

Rwanda Development Board

Solution Data Architecture Definition for JRLOS IECMS

Version 1.0





Document History

Ver.	Date	Author/s	Reviewed by	Date	Validated by	Date
1.0	25/05/2014	H Mountany	M Snel	17/07/2014	J.L Kali	17/07/2014

Version Control

Date	Version	Object of revisions

Related Documents

Document name	Document version
Architecture framework documents	
The Open Group The Open Group Architecture Framework (TOGAF)	9.1
The Open Group ArchiMate 2 standard	2.0
RDB RGEA ADM	1.4
2013-12 RDB RGEA JRLOS IECMS Architecture Definition Document	1.0
Rwanda Government strategic and policy documents	
Government of Rwanda Economic Development and Poverty Reduction Strategy 2013-2018	EDPRS-2
Government of Rwanda National ICT Strategy and Plan NICI 2015	NICI-III
Government of Rwanda - Records and Archives Management Policy	September 2012
Government of Rwanda - Electronic Document Management Procedures	September 2012
Harmonised File Plan and Records Appraisal Procedures for the Government of Rwanda	September 2012
Implementation Roadmap for Government of Rwanda Records and Archives Policies and Electronic Document Management and Procedures	September 2012



Approval

The signatories hereof, being duly authorised thereto, by their signatures hereto authorise the execution of the work detailed herein, or confirm their acceptance of the contents hereof and authorise the implementation/adoption thereof, as the case may be, for and on behalf of the parties represented by them.

Knotion: Director Mr Marius SNEL	Date
Rwanda Development Board: Project Owner Mrs Rita KAMANZI	Date



Table of Contents

	Purpose of the document12
2.	Detailed Data Solution Architecture
	2.1. Physical Documents (PD)
	2.1.1. JCE004 Language Interpretation Record
	2.1.2. JCE015 Settlement Agreement
	2.1.3. JCE040 Receipt
	2.1.4. JCE044 Expert Service Request
	2.1.5. JCE045 Expert Report
	2.1.6. JCE063 Warrant
	2.1.7. JCE065 Statement
	2.1.8. JCE082 Criminal Record Clearance
	2.1.9. JCE092 Summon
	2.1.10.JCE095 Notification Notice
	2.1.11.JCE020 Crime Scene Record14
	2.1.12.JCE031 Complaint File14
	2.1.13.JCE051 Case Investigation Report14
	2.1.14.JCE055 Police Clearance Certificate14
	2.1.15.JCE062 Interrogation14
	2.1.16.JCE064 Crime Scene Report14
	2.1.17.JCE069 Interception Order14
	2.1.18.JCE070 Interception Report14
	2.1.19.JCE071 Seizure Report14
	2.1.20.JCE075 Investigation Assistance Report14
	2.1.21.JCE077 Pre-Trial Detention Order15
	2.1.22.JCE124 Police Statement15
	2.1.23.JCE147 Testimony15
	2.1.24.JCE072 Fine without Trial Report15
	2.1.25.JCE073 Charge Sheet
	2.1.26.JCE074 Investigation Assistance Request15
	2.1.27.JCE076 Pre-Trial Detention Request15
	2.1.28.JCE079 Final Prosecution Report15
	2.1.29.JCE093 Pre-trial Meeting Report15
	2.1.30.JCE066 Cross Examination Report15







	2.1.31.JCE085 Verdict	.15
	2.1.32.JCE089 Case Checking Report	.16
	2.1.33.JCE097 Court Decision Record	.16
	2.1.34.JCE103 Appeal Request	.16
	2.1.35.JCE120 Judgement Decision	.16
	2.1.36.JCE152 Court Submission Record	.16
	2.1.37.JCE121 Health Status Record	.16
	2.1.38.JCE125 Item Check Record	.16
	2.1.39.JCE127 Education Status Record	.16
	2.1.40.JCE129 Inmate Discipline Record	.16
	2.1.41.JCE130 Inmate Report	.16
	2.1.42.JCE131 Evaluation Result Report	.16
	2.1.43.JCE132 TIG Record	.16
	2.1.44.JCE134 TIG Attendance Record	.16
	2.1.45.JCE135 Parole Record	.17
	2.1.46.JCE136 Extension Record	
	2.1.47.JCE137 Suspend Record	.17
	2.1.48.JCE138 Conditional Release Record	.17
	2.1.49.JCE139 Amnesty Record	.17
	2.1.50.JCE140 Presidential Pardon Record	.17
	2.1.51.JCE141 Death Record	
	2.1.52.JCE142 Discharge Record	.17
	2.1.53.JCE143 End of Sentence Certificate	.17
	2.1.54.JCE151 Witness and Victim Protection Information	.17
	2.1.55.JCE006 Public Civil Litigation Case File	.17
	2.1.56.JCE145 Mediation Record	.17
	2.1.57.Printing of scanned documents	.17
2.2	2. External Systems	.18
	2.2.1. NIDA (External)	.18
	2.2.2. RRA (External)	.18
	2.2.3. RNRA (External)	.18
	2.2.4. DGIE (External)	.18
2.	3. Data Flow Diagrams	.18
	2.3.1. Level 0 IECMS Context	.18



	2.3.2. Level 1 IECMS DFD RNP - (Data Flow diagram)	.22
	2.3.3. Level 1 IECMS DFD NPPA - (Data Flow diagram)	.25
	2.3.4. Level 1 IECMS DFD Judiciary - (Data Flow diagram)	.28
	2.3.5. Level 1 IECMS DFD RCS - (Data Flow diagram)	.31
	2.3.6. Level 1 IECMS DFD RBA - (Data Flow diagram)	.34
	2.3.7. Level 1 IECMS DFD MINIJUST - (Data Flow diagram)	.35
	2.3.8. Level 2 IECMS DFD RNP - (Data Flow diagram)	.38
	2.3.9. Level 2 IECMS DFD NPPA - (Data Flow diagram)	.43
	2.3.10. Level 2 IECMS DFD Judiciary - (Data Flow diagram)	.48
	2.3.11. Level 2 IECMS DFD RCS - (Data Flow diagram)	.54
	2.3.12. Level 2 IECMS DFD RBA - (Data Flow diagram)	.56
	2.3.13. Level 2 IECMS DFD MINIJUST - (Data Flow diagram)	.57
2.	4. Entity Relationship Diagram	.58
2.	5. Data Dictionary	.58
	2.5.1. Audio/Video/Image	.58
	2.5.2. Case	.59
	2.5.3. Community Corrections Activities	.59
	2.5.4. Court	.60
	2.5.5. Document	.60
	2.5.6. Judgment Decisions	.60
	2.5.7. Evidence	.60
	2.5.8. Expert	.61
	2.5.9. Form	.61
	2.5.10.Health Status	.62
	2.5.11.Incident / Complaint	.62
	2.5.12.Infant	.63
	2.5.13.Investigation	.63
	2.5.14.Inmate / Offender	.63
	2.5.15. Judgement	.64
	2.5.16.Legal Instrument	.64
	2.5.17.Location	.65
	2.5.18.Notification	.65
	2.5.19.Organisation	.66
	2.5.20.Person	





	2.5	.21.Person Role	67
	2.5	22. Prison	67
	2.5	23. Production	68
	2.5	24.Proof of Payment	68
	2.5	25. Release Criteria	68
	2.5	26. Resources	69
	2.5	27. Schedule	69
	2.5	28. Judgement Decision	70
	2.5	29. Settlement	70
	2.5	.30.Staff Role	70
	2.5	.31.TIG Camp	71
	2.5	32.Template	71
	2.5	33. Valuable Item	72
	2.5	.34. Warrant	72
3.	Data	Integration	73
	3.1.	Overview	73
	3.2.	External Integration	73
	3.3.	Internal Integration	73



Tables

Table 1-1: IECMS Data Flow	19
Table 1-2: Report Incident	22
Table 1-3: Investigate Crime	24
Table 1-4: Prosecute Case	26
Table 1-5: Manage Pre-trial detention	27
Table 1-6: Adjudicate Case	29
Table 1-7: Detain Prisoner:	32
Table 1-8: Rehabilitate Offender	33
Table 1-9: Private Litigation	34
Table 1-10: Public Civil Litigation	36
Table 1-11: Capture Incident/Complaint	38
Table 1-12: Determine CSI need	39
Table 1-13: Carry out CSI	40
Table 1-14: Determine Possibility of Transaction	40
Table 1-15: Close Reported Incident:	41
Table 1-16: Investigate and Prepare Case	41
Table 1-17: Record Case	43
Table 1-18: Evaluate Case	44
Table 1-19: Determine Possibility of amicable settlement	45
Table 1-20: Prepare Formal Criminal Charges	45
Table 1-21: Finalise Prosecution Case	46
Table 1-22: Confirm Suspect's Detention Status	47
Table 1-23: Release Suspect	47
Table 1-24: Detain Suspect	48
Table 1-25: Screen Document	49
Table 1-26: Determine Eligibility of Case	49
Table 1-27: Record Case	50
Table 1-28: Arrange Pre-Trial Meeting	50
Table 1-29: Schedule Court Hearing Date	51
Table 1-30 Allocate Judge to Case	51
Table 1-31: Determine Court's Competency	52
Table 1-32: Judge Case	52
Table 1-33: Administer Adjudicated Outcome	53







Table 1-34: Audio Visual/Image	5
Table 1-35: Case	59
Table 1-36: Community Corrections Activities	59
Table 1-37: Court	60
Table 1-38: Judgement Decisions	60
Table 1-39: Evidence	6
Table 1-40: Expert	6
Table 1-41: Form	6
Table 1-42: Health Status	62
Table 1-43: Incident/Complaint	62
Table 1-44: Infant	63
Table 1-45: Investigation	63
Table 1-46: Inmate/Offender	63
Table 1-47: Judgement	64
Table 1-48: Legal Instrument	64
Table 1-49: Location	65
Table 1-50: Notification	65
Table 1-51: Organisation	66
Table 1-52: Person	66
Table 1-53: Person Role	67
Table 1-54: Prison	67
Table 1-55: Production	68
Table 1-56: Proof of Payment	68
Table 1-57: Release Criteria	68
Table 1-58: Resources	69
Table 1-59: Schedule	69
Table 1-60: Judgement Decision	70
Table 1-61: Settlement	70
Table 1-62: Staff Role	7
Table 1-63: TIG Camp	7
Table 1-64: Template	7
Table 1-65: Valuable Item	72
Table 1-66: Warrant	72
Table 3-1: Data Integration	73









Figures

Figure 1: IECMS - Context Diagram	19
Figure 2: Data Flow Diagram - Level 1: Rwanda National Police (RNP)	22
Figure 3: Data Flow Diagram - Level 1: NPPA	25
Figure 4: Data Flow Diagram - Level 1 Judiciary	28
Figure 5: Data Flow Diagram - Level 1: Rwanda Correctional Services (RCS)	31
Figure 6: Data Flow Diagram - Level 1: Rwanda Bar Association (RBA)	34
Figure 7: Data Flow Diagram - Level 1: MINIJUST (Public Civil Litigation)	36
Figure 8: DFD Level 2: RNP (Report Incident & Investigate Crime)	38
Figure 9: DFD Level 2: NPPA (Prosecute Case & Manage Pre-Trial Detention)	43
Figure 10: Data Flow Diagram Level 2: Adjudicate Case (Judiciary)	48
Figure 11: DFD Level 2: RCS (Detain Inmate)	54
Figure 12: DFD Level 2: RCS (Rehabilitate Offender)	55
Figure 13: DFD Level 2: Private Litigation Case	56
Figure 14: DFD Level 2: MINIJUST (Public Civil Litigation)	57
Figure 15: Entity Relationship Diagram (ERD)	58



1. Purpose of the document

This document provides a detail view of the data architecture of the solution architecture for the Integrated Case Management System (IECMS) for the Justice, Reconciliation, Law and Order Sector (JRLOS). The document will describe in detail the Physical documents that needs to be produced by the final solution, how data will flow through processes and provides the Entity Relationship Diagram that defines all the key Entities that will be required to keep the information gathered by the solution.



