



**eGCA**

# **System Requirements Specifications (Abridged) Air Safety Directorate**

Version: 1.1

**Service Name:**                      **Service Code:**                      **ASF 8**  
**Voluntary Reporting System**

<b>Project Name:</b>	eGCA
<b>Location:</b>	DGCA, New Delhi
<b>Customer Name:</b>	Directorate General of Civil Aviation

## DOCUMENT CONTROL

<b>Version</b>	<b>Date of Revision</b>	<b>Author/Modified By</b>	<b>Reviewed By</b>	<b>Reviewed by (DGCA responsible)</b>	<b>Description for Change</b>	<b>Affected Sections</b>
<b>1.1.0</b>	<b>07.03.16</b>	<b>Neetu Somani</b>			<b>Baseline</b>	

## Approval

<b>DGCA Responsible</b>	<b>Date</b>	<b>Signature</b>

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## **ASF/1 Document Objective**

The objective of this document is to provide functional and business requirements and the inter dependencies between various stakeholders to enable the design and development of eGCA solution.

This document, at a broad level, will provide the services addressed within the directorate, the concerned actors and roles in the service, a synopsis of the process, process flow, and the data elements required to be captured for developing the eGCA solution in compliance with the existing rules and procedures.

### **ASF/1.1 About Air Safety Directorate (ASD)**

The Air safety Directorate ensures safety of air travel through preventive measures, such as surveillances and audits, and through reactive measures, such as investigations and recommendations for prevention of incidents and accidents in future.

The main functions of ASD are as under:

- A. At HQ Level
  - 1. Investigation of Civil Registered aircraft Incidents is done by DGCA
  - 2. Follow-up for implementation of recommendation made in investigation reports for accidents/ incidents.
  - 3. Analysis of incident database and issue of safety recommendations to industry & directorates.
  - 4. Accident/Incident Prevention work
  - 5. Database of accident prevention work, audit.
  - 6. Approval of flight safety manual, chief of flight safety and flight safety organization.
- B. At RO level
  - 1. To carry out the investigation of incidents/accidents occurring of operators/airlines in their region.
  - 2. To associate in investigation of incident by PIB.
  - 3. To carry out the investigation of Ground incidents.
  - 4. To carry out the investigation of air miss/Air Prox/ATC violations.
  - 5. Participate in the operational area inspection, Airport security meeting,
  - 6. Creating Safety committees and Safety teams.
  - 7. Monitoring of incidents of operators/airlines.
  - 8. CVR/DFDR monitoring.
  - 9. ATC Tape monitoring.
  - 10. To carry out the airport inspections.
  - 11. To carry out surveillance inspection of airlines/operators e.g., preflight medical

## ASF/2 Functional Overview

### ASF/2.1 Functional Packages

S.No.	Package Name	Description
ASF 1	Safety Management System & SSP	Provide facility to monitor/efficiently execute the requirements laid down by SMS.
ASF 2	Mandatory Occurrence Reporting System (MORS)	Provide facility to encourage the reporting of incidents concerning Air Safety
ASF3	Investigation	Provide facility to conduct and report enquiry details/ reports as a result of investigation carried out for analyzing air incidents/accidents. This is a part of MORS and hence is not mentioned separately
ASF 4	Audit	Provide facility to prepare Audit plans, monitor execution of Audits and record Audit records.
ASF4	Surveillance	Provide facility to prepare surveillance plan and monitor its execution.
ASF 5	Enforcement	Provide facility to the Directorate to process enforcement action
ASF 6	Approval to Flight Safety Organizations	Provide capturing of approvals for a flight safety organization from DGCA
ASF 7	Cabin Safety Division	This service is not a part of Air Safety Directorate.
ASF 8	Voluntary Reporting System	Provide facility to users to voluntarily report incidents.
ASF 9	Flight Safety Document System	Provide facility to manage flight safety documentation system online

**This Document deals with the service of Voluntary Reporting System**

### ASF 8/2.2 Actors / Roles

S. No.	System / Application Role	Informant	DG	JDG	DDG	D(AS)	AD	ASO/concerned Directorate	Voluntary Reporting Cell
1.	Applicant	X							
2.	Verifier						X	X	X
3.	Approver		X	X	X	X			
4.	Exempting Authority								
5.	Escalation		X	X					

## **ASF 8/3 Business Process Flows and Description**

### **ASF 8/3.1 Process flow synopsis**

#### **Service – ASF 8 : Voluntary Reporting System**

The key objective of voluntary and confidential reporting system is to enhance aviation safety through the collection of reports on actual or potential safety deficiencies that would otherwise not be reported through other channels.

