contract covers key deliverables and essential management elements.	Contract terms difficult or resource-intensive to manage, and/or not fully aligned to project.	Contract does not establish an adequate framework to manage key risks.
	Procurement applies well-developed methodology leading to optimised tenders.	Procurement will achieve good outcome for project and commercially.	Procurement will address essential requirements.	Procurement broadly adequate, however opportunities lost.	Procurement planning, execution and outcome poor.
	Contract management highly effective; ensures control and optimisation of delivery.	Contract management highly effective, ensuring delivery and guarding client interests.	Contract management adequate to monitor delivery and safeguard client interests.	Contract management not aligned with contract or fully effective.	Client and/or supplier do not meet obligations. Status of delivery unclear.

+	ıt to	
Scope definition not started.	No operational input to scope definition.	Serious technical problems causing schedule slippage.
Scope definition based on assumptions with significant gaps in detail.	Development management process inadequate; lack of operational input to scope development.	Problems with product quality and schedule delays.
Scope development complete, supported by process flow but not supported by peer review.	Reviewed by operations.	Ad hoc IT solution based on recently released products; simple tools in use with minimal development environment.
Definitive scope definition with supporting documentation and proven components, supported by peer review.	Authorised by operations.	Appropriate IT development tools and environments; solution verified by independent expert.
Scope being delivered with no major technical issues or design changes.	Exemplary operations input with continuity into the operations phase.	State-of-the-art tools in use.
Solution		

Cost, value and rare continuously monitored and fe	Cost, vall are contii monitore	Cost, value and revenue are continuously monitored and forecast.	Cost, value and revenue are regularly monitored and forecast.	Cost monitored and forecast monthly.	Cost monitored and forecast on an ad hoc basis.	No financial analysis in place.
Variance from attributable to identifiable carevidence of coactions.	Variance attributak identifiab evidence actions.	Variance from baseline attributable to identifiable cause with evidence of corrective actions.	Anticipated final cost understood and any variance from baseline attributable to identifiable cause.	Anticipated final cost partially understood but cause of variances from baseline not clearly understood.	Anticipated final cost and variances from baseline not understood.	Baseline not understood.
Invoices on time.	Invoices on time.	Invoices issued and paid on time.	Invoices generally paid on time.	Value and revenue monitored on an ad hoc basis.	Invoices and payments paid late.	Invoices and payments significantly delayed.
responsibility and sustainability sustainability sustainability sustainability social, technolog economic, ecolo legislative plus hand safety) fully embedded in all of project delive	Processe manager of social (political social, te economi legislativ and safe embedd of projec	Processes for the management of all facets of social responsibility (political, environmental, social, technological, economic, ecological, legislative plus health and safety) fully embedded in all aspects of project delivery.	Processes for statutory compliance embedded.	Processes embedded but scope limited to statutory compliance.	Consideration given to statutory requirements only.	No understanding of statutory social responsibility requirements.
Real time reporting	Real time reporting	Real time, verifiable reporting in place.	Ad hoc processes in place for key areas of social responsibility.	Key areas of social responsibility understood.	Processes not embedded.	No consideration given to social responsibility for project delivery.

	(i)	ot	
No defined process to manage performance measurement. Performance not integrated to project management.	No established baseline or baselines re-profiled in an uncontrolled way.	Project managers do not own their baseline.	
Process and practice exist but are not documented or repeatable.	Data structures and the transaction of change do not support accurate or consistent performance reporting.	Reports do not cover all aspects of the project are not integrated with the supply chain.	
The performance baseline is supported by a good understanding of scope and accountabilities; performance is informed by objective measures; control disciplines operate in an integrated manner.	The data structure provides a single source of the truth, providing accurate and timely reporting.	Forecasts of future performance are informed by 'bottom up' information, validated through trend analysis and a single source of truth.	
A comprehensive suite of integrated project controls has been implemented at all levels of the project.	Performance analysis drives management action, identifying causes of variance and trends against baseline.	Project controls capture benchmark information and help improve predictability.	Baseline reviews are conducted at regular intervals to test the quality of the baseline and management controls.
The performance baseline, forecasts of future performance, risks and opportunities assured against other projects.	Performance issues are escalated in a manner that supports timely and informed decision making.	A knowledge share process is in place, sharing best practice with other industries.	Benchmarking of best practice in an environment that supports continuous improvement.
Performance			

vernance	Responsibility recognised at board and project level; sponsor and project manager have long standing mutual confidence.	Responsibility recognised at board and project level; sponsor and project manager are developing mutual confidence.	Responsibilities formally recognised at board and project level but not always followed in practice; sponsor and project manager may not have mutually supportive relationship.	Responsibilities are not recognised or neglected; sponsor and project manager may have an adversarial relationship.	Responsibilities are not recognised at board and project level, with the role of project sponsor, stakeholders or project manager not being properly recognised.
	Communications between board and project manager (including project reporting) are efficient; issues are escalated and de-escalated as appropriate.	Communications between board and project manager are efficient, albeit with minor shortcomings; issues are escalated promptly.	Communications between board and project manager have evident deficiencies with issues escalated late.	Communications between board and project manager are inadequate; issue escalation late or absent.	Communications are inadequate ,with deficiencies in project reporting; issue escalation only takes place as a crisis response.
	Stakeholder interests and contributions are fully articulated and respected.	Stakeholder interests and contributions are known and respected.	Stakeholder interests are insufficiently known or respected.	Stakeholder interests are neglected.	Stakeholder interests are unknown.
	The portfolio is relevant and revised promptly, including closures.	A portfolio maintenance process exists but may not be promptly operated.	A portfolio maintenance process exists formally but is not operated in practice.	A formal portfolio maintenance process may not exist or may not be respected in the organisation.	Portfolio changes are reactive and typically imposed by non-project authorities.

## Appendix B – Detailed breakdown of evidence that could be sought when assessing assurance criteria

For each of the categories a summary of the sub-categories, and examples of appropriate evidence to corroborate, is provided in this table.

