



AIR SPACE CONTROL DEPARTMENT - DECEA

SBAS BRAZILIAN PLAN AND ACTIVITIES

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Air Space Control Department - DECEA

- **Provides the Aeronautic Telecommunications in Brazil, including the implementation of new CNS/ATM systems.**
- **Follows the ITU and ICAO Recommendations.**

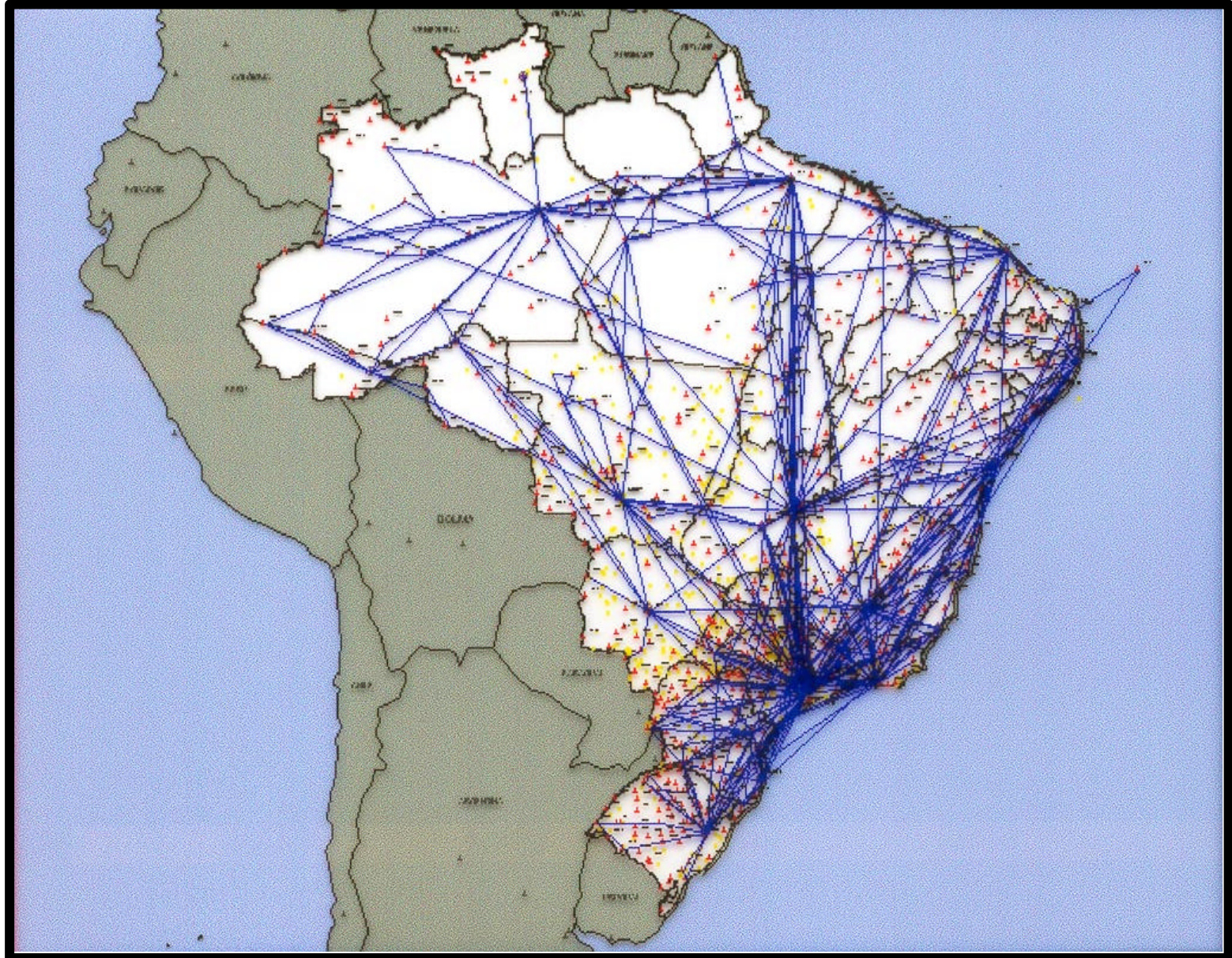


SBAS and GBAS Implementation

- **Using the available technology is possible to start the transition to CNS/ATM by “N”, without conflict on existing navigation systems.**

