International Civil Aviation Organization

REGIONAL WORKSHOP ON AMHS

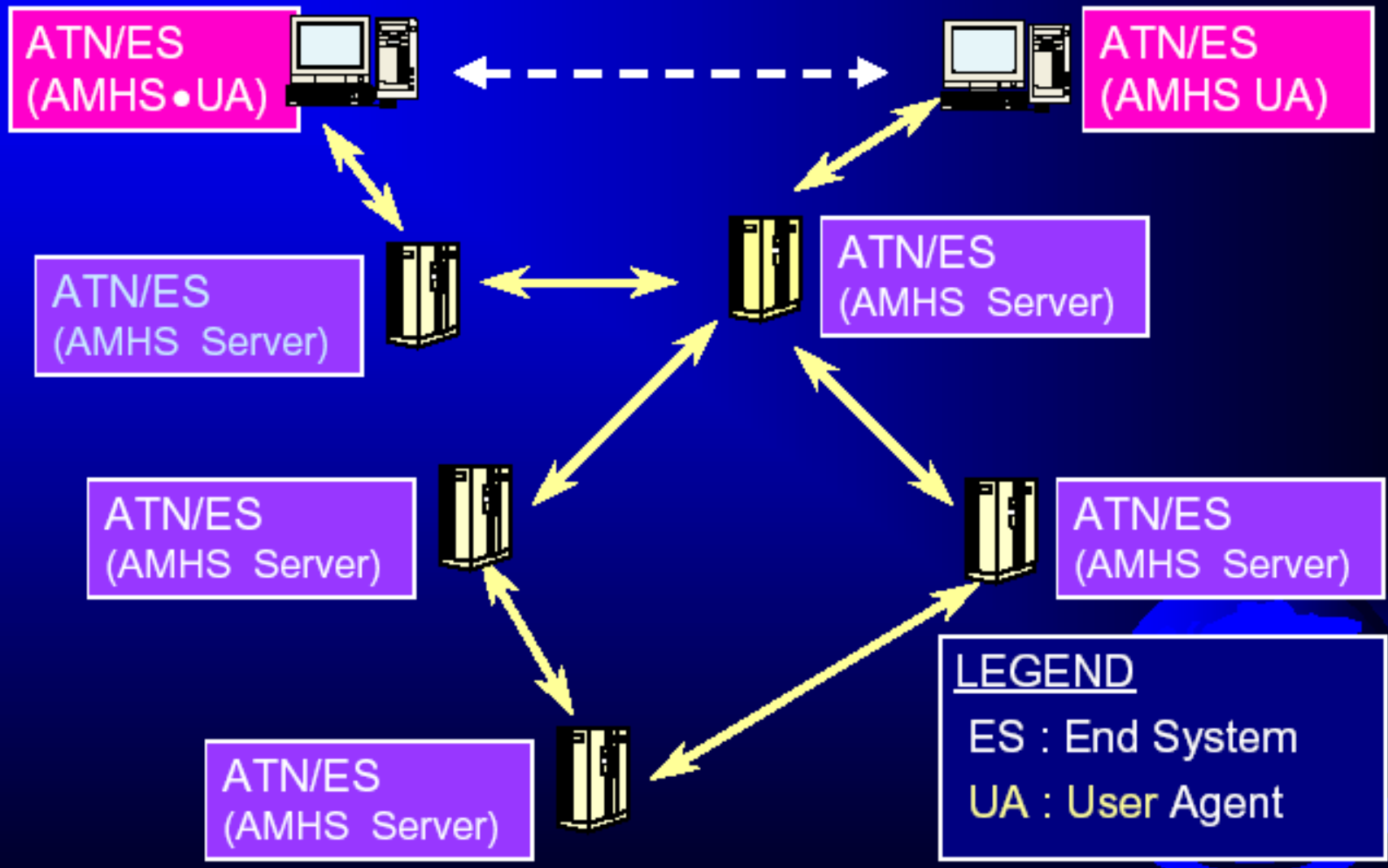
Overview

(Dakar, 28-29 May 2013)

Outline

- AMHS Servers and User Agents
- AMHS Requirements
- AFTN Service to ATN Service
- AFTN/AMHS Gateway
- AMHS Messaging

AMHS Servers & User Agents



AMHS Standards Basis

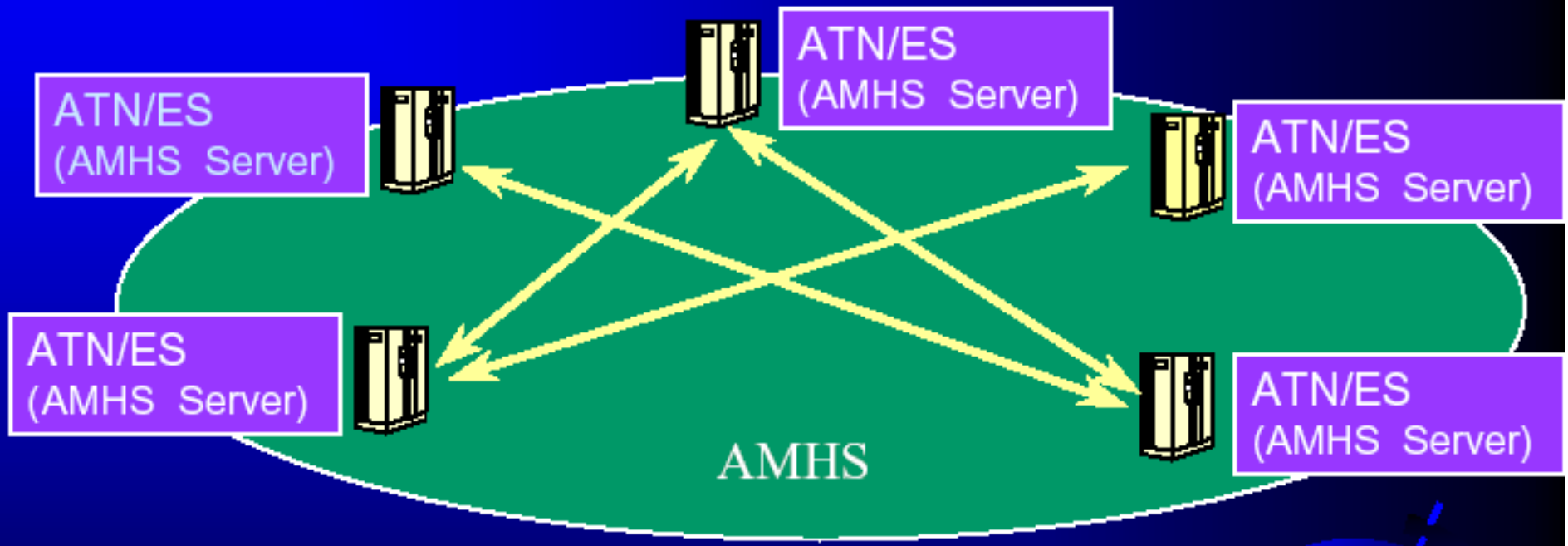
- CCITT/ITU-T X.400 MHS(1992), ISO/IEC 10021 MOTIS (1990)
- Store-and-forward message delivery
- Basic Service; Adapted to Aeronautical Environment, especially AFTN Functionality
- Extended Service; Security, Directory Services, System Management etc. Enhancements

