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INFRASTRUCTURE, GOVERNMENT AND HEALTHCARE

# Argyll & Bute Council

Internal audit report

Scoping for Development and Infrastructure Services systems health  
check, in respect of specific client-identified systems

22 August 2012

This report is for:

**Action**

Lesley Sweetman, *Performance & Business Manager*

Graham Whitefield, *GIS Manager*

**Information**

Audit committee

Ian Nisbet, *Internal Audit Manager*

Gerry Wilson, *IT Infrastructure Manager*

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**Notice: About this report**

This Report has been prepared on the basis set out in our Engagement Letter addressed to Argyll and Bute Council ("the Client") dated 30 January 2012 (the "Services Contract") and should be read in conjunction with the Services Contract. Nothing in this report constitutes a valuation or legal advice. We have not verified the reliability or accuracy of any information obtained in the course of our work, other than in the limited circumstances set out in the Services Contract. This Report is for the benefit of the Client only. This Report has not been designed to be of benefit to anyone except the Client. In preparing this Report we have not taken into account the interests, needs or circumstances of anyone apart from the Client, even though we may have been aware that others might read this Report. We have prepared this report for the benefit of the Client alone. This Report is not suitable to be relied on by any party wishing to acquire rights against KPMG LLP (other than the Client) for any purpose or in any context. Any party other than the Client that obtains access to this Report or a copy (under the Freedom of Information (Scotland) Act 2002, through the Client's Publication Scheme or otherwise) and chooses to rely on this Report (or any part of it) does so at its own risk. To the fullest extent permitted by law, KPMG LLP does not assume any responsibility and will not accept any liability in respect of this Report to any party other than the Client. In particular, and without limiting the general statement above, since we have prepared this Report for the benefit of the Client alone, this Report has not been prepared for the benefit of any other local government body nor for any other person or organisation who might have an interest in the matters discussed in this Report, including for example those who work in the sector or those who provide goods or services to those who operate in the sector.

The D&I department is implementing a 'Specialist D&I service's Support Review and Improvement Programme'. This audit has been performed to aid the 'Improving utilisation and streamlining IT systems' project within the programme. The audit provided a high level review of systems and projects through review of documentation and interviews with stakeholders/management and key users.

Through meetings and consideration of documentation it was identified that whilst the systems can generally meet the D&I service's requirements with a number of manual workarounds, there were a number of key issues identified in the current systems, vendor relationships and operating model that may impact any future initiatives to improve utilisation and streamline systems, specifically:

The observations and road map detailed in this report are to assist D&I to progress the 'Improving utilisation and streamlining IT systems' project within the programme.

- There may be opportunities to further develop the Development & Infrastructure (D&I) systems architecture to provide a greater level of systems integration that would bring efficiencies and improve the effectiveness of core systems. The proliferation of end-user-computing databases and spreadsheets can no longer be effectively managed by D&I nor fully supported by central IT.
- Currently the systems architecture within D&I appears to be inefficient in meeting the D&I service's requirements in the most efficient and effective manner. It appears that this may partly be due to the current operating and governance model. Therefore, consideration should therefore be given to reviewing the current operating and governance model(s) as it appears that there are opportunities to improve the framework for communication and governance between D&I and the central IT function.
- D&I should determine what D&I service's process and systems architecture improvements will bring the required D&I service's benefits. Where this has reliance on a vendor, greater consideration should be given to the level of development service available from a vendor to support the improvements.
- The barriers to replacing core systems may be relatively high and any replacement may be unlikely to provide adequate benefits over the existing systems to justify the investment. There also appears to be limited options in the market for replacing any of the core systems with an alternative package solution.
- It is unlikely that the current level of staff resource would be adequate to continue D&I service's-as-usual operations and also provide resource to further develop the systems.
- Whilst five systems have been in-scope for this audit, we understand that consideration will be given to tiering the level of systems critical to D&I, which will aid in achieving the maximum benefit from the 'Improving utilisation and streamlining IT systems' project.



## Introduction and background

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### **Introduction and scope**

In accordance with the 2011-12 internal audit plan of Argyll & Bute Council ("the Council"), as approved by the Audit Committee, we performed an internal audit of key systems to define the scope of further work to perform a health-check. The overall objective of this internal audit was to:

- Develop and define objectives
- Identify key individuals
- Perform high level planning
- Produce an agreed scope of work

The specific objective, scope and approach, as agreed with management, is detailed in appendix four.

