

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

Document Title: Schedule of Corrective Actions
CSR+ Development Audit

Document Type: Schedule

Abstract: This document presents the Observations and Recommendations resulting from the referenced Internal Audit(s) along with the agreed corrective action, the action owner and the date by which the action is to be complete. A status field is included for quick reference purposes.

Status: Draft

Distribution:

J. Bennett	M. Coombs
T. Austin	M. Bennett
P. Jeram	J. Hunt
G. Chatten	D. Groom
G. King	G. Hooper
Library	

Author: Jan Holmes

Comments to: Jan Holmes

Comments by:

0 Document control

0.1 Document history

Version	Date	Reason
0.1	22/11/99	Initial draft following preliminary analysis with MJBC (17/11)
0.2	29/11/99	Following review with individual action owners

0.2 Approval authorities

Name	Position	Signature	Date
M. Bennett	Director Quality & Risk		

0.3 Associated documents

	Reference	Vers	Date	Title	Source
[1]	IA/REP/015	1.0	28/10/99	Audit of CSR+ Development	
[7]	IA/REP/009	0.1	21/09/99	Report on EPOSS Solutions	

0.4 Table of content

1 Introduction.....	3
2 Process	3
3 Key to Plan.....	3
4 Implementation	4

1 Introduction

This document presents the Corrective Action Plan that emerged from a post audit meeting following the audit of the operation of CSR+ Development.

2 Process

This Plan will go through a number of iterations and reviews following production as Corrective Actions (CA) are worked on and, subject to agreement between the CA Owner and Internal Audit, amended.

The status will remain OPEN until such time as the CA Owner and Internal Audit agree on a course of action to address the issue at which time the status will be changed to ACTION. Once the actions have been carried out, subject to agreement between the CA Owner and Internal Audit, the status will change to CLOSED.

Once actions have been agreed the Plan will be monitored by the responsible manager and subject to periodic review by Internal Audit.

3 Key to Plan

Column	Meaning
CAP Ref.	Unique number allocated to each Observation/ Recommendation for follow-up
Report Ref.	Paragraph number in the original report where the Observation/Recommendation was raised
Observation/Recommendation	Narrative detail taken directly from Audit Report
Owner	The identified owner of the Corrective Action (CA)
MTM	Management Team Member to whom the CA Owner reports
Status	CA status. OPEN pending agreed corrective action ACTION pending completion of agreed corrective action CLOSED on completion of agreed corrective action
Agreed Action/Commentary	Detail of the CA agreed between the CA Owner and IA. If the CA Status is OPEN or ACTION it will contain a commentary of the current position.
Due Date	The date of the next important event in the CA. Where the Status is CLOSED the date will be the closure date.

4 CSR+ Development

Report Reference IA/REP/015

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/01	3.2	<p>The audit identified that some Team Leaders had identified retrospective work to generate missing and update CSR documentation in preparation for future Releases.</p> <p>This retrospective work should be supported by the organisation and should be taken into account in any resource planning that may be underway. However, it must be planned and I recommend that Delivery Unit Managers are tasked with developing 'Get Well Plans' for their retrospective units to deal with the missing or incomplete deliverables.</p>	PJ	TPA	Open Action	<p>Retrospective Work Group</p> <p>17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with PJ.</p> <p>25/11 : TPA – PJ/TPA to establish forum with Delivery Managers to identify the shortfall. Put together plan with resourcing implications to present to JHB/MJBC. Will have to be cost justified. Email invitation to meeting (1/12) issue to DMs 26/11.</p>	<u>03/12/99</u>
015/02	3.3	<p>Many of the development teams are producing documentation to varying form and content standards.</p> <p>The current work to convert the existing helpfile OLS to a full intranet provides an ideal opportunity to re-launch them and I recommend that an awareness programme is launched to overcome the apparent lack of knowledge of the coverage and content of the OLS. This must be backed up with effective management checks ensuring that the key controls are exercised.</p>	PJ	TPA	Open Action	<p>Retrospective Work Group</p> <p>17/11 : See 015/01</p> <p>25/11 : See 015/01</p>	<u>03/12/99</u>

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/03	3.4	<p>Hard evidence is an important element of ISO registration. The audit found little in the way of hard evidence to support assertions made wrt reviews.</p> <p>There was an abundance of verbal assurances that lifecycle reviews had taken place but very little hard evidence, in the form of walkthrough notes, document comment sheets, review meeting minutes, etc existed. Having moved from the NR2 position where even anecdotal evidence was hard to find Pathway must now formalise the documenting and retention of review outcomes. Not only does this provide evidence of review but can also be used to measure the effectiveness of the review process itself, an important element of continuous process improvement.</p>	PJ	TPA	Open Action	<p>Retrospective Work Group</p> <p>17/11 : See 015/01</p> <p>25/11 : See 015/11</p>	<u>03/12/99</u>

