DIRECCION GENERAL DE
AVIACION CIVIL
COSTA RICA

National ASBU Plan

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ICAO Workshop on ASBU Methodology

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Step 1 – Analysis Phase

DIRECCION GENERAL DE
AVIACION CIVIL
COSTA RICA

Organization

DGAC is the CAA

Air Navigation Department belongs to DGAC

Provides:

ATM	CNS
AIM	AGA
SAR	MET

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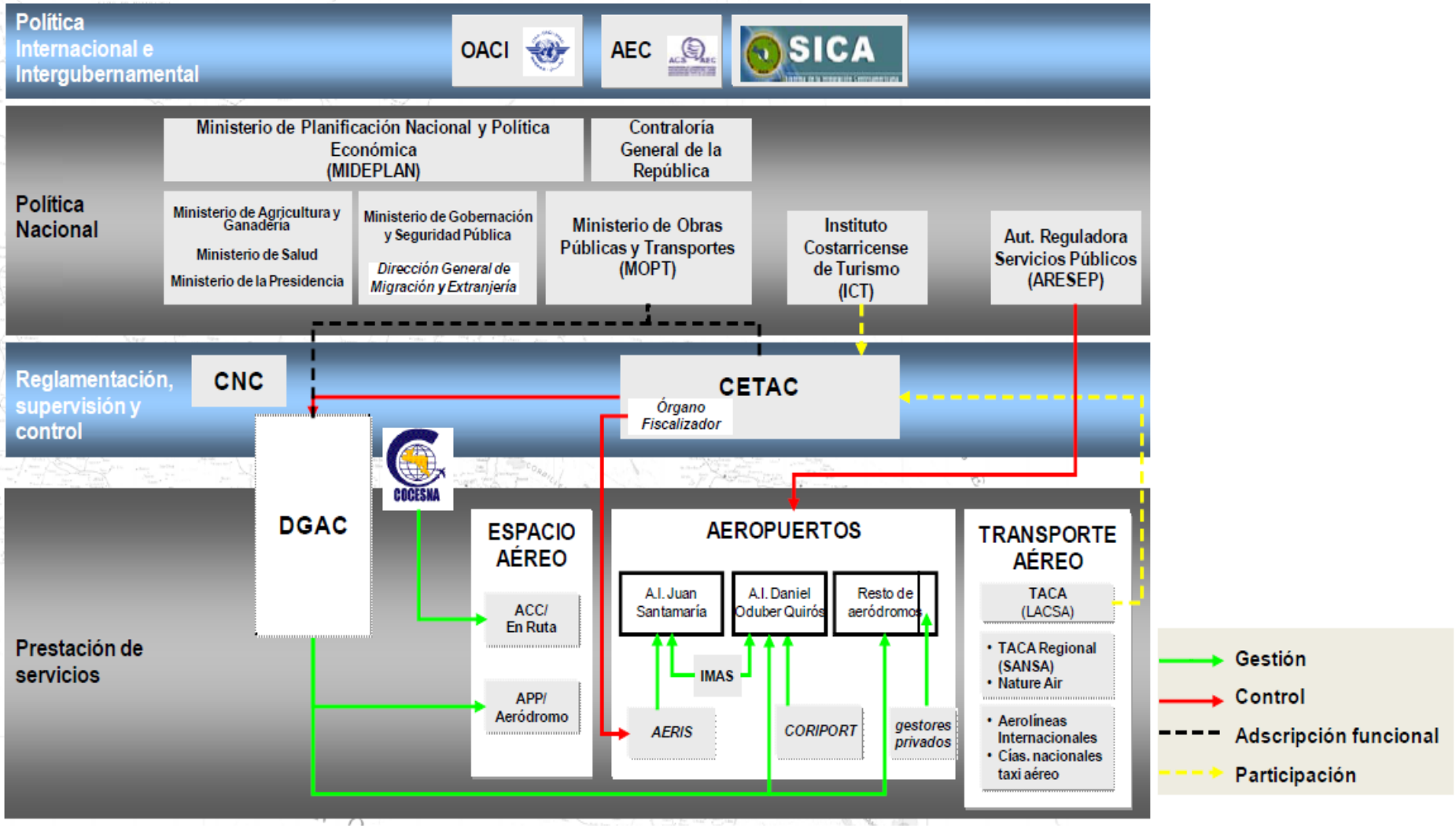
DIRECCION GENERAL DE AVIACION CIVIL COSTA RICA

