ATFM from ATM perspective in Dominican Republic

- **Air Traffic Management Department (ATM):** it is one of the four Departments that make up the Air Navigation Directorate of the Dominican Institute of Civil Aviation IDAC.
- **ATM**
- CNS
- AIM
- SMS

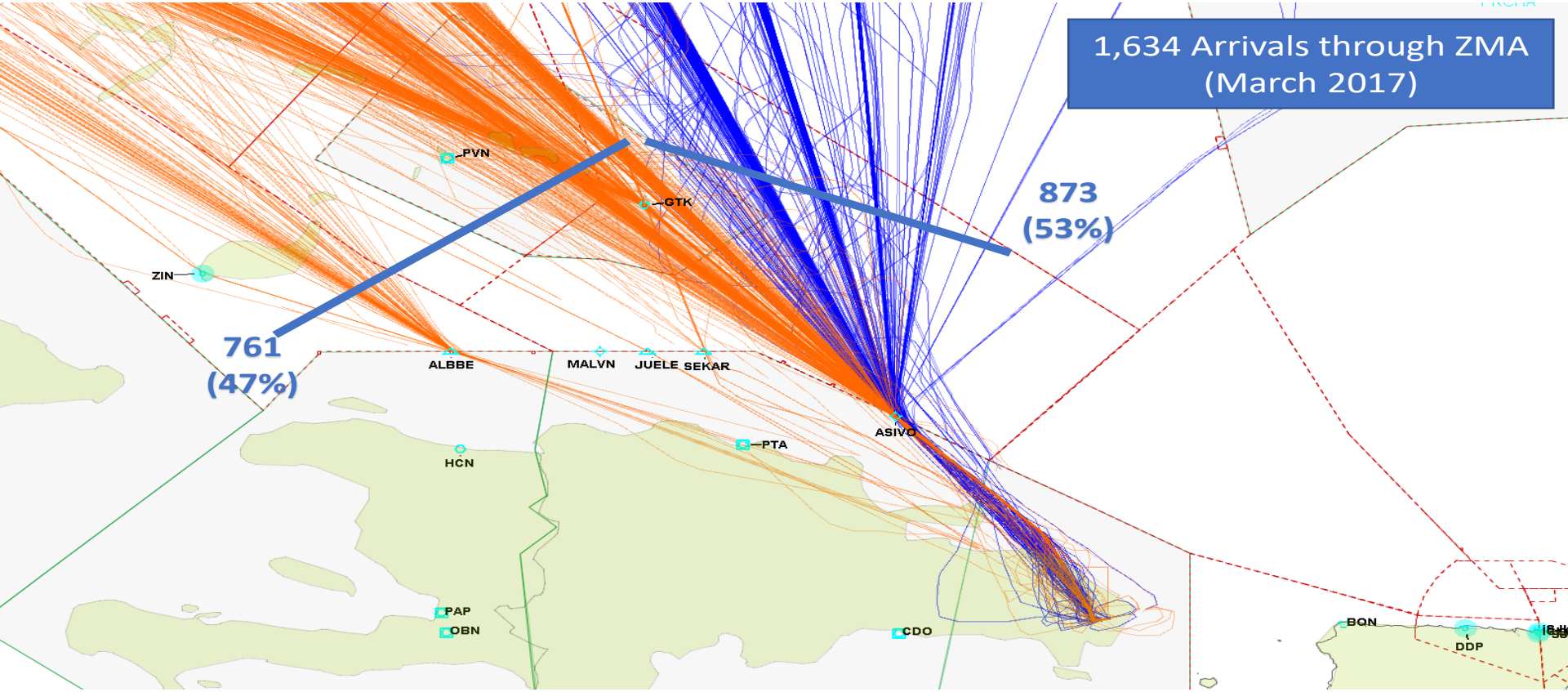
- **The ATM Department has five divisions:**
- (ATS) Air Traffic Services (+ ATFM)
- (AM) Airspace management
- (FIS) Flight Information Services
- (MET) Meteorological services
- (SAR) Search and rescue

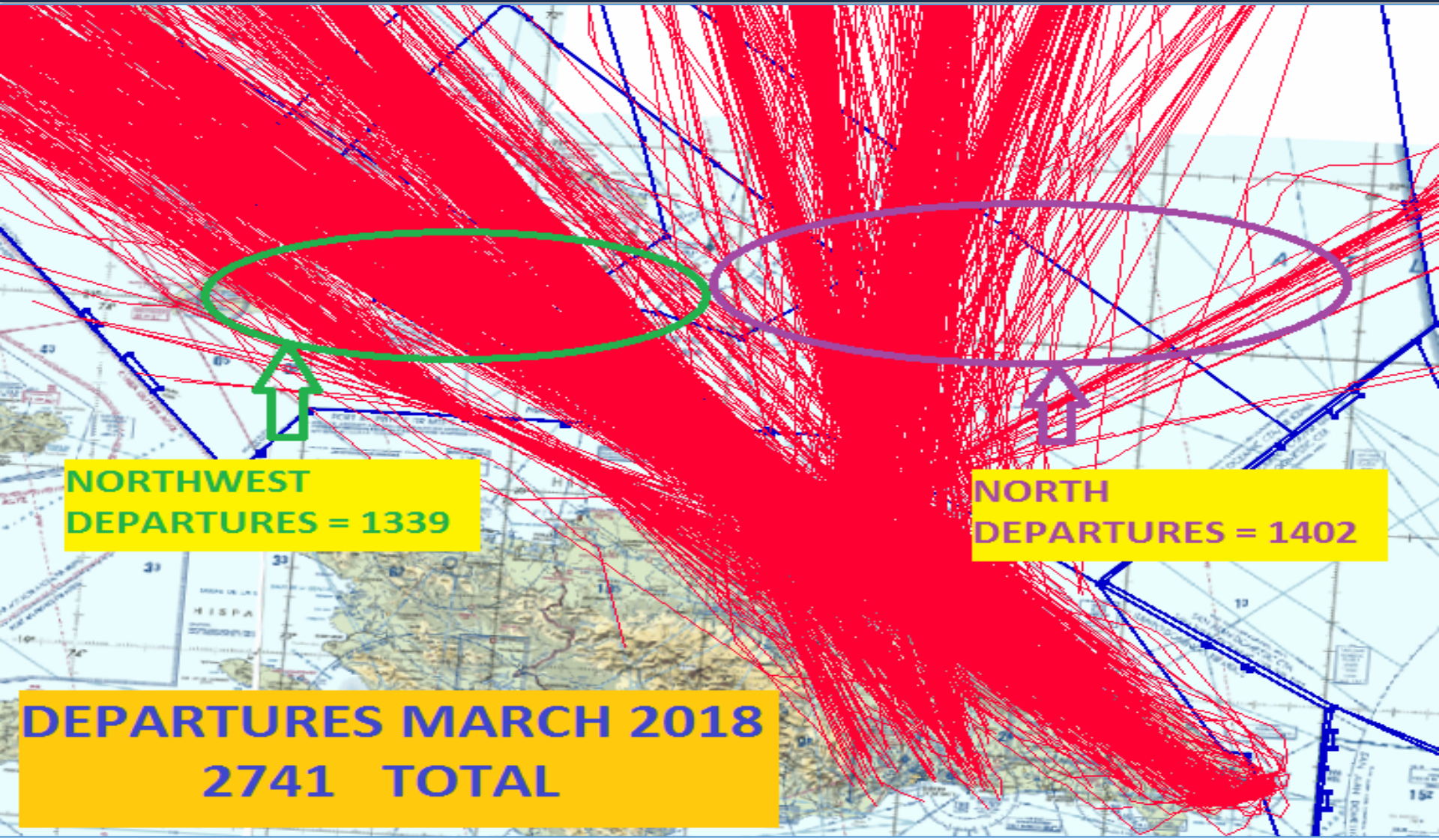
- **Air traffic management (ATM).** The dynamic, integrated management of air traffic and airspace including air traffic services, airspace management and air traffic flow management — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

