EGNOS PROJECT

ABBREVIATIONS AND ACRONYMS

A

A	Analysis
AAIM	Aircraft Autonomous Integrity Monitoring
ABS	Anti Blocking System
AC	Address Circular
AD	Applicable Document
ACI	Action Item Clarification
AD/R	Architectural Design Review
ADD	Architectural Design Document
ADP	Acceptance Data Package
AENA	Aeropuertos Espa oles y Navegación Aérea (Spain)
AES	Analysis & Evaluation Segment
AFCL	Air Force Cambridge research Laboratory
AHRS	Altitude Heading Reference System
AIR	Inspection Aircraft & Independent Positioning
AIV	Assembly, Integration and Verification
AIVP	Assembly, Integration and Verification Plan
AOC	Advance Operational Capability
AOR	Atlantic Ocean Region
AOR-E	AOR Est
AOR-W	Atlantic Ocean Region-West (INMARSAT III satellite)
AP	Auto Pilot
APV	Approach Operations with Vertical Guidance
ARINC	Aeronautical Radio, INC
ARTEMIS	Advanced Relay and Technology Mission Satellite
ARTES	Advanced Research in TElecommunication Systems
ASE	Agence Spatiale Europeenne
ASQF	Application Specific Qualification Facility
ASQFRD	ASQF Requirements Document
AT	Acceptance Testing
ATC	Air Traffic Control
ATM	Air Traffic Management or Asynchronous Transfer Mode
ATS	Air Traffic Services
ATSP	ATS Providers
AWOP	All Weather Operations Panel

B

Baro	Barometric altitude
BER	Bit Error Rate
BIH	Bureau International de l'Heure
BIPM	Bureau International des Poids et Mesures
BITE	Built In Test Equipment
BPF	Band Pass Filter
Bps	Bit per second
BPSK	Bipolar Phase Shift Key
BSDR	Baseline System Design Review
BSDR-C	Consolidated BSDR
BSSC	Board for Software Standardization & Control
BW	Band Width

C

C	Compliant
C&M	Control & Monitoring
C/A	Coarse Acquisition
C1	C-band uplink frequency (C1 = 6,4 GHz)
C2	C-band downlink frequency (C2 = 3,6 GHz)
CAA	Civil Aviation Authority
CAASD	Centre for Advanced Aviation System Development
CADM	Configuration And Data Management
CAT-1	Category 1 Precision Approach Phase of Flight
CAT-2	Category 2 Precision Approach Phase of Flight
CC	Configuration Control or
	Core Computer
CCB	Change Configuration Board or
	Configuration Control Board
CCF	Central Control Facility
CCI	Communications Control Interface
CCITT	Comite Consultatif International Telegraphique et
	Telephonique ou
	International Telephone and Telegraph Consultative
	Committee
CCN	Contract Change Notice
CDI	Course Deviation Indicator
CDMA	Code Division Multiple Access
CDR	Critical Design Review
CE	Communication Equipment
CEU	Commission of the European Union
CFI	Customer Furnished Item
CHA	Channel of High Accuracy
CI	Configuration Item
CIDL	Configuration Items Data List
CIL	Critical Items List or Configuration Items List

CIO	Conventional International Origin
CL	Client representative
CM	Compliant Multiple or
	Configuration Manager or
	Configuration Management
CMO	Configuration Management Office
CMP	Configuration Management Plan
CMT	Centre de Mission et Traitement (Euridis)
	or Commissioning and Maintenance Terminal
CN	Change Notice
CNES	Centre National d'Etudes Spatiales
CNMS	Communication Network Management System
CNS	Communications Navigation & Surveillance
CO	Change Order
COC	Certification Of Conformance
COQ	Certification of Qualification
COS	Continuity Of Service
COTS	Commercial Off The Shelf
CPF	Central Processing Facility
CPU	Central Processing Unit
CR	Change Request
CRB	Change Review Board
CRC	Cyclic Redundancy Check
CRD	Certification Requirements Document
CSA	Channel of Standard Accuracy
CSAR	Configuration Status Accounting Report
CSI	Containment Surface Incident
CSU	Channel Service Unit
CW	Continuous Wave

