



**Departamento  
de Controle do Espaço Aéreo**  
Department of Airspace Control



Davi Monteiro de Medeiros – Capt  
Deputy of the Air Traffic Service Sectors – ATS  
Air Traffic Management Planning Section  
TEL.: +55 21 2101-6017 / email [davidmm@decea.gov.br](mailto:davidmm@decea.gov.br)





**Departamento  
de Controle do Espaço Aéreo**  
Department of Airspace Control



# FLIGHT PLAN CENTRALIZATION PROJECT – CPVP BRAZIL



# PURPOSE



□ TO PRESENT THE FLIGHT PLAN CENTRALIZATION PROJECT.

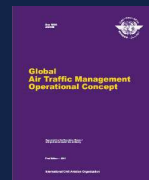


# TOPICS COVERED



- CONTEXTUALIZATION;**
- PROJECT OBJECTIVES;**
- SYSTEMS AND 5 FIR;**
- CURRENT FLIGHT PLAN FLOW;**
- FUTURE FLIGHT PLAN FLOW;**
- TRANSITION; and**
- CONCLUSION**

# CONTEXTUALIZATION



INFORMATION  
INFORMATION  
INFORMATION  
INFORMATION  
INFORMATION  
INFORMATION

PERFORMANCE

HARMONIZED

INTEGRATED

INTEROPERABILITY

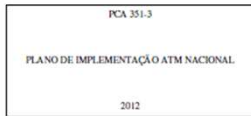
# CONTEXTUALIZATION



MINISTÉRIO DA DEFESA  
COMANDO DA AERONÁUTICA



CONTROLE DO ESPAÇO AÉREO



INFORMATION

INFORMATION

INFORMATION

INFORMATION

INFORMATION

INFORMATION

PERFORMANCE

HARMONIZED

INTEGRATED

INTEROPERABILITY

The SIRIUS BRAZIL PROGRAM represents, within SISCEAB, the projects and activities required for the Implementation of the Operational Concept.

