



International Civil Aviation Organization

ATN Seminar and Third ATN Transition Task Force Meeting

Singapore, 26-30 March 2001

Agenda Item 3: ATN Ground – Ground Application

AMHS (ATS MESSAGE HANDLING SYSTEM)

(Presented by Japan)



AMHS(ATS Message Handling System)

ATN Seminar

Singapore, March 26-27,2001

Tetsuo Mizoguchi

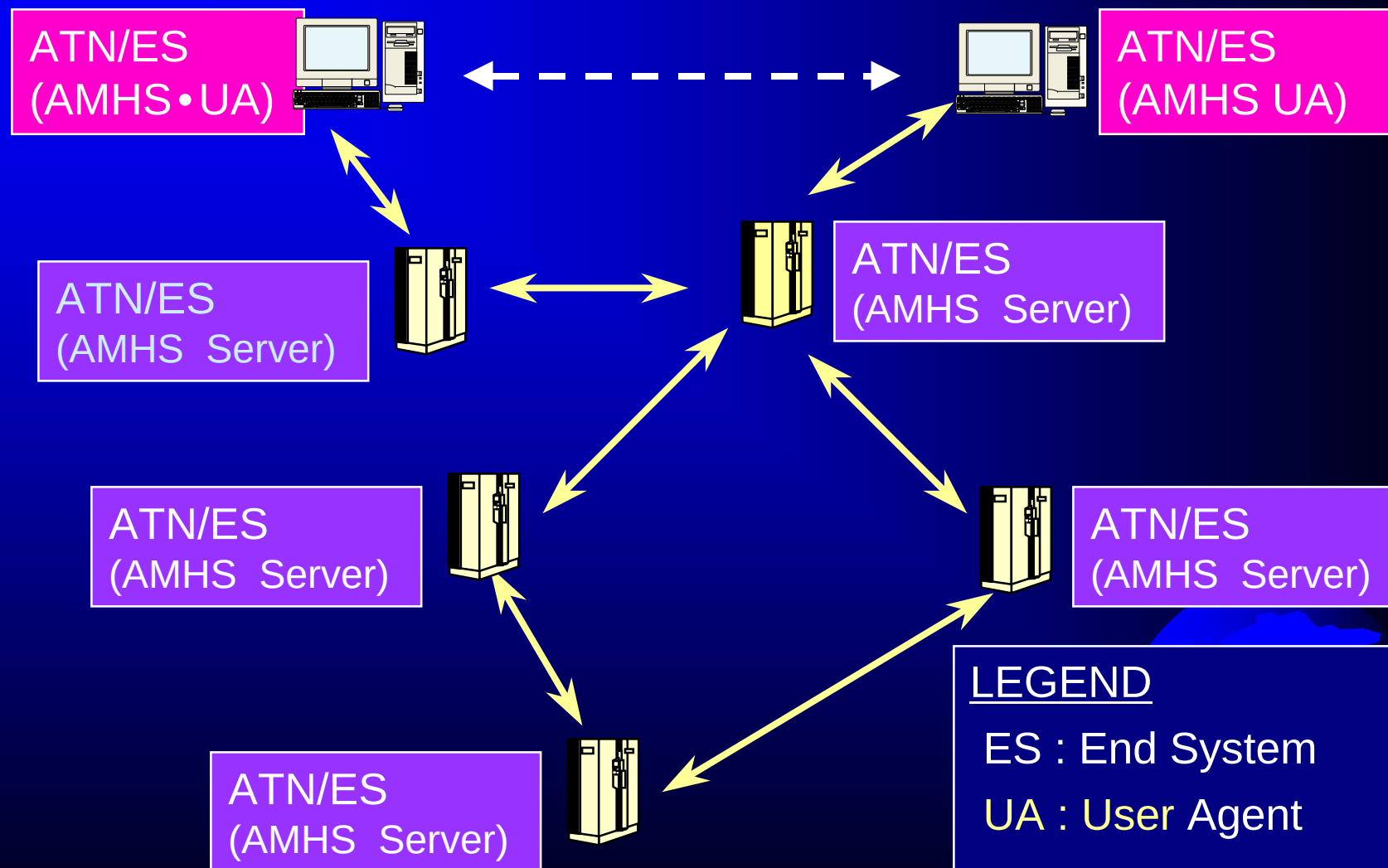
Japan

Table of Contents

- ❖ AMHS Servers & 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