<u>D</u>

D	Demonstration
DAL	Development Assurance level
DAT	Digital Audio Tape
DB	Data Base
DCN	Document Change Notice
DCU	Display & Control Unit
DD	Detailed Design
DD/R	DD Review
DDD	DD Document
DDKP	DD Key Point
DFS	Deutsche Flugsicherung GmbH (D)
DGAC	Direction Generale Aviation Civile (F)
DGPS	Differential GPS
DH	Decision Height
DIL	Deliverable Items List
DJF	Design Justification File

DLL	Delay Lock Loop
DLR	Deutsche forschungsanstalt fur Luft – und Raumfahrt e.v.
DMA	Direct Memory Access
DME	Distance Measuring Equipment
DoC	Depth of Coverage
DOD	Department Of Defence (US)
DOP	Dilution Of Precision
DOT	Department Of Transport
DPU	Data Processing Unit
DR	Design Review
DRACAS	Data Recording Analysis and Corrective Action System
DRAIM	Differential RAIM
DRD	Document Requirements Description
DRL	Documentation Requirements List
DRMS	Distance Root Mean Square
DRU	Data Replaceable Unit
DSPU	Digital Signal Processing Unit
DSS	Design Simulation Segment
DSU	Data Service Unit
DVP	Development Verification Platform Platform
DVPRD	DVP Requirements Document

E

ECAC	European Civil Aviation Conference
ECDIS	Electronic Chart Display and Information System
ECEF	Earth Centered Earth Fixed
ECO	Engineering Change Order
ECP	Engineering Change Proposal
ECR	Engineering Change Request
ECRB	External Change Review Board
ECS	Electronic Chart System
ECSS	European Co-operation for Space Standardisation
EDP	EGNOS ILD Documentation Plan
EEE	Electrical Electronic Electromechanical
EETES	EGNOS End To End Simulation
EGN	EGNOS
EGNOS	European Geostationary Navigation Overlay Service
EIDP	End Item Data Package
EIRP	Equivalent Isotropic Radiated Power
EL	Elevation
EMC	Electromagnetic Compatibility
EMP	EGNOS Maintenance Plan
ENAV	Ente Nazionale di Assistenze al Volo (Italy)
ENMA	EGNOS Network Management Application
ENMC	EGNOS Network Monitoring & Control
ENT	EGNOS Network Time
EOIG	EGNOS Operators and Infrastructure Group

EPO	EGNOS Project Office
EPROM	Erasable and Programmable Read Memory Only
EPUE	EGNOS Prototype User Equipment
EPUERD	EPUE Requirements Document
ERAM	EGNOS Requirements Allocation Matrix
ERNP	European RadioNavigation Plan
ESA	European Space Agency
ESA-CST	ESA Centre Spatial de Toulouse
ESA HQ	ESA Headquarters Paris
ESDV	Early System Demonstration & Verification (activities)
ESM	Electronics Support Measures
ESNP	European Satellite Navigation Programme
ESRRD	EGNOS Standard Receiver Document
ESSF	EGNOS System Simulation Facility
ESTB	EGNOS System Test Bed
ESTEC	European Space Research and Technology Centre (Noordwijk)
ESVS	EGNOS Service Volume Simulator
ETFM	Early Trials Final Meeting
ETG	European Tripartite Group
ETMS	EGNOS Transport Management System
ETS	Early Test System
EVP	EGNOS Verification Plan
EUROCAE	European Organisation for Civil Aviation Equipment
EWAN	EGNOS Wide Area Network

F

FAA	Federal Aviation Administration
FAF	Final Approach Fix
FANS	Future Air Navigation Systems
FDDI	Fibber Distributed Data Interface
FDE	Failure Detection and Exclusion
FDI	Failure Detection and Isolation
FDIR	Failure Detection , Isolation and Recovery
FDMA	Frequency Division Multiple Access
FDS	Flight Director System
FEC	Forward Error Correction
FECP	Front End Communication Processor
FEE	(EWAN) Front End Equipment
FFT	Fast Fourier Transform
FIR	Flight Information Region
FIVP	Factory Integration Validation Plan
FL	Flight Level
FMAP	Failure during Miss Approach Procedure
FMECA	Failure Mode Effects & Criticality Analysis
FMS	Flight Management System
FOC	Full Operational Capability
FOCTF	FOC Transition File