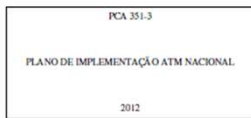
# CONTEXTUALIZATION



MINISTÉRIO DA DEFESA  
COMANDO DA AERONÁUTICA



CONTROLE DO ESPAÇO AÉREO



INFORMATION

INFORMATION

INFORMATION

INFORMATION

INFORMATION

INFORMATION

PERFORMANCE

HARMONIZED

INTEGRATED

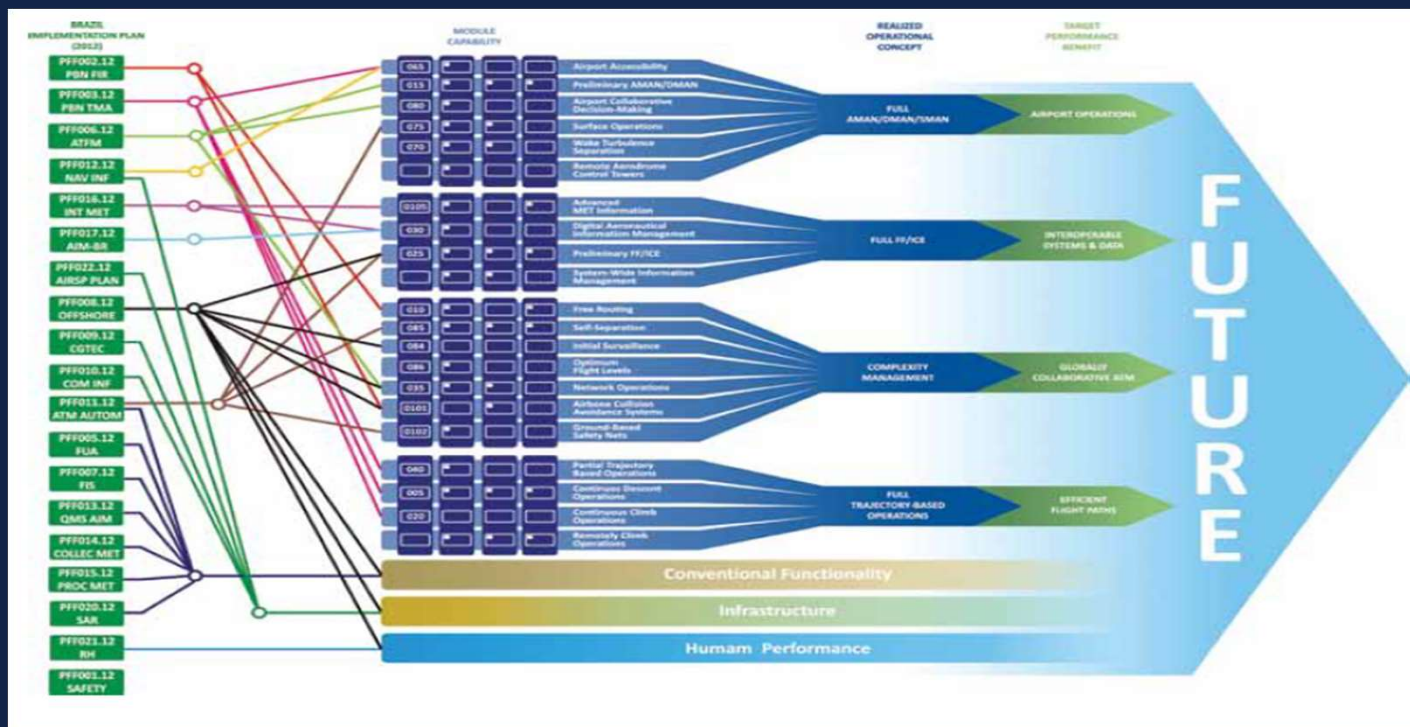
INTEROPERABILITY

The SIRIUS BRAZIL PROGRAM represents, within SISCEAB, the projects and activities required for the Implementation of the Operational Concept.