AMHS Requirements

- Provide a messaging service over the ATN
- Deliver a level of service at least equivalent to the that of the AFTN
- Allow transition from AFTN to ATN
  - AMHS users to/from AMHS users
  - AMHS users to/from AFTN users
  - AFTN users to/from AFTN users via ATN

➡ Gateway between AMHS and AFTN

Messaging among Servers



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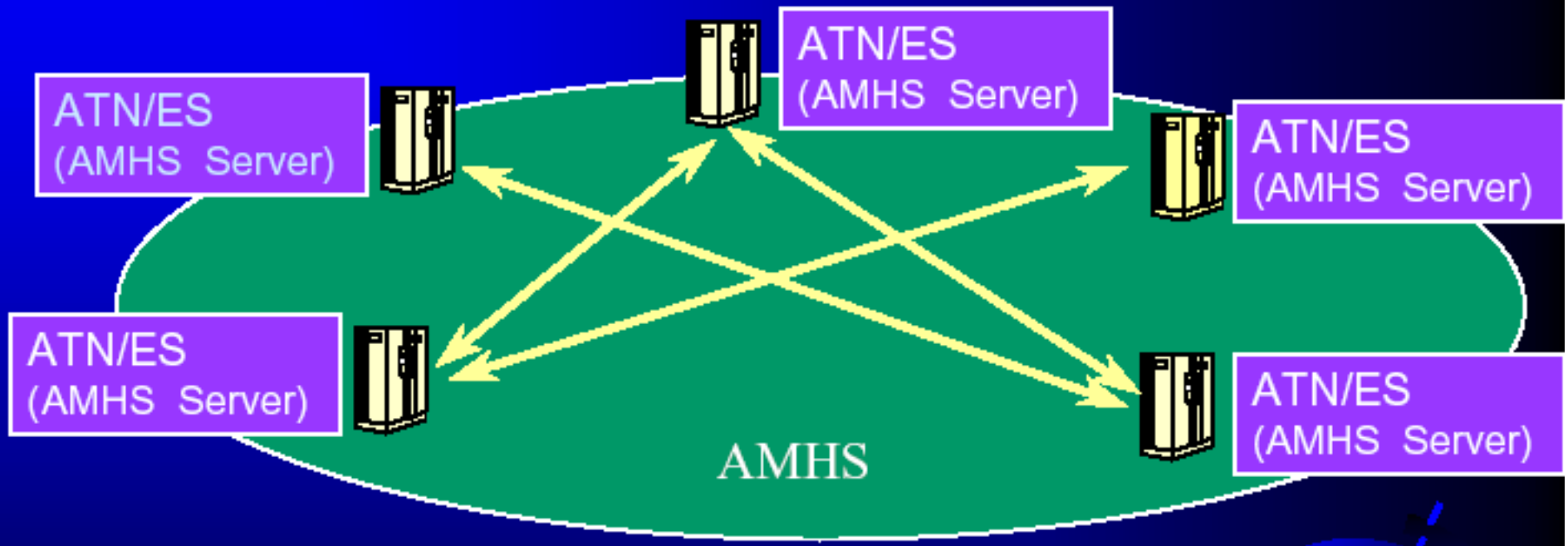
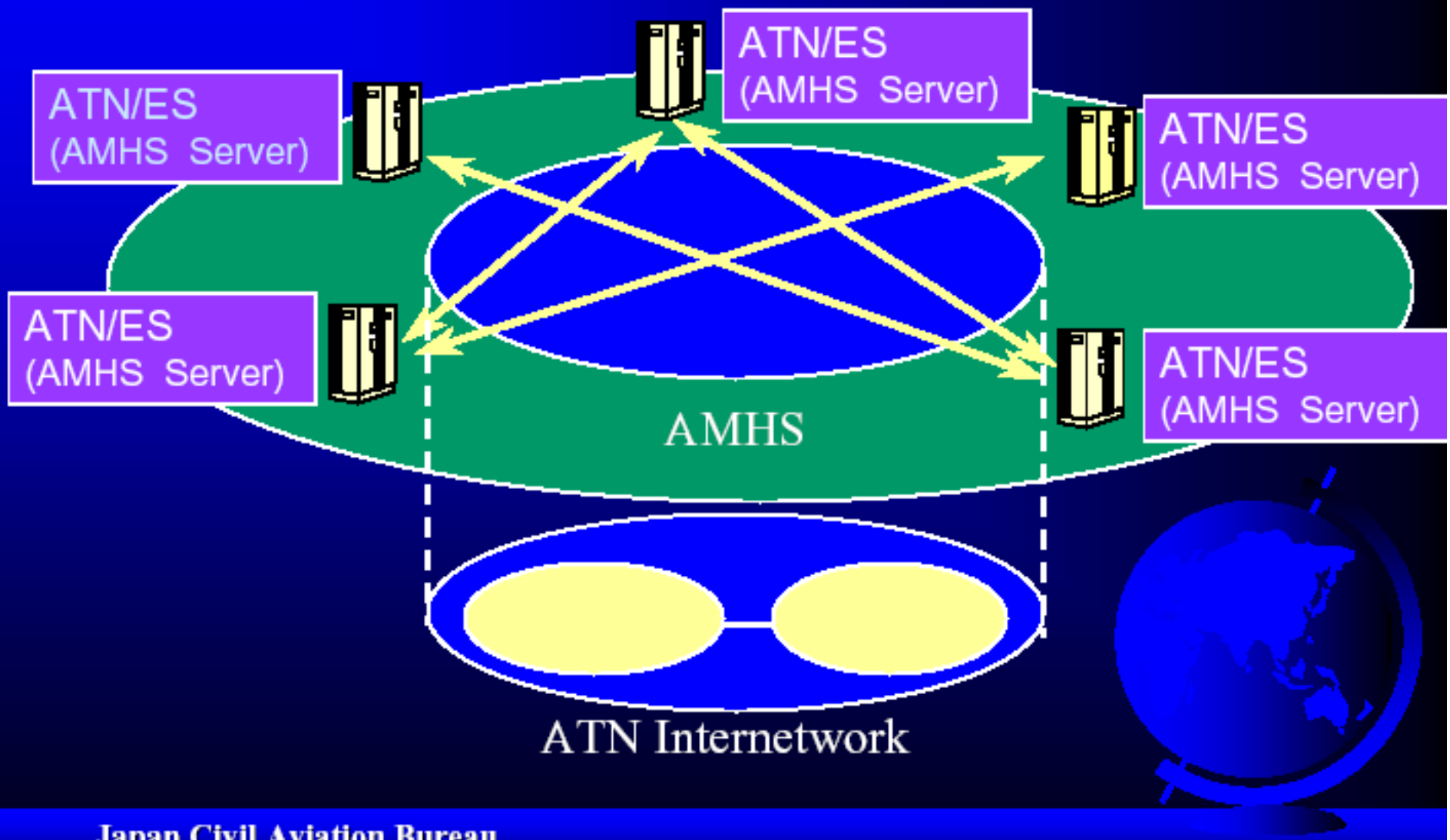
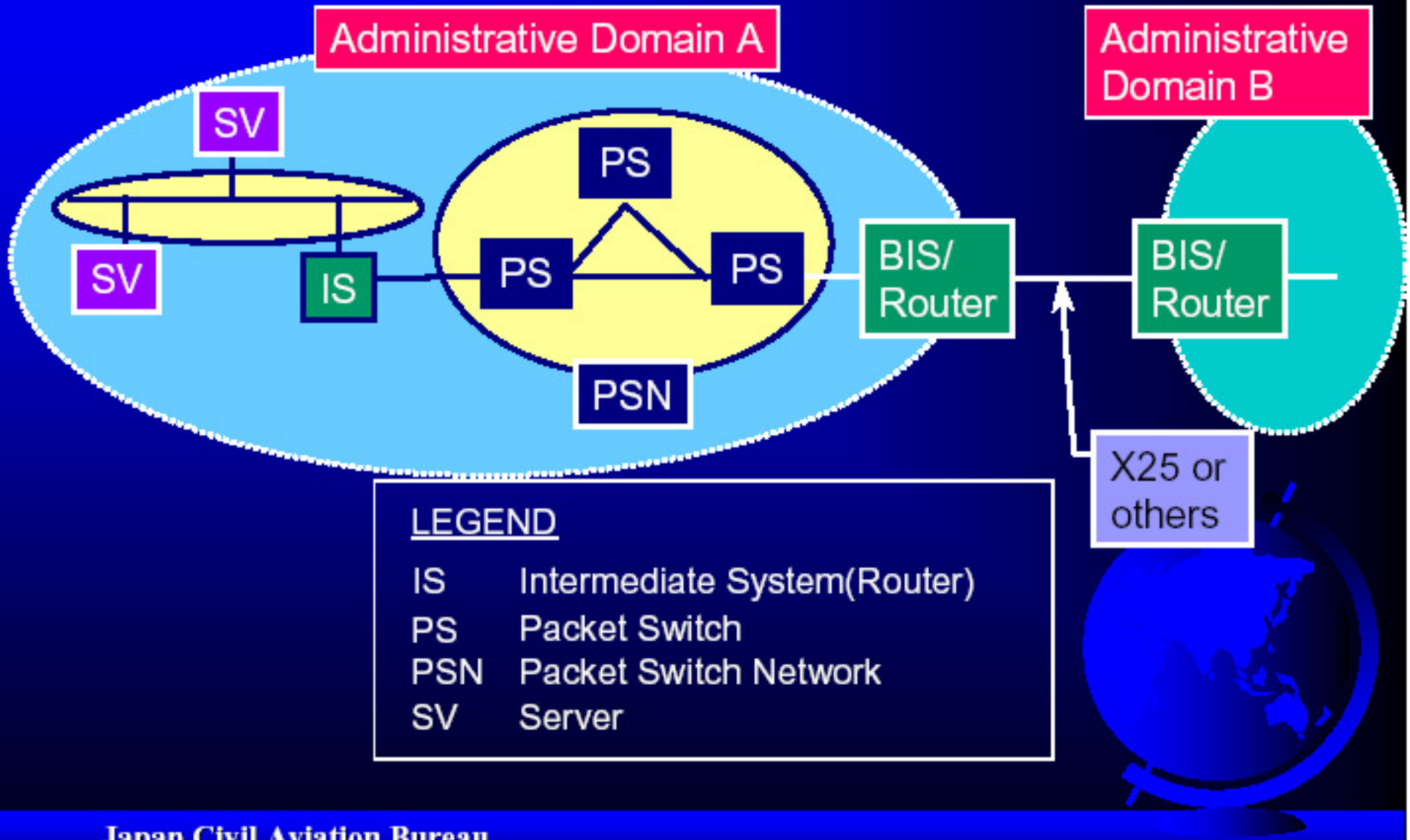


