Acceptance Workshop (5)

Gavrelle House - 9:30 - 16:00 on 9th September 1999

ACTION Points

Attendees:

Expert: Peter Copping

POCL: Keith Baines, John Meagher, Ruth Holleran, Min Burdett (minutes), Graeme Seedall (376, 378), Calum Craig (376, 378), Adele Henderson (408)

Pathway: Tony Oppenheim, John Dicks, John Pope (376, 378), Dave Hollingsworth (298), Dave Cook (412), Steve Muchow (408, 412, 298)

218 Training

	Work shop		Action Date	Workshop Date
7.	2	Pathway proposed that severity is reduced from High to Medium. POCL to review for 2 nd Sept why this should not happen.		2 nd Sept
		Workshop 3 Update : POCL presented draft success criteria. POCL to update draft with timescales to enable assessment before 9 th Sept. Also to include "no show stoppers" where the success criteria involve POCL reviews. Reconsider link with AI 408.	Early 3 rd Sept	9th Sept
		Workshop 5 Update: Agreed that the severity is now an agreed Medium delete next time		

	Work		Action	Workshop
	shop		Date	Date
8.	3	The working group will meet to progress:	8th Sept	9 th Sept
		formal feedback on Pre-Training Event paper		
		feedback on Monitoring Training Delivery paper		
		progress rectification plan (see action 218/10 below)		
		• formalisation of process to deal with the 5% of trainees who do not reach the appropriate competence level Feed back progress and issues to this group.		
		During the on-going work by POCL to review Pathway's proposals/deliverables, POCL will raise immediately with Pathway (Tony Oppenheim or Liam Foley) serious issues which would impact the success criteria, and not wait for the working group meeting.		
		Workshop 4 Update: No show-stoppers identified. POCL comments to Pathway planned for 6/9, for formal review on 8/9 by the working group.		
		Activities incorporated in rectification plan - delete next time.		
9.	3	POCL (Bruce McNiven) is writing to Pathway (Liam Foley) 2 nd Sept covering:	6th Sept	6th Sept
		endorsement of Pathway to start development of the Pre-Training event		
		the cost implications of the CCN for RNM training		
		Liam Foley to reply to POCL (Bruce McNiven and cc to Ruth Holleran). Any issues to be raised at this meeting.		
		Workshop 4 Update: POCL (Ruth Holleran) and Pathway (Tony Oppenheim) to determine any outstanding commercial issues and bring to this group.		9th Sept
		Workshop 5 Update: No outstanding cost/commercial issues. Delete next time.		9th Sept 6th Sept 9th Sept 9th Sept 17th Sept 17th Sept
10.	3	POCL (Steve Grayston) and Pathway (Liam Foley) to progress and agree the rectification plan.		6th Sept
		Workshop 4 Update: Plan being discussed at working group on 8 Sept. Outcome to be brought to this group.		9th Sept
		Workshop 5 Update: Rectification plan now subject to some detailed changes. Confirm agreement to this group.		17 th Sept
11.	5	Pathway to provide final AI analysis form and POCL to confirm agreement.		17 th Sept

298 System Stability

	Work		Action	Workshop
1.	2 2	A joint POCL/Pathway working group has been established to review deficiencies. This group is agreeing: • metrics (current and retrospective monitoring) • underlying cause • what fixes when (both introduced and in progress) and correlate these to the deficiencies • results of the fixes. The working group to report back to this group progress, outcome and issues. Workshop 3 Update: progress satisfactory. See below for new actions arising Delete next time	Date	Date 2 nd Sept, 6 th Sept 13 th Sept
2.	2	POCL (John Meagher/Ruth Holleran) and Pathway (Terry Austin) to agree achievement levels for each deficiency. This will establish the target levels for reducing this Acceptance Incident from High to Medium. Workshop 4 Update: POCL presented their view of the target levels for closure. Pathway to review and feed back to this meeting: the achievability of the closure target; the associated timescales; and their view of the target for moving from High to Medium. Workshop 5 Update: POCL to review Pathway's proposal for reducing the severity (section 5.4 of Resolution Plan for AI 298).	6 th Sept	6 th Sept 9 th Sept 13 th Sept
3.	2	Pathway reconsidering their "complexity of technology" argument for justifying the acceptability of higher incident rates. Pathway will develop a policy document describing how they will minimise the risk of destablising the system in subsequent releases. Policy document to be issued and discussed with POCL (Jeremy Folkes to arrange POCL participants) in advance of discussions at this group.	9 th Sept	13 th Sept