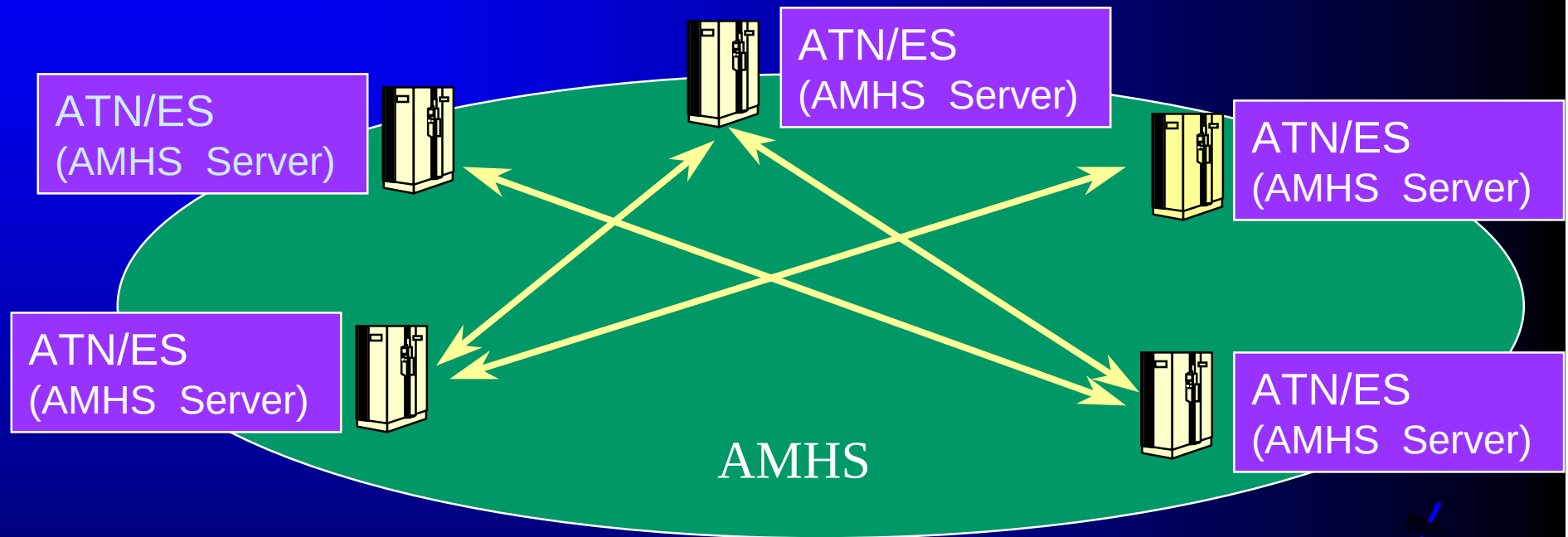


AMHS Requirements

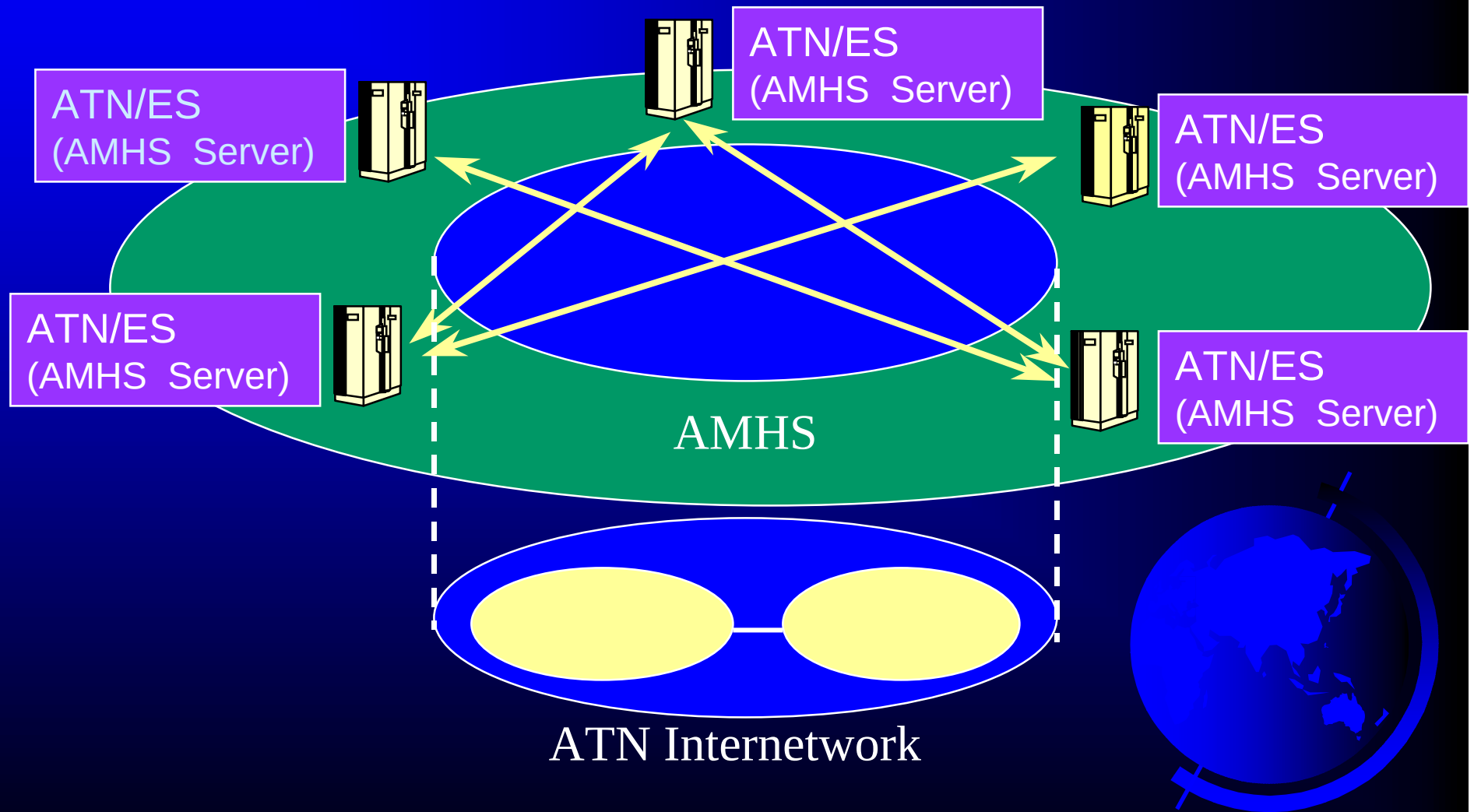
- ❖ Provide a messaging service over the ATN
 - ❖ Deliver a level of service at least equivalent to the that of the AFTN
 - ❖ Allow transition from AFTN to ATN
 - AMHS users to/from AMHS users
 - AMHS users to/from AFTN users
 - AFTN users to/from AFTN users via ATN
- ➡ Gateway between AMHS and AFTN