### **Category 1 Client and scope**

Category	Sub-category	Evidence includes:
1. Client and scope	<ul> <li>1.1 Managing the baseline</li> <li>Documented, approved baseline scope.</li> <li>Change control process for baseline scope established.</li> </ul>	<ul> <li>1.1.1 Clear roles/responsibilities have been defined for authorisation of baseline documents.</li> <li>1.1.2 Documented outline of basic project scope.</li> <li>1.1.3 Processes, standards and tools for defining and managing change to the</li> </ul>
	<ul> <li>1.2 Documenting client criteria</li> <li>Objectives.</li> <li>Priorities and success criteria.</li> <li>Dependencies.</li> <li>Constraints and assumptions.</li> </ul>	baseline.  1.2.1 Clear and unambiguous objectives.  1.2.2 Agreed priorities and success criteria.  1.2.3 Agreed dependencies.  1.2.4 Agreed constraints and assumptions.
	<ul> <li>1.3 Defining and documenting project scope</li> <li>Project scope, requirements and specifications.</li> <li>Estimated schedule and milestones.</li> <li>Estimated costs and budget.</li> <li>Scope change control.</li> </ul>	<ul> <li>1.3.1 Documents provide agreed definition of:</li> <li>project scope;</li> <li>project requirements;</li> <li>estimated schedule and milestones;</li> <li>estimated costs and budget;</li> <li>control of scope changes.</li> <li>1.3.2 Definition is to a sufficient level of detail for effective control and management.</li> </ul>

Category	Sub-category	Evidence includes:
1. Client and scope	<ul> <li>1.4 Establishing the project environment</li> <li>Corporate policies.</li> <li>Legislation.</li> <li>Audit and compliance.</li> <li>Industry regulation.</li> <li>Risk appetite.</li> </ul>	<ul> <li>1.4.1 Monitoring processes and documents show monitoring of:</li> <li>corporate policies;</li> <li>legislation;</li> <li>audit and compliance;</li> <li>industry regulation;</li> <li>risk appetite;</li> <li>response to these topics, where applicable.</li> </ul>
	<ul> <li>1.5 Agreeing and documenting project deliverables</li> <li>Internal agreement on deliverables.</li> <li>Contractual schedule.</li> <li>Acceptance processes.</li> <li>Links to contractual requirements.</li> </ul>	<ul> <li>1.5.1 Agreed and documented definition of deliverables</li> <li>Technical and service definitions.</li> <li>Milestones.</li> <li>1.5.2 Contractual schedules of deliverables</li> <li>1.5.3 Acceptance processes</li> <li>1.5.4 Links to contractual requirements</li> <li>Payment provisions.</li> <li>Completion.</li> <li>Liabilities.</li> </ul>
	<ul> <li>Defining and managing expected benefits</li> <li>Stated and quantified in business case.</li> <li>Benefits management structures.</li> <li>Measurement and control of realisation of benefits.</li> <li>Appropriate individual is accountable for realisation.</li> <li>Survival of accountability.</li> </ul>	<ul> <li>1.6.1 Business case contains stated and quantified benefits</li> <li>Clear and unambiguous.</li> <li>Measurement of achievement.</li> <li>Accountability for realisation.</li> <li>Realisation processes.</li> <li>Links to success criteria.</li> </ul>

## **Category 1 Client and scope** cont.

Category	Sub-category	Evidence includes:
1. Client and scope	<ul> <li>1.7 Agreeing and documenting acceptance process and success criteria</li> <li>Requirements for successful achievement.</li> <li>Acceptance criteria and process.</li> <li>Project success criteria defined.</li> <li>Links to contractual requirements.</li> </ul>	<ul> <li>1.7.1 Acceptance</li> <li>Acceptance process.</li> <li>Acceptance criteria.</li> <li>Metrics of project success.</li> <li>Contractual requirements schedule.</li> </ul>
	<ul> <li>1.8 Clarifying sponsor and client obligations</li> <li>Sponsor has been identified at a senior level.</li> <li>Role of sponsor has been defined.</li> <li>Sponsor is accountable for delivery of business case.</li> <li>Sponsor takes active interest in project.</li> <li>Client obligations have been established and are managed.</li> </ul>	<ul> <li>1.8.1 Defined role of the project sponsor</li> <li>Senior level in organisation.</li> <li>Authority.</li> <li>Accountability.</li> <li>Continuity.</li> <li>Actively involved in project.</li> <li>1.8.2 Defined client obligations</li> <li>Clear client obligations.</li> <li>Management of client obligations.</li> </ul>
	<ul> <li>1.9 Client readiness for acceptance and implementation of solution</li> <li>Organisation's technical commissioning programme.</li> <li>Client's commissioning processes.</li> <li>Client's business change processes.</li> <li>Sufficient client staff resources available for commissioning.</li> <li>Client's technical resources and interfaces.</li> </ul>	<ul> <li>1.9.1 Business change processes</li> <li>1.9.2 Commissioning processes</li> <li>1.9.3 Implementation programme</li> <li>1.9.4 Training programme</li> <li>1.9.5 Change management process</li> <li>1.9.6 Sufficient staff and equipment resources</li> </ul>

Category	Sub-category	Eviden	ce includes:
1. Client and scope	<ul><li>1.10 Management of requirements</li><li>Change control process.</li></ul>	1.10.1	Requirement change control processes
	<ul><li>User involvement and</li></ul>	1.10.2	User involvement
	feedback.	1.10.3	Consistency of changes
	<ul><li>Statement of revised needs</li></ul>	4 40 4	with project scope
	and requirements.	1.10.4	Revised implementation and other plans
	<ul><li>Links to benefits management.</li></ul>		and other plans

## Category 2 Risks and opportunities

Category	Sub-category	Evidence includes:
2. Risks and opportunities	<ul> <li>2.1 Management process</li> <li>Risk and opportunity management process.</li> <li>Integration with other project processes.</li> </ul>	<ul> <li>2.1.1 Risk and opportunity management processes</li> <li>Documented processes are clear and unambiguous.</li> <li>Supported by guidance.</li> <li>Supported by training.</li> <li>2.1.2 Documented outline of basic project scope.</li> </ul>
	2.2 Phase initiation	<ul><li>2.2.1 Risk and opportunity flow diagram or process diagram.</li><li>2.2.2 Defined standards and process.</li><li>2.2.3 Proven tool identified and set up.</li></ul>
	<ul> <li>2.3 Risk and opportunity identification and assessment</li> <li>Risk and opportunity workshops.</li> <li>Risk, issues and opportunities register.</li> </ul>	<ul> <li>2.3.1 Risk and opportunity workshops</li> <li>Held at appropriate intervals.</li> <li>Key team members participate.</li> <li>Assisted by appropriate external peers.</li> </ul>