Figura 9. Cuadro Institucional del subsector aéreo de Costa Rica (2010)



Step 1 – Analysis Phase

DIRECCION GENERAL DE AVIACION CIVIL COSTA RICA

Traffic Operations

Tabla 23: Previsión de Tráfico total (internacional+nacional) para los principales aeropuertos de Costa Rica. Período 2009-2030

AÑO	JUAN SANTAMARÍA		TOBÍAS BOLAÑOS		DANIEL ODUBER		RESTO AERÓDROMOS		TOTAL COSTA RICA	
	Pax	Ops	Pax	Ops	Pax	Ops	Pax	Ops	Pax	Ops
2008	4,154,247	79,634	129,865	77,661	442,902	16,615	242,999	121,066	**4,970,013**	**294,976**
2009	3,948,659	79,304	128,706	55,216	423,500	15,665	244,064	103,472	**4,744,929**	**253,657**
2010	4,268,740	81,540	139,948	56,221	458,631	16,193	257,526	104,951	**5,124,845**	**258,905**
2011	4,771,731	86,909	153,297	58,951	512,260	17,039	277,546	107,739	**5,714,834**	**270,638**
2012	5,291,376	92,241	167,720	62,630	568,356	17,913	298,783	110,741	**6,326,235**	**283,525**
2013	5,818,129	98,206	182,506	63,600	625,255	18,772	322,400	116,413	**6,948,290**	**296,991**
2014	6,302,872	102,938	196,943	66,087	677,597	19,603	345,456	120,357	**7,522,868**	**308,985**
2015	6,794,719	107,381	210,199	68,241	730,710	20,308	367,309	123,526	**8,102,937**	**319,456**
2020	9,186,551	131,801	286,115	79,417	991,685	24,358	500,684	143,862	**10,965,035**	**379,438**
2030	12,475,941	170,404	451,067	100,351	1,366,857	30,944	822,352	182,814	**15,116,217**	**484,513**

Fuente: Elaboración propia sobre datos Plan de Aeródromos Locales. DGAC

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AVIACION CIVIL
COSTA RICA

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Fuente: COCESNA

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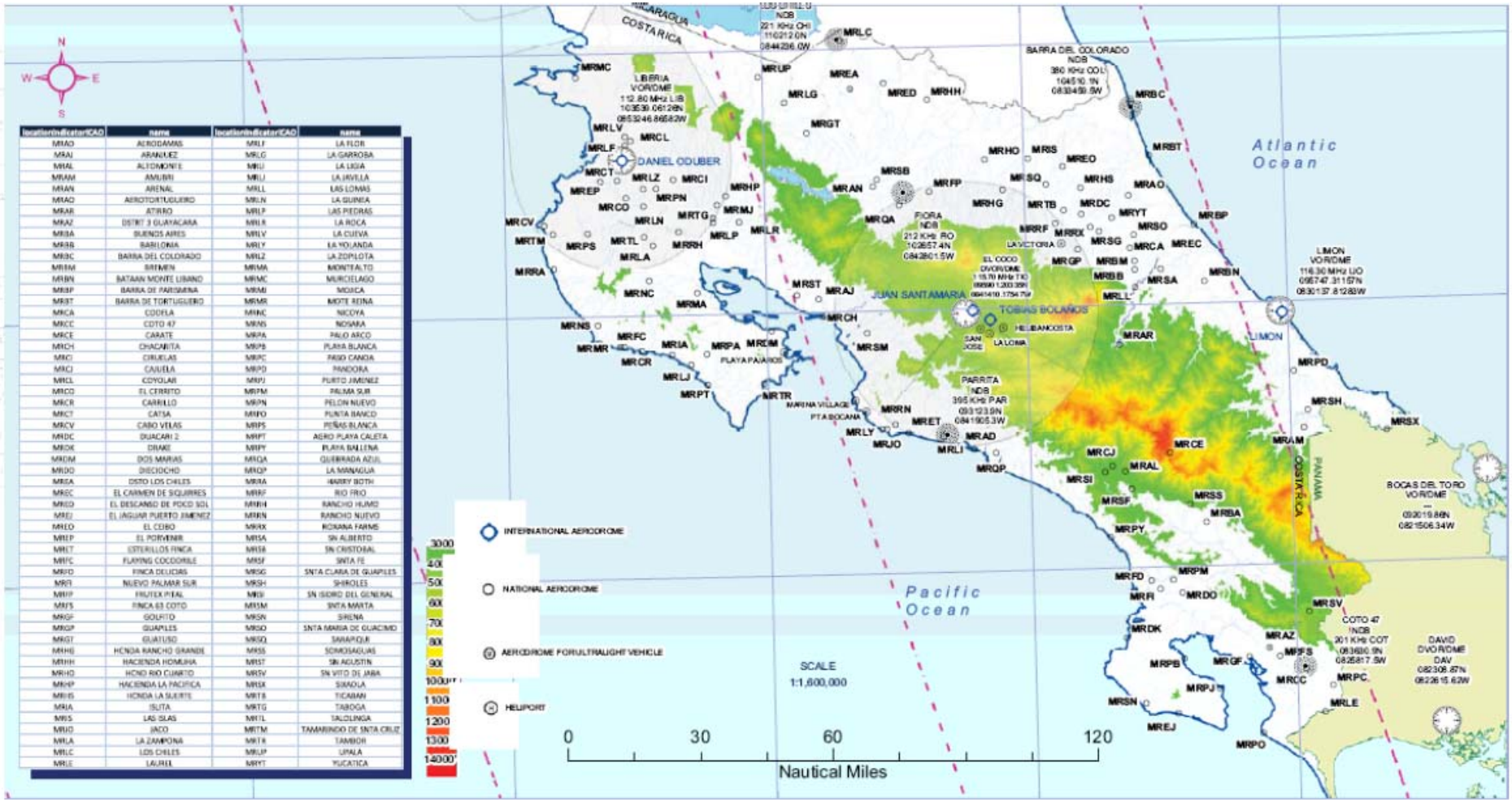

