



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

IN CONFIDENCE

3644 Biometric Capability Update

NFR Support Data for the NEC solution

s6(c)

Version 1.0 FINAL

Date: 04/05/2021

1. Document control

Version history

Date	Version	Author	Organisation	Description of change
1/3/2021	0.1	s 9(2)(a)	MBIE	Initial draft
12/4/2021	0.2		MBIE	Updated to: • Include feedback from internal review • Add Volume and Capacity data • Update response times to use volume data • Removed the following Technical transactions and Business Events as extracting ad-hoc search results is no longer required 1. IDTYTXND26 2. IBWTXND02 3. NEC12 4. IBW02 • Added projected Identity volumes • Added assumption for the expected increase in FCC/FCR volumes
3/5/2021	0.3		MBIE	Updated to round up Average volumes to whole numbers and to remove the assumption (included in NFR-SC01)
4/5/2021	1.0		MBIE	All revisions committed and updated to FINAL version

Template information

This document was produced using Capital Portfolio Office's (CPO) Project delivery model 'Requirements template' template, version 3.0.

Approved by

Name	Role	Organisation	Date	Signature*
s 9(2)(a)	Business Owner	MBIE	4/5/2021	 FW For Approval - BCU NEC Requiremer

Reviewed by

The following people have a formal quality assurance role with respect to this document.

Name	Role	Organisation	Supported?	Date	Version
s 9(2)(a)	Senior Project Manager	MBIE	Yes	3/5/2021	0.3

Consulted

The following people have been consulted in the production of this document (list excludes approvers and reviewers).

Name	Role	Organisation
s 9(2)(a)	Architect	MBIE
	Architect	MBIE
	Architect	MBIE
	Test Manager	MBIE

Distributed to

The following people / groups have been sent a copy of this document (list excludes approvers, reviewers, and consulted).

Name	Role	Organisation	Date
s 9(2)(a)		NEC NZ	31/3/2021 v0.1 6/5/2021 v1.0
	s9(2)(a)	NEC NZ	31/3/2021 v0.1 6/5/2021 v1.0
	s9(2)(a)	NEC NZ	31/3/2021 v0.1 6/5/2021 v1.0
	s9(2)(a)	NECAM	31/3/2021 v0.1 6/5/2021 v1.0
		NEC NZ	31/3/2021 v0.1 6/5/2021 v1.0

Contents

1. Document control	2
Version history	2
Template information	2
Approved by	3
Reviewed by	3
Consulted	3
Distributed to	3
2. Introduction	6
Purpose	6
Background	6
Assumptions	6
3. Candidate Transactions & response times	7
Structure	7
Business Service Levels	7
Security Events	7
Business Events & response times	9
In-Person enrolment	9
AMS Identity Management	10
Identity matching	10
Ad hoc search	13
6(c) of the OIA	
General	16
Technical transactions & through-put volumes	17
In-Person Enrolment	17
AMS Identity Management	19
Identity Matching	20
Ad hoc Search	21
6(c) of the OIA	
4. Scenarios and Definitions	26
Definitions	26
Reliability Scenarios	27
Availability and Recoverability Scenarios	27
5. Capacity/Volume Statistics	29



Introduction	29
Current & Projected Capacity.....	29
Capacity assumptions	30
Projected Identity Volumes.....	31

NEC New Zealand

MBIE New Zealand

BCU Project

Functional and Non-Functional Requirements

[Final Version 1.0]



Document Control

Version	Description
1.0	As agreed, 21/7/2020

NEC Corporation of America

Ministry of Business, Innovation & Employment

B-100242.001

Core Configuration Requirements Document (CCRD) – Integra-ID (Integrated Biometric Workstation- IBW)

Version 2.0

07/04/2022



Proprietary Notice



The information disclosed in this document, including all designs and related materials, is the valuable property of NEC Corporation of America, (hereinafter “NEC”) and/or its licensors. NEC and/or its licensors, as appropriate, reserve all patent, copyright, and other proprietary rights to this document, including all design, manufacturing, reproduction, use, and sales rights thereto, except to the extent said rights are expressly granted to others.

You may not remove, overprint, or deface any notice of copyright, trademark, logo, legend, or other notice of NEC ownership from any originals or duplicates of any software or hardware products of NEC disclosed in this document. The names, logos, copyrights, trademarks, and service marks of NEC appearing in this document may not be used in any advertising or publicity or otherwise to indicate sponsorship of or affiliation with any product or service, without NEC’s express prior written permission.

The NEC product(s) discussed in this document are warranted in accordance with the terms of the Warranty Statement accompanying each product or a separate written warranty agreement that may be applicable. However, actual performance of each such product is dependent upon factors such as system configuration, customer data, and operator control. Since implementation by customers of each product may vary, the suitability of specific product configurations and applications must be determined by the customer and is not warranted by NEC.