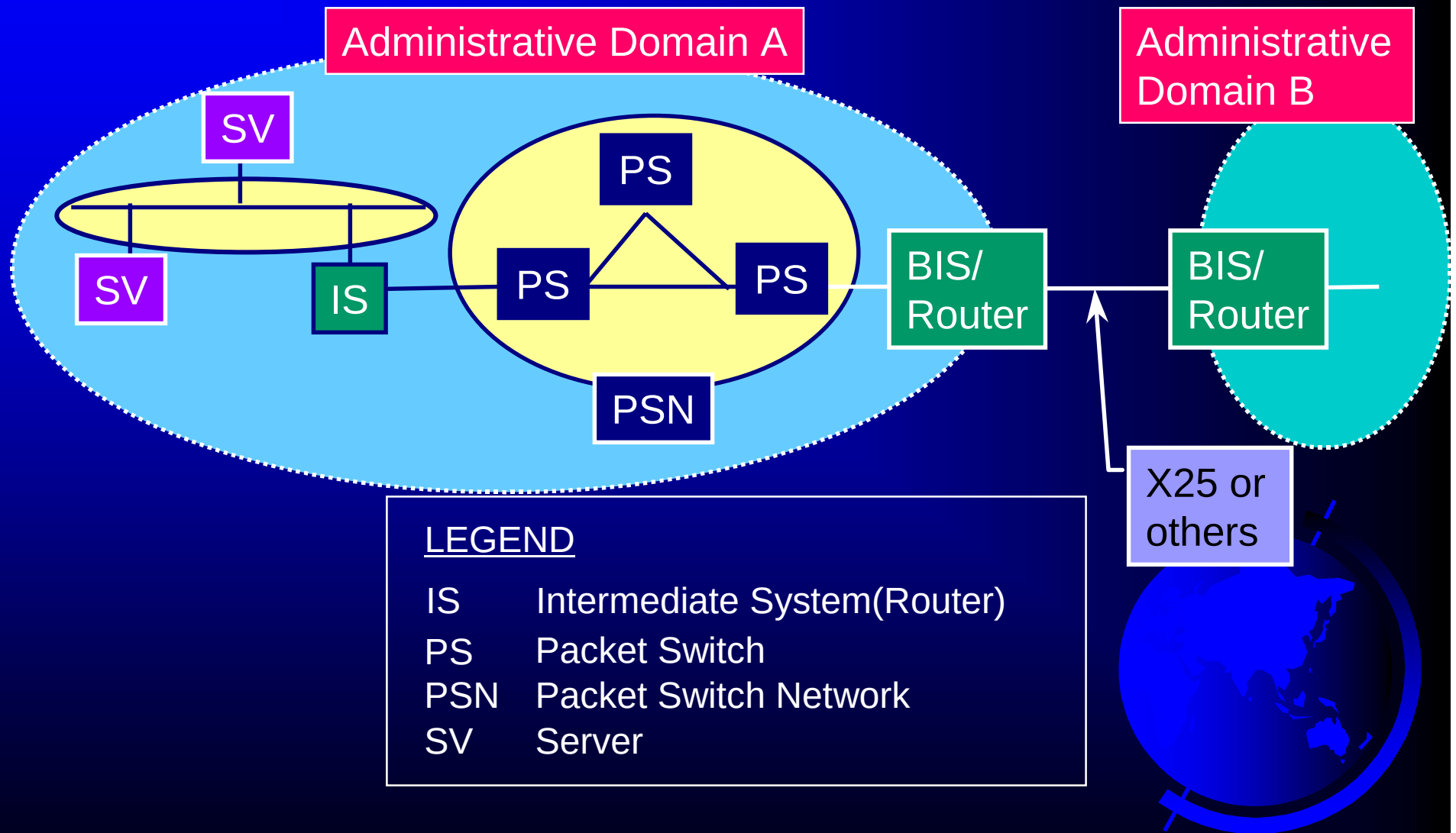
Messaging among Servers



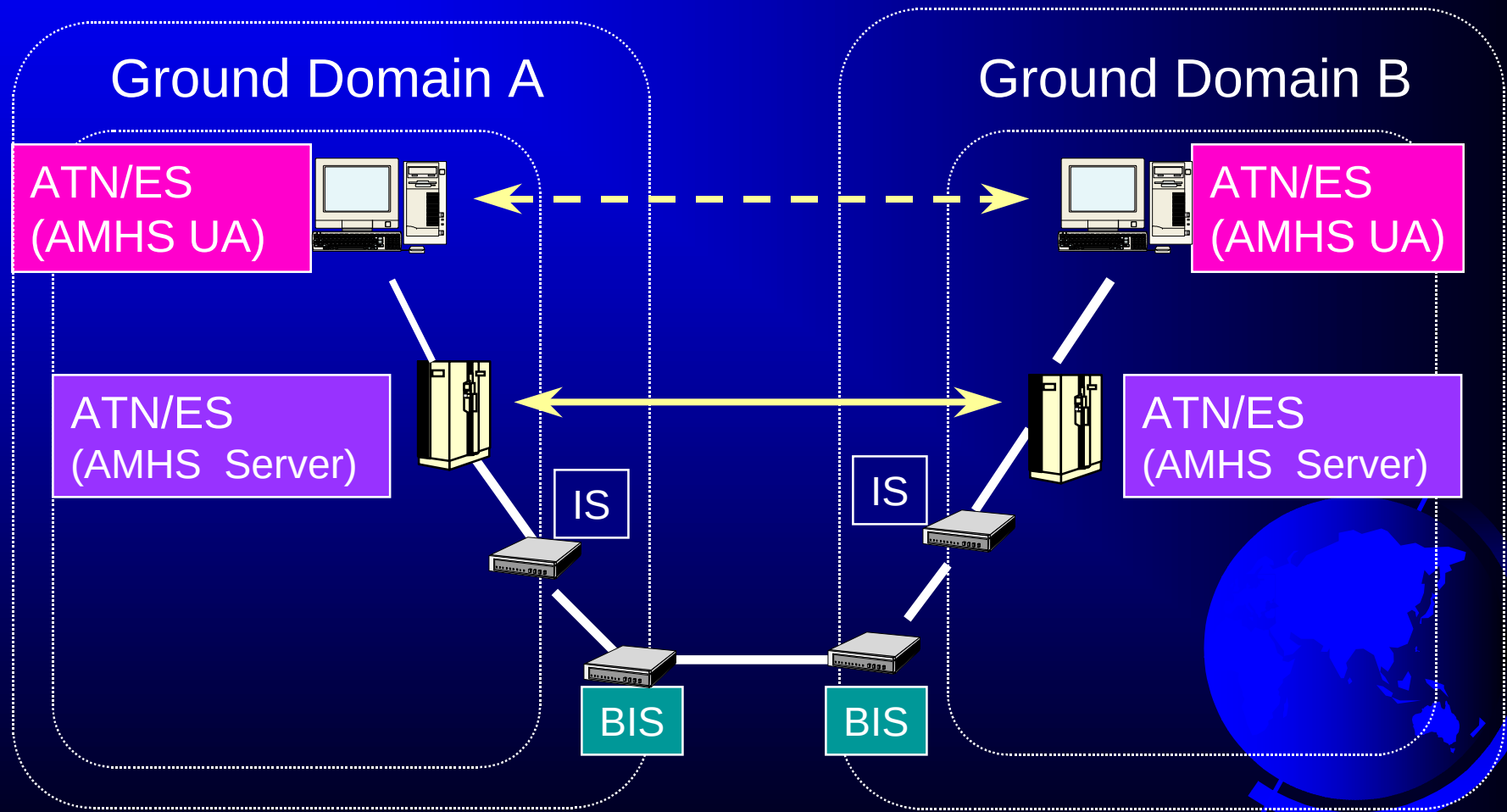
AMHS and ATN Internetwork



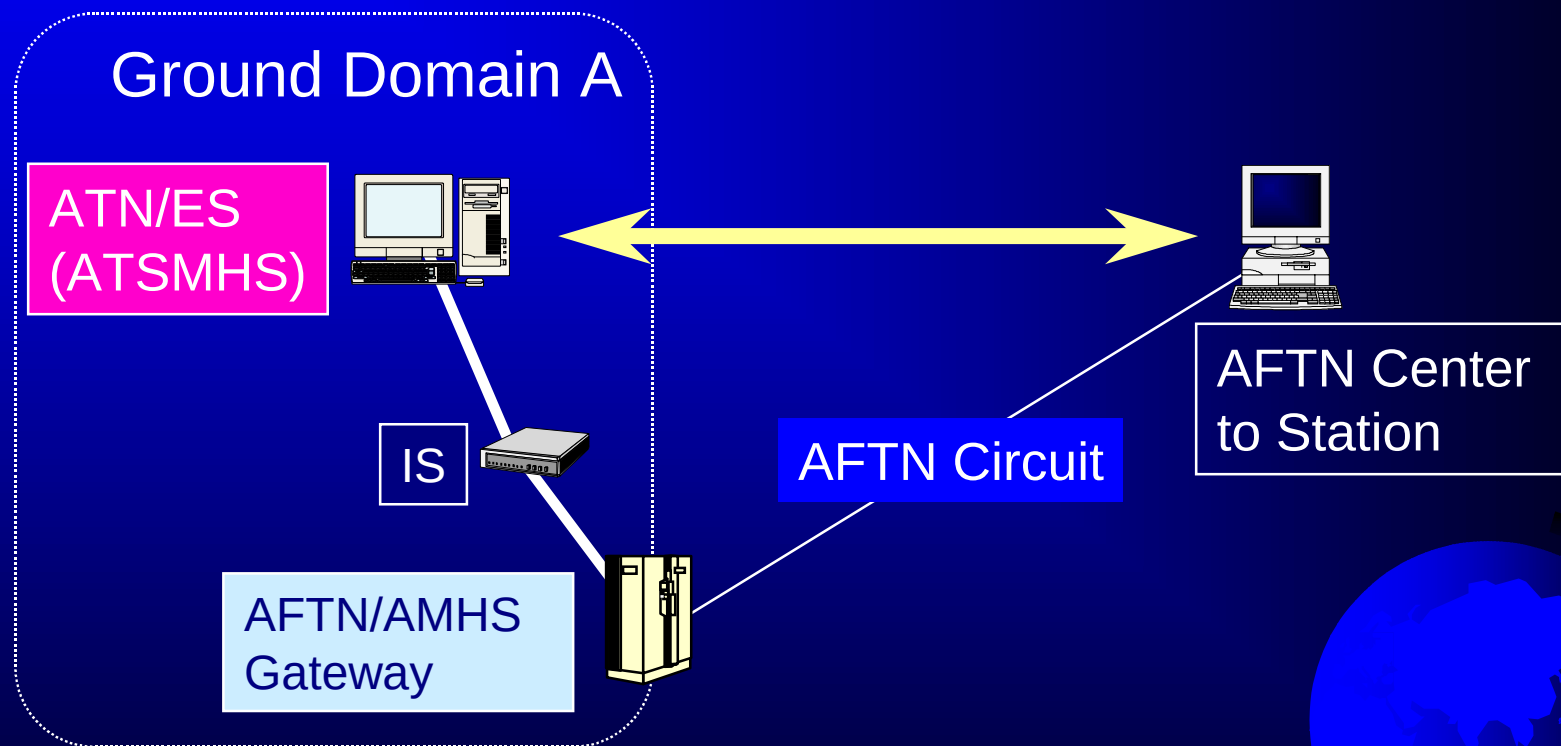