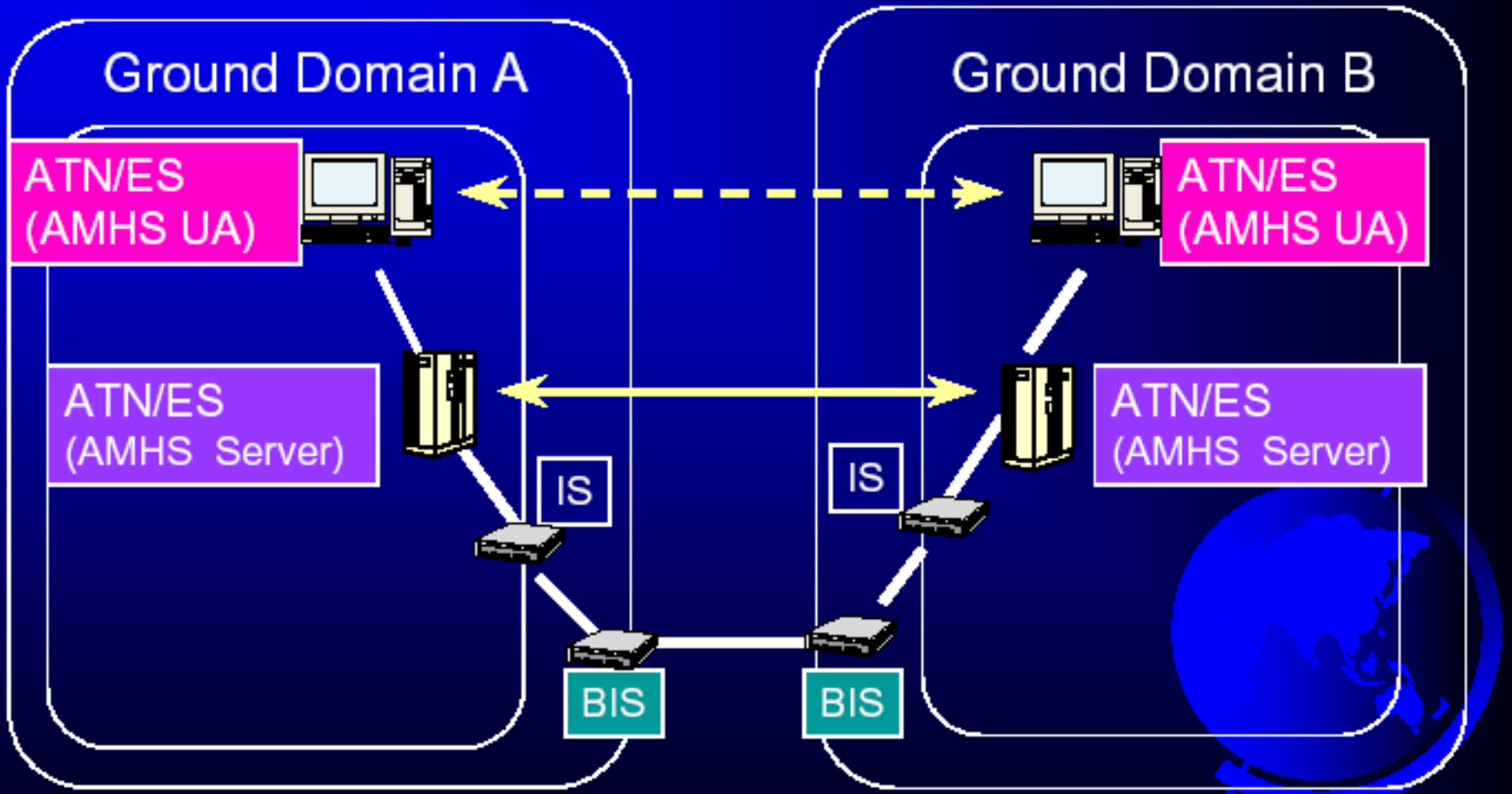
AMHS and ATN Internetwork



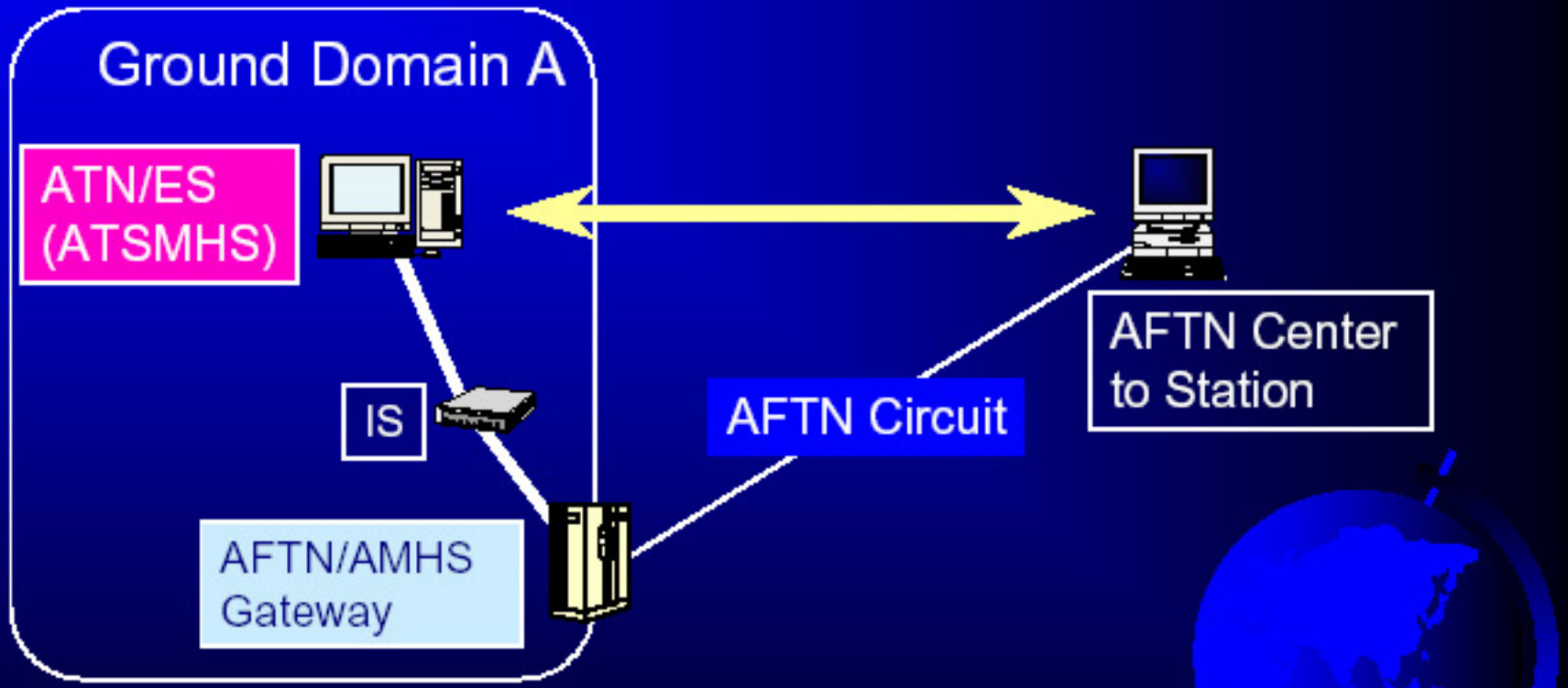
Inter-Domain Connection



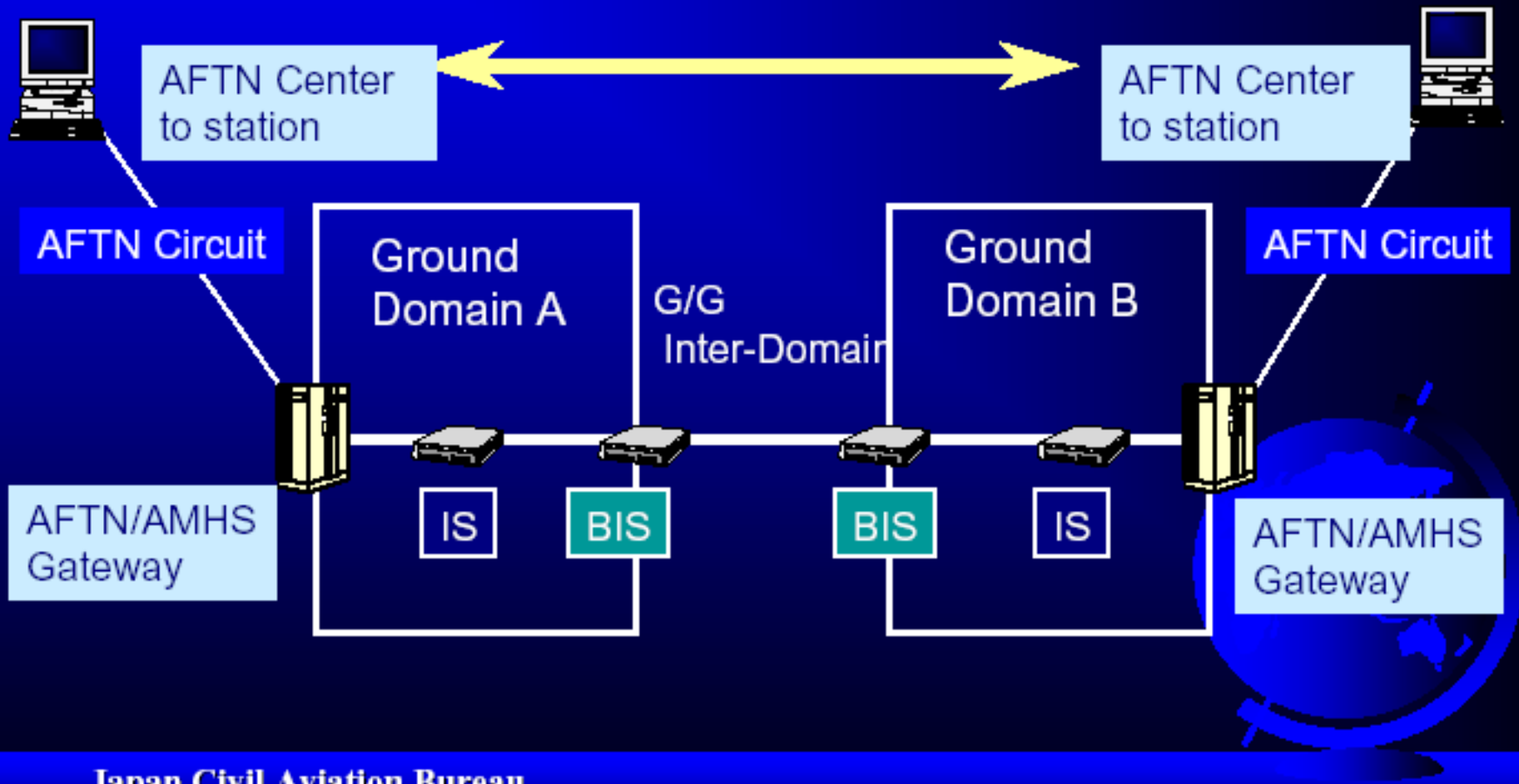
AMHS User-to-AMHS User



AMHS User-to-AFTN User via AFTN/AMHS Gateway