	Work shop		Action Date	Workshop Date
4.	3	POCL (John Meagher) to produce mapping of Pathway to POCL classifications of the incidents. Agree this mapping with Pathway. As part of 298/1 above, report back any issues.	6 th Sept	6 th Sept
		Workshop 4 Update: Mapping has been done by POCL. POCL to send to Pathway for review.		
		Workshop 5 Update : The new report (see action 298/6 below) to be reviewed to ensure that the mapping overlaps and omissions are properly accounted for and reported.		13 th Sept
5.	3	Additional stability issues have been noted by POCL (e.g. hour glass appearing at unexpected times). POCL (John Meagher) to ensure that Pathway is kept up to date with new types of incidents as seen by POCL.	As they occur	
6.	3	To inform the 10^{th} Sept meeting (deciding whether to roll out to the next $158/178$ outlets) we need the best view we can get of the data and trends. The working group should provide an initial draft of a management summary report on 6^{th} Sept and a further report for 9^{th} .		6 th Sept 9 th Sept
		Workshop 5 Update: Pathway to produce an updated report including categories around disputed calls. This report to be reviewed by POCL.		13 th Sept
		Pathway (Steve Muchow) to consider how to report the data and trends to minimise the effect of new offices' learning curve calls.		13 th Sept
7.	4	Pathway issued a draft Rectification Plan. POCL (John Meagher) to review and feedback to Pathway (Terry Austin cc: Dave Hollingsworth). Update this meeting.	9th Sept	9th Sept
8.	4	Pathway to clarify whether in the Long Term Stability Policy document there is just going to be testing, or whether other elements of the development life-cycle will be part of the approach.		9th Sept

AI 314 - Provision of Technical Documentation

	Work shop		Action Date	Workshop Date
2.	3	Peter Copping to review version 0.2 of CS/SPE/007 "Development of Manual Describing Use of OPS, TMS and EPOSS APIS within ICL Pathway" to decide whether it is sufficient basis for judging the fitness for purpose of the document when made available.		6th Sept
		Workshop 4 Update: Review identified an issue: how would procurement be structured where a new agent was required across the interface. This is primarily an issue for TMS. Pathway do not want other suppliers to be developing new agents and so this would have to be a Pathway developed new agent, or a Pathway enhancement of an existing one. POCL (Graham White) to consider POCL's response and to feed back to this group.		13 th Sept
		Workshop 5 Update: POCL understand Pathway's position, and although not ideal, agree their involvement as described above. Delete next time.		
3.	3	Pathway will produce a revised version of CS/SPE/007 including:	13th Sept	
		 (i) the document will contain Pathway specific APIs as will be required for the development process; (ii) an undertaking to provide a list of 'excluded' Riposte APIs which are in conflict with the Pathway implementation; (iii) addition of an appendix containing technical details of Systems Management and Key Management that would be subject to an NDA; (iv) Pathway to add a new section on standards. 		
		Pathway to report progress to this group having discussed the revised draft with POCL.		
		Workshop 4 Update: Note the change in date for review by this group.		
		Workshop 5 Update: Document agreed. Pathway to raise final AI analysis form and POCL to confirm agreement.		17 th Sept