# CONTEXTUALIZATION

**PFF: Performance Framework Form; and  
ASBU: Aviation System Block Upgrade**



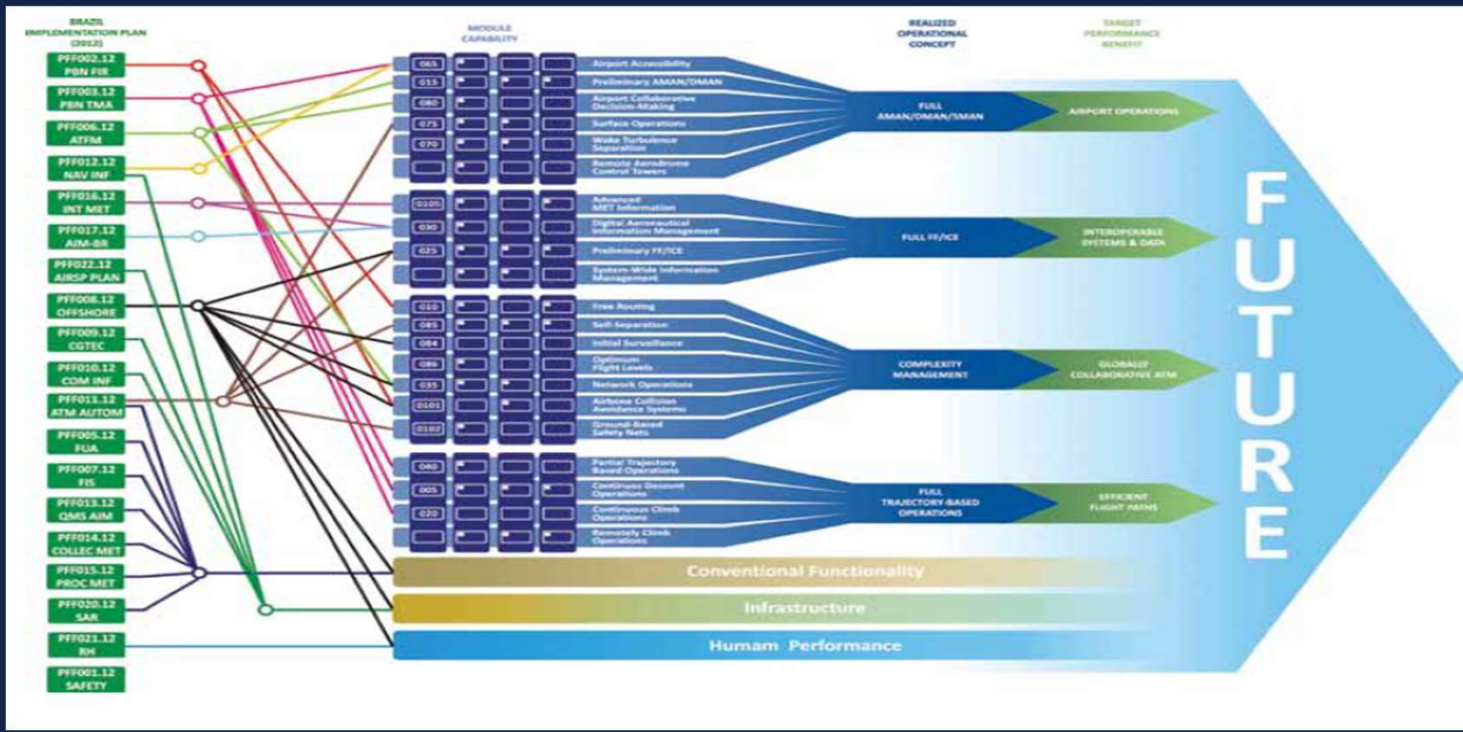
PERFORMANCE

HARMONIZED

INTEGRATED

INTEROPERABILITY

# CONTEXTUALIZATION



PFF 006 => Evolution of ATFM Management

PROJECT A

PROJECT B

PROJECT C

PROJECT D

**Projeto:** FLIGHT PLAN CENTRALIZATION PROJECT

# PROJECT OBJECTIVES



- Integration among our systems;
- Integration among our FIR;
- Single national address: SBRJZPX;
- Flight plan traceability by means of an alphanumeric code;
- Improvement of ATS and ATFM; and
- Paving with way to the FUTURE ATM SYSTEM

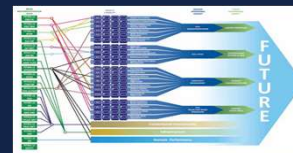


PERFORMANCE

HARMONIZED

INTEGRATED

INTEROPERABILITY



# SYSTEMS



## ❑ SIGMA

- Integrated Air Movement Management System used by CGNA



## ❑ SAGITARIO

- Advanced Air Traffic Information Management System and Report of Operational Interest used by the ACC and APP.



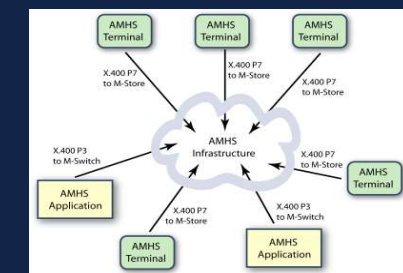
## ❑ TATIC

- Total Air Traffic Information Control: management system used by the TWR.