2. Detailed Data Solution Architecture

2.1. Physical Documents (PD)

This section lists the Physical Documents that will need to be produced by the IECMS solution.

2.1.1. JCE004 Language Interpretation Record

A record of translation from one language in to another language by a translator for a court case.

2.1.2. JCE015 Settlement Agreement

A document indicating the points of agreement between two parties in the resolution of a dispute through mediation

2.1.3. JCE040 Receipt

A proof of record for the amount of money paid by the offender for an offense.

2.1.4. JCE044 Expert Service Request

A documented Request for an expert service required e.g. financial, narcotics, biometric, medical, etc.

2.1.5. JCE045 Expert Report

A documented result and information of evidence generated / produced by an expert (e.g. financial, narcotics, biometric, medical, etc.)

2.1.6. JCE063 Warrant

A document issued by an Authority in the context of a criminal case to a person for:

- Arrest
- Search
- Etc.

2.1.7. JCE065 Statement

A document that records the declarations of a party to a judicial case.

2.1.8. JCE082 Criminal Record Clearance

A Certificate of Record of crimes for which a defendant has been previously convicted.

2.1.9. JCE092 Summon

A document that requests a litigant to appear before a court at a given date and time.





2.1.10. JCE095 Notification Notice

A note to inform all relevant parties of their case hearing dates, Judgement Decisions etc.

2.1.11. JCE020 Crime Scene Record

Documented information about the location where a crime took place.

2.1.12. JCE031 Complaint File

A document with all recorded complaint information received by the RNP office at all levels.

2.1.13. JCE051 Case Investigation Report

A documented result stating the completeness and maturity of the investigation done.

2.1.14. JCE055 Police Clearance Certificate

A certificate issued by police indicating that the person does not have any case. It is issued by CID. This document should be merged with JCE082.

2.1.15. JCE062 Interrogation

A documented Interview or Statement that is part of evidence to a case or crime incident, Proof of Evidence etc.

Interrogation (also called questioning or interpellation) is interviewing as commonly employed by officers of the police, military, and intelligence agencies.

2.1.16. JCE064 Crime Scene Report

A documented result generated / produced after a physical visit of a crime scene.

2.1.17. JCE069 Interception Order

A request by the Prosecutor General to perform an interception of communications or all correspondence, letters, phone etc.

2.1.18. JCE070 Interception Report

A document that describes in detail the results obtained from an interception of communication, in the context of a criminal investigation.

2.1.19. JCE071 Seizure Report

A document detailing all the objects confiscated following a legal search (mandated by a search Warrant).

2.1.20. JCE075 Investigation Assistance Report

A document result produced by the Police in response to an Investigation Assistance Request.





2.1.21. JCE077 Pre-Trial Detention Order

An order issued by a Judge to put a suspect in Detention pending the judgment of his/her criminal case.

2.1.22. JCE124 Police Statement

A documented Statement produced by the Police and submitted to RCS in relation to case or an inmate.

2.1.23. JCE147 Testimony

A statement or declaration of a witness under oath or affirmation, usually to prove the truth of a matter.

2.1.24. JCE072 Fine without Trial Report

Evidence of an agreement or acceptance to the agreed transaction.

2.1.25. JCE073 Charge Sheet

A document with the list of formal charges for the case to be prosecuted.

2.1.26. JCE074 Investigation Assistance Request

A request issued by the Prosecution to the Police to proceed with further investigation in the context of a criminal case.

2.1.27. JCE076 Pre-Trial Detention Request

A formal request made before a Judge for the pre-trial detention of a defendant.

2.1.28. JCE079 Final Prosecution Report

The final documented result of readiness produced by a Prosecutor before the transmission of the criminal case to a Judge.

2.1.29. JCE093 Pre-trial Meeting Report

A documented result produced at the end of a meeting organised by the Registrar prior to the trial to mediate between the litigants and draw points of agree- or disagreement.

2.1.30. JCE066 Cross Examination Report

A documented opinion result generated / produced by a second authority on the given aspect of a criminal or civil case.

2.1.31. JCE085 Verdict

The documented final decision generated or produced by a Judge at the conclusion of a judicial case (duplicate with 120).





2.1.32. JCE089 Case Checking Report

A document verifying whether the case has all the requirements needed for submission to a court or discarding thereof (send it back).

2.1.33. JCE097 Court Decision Record

The final decision produced by a Judge at the conclusion of a judicial case.

2.1.34. JCE103 Appeal Request

A formal request in the legal process allowing a party to request a second judgement by a superior court, of the case at hand.

2.1.35. JCE120 Judgement Decision

The documented decision (resolution) issued by a Judge in a judicial case (same as Verdict 85).

2.1.36. JCE152 Court Submission Record

A document that provides proof that case documents have been submitted to a court.

2.1.37. JCE121 Health Status Record

A documented report produced by the RCS medical service concerning the health status of an inmate.

2.1.38. JCE125 Item Check Record

A receipt of proof of all valuable items taken from an inmate at the moment of incarceration.

2.1.39. JCE127 Education Status Record

A documented report of any educational achievement attained by an inmate.

2.1.40. JCE129 Inmate Discipline Record

A documented report of any disciplinary event in relation to an inmate.

2.1.41. JCE130 Inmate Report

A documented report of all information recorded in relation to an inmate.

2.1.42. JCE131 Evaluation Result Report

A documented report resulting from an evaluation of an inmate.

2.1.43. JCE132 TIG Record

A report of all information recorded in relation to a person assigned to Community service.

2.1.44. JCE134 TIG Attendance Record

A detailed list of the number of days a person spent in every TIG camp they were allocated too.





2.1.45. JCE135 Parole Record

A documented report indicating information about the conditional liberation on parole of an inmate.

2.1.46. JCE136 Extension Record

A documented report indicating all extensions to provisional detention in relation to an inmate in pre-trial detention.

2.1.47. JCE137 Suspend Record

A documented report indicating information related to suspended sentences of an inmate.

2.1.48. JCE138 Conditional Release Record

A document with proof of an inmate's conditional release conditions.

2.1.49. JCE139 Amnesty Record

A document with proof of an inmate who benefited from an amnesty.

2.1.50. JCE140 Presidential Pardon Record

A document containing proof of an inmate who was pardoned.

2.1.51. JCE141 Death Record

A document with proof of an inmate who died in custody.

2.1.52. JCE142 Discharge Record

A document with proof of an inmate who was discharged.

2.1.53. JCE143 End of Sentence Certificate

A document with proof of an inmate who purged the sentence.

2.1.54. JCE151 Witness and Victim Protection Information

A document of Information about a witness or victim that needs protection.

2.1.55. JCE006 Public Civil Litigation Case File

A document with recorded information of a case received or initiated by MINIJUST / Civil Litigation Services (CLS)

2.1.56. JCE145 Mediation Record

A documented report indicating the outcomes of a mediation between two parties.

2.1.57. Printing of scanned documents

Any physical document that was scanned needs to be reproduced - either on screen or physically.





2.2. External Systems

The following information will be obtained from external parties:

2.2.1. NIDA (External)

NIDA is the National Identification Authority for Rwanda that controls the unique identity of a person, irrespective of whether or not the person is a citizen of the country of Rwanda

2.2.2. RRA (External)

RRA is the Rwanda Revenue Authority which manages the finances of Rwanda Government and is an external entity to the IECMS for JRLOS.

2.2.3. RNRA (External)

Integration with the Rwanda Natural Resources Authority (RNRA) database, in order to get Land Registration information

2.2.4. DGIE (External)

Integration with the Rwanda Directorate General of Immigration and Emigration (DGIE) to get Immigration information to determine if a person is legally in Rwanda

2.3. Data Flow Diagrams

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system.

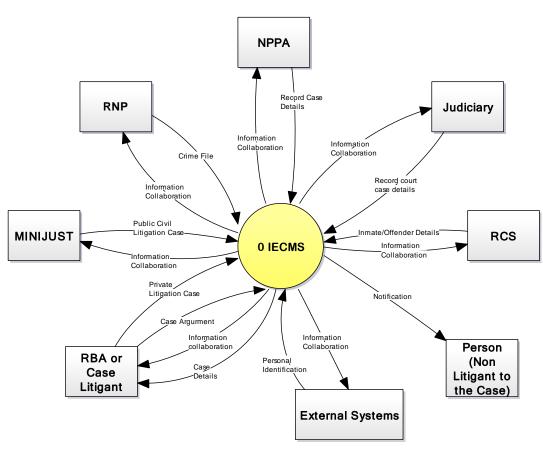
2.3.1. Level 0 IECMS Context

This context diagram is the top level (also known as Level 0) Data Flow Diagram (DFD). It shows the following key contributors to the IECMS solution:

- RNP
- NPPA
- Judiciary
- RCS
- MINIJUST
- RBA
- External Systems
- Person







IECMS - Context Diagram

Figure 1: IECMS - Context Diagram

2.3.1.1 IECMS Data Flow

Figure 4 illustrates the flow to Generate, Record, Store, Collaborate, Transform and Dispose all Case Data and/or Information inclusive of Applications in use of the IECMS system.