AI 369 - Scanner Reliability

	Work shop		Action Date	Workshop Date
1.	1	 The following were agreed: Pathway would write up the results of the last 100-cover laboratory tests and submit a report to POCL. Pathway and POCL would conduct data analysis to validate the DSS proposition that there has been a higher level of impound rates on OBCS compared with ESNS yet, as they were all valid books, there must therefore be a higher rate of false rejection (impounds) on OBCS than on ESNS. Pathway will conduct the data analysis and validation work for OBCS; POCL will conduct the work for ESNS. Pathway will set up field validation of actual rejects occurring in outlets. The validation tests will determine the cause of the rejects as between scanner, user, paper, ink, damage, condition etc. This activity is expected to require a mobile laboratory facility. POCL will seek observation of the field validation tests by DSS observers. POCL will request the DSS to provide the covers off books rejected during field validation &/or historically rejected books to Pathway for laboratory testing. POCL will check training course material for the adequacy of scanner user training and/or instructions. POCL will obtain the DSS's buy-in to the above approach to the resolution of this AI. It was expected that Karen Rogers would co-ordinate this activity for POCL and that John Dicks would initially do so for Pathway. Actions subsumed below - delete next time. 		2 nd Sept (Progress check)
2.	3	POCL (Karen Rogers) to issue plan to Pathway. Workshop 4 Update: Plan issued. Initial review indicates plan OK except some difficulty with Pathway doing historical analysis of read failures back to 25/7. Pathway and POCL to meet to review. This meeting to include: the detail of the metrics to be used to report the failure rates; any modifications to the activities to be undertaken in the "roving lab" in the NE on 9th Sept (see 3 below); and formal confirmation by Pathway of plan. Report back to this meeting. Workshop 5 Update: Plan discussed and modifications agreed. Delete next time	3 rd Sept 7 th Sept	9 th Sept

	Work shop		Action Date	Workshop Date
3.	3	Pathway (Steve Muchow) and POCL (Karen Rogers) to develop an action plan for the "roving lab" to pick up reject books as they occur. Target is for the lab to be in operation on 7 th and/or 9 th Sept. Pathway will attempt to provide bar-code evaluation equipment as part of the lab.	3 rd Sept	13 th Sept
		Workshop 5 Update: Roving Lab in NE 9th Sept . Feed back outcome to this meeting.		
4.	3	POCL to escalate with DSS the need to be involved in the activities (a) providing impounded books for further testing and (b) observe the "roving lab" tests. Update this group with progress.	3 rd Sept	6th Sept
		Workshop 4 Update: DSS (Steph Fowler) has noted that their concern with the proposal to provide impounded books is (a) getting agreement from DSS Security and (b) concerns around the delay in returning books. POCL (Bruce McNiven via John Meagher) to escalate this with DSS (Ken Davenport and Vince Gaskell) to try to get their agreement.	9 th Sept	9th Sept
		Workshop 5 Update: Vince Gaskell no longer involved in this area. John Meagher to speak to Ken Davenport to determine appropriate operational contacts in DSS to be involved with on-going issues around the service.		13 th Sept
5.	3	Pathway reported that about 90% of books not scanned were from 4 or 5 offices. Pathway will undertake root cause analysis of these offices.		6th Sept
		Workshop 4 Update: Analysis of single office with 50% of failures indicates incorrect procedure being used in outlet. POCL (Dave McLaughlin via John Meagher) to telephone to determine reason for high failure rates in the other cluster offices.		9th Sept
		Workshop 5 Update: Ring around cluster offices has identified a number of causes of user problems with system. There is some justifiable confusion with the procedures (having to do different processes in similar, but different circumstances). A reference data change will help with one misleading icon. John Meagher to action change.		13 th Sept
6.	5	POCL (John Meagher) and Pathway (John Dicks) to develop a joint rectification plan for presentation to DSS. This rectification plan to include the targeting of cluster offices (Pathway providing the MIS/POCL to determine and manage the process for dealing with problem offices).	15 th Sept	17th Sept

AI 372 - Systems Management

	Work shop		Action Date	Workshop Date
3.	3	Pathway to document the resolution proposal as an AI Analysis form.		
		Workshop 4 Update: Note change in date for next review at this meeting.		13th Sept.
4.	4	POCL to review whether re-down-loading of Riposte file is an acceptable part of the test.	9th Sept	9th Sept
		Workshop 5 Update: It is not acceptable to POCL that re-down loading Riposte as part of the Systems Management test. Pathway to produce provisional release note for the test drop and discuss this with POCL (Bob Booth in Jeremy Folke's absence.)		13 th Sept

376 Data Integrity

	Work		Action	Workshop
	shop		Date	Date
2.	2	Pathway needs to make clear the OBC procedures and practice that will be in place, both up to CSR+ and after CSR+, for: • changing the status of core products to non-core • decreasing the availability of non-core products. This to be documented by Pathway (referring to existing documents where appropriate) and reviewed by Working Group (see 1). There will be a test of the agreed (interim) procedures by releasing currently suppressed changes through a managed programme. This test to be planned by 2 nd Sept and progressed sufficiently to assure the procedures by 9 th or 13 th Workshop. Flag up on 2 nd Sept Workshop if problems with progress.	2 nd Sept	9 th or 13 th Sept
		Workshop 3 Update: See new action 376/10 below. Workshop 5 Update: Because of the nature of the process to release the embargoed reference data changes, it will not be possible to manage the release, test the fix and report back in the remaining time for Acceptance. Determine the implications of this at next meeting - each party to determine appropriate representation for the discussion.		13 th Sept