Inter-Domain Connection



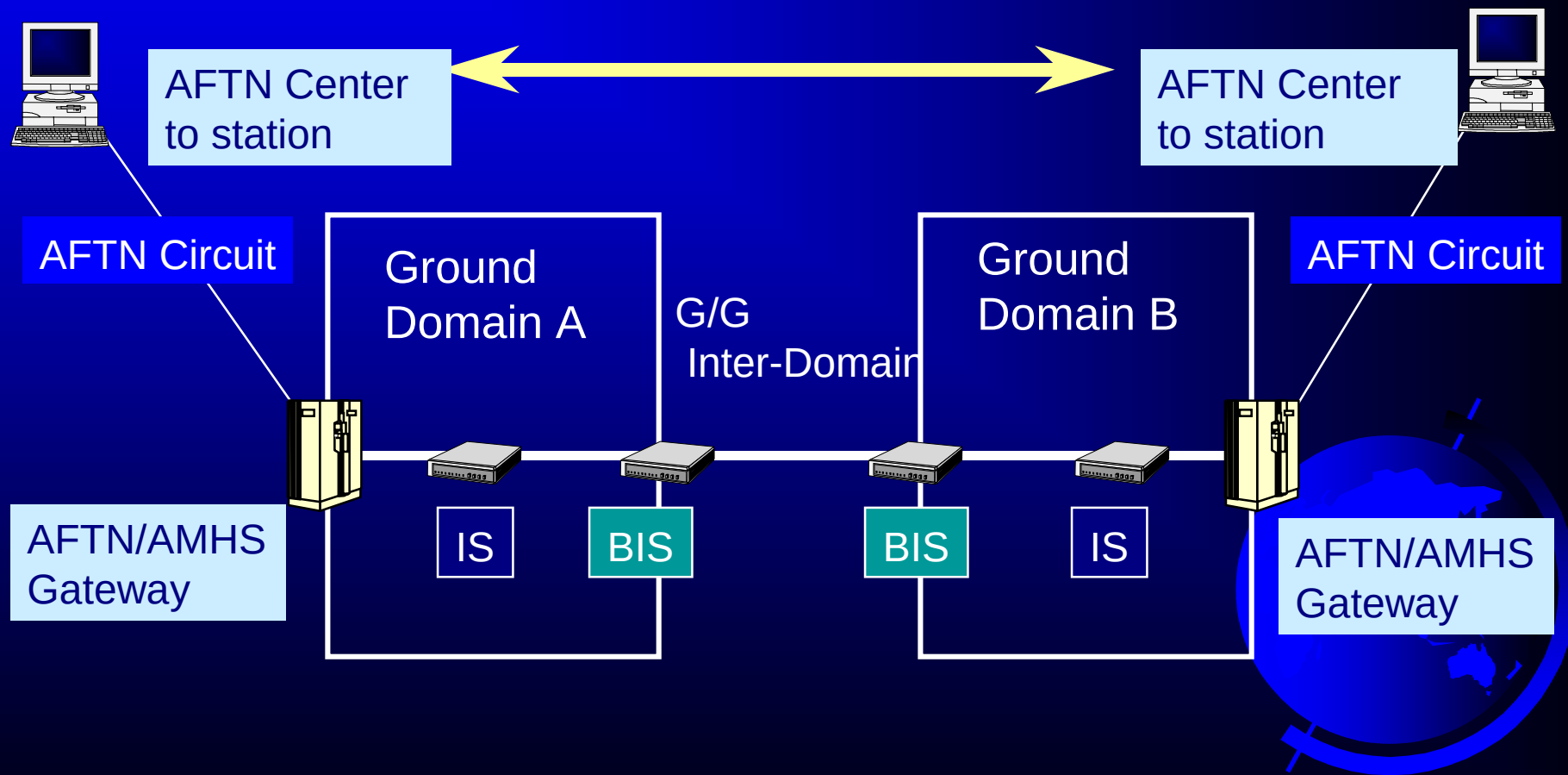
AMHS User-to-AMHS User



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