locationIndicatorICAO	name	locationIndicatorICAO	name
MRAO	AERODAMAS	MRLF	LA FLOR
MRAL	ARANUEZ	MRLG	LA GARROBA
MRAL	ALTOMONTE	MRLI	LA LIGIA
MRAM	AMUBRI	MRLJ	LA JAVILLA
MRAN	ARENAL	MRLL	LAS LOMAS
MRAO	AEROTORTUGUERO	MRLN	LA GUINEA
MRAR	ATIRRO	MRLP	LAS PIEDRAS
MRAZ	DISTRT 3 GUAYACANA	MRLR	LA ROCA
MRBA	BUENOS AIRES	MRLV	LA CUEVA
MRBB	BABILONIA	MRLY	LA YOLANDA
MRBC	BARRA DEL COLORADO	MRLZ	LA ZOPILOTA
MRBM	BREMEN	MRMA	MONTEALTO
MRBN	BATAAN MONTE LIBANO	MRMC	MURCIELAGO
MRBP	BARRA DE PARISMINA	MRMI	MOSICA
MRBT	BARRA DE TORTUGUERO	MRMR	MOTE REINA
MRCA	CODELA	MRNC	NICOYA
MRCC	COTO 47	MRNS	NOSARA
MRCE	CARATE	MRPA	PALO ARCO
MRCH	CHACARITA	MRPB	PLAYA BLANCA
MRCI	CIRUELAS	MRPC	PASO CANOA
MRCJ	CAJUELA	MRPD	PANDORA
MRCL	COYOLAR	MRPJ	PUERTO JIMENEZ
MRCO	EL CERRITO	MRPM	PALMA SUR
MRCR	CARRILLO	MRPN	PELON NUEVO
MRCT	CATSA	MRPO	PUNTA BANCO
MRCV	CABO VELAS	MRPS	PEÑAS BLANCA
MRDC	DUACARI 2	MRPT	AGRO PLAYA CALETA
MRDK	DRAKE	MRPY	PLAYA BALLENA
MRDM	DOS MARIAS	MRQA	QUEBRADA AZUL
MRDO	DIECIOCHO	MRQP	LA MANAGUA
MREA	DISTO LOS CHILES	MRRA	HARRY BOTH
MREC	EL CARMEN DE SQUIRRES	MRRF	RIO FRIO
MREO	EL DESCANSO DE POCO SOL	MRRH	RANCHO HUMO
MREJ	EL JAGUAR PUERTO JIMENEZ	MRRN	RANCHO NUEVO
MREO	EL COBO	MRRX	ROXANA FARMS
MREP	EL PORVENIR	MRSA	SN ALBERTO
MRET	ESTERILLOS FINCA	MRSB	SN CRISTOBAL
MRFC	FLAYING COCODRILE	MRSF	SNTA FE
MRFD	FINCA DELICIAS	MRSG	SNTA CLARA DE GUAPILES
MRFI	NUEVO PALMAR SUR	MRSH	SHIROLES
MRFP	FRUTEX PEAL	MRSI	SN ISIDRO DEL GENERAL
MRFS	FINCA 63 COTO	MRSM	SNTA MARTA
MRGF	GOLFITO	MRSN	SIRENA
MRGP	GUAPILES	MRSO	SNTA MARIA DE GUACIMO
MRGT	GUATUSO	MRSQ	SAMAPIQUE
MRHG	HCNDA RANCHO GRANDE	MRSS	SOMOSAGUAS
MRHH	HACIENDA HOMUHA	MRST	SN AGUSTIN
MRHO	HCND RIO CUARTO	MRSV	SN VITO DE JABA
MRHP	HACIENDA LA PACIFICA	MRSX	SIAOLA
MRHS	HCNDA LA SUERTE	MRTB	TICABAN
MRIA	ISLITA	MRTG	TABOGA
MRIS	LAS ISLAS	MRTL	TALOLINGA
MRJO	JACO	MRTM	TAMARINDO DE SNTA CRUZ
MRLA	LA ZAMPONA	MRTR	TAMBOR
MRLC	LOS CHILES	MRUP	UPALA
MRLE	LAUREL	MRYT	YUCATICA