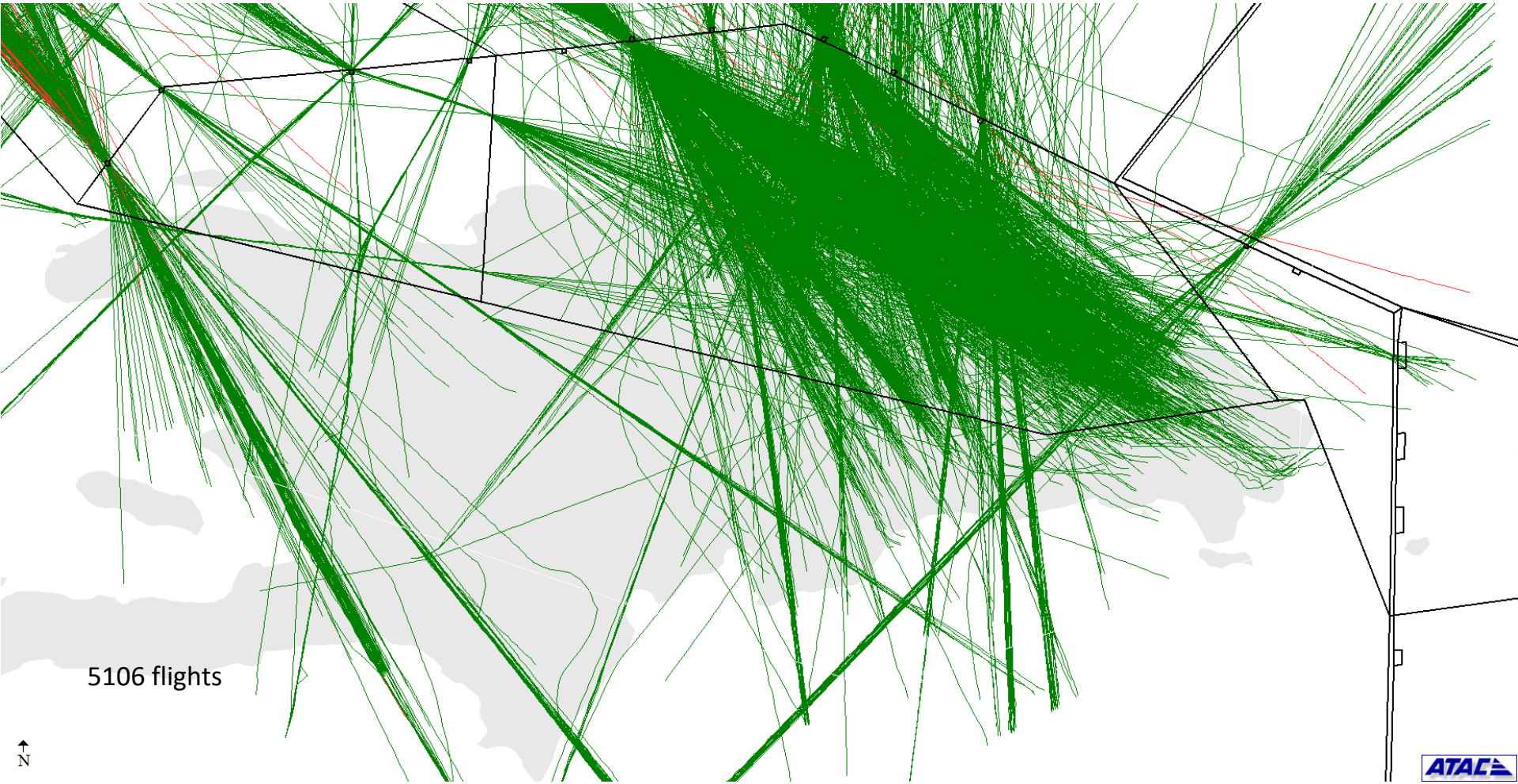
- **Air traffic flow management (ATFM).** A service established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate ATS authority.

Air Traffic Services (ATS)

MDPC Arrivals



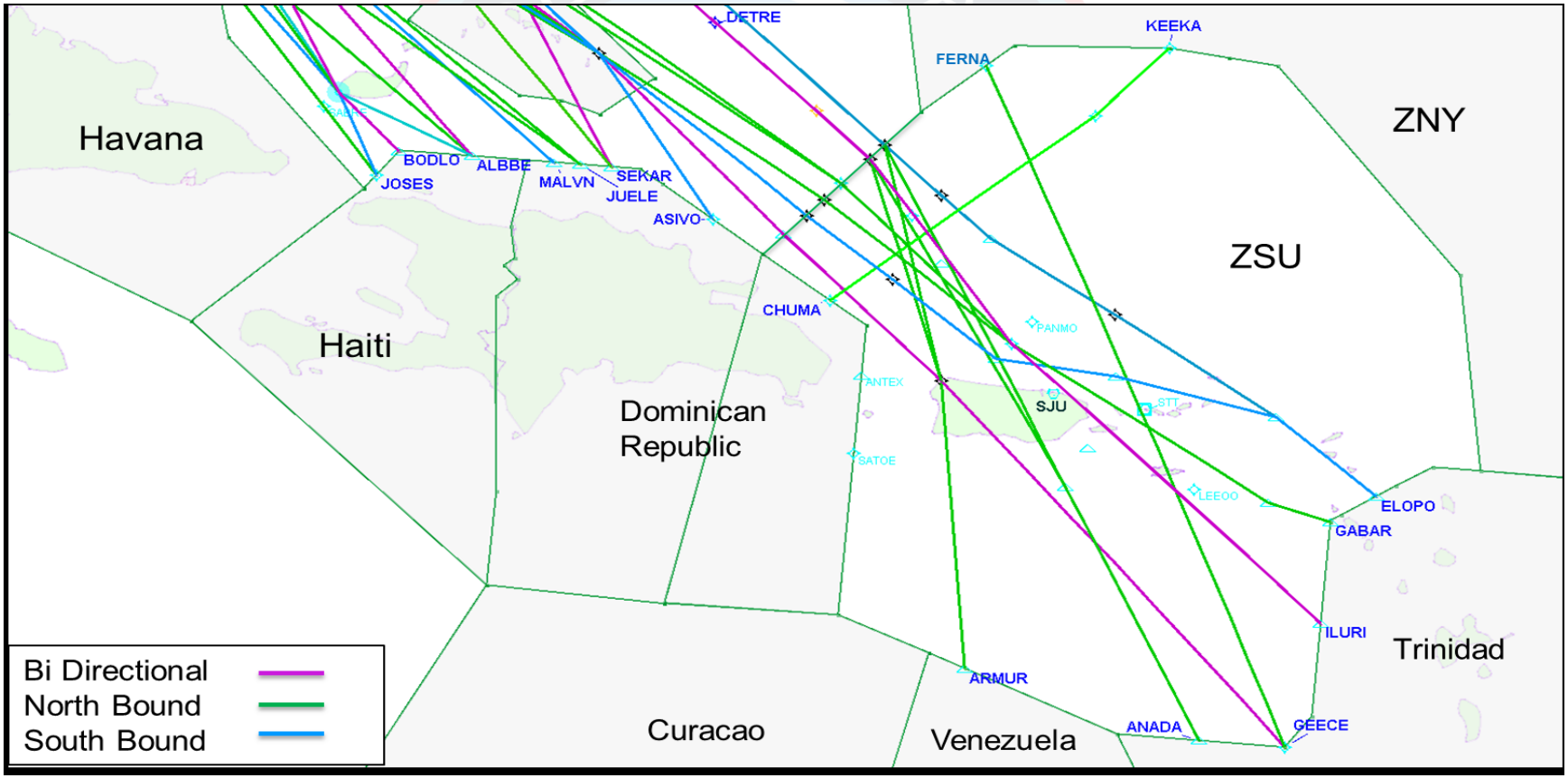

NORTHWEST
DEPARTURES = 1339
NORTH
DEPARTURES = 1402
DEPARTURES MARCH 2018
2741 TOTAL


5106 flights
N

CHANGES IN KZMA'MDCS LOA

November 8th, 2018

ACR METROPLEX implementation. (KZMA)



Allocation of flight levels will be as follows: (7.1).

Transfer of Control Point (TCP)	Southbound	Northbound
MALVN		MALVN
JUELE	JUELE	
SEKAR	SEKAR	SEKAR
~~BESAS~~ LERED		LERED
POKEG	POKEG	POKEG
ASIVO	ASIVO	ASIVO

MDCS must coordinate Traffic Management Initiatives (TMI) through KZMA Traffic Management Unit (TMU). (4.4)