To allow for design and specification improvements, the information in this document, and the products and services described in such information, are subject to change at any time, without notice. Reproduction of this document or portions thereof without prior written approval of NEC is prohibited.

Copyright © 2026 NEC Corporation of America

Table of Contents

1	INTRODUCTION	6
1.1	PURPOSE.....	6
1.2	DOCUMENT OVERVIEW	6
2	SYSTEM OVERVIEW	7
2.1	INTEGRA-ID	7
2.1.1	IBW Applications.....	8
2.2	SYSTEM FUNCTIONS.....	9
2.3	SYSTEM COMPONENTS.....	9
2.4	UNIFIED DATABASE (UDB) OVERVIEW.....	11
2.4.1	Database Events.....	12
2.4.2	Matcher Events	13
2.4.3	Audit and Reporting Database	14
3	FUNCTIONAL REQUIREMENTS.....	15
3.1	WORKFLOW REQUIREMENTS	15
3.1.1	Automated Fingerprint Workflow Requirements	15
3.1.2	Ad Hoc Fingerprint Search Workflow Requirements.....	16
3.1.3	Fingerprint Maintenance Workflows.....	22
3.2	IBW APPLICATIONS	26
3.2.1	Login Requirements	26
3.2.2	Fingerprint Input Requirements.....	26
3.2.3	Job Queue Requirements	27
3.2.4	QC Edit Requirements.....	30
3.2.5	Tenprint Requirements	32
3.2.6	Verify Requirements.....	34
3.2.7	Browse Requirements.....	38
3.3	DATABASE REQUIREMENTS	41
3.3.1	Audit and Reporting Database Requirements.....	41
3.3.2	Report Requirements	Error! Bookmark not defined.
	APPENDIX A – REFERENCES.....	42
	APPENDIX B – GLOSSARY	43

List of Figures

Figure 1: Integra-ID Product Suite.....	8
Figure 2: UDB Structure Fingerprint Images.....	12
Figure 3: Data Model	13
Figure 4: Fingerprint Input Phase Diagram	16
Figure 5: Fingerprint Standard Processing Phase Diagram.....	17
Figure 6: Ad hoc Fingerprint Search - TI Transaction Submission Phase Diagram.....	18
Figure 7: Ad Hoc Fingerprint Verify Phase Diagram	19
Figure 8: TD-S Diagram.....	23
Figure 9: TU Diagram	25

List of Tables

Table 1: Organization of the CCRD - Integra ID.....	6
Table 2: MBIS Components	9
Table 3: Tenprint Input Phase Requirements	17
Table 4: Fingerprint Standard Processing Phase Requirements.....	18
Table 5: Ad Hoc Fingerprint Search TI Transaction Submission Phase Requirements.....	19
Table 6: Ad Hoc Fingerprint Search TI Verification Phase Requirements.....	20

NEC Corporation of America

Ministry of Business, Innovation & Employment

B-100242.001

Core Configuration Requirements Document (CCRD) – Integra-ID (Integrated Biometric Workstation- IBW)

Version 2.0

07/04/2022



Proprietary Notice



The information disclosed in this document, including all designs and related materials, is the valuable property of NEC Corporation of America, (hereinafter “NEC”) and/or its licensors. NEC and/or its licensors, as appropriate, reserve all patent, copyright, and other proprietary rights to this document, including all design, manufacturing, reproduction, use, and sales rights thereto, except to the extent said rights are expressly granted to others.

You may not remove, overprint, or deface any notice of copyright, trademark, logo, legend, or other notice of NEC ownership from any originals or duplicates of any software or hardware products of NEC disclosed in this document. The names, logos, copyrights, trademarks, and service marks of NEC appearing in this document may not be used in any advertising or publicity or otherwise to indicate sponsorship of or affiliation with any product or service, without NEC’s express prior written permission.

The NEC product(s) discussed in this document are warranted in accordance with the terms of the Warranty Statement accompanying each product or a separate written warranty agreement that may be applicable. However, actual performance of each such product is dependent upon factors such as system configuration, customer data, and operator control. Since implementation by customers of each product may vary, the suitability of specific product configurations and applications must be determined by the customer and is not warranted by NEC.

To allow for design and specification improvements, the information in this document, and the products and services described in such information, are subject to change at any time, without notice. Reproduction of this document or portions thereof without prior written approval of NEC is prohibited.