## Category 2 Risks and opportunities cont.

Category	Sub-category	Evidence includes:
2. Risks and opportunities		<ul> <li>2.3.2 Risk, issues and opportunities register.</li> <li>Up-to-date, accurate and complete.</li> <li>Risks analysed for cause, effect and impact.</li> <li>Risks evaluated for financial and non-financial impacts.</li> </ul>
	<ul><li>2.4 Plan responses</li><li>Risk, issues and opportunities register.</li></ul>	<ul> <li>2.4.1 Action owners are identified.</li> <li>2.4.2 Clear action or mitigation plans are in place.</li> <li>2.4.3 Plans are being actively tracked.</li> <li>2.4.4 Implementation of responses actively followed up.</li> </ul>
	<ul> <li>2.5 Implement responses</li> <li>Information on significant project-related risks.</li> <li>Risk and opportunity management process.</li> <li>Risk and opportunity register.</li> </ul>	<ul> <li>2.5.1 Sufficient information communicated to the board</li> <li>2.5.2 The effectiveness is regularly tracked with metrics</li> <li>2.5.3 A clear mechanism for escalating risks exists and is used where appropriate</li> <li>2.5.4 Risks and opportunities communicated within the project and to other parties</li> </ul>
	<ul> <li>2.6 Contingency</li> <li>Project cost and schedule contingencies.</li> <li>Contingency management.</li> </ul>	<ul> <li>2.6.1 Project cost and schedule contingencies</li> <li>Estimated with an appropriate level of probability analysis.</li> <li>2.6.2 Contingency management</li> <li>Drawdown controlled in accordance with delegated powers.</li> <li>Documented completely, clearly and unambiguously.</li> <li>Based on risk management principles.</li> </ul>

Category	Sub-category	Evidence includes:
2. Risks and opportunities	<ul><li>2.7 Business continuity (e.g. disaster recovery)</li><li>Business continuity plan.</li></ul>	<ul> <li>2.7.1 Business continuity plan</li> <li>Documented completely, clearly and unambiguously.</li> <li>Business continuity plan appropriate and up-to-date.</li> <li>Disaster recovery plan appropriate and up-to-date.</li> </ul>

## Category 3 Planning and scheduling

3. Planning and scheduling  3.1 Integrated set of approaches process  Planning and scheduling process  Documented.	Category	Sub-category	Evidence includes:
<ul> <li>Tools.</li> <li>3.1.2 Work breakdown structure</li> <li>Represents the project scope.</li> <li>Aligns to cost, planning and organisation.</li> <li>Identifies necessary controls.</li> </ul>	3. Planning and	<ul> <li>Integrated set of approaches</li> <li>Planning and scheduling process.</li> <li>Work breakdown structure and accountabilities.</li> </ul>	<ul> <li>3.1.1 Planning and scheduling process</li> <li>Documented.</li> <li>Integrated with other disciplines and techniques.</li> <li>3.1.2 Work breakdown structure</li> <li>Represents the project scope.</li> <li>Aligns to cost, planning and organisation.</li> <li>Identifies necessary controls.</li> <li>Accountabilities have been identified and allocated.</li> <li>3.1.3 Tools</li> <li>Schedule is managed through a recognised</li> </ul>

## Category 3 Planning and scheduling cont.

3. Planning and scheduling  3.2 Schedule integrity  Baseline.  Schedule durations.  Assurance.  Deliverables.  Close-out activities.  Close-out activities.  3.2.1 Baseline  Agreed and recorded.  Identifies critical path, major activities and milestones; mapped to the governance structure.  Reviewed at appropriate intervals.  3.2.2 Schedule durations and milestones  Appropriate estimates of activities and resources.  Credible.  Milestones defined.  3.2.3 Assurance  Scheduled process.
<ul> <li>Uses baseline and appropriate benchmarks.</li> <li>Schedule check software used.</li> <li>3.2.4 Deliverables</li> <li>Agreed and recorded.</li> <li>Ownership of schedule and accountabilities agreed.</li> <li>3.2.5 Close-out and handover</li> <li>Commissioning requirements agreed and recorded.</li> <li>Pre- and post-transition</li> </ul>

Category	Sub-category	Evidence includes:
3. Planning and	3.3 Project controls	3.3.1 Reporting
scheduling	Reporting.	<ul><li>Formal reporting process.</li></ul>
	<ul><li>Meetings.</li><li>Data integrity and</li></ul>	<ul><li>Reports made to appropriate levels of organisation.</li></ul>
	information flow.	<ul><li>Relevant content.</li></ul>
	<ul><li>Early warning and change</li></ul>	3.3.2 Meetings
	impacts.	Receive reports.
		<ul><li>Review performance, progress and cost.</li></ul>
		<ul> <li>Assess future activity and intended progress.</li> </ul>
		<ul><li>Provide stage approval.</li></ul>
		■ Take action.
		3.3.3 Data integrity and information flow
		The right data from the right sources.
		Objective and independent.
		<ul><li>Integrity of forecasting and estimating.</li></ul>
		3.3.4 Early warning and change impacts
		<ul><li>Formal early warning and change process.</li></ul>
		<ul><li>Early involvement of planning team.</li></ul>
		<ul><li>Involvement of stakeholders in early warning process.</li></ul>
		<ul><li>Planning scenarios modelled for assessment of impacts.</li></ul>
		<ul><li>Regular update of schedules to reflect changes.</li></ul>

## Category 4 Organisational capability and culture

Category	Sub-category	Evidence includes:
4. Organisational capability and culture	<ul> <li>4.1 People and the profession</li> <li>Project organisation and staffing.</li> <li>Co-ordination groups.</li> <li>Functional support.</li> <li>Roles and responsibilities.</li> <li>Learning and development.</li> <li>Health and safety.</li> </ul>	<ul> <li>4.1.1 Project organisation and staffing</li> <li>Plan for the life of the project.</li> <li>Staff numbers, recruitment and turnover.</li> <li>Access to shared resources.</li> <li>Competency assessments.</li> <li>Gap analysis and action plan.</li> <li>4.1.2 Co-ordination groups.</li> <li>Terms of reference.</li> <li>Delegated limits of authority.</li> <li>Escalation and cascade.</li> <li>4.1.3 Functional support</li> <li>IT.</li> <li>HR.</li> <li>Assurance.</li> <li>4.1.4 Roles and responsibilities for key roles</li> <li>Competences.</li> <li>Appropriate decision-making authority.</li> <li>Experience required.</li> <li>4.1.5 Learning and development</li> <li>Mentoring.</li> <li>Coaching.</li> <li>Training.</li> <li>4.1.6 Health and safety guidelines</li> <li>Personal safety.</li> </ul>