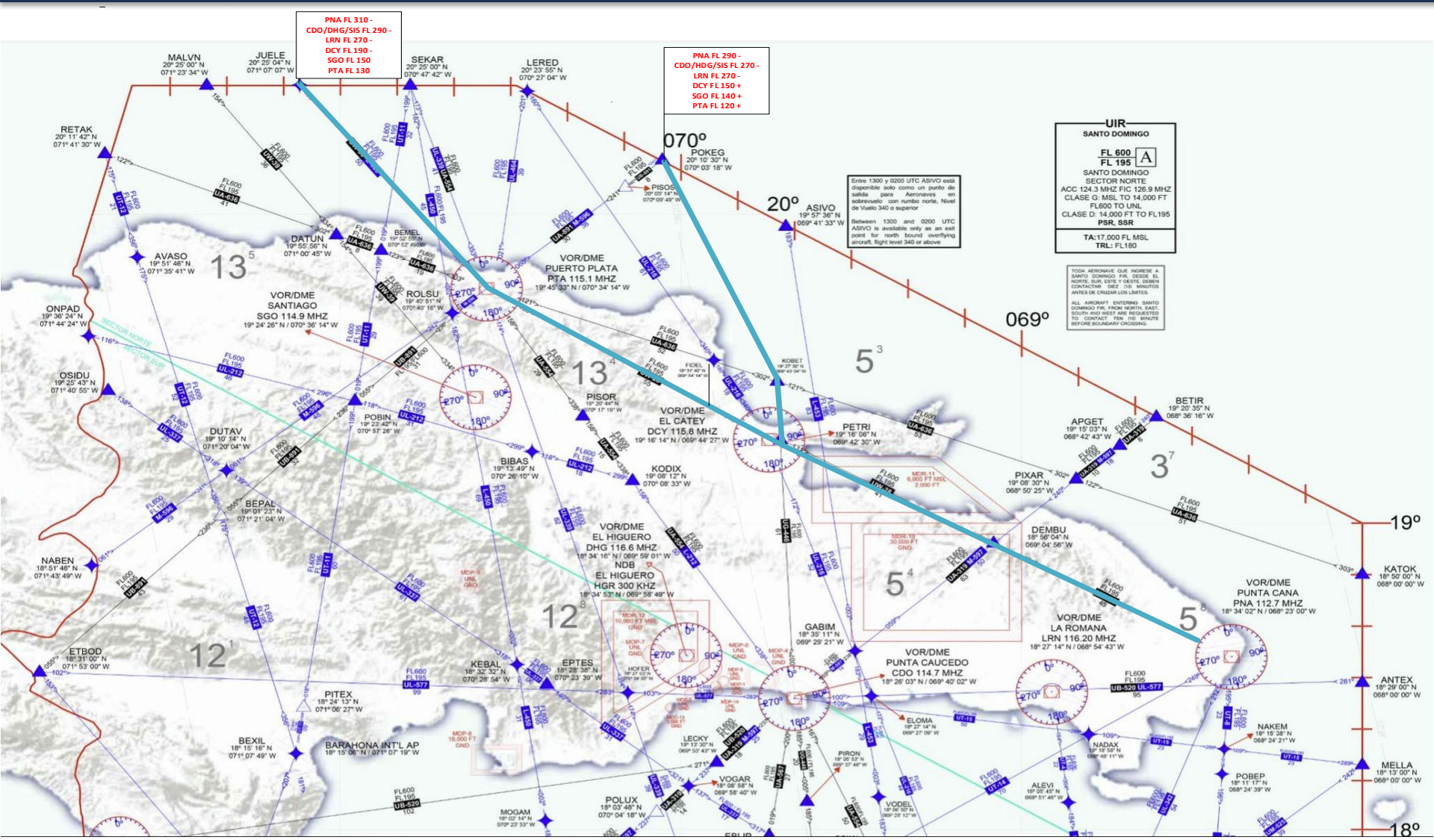
KZMA must coordinate Traffic Management Initiatives (TMI) through MDCS ATFM/CDM Unit. (4.5)

Prior the application of this TMI, KZMA must guarantee that all flight plans of traffic re-routed have been received by MDCS with time in advance before the coordination process. (10.3.3).

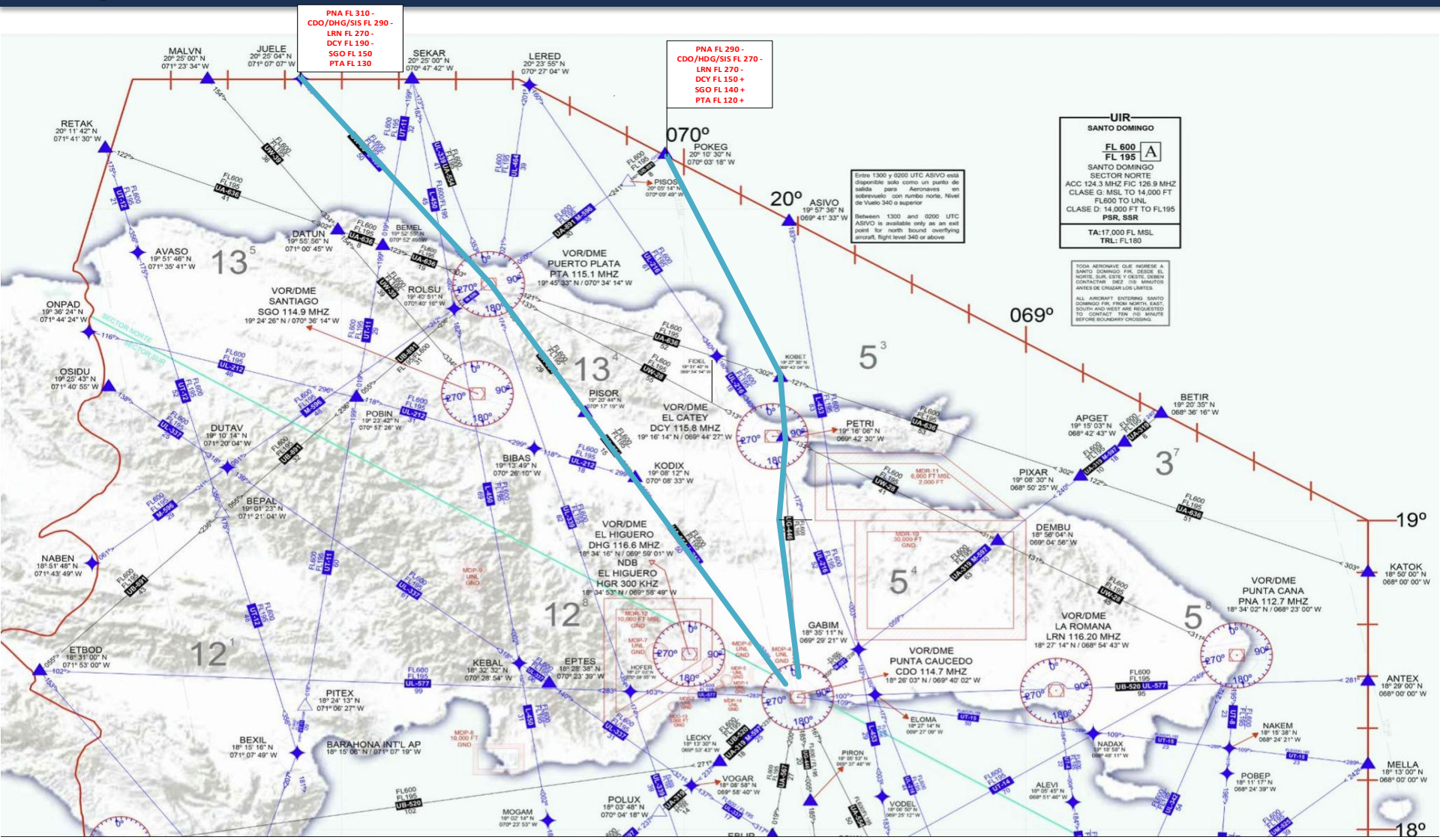
Impact and consequences of the MIAMI Atlantic coast route (ACR) implementation in the Dominican ATC system.

(NOTAMs)