Table 1-1: IECMS Data Flow

Connector	Source	Target	Notes
<u>DataFlow</u>	0 IECMS	External Systems	Information collaboration
Information			such as:
Collaboration			- Requests
			- Notifications
<u>DataFlow</u>	0 IECMS	RBA or Case	Information collaboration
		Litigant	such as:





Connector	Source	Target	Notes
Information			- Notifications
collaboration			- Queries
			- Result reports
			- Requests
			- Lawyer details
<u>DataFlow</u>	0 IECMS	NPPA	Notification for access to the
Information			IECMS, Run Query Reports,
Collaboration			Searches for Information,
			Update and Case details
<u>DataFlow</u>	0 IECMS	RBA or Case	
Case Details		Litigant	
<u>DataFlow</u>	0 IECMS	RNP	Information collaboration
Information			such as:
Collaboration			- Notifications
			- Requests
			- Queries
			- Report results
<u>DataFlow</u>	0 IECMS	MINIJUST	Information collaboration
Information			such as:
Collaboration			- Notifications
			- Requests
			- Queries
			- Result reports
<u>DataFlow</u>	0 IECMS	Person (Non	Inform person by
Notification		Litigant to the	Notification.
		Case)	
<u>DataFlow</u>	0 IECMS	Judiciary	1. Notification for access to
Information			court Case information
Collaboration			2. Sharing of Case outcomes
			to all stakeholders
<u>DataFlow</u>	0 IECMS	RCS	Information Collaboration
Information			such as:
Collaboration			- Notifications





Connector	Source	Target	Notes
			- Requests
			- Queries
			- Reports
<u>DataFlow</u>	RBA or Case	0 IECMS	Sent legal argument of case
Case Argument	Litigant		to the prosecutors
<u>DataFlow</u>	External Systems	0 IECMS	Complete person
Personal			identification details
Identification			
<u>DataFlow</u>	RCS	0 IECMS	Record details such as:
Inmate/Offender			- Offender/Inmate details,
Details			- Health and educational
			status
			- Judgment decision
			- Mother and infant (child)
			details
			- Sentence location
<u>DataFlow</u>	Judiciary	0 IECMS	Record of Court Case details
Record court case			(Inclusive of image, digital,
details			audio and video recording,
			court session and court
			decision)
<u>DataFlow</u>	MINIJUST	0 IECMS	Inclusive of to generate,
Public Civil Litigation			record, store, transform and
Case			dispose all civil case data
			and information
<u>DataFlow</u>	NPPA	0 IECMS	Details for Case
Record Case Details			Completeness, Readiness
			(Quality Information) and
			Settlement Information
<u>DataFlow</u>	RBA or Case	0 IECMS	To generate, record, store,
Private Litigation	Litigant		transform and dispose
Case			private litigation case data
			and information





Connector	Source	Target	Notes
<u>DataFlow</u>	RNP	0 IECMS	To generate, record, store,
Crime File			collaborate, transform and
			dispose all crime case data
			and information

2.3.2. Level 1 IECMS DFD RNP - (Data Flow diagram)

Data Flow Diagram - Level 1: Rwanda National Police (RNP)

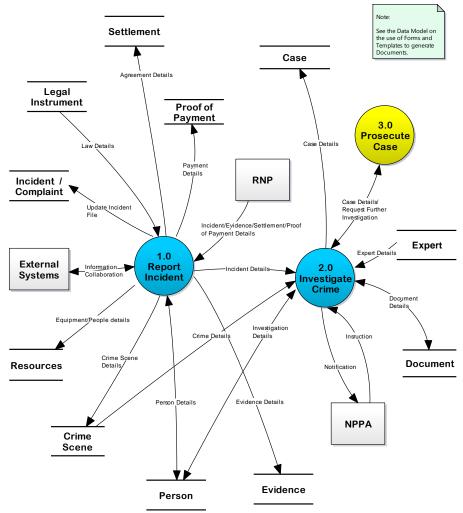


Figure 2: Data Flow Diagram - Level 1: Rwanda National Police (RNP)

Table 1-2: Report Incident

Connector	Source	Target	Notes
<u>DataFlow</u>	1.0 Report Incident	Settlement	





Connector	Source	Target	Notes
Agreement Details			
<u>DataFlow</u>	1.0 Report Incident	Resources	
Equipment/People			
details			
<u>DataFlow</u>	1.0 Report Incident	Proof of Payment	
Payment Details			
<u>DataFlow</u>	1.0 Report Incident	Person	Details such as ID-No, Names
Person Details			for suspect, victim, witness
<u>DataFlow</u>	1.0 Report Incident	Evidence	
Evidence Details			
<u>DataFlow</u>	1.0 Report Incident	2.0 Investigate	
Incident Details		Crime	
DataFlow	1.0 Report Incident	Crime Scene	
Crime Scene Details			
<u>DataFlow</u>	1.0 Report Incident	Incident	
Update Incident File		/Complaint	
<u>DataFlow</u>	External Systems	1.0 Report Incident	
Information			
Collaboration			
<u>DataFlow</u>	Legal Instrument	1.0 Report Incident	
Law Details			
<u>DataFlow</u>	RNP	.0 Report Incident	Collect evidence details
Incident/Evidence/Se			
ttlement/Proof of			
Payment Details			

2.3.2.1 2.0 Investigate Crime

For homicide the prosecutor should be informed. Request instruction for further investigation.



Table 1-3: Investigate Crime

Connector	Source	Target	Notes
<u>DataFlow</u>	2.0 Investigate	Document	Police documents such as:
Document Details	Crime		- Warrant
			- Records
			- Reports
<u>DataFlow</u>	2.0 Investigate	NPPA	Inclusive of access to the
Notification	Crime		case file. For
			homicide/felony the
			prosecutor should be
			informed. Request
			instruction for further
			investigation
<u>DataFlow</u>	2.0 Investigate	Case	
Case Details	Crime		
<u>DataFlow</u>	2.0 Investigate	3.0 Prosecute Case	Case details and Request for
Case Details/ Request	Crime		further clarification
Further Investigation			
<u>DataFlow</u>	Expert	2.0 Investigate	
Expert Details		Crime	
<u>DataFlow</u>	1.0 Report Incident	2.0 Investigate	
Incident Details		Crime	
<u>DataFlow</u>	NPPA	2.0 Investigate	NPPA request further
Instruction		Crime	investigation required.
<u>DataFlow</u>	Crime Scene	2.0 Investigate	
Crime Details		Crime	
<u>DataFlow</u>	Person	2.0 Investigate	
Investigation Details		Crime	



2.3.3. Level 1 IECMS DFD NPPA - (Data Flow diagram)

Legal Criminal Case See the Data Model on the use of Forms and Templates to generate Charges Argument Documents. Proof of **Payment** Prosecutor's Argument Payment Details **Evidence** Evidence details Person 3.0 (Non **Prosecute** Litigant to Proof of Payment Case the Case) Settlement Document Details Information Collaboration Settlen Suspect's Interview Case Details/ Request Further Investigation Case Details **Document** Audio/Video Record 5.0 **Adjudicate** Case Arres 2.0 Investigate Crime Information Collaboration Notification 4.0 Manage Pre trial Information Collaboration detention **NPPA** Notification/Arrest RNP Detention

Data Flow Diagram - Level 1: NPPA

Figure 3: Data Flow Diagram - Level 1: NPPA



2.3.3.1 3.0 Prosecute Case

Table 1-4: Prosecute Case

Connector	Source	Target	Notes
<u>DataFlow</u>	3.0 Prosecute Case	Proof of Payment	
Payment Details			
<u>DataFlow</u>	3.0 Prosecute Case	Settlement	
Settlement Details			
<u>DataFlow</u>	3.0 Prosecute Case	Legal Argument	
Prosecutor's			
Argument			
<u>DataFlow</u>	3.0 Prosecute Case	Criminal Charges	
Add Criminal Charges			
<u>DataFlow</u>	3.0 Prosecute Case	Audio/Video Record	
Suspect's Interview			
<u>DataFlow</u>	3.0 Prosecute Case	4.0 Manage Pre-trial	
Information		detention	
Collaboration			
<u>DataFlow</u>	3.0 Prosecute Case	5.0 Adjudicate Case	
Case Details			
<u>DataFlow</u>	3.0 Prosecute Case	Document	
Document Details			
<u>DataFlow</u>	3.0 Prosecute Case	Person (Non -	
Notification		litigant to the Case)	
<u>DataFlow</u>	Evidence	3.0 Prosecute Case	
Evidence details			
<u>DataFlow</u>	Person	3.0 Prosecute Case	
Person Details			
<u>DataFlow</u>	NPPA	3.0 Prosecute Case	The Prosecutor may request
Further Investigation			for further investigation
<u>DataFlow</u>	Case	3.0 Prosecute Case	
Case Details			
<u>DataFlow</u>	2.0 Investigate	3.0 Prosecute Case	Case details and Request for
	Crime		further clarification





Connector	Source	Target	Notes
Case Details/ Request			
Further Investigation			

2.3.3.2 4.0 Manage Pre-trial detention

Table 1-5: Manage Pre-trial detention

Connector	Source	Target	Notes
<u>DataFlow</u>	4.0 Manage Pre-	Document	
Arrest Warrant	trial detention		
<u>DataFlow</u>	4.0 Manage Pre-	Detention	
Detention Details	trial detention		
<u>DataFlow</u>	4.0 Manage Pre-	RNP	Inclusive of notification,
Notification/Arrest	trial detention		arrest warrant and any other
Warrant			information for collaboration
<u>DataFlow</u>	NPPA	4.0 Manage Pre-trial	
Information		detention	
Collaboration			
<u>DataFlow</u>	3.0 Prosecute Case	4.0 Manage Pre-trial	
Information		detention	
Collaboration			



2.3.4. Level 1 IECMS DFD Judiciary - (Data Flow diagram)

Data Flow Diagram - Level 1: Judiciary

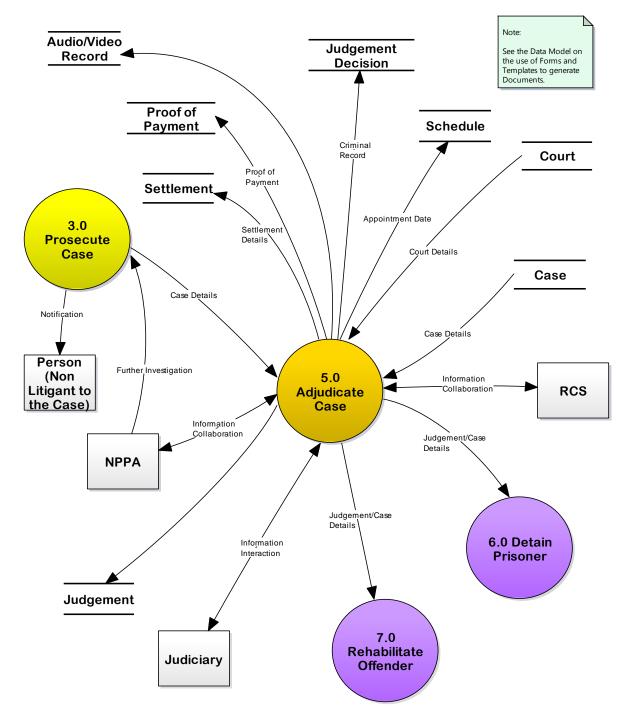


Figure 4: Data Flow Diagram - Level 1 Judiciary



2.3.4.1 5.0 Adjudicate Case

This process is described as part of the Adjudicate Case processes.