	Work shop		Action Date	Workshop Date
3.	2	Pathway propose to introduce a fix to ensure that the Cash Account does not lose transactions (PinICL 27748 refers). As part of 1 above, review fix and confirm acceptability of fix to this group.	26 th August to 1 st Sept	2 nd Sept
		Workshop 3 Update: New analysis emerging. Carry forward to 6th Sept.		6th Sept
		Workshop 4 Update: The working group will review the explanation of the fix that is being applied on 9 th Sept and will consider whether to release the retained Reference Data changes. Feedback outcome to this group.		9th Sept
		Subsumed within 376/2 and 376/10 below - delete next time		
5.	2	Pathway are proposing a 3-level data integrity check to be implemented in December. This needs to be documented as a high level design including failure state analysis. POCL (Calum Craig, Graeme Seedall, Martin Box and Jeremy Folkes) to be involved in interactive walkthroughs during the development of the design. Report progress and issues to this group.	3 rd Sept	6 th Sept.
		 Workshop 4 Update: POCL consider high level design generally good. Further joint work needs to be undertaken on: failure scenarios. POCL will undertaken an internal review of the design (including TIP and TP) to determine failure scenarios. These will be documented and fed back to John Pope by close of play 9th. John Pope (calling on others if required) will identify how these scenarios will be dealt with. Update at this meeting operating procedures. The development of the operating procedures, including reporting failures to TIP, will be included in 	9 th Sept	13 th Sept
		the rectification plan. (see 8 below)		
		Workshop 5 Update: POCL review identified failure scenarios and some issues with the high level design which needed clarification. (It was reconfirmed that the high level design was acceptable, but the resolution of detailed aspects of the design may impact the high level design.). POCL and Pathway will meet to discuss the POCL paper "EPOSS/TIP Reconciliation Controls" which summarises the failure scenarios and design issues.	10 th Sept	13th Sept

	Work shop		Action Date	Workshop Date
6.	2	POCL's position is that roll-out should not commence until data integrity can be assured. Ruth Holleran to consider with the Auditors, and report back to this group, whether the current Pathway checks plus, possibly, continuing POCL checks, would be adequate until Pathway's full data integrity checks are in place.		6th Sept
		Workshop 3 Update : Due to possible dependency of this action on 376/5 above, and 376/7. below, this action may have to be revisited on 9 th Sept.		9th Sept
		Workshop 4 Update : POCL and Pathway need to develop a contingent approach possibly including indemnities. Keith Baines and Tony Oppenheim to meet with lawyers to initiate.	8 th Sept	9th Sept
		Workshop 5 Update: POCL's position remains that this Incident should remain High until the data integrity fix is in place. POCL have further internal meetings to confirm this position. POCL will contact Pathway should further clarification be required. POCL to report back to this meeting.		13 th Sept
7.	2	Pathway to review whether there are any interim checks which can be undertaken on the cash account stream - report back to this group.		6th Sept
		Workshop 4 Update: As part of the rectification plan (see 8 below) Pathway presented an interim proposal (see section 5.2 last 3 lines). POCL to review this proposal (including TP and TIP) and inform Pathway (John Pope) by close of play 7 th Sept whether proposal accepted. Workshop 5 Update: Agreed that this interim proposal would not be beneficial and so should not be progressed. Agreed that no further proposals are likely to emerge. Delete next time	7 th Sept	9 th Sept
8.	2	Pathway to prepare rectification plan and present to this group.		6th Sept
		Workshop 4 Update : Pathway presented CR/ACD/376 "Acceptance Proposal Acceptance Incident 376" version 0.3. POCL to feed back comments.	9th Sept	9th Sept
		 Workshop 5 Update: Pathway to update rectification plan addressing POCL comments provided. Plan to include: the process and output for tracking and reporting incidents (along the lines of the current reports to this group) how POCL will be involved with on-going detailed design issues which impact the high level design development of the process/procedures for the December data integrity fix 		13th Sept??