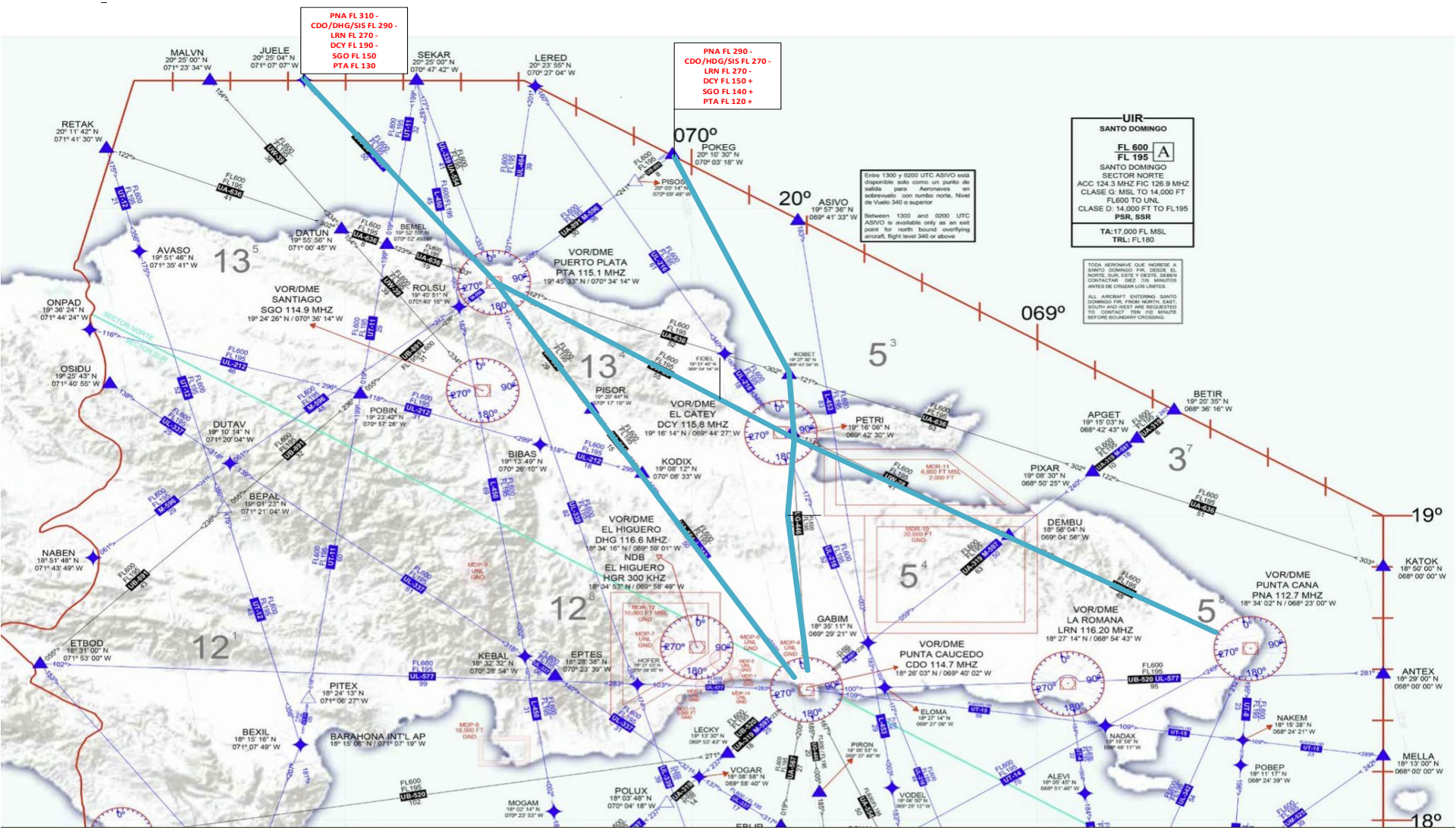
NEW Arrival GATES to PNA



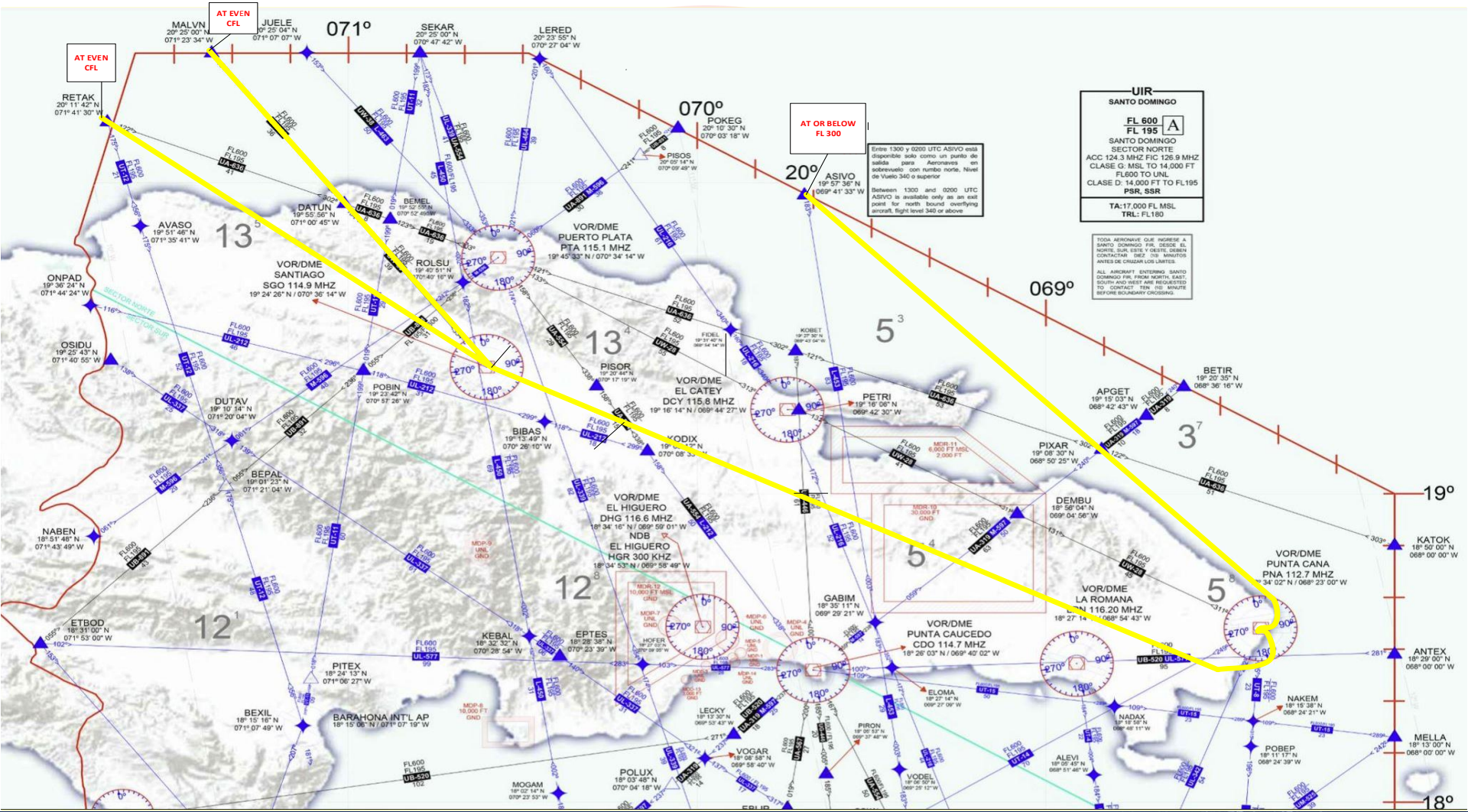
NEW Arrival GATES to CDO



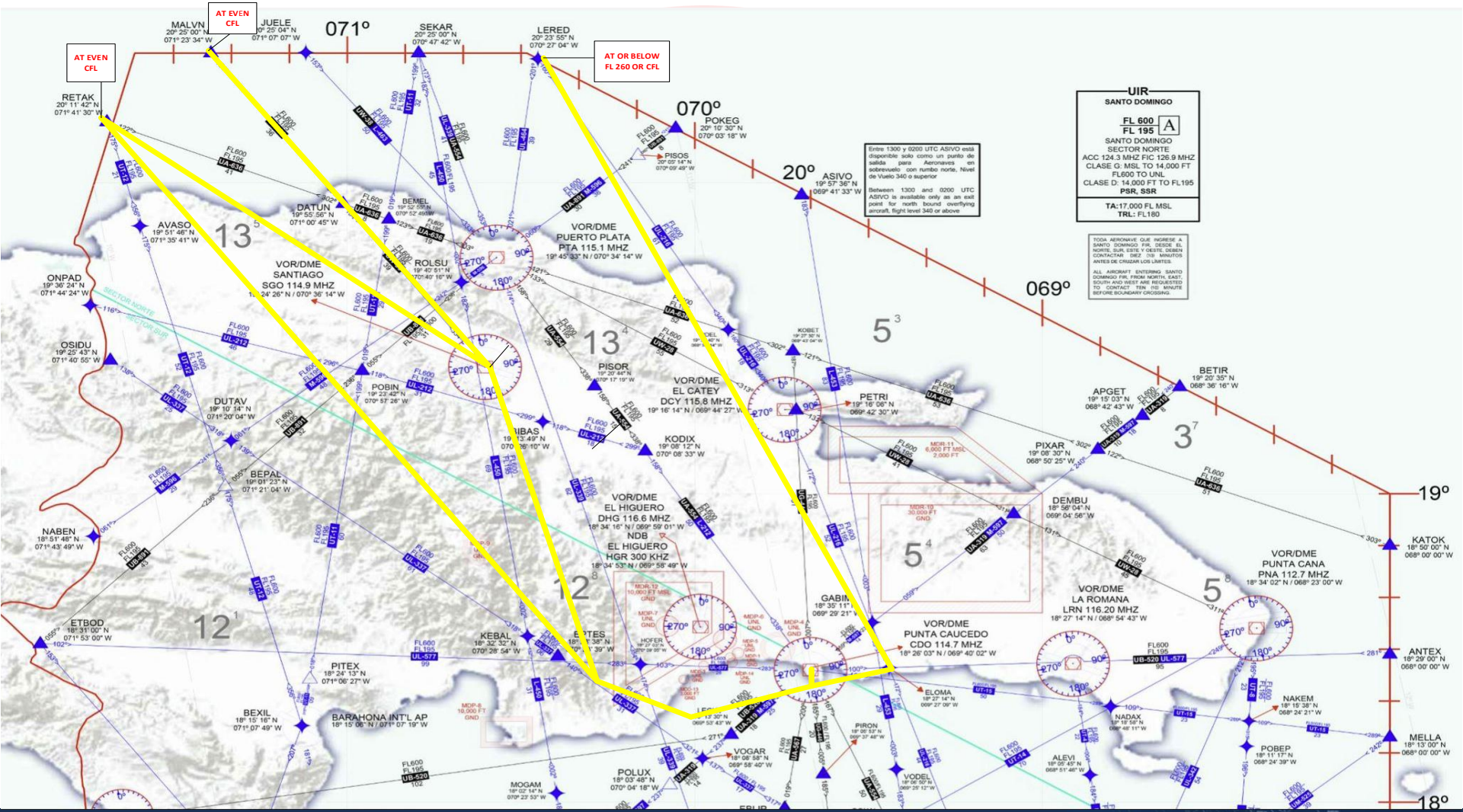
NEW Arrival GATES to PNA/CDO combined



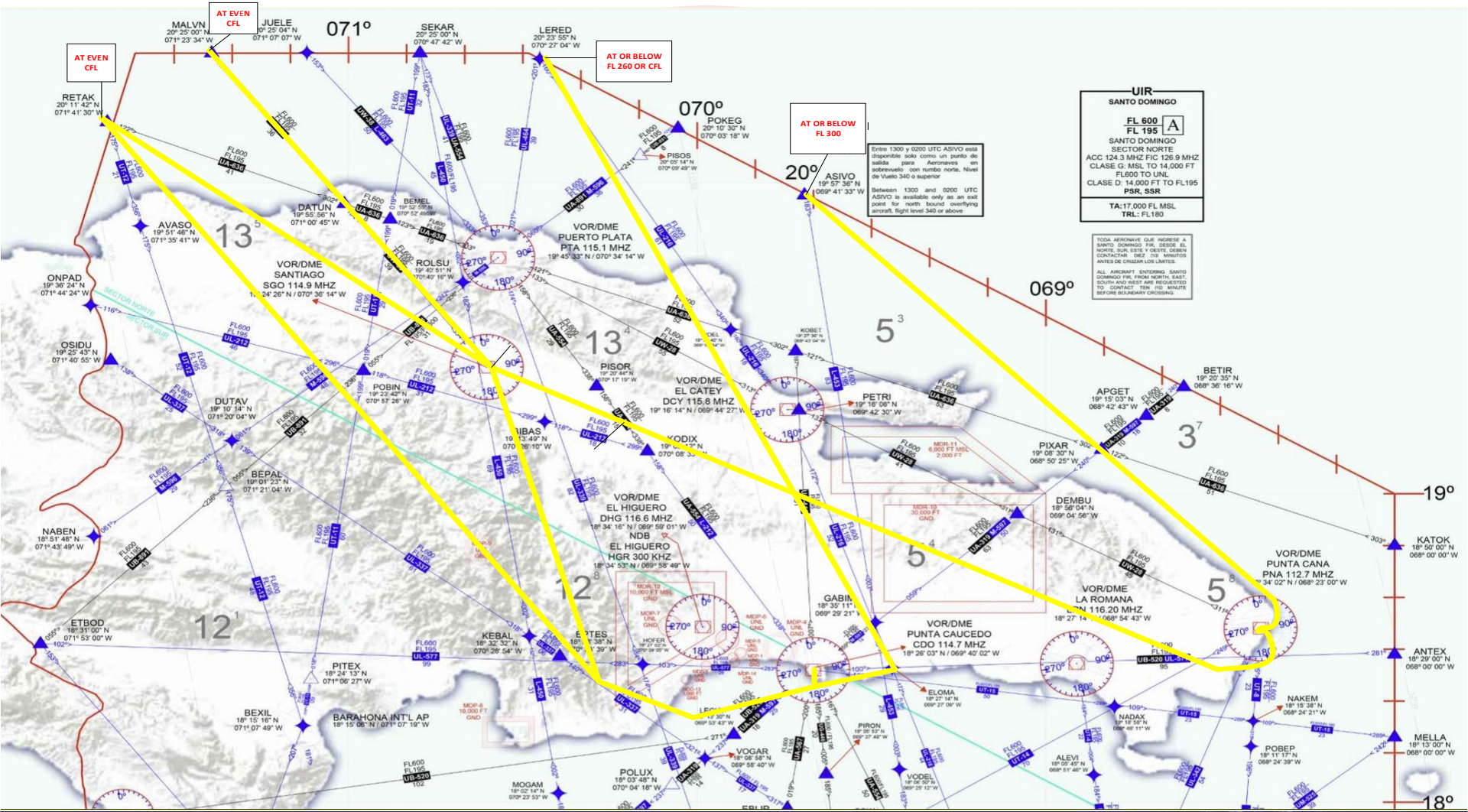
NEW Departure GATES from PNA



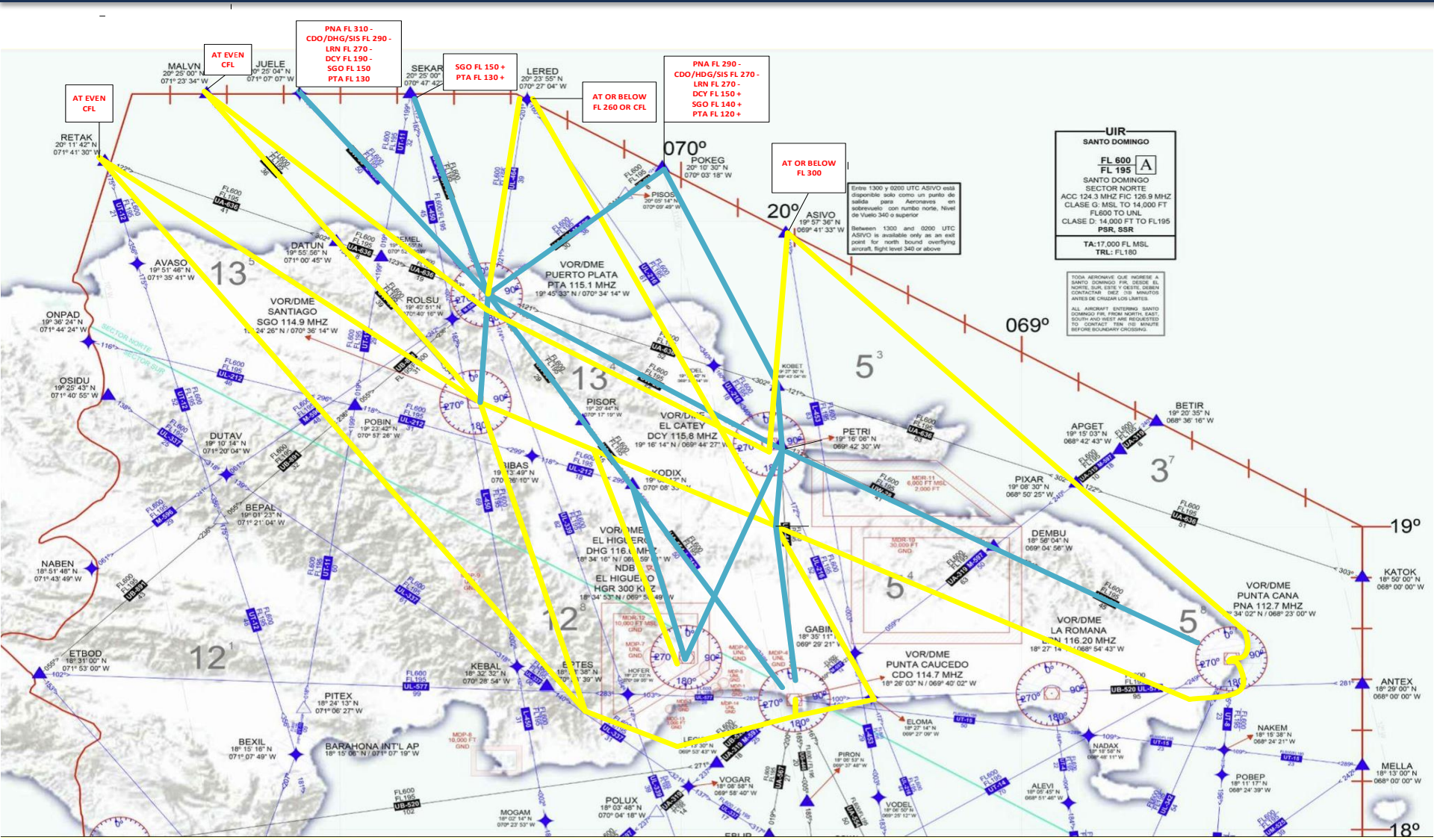
NEW Departure GATES from CDO



NEW DEP GATES from CDO/PNA combined

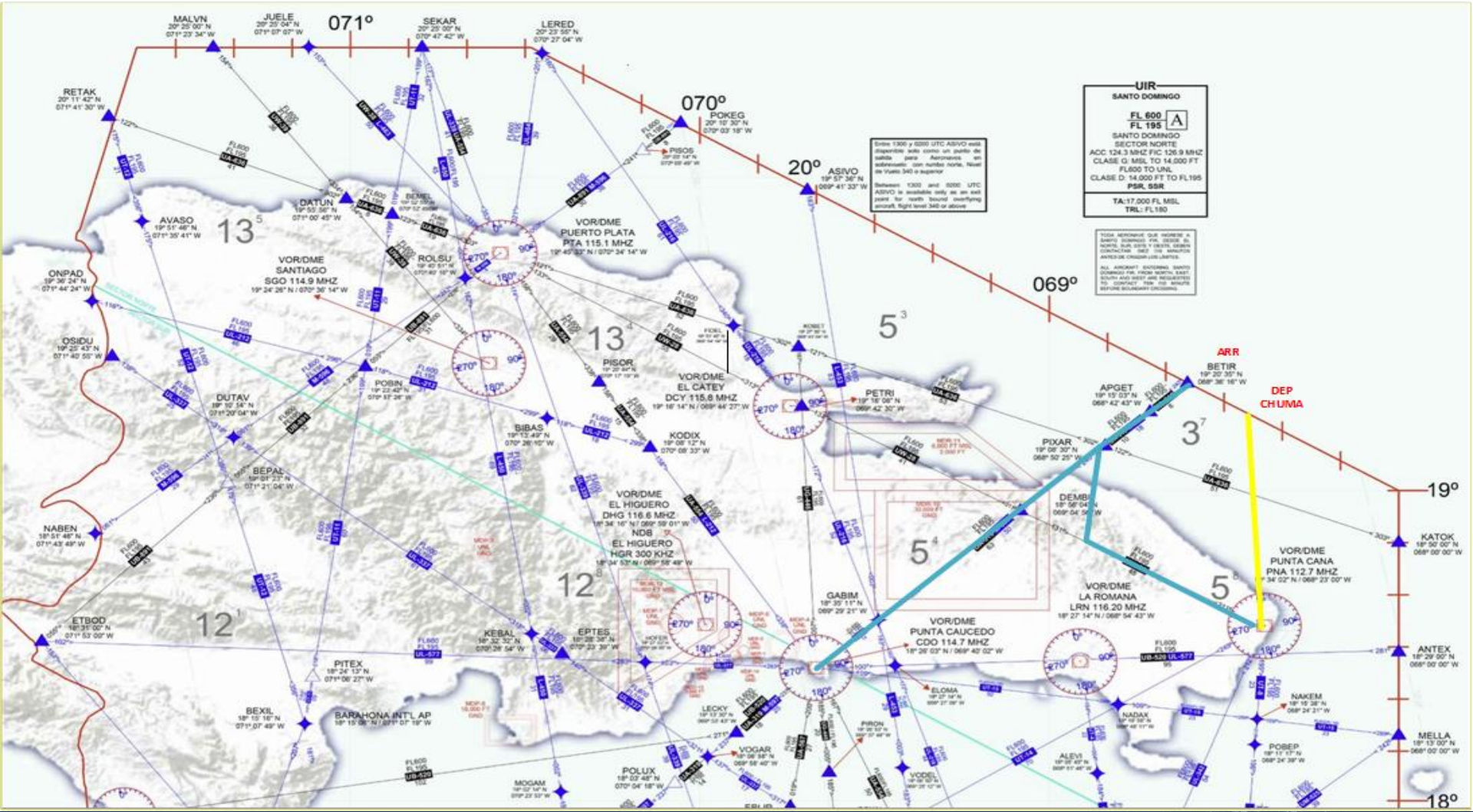


DEP/ARR to/from DOM Airports



Impact and consequences of the San Juan Atlantic coast route (ACR) implementation in the Dominican ATC system.

SJU/SDQ Y315 ACR METROPLEX



Airspace Management (AM)

- **Pfa2 implementation + New SIS-STAR procedures**
- **January 31st, 2019**

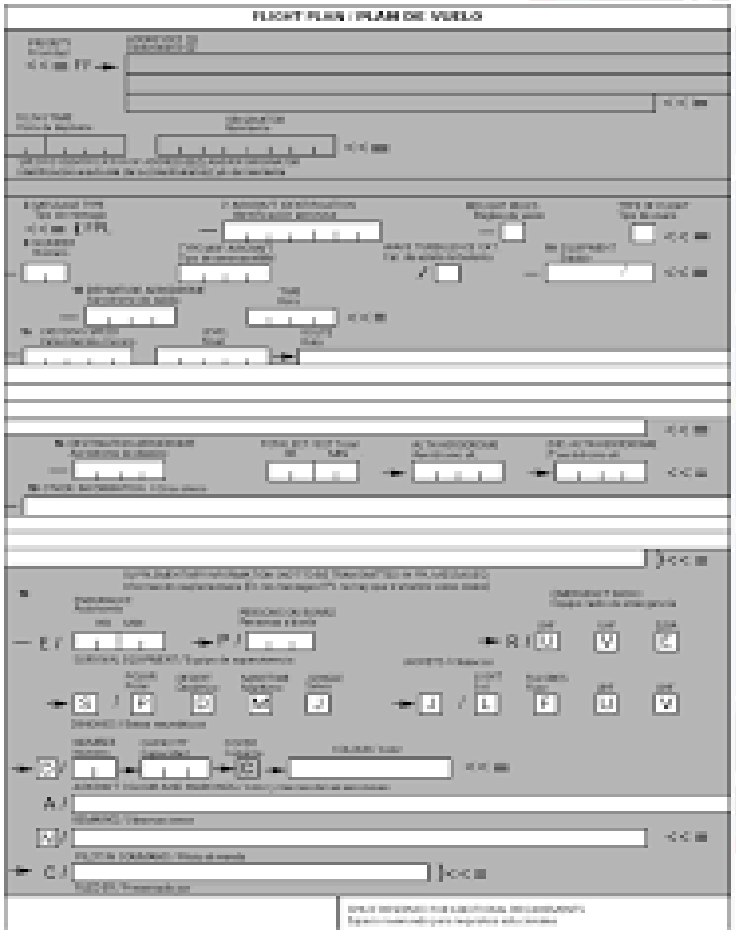
- **AMDT AIRAC 1-19**
- **1-19BIS**

Graphic Pages of the amendment AMDT AIRAC 1-19

- 1, 4, 11, 25, 45, 47, 49, 51, 55, 57, 61, 63, 65, 69 and 71

