AWA

Defence & Aerospace

<u>AWANET-100</u> Multimedia Switch developed with both LAN and PBX features for both commercial premises networks, civil (ATC) and para-military communication switching & control systems.

ATC / Emergency Services Communications Control Applications

CONFIGURATION MAINTENANCE & DIAGNOSTIC SUB SYSTEMS

AUTOMATIC CALL PROCESSING

application layer equipment, is the system of choice for air traffic control applications, combining all the elements of an air traffic control centre (ATIS, AFTN, PABX, switched radio, intercom, radar, Navaid data and controls) into a single switched and distributed network.

The system is designed to meet mission critical standards and offers a wide range of man-machine interfaces.

AWANET-100 can support networking of ATC centres over a wide area.

AWANET-100 NODE

AWANET-100 RING

AWANET-100 COMPUTER NODE

Agents

MULTI-MEDIA NETWORKS

OPERATOR'S CONSOLE

ATOR'S ANEL hscreen shbutton

ERCOM ILITIES

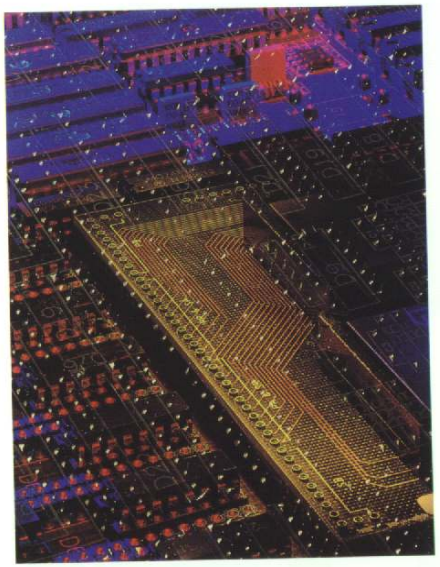
DISPLAY Met., etc.