	Work shop		Action Date	Workshop Date
9.	3	It was agreed that the working group should continue to meet to monitor and review TIP incidents. Next meeting to have on agenda and feed back to this group: • any further progress on existing incidents (including PinICL 27748 - see 376/3 above) • new incidents raised since last group meeting • commission the production of a management summary of incidents highlighting: • summary of incidents by type of occurrence • when related fix(es) introduced • rate of occurrence before and after fix • new incident types	3 rd Sept	6 th Sept
		Workshop 4 Update: Draft monitoring report was presented. Working group will update this report including: • week 23 to be added • add notes explaining position of those under investigation • fixes forecast		9 th Sept
		Workshop 5 Update: Next report to be presented before the Workshop on 17th Sept	16 th Sept	17 th Sept
10.	3	As part of the working group activity, POCL has reviewed the procedures (some of them interim) which will be in place to manage OBC change up to CSR+. POCL to determine the acceptability of proceeding with this interim solution. Any issues to be discussed with Pathway before the 9 th Sept review by this group. Workshop 5 Update: Interim solution acceptable. Delete next time		9 th Sept

378 Incomplete Cash Account Records

	Work shop		Action Date	Workshop Date
1.	2	POCL would like to understand how the "Non-Stock" records were lost from the TIP file. John Pope to explain to Martin Box. Report back any issues to this group.		6 th Sept
		Workshop 4 Update: Explanation given. POCL to feed back any issues to this group.		9th Sept
		Workshop 5 Update: POCL confirmed acceptability of fix. Delete next time.		
2.	2	POCL would like to understand how Pathway have undertaken their design level review to analyse and improve the deficiencies around the cash account to prevent inappropriate interruptions e.g. multiple user key/touch screen entries. Pathway to arrange, Jeremy Folkes to arrange suitable POCL participants. Report back any issues to this group.		6 th Sept
		Workshop 3 Update: The action is focused on the cash account process, but will include possible side-effects of the rectification elsewhere.		
		Note new wording agreed at Workshop 4 . Pathway (Alan Ward) and POCL (Jeremy Folkes arranging appropriate participants) to meet by 15 th Sept - earlier if possible. Follow on meeting with designer on 20 th Sept if necessary	15 th Sept	17 th Sept
3.	5	New incidents have occurred. Pathway to report back root cause to next meeting.		13th Sept

AI 391 - Physical Security at Bootle and Wigan

	Work shop		Action Date	Workshop Date
2.	3	Pathway will obtain and review A&L procedures for vehicle access at Bootle. POCL to be involved in review. Pathway will propose and gain approval to any changes noted in the review. Review to be done in time for action 391/3 by end of 10 th Sept should that be required. Workshop 4 Update: NB new workshop date.	Circa 8 th Sept	13 th Sept update
3.	3	POCL to participate in site visit to check deployment of security procedures at Bootle if deemed necessary.	10 th Sept	13th Sept

408 HSH Performance

	Work shop		Action Date	Workshop Date
3.	2	Pathway will arrange a workshop aimed at giving POCL confidence in their resourcing model and to confirm their analysis that a level 3 expert domain for cash accounting is required. Report back outcome and issues to this group.		
		Workshop 4 Update . POCL identified a considerable number of changes to the scripts. These scripts are going to be introduced into the live environment on 8 th Sept. POCL wish to understand how the HSH is being trained in these new scripts and how resource levels have been specified using these scripts. Workshop on 7 th Sept to cover this as well.	7 th Sept	9 th Sept
		Workshop 5 Update : POCL now understand how adequate resourcing levels will be achieved in both the short and longer term. Action complete - delete next time .		
6.	2	Pathway to produce a rectification plan for presenting to this group. This plan to include date for when target SLAs will be met.		9th Sept
		Workshop 5 Update: Pathway to update rectification plan in light of actions 7 and 8 below for review by POCL.		17 th Sept

	Work shop		Action Date	Workshop Date
7.	2	Pathway to produce outline proposal on Service Levels for the cash accounting expert domain. Workshop 5 Update: POCL (including Keith Baines, Ruth Holleran) to review Pathway's (including Tony Oppenheim) proposal and discuss.	14 th Sept	9 th Sept
8.	5	Performance Service Level statistics for August have been re-produced by Pathway to exclude the cash account calls. POCL to assure that the statistics are being appropriately reported. Pathway and POCL (including Ruth Holleran, Dave McLaughlin, Jerome Brice, Adele Henderson) to meet to review the new service level report.	14 th Sept	17 th Sept