FQP	Factory Qualification Plan
FQR	Factory Qualification Review
FR	Frame Relay
FTA	Fault Tree Analysis
FTE	Flight Technical Error
FTRR	Factory Test Readiness Review

G

G/S	Ground Segment
GBA	Geostationary Broadcast Area
GEO	Geostationary Earth Orbit or
	INMARSAT Geostationary satellite
GIC	Ground Integrity Channel
GIVD	Grid Ionospheric Vertical Delay
GIVE	Grid Ionospheric Vertical Error
GLONASS	GLObal Navigation Satellite System
GMDSS	Global Maritime Distress and Safety System
GNOS	Geostationary Navigation Overlay Service
GNSS	Global Navigation Satellite System
GNSS-1	GNSS First Generation
GNSS-P	GNNS Panel
GPRS	General Packet Radio Services
GPS	Global Positioning System
GRAIM	Ground RAIM
GRS	Geostationary Ranging Stations or
	Geostationary Ranging System
GRS-H	GRS – Hartebeeshoek, South Africa
GRS-K	GRS – Kourou, Guyana
GRS-S	GRS – Singapore
GRS-T	GRS – Toulouse, France
GS	Ground Speed or
	Ground Segment
GSBAS	Geostationary Satellite Based Augmentation System
G-SBAS	Geostationary-Satellite Based Augmentation Systems
GSCN	Ground Segment Communication Network
GSM	Global System for Mobile communications
GSRD	Ground Segment Requirements Document
GSVP	Ground Segment Verification Plan
GUI	Graphical User Interface
GW	GateWay
Gyro	Gyroscope

H

H/W	Hardware
HAL	Horizontal Alarm Limit
HDI	HeaDIng

HDLC	High Level Data Link Control
HDOP	Horizontal Dilution Of Precision
HDU	Hard Disk Unit
HE	Hosting Entity
HID	Hazardous Invalid Data
HMI	Hazardous Misleading Information
HOW	Hand Over Word
HPA	High Power Amplifier
HPL	High Precision Landing or
	Horizontal Protection Level
HUNE	Horizontal User Navigation Error
HW	HardWare
HWE	Hardware Engineer

I

I	Inspection
I/F	InterFace
I/S	Interference / Signal
IALA	International Association of Lighthouse Authorities
IAP	Interoperability Action Plan
ICAO	International Civil Aviation Organisation
ICB	Interface Control Board
ICD	Interface Control Document
ICO	Intermediate Circular Orbit
ICRB	Interna Change Review Board
IDEF0	Integrated Design Functional model
IERS	International Earth Rotation Service
IF	Intermediate Frequency
IFF	Identifier Friend (or Foe)
IGP	Ionospheric Grid Points
IGS	International GPS Service for Geodynalics
IKD	In Kind Delivery
ILS	Instrument Landing System or
	Integrated Logistics Support
IMO	International Maritime Organisation
INC	Inmarsat Navigation Center
INMARSAT	International MARitime SATellite
INS	Inertial Navigation System
IOC	Initial Operational Capability
IOD	Issue Of Data or Issuance Of Data
IODC	Issuance Of Data Clock
IODE	Issuance Of Data Ephemeris
IODI	Issuance Of Data Ionosphere
IODP	Issuance Of Data PRN
IOP	Initial Operations Phase
IOR	INMARSAT III – Indian Ocean Region
IP	Internet Protocol
IPP	Ionospheric Pierce Point

IRD	Interface Requirements Document
IRS	Inertial Reference System
ISDN	Integrated Services Digital Network
ISNS	International Satellite Navigation System
ISO	International Organisation for Standard
ISOP	In Service Operations Phase
ISVV	Independent Software Verification and Validation
IT	Integration Testing
ITRF	International Terrestrial Reference Frame
ITT	Invitation To Tender
ITU	International Time Unit

J

JAA	Joint Aviation Authorities
JAR	Joint Airworthiness Requirement
JCB	Joint Communications Board (ESA)
JTC	Joint Tripartite Committee
JTSO	Joint Technical Standing Orders