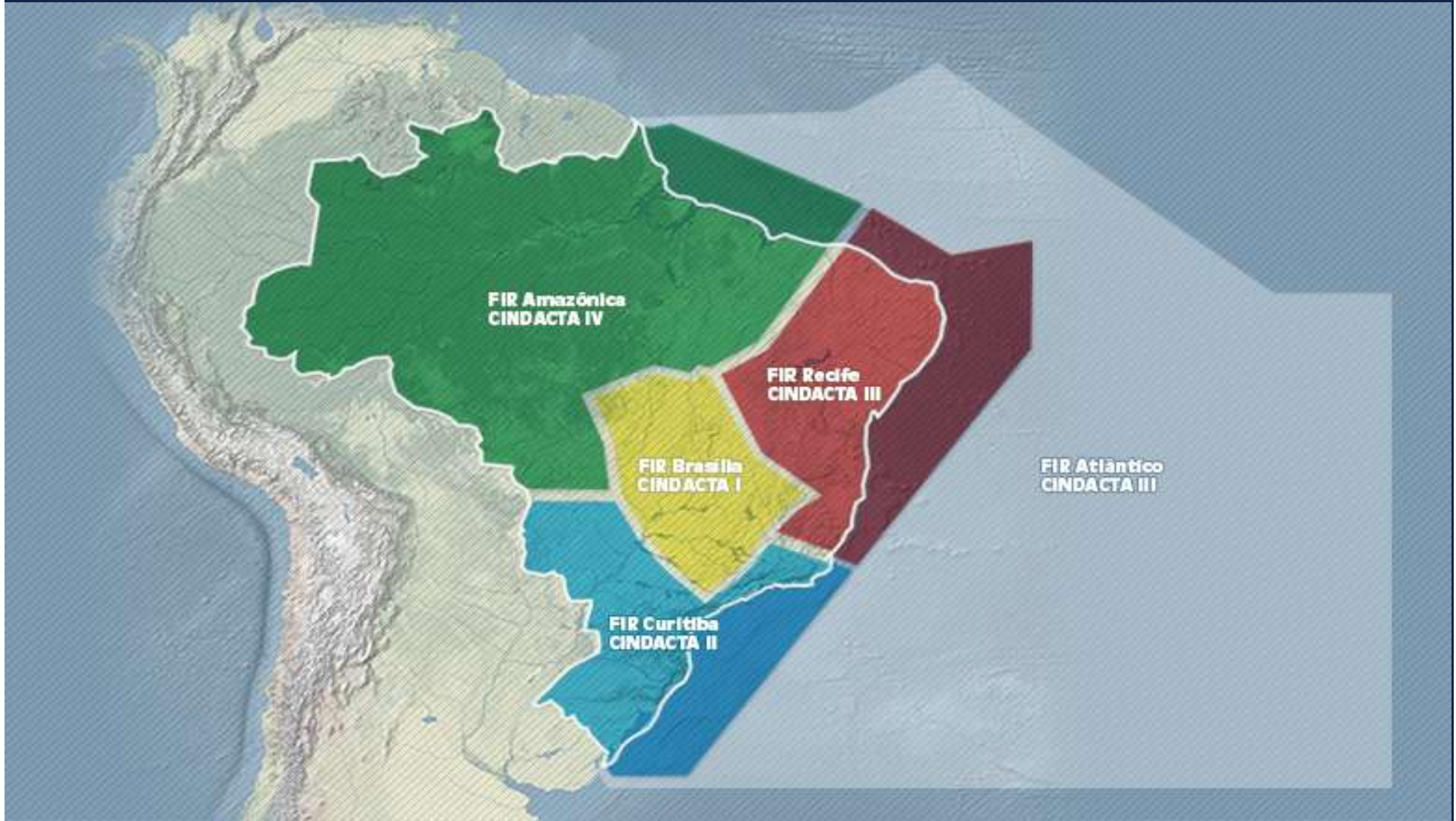


## ❑ AMHS

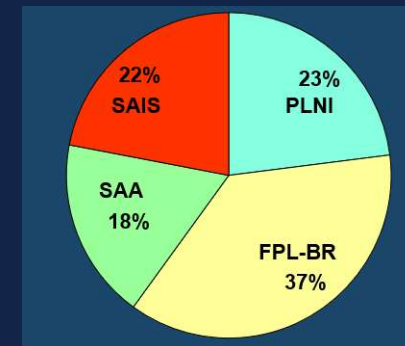
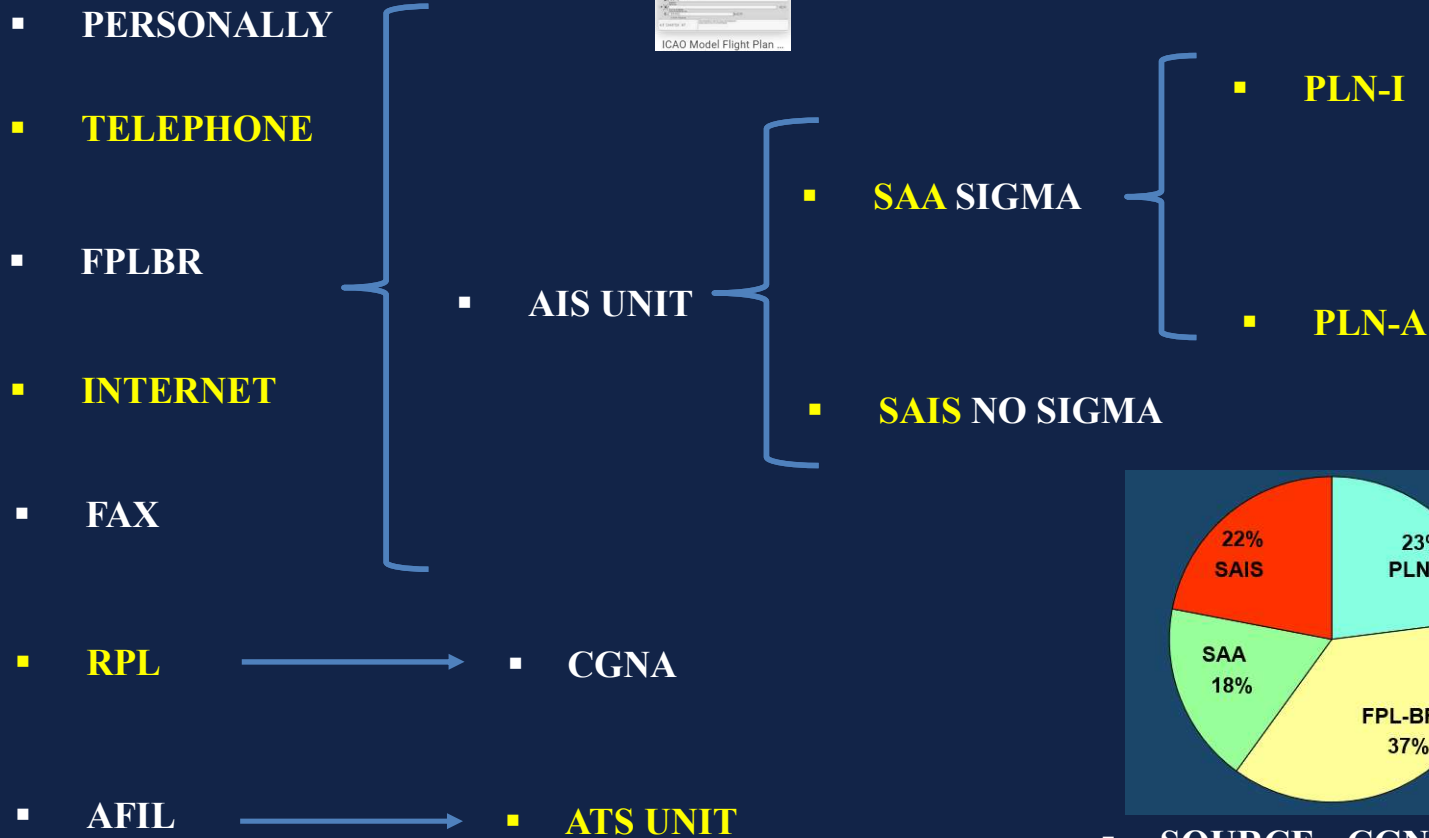
- ATS Message Handling System