Table 1-6: Adjudicate Case

Connector	Source	Target	Notes
<u>DataFlow</u>	5.0 Adjudicate	Judiciary	Inclusive of data and
Information	Case		information sharing such as:
Interaction			- Appointment
			- Case
			readiness/completeness
			- Notifications
<u>DataFlow</u>	5.0 Adjudicate	7.1 Admit Offender	This Notification is for an
Notification	Case	into Correctional Services	Offender from the Court
<u>DataFlow</u>	5.0 Adjudicate	NPPA	
Information	Case		
Collaboration			
<u>DataFlow</u>	5.0 Adjudicate	Judgement	
	Case		
<u>DataFlow</u>	5.0 Adjudicate	6.0 Detain Prisoner	
Judgement/Case	Case		
Details			
<u>DataFlow</u>	5.0 Adjudicate	Judgement Decision	
Criminal Record	Case		
<u>DataFlow</u>	5.0 Adjudicate	Audio/Video Record	
	Case		
<u>DataFlow</u>	5.0 Adjudicate	Schedule	
Appointment Date	Case		
<u>DataFlow</u>	5.0 Adjudicate	RCS	Notification inclusive of:
Information	Case		- Judgement
Collaboration			decision/verdict
			- Arrest Warrant
			- Police statement
<u>DataFlow</u>	5.0 Adjudicate	Settlement	
Settlement Details	Case		



Connector	Source	Target	Notes
<u>DataFlow</u>	5.0 Adjudicate	7.0 Rehabilitate	
Judgement/Case	Case	Offender	
Details			
<u>DataFlow</u>	5.0 Adjudicate	Proof of Payment	
Proof of Payment	Case		
<u>DataFlow</u>	9.4 Submit Public	5.0 Adjudicate Case	Case submitted to the court
Case Submission	Civil Case to Court		notification
Notification			
<u>DataFlow</u>	3.5 Finalise	5.0 Adjudicate Case	
Prosecution Argument	Prosecution Case		
<u>DataFlow</u>	Case	5.0 Adjudicate Case	
Case Details			
<u>DataFlow</u>	9.0 Public Civil	5.0 Adjudicate Case	
Case Details	Litigation		
<u>DataFlow</u>	3.0 Prosecute Case	5.0 Adjudicate Case	
Case Details			
<u>DataFlow</u>	Court	5.0 Adjudicate Case	
Court Details			



2.3.5. Level 1 IECMS DFD RCS - (Data Flow diagram)

Data Flow Diagram - Level 1: Rwanda Correctional Services (RCS)

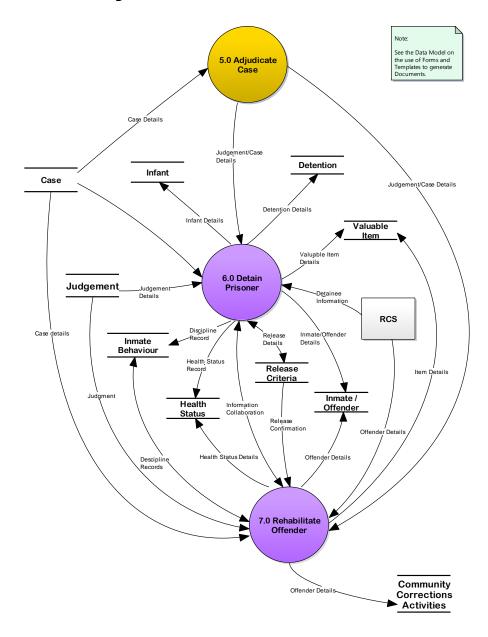


Figure 5: Data Flow Diagram - Level 1: Rwanda Correctional Services (RCS)



2.3.5.1 6.0 Detain Prisoner

Table 1-7: Detain Prisoner:

Connector	Source	Target	Notes
<u>DataFlow</u>	6.0 Detain Prisoner	Inmate Behaviour	
Discipline Record			
<u>DataFlow</u>	6.0 Detain Prisoner	Detention	
Detention Details			
<u>DataFlow</u>	6.0 Detain Prisoner	Release Criteria	
Release Details			
<u>DataFlow</u>	6.0 Detain Prisoner	Inmate / Offender	Inmate details, Judgement
Inmate/Offender			decision
Details			
<u>DataFlow</u>	6.0 Detain Prisoner	Infant	
Infant Details			
<u>DataFlow</u>	6.0 Detain Prisoner	Valuable Item	
Valuable Item Details			
<u>DataFlow</u>	6.0 Detain Prisoner	Health Status	
Health Status Record			
<u>DataFlow</u>	6.0 Detain Prisoner	7.0 Rehabilitate	
Information		Offender	
Collaboration			
<u>DataFlow</u>	5.9 Administer	6.0 Detain Prisoner	
Verdict	Adjudicated		
	Outcome		
<u>DataFlow</u>	5.0 Adjudicate	6.0 Detain Prisoner	
Judgement/Case	Case		
Details			
<u>DataFlow</u>	RCS	6.0 Detain Prisoner	
Detainee Information			
<u>DataFlow</u>	Judgement	6.0 Detain Prisoner	
Judgement Details			
<u>DataFlow</u>	Case	6.0 Detain Prisoner	





2.3.5.2 7.0 Rehabilitate Offender

Table 1-8: Rehabilitate Offender

Connector	Source	Target	Notes
<u>DataFlow</u>	7.0 Rehabilitate	Community	
Offender Details	Offender	Corrections	
		Activities	
<u>DataFlow</u>	7.0 Rehabilitate	Health Status	
Health Status Details	Offender		
<u>DataFlow</u>	7.0 Rehabilitate	Inmate / Offender	
Offender Details	Offender		
<u>DataFlow</u>	7.0 Rehabilitate	Valuable Item	
Item Details	Offender		
<u>DataFlow</u>	7.0 Rehabilitate	Inmate Behaviour	
Discipline Records	Offender		
<u>DataFlow</u>	Case	7.0 Rehabilitate	
Case details		Offender	
<u>DataFlow</u>	5.9 Administer	7.0 Rehabilitate	
Verdict	Adjudicated	Offender	
	Outcome		
<u>DataFlow</u>	RCS	7.0 Rehabilitate	
Offender Details		Offender	
<u>DataFlow</u>	Release Criteria	7.0 Rehabilitate	
Release Confirmation		Offender	
<u>DataFlow</u>	6.0 Detain Prisoner	7.0 Rehabilitate	
Information		Offender	
Collaboration			
<u>DataFlow</u>	5.0 Adjudicate	7.0 Rehabilitate	
Judgement/Case	Case	Offender	
Details			
<u>DataFlow</u>	Judgement	7.0 Rehabilitate	
Judgment		Offender	





2.3.6. Level 1 IECMS DFD RBA - (Data Flow diagram)

Data Flow Diagram - Level 1: Rwanda Bar Association (RBA)

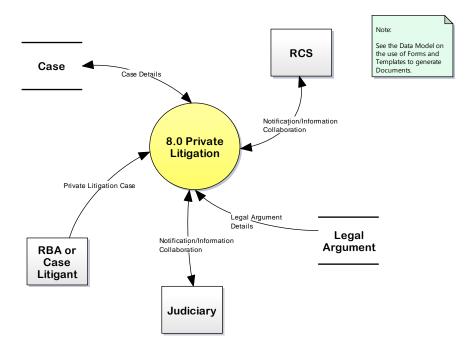


Figure 6: Data Flow Diagram - Level 1: Rwanda Bar Association (RBA)

2.3.6.1 8.0 Private Litigation

Table 1-9: Private Litigation

Connector	Source	Target	Notes
<u>DataFlow</u>	8.0 Private	Judiciary	
Notification/	Litigation		
Information			
Collaboration			
<u>DataFlow</u>	8.0 Private	RCS	
Notification/	Litigation		
Information			
Collaboration			
<u>DataFlow</u>	8.0 Private	Case	
Case Details	Litigation		
<u>DataFlow</u>	Legal Argument	8.0 Private	
		Litigation	



Connector	Source	Target	Notes
Legal Argument			
Details			
<u>DataFlow</u>	RBA or Case	8.0 Private	
Private Litigation	Litigant	Litigation	
Case			

2.3.7. Level 1 IECMS DFD MINIJUST - (Data Flow diagram)

Data Flow Diagram - Level 1: MINIJUST(Public Civil Litigation)

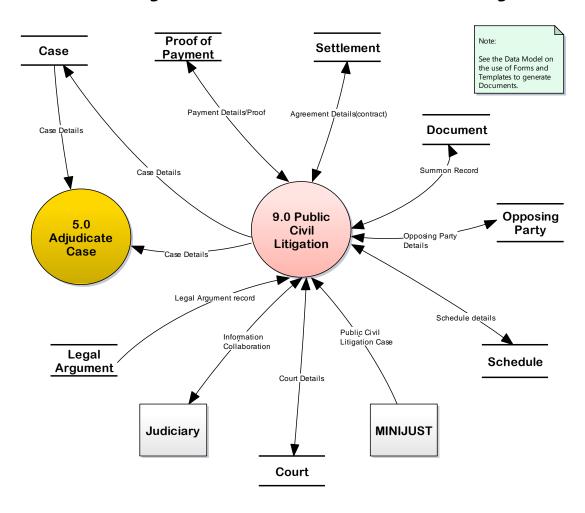




Figure 7: Data Flow Diagram - Level 1: MINIJUST (Public Civil Litigation)