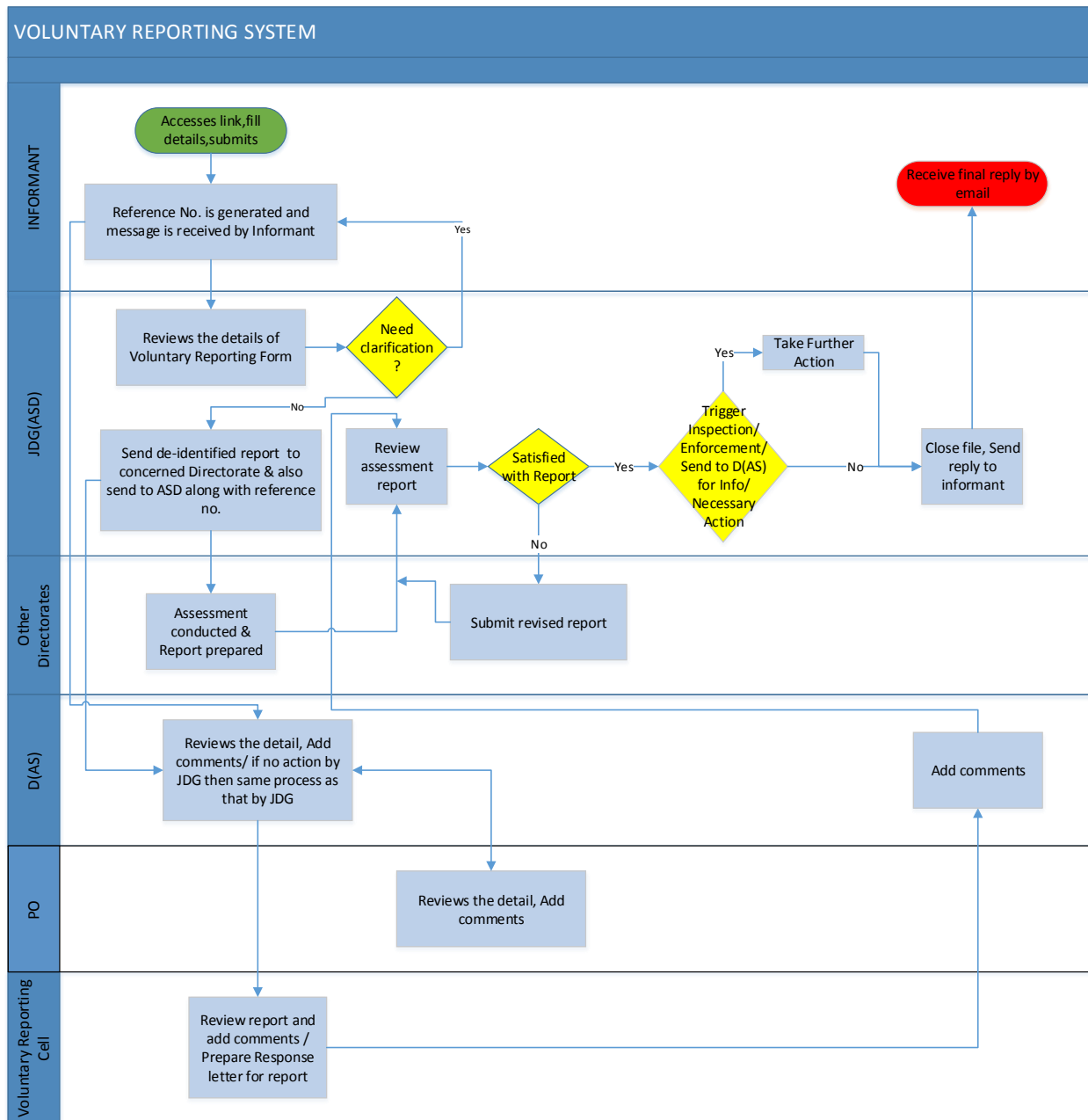
Though it is assured that no punitive action will be taken on such voluntary reporting however if the infringement relates to unlawful/criminal/deliberate gross negligent unsafe action.