Category	Sub-category	Evidence includes:
4. Organisational capability and culture	<ul> <li>4.2 Teamwork</li> <li>Organisation charts.</li> <li>Protocols and strategies.</li> <li>Team building.</li> <li>Team characteristics.</li> </ul>	<ul> <li>4.2.1 Organisation charts</li> <li>Cover key roles.</li> <li>4.2.2 Protocols and strategies</li> <li>Internal communications.</li> <li>Meetings.</li> <li>Interfaces.</li> <li>Decision-making processes.</li> <li>4.2.3 Team building</li> <li>Facilitated workshop or similar activity.</li> <li>4.2.4 Team characteristics</li> <li>Team alignment/effectiveness surveys.</li> <li>Action plan to address issues.</li> </ul>
	<ul> <li>4.3 Processes and systems</li> <li>Project gate process.</li> <li>Continuous improvement.</li> <li>Standards and processes.</li> <li>Assurance and audit.</li> <li>Project management tools.</li> </ul>	<ul> <li>4.3.1 Established project gate process</li> <li>Authorised sign-off of decisions.</li> <li>Review prior to decision.</li> <li>4.3.2 Continuous improvement process</li> <li>Knowledge management ethos.</li> <li>Documentation system.</li> <li>Active learnings identification, sharing and application.</li> </ul>

## Category 4 Organisational capability and culture cont.

Category	Sub-category	Evidence includes:
4. Organisational capability and culture		4.3.3 Standards and processes
		<ul><li>Defined management system.</li></ul>
		<ul><li>Compliance with management system.</li></ul>
		Derogations.
		4.3.4 Assurance and audit
		<ul> <li>Integrated assurance and approval plan has been developed.</li> </ul>
		<ul><li>Integrated assurance plan owned by the project sponsor.</li></ul>
		4.3.5 Project management tools
		<ul><li>Support administration and processes.</li></ul>
		<ul><li>In place and functioning effectively.</li></ul>
	4.4 Working environment	4.4.1 Facilities requirements
	<ul><li>Facilities requirements.</li><li>Communication and coordination.</li></ul>	<ul><li>Adequate plans in place for duration of the project.</li></ul>
		<ul> <li>4.4.2 Communication and coordination across the team</li> <li>Co-location of key staff.</li> <li>Effective virtual working.</li> </ul>
	4.5 Leadership	4.5.1 Project leadership qualities
	Project leadership.	■ Professionalism.
		■ Ethics.
	<ul><li>4.6 Non-people resources</li><li>Administrative management.</li><li>IT.</li></ul>	<ul> <li>4.6.1 Administrative management</li> <li>Processes for non-people resources.</li> <li>4.6.2 IT</li> <li>Systems.</li> <li>Tools.</li> </ul>
		■ Databases.

## Category 5 Supply chain

Category	Sub-category	Evidence includes:
5. Supply chain	<ul> <li>5.1 Contract strategy</li> <li>Market analysis.</li> <li>Delivery model.</li> <li>Commercial model.</li> <li>Contract planning and drafting.</li> <li>Contract management.</li> </ul>	<ul> <li>5.1.1 Market analysis</li> <li>Capabilities of client and organisation understood.</li> <li>Engagement with market regarding key future requirements.</li> <li>Potential of existing supply chain and internal resources considered.</li> <li>5.1.2 Delivery model</li> <li>Proposed service definition and/or approach to delivering physical works are appropriate to need and feasible.</li> <li>5.1.3 Commercial model</li> <li>Commercial terms and structure addressed including adjustments to payment, delivery programme and performance aspects.</li> <li>Review and break points considered for long-term and service-type contracts.</li> <li>5.1.4 Contract (or internal service agreement) planning and drafting</li> <li>Appropriate expertise supports contract drafting.</li> <li>Agreed scope and deliverables from contract(s) aligns with project scope, schedule and operational requirements.</li> <li>Risks which can be transferred are allocated to the party best able to manage them.</li> </ul>

## **Category 5 Supply chain** cont.

Category	Sub-category	Evidence includes:
5. Supply chain		<ul> <li>Strategic and operational value of intellectual property addressed.</li> </ul>
		<ul> <li>Contract encourages proactive risk and value management.</li> </ul>
		<ul> <li>Post-delivery technical support and/or maintenance needs are addressed.</li> </ul>
		5.1.5 Contract management
		<ul> <li>Organisation has expertise to manage and assure contractor performance.</li> </ul>
		<ul> <li>Contract contains issue, escalation and dispute clauses.</li> </ul>
		<ul> <li>Assurance requirements for supplier and client are addressed.</li> </ul>
	5.2 Procurement strategy and	5.2.1 Procurement strategy
	process  Procurement strategy.	<ul><li>Stakeholders identified and engaged.</li></ul>
	<ul><li>Tendering and procurement process.</li></ul>	Strategy considers market structure and competition
	<ul> <li>Evaluation and award</li> </ul>	(both current and future).
	processes.  Governance and approvals.	<ul><li>Strategy sets appropriate timetable and procurement</li></ul>
	Governance and approvals.	method. Appropriate software is used to facilitate the procurement, including communications and record management.

Category	Sub-category	Evidence includes:
5. Supply chain		5.2.2 Tendering and procurement process
		<ul> <li>Adequate time allowed for procurement stages.</li> </ul>
		<ul> <li>Pre-Qualification         Questionnaire (PQQ)         is objective and covers         financial standing and         technical capacity.</li> </ul>
		<ul> <li>Invitation to tender (ITT) provides sufficient information and clarity (to extent possible) for bid preparation.</li> </ul>
		<ul> <li>Methodology and scoring criteria set prior to bids being returned and are applied.</li> </ul>
		5.2.3 Evaluation and award
		<ul> <li>Evaluation panel has suitable skills and expertise in procurement and technical matters.</li> </ul>
		<ul> <li>Fraud and corruption precautions taken, including compliance with internal and external procedures and rules.</li> </ul>
		<ul> <li>Negotiation strategy and activity clarifies and optimises each of the bids where possible.</li> </ul>
		<ul><li>Process and outcomes documented.</li></ul>
		<ul> <li>Award recommendation includes the analysis of procurement outcome based on assessment criteria.</li> </ul>

### **Category 5 Supply chain** cont.

Category	Sub-category	Evidence includes:
5. Supply chain	5.3 Contract management	5.3.1 Transition and mobilisation
	<ul><li>Transition and mobilisation.</li></ul>	■ Continuity of suitably
	<ul><li>Contract administration.</li></ul>	experienced client and organisation staff and
	Changes and variations.	resources.
	<ul><li>Delivery and service performance.</li></ul>	<ul> <li>Necessary change management and contract</li> </ul>
	<ul><li>Resolution processes.</li></ul>	mobilisation is planned and monitored.
	<ul><li>Contract completion and handover.</li></ul>	<ul><li>Handover of necessary information between parties.</li></ul>
		5.3.2 Contract administration
		<ul><li>Procedures align contract with governance requirements.</li></ul>
		<ul> <li>Payment procedures comply with contractual requirements and provide adequate review of claimed amounts by supplier.</li> </ul>
		<ul> <li>Compliance with contract obligations, including testing and certification, is monitored.</li> </ul>
		<ul> <li>Use of appropriate systems and software for management of contract and documents.</li> </ul>
		5.3.3 Changes and variations
		<ul> <li>Organisational policy for contractual changes and variations aligned with contract provisions.</li> </ul>
		<ul> <li>Changes and variations reviewed by appropriately skilled and authorised people for impact on commercial and other objectives.</li> </ul>