2.3.7.1 9.0 Public Civil Litigation

Table 1-10: Public Civil Litigation

Connector	Source	Target	Notes
<u>DataFlow</u>	9.0 Public Civil	Judiciary	
Information	Litigation		
Collaboration			
<u>DataFlow</u>	9.0 Public Civil	Case	
Case Details	Litigation		
<u>DataFlow</u>	9.0 Public Civil	5.0 Adjudicate Case	
Case Details	Litigation		
<u>DataFlow</u>	Proof of Payment	9.0 Public Civil	
Payment		Litigation	
Details/Proof			
<u>DataFlow</u>	MINIJUST	9.0 Public Civil	
Public Civil Litigation		Litigation	
Case			
<u>DataFlow</u>	Court	9.0 Public Civil	
Court Details		Litigation	
<u>DataFlow</u>	Settlement	9.0 Public Civil	
Agreement		Litigation	
Details(contract)			
<u>DataFlow</u>	Document	9.0 Public Civil	
Summon Record		Litigation	
<u>DataFlow</u>	Opposing Party	9.0 Public Civil	
Opposing Party		Litigation	
Details			
<u>DataFlow</u>	Legal Argument	9.0 Public Civil	
Legal Argument		Litigation	
record			
<u>DataFlow</u>	Schedule	9.0 Public Civil	
Schedule details		Litigation	





2.3.8. Level 2 IECMS DFD RNP - (Data Flow diagram)

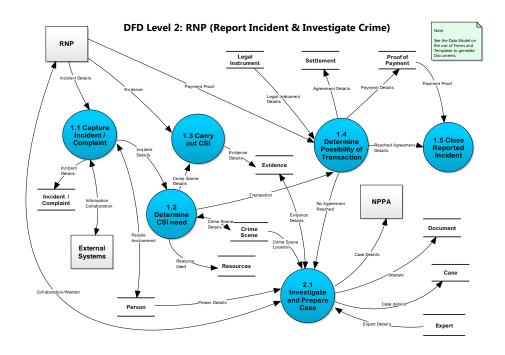


Figure 8: DFD Level 2: RNP (Report Incident & Investigate Crime)

2.3.8.1 1.1 Capture Incident / Complaint

An incident or complaint may be reported or lodged by anybody and to any official within the Rwanda National Police (RNP). Irrespective of the nature of the reporting the incident / complaint need to be captured for further processing. It is suggested that a national call centre is established which would enable the audio recording of each call to report an incident / complaint.

The incident / complaint reporting need to be recorded on to the Integrated Electronic Case Management system (IECMS). In the instance of a telephonic reporting an audio recording of the call should be made if possible.

Determine if the incident is a Felony and inform the Chief Prosecutor. Also capture if the incident is a Petty Offence, a Misdemeanour or a Felony.

Table 1-11: Capture Incident/Complaint

Connector	Source	Target	Notes
<u>DataFlow</u>	1.1 Capture	Person	Including suspect/witness,
People Involvement	Incident /		and victim
	Complaint		





Connector	Source	Target	Notes
<u>DataFlow</u>	1.1 Capture	1.2 Determine CSI	
Incident Details	Incident /	need	
	Complaint		
<u>DataFlow</u>	1.1 Capture	Incident /	
Incident Details	Incident /	Complaint	
	Complaint		
<u>DataFlow</u>	RNP	1.1 Capture	
Incident Details		Incident /	
		Complaint	
<u>DataFlow</u>	External Systems	1.1 Capture	Complete identification
Information		Incident /	
Collaboration		Complaint	

2.3.8.2 1.2 Determine CSI need

It is important to determine the nature of the reported incident to enable the efficient processing thereof. The reported incident may take on a number of guises:

- Traffic offence,
- Murder,
- Commercial crime,

Table 1-12: Determine CSI need

Connector	Source	Target	Notes
<u>DataFlow</u>	1.2 Determine CSI	1.4 Determine	Only applicable for traffic
Transaction	need	Possibility of	fines
		Transaction	
<u>DataFlow</u>	1.2 Determine CSI	Crime Scene	
Crime Scene Details	need		
<u>DataFlow</u>	1.2 Determine CSI	1.4 Determine	
incident details	need	Possibility of	
		Transaction	
<u>DataFlow</u>	1.2 Determine CSI	1.3 Carry out CSI	
Crime Scene Details	need		
<u>DataFlow</u>	1.2 Determine CSI	Resources	People and all equipment
Resource Used	need		used at crime scene





Connector	Source	Target	Notes
<u>DataFlow</u>	1.1 Capture	1.2 Determine CSI	
Incident Details	Incident /	need	
	Complaint		

2.3.8.3 1.3 Carry out CSI

The police, in responding to the incident / complaint reporting, would attend to the crime scene. The primary concern is to secure and document the environment. Evidence would be gathered and potential witnesses interviewed. Assistance from an expert would be sought if required.

Table 1-13: Carry out CSI

Connector	Source	Target	Notes
<u>DataFlow</u>	1.3 Carry out CSI	Evidence	
Evidence Details			
<u>DataFlow</u>	1.2 Determine CSI	1.3 Carry out CSI	
Crime Scene Details	need		
<u>DataFlow</u>	RNP	1.3 Carry out CSI	
Evidence			

2.3.8.4 1.4 Determine Possibility of Transaction

Certain cases may qualify for a fine to be paid instead of going forward as a case to be investigated. A pre-determined set of conditions exist against which the case would be measured.

Table 1-14: Determine Possibility of Transaction

Connector	Source	Target	Notes
<u>DataFlow</u>	1.4 Determine	Settlement	
Agreement Details	Possibility of		
	Transaction		
<u>DataFlow</u>	1.4 Determine	2.1 Investigate and	
No Agreement	Possibility of	Prepare Case	
Reached	Transaction		
<u>DataFlow</u>	1.4 Determine	Proof of Payment	
Payment Details	Possibility of		
	Transaction		
<u>DataFlow</u>	1.4 Determine	1.5 Close Reported	
Reached Agreement	Possibility of	Incident	
Details	Transaction		





Connector	Source	Target	Notes
<u>DataFlow</u>	1.2 Determine CSI	1.4 Determine	Only applicable for traffic
Transaction	need	Possibility of	fines
		Transaction	
<u>DataFlow</u>	1.2 Determine CSI	1.4 Determine	
incident details	need	Possibility of	
		Transaction	
<u>DataFlow</u>	RNP	1.4 Determine	
Payment Proof		Possibility of	
		Transaction	
<u>DataFlow</u>	Legal Instrument	1.4 Determine	
Legal Instrument		Possibility of	
Details		Transaction	

2.3.8.5 1.5 Close Reported Incident

In the instance of the incident being redressed by the payment of a fine, the case would be closed without prejudicing the payee.

Table 1-15: Close Reported Incident:

Connector	Source	Target	Notes
<u>DataFlow</u>	Proof of Payment	1.5 Close Reported	
Payment Proof		Incident	
<u>DataFlow</u>	1.4 Determine	1.5 Close Reported	
Reached Agreement	Possibility of	Incident	
Details	Transaction		

2.3.8.6 2.1 Investigate and Prepare Case

Table 1-16: Investigate and Prepare Case

Connector	Source	Target	Notes
<u>DataFlow</u>	2.1 Investigate and	Document	
Warrant	Prepare Case		
<u>DataFlow</u>	2.1 Investigate and	RNP	
Collaboration/	Prepare Case		
Warrant			
<u>DataFlow</u>	2.1 Investigate and	NPPA	
Case Details	Prepare Case		





Connector	Source	Target	Notes
<u>DataFlow</u>	2.1 Investigate and	Case	
Case details	Prepare Case		
<u>DataFlow</u>	Crime Scene	2.1 Investigate and	
Crime Scene Location		Prepare Case	
<u>DataFlow</u>	1.4 Determine	2.1 Investigate and	
No Agreement	Possibility of	Prepare Case	
Reached	Transaction		
<u>DataFlow</u>	Evidence	2.1 Investigate and	
Evidence Details		Prepare Case	
<u>DataFlow</u>	Person	2.1 Investigate and	Inclusive of
Person Details		Prepare Case	witness/suspect/victim
			details
<u>DataFlow</u>	Expert	2.1 Investigate and	
Expert Details		Prepare Case	



2.3.9. Level 2 IECMS DFD NPPA - (Data Flow diagram)

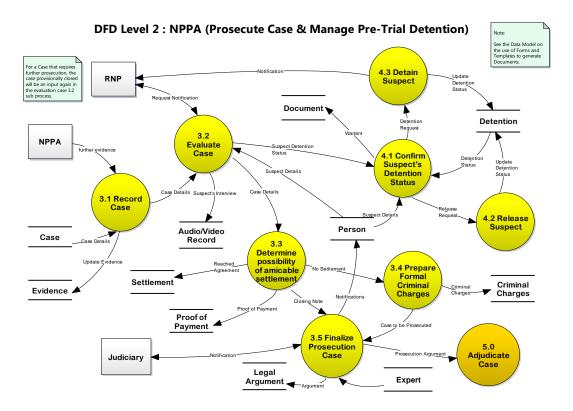


Figure 9: DFD Level 2: NPPA (Prosecute Case & Manage Pre-Trial Detention)

2.3.9.1 3.1 Record Case

The Assistant Prosecutor would accept the case file. The case file (physical and digital) needs to be checked for completeness. An incomplete case file would be returned to be completed. A complete case file would be scanned to the Integrated Electronic Case Management System (IECMS). The NPPA utilises a specific reference number framework and within this framework a reference number would be allocated and documented to the case.

Table 1-17: Record Case

Connector	Source	Target	Notes
<u>DataFlow</u>	3.1 Record Case	Evidence	
Update Evidence			
<u>DataFlow</u>	3.1 Record Case	3.2 Evaluate Case	
Case Details			
<u>DataFlow</u>	NPPA	3.1 Record Case	
further evidence			





Connector	Source	Target	Notes
<u>DataFlow</u>	Case	3.1 Record Case	
Case Details			

2.3.9.2 3.2 Evaluate Case

The Prosecutor needs to evaluate the case to determine if sufficient information is available. Additional information would be requested should any be required. The Prosecutor needs to determine if any witnesses / victims may need protection and if the suspect(s) may need to be detained.

Table 1-18: Evaluate Case

Connector	Source	Target	Notes
<u>DataFlow</u>	3.2 Evaluate Case	3.3 Determine	
Case Details		possibility of	
		amicable	
		settlement	
<u>DataFlow</u>	3.2 Evaluate Case	Audio/Video Record	
Suspect's Interview			
<u>DataFlow</u>	3.2 Evaluate Case	4.1 Confirm	
Suspect Detention		Suspect's Detention	
Status		Status	
<u>DataFlow</u>	3.2 Evaluate Case	RNP	Request further
Request Notification			investigation/notification
<u>DataFlow</u>	Person	3.2 Evaluate Case	Interviewing the victim,
Suspect Details			witness or suspect
<u>DataFlow</u>	3.1 Record Case	3.2 Evaluate Case	
Case Details			

2.3.9.3 3.3 Determine possibility of amicable settlement

The Prosecutor needs to determine if any amicable settlement may be possible. This would be put to the opposing party and, if accepted, arrangements would be made for the fine to be paid. A receipt would be issued on receiving payment of the fine and the case file would be scanned.