**Data elements captured** – Relevant details that enables voluntary Reporting from the informant, getting response from the Concerned Directorates

**Process Flow** – Informant (Voluntary Reporter) -> Verifier -> Approver -> Escalation (If required)

**Output** – Closing of report, Answer to Voluntary Report to the Sender, Inspection / Enforcement action (if any), Updation of database

## ASF 8/3.2 To Be Process Flow



## ASF 8/3.4 Process Flow Description

S. No.	Process Description	Responsibility
ASF 8/3.1.1	Informant accesses the portal and uses the Voluntary reporting form to submit the information. He has the option to send/not send his identification details, contact number, email address.	Applicant
ASF 8/3.1.2	A unique acknowledgment number and date/time stamp of the reporting is generated and displayed to the applicant in a popup on screen. An email is sent to the contact email ID if available.	System generated
ASF 8/3.1.3	The JDG and D(AS) both get copy of the report (identified) if identity sent. The JDG will be the primary owner of the Voluntary Reports received. If no action is taken within 3 working days of receiving the report by the JDG, the Director will be able to process the report.  They will be able to write to the informant on his email Id given by him for any clarification if required and receive his response.	Approver
ASF 8/3.1.4	During the entire processing of the report, The time and date trail will be recorded for the purpose of calculating the time taken for processing and closure of each report for future analysis	System Generated
ASF 8/3.1.5	After preliminary review, the JDG/D(AS) will send it for further analysis and take response from the Concerned Directorate/external agencies /Stakeholder/Regional Officers/Investigators as and if required and to the Voluntary Reporting cell .  Only de-identified reports will be forwarded. The information report can be edited if required by the D(AS)/JDG to ensure that there is no identity of the informant in the report.	Approver
ASF 8/3.1.6	The Actor (Concerned Directorate/external agencies/ Stakeholder/Regional Officers/Investigators ) analyzes the report, prepare response report and Submit it back to the JDG/D(AS)	Verifier
ASF 8/3.1.7	The D(AS)/JDG send the report to the Voluntary reporting cell for data analysis, study and preparation of response for the informant.	Approver
ASF 8/3.1.8	Voluntary Reporting cell studies the report received from the informant and response from the concerned agency/stakeholder/directorate if available and prepare response for the Informant  It will also be able to search past data for analysis for preparing inputs to help in policy / regulation making for ASD.	Verifier
ASF 8/3.1.9	Based on the report analysis, necessary steps if and as required (Investigation/Enforcement/recommendations etc.) may be taken.  Enforcement may be triggered if there are any fault findings of critical nature and after approval of JDG, Enforcement may be done.	Approver/Escalation Authority
ASF 8/3.1.10	If all necessary action have been taken the JDG/D(AS) may close the report.  The Director has to refer to the JDG before closing the report.	Approver



	If the report is being closed, the response is sent to the informant if his email id is available.	
ASF 8/3.1.11	De-identified data is saved in the system for future references and generation of MIS reports	System Generated