### **Background**

The D&I department is implementing a 'Specialist D&I service's Support Review and Improvement Programme'. This audit has been performed to aid the 'Improving utilisation and streamlining IT systems ' project within the programme. The audit provided a high level review of systems and projects through review of documentation, including client-produced Project Initiation Document in respect of the Specialist D&I service's Support Review and Improvement Programme, and interviews with stakeholders/management and key users, in order to:

- Define tasks to be included in a systems health check of the client-identified systems
- Identify and agree the objectives of a systems health check
- Identify and develop the key areas for inclusion in a systems health check for the in-scope systems.
- Socialise and agree the proposed systems health check scope

The output from the audit is a report that details an agreed scope, approach and objectives for the systems health check.

The in-scope systems are:

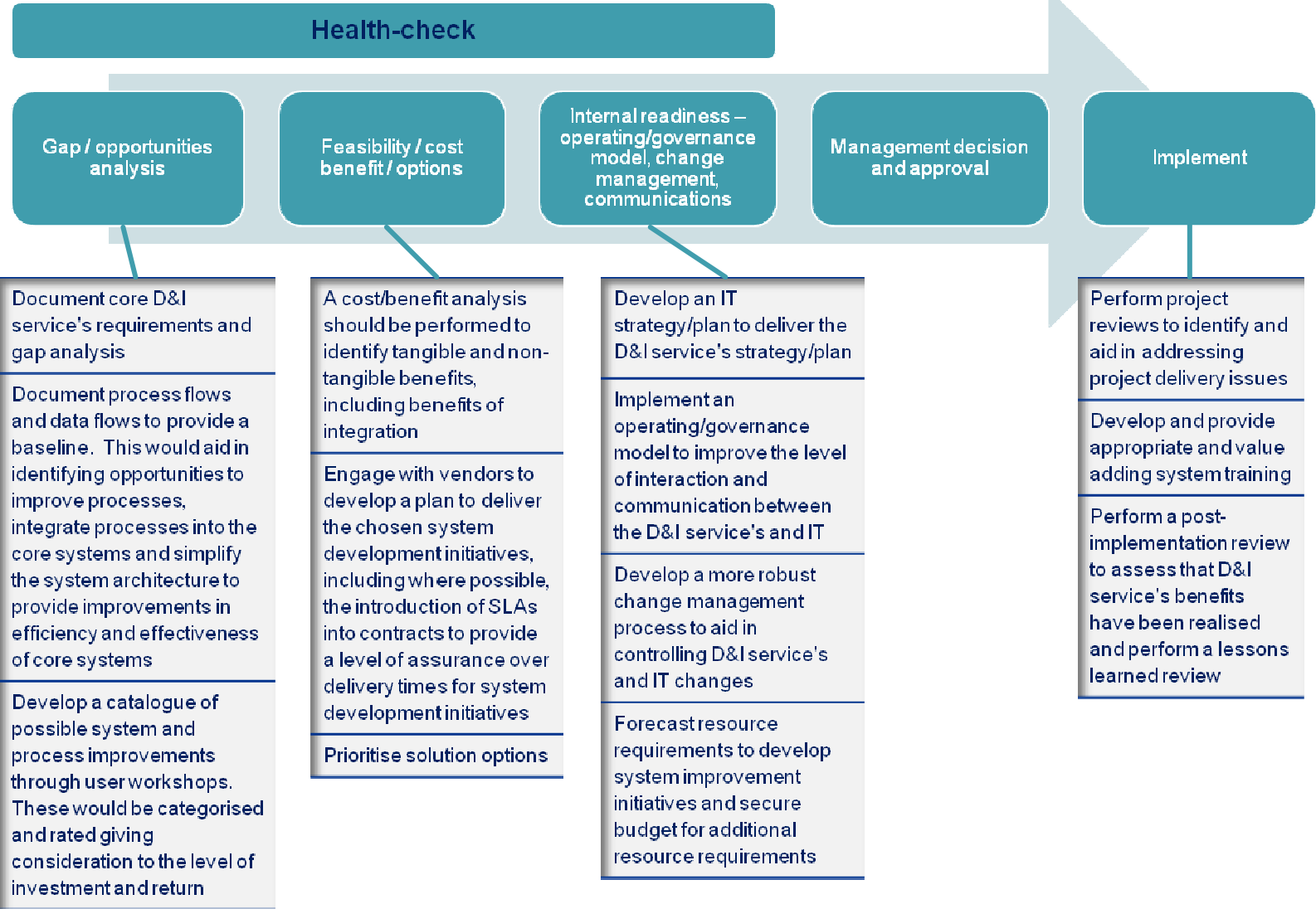
- WDM
- Uniform
- BACAS
- LAGAN
- Commercial Refuse