Table 1-19: Determine Possibility of amicable settlement

Connector	Source	Target	Notes
<u>DataFlow</u>	3.3 Determine	3.5 Finalise	
Closing Note	possibility of	Prosecution Case	
	amicable		
	settlement		
<u>DataFlow</u>	3.3 Determine	Settlement	Reached agreement
Reached Agreement	possibility of		
	amicable		
	settlement		
<u>DataFlow</u>	3.3 Determine	3.4 Prepare Formal	Amicable settlement not
No Settlement	possibility of	Criminal Charges	possible
	amicable		
	settlement		
<u>DataFlow</u>		Proof of Payment	
Proof of Payment	3.3 Determine		
	possibility of		
	amicable		
	settlement		
<u>DataFlow</u>	3.2 Evaluate Case	3.3 Determine	
Case Details		possibility of	
		amicable	
		settlement	

2.3.9.4 3.4 Prepare Formal Criminal Charges

The compilation of the criminal case would culminate in formal criminal charges being formulated. The Prosecutor, however, determines whether a suspect can be charged beyond any reasonable doubt.

Table 1-20: Prepare Formal Criminal Charges

Connector	Source	Target	Notes
<u>DataFlow</u>	3.4 Prepare Formal	Criminal Charges	Add criminal charges
Criminal Charges	Criminal Charges		
<u>DataFlow</u>	3.4 Prepare Formal	3.5 Finalise	
Case to be	Criminal Charges	Prosecution Case	
Prosecuted			





Connector	Source	Target	Notes
<u>DataFlow</u>	3.3 Determine	3.4 Prepare Formal	Amicable settlement not
No Settlement	possibility of amicable	Criminal Charges	possible
	settlement		

2.3.9.5 3.5 Finalise Prosecution Case

On finalising a case whether found not to be prosecutable or having compiled a prosecutable case, the Chief Prosecutor would evaluate the case to determine if the accused concurs with the finding and is satisfied with the execution of the file.

Table 1-21: Finalise Prosecution Case

Connector	Source	Target	Notes
<u>DataFlow</u>	3.5 Finalise	Judiciary	
Notification	Prosecution Case		
<u>DataFlow</u>	3.5 Finalise	5.0 Adjudicate Case	
Prosecution Argument	Prosecution Case		
<u>DataFlow</u>	3.5 Finalise	Legal Argument	Prosecutor's argument
Argument	Prosecution Case		
<u>DataFlow</u>	3.5 Finalise	Person	Notification of the outcome
Notifications	Prosecution Case		of the decision
<u>DataFlow</u>	Expert	3.5 Finalise	
		Prosecution Case	
<u>DataFlow</u>	3.3 Determine	3.5 Finalise	
Closing Note	possibility of	Prosecution Case	
	amicable		
	settlement		
<u>DataFlow</u>	3.4 Prepare Formal	3.5 Finalise	
Case to be	Criminal Charges	Prosecution Case	
Prosecuted			

2.3.9.6 4.1 Confirm Suspect's Detention Status

It is of crucial importance for the Prosecutor to determine if the suspect(s) are in detention.





Table 1-22: Confirm Suspect's Detention Status

Connector	Source	Target	Notes
<u>DataFlow</u>	4.1 Confirm	4.2 Release Suspect	
Release Request	Suspect's Detention		
	Status		
<u>DataFlow</u>	4.1 Confirm	Document	Arrest/Release Warrant
Warrant	Suspect's Detention		
	Status		
<u>DataFlow</u>	4.1 Confirm	4.3 Detain Suspect	
Detention Request	Suspect's Detention		
	Status		
<u>DataFlow</u>	3.2 Evaluate Case	4.1 Confirm	
Suspect Detention		Suspect's Detention	
Status		Status	
<u>DataFlow</u>	Detention	4.1 Confirm	
Detention Status		Suspect's Detention	
		Status	
<u>DataFlow</u>	Template	4.1 Confirm	Use of Template for
Warrant Template		Suspect's Detention	arrest/release warrant etc.
		Status	
<u>DataFlow</u>	Person	4.1 Confirm	
Suspect Details		Suspect's Detention	
		Status	

2.3.9.7 4.2 Release Suspect

If a suspect is in detention and needs to be released, the Prosecutor would submit an urgent request to the police to release the suspect.

Table 1-23: Release Suspect

Connector	Source	Target	Notes
<u>DataFlow</u>	4.2 Release	Detention	
Update Detention	Suspect		
Status			
<u>DataFlow</u>	4.1 Confirm	4.2 Release Suspect	
Release Request	Suspect's Detention		
	Status		





2.3.9.8 4.3 Detain Suspect

The Prosecutor determines that the suspect should be in detention. If the suspect is not in detention, a detention warrant should be forwarded to the police. A suspect may only remain in detention for a total of 10 days without trial. Should the Prosecutor require a longer detention period, the request would need to be heard by a judge. A judge may authorise a maximum of 30 days detention.

Connector	Source	Target	Notes
<u>DataFlow</u>	4.3 Detain Suspect	Detention	
Update Detention			
Status			
<u>DataFlow</u>	4.3 Detain Suspect	RNP	
Notification			
<u>DataFlow</u>	4.1 Confirm	4.3 Detain Suspect	
Detention Request	Suspect's Detention		
	Status		

Table 1-24: Detain Suspect

2.3.10. Level 2 IECMS DFD Judiciary - (Data Flow diagram)

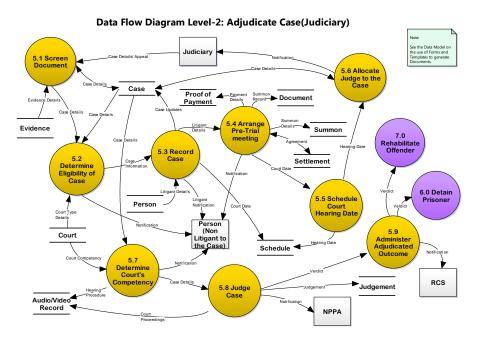


Figure 10: Data Flow Diagram Level 2: Adjudicate Case (Judiciary)



2.3.10.1 5.1 Screen Document

The Registrar needs to check the submissions for completion if it is a non-criminal case. Incomplete non-criminal submissions are rejected.

Table 1-25: Screen Document

Connector	Source	Target	Notes
<u>DataFlow</u>	5.1 Screen	5.2 Determine	
Case Details	Document	Eligibility of Case	
<u>DataFlow</u>	Judiciary	5.1 Screen	
Case Details/ Appeal		Document	
<u>DataFlow</u>	Evidence	5.1 Screen	
Evidence Details		Document	
<u>DataFlow</u>	Case	5.1 Screen	Case details/nature of the
Case Details		Document	case

2.3.10.2 5.2 Determine Eligibility of Case

The case is evaluated to determine if it is eligible to be heard in a particular court. The rejection of a case may be appealed. The appeal of a superior court case would be heard by a judge. Appeals for other courts would be heard by the President of the Court.

Table 1-26: Determine Eligibility of Case

Connector	Source	Target	Notes
<u>DataFlow</u>	5.2 Determine	Person (Non-litigant	
Notification	Eligibility of Case	to the Case)	
<u>DataFlow</u>	5.2 Determine	5.3 Record Case	
Case Information	Eligibility of Case		
<u>DataFlow</u>	Case	5.2 Determine	
Case Details		Eligibility of Case	
<u>DataFlow</u>	5.1 Screen	5.2 Determine	
Case Details	Document	Eligibility of Case	
<u>DataFlow</u>	Court	5.2 Determine	
Court Type Details		Eligibility of Case	



2.3.10.3 5.3 Record Case

The Registrar records the case on to the system with a sequential number by category of crime. A pre-trial hearing date is scheduled.

Table 1-27: Record Case

Connector	Source	Target	Notes
<u>DataFlow</u>	5.3 Record Case	Person (Non-litigant	Notify litigant to reply for
Litigant Notification		to the Case)	submission
<u>DataFlow</u>	5.3 Record Case	Case	Update with case
Case Updates			number/submission
<u>DataFlow</u>	5.3 Record Case	Schedule	
Court Date			
<u>DataFlow</u>	5.3 Record Case	5.4 Arrange Pre-	Case/ litigant details
Litigant Details		Trial meeting	
<u>DataFlow</u>	5.2 Determine	5.3 Record Case	
Case Information	Eligibility of Case		
<u>DataFlow</u>	Person	5.3 Record Case	
Litigant Details			

2.3.10.4 5.4 Arrange Pre-Trial meeting

A pre-trial meeting is compulsory for all non-criminal cases. The Registrar participates in the pretrial meeting. The meeting is recorded. If an agreement has been reached the agreement would be recorded and the case closed. If no agreement can be arrived at, the case file name is appended with the original court date. Carry Out and Record Pre-trial Meeting

Table 1-28: Arrange Pre-Trial Meeting

Connector	Source	Target	Notes
<u>DataFlow</u>	5.4 Arrange Pre-	Proof of Payment	
Payment Details	Trial meeting		
<u>DataFlow</u>	5.4 Arrange Pre-	Document	
Summon Record	trial meeting		
<u>DataFlow</u>	5.4 Arrange Pre-	Person (Non-litigant	
Notification	trial meeting	to the Case)	
<u>DataFlow</u>	5.4 Arrange Pre-	Summon	
Summon Details	trial meeting		
<u>DataFlow</u>	5.4 Arrange Pre-	5.5 Schedule Court	
Court Date	trial meeting	Hearing Date	





Connector	Source	Target	Notes
<u>DataFlow</u>	5.4 Arrange Pre-	Settlement	Reached agreement
Agreement	trial meeting		
<u>DataFlow</u>	5.3 Record Case	5.4 Arrange Pre-	Case/ litigant details
Litigant Details		trial meeting	
<u>DataFlow</u>	Template	5.4 Arrange Pre-	Template to be used for
Summon Template		trial meeting	summon

2.3.10.5 5.5 Schedule Court Hearing Date

Schedule a court hearing date. The Chief registrar would propose a suitable date and the President of the Court would make the final decision on the date.