ICL Pathway

Schedule of Corrective Actions:
CSR+ Development Audit

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/04	4.2.1	<p>The audit identified that EPOSS continues to be unstable. PinICL evidence illustrated the numbers of PinICLs raised since the 1998 Task Force and the rate of their being raised.</p> <p>The EPOSS Solutions Report [7] made specific recommendations to consider the re-design and re-write of EPOSS, in part or in whole, to address the then known shortcomings. In light of the continued evidence of poor product quality these recommendations should be re-considered.</p>	TPA	JHB/ MJBC	Open Action	<p>17/11 : This action falls within Development but requires higher level drive. Has links with CS and BD. MJBC to speak with TPA direct.</p> <p>25/11 : Work on AI298 identified that majority of problems (~80%) were to do with error and printer error handling. Daily meetings had been instigated. TPA of view that while original code had not been good it would be difficult to justify the case for re-writing now.</p> <p>25/11 : Email issued by TPA :-</p> <p>“We have not formally closed down the recommendation that we re-engineer the EPOSS application due to its inherent instability. Since this recommendation was made, a number of events/actions have taken place. We embarked upon a major maintenance exercise for LT2 which targeted several known stability issues. In parallel, we carried out a defensive testing activity which identified a number of faults which were addressed. The intensive exercise designed to remove acceptance incident 298 resulted in many substantial improvements to the error handling, messaging and printing aspects of the product. We finally introduced improved unit and link testing and more disciplined configuration control. Finally, the maintainability and enhanceability of the product has been proven by the speed and quality of the SIP 16 and EPOSS Reconciliation developments.</p> <p>We will of course continue to monitor the PINICL stack for the next few months and if necessary re-evaluate this decision. Would Jan please close this issue formally using the rationale described.”</p>	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/05	4.2.2	RDMC did not have any test scripts and testing for this fundamental part of the solution was informal. Effort should be expended, as soon as practicable, into developing a full suite of unit and/or link test scripts, and a formal test strategy for future releases of RDMC/RDDS should be established.	PJ	TPA	Open Action	Retrospective Work Group 17/11 : See 015/01 25/11 : See 015/01	<u>03/12/99</u>
015/06	5.1	The CSR+ Plan had recently been changed and a revised delivery date arrived at. The audit expressed concern that while slipping dates additional requirements/functionality was being added in. In order to protect the revised delivery date it is imperative that no further changes are accepted to the CSR+ requirements baseline and I recommend that the principles enshrined in the Release Management process be applied to the current CSR+ requirements baseline.	GC/ MJBC	MJBC	Open	Release Management Group 17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with GC.	
015/07	5.2	A Non Functional Catalogue is currently being developed. The design and development work for CSR+ is largely complete. B&TC's proposed testing of NFRs is currently based on old, potentially superseded requirements although the delivery a revised NFR Catalogue is imminent. It is imperative that the existing scripts are validated against the NFRs in the new Catalogue at the earliest opportunity.	GJ	TPA	Open Action	17/11 : An activity to be planned/agreed to review the emergent NFC against B&TC scripts. 25/11 : TPA – Confirmed that Janet Dore was producing NFR and that a Gap Analysis would follow. Not aiming to deliver gaps at CSR+ and any future delivery will have to be cost justified. GJ looking to identify missing bits against B&TC technical test Register. JD also looking at what <i>should</i> be in system to identify what scripts <i>should</i> contain.	<u>End 12/99</u>
015/08	5.2	There is an implied risk that the NFR Catalogue may highlight deficiencies in the CSR+ products delivered that will require re-work.	TPA	TPA	Open Action	17/11 : Suggested that a TDA review of the NFC be carried out to identify any potential issues. 25/11 : TPA – See 015/07	<u>End 12/99</u>