## ASF 8/3.4 Business Rules / Validations

	Business Rule	CAR Reference
ASF8/3.1.1	Voluntary/Confidential Reporting Performa (captured in the data elements later in this document)	AIC03_2015 – ANNEXURE A
ASF8/3.1.1	Information to be Reported Anyone who witnesses or is involved or has knowledge of an occurrence, hazard or situation which he or she believes possess potential threat to flight safety is requested to report the same.	AIC03_2015 – Para 3  AIC 02 of 2015 – Para 3, 3.7
ASF8/3.1.1	Whereas anonymous reports will also be accepted but it is requested that reporter give his identity to enable later contact if any part of the report needs clarification.	AIC 03/2015 – Para 2
ASF8/3.1.3	Only De-identified reports are sent for analysis  Complete confidentiality of the system and strict anonymity of the reporter shall be ensured. Whereas anonymous reports will also be accepted but it is requested that reporter give his identity to enable later contact if any part of the report needs clarification	Air Safety Procedure Manual, Sep 2015, Para 1.18.2  AIC 03/2015 – Para 5
ASF 8/3.1.3	Voluntary Reporting System will function under direct supervision of the Coordinator (JDG) and alternate Coordinator (Director Air Safety)	AIC 03/2015 – Para 6
ASF 8/3.1.4	The coordinator/ alternate coordinator will endeavor to complete the processing within ten (10) working days if additional information is not needed. In cases where the coordinator/ alternate coordinator needs to discuss with the reporter or consult a third party, more time may be needed	Air Safety Procedure Manual, Sep 2015, Para 1.18.2
ASF 8/3.1.5	Refer to concerned Directorate or any third party external agency	Air Safety Procedure Manual, Sep 2015, Para 1.18.2
ASF8/3.1.7	All Voluntary reports have to be referred to the JDG	Air Safety Procedure Manual, Sep 2015, Para 1.18.2
ASF8/3.1.8	The voluntary reporting cell should have the facility to search the voluntary reporting database based on any parameter to enable studying the data and learning statistics, facts and trends.	AIC 03/2015 –Para 5

	<b>Business Rule</b>	<b>CAR Reference</b>
ASF8/3.1.1	Voluntary/Confidential Reporting Performa (captured in the data elements later in this document)	AIC03_2015 – ANNEXURE A
ASF8/3.1.9	It is assured that no punitive action will be taken on such voluntary reporting made unless infringement relates to unlawful/criminal/deliberate gross negligent unsafe action.	Air Safety Procedure Manual, Sep 2015 AIC 03/2015 - Para 6
ASF 8/3.1.11	Only de-identified report will form part of the Database	Air Safety Procedure Manual Sep - 2015

### ASF 8/3.5 Interdependencies on Internal /External Stakeholders

Service	Information Received From other Directorate(s) / External Stakeholder(s)		
	Information Received	External Stakeholder(s)	Internal Stakeholder
ASF 7- Voluntary Reporting System	Form for Voluntary Reporting  Inputs on report sent for analysis	Informant	Voluntary Reporting Cell  Concerned Directorates  Any concerned Stakeholder who may be affected or is mentioned in the report under the purview of the Directorate of Air Safety

### ASF 8/ 3.6 Output to Internal/External Stakeholders

Service	Information Sent To Directorate(s) / External Stakeholder(s)		
	Title / Nature of Output	Distribution 1	Distribution 2
ASF 7- Voluntary Reporting System	Reponses to Voluntary Report  Enforcement / Warning	Informant (If email is available)	Concerned person / organization against whom the order is generated  SED

## ASF 8/3.7 Data Elements

### 3.7.1 For Submitting Voluntary Reports

S. No.	Data Field	Type	Mandatory	Permissible Characters/Default Value and Business Rules
1.	Name	Text Box	No	Alphabets
2.	Address	Text Area	No	Any
3.	Email	Text box	No	Alphanumeric, special characters (., _ -, @)
4.	Landline Number	Text Box	No	Numeric-Landline Number format
5.	Mobile Number	Textbox	No	10 digit number
6.	Description of the occurrence/hazard/situation	Text Area	Yes	Any
7.	Date of occurrence	Text Box	No	Date picker
8.	Upload any relevant document/evidence	Upload	No	Any (should be able to upload as many docs as red) of any format
	Document Name	Upload	Yes if uploaded	Any
	Document description	Text area	Yes if uploaded	Any
9.	Date of submission of report	Textbox, read Only	Yes	Auto generate