Category	Sub-category	Evidence includes:
5. Supply chain		5.3.4 Delivery and service performance
		<ul> <li>Inputs/outputs and delivery programmes which supplier is responsible for delivering are monitored.</li> </ul>
		<ul> <li>Delivery and service performance parameters are identified, allocated and monitored, and action taken where needed.</li> </ul>
		<ul> <li>Contractual remedies and incentives are used to encourage contractor performance.</li> </ul>
		<ul> <li>Client has adequate control over subcontractor appointment and assurance that sub-contractor management by head contractor is effective.</li> </ul>
		5.3.5 Resolution processes
		<ul> <li>Contractual provisions are followed, not ad hoc arrangements.</li> </ul>
		<ul> <li>Resolution of disputed matters should be achieved as soon as practical, not be left to accumulate for end-of-contract resolution.</li> </ul>
		<ul> <li>Adequate records are kept to support resolution processes.</li> </ul>
		5.3.6 Contract completion and handover
		<ul> <li>Exit or handover strategy covers key areas including training, intellectual property, business continuity.</li> </ul>

### **Category 5 Supply chain** cont.

Category	Sub-category	Evidence includes:
5. Supply chain		<ul> <li>All outstanding contract tasks, warranty requirements, deliverables outstanding, snagging and defect lists, completion certification, identified and addressed appropriately.</li> <li>Residual risks and liabilities identified and recorded.</li> </ul>

# **Category 6 Solution**

Category	Sub-category	Evidence includes:
6. Solution	6.1 Approach to developing the solution	6.1.1 Solution development approach
	<ul><li>Solution development.</li><li>Standards.</li><li>Ownership.</li></ul>	<ul> <li>Follows industry-appropriate principles and business processes.</li> <li>Development and design of requirements.</li> <li>Progressive assurance.</li> </ul>
		<ul><li>6.1.2 Standards</li><li>Coherent and up-to-date solution development standards used.</li></ul>
		<ul> <li>6.1.3 Ownership</li> <li>Defined responsibilities for commissioning, development and delivery.</li> </ul>

Category	Sub-	category	Evide	ence includes:
6. Solution	6.2	Design of solution or service  Design development.  Implementation.		<ul> <li>Development of solution design</li> <li>System components, boundaries and interfaces are defined.</li> <li>Key disciplines and processes applied by skilled resources.</li> <li>Documentation of design outputs, including specifications.</li> <li>Systems integration analysed and scheduled.</li> <li>Review and approval processes applied.</li> <li>Implementation of solution</li> <li>Implementation strategy.</li> <li>Implementation plan.</li> <li>Transition arrangements.</li> <li>Support requirements.</li> <li>Commissioning processes including testing and acceptance.</li> </ul>
	6.3	Solutions development management	6.3.1	<ul> <li>Operations management</li> <li>Service level agreements.</li> <li>Standards and procedures for operations management.</li> <li>Service delivery reports/analysis.</li> </ul>
	6.4	Business change planning	6.4.1	<ul> <li>Business change management</li> <li>New business processes.</li> <li>Business change, training and communication schedules.</li> <li>Results from change management activities.</li> </ul>

### Category 6 Solution cont.

Category	Sub-category	Evidence includes:
6. Solution	6.5 Quality control (review and test)	6.5.1 Quality control – review and test
		<ul> <li>Quality activities are all recognised and scheduled.</li> </ul>
		<ul><li>Quality control approach.</li></ul>
		<ul><li>Records of all reviews, inspections, tests.</li></ul>
		<ul><li>Records of all defects reports.</li></ul>
		<ul><li>Quality control reports (e.g. test results).</li></ul>
	6.6 Release management	6.6.1 Release management – handover and acceptance
		<ul> <li>Release schedules, plans and configuration specifications.</li> </ul>
		<ul> <li>Release testing and acceptance procedures and results to support delivery into service decision.</li> </ul>
		<ul> <li>Transition management (handover) plans and schedules.</li> </ul>
		<ul><li>Storage of released components.</li></ul>
		<ul><li>Acceptance criteria and processes.</li></ul>
	6.7 Implementation of solution	6.7.1 Pre-implementation project
		■ Requirements defined.
		6.7.2 Business change management
		<ul><li>Readiness reviews of receiving organisation.</li></ul>
		User manuals completed.
		<ul><li>User training plans implemented.</li></ul>

Category	Sub-category	Evidence includes:
6. Solution	6.8 Configuration management	6.8.1 Configuration management (CM)
		<ul> <li>Processes and tools used to maintain integrity of solution.</li> </ul>
		6.8.2 Configuration management in operation
		<ul><li>Comparison with project deliverables.</li></ul>
		6.8.3 CM database fully populated

#### **Category 7 Finance**

Category	Sub-category	Evidence includes:
7. Finance	7.1 Procurement	7.1.1 Supply chain management
	<ul><li>Supply chain management.</li><li>Placing of orders.</li></ul>	<ul> <li>Procurement strategy fits with project approach to supply chain management strategy.</li> </ul>
		7.1.2 Procedures for placing of orders ensure:
		timeliness;
		<ul> <li>cost, schedule and value including assurance measures;</li> </ul>
		■ changes are controlled;
		<ul><li>appropriate forms of contract and contract conditions;</li></ul>
		<ul><li>compliance with contract requirements by both parties.</li></ul>

### Category 7 Finance cont.

Category	Sub-category	Evidence includes:
7. Finance	<ul> <li>7.2 Contract administration</li> <li>Responsibilities.</li> <li>Change control.</li> <li>Claims management.</li> <li>Payment and income.</li> </ul>	<ul> <li>7.2.1 Responsibility for contract administration has been assigned</li> <li>7.2.2 Change control procedures <ul> <li>Document and manage change from either party.</li> <li>Take account of cost, schedule and value.</li> <li>Complied with by all parties.</li> </ul> </li> <li>7.2.3 Claims management procedures <ul> <li>Document and manage claims.</li> <li>Take account of cost, schedule and value.</li> <li>Complied with by all parties.</li> </ul> </li> <li>7.2.4 Procedures for obtaining and making payment <ul> <li>Take account of cost, schedule and value.</li> <li>Complied with by all parties.</li> </ul> </li> <li>7.2.4 Procedures for obtaining and making payment <ul> <li>Take account of cost, schedule and value.</li> <li>Complied with by all parties.</li> </ul> </li> </ul>
	<ul> <li>7.3 Financial control</li> <li>Cost/value analysis.</li> <li>Risk register.</li> <li>Forecast costs.</li> <li>Variances.</li> </ul>	<ul> <li>7.3.1 Cost/value analysis procedures</li> <li>Supporting business case.</li> <li>Cost/value analysis and reporting.</li> <li>Responsibilities assigned for maintenance of detailed cost breakdown.</li> <li>7.3.2 Risk register</li> <li>Priced and quantified risk register.</li> <li>Risk pricing process.</li> <li>Contingency management and release.</li> <li>Linked to corporate risk register.</li> </ul>