- For future implementations, we (States) should be more aware about the impact of our actions in the International community, especially in our neighboring facilities, new implementations should be based on the need of the users through a real CDM.

Flight Information Services



- We are signing agreement with the Airlines.
- We already signed with JBU and DELTA for Automatic Flight Plans Processing in which the Airlines are responsible for filling flight plans directly from their own system.
- Other interested airlines are: CMP, AAL, IBE and UAL (in process)
- Those airlines signing the agreement are released from presenting physical flight plans in our local AIS/ARO office.

The transition must be done following 3 phases prior to the entry into force of the Agreement.

PHASE 1

- A trial period of five (5) days, in which UNITED will continue to physically present all your **DEPARTING** flight plans to the AIS/ARO office in the Departing airdrome of the Dominican Republic and will send the ARRIVING and OVERFLYING flight messages to the AMHS MDCSZQZX address, at the same time (in parallel) UNITED will send all your flight plan messages DEPARTURES, ARRIVALS OR OVERFLIGHTS with impact in the Santo Domingo flight information region to the new exclusive AMHS/AFTN address specified in the agreement. (MDCSZPZF).

- Following the five (5) days of step 1 working in parallel, there will be a debriefing between the parties to share a feedback, if the feedback is positive we move to the next phase.

PHASE 2

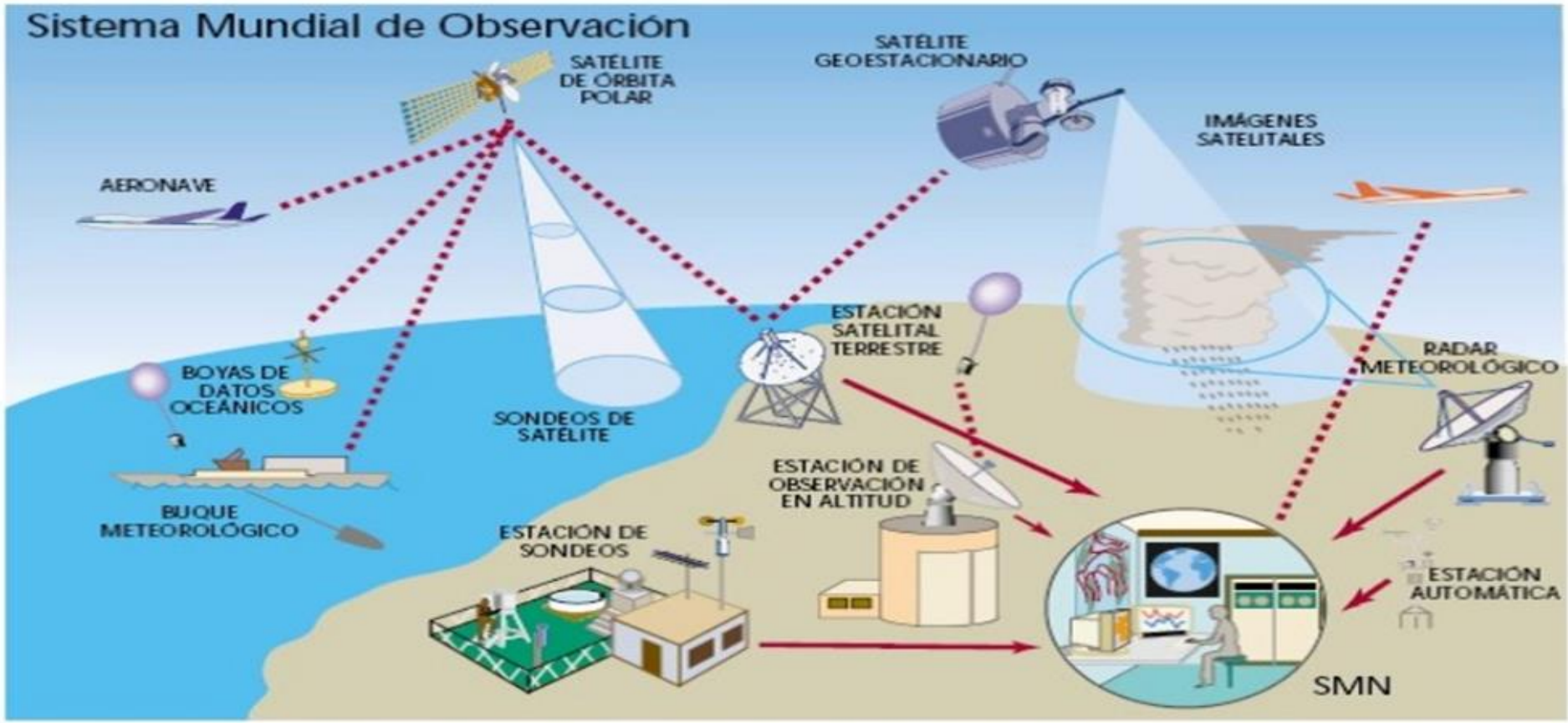
- This phase consists of a trial period of fifteen (15) days, in which UNITED is going to SUSPEND all the physical presentation to the local AIS/ARO office of flight plans departing from the Dominican Airports and will send all its flight plan messages regarding DEPARTURES, ARRIVALS and OVERFLIGHTS with impact in the Santo Domingo Flight Information Region ONLY to the new exclusive AMHS/AFTN address specified in this document (MDCSZPZF).