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

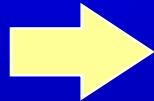


AFTN Service to ATN/AMHS Service

— AFTN —

— ATN —

AFTN
messaging services



AMHS
messaging services



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

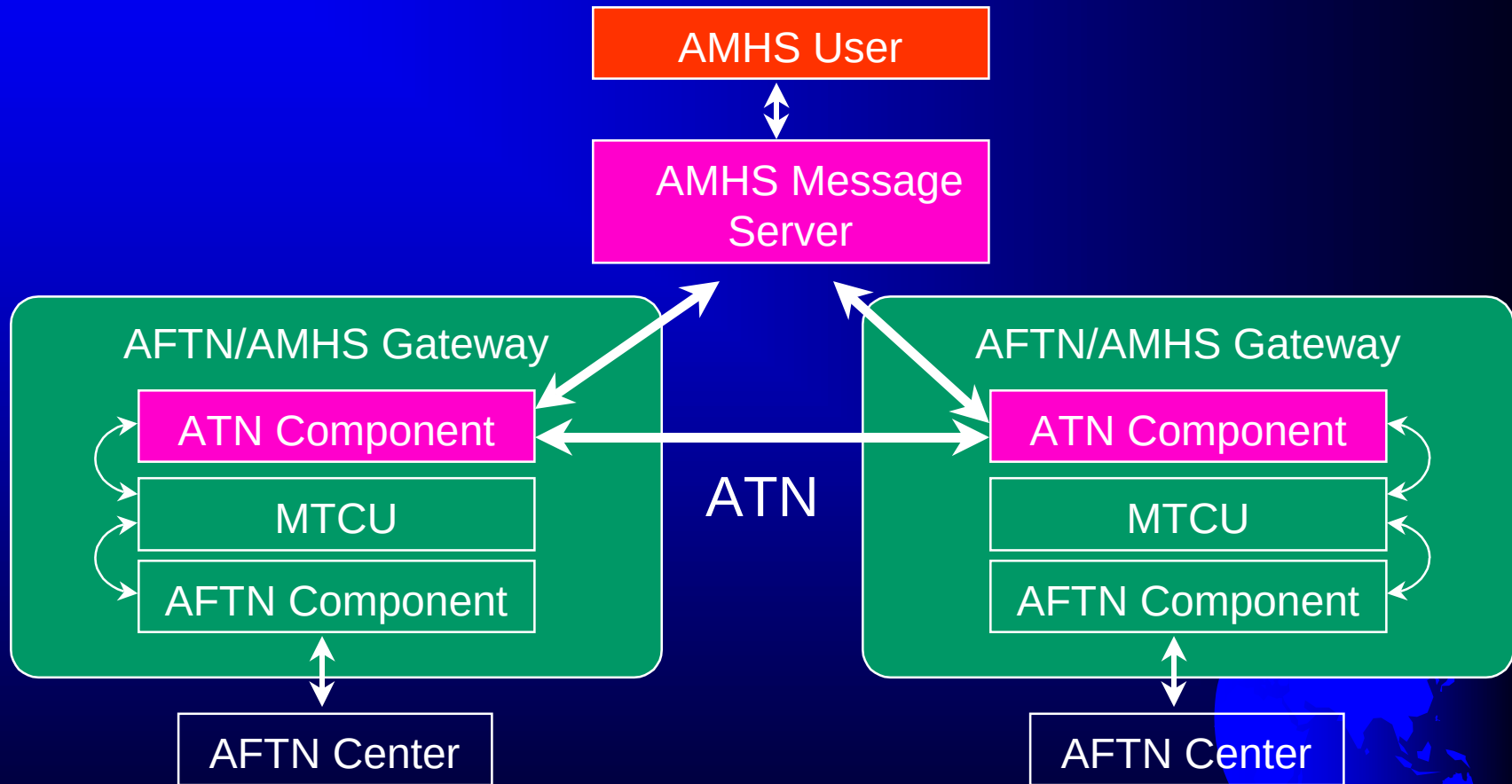


AFTN/AMHS Gateway

- ❖ 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.