Category	Sub-category	Evidence includes:
7. Finance		7.3.3 Forecast cost, value, income and business case
		<ul> <li>Detailed and realistic estimates for forward cost and value.</li> </ul>
		<ul> <li>Impact of forecasts on business case projections recognised.</li> </ul>
		7.3.4 Variances in reported position
		<ul> <li>Variances in costs and forecasts have been identified and investigated.</li> </ul>
	7.4 Cash flow	7.4.1 Cash flow forecasting
	<ul><li>Forecasting.</li><li>Monitoring.</li></ul>	<ul><li>A robust forecast of future cash flows is in place.</li></ul>
	■ Timeliness.	7.4.2 Cash flow monitoring
		<ul> <li>Actual cash flows are monitored against the forecast and variances are explained.</li> </ul>
		7.4.3 Timely payments
		<ul> <li>Monitoring of receipt of incoming funds and payments to the supply chain.</li> </ul>
		<ul> <li>Appropriate action taken in respect of late payment.</li> </ul>
	7.5 Funding	7.5.1 Funding requirements
	<ul><li>Requirements.</li><li>In place.</li></ul>	<ul> <li>Project funding requirements are clearly defined and understood.</li> </ul>
		7.5.2 Funding in place
		<ul> <li>Appropriate sources of funding have been arranged and are secure.</li> </ul>

# Category 8 Social responsibility and sustainability

Category	Sub-category	Evidence includes:
8. Social responsibility and sustainability	8.1 Social responsibility aspects of scope	<ul> <li>8.1.1 Social responsibility credentials of finished project</li> <li>Project scope is consistent with organisation's reputational risk appetite.</li> </ul>
	<ul> <li>8.2 Health, safety and security</li> <li>Management.</li> <li>Performance measures.</li> <li>Safety culture.</li> </ul>	<ul> <li>8.2.1 Health, safety and security management system has:</li> <li>been developed;</li> <li>been implemented.</li> <li>8.2.2 Health, safety and security performance is:</li> <li>monitored;</li> <li>measured and recorded;</li> <li>outcomes acted upon.</li> <li>8.2.3 Safety culture</li> <li>Safety first culture prevails.</li> </ul>
	<ul> <li>8.3 Society</li> <li>Societal impact management.</li> <li>Societal performance.</li> </ul>	<ul> <li>8.3.1 Societal impact management system:</li> <li>addresses impact of project delivery on local society;</li> <li>has been developed;</li> <li>has been implemented.</li> <li>8.3.2 Societal performance</li> <li>Monitored.</li> <li>Measured and recorded.</li> <li>Outcomes acted upon.</li> </ul>

Category	Sub-category	Evidence includes:
8. Social responsibility and sustainability	<ul> <li>8.4 Ecological and physical environment</li> <li>Environmental management.</li> <li>Environmental performance.</li> </ul>	<ul> <li>8.4.1 Environmental management system:</li> <li>addresses environmental management impacts of project;</li> <li>has been developed;</li> <li>has been implemented.</li> <li>8.4.2 Environmental performance</li> <li>Monitored.</li> <li>Measured and recorded.</li> <li>Outcomes acted upon.</li> </ul>
	<ul> <li>8.5 Economy</li> <li>Economic impact assessment.</li> <li>Economic impact measures.</li> </ul>	<ul> <li>8.5.1 Economic impact assessment that:</li> <li>addresses impact of project delivery on local economy;</li> <li>has been developed;</li> <li>has been implemented.</li> <li>8.5.2 Economic impact measures</li> <li>Monitored.</li> <li>Measured and recorded.</li> <li>Outcomes acted upon.</li> </ul>

### **Category 9 Performance**

Category	Sub-category	Evidence includes:
9. Performance	9.1 Approach to managing	9.1.1 Performance management
	performance  Performance management.	<ul><li>Documented process in project execution plan.</li></ul>
	Work breakdown structure.	<ul><li>Integrates with other project disciplines.</li></ul>
	<ul><li>Control accounts.</li><li>Accountabilities.</li></ul>	9.1.2 Work breakdown structure (WBS)
	■ Tools.	<ul><li>Represents the project scope.</li></ul>
		<ul><li>Aligns to cost breakdown structure.</li></ul>
		<ul><li>Identifies control activities to measure progress.</li></ul>
		9.1.3 Control accounts
		■ Formal structure developed.
		<ul><li>Support performance analysis and corrective action.</li></ul>
		9.1.4 Accountabilities
		<ul> <li>Accountability for delivery has been allocated through management structures.</li> </ul>
		9.1.5 Tools
		<ul> <li>Performance measurement is managed through tools which integrate time, cost, risk and change.</li> </ul>

Category	Sub-category	Evidence includes:
9. Performance	<ul> <li>9.2 Performance measurement</li> <li>Established and controlled baseline.</li> <li>Key performance indicators.</li> <li>Form of contract.</li> <li>Data integrity.</li> </ul>	<ul> <li>9.2.1 Performance measurement baseline (PMB)</li> <li>Established for time, cost and resource management.</li> <li>Provides basis for management of change.</li> <li>Reflects project approach to risk management.</li> <li>Performance measurement implemented.</li> <li>Updated for change.</li> <li>9.2.2 Key performance indicators (KPIs):</li> <li>Established to measure progress against the baseline.</li> <li>9.2.3 Form of contract</li> <li>Form of contract supports performance measurement.</li> <li>9.2.4 Data integrity and information flow</li> <li>Single source for performance information exists in business systems.</li> </ul>
	<ul> <li>9.3 Holistic performance</li> <li>Maturity modelling.</li> <li>Risk and issue management.</li> <li>Improving outcomes.</li> <li>Performance reporting and review.</li> <li>Benefits realisation.</li> </ul>	<ul> <li>9.3.1 Maturity modelling</li> <li>Used to assess current performance status and as basis of corrective action.</li> <li>9.3.2 Risk and issue management</li> <li>Processes exist to identify and manage risk.</li> <li>Processes exist to identify issues for resolution or escalation.</li> </ul>