- Following the fifteen (15) days of phase 2 of direct filling of flight plans, there will be a debriefing between the parties to share a feedback, if the feedback is positive we move to the next phase.

PHASE 3

- The next and final phase would be to formally implement the agreement in full extend.

Meteorological Services (MET)

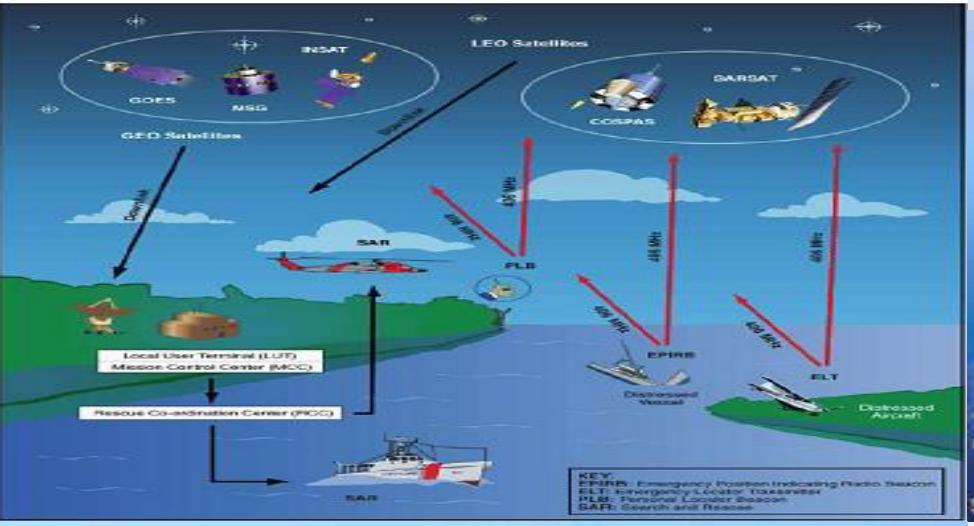


- IDAC is the CAA of the Dominican Republic and the entity responsible for the provision of the meteorological services for the international air navigation (ANNEX 3).

- We are currently providing the MET services through the MET National Office (ONAMET).

- We are in the process to complete the installation of airdrome automatic weather Stations to assume the provision of the MET services for aeronautical purposes.

Search and Rescue (SAR)



- SAR is the division in charge of making the search and rescue coordination in case of accident of aircraft and of coordinating NOTAM emissions for reservations of airspace for SAR operations.
- They do their coordination trying to avoid negative impact to the normal flow of air traffic.

ATFM AS A DEPENDENT ATS UNIT

- The Dominican TMU was established in 2016 as a dependency of the ACC Santo Domingo.

- The main objective is to anticipate situational awareness during hours of high volume of traffic in order to maintain a balance between demand and capacity that keeps a flow of traffic evolving in a safe, orderly and expeditious manner using all the available resources.

- The success in the implementation of our TMU has been accuracy of the information provided and the good relations existing between its personnel and the ACC Supervisors, which helps the collaborative decision-making process aiming at a common objective.

- The Web Conference of CADENA has served IDAC to project our TMU as a reference, having the direction and organization of these teleconferences since December 2017, whose function has been recognized by the participants of other ANSPs.

- The learning with the teleconferences of CADENA has allowed us to carry out local teleconferences with the national stakeholders.

- In addition, our TMU is responsible for projecting the daily situation of our system in the CADENA OIS.

- So far, CDM collaborative decision-making is being carried out through local conferences held on Fridays, after the web conference of CADENA, and until now, we have not received complaints from users regarding our work.

- Thanks to the information received from the Command Center of the FAA and the schedule from the airport operators regarding the flight operations that they are expecting, we daily generate three (3) reports with the projection of the possible flow of traffic in the different shifts of the ACC.
- Those reports are shared via email with all the ACC supervisors, air navigation directorate managers of and national aeronautical community.

- Through our CDM process, we have been successful in obtaining a daily report of military activities that do not affect national security, being the first time that the FARD shares this type of information.

- Our ATFM unit has multiple TMM available to apply, but so far we have only applied the TMM related to Miles in Trail (MIT) increasing the radar longitudinal separation from 10 to 15 or 20 miles depending the situation.

- In addition to changing routes to the traffics arriving from Europe by BETIR with destination MDLR/MDSD, changing the entry fix from BETIR to ANTEX to guarantee a better performance during the descent operation through PNA terminal control area (TMA).

- During the hurricane seasons of 2017 and 2018, our TMU followed and share all the information available regarding the track of the hurricanes.

- We held teleconferences as the track of the hurricanes were approaching the Caribbean.

- The airlines expressed their satisfaction with the information received during those events, which were helpful for their operational plans.

- **Air traffic management (ATM).** The dynamic, integrated management of air traffic and airspace including air traffic services, airspace management and air traffic flow management — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

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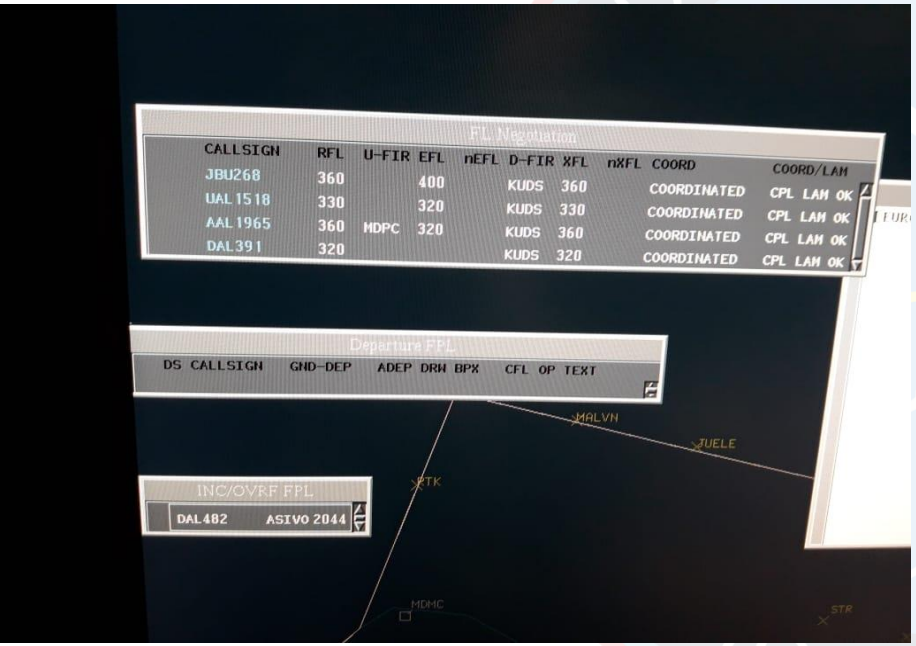
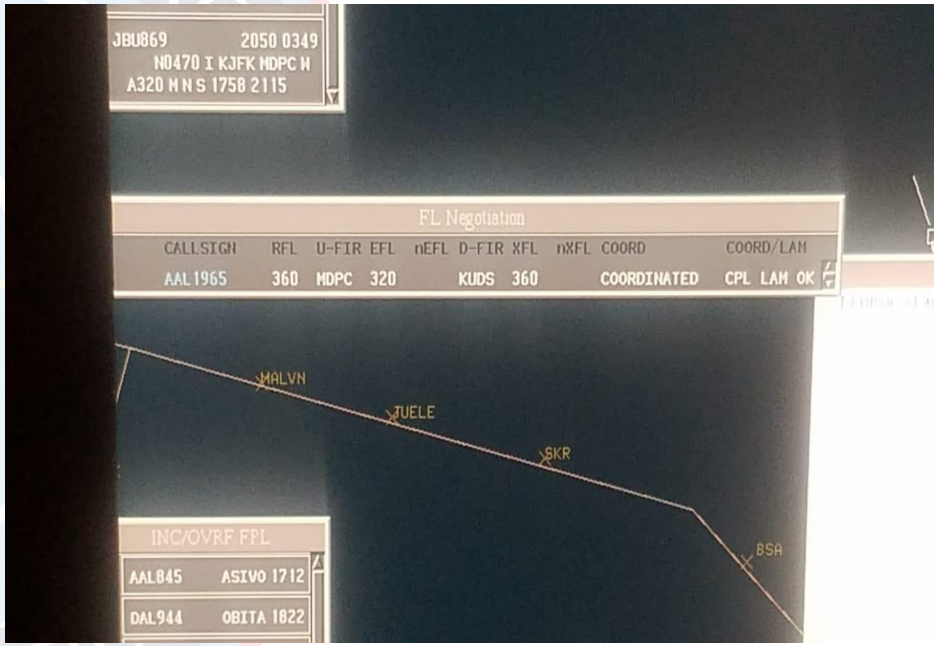
ATM projects in progress