# FIR

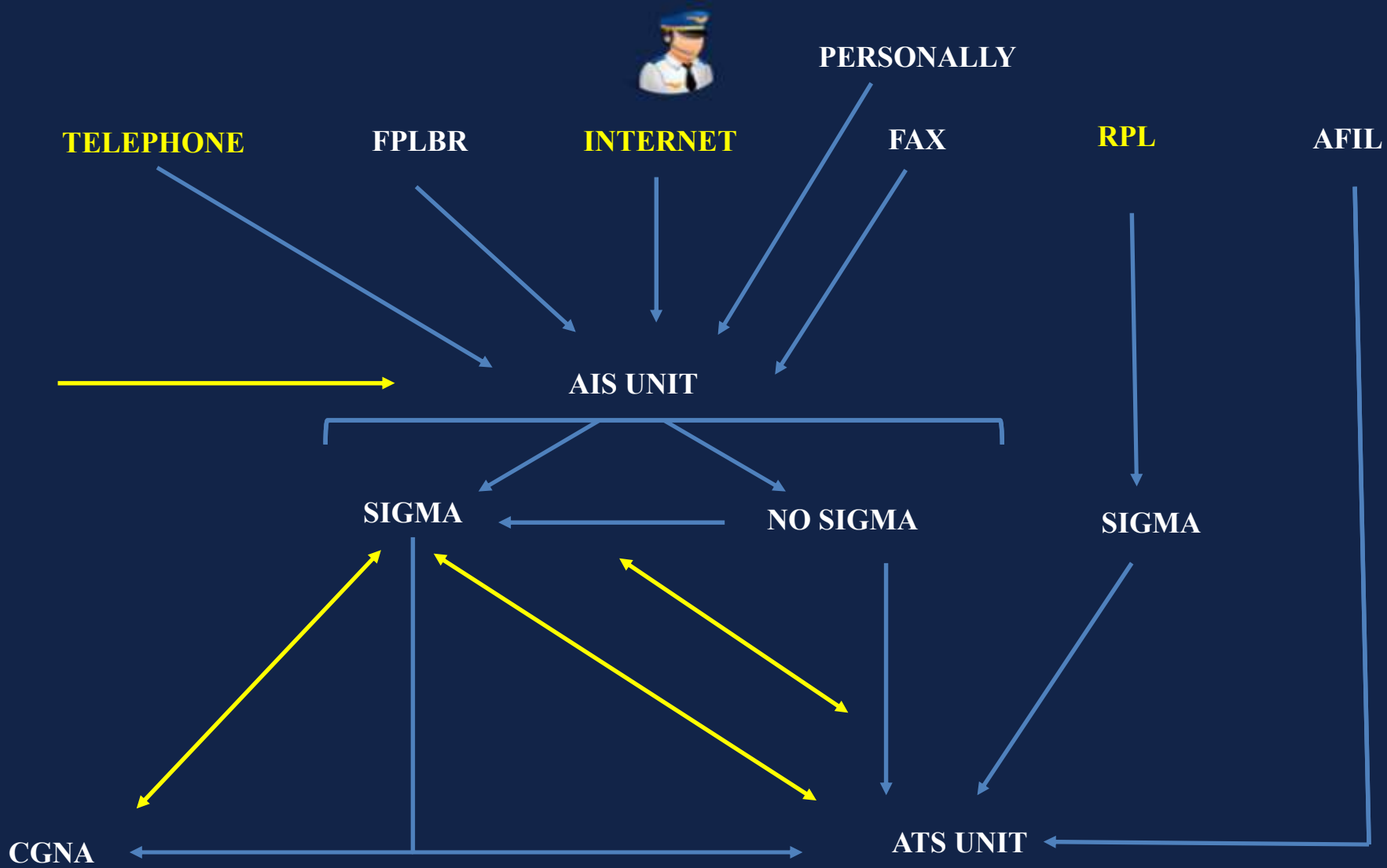


# CURRENT FLIGHT PLAN FLOW



▪ SOURCE: CGNA 2019

# CURRENT FLIGHT PLAN FLOW



# CURRENT FLIGHT PLAN FLOW



- Sending ATS Filed Flight Plan Messages and **their updates directly to national ACC through different flight intent presentation systems**, representing a potential source of