AFTN User-to- AFTN User via AFTN/AMHS Gateway and ATN Domains



AFTN Service to ATN/AMHS Service

AFTN

ATN

AFTN
messaging services

AMHS
messaging services

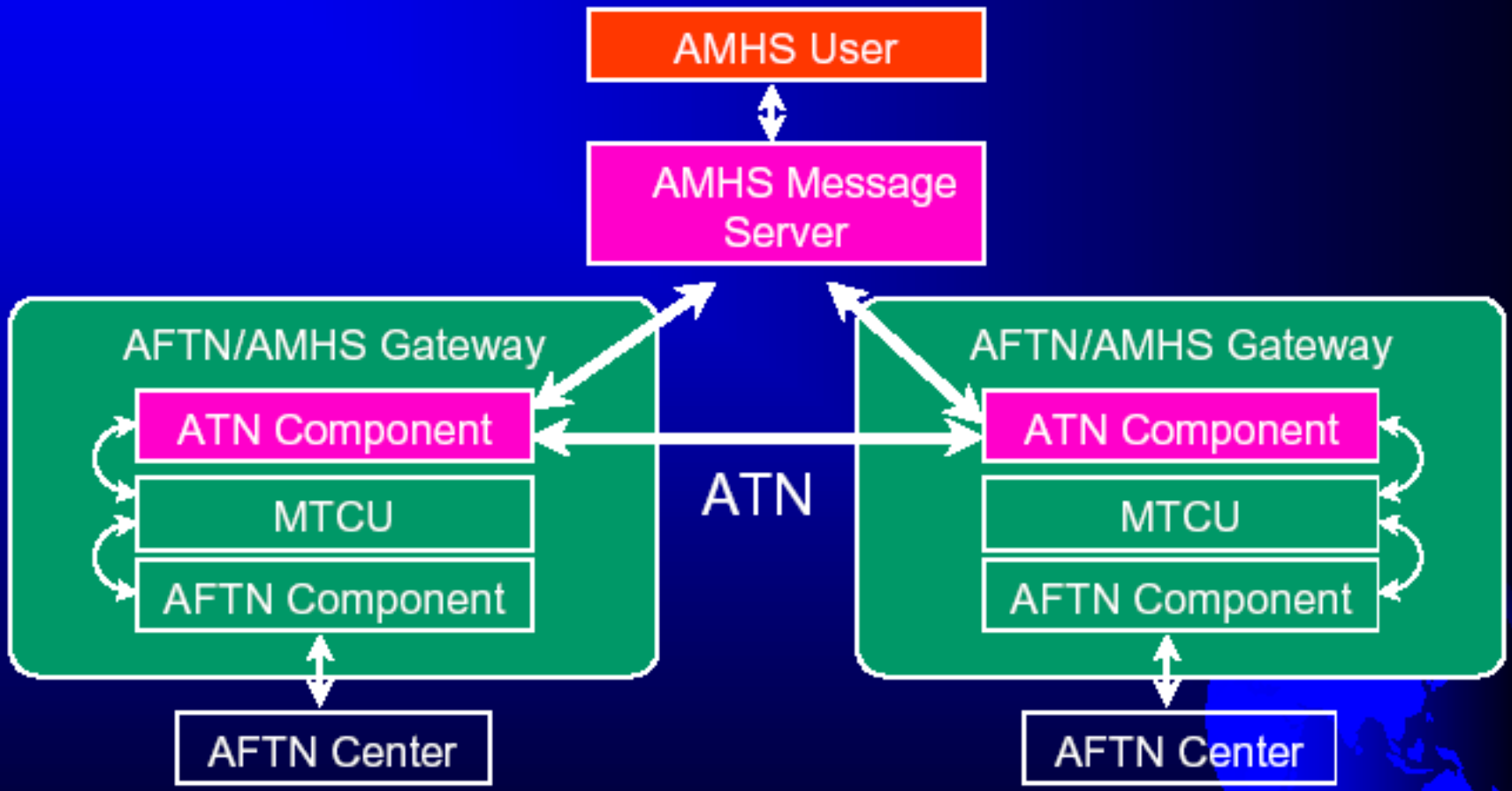
Extended Service
e.g. AIS Messaging,
Weather
(to be defined)

AFTN/AMHS Gateway