412 Service Performance Ad Hoc Reporting

	Work shop		Action Date	Workshop Date
1.	5	POCL and Pathway to meet to review particular examples of concern to POCL (or review all examples on the Pathway log). Report back any issues to this group.		13 th Sept
2.	5	Pathway (Steve Muchow) to consider whether it would be appropriate to provide a targeted teach-in to appropriate POCL experts to enable them to focus their ad hoc requests around the Pathway data structures.		13 th Sept
3.	5	POCL and Pathway presented their respective draft papers explaining their view of the issue. The process for ad hoc reporting is documented in CS/PRO/031. The Pathway report highlighted an issue around the availability of data at appropriate points in the reporting cycle. Pathway to provide further information on this for POCL to review.		13th Sept
4.	5	POCL to progress (Keith Baines to speak to Dave McLaughlin) the issue around the transaction times for fallback transactions.		

Agreed Category B And Other Incidents

	Work shop		Action Date	Workshop Date
1.	1	Of the nine Agreed Category B Faults, there are six with agreed resolution plans. It was agreed that ICL Pathway would submit an Acceptance Incident Analysis Form to cover the agreed resolution plan for each of the six Acceptance Incidents for POCL's agreement. (The six incidents are 342, 361, 371, 211, 390 and 395.) Workshop 3 Update: 342, 371, 390 and 395 Analysis forms received. POCL note the request for closure on 371 and 395. Workshop 4 and 5 Update: • 211 - further 7 incidents investigated. A recent fix, "F1" caused this (and the OBCS read) problem. New fix will be introduced 17th Sept. See action IRP 5 for wider implication of this issue - assuring the regression testing is appropriate for the level of fixes being applied. Pathway to submit an updated AI analysis form including these new incidents and including an update to the rectification plan • 342 - No further incidents. Monitoring continuing until 1st Oct • 361 - No further incidents. Monitoring continuing until 1st Oct • 371 - Reports produced. ATM review to see if appropriate to close. • 390 - No further incidents. Monitoring continuing as per rectification plan • 395 - No further incidents. Monitoring continuing. ATM review to see if appropriate to close.	31st Aug to 5th Sept	6 th Sept
2.	3	Pathway (John Dicks) and POCL (Jeff Austin) to arrange a review of all remaining Low Severity incidents to resolve any Low/None differences of opinion and to determine the plan for closure. Complete review by 21st Sept.	21st Sept	

Integrated Rectification Plan (IRP)

	Work		Action	Workshop
	shop		Date	Date
1.	4	POCL (Ruth Holleran) to confirm dates for monitoring the fix and feed back to Pathway.	7 th Sept	
2.	4	POCL (Jeremy Folkes) to review 391 plan and feed back to Pathway.	7th Sept	

		Work shop		Action Date	Workshop Date
3		4	POCL (Andrew Simpkins) and Pathway (Mike Coombes and Lawrence Price) to compare plans and resolve issues. Update Pathway plan. • Feedback issues to this group • Issue plan for review by this group	9 th Sept	9 th Sept 13 th Sept
4	٠.	5	POCL (John Meagher) to speak to Pathway (Mike Coombes) about Pathway's wider regression testing plans which are currently being developed to assure the stability of the system going forward.		13 th or 17 th Sept

Other Actions

	Work		Action	Workshop
	shop		Date	Date
1.	4	POCL (Ruth Holleran and Keith Baines) to determine the management forum to oversee the implementation of the rectification plan.		13 th Sept

Acceptance workshop (5	Acceptance	Workshop	(5)
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The meeting summarised the intended topics for the next Workshop giving guideline times for some topics.

13th September Workshop (Renaissance Hotel 10:00)

Morning

- 391
- 372
- 298
- 376
- 378

Lunch in restaurant at 12:30

- 369
- 412
- Integrated Rectification Plan
- Management forum for the rectification plan

17th September Workshop (Gavrelle House)

- check to ensure all incidents have been appropriately documented (including rectification plan and AI analysis form)
- 298
- 376
- Integrated Rectification Plan

Min Burdett

GRO