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Main Aerodromes

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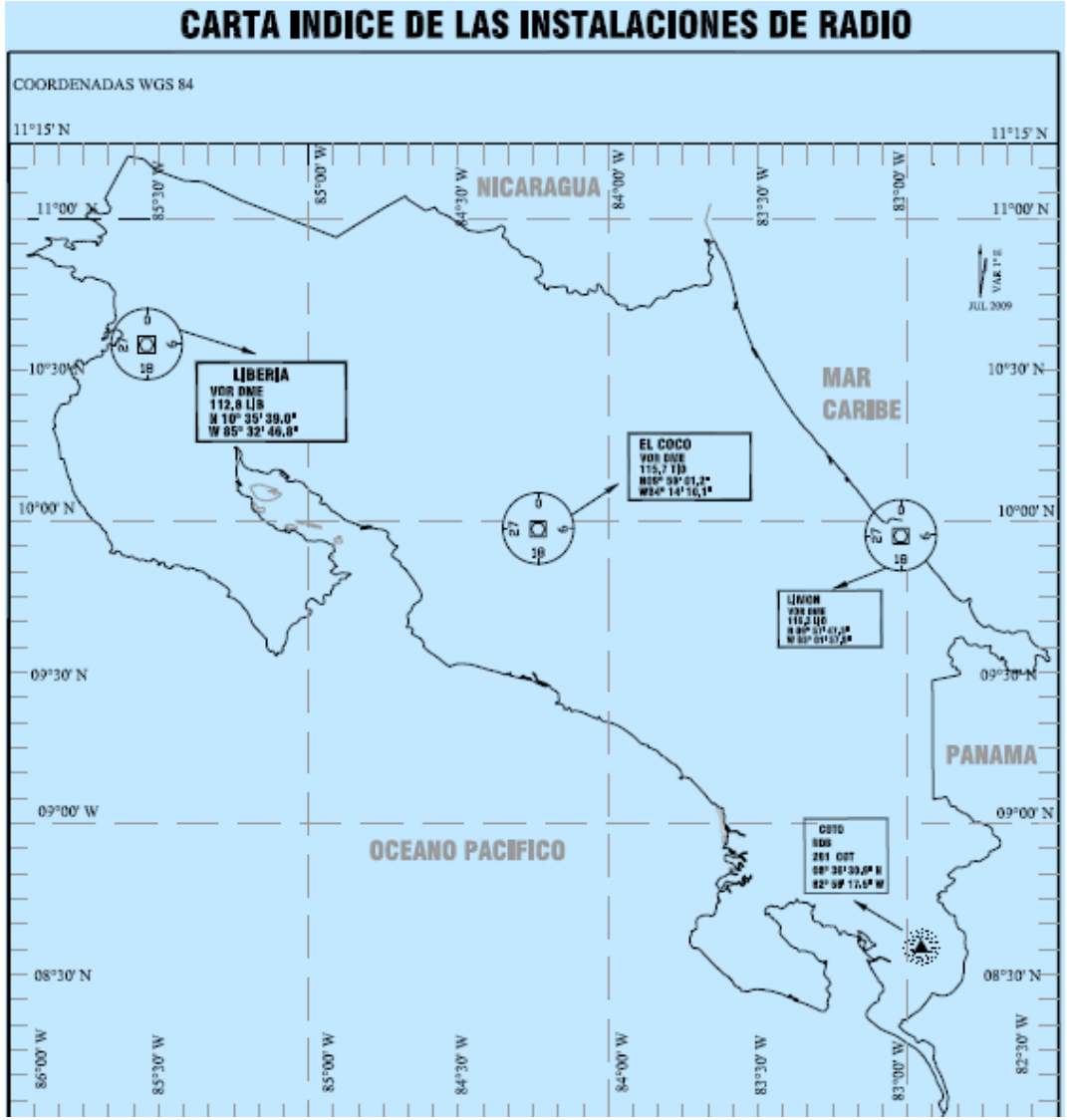
CNS