syntactic and semantic errors, as well as an **obstacle to an ATFM analysis**; and



CGNA

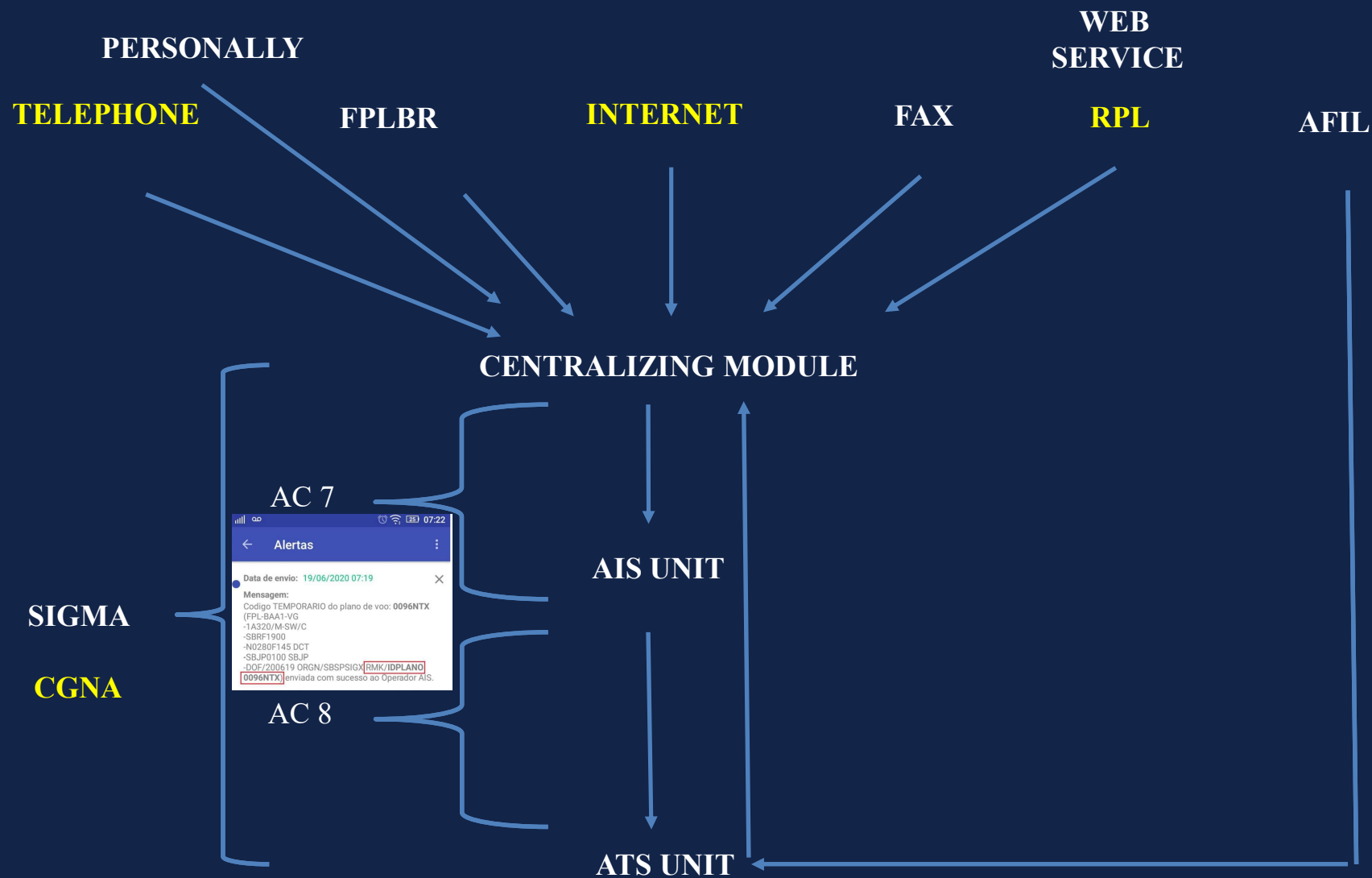


ATS UNIT

- **Additional costs** for SISCEAB in the provision of ATS and ATFM, in terms of **demand for skilled labor to correct these errors**, and in the image of DECEA, as the Central Body of the SYSTEM.