I/F

I/F

I/F

AWANET-100 WORKSTATION NODE



SWITCHED RADIO SYSTEMS

I/F

I/F

I/F

TRANSMITTER CONTROLLER

STATUS ID INTERFACE

RECEIVER VOTING EQUIPMENT

RX

TX

Touch Screen Interface

AWANET-100 GATEWAY NODE

I/F

I/F

LITE LINK

I/F

LANS

I/F

AWANET-100 GATEWAY NODE

AWANET-100 GATEWAY NODE

I/F

Administrative Telephone Services

PABX

Tie Lines

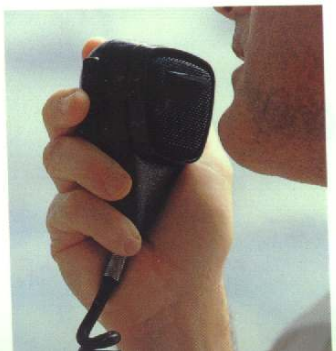
I/F

I/F

I/F

ISDN X.25 AND FRAME RELAY

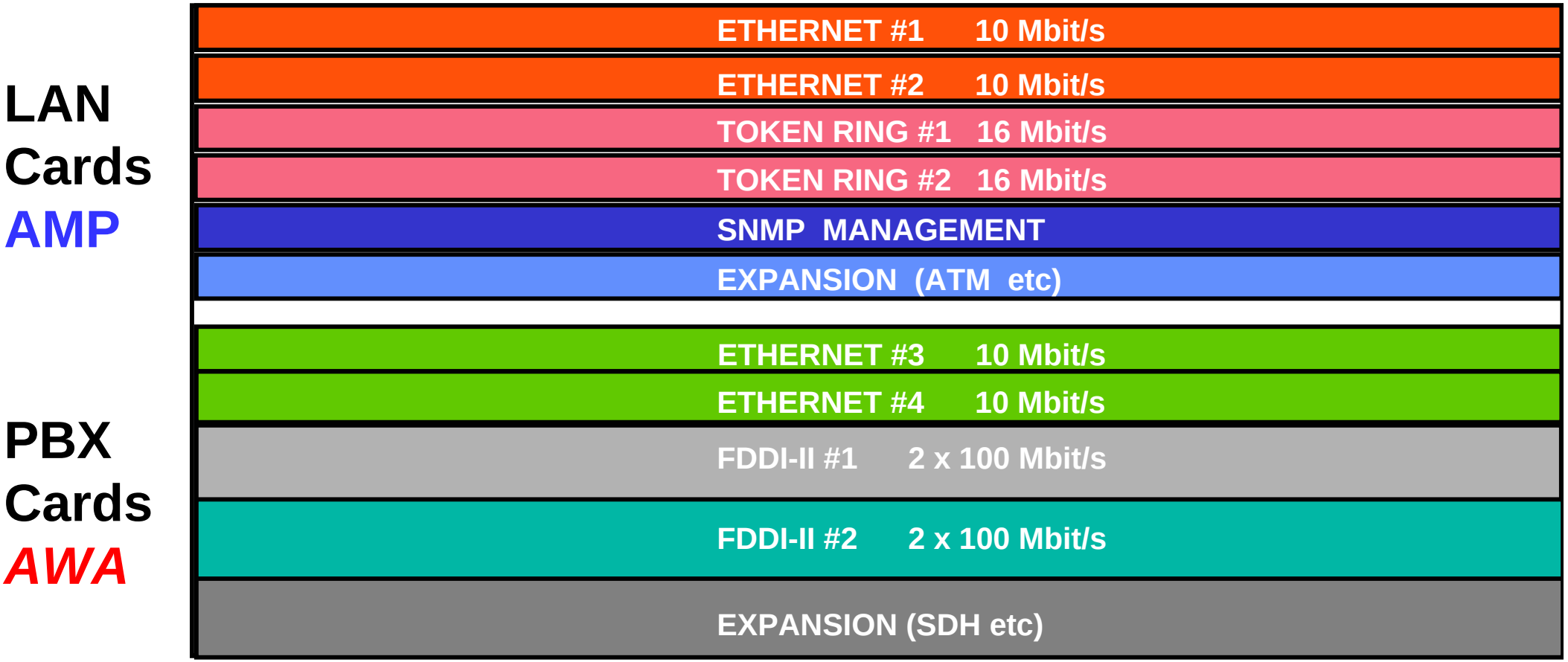
PUBLIC NETWORK E1 OR T1



AWANET-100: FDDI-II Compliant

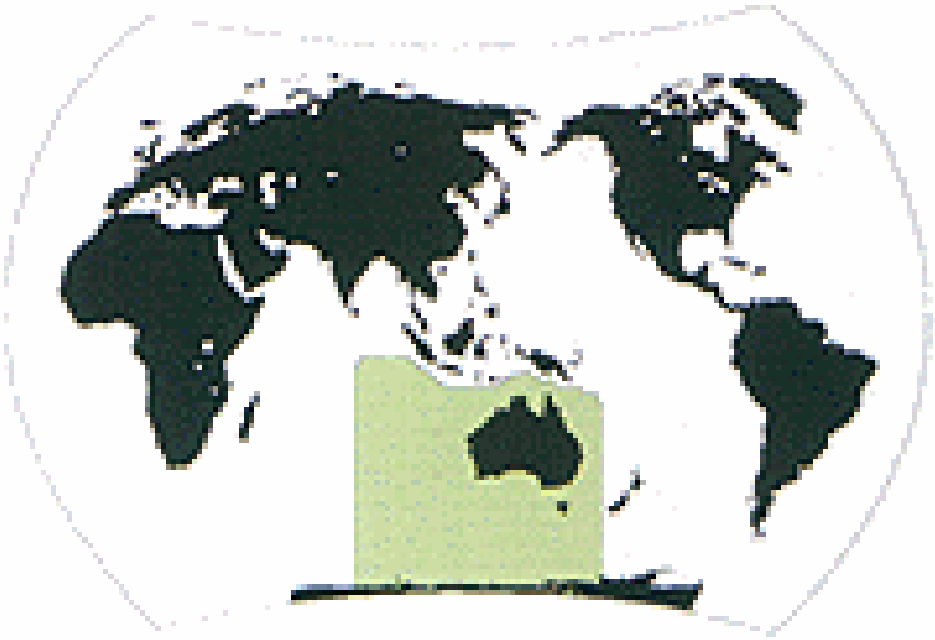
AWANET-100 conforms to the ANSI FDDI-II (Fibre Distributed Data Interface) standards. AWA has played a significant role in the development of FDDI-II standards and is committed to providing its customers with solutions that meet international standards.