Table 1-29: Schedule Court Hearing Date

Connector	Source	Target	Notes
<u>DataFlow</u>	5.5 Schedule Court	5.6 Allocate Judge	
Hearing Date	Hearing Date	to the Case	
<u>DataFlow</u>	5.5 Schedule Court	Schedule	Court hearing date
Hearing Date	Hearing Date		
<u>DataFlow</u>	5.4 Arrange Pre-	5.5 Schedule Court	
Court Date	trial meeting	Hearing Date	

2.3.10.6 5.6 Allocate Judge to the Case

The President of the Court appoints a Judge to the case (Seating Order). In turn the Judge needs to determine if any conflicts exists that may precludes him / her from hearing the case.

Table 1-30 Allocate Judge to Case

Connector	Source	Target	Notes
<u>DataFlow</u>	5.6 Allocate Judge	Case	
Case Details	to the Case		
<u>DataFlow</u>	5.6 Allocate Judge	Judiciary	
Notification	to the Case		
<u>DataFlow</u>	5.5 Schedule Court	5.6 Allocate Judge	
Hearing Date	Hearing Date	to the Case	

2.3.10.7 5.7 Determine Court's Competency

The competency of the court to hear the case needs to be determined. A commercial and civil case would be cancelled if the court is found to be unable to hear the case. A criminal case would be reallocated to a suitable court.





Table 1-31: Determine Court's Competency

Connector	Source	Target	Notes
<u>DataFlow</u>	5.7 Determine	Person (Non-	
Notification	Court's	litigant to the Case)	
	Competency		
<u>DataFlow</u>	5.7 Determine	5.8 Judge Case	
Case Details	Court's		
	Competency		
<u>DataFlow</u>	5.7 Determine	Audio/Video Record	
Hearing Procedure	Court's		
	Competency		
<u>DataFlow</u>	Case	5.7 Determine	
Case Details		Court's Competency	
<u>DataFlow</u>	Court	5.7 Determine	
Court Competency		Court's Competency	

2.3.10.8 5.8 Judge Case

The Judge hears the case after analysing the case files, consulted precedents and applicable laws. The case would be heard on the scheduled date.

Table 1-32: Judge Case

Connector	Source	Target	Notes
<u>DataFlow</u>	5.8 Judge Case	Judgement	
Judgement			
<u>DataFlow</u>	5.8 Judge Case	Audio/Video Record	Applicant's argument and
Court Proceedings			defendant's argument
<u>DataFlow</u>	5.8 Judge Case	NPPA	
Notification			
<u>DataFlow</u>	5.8 Judge Case	5.9 Administer	
Verdict		Adjudicated	
		Outcome	
<u>DataFlow</u>	5.7 Determine	5.8 Judge Case	
Case Details	Court's		
	Competency		



2.3.10.9 5.9 Administer Adjudicated Outcome

The Registrar notifies the parties of the sentence. In the instance of Correctional Service sentence, the Registrar needs to compile a case file to accompany the offender to Correctional Services. Publish selected Judgement on Web site / Law Reporting.

Table 1-33: Administer Adjudicated Outcome

Connector	Source	Target	Notes
<u>DataFlow</u>	5.9 Administer	RCS	
Notification	Adjudicated		
	Outcome		
<u>DataFlow</u>	5.9 Administer	7.0 Rehabilitate	
Verdict	Adjudicated	Offender	
	Outcome		
<u>DataFlow</u>	5.9 Administer	6.0 Detain Prisoner	
Verdict	Adjudicated		
	Outcome		
<u>DataFlow</u>	5.8 Judge Case	5.9 Administer	
Verdict		Adjudicated	
		Outcome	



2.3.11. Level 2 IECMS DFD RCS - (Data Flow diagram)

2.3.11.1 Level 2 IECMS DFD Detain Prisoner

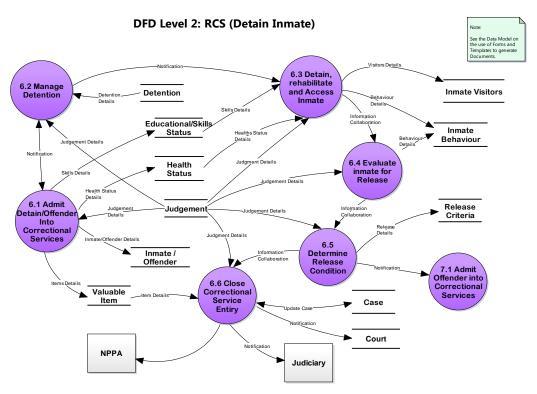


Figure 11: DFD Level 2: RCS (Detain Inmate)



2.3.11.2 Level 2 IECMS DFD Rehabilitate Offender

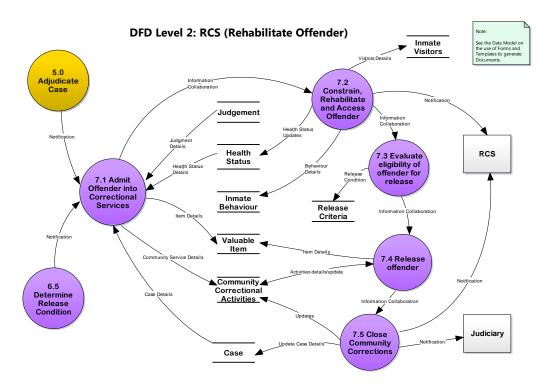


Figure 12: DFD Level 2: RCS (Rehabilitate Offender)



2.3.12. Level 2 IECMS DFD RBA - (Data Flow diagram)

2.3.12.1 8.0 Private Litigation Case

DFD Level 2: Private Litigation Case

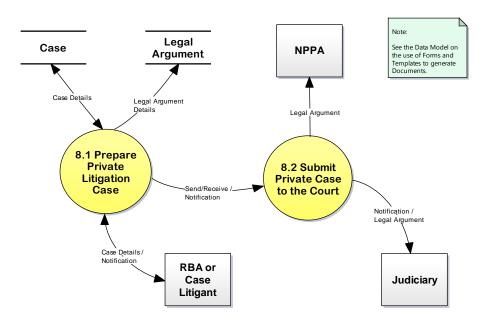


Figure 13: DFD Level 2: Private Litigation Case



2.3.13. Level 2 IECMS DFD MINIJUST - (Data Flow diagram)

2.3.13.1 9.0 Public Civil Litigation

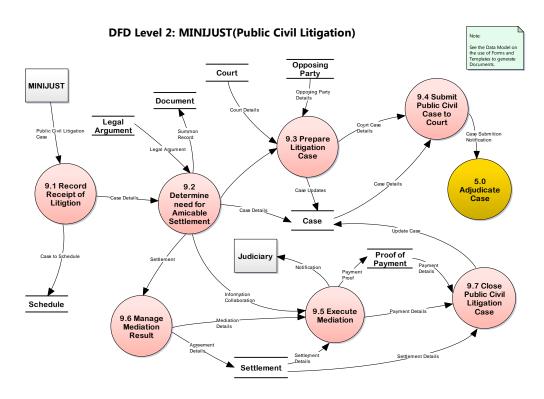


Figure 14: DFD Level 2: MINIJUST (Public Civil Litigation)



2.4. Entity Relationship Diagram

This diagram below represents the full IECMS inclusive of all the applicable JRLOS Institutions such as:

Relationship

Entity Relationship Diagram(ERD) - JRLOS IECMS

**Tree Programment of Programment

Figure 15: Entity Relationship Diagram (ERD)

2.5. Data Dictionary

This section provides a Catalogue with description of all entities in the proposed Solution Data Architecture.

2.5.1. Audio/Video/Image

The documented recording of all case information in audio or voice medium for a complaint, crime investigation, court hearing, case session or any other proof of record.



Table 1-34: Audio Visual/Image

Attribute	Notes	Constraints and tags
Record ID NUMBER		Default:
Public		
Date DATE		Default:
Public		
Case NUMBER		Default:
Public		

2.5.2. Case

A master file containing all Data and / or Information of the case throughout its total life cycle. This Database FILE contains relationships to all other relevant content of the Complaint, Crime, Prosecutor, Court, Inmate Data and Information etc.

Table 1-35: Case

Attribute	Notes	Constraints and tags
Case NUMBER		Default:
Private		
Case Type CHAR		Default:
Private		
Case DATE		Default:
Public		
Crime Reference CHAR		Default:
Public		

2.5.3. Community Corrections Activities

An official establishment where crime suspects or crime perpetrators serve community service on the order of a Judge inclusive of the duration period, activities, organisation, location and crime committed etc.

Table 1-36: Community Corrections Activities

Attribute	Notes	Constraints and tags
Service_ID NUMBER		Default:
Public		
Location NUMBER		Default:
Public		





2.5.4. Court

A governmental body that adjudicates legal disputes by interpreting and applying the law to specific cases, also called a place of conviction.

Table 1-37: Court

Attribute	Notes	Constraints and tags
Court ID NUMBER		Default:
Public		
Court_Type CHAR		Default:
Public		
Court_Name CHAR		Default:
Public		

2.5.5. Document

A digital store of all the documents data and / or information in relationship to the images and physical inputs and outputs such as:

- Warrants
- Summons
- Receipts
- Reports
- Records
- Statements

2.5.6. Judgment Decisions

Table 1-38: Judgement Decisions

Attribute	Notes	Constraints and tags
ID NUMBER		Default:
Private		
Document_Type CHAR		Default:
Private		
Description CHAR		Default:
Public		

2.5.7. Evidence

Any digital recording of physical or digital elements that could be used in the context of a criminal case to establish a fact.





Table 1-39: Evidence

Attribute	Notes	Constraints and tags
Evidence ID NUMBER		Default:
Public		
Evidence_Description		Default:
CHAR		
Public		

2.5.8. Expert

A documented store of expert services available or required (on request) e.g. financial, narcotics, biometric, medical, etc.

Table 1-40: Expert

Attribute	Notes	Constraints and tags
Expert ID NUMBER		Default:
Public		
Expert Name CHAR		Default:
Public		
Date DATE		Default:
Public		
Report Reference		Default:
NUMBER		
Public		

2.5.9. Form

A list of digital applications (e-Form) for easy use with recorded information that contains the results as input or output required such as:

- Receipt
- Application

Table 1-41: Form

Attribute	Notes	Constraints and tags
Form NUMBER		Default:
Public		
Form_Name CHAR		Default:
Public		





Attribute	Notes	Constraints and tags
Description CHAR		Default:
Public		

2.5.10. Health Status

A documented store of data and information produced by the RCS medical services, concerning the health status of an Inmate of Offender.