# Systems health-check process

The following health-check process details indicative steps that should be addressed to support improving the level of efficiency and effectiveness of the core systems and simplifying the overall system architecture

The objective of the health-check is to confirm systems are:

- Fit for purpose
- Supportable/maintainable
- Fit for future D&I service's requirements
- Operating and maintenance costs are optimised
- Appropriate resource skills are available
- Risks are identified and managed



## Audit actions

As a result of our work, two audit actions have been identified for consideration by management.

Since our findings do not relate to control failure, we have not specifically graded the significant of the findings, but recommend that management consider for action and tracking following standard Council processes.

### Key findings

As a result of our work, we have identified two audit actions for consideration by management

Finding(s) and recommendation(s)	Agreed management response
<p><b>1 D&amp;I interaction with the general IT environment</b></p> <p>In the course of our discussions, we identified a number of areas in respect of the general IT environment which we believe D&amp;I should consider as part of the systems health-check phase of the project. Examples of this include the overall IT strategy, disaster recovery / D&amp;I service's continuity planning, change management processes and process and data flows. The full detail of our general observations are outlined in appendix one.</p> <p>It is recommended that D&amp;I management consider the general observations made in the appendix, and consider how best to incorporate these, where appropriate, within the health-check phase.</p>	<p>Noted – consideration will be made of general observations raised.</p> <p><b>Responsible officer:</b> Performance &amp; Business Manager (D&amp;I)</p> <p><b>Implementation date:</b> Immediate – as part of ongoing project</p>
<p><b>2 D&amp;I specific systems</b></p> <p>Our system specific enquiries identified a range of observations for consideration in undertaking a detailed health-check of existing systems, and the process through which this should be undertaken. Our general observations in respect of each system are outlined in appendix one.</p> <p>It is recommended that management review the system observations, and identify the nature of additional work required to consider these within the system health-check phase of work.</p>	<p>Noted – consideration will be made of system-specific observations raised.</p> <p><b>Responsible officer:</b> Performance &amp; Business Manager (D&amp;I)</p> <p><b>Implementation date:</b> Immediate – as part of ongoing project</p>

# Appendices



## Appendix one

# Summary of observations for consideration

The following observations have been aligned to the phases of the health-check

Ref	Finding	Health-check phase
<b>General D&amp;I and IT environment</b>		
1	<p><b><u>Communicate with other Council's to identify possible options to improve core systems</u></b></p> <p>Engaging with other local Council's may provide an opportunity to understand what systems they are using, how they are using their systems, and other options available in the market.</p> <p>This could shorten the time and effort in identifying the most appropriate system development opportunities, and provide input to D&amp;I service's and IT strategy/plans to meet the D&amp;I service's requirements.</p>	2 - Feasibility / cost benefit / options
2	<p><b><u>Perform a contract review and engage with vendors to identify opportunities to improve the level of development support</u></b></p> <p>The Council's aim is to procure best of breed systems from leading industry suppliers, and remain in line with versions operated by other customers in order that systems remain fully support by the suppliers under annual maintenance agreements. Participation in user and product development groups are used to ensure that Council requirements are included in supplier's longer term product development plans.</p> <p>D&amp;I should determine what D&amp;I service's process and systems architecture improvements will bring the required D&amp;I service's benefits. Where this has reliance on a vendor, it is important that consideration continues to be given to the level of development service available from a vendor to support the improvements.</p> <p>Consideration should be given to the barriers to replacing core systems as these may be relatively high and any replacement may not provide adequate benefits over the existing systems to justify the investment. There also appears to be limited options in the market for replacing any of the core systems with an alternative package solution.</p>	2 - Feasibility / cost benefit / options