# FUTURE FLIGHT PLAN FLOW





# FUTURE FLIGHT PLAN FLOW

WEB  
SERVICE

TELEPHONE

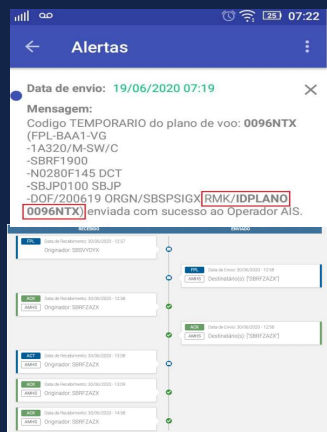
FPLBR

INTERNET

FAX

RPL

AFIL



CENTRALIZING MODULE

AIS UNIT

ATS UNIT

SIGMA

CGNA

AC 7

AC 8

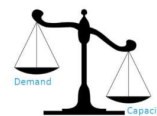
CGNA



ATS UNIT



ATFM is  
demand/capacity balancing



Departamento  
de Controle do Espaço Aéreo  
Department of Airspace Control



FORÇA AÉREA BRASILEIRA  
Asas que protegem o País



## FUTURE FLIGHT PLAN FLOW

- Optimization of the Flight Plan analysis and processing in a Centralized way, with the consequent reduction in the workload of air navigation professionals and in the loss of ATS information between the systems and the ATS Units;
- All plans will have an initially preliminary alphanumeric code, composed of 7 (seven) characters;
- This will indicate that the plan has moved to the “Sent to the AIS Unit” status.
- An 8th (eighth) character will be added to the generated preliminary code;
- It will indicate processing of the FPL message by the system at the ATC Unit;
- Optimization of the Provision of AIS, ATS and ATFM (Demand vs Capacity) as a result of the Integration of SIGMA with SAGITARIO and TATIC.