- **ATS Inter-facility**
- **Data Communications (AIDC) with FAA**

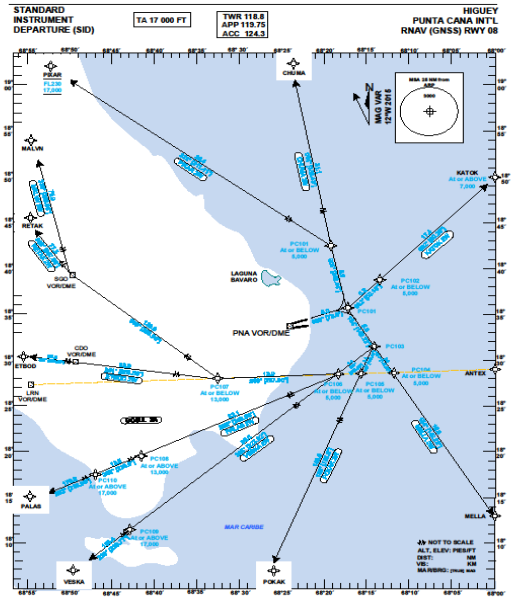
AIDC Clase 1/2 + LAM/LRM

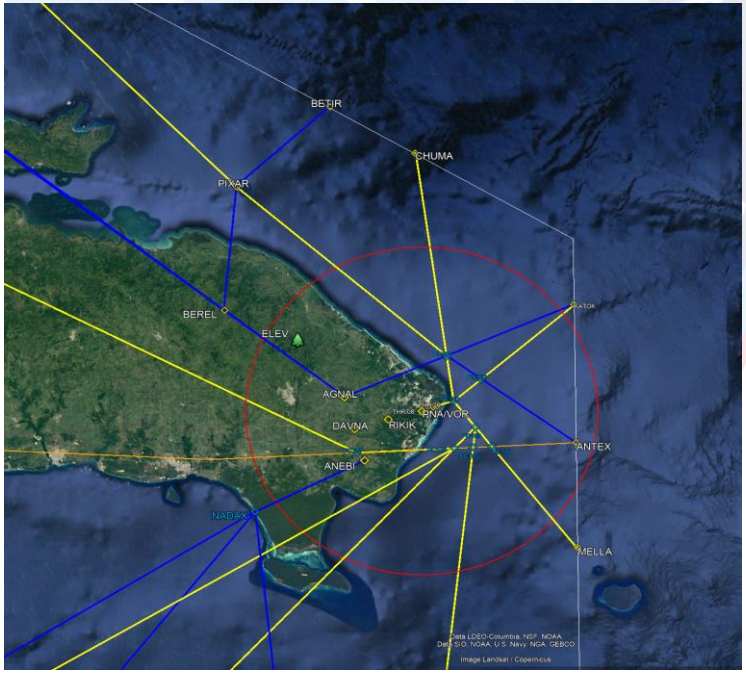


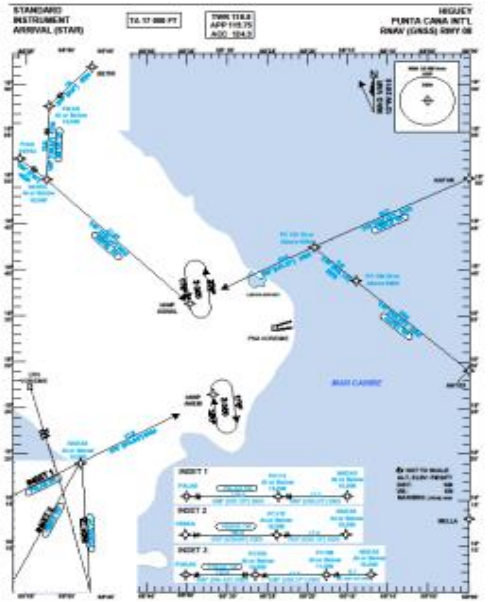


- LAM Logical Acknowledgement message
- LRM Logical Rejection message

Implement the NEW SID/STARs
AMDT AIRAC 01-19
connect the rest of the airport with the new flow of traffic with KZMA







RADAR data sharing TNCF + Shout Line

Datos sobre los Servicios de Navegación Aérea

- 8 aeropuertos Internacionales
- 2 Modernos Centros de Control
- 14 Posiciones Operativas
- 8 Posiciones para Simuladores
- 3 Radares Primarios
- 2 Radares Secundario
- 308 Controladores de Tránsito Aéreo
- 300 Técnicos que dan soporte a las Instalaciones del Sistema de Navegación Aérea Nacional
- 200,101 Operaciones Aéreas en 2014
- 11,366,154.00 Pasajeros Transportados

- try to standardize the separations applied in the region (10 NM, 40 NM GNSS, 10 Min, 15 Min) etc.

- Update the LOAs with adjacent facilities.

- ADS-B as a redundant surveillance source

Flexible use of the airspace

Threats

- **Irresponsible use of drones**
- **Aircraft affected with laser lights**
- **Illegal operations of aircraft**

- Constant grow of MDPC

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The Free Encyclopedia

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List of the busiest airports in the Caribbean

From Wikipedia, the free encyclopedia

This is a **list of the busiest airports in the Caribbean region by passenger traffic**. Statistics are available for almost all the airstrips taken into account. The present list intends to include all the international airports located in the area geographically defined as the Caribbean. Given that each country has a different body to control these statistics, the compilation of data is difficult and not homogeneously distributed. The information presented here, represents the best available data from different Internet sources. The list contains statistics for different years, since each country authority does not have strong regulations reporting passengers traffic. The ranking is ordered according to total passenger traffic (unless the footnotes indicate the contrary). Information on aircraft movements or cargo movements is not available for all of the airports.

Ranking of airports [edit]

Rank	Country/Region	Airport name	IATA/ICAO Code	City Served	Passengers
1.	Puerto Rico	Luis Muñoz Marin International Airport	SJU/TJSJ	San Juan	8,808,028 [1]
2.	Dominican Republic	Punta Cana International Airport	PUJ/MDPC	Punta Cana	7,264,912 [2]
3.	Cuba	José Martí International Airport	HAV/MUHA	Havana	5,713,859 [3]
4.	Jamaica	Sangster International Airport	MBJ/MKJS	Montego Bay	4,284,558 [4]
5.	Dominican Republic	Las Americas International Airport	SDQ/MDSD	Santo Domingo	3,687,024 [5]
6.	The Bahamas	Lynden Pindling International Airport	NAS/MYNN	Nassau	3,339,876 [6]
7.	Trinidad and Tobago	Piarco International Airport	POS/TTPP	Port of Spain	2,884,843 [6]
8.	The Netherlands - Aruba	Queen Beatrix International Airport	AUA/TNCA	Aruba	2,602,728 [8]
9.	France - Guadeloupe	Pointe-à-Pitre International Airport	PTP/TFFR	Pointe-à-Pitre	2,361,198 [9]
10.	Barbados	Grantley Adams International Airport	BGI/TBPB	Bridgetown	2,172,603 [10]

- For future implementations, we (States) should be more aware about the impact of our actions in the International community, especially in our neighboring facilities, new implementations should be based on the need of the users through a real CDM.

"The ATFM units must be seen by the States as a mechanism for, based on their capabilities, to guarantee an optimal use of their airspace in harmony with the other airspaces that surround them, NEVER as a way to counteract the measures imposed by another State".

Thank you!!!

Dirección Navegación Aérea