### **Category 9 Performance management** cont.

9. Performance 9.3.3 Improving	des:
Establish encoura improve     Measure success 9.3.4 Performance     Perform against of     Reportire identified variance     Future proceast used as     Perform against by 9.3.5 Benefits received by 9.4.1 Issue reporting.     Issue reporting.     Risk management.     Communications.     Governance of escalation.  Section 1. Success and project received by 9.4.2 Risk management.     Unresolved by 9.4.2 Risk management.     Process subject and process.  9.4.2 Risk management.	outcomes ned process to ge continuous ement by all parties. ement of key drivers. ce reporting ance is controlled objectives. ng of performance s trends and es. performance is being and reported and is a control. ance is reviewed oaseline. alisation exists to validate achieved against roposed. orting re reported to management. re logged and ed. ved issues are to escalation

Category	Sub-category	Evidence includes:
9. Performance		9.4.3 Project communications
		<ul> <li>Communications strategy exists, involving all project stakeholders.</li> </ul>
		<ul> <li>Information management processes are aligned to support effective decision making.</li> </ul>
		9.4.4 Governance of escalation
		<ul> <li>Formal processes exist in respect of escalation of issues and disputes.</li> </ul>
		<ul> <li>Contractual escalation processes apply to all parties.</li> </ul>
		<ul> <li>Contractual escalation processes ensure that board is aware of disputes.</li> </ul>

### **Category 10 Governance**

Category	Sub-category	Evidence includes:
10.Governance	10.1 Management and governance	10.1.1 Board approval
	of projects	Business case approved.
	Board approval of project.	■ Approval given at
	<ul><li>Responsibility and accountability for delivery.</li></ul>	appropriate level in organisation.
	<ul> <li>Structured management organisation.</li> <li>Business case.</li> <li>Project plan.</li> </ul>	<ul> <li>Board has overall responsibility for</li> </ul>
		governance of project.
		10.1.2 Responsibility and accountability
		<ul><li>Defined accountability for delivery.</li></ul>
		<ul><li>Continuation of accountability.</li></ul>

Category	Sub-category	Evide	nce includes:
10.Governance		10.1.3	Structured management
			<ul><li>Clarity of roles and responsibilities.</li></ul>
			Processes and controls are defined.
			<ul><li>Project organisation including governance</li></ul>
		10.1.4	Business case
		10.1.5	Project plan
	10.2 Sponsorship and project direction	10.2.1	Accountability for business case
	Business case.		<ul> <li>Project sponsor retains</li> </ul>
	Representation of project.		accountability for and ownership of business
	Continuity of sponsorship.		case.
	<ul> <li>Senior awareness of project</li> </ul>	10.2.2	Representation of the project
	status.  Continuing review of		<ul><li>Project sponsor represents project at senior level.</li></ul>
	links between project and organisation's strategic requirements.		<ul> <li>Project sponsor consults with project manager giving effective direction.</li> </ul>
		10.2.3	Continuity of sponsorship
			<ul> <li>Accountabilities continue on change of project sponsor.</li> </ul>
		10.2.4	Project status
			<ul> <li>Project sponsor reports project status to senior stakeholders.</li> </ul>
		10.2.5	Links to strategy
			<ul> <li>Project sponsor reviews continuing links to organisation's strategy.</li> </ul>

Category	Sub-category	Evidence includes:
10.Governance	<ul> <li>Sponsors</li> <li>Suitably senior sponsor appointed by board or delegated authority.</li> <li>Availability, and attendance at appropriate meetings.</li> <li>Reporting by sponsor.</li> <li>Able to obtain and allocate resources.</li> <li>Communication between sponsor and project manager.</li> </ul>	<ul> <li>10.3.1 Senior sponsor</li> <li>Appointed by board or delegated authority.</li> <li>Appropriate competencies.</li> <li>10.3.2 Availability and attendance</li> <li>Allocates sufficient time to project.</li> <li>Chairs and attends project board.</li> <li>10.3.3 Reporting</li> <li>Reports on project progress to organisation board.</li> <li>10.3.4 Allocation of resources</li> <li>Authorised to allocate organisation's resources.</li> <li>10.3.5 Communication</li> <li>Meets at appropriate intervals with project manager.</li> <li>Continuing awareness of user requirements.</li> </ul>
	<ul> <li>10.4 Administration of governance arrangements</li> <li>Robust project governance arrangements.</li> <li>Staged authorisation and review plans for business case.</li> <li>Internal reporting structures and plan.</li> <li>Delegated authority.</li> <li>Disclosure and whistleblowing policies.</li> </ul>	<ul> <li>10.4.1 Robust project governance</li> <li>Documented governance arrangements.</li> <li>Appropriate methodologies and controls.</li> <li>Governance arrangements are applied through project life cycle.</li> <li>10.4.2 Business case authorisation and review</li> <li>Approved project management plan and schedule.</li> </ul>

Category	Sub-category	Evide	nce includes:
10.Governance			<ul> <li>Agreed business case authorisation, review and approval points.</li> </ul>
			<ul> <li>Decisions made at authorisation points are recorded and communicated.</li> </ul>
		10.4.3	Internal reporting structures
			<ul> <li>Effective disclosure of project information to all levels of project.</li> </ul>
			<ul><li>Culture of continuous improvement.</li></ul>
			<ul> <li>Communications plan, linked to communications strategy.</li> </ul>
			<ul> <li>Inclusion of users and wider stakeholders in communications plan.</li> </ul>
		10.4.4	Delegated authority
			<ul> <li>Appropriate delegation of authority for effective governance and administration.</li> </ul>
		10.4.5	Disclosure and whistleblowing
			<ul> <li>Documented policy supportive of whistleblowers.</li> </ul>

Category	Sub-category	Evidence includes:
10.Governance	<ul> <li>Project status reporting</li> <li>Reporting of project status to interested stakeholders and others.</li> <li>Reporting of forecasts to board at appropriate points, including at approval stages.</li> </ul>	<ul> <li>Reporting project status</li> <li>Agreed structure and metrics for reporting project status to stakeholders.</li> <li>Reports provide appropriate level of detail to recipient.</li> </ul>
	<ul> <li>Reporting of project progress and risk to the board.</li> <li>Documented escalation processes for risks and issues.</li> </ul>	<ul> <li>10.5.2 Reporting forecasts</li> <li>Agreed structure for preparation of project forecasts.</li> <li>Forecasts provide appropriate level of detail to recipient.</li> </ul>
		<ul> <li>Reporting project progress and risk</li> <li>Project progress and risk reported at planned intervals to appropriate levels of organisation.</li> <li>Progress reports act as base of corrective action plan.</li> <li>Risk management processes are consistent with those of organisation.</li> <li>Project risks form part of organisation's main risk register.</li> </ul>
		<ul> <li>10.5.4 Escalation processes for issues and risks</li> <li>Project issue and risk registers maintained.</li> <li>Provision to escalate issues and risks to appropriate levels of organisation.</li> <li>Escalation process consistent with contractual requirements.</li> </ul>