- Allow Transition from AFTN to ATN
- AFTN and ATN/AMHS co-existence

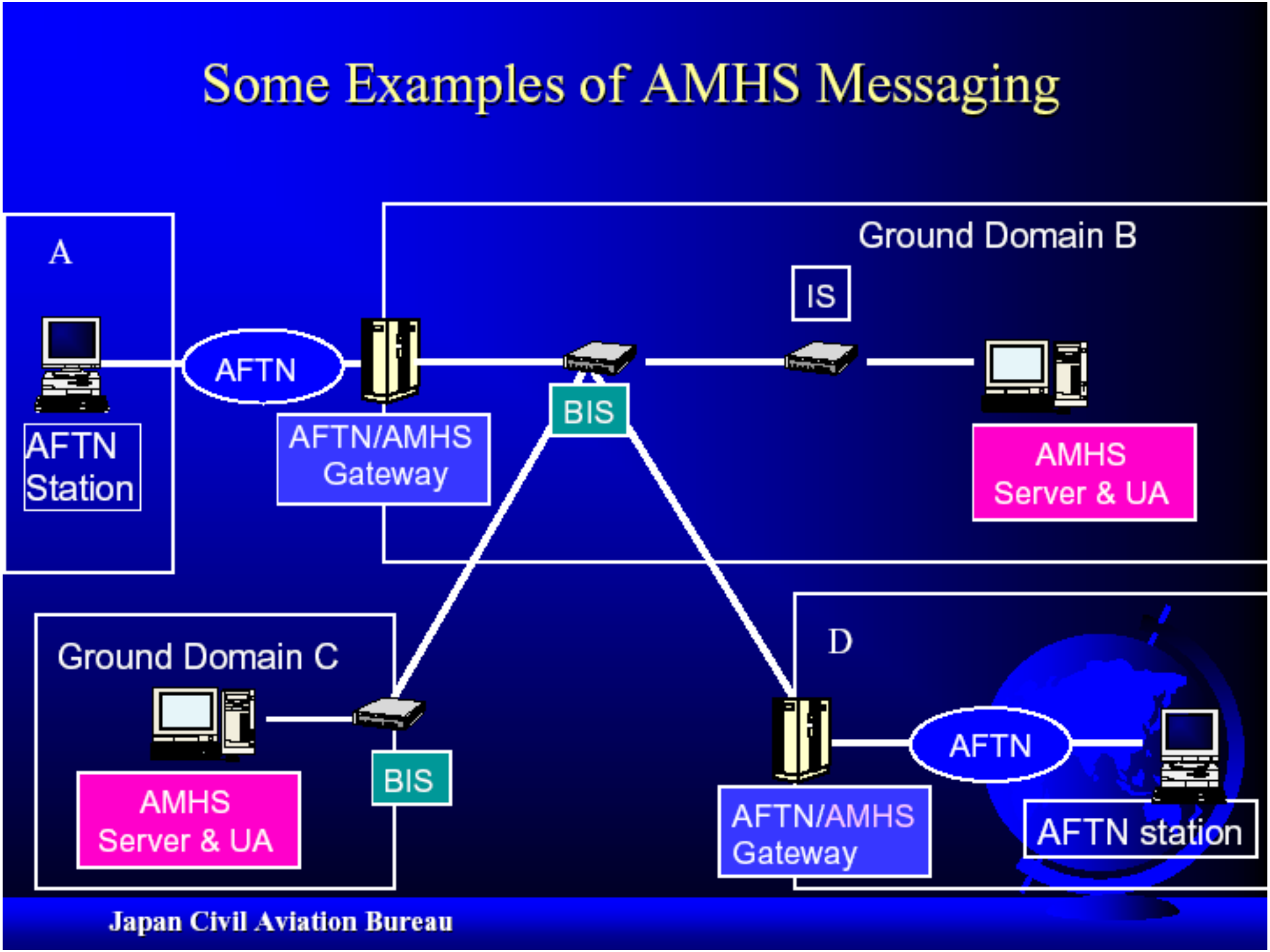
- AFTN/AMHS gateway : AFTN messages are converted to ATSMHS messages,or vice versa. It provides inter-working between AFTN and ATN at the message level.