# TRANSITION

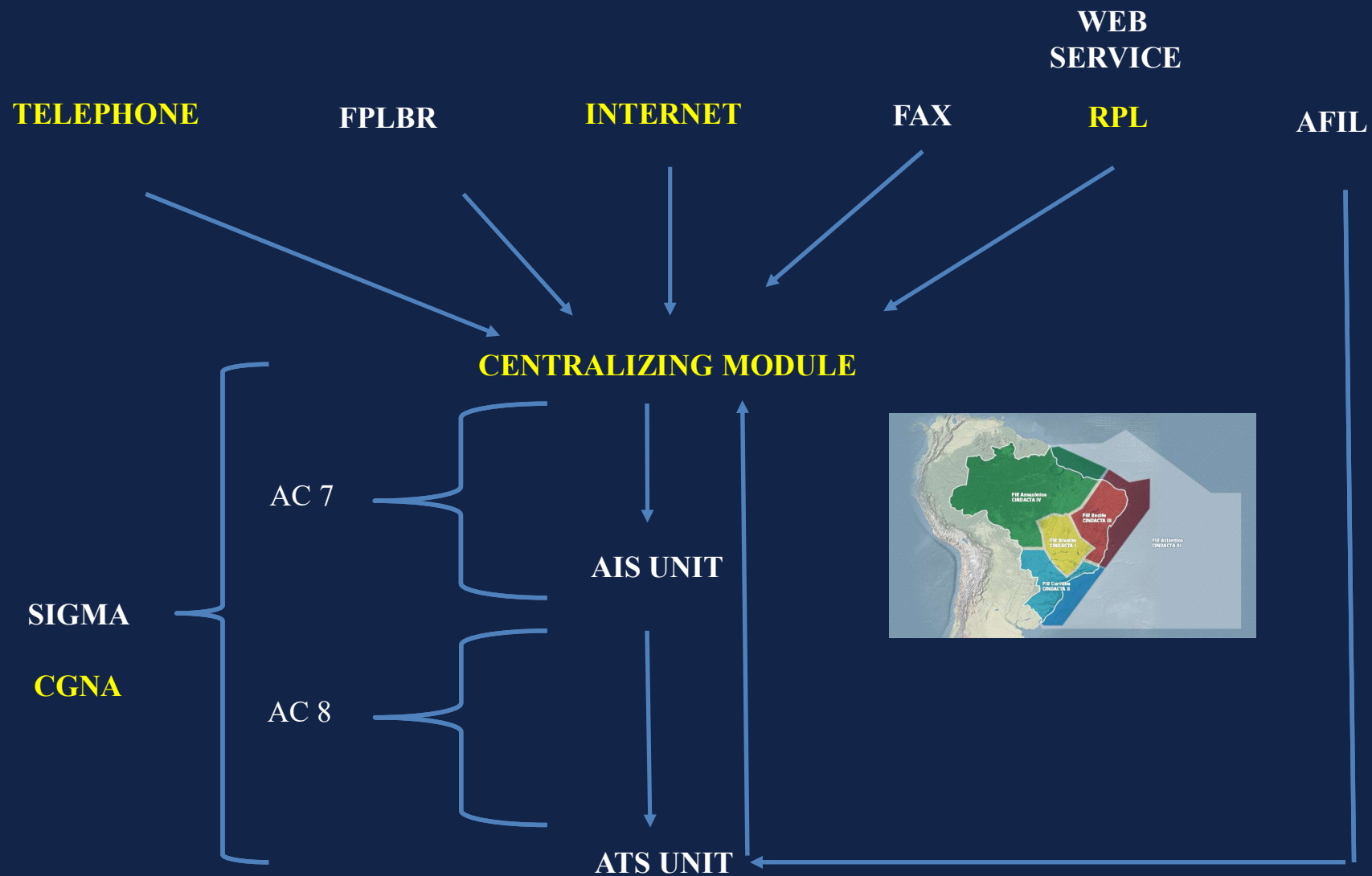


- Planning of the SIGMA / SAGITARIO / TATIC integration
  - 1<sup>st</sup> - Recife FIR;
  - 2<sup>nd</sup> - Atlântico FIR;
  - 3<sup>rd</sup> - Amazônica FIR;
  - 4<sup>th</sup> - Curitiba FIR; and
  - 5<sup>th</sup> - Brasília FIR.





# FUTURE FLIGHT PLAN FLOW



# TRANSITION



## ❑ SIGMA / SAGITARIO / TATIC INTEGRATION

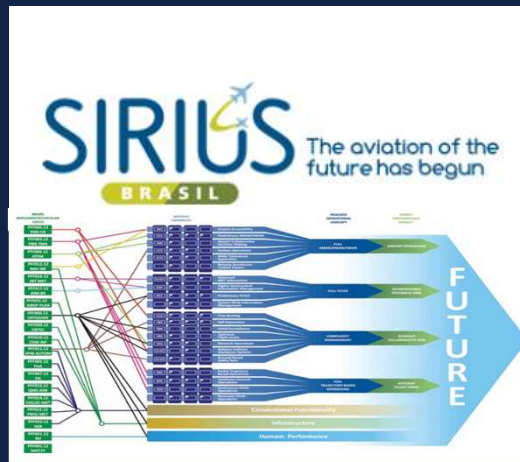
- During the implementation and national integration, the plan forwarding addresses will remain unchanged; and
- The system itself will make the necessary conversions by forwarding all plans to the SIGMA - centralizing module.



## ❑ AFTER INTEGRATION OF ALL FIR

- AIC publication;
- The address will be updated, following the steps set out in the regulation, to **SBRJZPZX**; and
- The system will **reject messages addressed to other recipients**, recognizing **only the single national address**.

# CONCLUSION



PERFORMANCE

HARMONIZED

INTEGRATED

INTEROPERABILITY

## Projeto: FLIGHT PLAN CENTRALIZATION PROJECT

# TOPICS COVERED



- CONTEXTUALIZATION;**
- PROJECT OBJECTIVES;**
- SYSTEMS AND 5 FIR;**
- CURRENT FLIGHT PLAN FLOW;**
- FUTURE FLIGHT PLAN FLOW;**
- TRANSITION; and**
- CONCLUSION**

# PURPOSE



□ TO PRESENT THE FLIGHT PLAN CENTRALIZATION PROJECT.





**Departamento  
de Controle do Espaço Aéreo**  
Department of Airspace Control



Davi Monteiro de Medeiros – Capt  
Deputy of the Air Traffic Service Sectors – ATS  
Air Traffic Management Planning Section  
TEL.: +55 21 2101-6017 / email [davidmm@decea.gov.br](mailto:davidmm@decea.gov.br)



# END



**Departamento  
de Controle do Espaço Aéreo**  
Department of Airspace Control



**FORÇA AÉREA BRASILEIRA**  
*Asas que protegem o País*



[WWW.DECEA.GOV.BR](http://WWW.DECEA.GOV.BR)