Ref: **GENERAL TESTING POLICY**

VI/POL0001 Version: 2.0

Date:

30/09/96

GENERAL TESTING POLICY **Document Title:**

Policy Document Type:

Abstract: This document prescribes the general testing policy to be

> adopted by Development Programmes within Pathway. Any testing strategies produced are to be regarded as subordinate to this policy, and are to comply with it in all respects except where authorised otherwise by the Director of Programmes and the Director of Quality and Risk

Management.

Status: Approved

Distribution: Pathway Management Team

(and further at their discretion)

Author: S Berry & J Hunt

Approval Authority:

Signature/Date:

Terry Austin

Quality Authority:

Signature/Date:

David Groom

Customer Authority:

Signature/Date:

Bob King

Gary Palmer

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DOCUMENT HISTORY

Version	Date	Reason	
0.1	05/01/96	Initial draft for review	
0.4	02/02/96	Final draft for review	
1.0	01/05/96	1st approved issue, following final review	
1.5	07/09/96	Revised and presented for PDA Acceptance Review	
2.0	30/09/96	2nd Issue, following acceptance by PDA	

CHANGES FROM LAST ISSUE

Ref.	Change	
n/a	Cosmetic changes to reflect revised document library standards	
n/a	Comments agreed at PDA Acceptance Review applied	

CHANGES FORECAST

Change	Target Issue
none	

ASSOCIATED DOCUMENTS

Ref.	Library Ref.	Title	Source
[1]	PA/POL0001	Quality Policy	Pathway
[2]	PA/POL0002	Quality Management System	Pathway

ABBREVIATIONS

Used	Meaning
	None used

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1. CONTEXT

- 1.1 This policy is consistent with the Pathway Quality Policy [1], and applies to all Testing and Integration activities conducted within Pathway Development Programmes, whether in-house or sub-contracted. Where shareholders or sub-contractors have their own Testing or Integration policies already in place, and where these have been agreed by the Pathway Director of Programmes and Director of Quality and Risk Management as being sufficient and appropriate, then these may replace this policy.
- 1.2 Pathway will seek confirmation from suppliers and sub-contractors that their own Quality Management System is adequate and appropriate. Pathway will be party to and seek to influence their supporting working practices in order to minimise the risk of receiving poor quality deliverables and to promote product consistency.
- 1.3 This policy, or the agreed substitute policy, should be used as one of the primary source documents in reviewing Pathway Testing or Integration Strategies as and when produced, whether in-house or sub-contracted.
- 1.4 This policy should be reviewed periodically in accordance with the process improvement objectives as specified in the Pathway Quality Management System [2].

2. RESPONSIBILITIES

- 2.1 The responsibility for the Testing Policy lies with the Director of Programmes and must be approved by the Director of Quality and Risk Management.
- 2.2 All Parties, Pathway staff and sub-contractors, have responsibility for complying with the Testing Policy.

3. TESTING POLICY

- 3.1 The overall objective of Testing and Integration activities in a Development Programme is to ensure delivery of high quality systems, demonstrably proven to be fit for service. That is, to progressively test and integrate the products and reduce their defect content to an established level of acceptability, agreed on a cost versus risk basis.
- 3.2 This will be achieved by agreeing at the outset with the Programme and the Customers a set of unambiguous and measurable test objectives with corresponding test success criteria. These should be based on established Acceptance Criteria, and should encompass both the functional requirements and the non-functional requirements, including performance, operability, and security attributes. They should be cast in terms of specific test coverage, error rates, conformance to standards, timescales and budgets.
- 3.3 The overall approach to be employed in testing and integrating the products will be agreed with the Programme and the Customers in a high level strategy document. Where

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any additional external certification of hardware or software may be required, this will be highlighted in the strategy.

- 3.4 Specific test coverage will be defined via a formal structured test planning methodology, and documented and agreed in subordinate test strategies, logical level test plans and physical level test scripts, subject to review by the Programme and the Customers. In general, and unless otherwise specified, a distinction will be made between bespoke products and standard proprietary hardware and software. Bespoke products will be subject to the full rigour of formal test planning, whereas these 'off the shelf' 'shrink wrapped' products will be assumed to function as declared by the manufacturer and will not be subjected to specifically engineered tests in this general respect. Rather they will be 'used' in context through the mainstream testing to confirm that they deliver those services and facilities required of them by the Pathway system. This may include specific tests engineered to verify specific requirements, for example in the security domain.
- 3.5 Tests will be classified as mandatory or optional, based on their relationship with the agreed Acceptance Criteria, and prioritised accordingly on a cost versus risk basis, by agreement with the Programme and the Customers. Test execution will be planned and defect removal will proceed on the basis of these priorities. All mandatory tests will be scripted and executed in a re-runable manner.
- 3.6 Defects are judged to arise where the products under test exhibit behaviour contrary to or outside the agreed requirement. Defect removal will follow rejection of defective components under test, where they fail to meet the agreed Acceptance Criteria, and will be demonstrated by the iterative re-testing of corrections.
- 3.7 Defects will be formally recorded and monitored against a model of projected errors for the products under test.
- 3.8 Testing progress will be formally recorded and monitored against plan.
- 3.9 Proof of testing will be secured to establish a full audit trail of the process.