Copyright © 2026 NEC Corporation of America

Table of Contents

1	INTRODUCTION	6
1.1	PURPOSE.....	6
1.2	DOCUMENT OVERVIEW	6
2	SYSTEM OVERVIEW	7
2.1	INTEGRA-ID	7
2.1.1	IBW Applications.....	8
2.2	SYSTEM FUNCTIONS.....	9
2.3	SYSTEM COMPONENTS.....	9
2.4	UNIFIED DATABASE (UDB) OVERVIEW.....	11
2.4.1	Database Events.....	12
2.4.2	Matcher Events	13
2.4.3	Audit and Reporting Database	14
3	FUNCTIONAL REQUIREMENTS.....	15
3.1	WORKFLOW REQUIREMENTS	15
3.1.1	Automated Fingerprint Workflow Requirements	15
3.1.2	Ad Hoc Fingerprint Search Workflow Requirements.....	16
3.1.3	Fingerprint Maintenance Workflows.....	22
3.2	IBW APPLICATIONS	26
3.2.1	Login Requirements	26
3.2.2	Fingerprint Input Requirements.....	26
3.2.3	Job Queue Requirements	27
3.2.4	QC Edit Requirements.....	30
3.2.5	Tenprint Requirements	32
3.2.6	Verify Requirements.....	34
3.2.7	Browse Requirements.....	38
3.3	DATABASE REQUIREMENTS	41
3.3.1	Audit and Reporting Database Requirements.....	41
3.3.2	Report Requirements	Error! Bookmark not defined.
	APPENDIX A – REFERENCES.....	42
	APPENDIX B – GLOSSARY	43

List of Figures

Figure 1: Integra-ID Product Suite.....	8
Figure 2: UDB Structure Fingerprint Images.....	12
Figure 3: Data Model	13
Figure 4: Fingerprint Input Phase Diagram	16
Figure 5: Fingerprint Standard Processing Phase Diagram.....	17
Figure 6: Ad hoc Fingerprint Search - TI Transaction Submission Phase Diagram.....	18
Figure 7: Ad Hoc Fingerprint Verify Phase Diagram	19
Figure 8: TD-S Diagram.....	23
Figure 9: TU Diagram	25

List of Tables

Table 1: Organization of the CCRD - Integra ID.....	6
Table 2: MBIS Components	9
Table 3: Tenprint Input Phase Requirements	17
Table 4: Fingerprint Standard Processing Phase Requirements.....	18
Table 5: Ad Hoc Fingerprint Search TI Transaction Submission Phase Requirements.....	19
Table 6: Ad Hoc Fingerprint Search TI Verification Phase Requirements.....	20



IN CONFIDENCE

3644 In Person Enrolment Hardware Requirements

Version 2.2

Date: 21/02/2022



Contents

1. Document control	2
Version history	2
Template information	3
Approved by	3
Endorsed by	3
Reviewed by	4
Consulted	4
Distributed to	4
2. Introduction	7
Purpose	7
Context	7
Background	7
Project objectives	7
Scope	8
Assumptions	8
Constraints	8
Anticipated business area impacts	9
Anticipated system impacts	9
3. Business Processes	11
Overview	11
Business Process Summary	11
Users of the system	11
4. Requirements	13
Business requirements	13
Equipment requirements	14
Non Functional Requirements	22
5. Terms and definitions	29
6. User Scenarios	30



IN CONFIDENCE



In Person Enrolment Functional Specifications

Version 2.5

Date: 13/03/2023



Contents

Document control	2
Version History.....	2
References	5
Reviewed by.....	5
Endorsed by	5
Consulted.....	6
Approvers.....	6
Terminology	6
Contents	9
 1 Introduction.....	 11
1.1 Outcome statement.....	11
1.2 Purpose of this document.....	11
1.3 Audience	11
 2 Features.....	 12
2.1 Scan Travel Documents	12
2.2 Amend Travel Document.....	17
2.3 Override Test Results	17
2.4 Add Travel Document.....	18
2.5 Add Biographics	19
2.6 Capture Face Image	21
2.7 Accept Compliant Image.....	22
2.8 Accept Non-Compliant Image	23
2.9 Skip Face Capture.....	23
2.10 Capture Fingerprint.....	23
2.11 Accept Compliant Fingerprints.....	24
2.12 Accept Non-Compliant Fingerprints.....	25
2.13 Skip Fingerprints Capture.....	25
2.14 Capture Single Page Document.....	25
2.15 Capture Multi-Page Document	26
2.16 Attach Document	26
2.17 Manage Attached Documents.....	29
2.18 Skip Document Capture	29
2.19 View Identity Summary.....	29
2.20 Submit Identity	30



2.21	Discard Identity	31
2.22	Submission Response.....	31
2.23	Login	32
2.24	Set IDme metadata	33
2.25	Manage Offline Identities	35
2.26	Log Out	36
2.27	Transaction Management	36
2.28	Provision Users	37
2.29	Administer Enrolment System.....	37
2.30	Analyse Enrolment Logs.....	38
3	Tasks.....	39
3.1	Capture Biographics.....	39
3.2	Capture Face	41
3.3	Capture Fingerprint.....	42
3.4	Capture Documents	44
3.5	Review and Submit Capture.....	44
4	Business Process.....	46
4.1	Border Referral	46
4.2	Identity Enrolment.....	46
4.3	Process Support	48
5	Predefined Values (Codetables)	49
6	Requirements Traceability	50