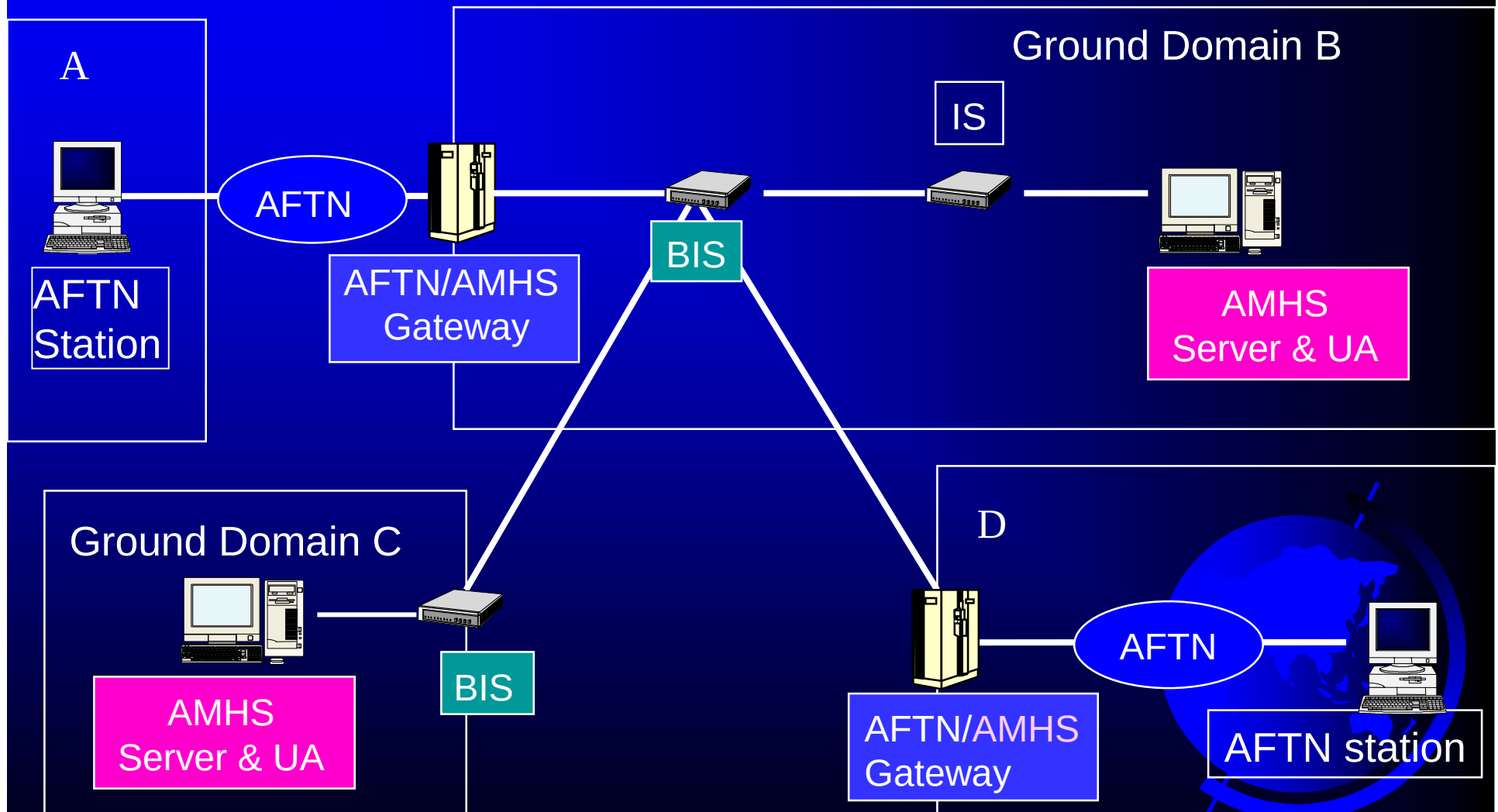


AFTN/AMHS Gateways (continued)