K

Kbps	Kilobits per second
KO	Kick-Off
KOM	KO Meeting

L

L1	L1-GPS frequency (L1 = 1575,42 MHz)
L2	L2-GPS frequency (L1 = 1227,2 MHz)
LAAS	Local Area Augmentation System
LAD	Local Area Differential
LADGPS	Local Area Differential GPS
LAN	Local Area Network
LAPB	Link Access Procedure for Balanced circuits
LHC	Left Hand Circular
LHCP	Left Hand Circular Position
LMP	Logistic Management Plan
LNA	Low Noise Amplifier
LO	Local Oscillator
LOC	Line Of Code
LRU	Line Replaceable Unit
LSA	Logistic Support Analysis
LSB	Least Significant Bit

M

M&C	Monitoring and Control
MASPS	Minimum Aviation System Performance Standard
MCC	Master Control Centre
M-CCB	Mission Configuration Control Board
MCC1	Principal Master Control Centre
MCC2	Backup Master Control Centre
MCC-P	Master Control Centre (Primary)
MCCRD	MCC Requirements Document
MCC-S	Master Control Centre (Secondary)
MCU	Management & Control Unit
MD	Miss Detection
ME	Multipath Error
MEDLL	Multipath Estimating Delay Lock Loop
MEL	Minimum Equipment List
MLS	Microwave Landing System
MMEL	Master MEL
MMI	Man Machine Interface
MOPS	Minimum Operational Performance Standard
MPR	Mission Performance Requirements
MRB	Material Review Board
MRD	Mission Requirements Document
MRR	Mission Requirements Review
MSAS	Multi-transport Satellite-based Augmentation System
MSB	Most Significant Bit
MSER	Manager for in-SERvice phase
MSG3	Maintenance Steering Group 3
MTB	Mediterranean Test Bed
MTBF	Mean Time Between Failures
MTBO	Mean Time Between Outages
MTSAT	Multi Transport SATellite
MTTR	Mean Time To Restore an outage

N

NA or N/A	Note Applicable
NAS	National Airspace System or National Air Space
NATS	National Air Traffic Services (UK)
NAV	NAVigation sub-system
NC	Non Compliant
NCC	Network Control Centre
NCM	Network Control Management
NCR	Non-Conformance Report
NCRB	Non-conformance Review Board
NI	Non Integrity
NIHID	Non-Integrity Hazardous Invalid Data
NLES	Navigation Land Earth Station
NLES-1B	Backup to NLES-R

NLES-2B	Backup to NLES-A
NLES-A	NLES – Aussagel France
NLES-R	NLES – Riesting Germany
NLESRD	NLES Requirements Document
NM	Nautical Mile
NMC	Network Management Center
NMF	Network Management Facility
NOC	Network Operations Centre
NOCC	Network Operation Control Centre
NOTAM	Notice To Airmen
NPA	Non Precision Approach
NPL	National Physical Laboratory
NSA	Navigation Service Availability
NSE	Navigation System Error
NTW	Network
NTWRD	Network Requirements Document

O

O&M	Operation & Maintenance
OCD	Operation Concept Document
OCR	Operational & Certification Requirement
OD	Orbit Designation
OHA	Operating Hazard Analysis
ORD	Operations Requirements Document
ORR	Operational Readiness Review
O/S	Operating System
OSI	Open Systems Interconnection

P

P&C	Processing and Control
PA	Product Assurance
PACF	Performance Assessment and Check-out Platform
PACFRD	PACF Requirements Document
PAD	Packet Assembler-Disassembler
PAE	PA Engineer
PAM	PA Manager
PAP	Product Assurance Plan
PB-NAV	Programme Board-Navigation (ESA)
PBMF	Performance Budget Management File
PC	Personal Computer
P-CCB	Programme Configuration Control Board
PDOP	Position Dilution Of Precision
PDP	Project Development Plan
PDR	Preliminary Design Review
PFA	Probability of False Alarm
PFD	Power Flux Density
PHD	Project History Document

PHST	Packing, Handling, Storage & Transport Plan
PIDS	Prime Item Development Specification
PM	Progress Meeting or Preventive Maintenance or Project Management
PMD	Probability of Missed Detection
PMP	Project Management Plan
PN	Pseudo Noise
POP	Points Of Presence or Preliminary Operations Phase
POR	Pacific Ocean Region
PP	Present Position
PPS	Precise Positioning Service or Pulse Per Second
PRE	Pseudo-Range Error
PRN	Pseudo Random Noise
PS	Power Supply
PS-CCB	Project/System Configuration Control Board
PSC	Project Safety Concern
PSPDN	Packet-Switched Public Data Network
PSS	Procedures, Standards and Specifications
PSTN	Public Switched Telephone Network
PT	Product Tree
PTT	Public Telephone and Telegraph authority (National organisation)
PTT	Project Tracking Team
PU	Portable Unit
PVC	Permanent Virtual Circuit
PVM	Procedure Verification Matrix
PVT	Position, Velocity, Time