Premises & Departmental Hub
500 Mbit/s Capacity Backplane Channels



AMP ”Paragon” OEM Chassis, Top Backplane & LAN Cards

Australian Area of Responsibility



-The Australian Advanced Air Traffic System

AWA Defence & Aerospace

TAAATS System

- **Subcontract to Thomson-CSF**
- **Responsible for VSCS Switch and Console Touch Screen**
- **AWANET-100 Switch with fibre-optic FDDI-2 Backbone.**

2

Voice Switching Control System a vital component of TAAATS

The Voice Switching and Control System (VSCS) is one of the new systems being provided under TAAATS. It represents one of the most critical components in the TAAATS Air Traffic Management system and, accordingly, the VSCS is designed to ensure high reliability, maintainability and availability.

The VSCS is located in both the Melbourne and Brisbane ATS centres and four smaller VSCSs are located in the Terminal Control Units (TCUs) of Sydney, Adelaide, Perth and Cairns.

The VSCS screen is a touch-sensitive liquid crystal display providing:

- a communications interface between the ground and the pilot — this is called Air-Ground-Air (AGA) communications;
- intercom connections within a centre or TCU called Ground-Ground (GG) communications;
- intercom between VSCS locations;
- intercom connections from within a centre or TCU to external systems; and
- telephone access via local PABX, public switched network facilities and through a VSCS network.

Above: The illustration is of a workstation with the VSCS panel located to the left of the main screen.

continued page 3

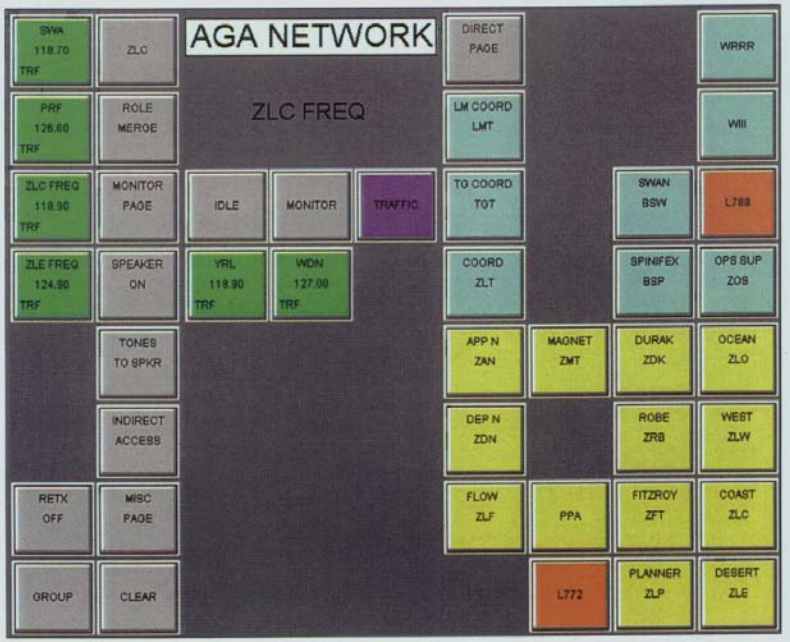
Right: A workstation screen. The use of colour is similar to that being used now, for example, for hotlines and coldlines.

Colours highlight the mode of operation of the AGA channels. There are three modes available for each AGA channel or network. They are ***Traffic, Monitor*** or ***Idle***. Each mode is identified with a unique colour.

Traffic mode (light green) — allows access to all radio channel transmitters and receivers.

Monitor mode (light blue) — allows an operator to monitor a frequency without being able to transmit on it

Idle mode (grey) — a change to Idle mode is required if you want to switch-off a particular radio channel or network. This mode will disconnect the frequency from only your workstation. It does not switch it off altogether.




AWA
VSCS Screen
TAAATS
Console