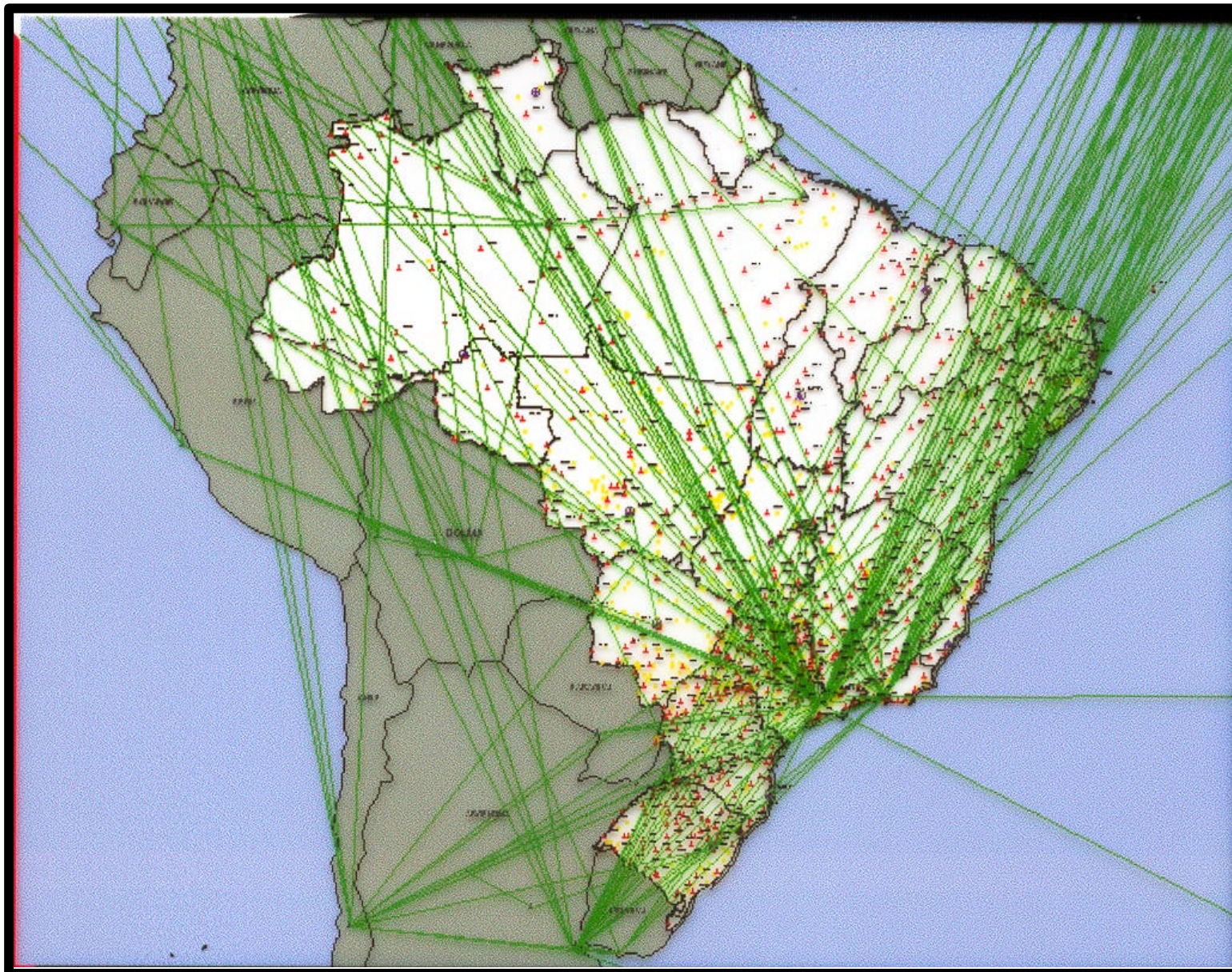


Features of Brazilian air space - National routes



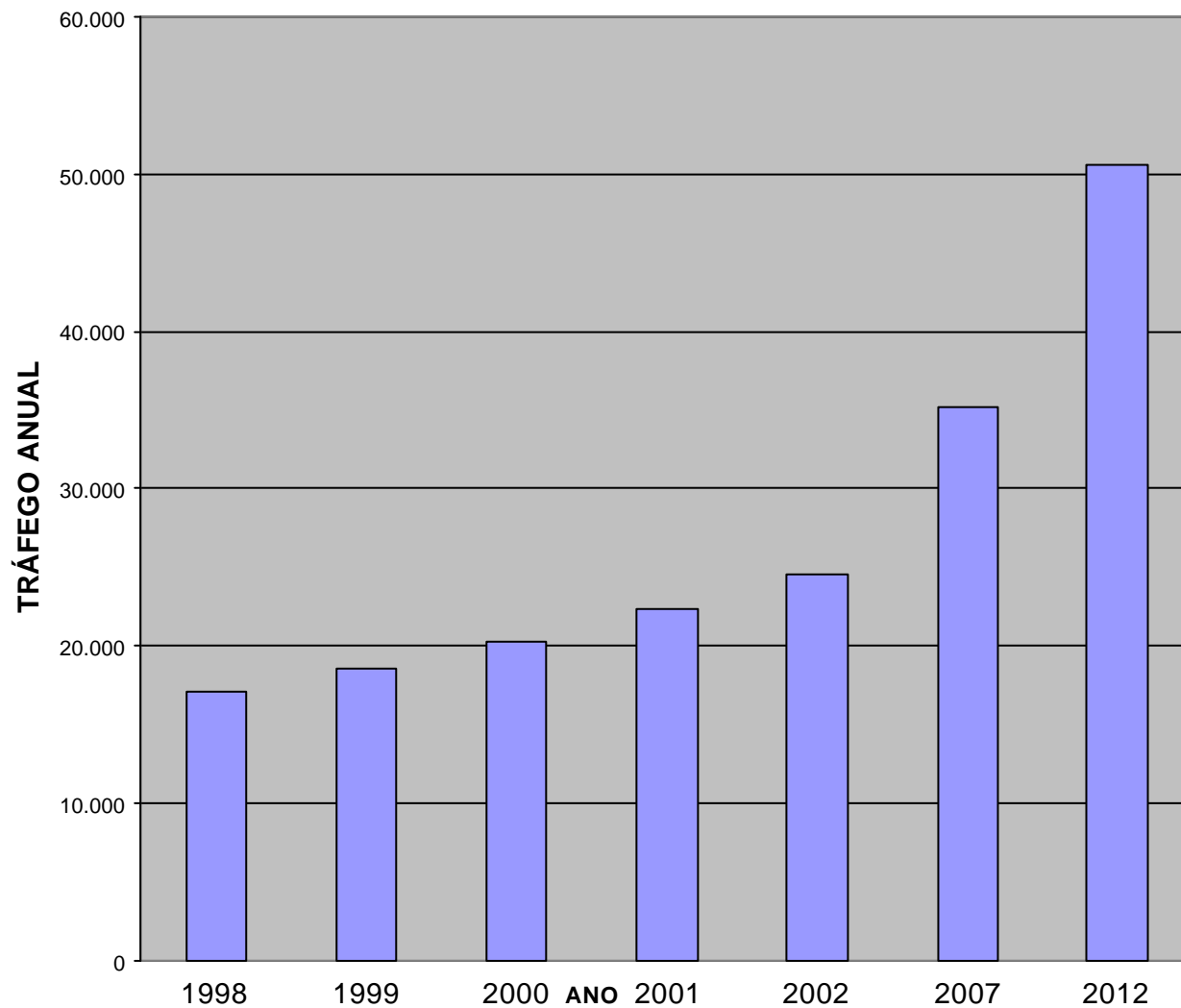


Features of Brazilian air space - International routes





Estimated demand to EURO/SAM routes





Items to Study

- **Ionosphere anomalies**
- **Scintillation**
- **Costs**
- **Benefits**
- **Short period to develop a solution or conclude to use the system with limitations.**