AFTN/AMHS Gateways (continued)



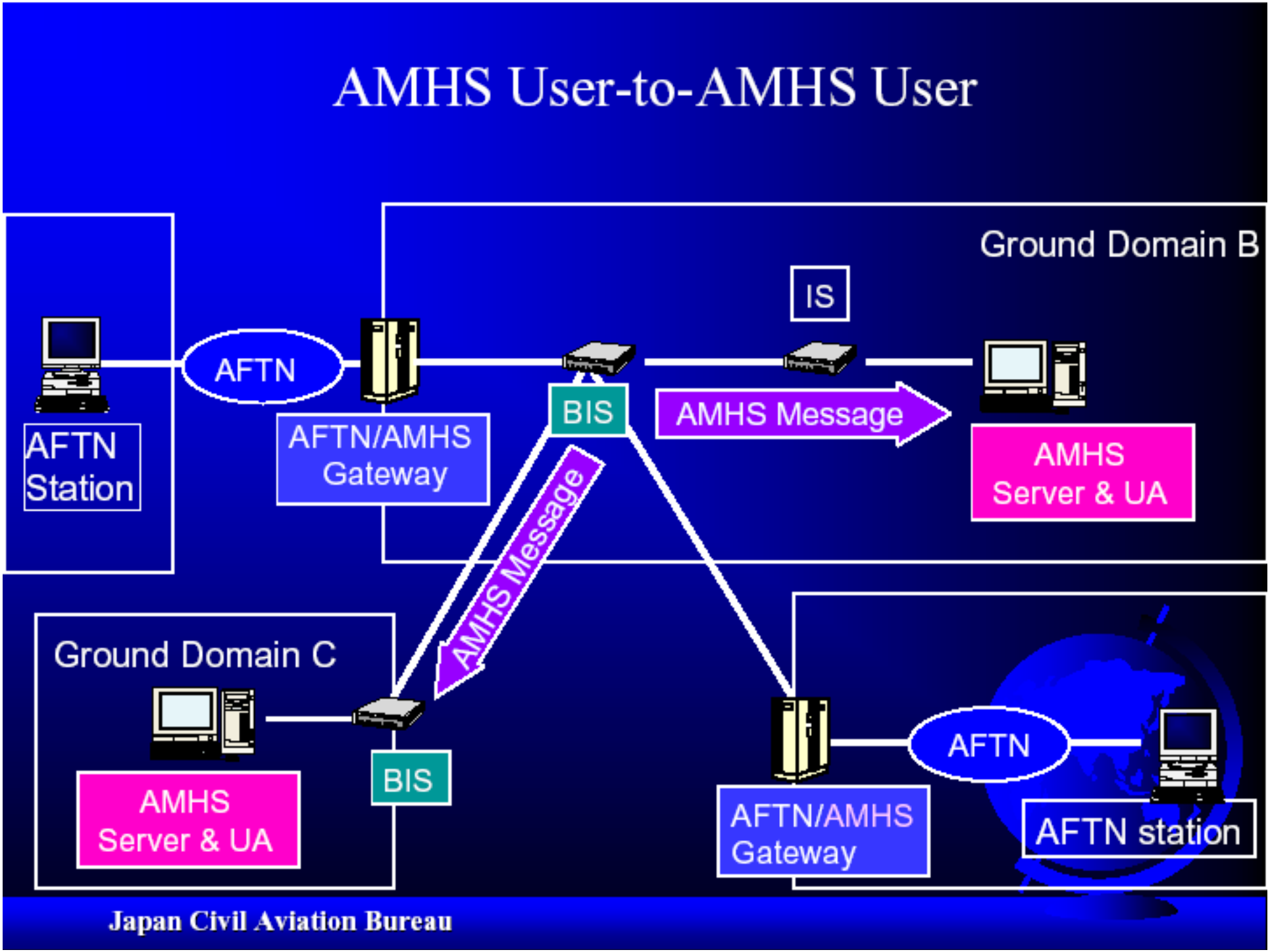
MTCU: Message Transfer Control Unit

Some Examples of AMHS Messaging



Japan Civil Aviation Bureau

AMHS User-to-AMHS User



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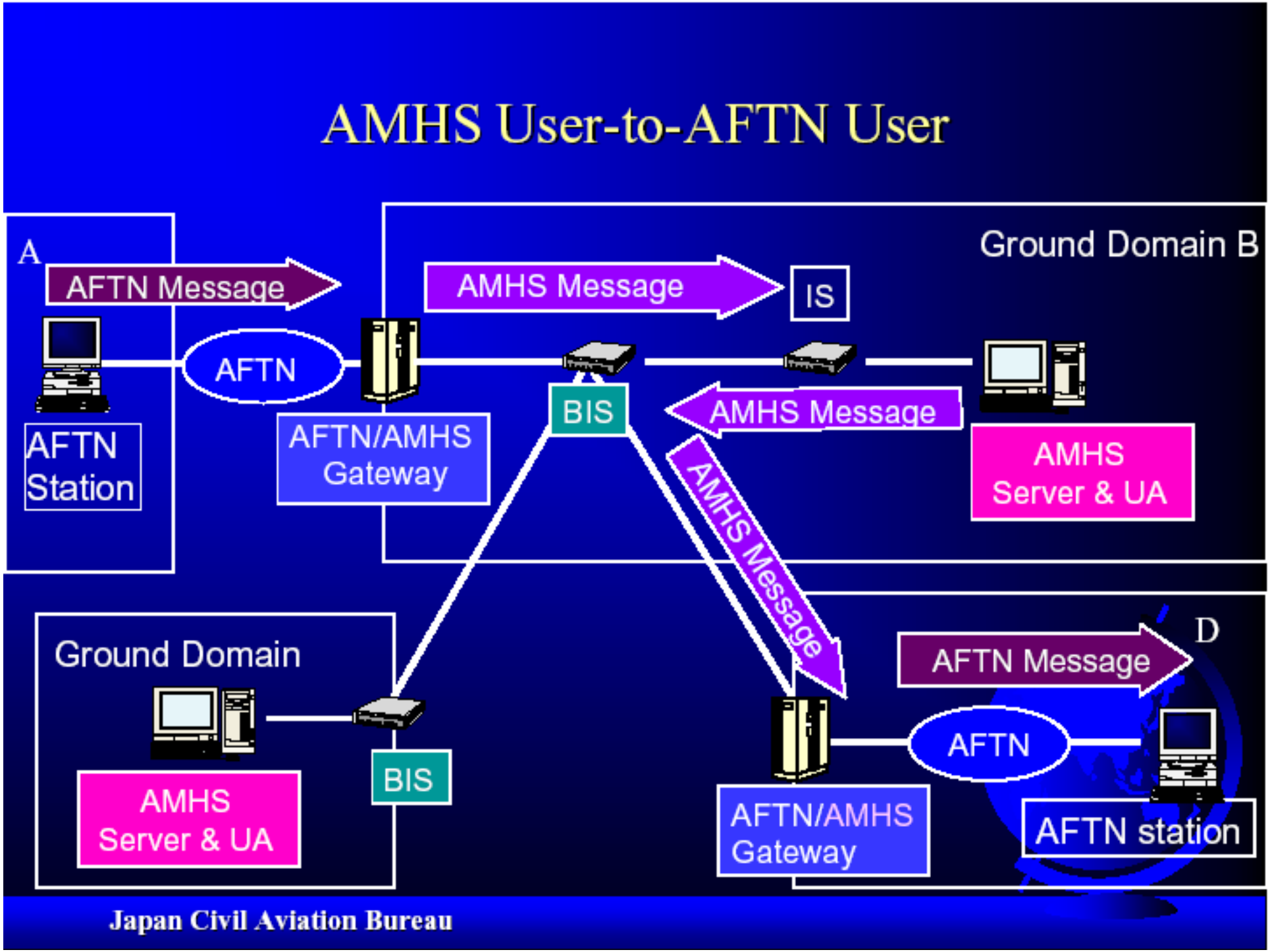
AMHS User-to-AFTN User
A
AFTN Message
AFTN
AFTN Station