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/09	5.3	The audit identified the informal nature of the arrangements between QRM and Secure Development. The agreements and commitments to conduct the KMS User Acceptance Tests should be formalised and reflected in the Security Manager's workplan for 2000.	GH	MHB	Open Action	17/11 : To be discussed 25/11 : Accepted. SDU and Roy Birkenshaw contacted to arrange meeting to discuss/agree UAT requirements. These to be formalised and planned to happen 02/00. GH also reviewing user documentation – ongoing at moment. This will be reflected in workplan.	<u>End 12/99</u>
015/10	5.3	The audit identified that there was no formal ownership or plan that supports penetration testing. Assuming that the requirement for penetration testing remains the approach agreed for NR2 should be reviewed for continued suitability. Ownership of the activity should be assigned and the necessary resources committed and reflected in the Programme Plan.	GH	MHB	Open Action	17/11 : To be discussed 25/11 : Meeting initiated with SDU, Chris Wannell (NR2 experience) & Kevin Barrett to discuss Penetration testing. Last known position was that this had been offered to Admiral Management Services who were going to prepare a proposal. GH also to meet Richard Gaze (Horizon Test Manager) 29/11. GH believes that PT will run along similar lines to NR2 but will have to confirm against new contract.	<u>10/12/99</u>
015/11	5.4	Concern was expressed that the technical problems being experienced with integrating Predict! And AMS would impact on the introduction of a revised risk management process. It was noted that difficulties are being experienced in the integration of the Predict! Tool with the AMS planning tool. While maintaining full integration as the ultimate goal the Risk Manager should not delay in introducing the revised RM process across the programme.	GK	MHB	Open	17/11 : To be discussed	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/12	5.4	<p>The audit highlighted that an independent risk register was being maintained by the Director QRM. This could lead to inconsistency in Pathways approach to risk identification and mitigation.</p> <p>It is anticipated that the Predict! register will form the sole repository and source of risk information, providing a common and consistent view of risk, and the use of all other registers, lists and matrices should cease once this has been fully implemented.</p>	GK/ MHB	MHB	Open	17/11 : Work undertaken to compare both lists. Update made to GPK register and decision taken to operate single list – Predict!	
015/13	5.4	<p>The Programme Office has developed a separate risk register which the audit considered should be applied to all delivery streams.</p> <p>The risks identified on the PO risk register apply in whole or in part to all Delivery Units. In order to ensure that Delivery Managers and Team Leaders address the detail of these risks they should be incorporated into each DU's risk register and the risks managed alongside those already identified.</p>	GK	MHB	Open	17/11 : To be discussed but suggested that lists are consolidated.	
015/14	5.5	<p>Concern was expressed by a number of Team Leaders about the planning process.</p> <p>For the Planning Process to be accepted and used positively by the Team Leaders it is imperative that it meets their needs as well as management's. I recommend that a full review is carried out of the Planning Process that confirms or refutes the concerns raised by the Team Leaders and establishes a process that is acceptable to, and used by, all interested parties.</p>	GC	MJBC	Open	17/11 : MJBC stated that Planning Manager is to be appointed – review situation with Team Leaders? Later discussion with GC suggests that new appointee will not be capable of conducting a wide ranging review. GC maintains that he wants an independent audit of the planning process.	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/15	5.6	<p>The audit identified that process management was operating on a departmental basis and made more complex the assurance that Pathway had a full suite in time for ISO registration.</p> <p>To have any chance of success I believe that a similar singular resource should be appointed to take overall responsibility for the co-ordination of process development and deployment across the whole of Pathway and that this resource and the ISO Project Manager should be organisationally co-located.</p>	MHB	JHB	Open	<p>ISO Registration Group</p> <p>17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with MHB. An ISO Board has been proposed. Details, TORs etc to be provided.</p>	
015/16	5.6	<p>The audit identified the absence of development standards for Agent and Counter development.</p> <p>The Host Application Database Design and Interface Standards were developed to provide definitive technical standards for host development teams. Arguably out of date since it deals specifically with Oracle development, there are no known equivalents for Counter or Agent Development. I recommend that the HADDIS is updated to reflect the current host development environments and the equivalents for Counter and Agent development be produced.</p>	JH	TPA	Open	<p>17/11 : To be discussed</p> <p>25/11 : JH under impression that Agent Team had comprehensive range of development standards so no further work required in that area. Confirmed that this was not the case with Counters and that JD was producing :</p> <p>(a) Description of Standard APIs for Counters</p> <p>(b) Development Standards or Counters</p>	
015/17	5.6	<p>The audit identified that there were no universal C or VB standards in place.</p> <p>However, to improve coding quality and ensure a consistent basis for code review coding standards for C and VB must be developed and deployed via the Intranet OLS. These standards should then be used.</p>	JH	TPA	Open	<p>17/11 : To be discussed</p>	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/18	5.7	<p>The audit identified the possibility that the statistics used to report progress on documentation generation and approval may be inaccurate.</p> <p>In order to present a more accurate reflection of CSR+ documentation status, thus improving the reporting to and monitoring of this by management, two review cycles should be undertaken/completed :</p> <p>a. The Programme Office should complete their review the totality of the PVCS documentation worksets for CSR+.</p> <p>b. Workset owners should review their worksets and confirm the current content or provide details of changes to the Programme Office.</p>	GC TPA/ MHB/ JF/ SM	MJBC MJBC	Action Action	<p>17/11 : GC confirmed that the Workset review had been carried out and was complete. Several redundant Worksets had been removed from both the CSR and CSR+ document lists..</p> <p>17/11 : GC to draft instruction to Directors requiring that a Workset review is carried out. MJBC to sign.</p> <p>25/11 : Following discussion with TPA decided to include the workset review in the Retrospective Work Group.</p>	
015/19	5.8	<p>A similar situation pertains for the CSR documentation.</p> <p>The size of this task is significant and should be included within the proposed 'Get Well Plans' identified in 3.2. In order to size the job the Programme Office should undertake a review of the worksets to ensure that they are all required and workset owners should review their content to confirm their accuracy, as required in Documentation Management, OLS Release 17.</p>	GC	MJBC	Open Action	<p>17/11 : See 015/18</p> <p>25/11 : See 015/18</p>	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/20	5.9	<p>The QAM had not been able to progress the quality improvement programmes that he had been recruited to do.</p> <p>The Quality Assurance Manager should be given the authority to proceed with the role that he was recruited to undertake. This will require the acceptance of, and agreement to, the Quality Improvement Plans by the Development Director and formal approval by him to proceed.</p>	JHem	TPA	Open	<p>Retrospective Work Group</p> <p>17/11 : See 015/01</p>	
015/21	5.9	<p>The QAM had produced a report detailing current failings against ISO9001. Unfortunately the report was not being acted on in the appropriate manner.</p> <p>This report provides a valuable insight into the state of Developments processes and the weaknesses that exist. It should be given a wider circulation, especially to the Pathway Quality Manager, and any corrective work identified should be authorised.</p>	MHB	JHB	Open	<p>ISO Registration Group</p> <p>17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with MHB. An ISO Board has been proposed. Details, TORs etc to be provided.</p>	
015/22	5.9	<p>QA Checklists had been developed by the QAM but their use was by no means universal.</p> <p>Many of the Delivery Unit teams are planning retrospective review sessions for their documents. This should be extended across all Units and the use of the Checklists mandated during those reviews.</p>	JHem	TPA	Open	<p>Retrospective Work Group</p> <p>17/11 : See 015/01</p>	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/23	5.9	Quality planning was virtually non existent. It is questionable whether there is any benefit in producing Quality Plans at this stage of CSR+ development. However, the value of the document in bringing together details of the resources, organisation, processes, reviews, risks, assumptions and other contributory factors must be realised in future Release and its production by Delivery Managers made mandatory.	JH	TPA	Open	17/11 : Production of Quality Plans deemed to be nugatory at this stage of development. Require confirmation that necessity and wherewithall present on new OLS	
015/24	5.10	The audit considered that insufficient management attention was being given to the contractual requirement to obtain ISO registration by September 2000. Having personally steered three separate companies through the rigours of ISO 9000 registration, including one to ISO9001/TickIT, I believe that the breadth of scope of the proposed certification, and the time remaining in which to achieve it, demands that a full time Project Manager is assigned to the task. Either the Quality Manager should be able to transfer any non-essential initiatives or a resource should be assigned to him specifically to manage the registration commitment.	MHB	JHB	Open	ISO Registration Group 17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with MHB. An ISO Board has been proposed. Details, TORs etc to be provided.	
015/25	5.10	Notwithstanding the appointment of dedicated resource to drive this project, and to assist when one is appointed, an activity should take place to produce an inventory of all processes, developed or under development, and their deployment status within Pathway. This activity should build on the work undertaken for Development and the inventory mapped onto the requirements of ISO9001 to identify shortcomings.	MHB	JHB	Open	ISO Registration Group 17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with MHB. An ISO Board has been proposed. Details, TORs etc to be provided.	