Strategic Decision

- **Create a task group: Group Ionosphere - CNS/ATM Comission**

3 Subgroups

- **Subgroup 1 - Scintillation**

Coordinator: Corbelli

- **Subgroup 2 - Operation Requirements**

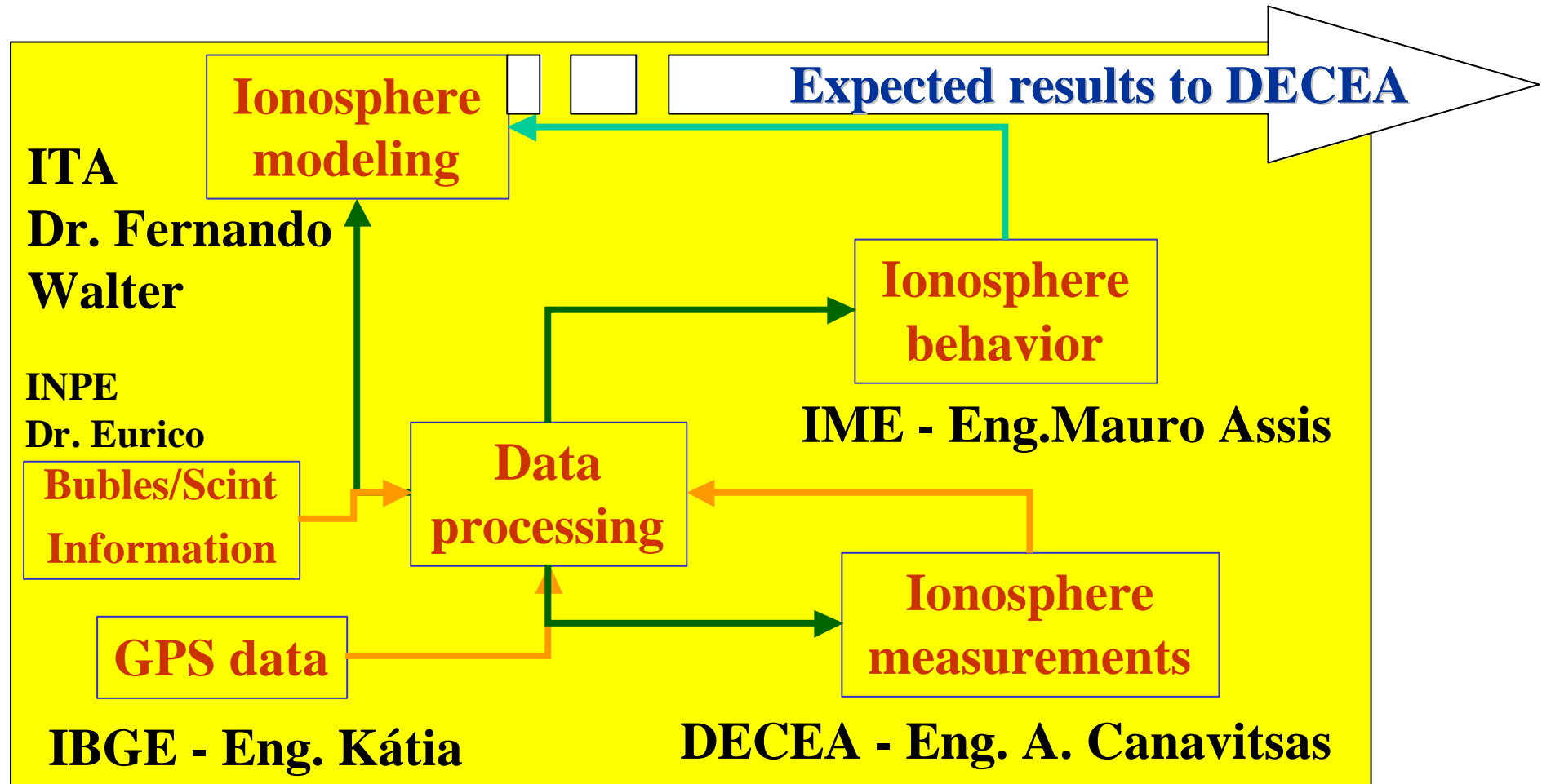
Coordinator: Carlos Cirilo

- **Subgroup 3 - Ionospheric Modelling**

Coordinator: Ângelo Canavitsas



Subgroup 3 - Ionospheric Modelling Preliminary Basic Structure





Interests

- **To provide a continuing forum with technical and operational sectors working on characterizing the impact of equatorial ionosphere on SBAS and try to find ways to deal with.**
- **To do regional tests, using the available resources.**
- **To cooperate with SBAS IONO studies.**
- **To support an effective Brazilian participation.**



Questions

- **Is there any organization work on ionospheric modeling to south America or to Brazil?**
- **Is it acceptable to the group (SBAS IONO) to have a particular solution to South America or other region?**
- **Would the group accept to use a software developed by Brazilian experts on SBAS?**
- **Can we work together interchanging technical information?**
- **Does any organization wants to participate on the Brazilian Group?**



Conclusion

- **Brazil is asking for SBAS IONO cooperation. Suggestions are welcome.**
- **The studies and tests that will be performed in Brazil will started using the available resources.**
- **Brazil will have his own strategic decision to face the ionosphere problem on August, 2003.**