Q

QA	Quality Assurance
QFE	barometric pressure at runway threshold
QMS	Quality Management System
QoS	Quality of Service
QR	Qualification Review

R

RAAS	Regional Area Augmentation System
RAIM	Receiver Autonomous Integrity Monitoring
RAM	Reliability Availability and Maintainability or Random Access Memory
RAMS	Reliability Availability, Maintainability and Safety
RB	Review Board
RCF	Ranging Control Facility
RCS	Revision Control System

RCVR	Receiver
RD	Requirements Document or Reference Document
REC	Range Error Correction
RF	Radio Frequency
RFC	RF Conversion or Request For Change
RFD	Request For Deviation
RFDC	RF Down Converter
RFE	RF front End
RFI	Radio Frequency Interference
RFLAB	RF measurement LABoratory
RFQ	Request For Quotation
RFW	Request For Waiver
R-GEO	Ranging via GEO satellites
RGIC	Ranging and Ground Integrity Channel
RGS	Ranging Ground Segment
RHC	Right Hand Circularly polarised
RHCP	Right Hand Circular Polarisation
RID	Review Item Discrepancy
RIMS	Ranging and Integrity Monitoring Station or Remote Integrity Monitoring Station
RIMSRD	RIMS Requirements Document
RMS	Root Mean Square
RNAV	Radio NAVigation
RNP	Required Navigation Performance or Required Navigation Parameters
ROD	Review Of Design
ROR	Range Only Radar
RPU	Receiver Processing Unit
RRC	Range-Rate Corrections
RS	Remote Station or Reference Station
RST	Reference System Time
RTCA	Radio Technical Commission for Aeronautics or Radio Technical Committee of America
RTK	Real Time Kinematics
RTOS	Real Time Operating System
RTSS	Real-Time Simulation Segment
RX	Receiver

S

S/C	SpaceCraft
S/W	SoftWare
SA	Selective Availability
SADT	Structure Analysis and Design Technical
SAN	Satellite Access Node
SARP(s)	Standards And Recommended Practices
SAW	Surface Acoustic Wave
SBAS	Satellite Based Augmentation System

SC	Software Component
SCAR	Software Component Acceptance Review
SCAT-I	Special CATegory I
SCC	Satellite Control Centre
SCL	Station de Connexion et Localisation
SCM	Software Configuration Management
SCMP	Software Configuration Management Plan
SCO	Software Change Order
SCQR/R	Software Component Qualification Readiness Review
SCR	Software Change Request
SCSI	Small Computer System Interface
SDM	System Definition Manual
SE	EGNOS Subsystem Element
SECT	System Engineering Core Team
SeKO	Set Kick Off
SEP	Support Equipment Plan
SFVP	Support Facility Verification Plan
SGS	Soviet Geocentric System
SGS-90	Soviet Geodetic System
SIS	Signal In Space
SIVP	Site Integration Validation Plan
SL	Service Level or Station de Localisation
SLA	Service Level Agreement (with network service provider)
SLRD	System Level Requirements Document or SL Requirements Document
SMR	Software Modification Report
SNA	Satellite Navigation Application
SNAPAS	Satellite Navigation Performance Analysis Software
SNMP	Simple Network Management Protocol
SNR	Signal to Noise Ratio
SNT	Satellite Navigation Transponder
SOC	Spacecraft Operation Centre
SOLAS	Safety of Life At Sea
SOP	System Operation Plan
SOW	Statement Of Work
SPACS	Simplified Position Accuracy Calculation Software
SPM	System Project Management
SPMP	System Project Management Plan or Software Project Management Plan
SPR	Software Problem Report
SPS	Standard Positioning Service
SQAP	Software Quality Assurance Plan
SQL	Software Query Language
SQP	System Qualification Plan
SQR	System Qualification Review
SR	Standard Receiver or Software Requirements
SR/R	Software Requirements Review
SRAM	Static Random Access Memory
SRB	Software Review Board
SRD	System Requirements Document or Software Requirement