### 3.7.2 For JDG after receiving report

S. No.	Data Field	Type	Mandatory	Permissible Characters/Default Value and Business Rules
1.	View Information Report		Yes	Should be able to view the submitted information by the informant in editable format
2.	Add Comments	Text area	Yes	Any

3.	Report under process	Checkbox	Yes, if report if being processed	Yes If this is not ticked within 3 days of receipt of report by the JDG, the D(AS) will receive notification to process the report and the date-time of receipt of report at D(AS) will be clocked in.
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### 3.7.3 For Concerned Directorates

S. No.	Data Field	Type	Mandatory	Permissible Characters/Default Value and Business Rules and Business Rules
1.	View Information Report			Should be able to view the submitted information by the informant in read-only format
2.	Add Comments	Text area	Yes	Any
3.	Add Reponse report, if any	Attachment	No	.Doc/.Docx
4.	Attach any other relevant document	Upload	No	Should be able to attach multiple docs if required
A	Document Name	Text Box	Yes if doc is uploaded	Any
B	Document Description	Text Area	Yes if doc is uploaded	Any

### 3.7.4 For PO/Voluntary Reporting Cell

S. No.	Data Field	Type	Mandatory	Permissible Characters/Default Value and Business Rules
1.	View Information Report			Should be able to view the submitted information by the informant and

				forwarded by the Director in read-only format
2.	View Reponse report			Read only
3.	Add Comments	Text area	Yes	Any
4.	Add assessment Report, if any	Attachment	No	Upload
5.	Attach any other relevant document	Upload	No	Attachment
6.	Document Name	Text Box	Yes if doc is uploaded	Any
7.	Document Description	Text Area	Yes if doc is uploaded	Any
8.	Document reference Number	Textbox	Yes, if doc is uploaded	Any
9.	Prepare response letter	Text Area	Yes	Any (as per format)


### 3.7.5 For D(AS)/ JDG

S. No.	Data Field	Type	Mandatory	Permissible Characters/Default Value
1.	View Information Report			Should be able to view the submitted information by the informant in read-only format
2.	View Reponse Report			Read only
3.	Add Comments	Text area	Yes	Any
4.	Generate reponse for informant	Text area	No	Any (Should be able to edit the reponse prepared by the Voluntary Reporting Cell)
5.	Approve Closure	Checkbox	Yes, if report is to be closed	Yes
6.	Digital Signature	Upload	Yes, if closure is approved	Upload

# ASF/4 Appendix

## ASF 8/4.1 Sample Output

Standard letter from the Directorate from the Director/JDG as per the nature of output to be sent to the informant

<b>GOVERNMENT OF INDIA CIVIL AVIATION DEPARTMENT</b>		भारत सरकार वायव्य विमानन विभाग महानिदेशक वायव्य विमानन का कार्यालय सकदरजंग एयरपोर्ट के सामने नई दिल्ली - ११० ००३
<b>OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION</b> OPP. SAFDARJUNG AIRPORT, NEW DELHI - 110 003 TELEPHONE: +91-011-24620272 +91-011-24620273 FAX:         +91-011-24633140		
		<input type="text" value="Reference Number"/>
		<input type="text" value="Date"/>
To,		
<input type="text" value="Name"/> <input type="text" value="Email address"/>		
Subject:	<input type="text" value="Auto populate ref no. and allow more text"/>	
Dear Sir,		
<input type="text" value="Text Area to add content for the letter"/>		
(Manoj Kumar) Director Air Safety For Director General of Civil Aviation		

## ASF 8/4.2 Reference Documents

S. No	Document Name
1.	RFP
2.	ANNEXURES TO THE RFP
3.	AIR SAFETY PROCEDURE MANUAL
4.	AIC 3of 2015
5.	AIC 2 Of 2015

## ASF 8/4.3 Abbreviations/Acronyms

Abbreviation / Acronym	Expanded Form
D(AS)	Director – Air Safety
PO	Processing Officer
VR	Voluntary Report (ing)

## ASF 8/4.4 Review History

Date	Reviewed by	Section Number	Review Feedback	Compliance Action taken