Table 1-42: Health Status

Attribute	Notes	Constraints and tags
Reference ID NUMBER		Default:
Public		
Person ID NUMBER		Default:
Public		
Description CHAR		Default:
Public		

2.5.11. Incident / Complaint

A documented file with all recorded complaint / incident data and / or information received at an official office at all levels in RNP. This digital file is an input to the Crime Case store inclusive of information relationships to:

- Incident name/description
- Evidence records
- Crime scene location (longitude, altitude)
- Physical address of case stakeholders (complainant, victim, suspect, witness)

Table 1-43: Incident/Complaint

Attribute	Notes	Constraints and tags
Complaint ID NUMBER		Default:
Private		
Date DATE		Default:
Private		
Description CHAR		Default:
Private		
Observation CHAR		Default:
Private		





Attribute	Notes	Constraints and tags
Case Number NUMBER		Default:
Private		

2.5.12. Infant

A documented store of *Infant (French: Nourrisson)* details. Meaning a child under the age of three (3) years, living with the mother in a correctional service place.

Table 1-44: Infant

Attribute	Notes	Constraints and tags
Child_ ID NUMBER		Default:
Public		
Parent ID NUMBER		Default:
Public		
First Name CHAR		Default:
Public		
Last Name CHAR		Default:
Public		
DoB DATE		Default:
Public		

2.5.13. Investigation

Table 1-45: Investigation

Attribute	Notes	Constraints and tags
Reference NUMBER		Default:
Public		
Case NUMBER		Default:
Public		

2.5.14. Inmate / Offender

A store of all the data and / or information of an Inmate or Offender associated to a case which is placed under correctional services, or who is in pre-trial detention, inclusive of all information such as photos, biometric data, sentencing details etc.

Table 1-46: Inmate/Offender

Attribute	Notes	Constraints and tags
Person ID NUMBER		Default:





Attribute	Notes	Constraints and tags
Public		
Case ID NUMBER		Default:
Public		
Photo Reference		Default:
NUMBER		
Public		

2.5.15. Judgement

The documented decision (resolution) issued by a Judge in a judicial case (same as Verdict).

Table 1-47: Judgement

Attribute	Notes	Constraints and tags
Judgement ID NUMBER		Default:
Public		
Case NUMBER		Default:
Public		
Court ID NUMBER		Default:
Public		

2.5.16. Legal Instrument

All data and information of relevance in a case of legislation inclusive of:

- Laws / Policies
- Directives
- Guidelines
- Codes and Standards

Applicable to the crime. Also the set of all judicial precedents are inclusive of:

- Journals
- Law Reports

E.g. A published record (digital or physical) of case judgements.

Table 1-48: Legal Instrument

Attribute	Notes	Constraints and tags
Reference NUMBER		Default:
Public		





Attribute	Notes	Constraints and tags
Description CHAR		Default:
Public		
Date of Publication		Default:
DATE		
Public		

2.5.17. Location

Documented data or information about the location or position where an incident / complaint or crime took place.

Table 1-49: Location

Attribute	Notes	Constraints and tags
Location ID NUMBER		Default:
Private		
Village CHAR		Default:
Private		
Cell CHAR		Default:
Private		
District CHAR		Default:
Private		
Sector CHAR		Default:
Private		

2.5.18. Notification

Table 1-50: Notification

Attribute	Notes	Constraints and tags
Notification Reference		Default:
NUMBER		
Private		
Notification Type		Default:
CHAR		
Public		
Description CHAR		Default:
Private		



Attribute	Notes	Constraints and tags
Person Surname CHAR		Default:
Private		
DATE		Default:
Public		

2.5.19. Organisation

An establishment or organisation to pursue a particular type of endeavour such as ministries, institutions, agencies, etc.

Table 1-51: Organisation

Attribute	Notes	Constraints and tags
Organisation ID		Default:
NUMBER		
Public		
Organisation		Default:
Description CHAR		
Private		
Organisation Type		Default:
CHAR		
Private		
Employee ID NUMBER		Default:
Private		

2.5.20. Person

A store of unique identity of a person in digital medium (e.g. biometric etc.), irrespective of whether or not the person is a citizen of the country of Rwanda, inclusive of the people in the community to serve a role in a case such as a person who requests or seeks legal assistance.

Table 1-52: Person

Attribute	Notes	Constraints and tags
Person ID CHAR		Default:
Private		
Surname CHAR		Default:
Private		
Name CHAR		Default:
Private		





Attribute	Notes	Constraints and tags
Title / Rank CHAR		Default:
Private		

2.5.21. Person Role

A store of unique identity qualities of a person in digital medium (e.g. biometric etc.), irrespective of whether or not the person is a citizen of the country of Rwanda, inclusive of the people in the community to serve a role in a case such as a person who requests or seeks legal assistance such as:

- Complainant
- Victim
- Suspect
- Witness
- Detainee

Table 1-53: Person Role

Attribute	Notes	Constraints and tags
Role ID NUMBER		Default:
Public		
Person ID NUMBER		Default:
Private		
Role Type CHAR		Default:
Private		
Description CHAR		Default:
Private		

2.5.22. Prison

Table 1-54: Prison

Attribute	Notes	Constraints and tags
Prison ID NUMBER		Default:
Public		
Prison Name CHAR		Default:
Public		





2.5.23. Production

Table 1-55: Production

Attribute	Notes	Constraints and tags
Activity ID NUMBER		Default:
Public		
Activity_name CHAR		Default:
Public		

2.5.24. Proof of Payment

A store containing a set of Proof of Records (Receipts) for the amount of money paid by the offender for an offense. This can be in digital or image (scanned physical) medium.

Table 1-56: Proof of Payment

Attribute	Notes	Constraints and tags
Payment_Reference		Default:
NUMBER		
Public		
Payment Receipt		Default:
Public		

2.5.25. Release Criteria

A documented proof of an Inmate or Offenders' release conditions. Inclusive of Presidential Pardon, Parole, Conditional Release, Death in detention etc.

Table 1-57: Release Criteria

Attribute	Notes	Constraints and tags
Release ID NUMBER		Default:
Public		
Court ID NUMBER		Default:
Public		
Case NUMBER		Default:
Public		
Description CHAR		Default:
Public		



2.5.26. Resources

A documented list of any Physical or Digital equipment (documents, CD, tapes) or Non-Physical (Time discrepancy, etc.) elements that could be used in the context of a judicial case to establish a fact such as:

- Equipment Checklist
- Vehicles

Also the Staff, Vehicle and Equipment used at a Crime Scene during investigation.

Table 1-58: Resources

Attribute	Notes	Constraints and tags
Resource Reference		Default:
NUMBER		
Public		
Resource Type CHAR		Default:
Public		
Description CHAR		Default:
Public		

2.5.27. Schedule

A digital calendar indicating the date and time booking for a hearing, court session for cases inclusive of:

- The stakeholders / persons been registered and / or allocated to the case
- The location of the booked session / hearing

Table 1-59: Schedule

Attribute	Notes	Constraints and tags
Schedule Reference		Default:
NUMBER		
Public		
DATE		Default:
Public		
Case Description CHAR		Default:
Public		
Court Location CHAR		Default:
Public		



2.5.28. Judgement Decision

A documented list of the final decisions produced by a Judge at the conclusion of a judicial case. A Clearance Certificate Record of crimes for which a defendant has been previously convicted will be generated / produces from this store.

Table 1-60: Judgement Decision

Attribute	Notes	Constraints and tags
Sentence ID NUMBER		Default:
Public		
Sentence Type CHAR		Default:
Public		
Sentence Duration		Default:
NUMBER		
Public		
Criminal Record ID		Default:
CHAR		
Public		

2.5.29. Settlement

A documented store with any data and/or information indicating the points of agreement between two parties in the resolution of a dispute.

Table 1-61: Settlement

Attribute	Notes	Constraints and tags
Settlement Reference		Default:
NUMBER		
Public		
Case NUMBER		Default:
Public		
DATE		Default:
Public		

2.5.30. Staff Role

A store of unique identity in digital medium (e.g. biometric etc.) of a person, irrespective of the person is a citizen or not of the country of Rwanda, inclusive of the Staff Role for people such as:

- Judicial Police Officer
- Prosecutor





Judge

Table 1-62: Staff Role

Attribute	Notes	Constraints and tags
Role ID NUMBER		Default:
Public		
Role Name CHAR		Default:
Public		
Role Type CHAR		Default:
Public		

2.5.31. TIG Camp

Table 1-63: TIG Camp

Attribute	Notes	Constraints and tags
Camp ID NUMBER		Default:
Public		
Location NUMBER		Default:
Public		

2.5.32. Template

A list of digital applications (e-Template) for easy use with recorded information that contains the results as input or output required such as:

- Documents
- Records
- Reports

Table 1-64: Template

Attribute	Notes	Constraints and tags
Template NUMBER		Default:
Public		
Template Name CHAR		Default:
Public		
Description CHAR		Default:
Public		



2.5.33. Valuable Item

A documented list of all valuable items (inclusive of money, telephones etc.) present on a person at intake to the correctional service for safeguarding until release.

Table 1-65: Valuable Item

Attribute	Notes	Constraints and tags
Item ID NUMBER		Default:
Public		
Item Description CHAR		Default:
Public		
Date		Default:
Public		
Case Reference		Default:
NUMBER		
Public		

2.5.34. Warrant

A documented store of warrants issued by an Authority in the context of criminal cases to arrest persons.

Table 1-66: Warrant

Attribute	Notes	Constraints and tags
Warrant Reference		Default:
NUMBER		
Public		
Description CHAR		Default:
Public		
Date		Default:
Public		
Person ID NUMBER		Default:
Public		



3. Data Integration

3.1. Overview

To support the various processes and the seamless integration of data, data needs to be shared between institutions. There are 2 types of data integration:

- External to other institutions or to this proposed solution architecture
- Internally between the 6 JRLOS institutions and within the context of this Solution Architecture

3.2. External Integration

There are two potential external integration requirements:

- NIDA to get a person's information
- RRA to get vehicle information
- RNRA to get Land Registration information
- DGEI to get Immigration information to determine if a person is legally in Rwanda

Integration to these Institutions and Systems needs to be via services as will be explained in the Technology Infrastructure architecture.

3.3. Internal Integration

In general case information needs to be shared between institutions. This will be done on a database level.

Table 3-1: Data Integration

Source Institution	Data Object	Target Institution
Rwanda National Police	Police Case	National Public Prosecution Authority
National Public Prosecution Authority	Prosecution Case	Judiciary
Judiciary	Criminal Record	Rwanda Correctional Services
Bar Association	Legal Argument	Judiciary
MINIJUST	Legal Argument	Judiciary

This data level integration will be achieved as follows:







There will be one data schema implemented on the Data Server. This schema will cover the complete data requirement for IECMS. Every institution will have a view on the data schema based on their respective ownership. Security will be implemented on a data object level. This is done by assigning a role to a user and in turn assigning that user and role to a data object.