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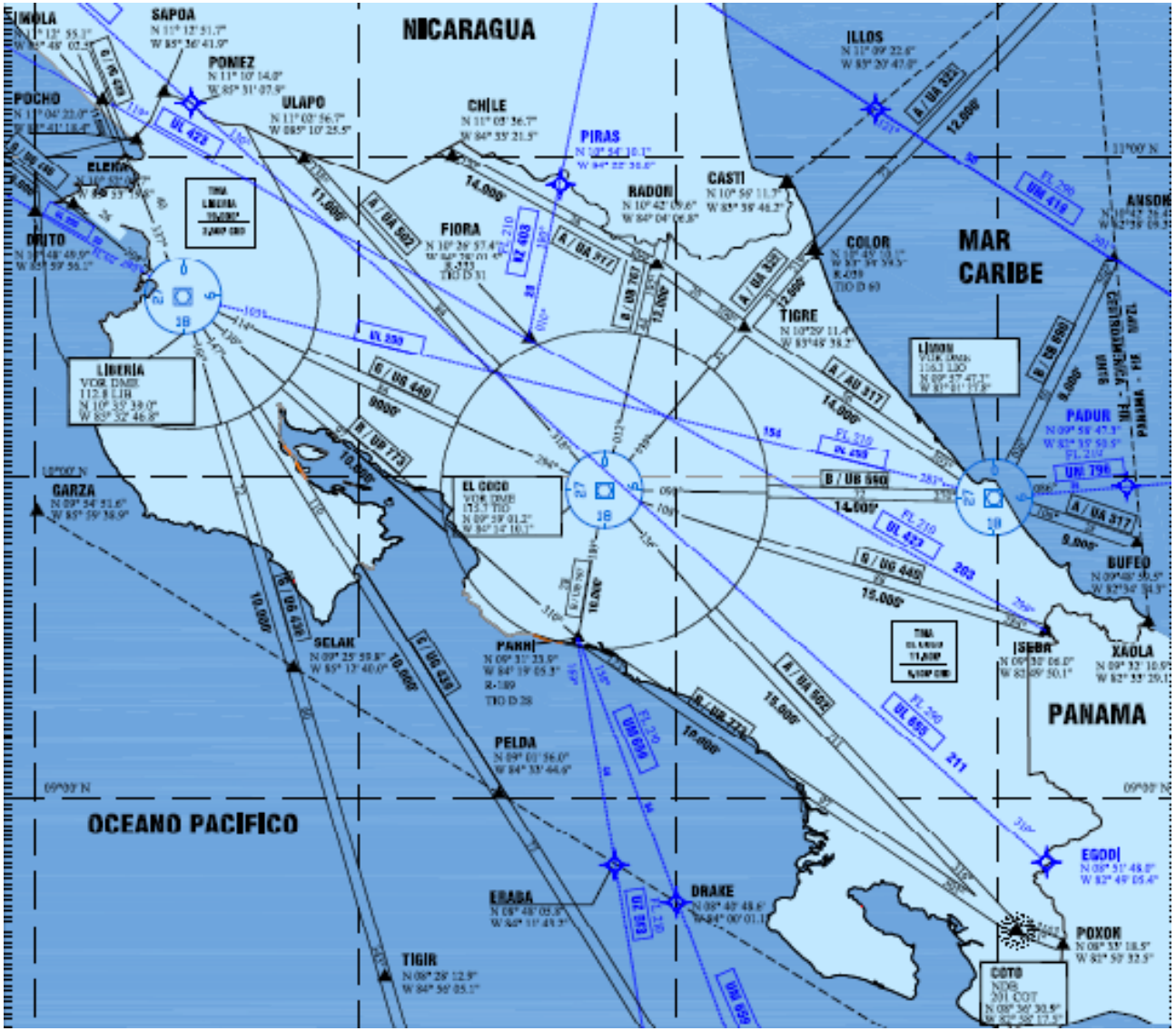
Air Space Structure