AFTN/AMHS Gateway
AMHS Message
IS
BIS
Ground Domain B
AMHS Message
AMHS Server & UA
AMHS Message
Ground Domain
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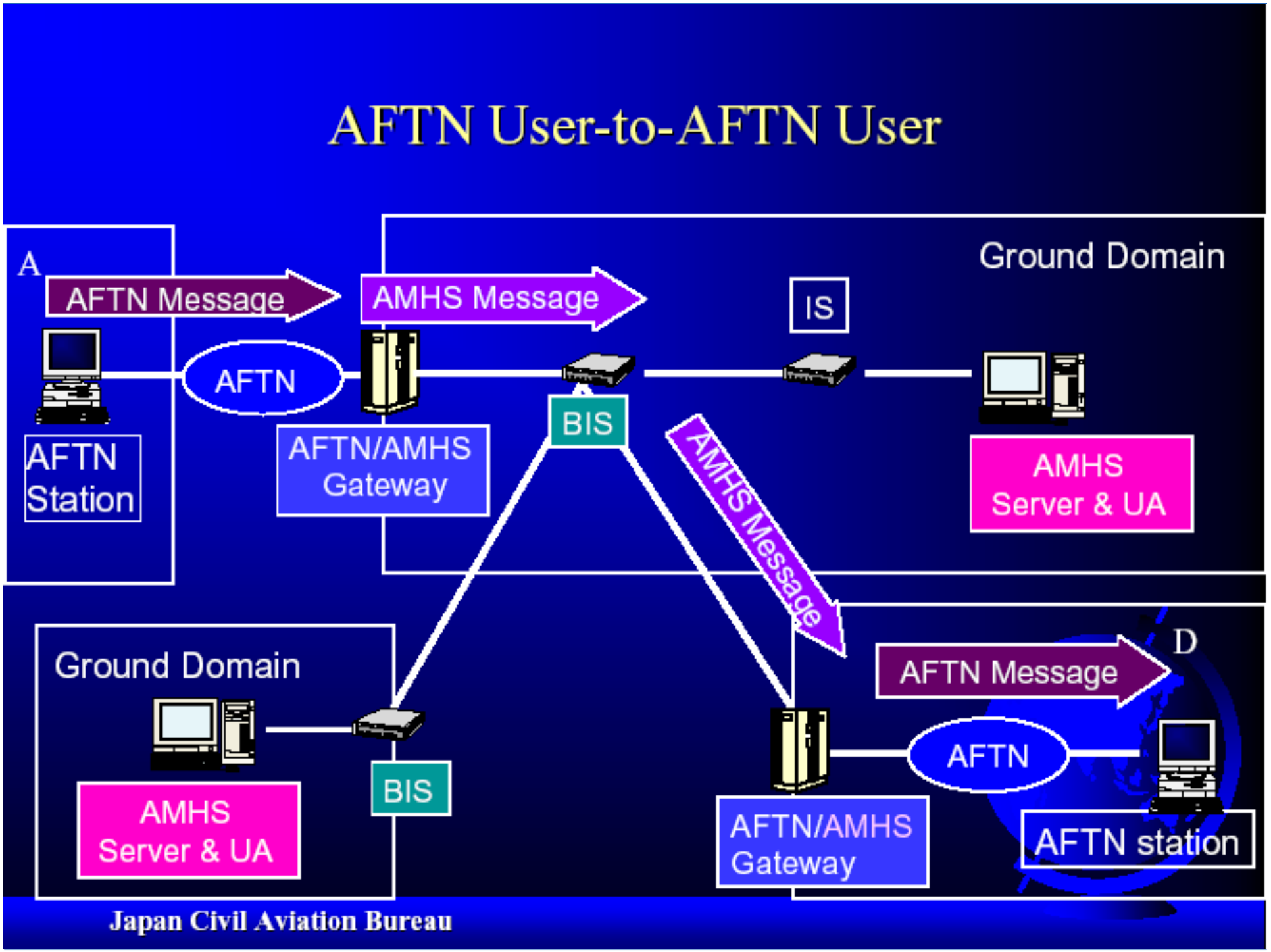
BIS
D
AFTN Message
AFTN
AFTN station
AFTN/AMHS Gateway
Japan Civil Aviation Bureau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Questions?

Thank you