## Appendix one

### Summary of observations for consideration (cont'd)

The following observations have been aligned to the phases of a health-check

Ref	Finding	Health-check phase
<b>General (cont'd)</b>		
3	<p><b><u>Document process and data flows to provide a baseline to support the systems architecture development</u></b></p> <p>We were unable to sight D&amp;I process flow and data flow documents.</p> <p>Without this the relevant information to identify opportunities to improve flows that would feed into rationalising the current systems architecture may not be recognised by the stakeholders.</p> <p>Process and data flows should be produced to identify opportunities to improve flows that would feed into rationalising the current systems architecture.</p> <p>Consideration should be given to D&amp;I specific systems and Corporate systems.</p>	1 - Gap / opportunities analysis
4	<p><b><u>The current change management process may not be robust enough to manage change across the D&amp;I service's and IT</u></b></p> <p>Discussions with D&amp;I staff identified that there had been issues with changes through the current change management process.</p> <p>Based on the change management documentation provided there is scope to make the change management process more robust and in-line with industry accepted good practice for managing business and technical change.</p>	3 - Internal readiness (operating/governance model, change management, communications)
5	<p><b><u>The level of communication and coordination between the D&amp;I service's and IT could be improved</u></b></p> <p>Historically D&amp;I had their own dedicated IT staff that operated independently of a centralised IT function. Since this was changed approximately two years ago, the majority of IT services are provided from a centralised IT function. The introduction of the client liaison officer role is intended to provide a more coherent relationship.</p> <p>However, the proliferation of end-user-computing databases and spreadsheets means that aspects of the D&amp;I system architecture cannot be supported effectively by D&amp;I and the centralised IT function.</p> <p>It appears that this may partly be due to the current operating and governance model. Therefore, consideration should therefore be given to reviewing the current operating and governance model(s) as it appears that there are opportunities to improve the framework for communication and governance between D&amp;I and the central IT function.</p>	3 - Internal readiness (operating/governance model, change management, communications)



## Appendix one Summary of observations for consideration (cont'd)

The following observations have been aligned to the phases of a health-check

Ref	Finding	Health-check phase
<b>General (cont'd)</b>		
6	<p><b><u>The current IT Strategy does not include D&amp;I specific requirements to improve system utilisation and streamline IT systems</u></b></p> <p>Consideration should be given to the adequacy of the current operating/governance model to engage with IT to identify, develop and implement initiatives to improve utilisation and streamline IT systems.</p>	3 - Internal readiness (operating/governance model, change management, communications)
7	<p><b><u>The level of system reporting available does not meet the D&amp;I service's requirements</u></b></p> <p>The level of reporting generally available from systems is limited, resulting in the development of specific reports, or for data to be extracted and manipulated to create a report with the required level of information.</p> <p>A gap analysis on the level of reporting available and that required should be carried out. Depending on the outcome of this, a solution could be defined. This may include the introduction of a reporting layer across the systems architecture using a dedicated reporting package.</p>	1 - Gap / opportunities analysis
8	<p><b><u>Consideration should be given to the adequacy of training on systems</u></b></p> <p>From meetings with D&amp;I staff, there was a general view that the level of training provided to system users may not be adequate to provide a level of knowledge to provide efficient, effective and consistent use of the systems across the department.</p> <p>Consideration should be given to the current training regime and materials to assess the level of adequacy to meet department needs. From this a training plan and materials can be developed and rolled out as required, with a review to ensure it is meeting the intended objective.</p>	5 – Implement
9	<p><b><u>Systems may not have an adequate level of disaster recovery/D&amp;I service's continuity planning</u></b></p> <p>Whilst we have been advised that there are corporate disaster recovery and business continuity plans in place, consideration should be given to performing a D&amp;I impact analysis to determine the level of disaster recovery and service continuity requirement based on the D&amp;I business processes and data flows.</p>	1 - Gap / opportunities analysis

## Appendix one

### Summary of observations for consideration (cont'd)

Ref	Finding	Health-check phase
<b>LAGAN</b>		
10	<p><b><u>The LAGAN system may have functionality that could be used to aid in improving system utilisation and streamlining IT systems</u></b></p> <p>The available functionality of the LAGAN CRM is not being fully utilised and there is limited integration of other systems.</p> <p>Whilst LAGAN may not be capable of providing all the functionality of other systems, there is scope to improve use of the functionality it can provide.</p>	1 - Gap / opportunities analysis
11	<p><b><u>The Customer Complaint process, CSC and LAGAN could be better aligned</u></b></p> <p>The LAGAN system assigns a different case number for each of the three stages of the complaints process. This makes it more difficult to track a specific case from opening to closing.</p> <p>The level of standard reporting available from LAGAN requires further extraction and manipulation to progress the complaints process.</p> <p>The level of training of what constitutes a 'complaint' may not be commonly known across the Customer Service Centre (CSC) resulting in cases having to be reassigned.</p>	1 - Gap / opportunities analysis
<b>UNIFORM</b>		
12	<p><b><u>Limited likelihood of significant vendor system development support</u></b></p> <p>Due to nature of the contract with the vendor, IDOX, the experience of development support is poor.</p> <p>This may impact the ability to adequately progress system developments generally, and to align them to other developments with which they are integrated.</p>	2 - Feasibility / cost benefit / options
13	<p><b><u>Regular manual data manipulation is required to produce the required level of reporting</u></b></p> <p>The level of standard reporting available from UNIFORM is not adequate to meet D&amp;I service's requirements. This results in data being extracted to MS Access and then exported to MS Excel where it can be manipulated.</p> <p>Furthermore, standard reports are generally no up-to-date with current legislation.</p> <p>This increases the risk that the source data integrity is impacted, resulting in inaccurate reports.</p>	1 - Gap / opportunities analysis