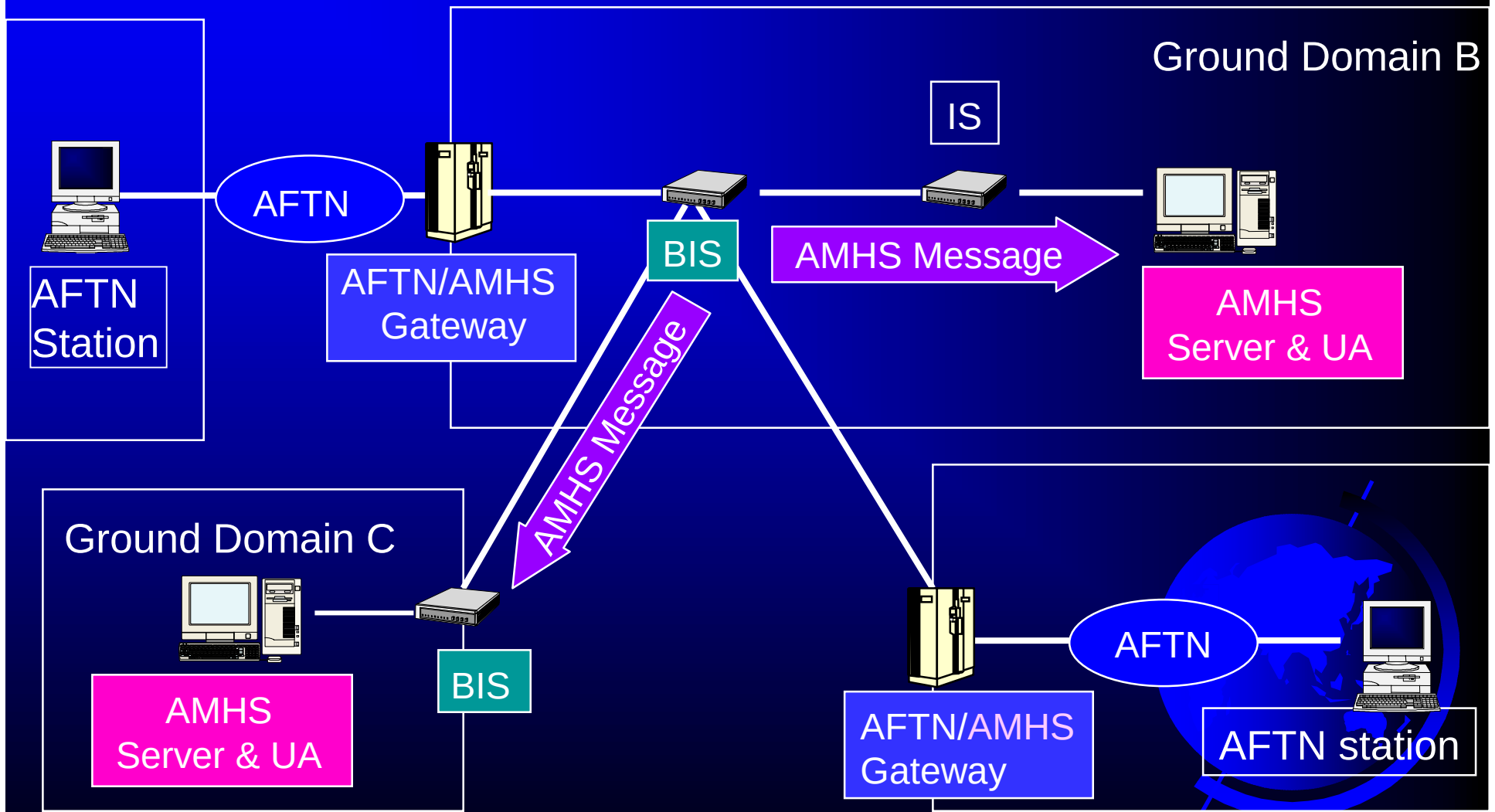


MTCU: Message Transfer Control Unit

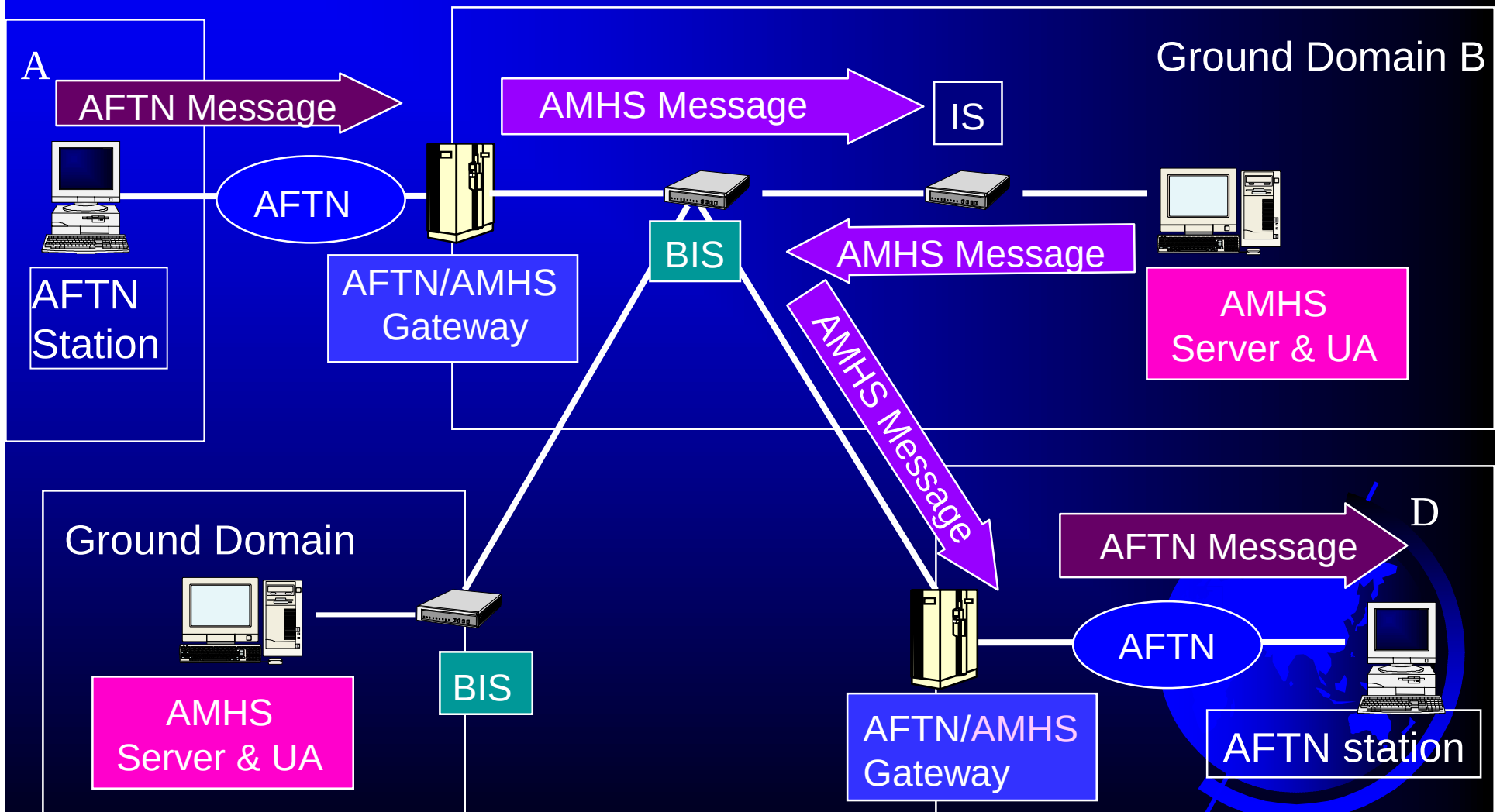
Some Examples of AMHS Messaging



AMHS User-to-AMHS User



AMHS User-to-AFTN User



AFTN User-to-AFTN User