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Challenges

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Challenges

Operational

1. Taxiway for Rwy 25
2. Runway separation with taxiway

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Challenges

Technical

1. Different institutions for regulatory and supervision

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Challenges

Economical

1. Cancelation of flights

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Needs of Stakeholders

1. Airport Infrastructure
2. New Technology for CNS
3. Needs of Funding

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Performance Gaps

1. Better ground equipment for LVP
2. Use of PBN procedures
3. Improve airport capacity

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Airport Capacity

1. With the current airfield,

the airport has the capacity to **2015 environment**

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Airport Capacity

2. A major performance in terms of capacity,

as is the **transfer of the runway 182.5 m** from the current position, would increase by about 10 years the airport limit

Airport Capacity

3. The **construction of a new airport** would take 10-15 years, from the previous studies to commissioning exploitation.

That is, by **around 2025**

Step 2 – Assessment phase

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PIA 1 Airport Operations

B0-015 RSEQ

Improved Runway Traffic Flow Through Sequencing (AMAN/DMAN)

AMAN and time based metering 2016

Departure Management 2016

Movement Area Capacity Optimization 2016

Step 2 – Assessment phase

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PIA 1 Airport Operations

B0-65 APTA

Optimization of Approach Procedures including Vertical Guidance

VNAV 15 Nov 2012 for approaches Rwy 07/25

SBAS / GBAS Not applicable

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PIA 1 Airport Operations

B0-80 ACDM

Improve Airport Operations through ACDM

Airport CDM 2016

Aerodrome Certification 2018

Heliport Operations 2018

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PIA 2 Interoperable Systems and Data

B0-25 FICE

Increase interoperability, efficiency and capacity through ground-ground integration

MEVA III IP Network Implementation 2016

AMHS Implementation 2014

AIDC Implementation 2016

ATN Router Structure Implementation 2016

Step 2 – Assessment phase

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PIA 2 Interoperable Systems and Data

B0-105 AMET

Meteorological Information Supporting enhanced operational efficiency and safety

Aerodrome Warnings 2014

Wind Shear Warnings and Alerts 2016

SIGMET 2014

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PIA 2 Interoperable Systems and Data

B0-30 DATM

Service Improvement through

Digital Aeronautical Information Management

QMS for AIM 100% Implemented but not Certified

e.TOD Implementation 2018

AIXM Implementation 2018

e-AIP Implementation 2018

Digital NOTAM 2018

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PIA 3 Optimum Capacity and Flexible Flights

B0-35 NOPS

Improved Flow Performance through Planning based on a Network Wide view

ATFM 2016

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PIA 3 Optimum Capacity and Flexible Flights

B0-101 ACAS

ACAS Improvements

TCAS Version 7.1 2018

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PIA 3 Optimum Capacity and Flexible Flights

B0-102 SNET

Baseline Ground-Based Safety Nets

STCA Implemented

APW Implemented

MSAW Implemented

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PIA 4 Efficient Flight Path

B0-05 CDO

Improved Flexibility and Efficiency in Descent Profiles CDO's

CDO Implementation 2017

PBN SID's Implemented

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PIA 4 Efficient Flight Path

B0-20 CCO

Improved Flexibility and Efficiency in Departure Profiles CCO's

CCO Implementation 2017

PBN STARS Implemented

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Categorization

PIA 1>	B0-15	**Essential**
	B0-65	**Desirable**
	B0-80	**Desirable**

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Categorization

PIA 2>	B0-25	**Essential**
	B0-105	**Desirable**
	B0-30	**Essential**

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Categorization

PIA 3>	B0-35	**Essential**
	B0-101	**Desirable**
	B0-102	**Essential**

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Categorization

PIA 4>	B0-05	**Desirable**
	B0-20	**Desirable**

Step 3 – Implementation phase

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Selected

B0-80 ACDM

B0-35 NOPS

View Documents

Step 4 – Monitoring Phase

DIRECCION GENERAL DE
AVIACION CIVIL
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Selected

B0-80 ACDM

B0-35 NOPS

View Documents