## Appendix one

### Summary of observations for consideration (cont'd)

Ref	Finding	Health-check phase
<b>UNIFORM (cont'd)</b>		
14	<p><b><u>A greater level of engagement with the account manager may be beneficial</u></b></p> <p>We were advised that IDOX attend user groups, however, issues specific to D&amp;I do not seem to be getting raised with the account manager.</p> <p>We understand that the new Client Liaison Officer role is expected to work with the lead user, GIS manager, or system administration staff (all D&amp;I roles) to help address this.</p>	3 - Internal readiness (operating/governance model, change management, communications)
15	<p><b><u>IDOX training courses may not add value</u></b></p> <p>We were advised that the content of the IDOX provided training courses may not fully meet the requirements and expectations of staff. A review of content appropriate to enhancement of staff knowledge may be appropriate.</p>	5 - Implement
<b>WDM</b>		
16	<p><b><u>There is no current integration with the GIS system</u></b></p> <p>The WDM system is not currently integrated with the GIS system, although we were advised that this is currently under consideration.</p>	1 - Gap / opportunities analysis
17	<p><b><u>There may be resource constraints that impact optimising benefits from the system</u></b></p> <p>There is a key reliance on one individual to administer the system for D&amp;I, and lack of resource available to input data, resulting in inefficient utilisation of the system.</p>	3 - Internal readiness (operating/governance model, change management, communications)
18	<p><b><u>The vendor has been supportive of previous development initiatives</u></b></p> <p>Whilst we are not aware of any specific contractual arrangement to provide and agreed level of development support, it does appear that the vendor is supportive of development initiatives.</p>	4 – Engage

## Appendix one

### Summary of observations for consideration (cont'd)

Ref	Finding	Health-check phase
<b>BACAS</b>		
19	<p><b><u>There does not appear to be a consistent approach to using the BACAS system</u></b></p> <p>During the audit we only had the opportunity to speak to a BACAS user at the Council office in Lochgilphead and Helensburgh, and at the Cardross Crematorium.</p> <p>However, there does not appear to be a consistent approach to using the BACAS system and there is no procedural guidance to drive a consistent approach to using BACAS.</p> <p>A lack of, or, inconsistent training for users across the various instances of the BACAS system was identified.</p>	1 - Gap / opportunities analysis
20	<p><b><u>BACAS system should be networked</u></b></p> <p>Whilst the desktop environment that hosts the BACAS system is supported by the centralised IT function, BACAS is supported by the relevant supplier.</p> <p>Consideration should be given to implementing a networked BACAS system, which the central IT function can then support, including data backups in accordance with policy/recognised industry practice.</p> <p>Furthermore, we were advised that some data relating to cremations is protected by legislation to specific individuals. An appropriate method to handle this data should be included.</p>	3 - Internal readiness (operating/governance model, change management, communications)
<b>Commercial Refuse</b>		
21	<p><b><u>Investigate options to replace the system with a package solution</u></b></p> <p>The current Commercial Refuse system is an in-house developed database supported by D&amp;I staff.</p> <p>Investigate the cost/benefit to making the system centrally supportable against replacing with a new package system.</p> <p>Consideration should be given to investigating how other Council's are managing the system aspect of this D&amp;I service's function, and to identify any package options to replace this.</p> <p>A new package system would be supported by the centralised IT function and the implementation of this could include integration with the GIS system.</p>	1 - Gap / opportunities analysis

Interviews were held with each of the following people to develop an understanding of how the systems are used, and identify issues with the day-to-day use and opportunities for improvement.