	Document
SRN	Software Release Note
SSAR	Sub System Acceptance Review
SSATR	Sub System Acceptance Test Review
SSCDR	Sub System CDR
SSDD	System Segment Design Document
SSFQR	Sub System Factory Qualification Review
SSKO	Sub System Kick Off
SSN	Sun Spot Number
SSPA	Solid State Power Amplifier
SSPDR	Sub System PDR
SSR	Site Selection Review
SSRD	Sub-System Requirements Document
SSTRR	Sub System Test Readiness Review
ST	System Testing
STD	Software Transfer Document
STEP1	R-GEO augmentation
STEP2	GIC augmentation
STEP3	WAD augmentation
STNA	Service Technique Navigation Aerienne (F)
STR	System Test Readiness
STRR	System Test Readiness Review
SU	SUpplier
SUM	Software User Manual
SV	Space Vehicle
SVC	Switch Virtual Circuit
SVP	System Verification Plan or Software Verification Plan or Subsystem Verification Plan
SVVP	Software Verification and Validation Plan
SW	SoftWare
SWPM	SoftWare Project Manager
SWRU	Software Replaceable Units

T

T	Test or Time
T4S	Thomson-CSF / Services et Systemes Sol Spatiaux
TA	Terminal Adapter (ISDN modem)
TAS	True Air Speed
TBC	To Be Clarified or To Be Confirmed
TBD	To Be Defined or To Be Determined
TBO	Time Between Outages
TBS	To Be Studied To Be Specified by the contractor
TCP	Transmission Control Protocol
TCP/IP	Transmission Control Protocol/Internet Protocol
TE	Test Engineer

TEB	Tender Evaluation Board
TEC	Total Electron Content
TF	Task Force
TGNSS	NLES reference Time
TH	True Heading
TL	Team Leader
TLM	TeLeMetry
TLS	Target Level of Safety
TM	TeleMetry
TMA	Technique Management Area
TN	Technical Note
TN-033	Technical Note on EGNOS overlay services
TN-069	Operation Concept Document
TOW	Time Of Week
TPG	Time of Propagation
TRAC	Traceability Report
TRB	Test Review Board
TRO	Time to Restore an Outage
TRR	Test Readiness Review
TRSF	Transfer
TS	Training Segment
TSE	Total System Error $= (NSE^2 + FTE^2)^{1/2}$
TSF	Test and Simulation Facilities
TSO	Technical Standard Order
TTC	Telemetry, Tracking and Command
TUE	Test User Equipment
TWAN	Transport Wide Area Network
Tx	Transmitter

U

UDP	User Datagram Protocol
UDRE	User Differential Range Error
UEE	User Equipment Error
UERE	User Equivalent Range Error
UHF	Ultra High Frequency
UIVD	User Ionospheric Vertical Delay
UIVE	User Ionospheric Vertical Error
UNE	User Navigation Error
UPS	Uninterruptible Power Supply
UR	User Requirements
UR/R	User Requirements Review
URA	User Range Accuracy
URD	User Requirements Document
URE	User Range Error
US	United States or
	User Segment
USAT	Ultra-Small Aperture Terminal (satellites terminal)
USRD	User Segment Requirements Document

UTC	Universal Co-ordinated Time

V

VAL	Vertical Alarm Limit
VCB	Verification Control Board
VDOP	Vertical Dilution Of Precision
VHF	Very High Frequency
VNSE	Vertical Navigation System Error
VOR	VHF Omnidirectional Ranging
VPL	Vertical Protection Level
VRD	Verification Requirements Document
VSAT	Very Small Aperture Terminal
VTE	Vertical Tropospheric compensation Error
VTS	Vessel Traffic Surveillance
VUNE	Vertical User Navigation Error

W

WAAS	Wide Area Augmentation System
WAC	Wide Area Correction
WAD	Wide Area Differential
WADC	Wide Area Differential Correction
WADGPS	Wide Area Differential GPS
WBS	Work Breakdown Structure
WD	Wind Direction
WGS	World Geodesic System
WGS-84	World Geodetic System
WIMP	Windows Icons Mouse Pointer
WN	Week Number
WP	WorkPackage
WPD	WorkPackage Description
WS	Wind Speed