ICL Pathway

**Schedule of Corrective Actions:
CSR+ Development Audit**

Ref: IA/CAP/008
Version: 0.1
Date: 22/11/99

CAP Ref.	Report Ref.	Report Observation/Recommendation	Owner	MTM	Status	Agreed Action/Commentary	Due Date
015/26	5.11	<p>A considerable amount of time (and money) had been spent earlier in 1999 to develop a revised Release Management process. A project manager was to have been appointed in August to implement and deploy the proposed process.</p> <p>A Project Manager should be appointed without delay and he/she must concentrate their initial efforts into identifying those areas that will benefit CSR+ and implementing them.</p>	GC/ MJBC	MJBC	Open	<p>Release Management Group</p> <p>17/11 : Agreed to form a CAP group to cover a number of related recommendations. Precise activities to be discussed and agreed with GC.</p>	
015/27	5.12	<p>The audit identified a plethora of varied intranet sites, all developing without the benefit of the imposition of standards or content controls.</p> <p>Pathway IT Infrastructure should established a policy and strategy for the development and deployment of intranet sites within Pathway. It should also conduct a review of existing activity, identify standards for their content and presentation values, and ensure that future intranets developed for use within Pathway conform to the strategy.</p>	PW	SM	Action	<p>17/11 : Paul Westfield has been emailed with detail from report and asked for views/proposals.</p>	