Name	Title	System
Lesley Sweetman	Performance & Business Manager	All
Graham Whitefield	GIS Manager	All
David Hanley	IT Project Leader	All
Ian Nisbet	Internal Audit Manager	All
Gerry Wilson	IT Infrastructure Manager	All
Gavin Boyd	IT Applications Manager	All
Katrina Duncan	ICT Projects and Liaison Manager	All
Mhairi Renton	Customer Service Manager	Lagan
Douglas Renton	System Administrator	Lagan
Christina Carmichael	Senior Administrative Officer	Lagan and Commercial Refuse
Alan Morrison	Regulatory Services Manager	Uniform
Dorothy Allan	Planning Service System Technician	Uniform
Marion MacLean	Systems Support Technician	Uniform
James Martin	IT Technician (Regulatory Services)	Uniform
Sybil Johnson	Senior Planning Officer	Uniform
Graham Brown	Roads Operations Manager	WDM/Total
Joanna Mellon	Clerical Assistant	BACAS
Lisa McCaffery	Administrative Officer (Helensburgh & Lomond)	BACAS
Tommy McLean	Cardross Crematorium	BACAS
Walter MacArthur	Fleet & Waste Manager	Commercial Refuse
Lorraine McGinty	Administrative Assistant	Commercial Refuse

The following documentation was provided.

Ref	Document name	Version /Date	System name
1	Programme Initiation Document - Specialist D&I service's Support Review and Improvement Programme	2.0	All
2	Service Improvement Plan 2011-12 for Planning and Regulatory Services	4	
3	2012-13 Service Plan – Economic Development	n/a	n/a
4	2012-13 Service Plan – Planning and Regulatory Services	n/a	n/a
5	Lagan Version 7 – Back Office Manual	7	Lagan
6	Summary of Application Interfaces for Argyll and Bute Council	n/a	n/a
7	IT Support to D&I Improvement programme(Stream 3)	n/a	n/a
8	Provision of Crematorium and Cemeteries Administration System - Tender		BACAS
9	Review of the interment and BACAS systems process and procedures currently in place throughout the authority for both the use of burial grounds and Cardross crematorium	December 2010	BACAS
10	Organisation chart – Argyll & Bute Council	n/a	n/a
11	Organisation chart – Development and Infrastructure Services	n/a	n/a
12	Sales Agreement for the Provision of Software and Services between Argyll & Bute Council and IDOX Software Limited	5 August 2008	Uniform
13	Software Maintenance Agreement between Argyll & Bute Council and IDOX Software Ltd	5 August 2008	Uniform
14	IDOX Help Desk Support Guidelines	2.7	Uniform
15	IDOX Sales Invoice		
16	Annual support renewal	4 March 2012	BACAS



## Appendix three Documentation (cont'd)

Ref	Document name	Version /Date	System name
17	BACAS support agreement	n/a	BACAS
18	Planning and Regulatory Services Service Plan 2012-13 FINAL VERSION	n/a	n/a
19	Improvement Plan – Planning and Regulatory Services	V4	n/a
20	2012-13 Service Plan – Economic Development	n/a	n/a
21	BACAS screen shots	n/a	BACAS



#### **Introduction**

Development and Infrastructure Services are undertaking a 'Programme of Specialist D&I Service's Support Improvement', the aims, objectives, deliverables, timescales and specific responsibilities of which are outlined in the relevant Project Initiation Document (PID) which has been prepared.

#### **Objectives**

As part of this overall ongoing specialist D&I service's support review and improvement programme within Development and Infrastructure Services, internal audit will undertake a review and scoping for a future key D&I service's systems healthcheck. This will involve:

- developing and defining objectives;
- identification of key individuals;
- performance of high level planning; and
- production of an agreed scope of work outlining the next phase of work required to complete the system healthchecks.

#### **Approach**

The audit approach will be to perform a high level review of systems and projects through review of documentation, including client-produced PID in respect of Specialist D&I service's Support Review and Improvement Programme, and interviews with stakeholders / management and key users. From this, the approach will:

- define a high level understanding of tasks included in a systems health check of the client-identified systems;
- identify and agree the objectives of a systems health check;
- identify and develop the key areas for inclusion in a systems health check for the in-scope systems (final list to be agreed); and
- specify and agree the proposed systems health check scope.

#### **Deliverable**

Following completion of this assignment, the key deliverable will be an:

- agreed scope and approach for the systems health check, with objectives.



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