Category	Sub-category	Evidence includes:
10.Governance	<ul> <li>Identification and engagement of stakeholders.</li> <li>Communications strategy and plan.</li> <li>Alignment of project with interests of stakeholders.</li> </ul>	<ul> <li>10.6.1 Identification and engagement of stakeholders</li> <li>Policies to identify and engage stakeholders at appropriate level.</li> <li>All stakeholders are identified, including contractors.</li> <li>10.6.2 Communications strategy</li> <li>Communications strategy encourages effective stakeholder engagement as needed.</li> <li>Records and logs of communications material and contacts.</li> <li>10.6.3 Alignment of interests</li> <li>Evidence of alignment of project with interests of stakeholders.</li> <li>Policies to manage non-alignment or misalignment.</li> </ul>
	<ul> <li>10.7 Project manager and staff</li> <li>Terms of reference and project organisation.</li> <li>Project manager(s).</li> <li>Technical and project office staff.</li> </ul>	<ul> <li>Terms of reference</li> <li>Terms of reference and job descriptions are consistent with project organisation and objectives.</li> <li>Project manager(s)</li> <li>Possess(es) suitable qualifications and experience.</li> <li>Report(s) to sponsor.</li> </ul>

Category	Sub-category	Evide	nce includes:
10.Governance		10.7.3	<ul> <li>Technical and project office staff</li> <li>Possess suitable qualifications and experience.</li> <li>Sufficiently resourced.</li> <li>Suitably qualified and experienced.</li> </ul>
	<ul> <li>Issue escalation and conflict management</li> <li>Issue and escalation procedure and records.</li> <li>Escalation reporting.</li> <li>Conflict management processes.</li> <li>Conflict management definition and policies for resolution.</li> <li>RAID (risks, assumptions, issues, dependencies) log maintained.</li> <li>Significant project risk recorded on organisation's risk register.</li> </ul>	10.8.1 10.8.2 10.8.3	<ul> <li>Issue and escalation procedure</li> <li>Approved issue and escalation procedure.</li> <li>Consistent with contractual requirements.</li> <li>Appropriate records maintained of risks, issues and actions, including escalation.</li> <li>Escalation reporting</li> <li>Issues and risks are reported to appropriate level in organisation for resolution, including board.</li> <li>Provision for action to be taken within contractual time limits.</li> <li>Conflict management</li> <li>Policies for recording and managing conflict.</li> <li>Policies for escalating and resolving conflict.</li> <li>RAID (risks, assumptions, issues, dependencies) log maintained</li> <li>Significant project risk recorded on organisation main risk register</li> </ul>

Category	Sub-category	Evidence includes:
10.Governance	<ul> <li>Business readiness for change</li> <li>Continuing relevance of project and business case.</li> <li>Commissioning processes and plans established.</li> </ul>	<ul> <li>10.9.1 Continuing relevance of project</li> <li>Business case reflects business need.</li> <li>Organisational strategy supports continuance of project.</li> <li>10.9.2 Commissioning</li> <li>Commissioning plans and processes established for technical and business aspects.</li> <li>Training plans developed.</li> <li>Changed business processes developed.</li> <li>Business case supports requirement for business change.</li> </ul>
	<ul> <li>10.10 Independent assessment and scrutiny</li> <li>Independent assurance and scrutiny processes.</li> <li>Assurance reporting to board.</li> <li>Assurance recommendations actioned.</li> <li>Assurance at appropriate stage gates of project.</li> </ul>	<ul> <li>10.10.1 Independent assurance and scrutiny</li> <li>Assurance and scrutiny activity at appropriate points in project.</li> <li>Assurance and scrutiny is independent of project.</li> <li>10.10.2 Assurance reporting to board</li> <li>Board seeks independent assurance.</li> <li>Assurance reports are made to appropriate level of project and organisation.</li> </ul>

Category	Sub-category	Evidence includes:
10.Governance		<ul> <li>10.10.3 Assurance recommendations actioned</li> <li>Responsibility for action on recommendations is assigned.</li> <li>Follow-up to ensure that assurance recommendations have been actioned.</li> <li>10.10.4 Assurance at stage gates</li> <li>Assurance activity scheduled to inform stage gate decision making.</li> </ul>
	<ul> <li>Closure of the project is planned.</li> <li>Early termination is agreed by the board or delegated authority.</li> <li>Post-project evaluation (PPE) and benefits realisation review.</li> <li>Resolution of project and contractual matters.</li> <li>Documented contractual acceptance by client.</li> </ul>	<ul> <li>Planning of project closure</li> <li>Consistent with contractual requirements.</li> <li>Planned project early close-down process.</li> <li>Post-closure continuing obligations identified and recorded.</li> <li>10.11.2 Early termination</li> <li>Agreed by board or delegated authority.</li> <li>Contractual and legal impacts identified and assessed.</li> <li>10.11.3 PPE and benefits realisation</li> </ul>
		<ul> <li>PPE and benefits realisation review</li> <li>Preparation for PPE from project outset.</li> <li>Benefits achieved quantified and measured against business case.</li> <li>Outcomes from PPE and benefits review are disseminated usefully within the organisation.</li> </ul>

Category	Sub-category	Evidence includes:
10.Governance		10.11.4 Resolution of project and contractual matters
		<ul> <li>Documented discussions and agreements to resolve contractual matters at completion.</li> </ul>
		<ul> <li>Planned and economical wind-down of project resources and facilities.</li> </ul>
		10.11.5 Contractual acceptance
		<ul> <li>Agreed acceptance processes are consistent with contractual requirements.</li> </ul>
		<ul><li>Acceptance is consistent with project deliverables.</li></ul>
		<ul> <li>Formal acceptance documentation with agreed defect and snag lists.</li> </ul>
		<ul><li>Incentive for contractor to complete outstanding works or services.</li></ul>

#### References

- [1] **APM (2012)** *APM Body of Knowledge 6th edition.* ISBN 978-1-903494-40-0
- [2] **APM (2014)** A Guide to Integrated Assurance. ISBN 978-1903494-04-2.
- [3] APM (2011) Directing Change: A Guide to Governance of Project Management. ISBN 978-1-903494-06-6.

**Measures for Assuring Projects** 

### **Association for Project Management**

Ibis House, Regent Park
Summerleys Road
Princes Risborough
Buckinghamshire HP27 9LE

Telephone+44 (0) 845 458 1944Facsimile+44 (0) 845 458 8807Emailinfo@apm.org.ukWebapm.org.uk