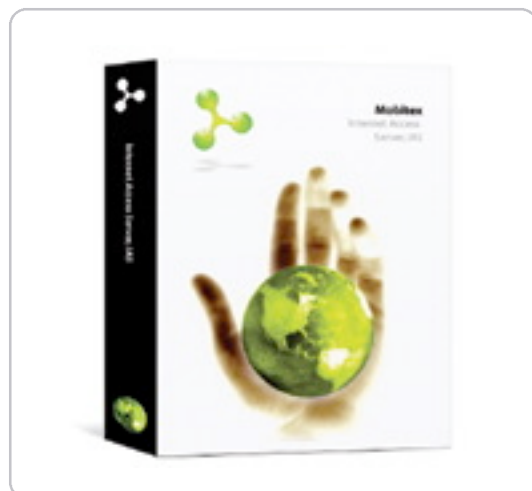# IAS R4

Mobitex IP Access Server

The IP Access Server (IAS) increases the choice of host connection types by addressing the market need for IP connectivity to Mobitex networks.

With the IAS, operators have the possibillity to offer both X.25 and IP connectivity for hosts connecting to the Mobitex network.

IAS provides an alternative method of connecting fixed terminals (FST) to a Mobitex network. With IAS, Mobitex operators are able to offer a more cost-effective connection to the network. Fixed terminals with an IP connection can connect to Mobitex via the IAS, which supports any IP-capable bearer, meaning that fixed terminals are able to connect to the Mobitex network over the Internet.

Management and supervision

The IP Access Server and its connections are configured remotely through a convenient graphical user interface accessed via a web browser. This web interface also gives access to the online IAS documentation. For supervision purposes the IAS uses standard SNMP manage-


ment software to supervise all alarms generated. The IAS can be configured to send SNMP traps to 6 different SNMP management stations.

A powerful package

The IAS package includes a sample IP Host application implemented in Java. This basic messaging application sends and receives MPAKs using the MDOT version 3 protocol and serves as an example for application developers.

IAS Architecture
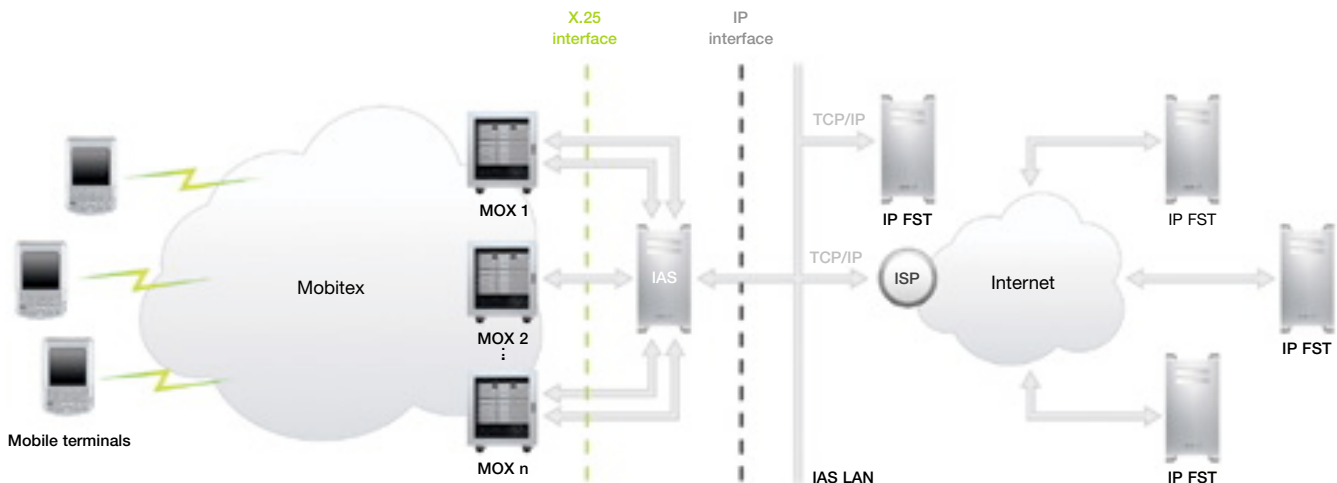
The IAS is connected to a local area exchange (MOX) in the Mobitex network, where it provides an interface between the Mobitex network and IP-connected fixed terminals.

Mobitex MPAK packets are tunnelled over TCP/IP connections, which means that MPAK packets are encapsulated in TCP/IP packets. To encapsulate MPAKs, the MDOT (MPAK Datagram Over TCP/IP) protocol is used, which adds a four-byte header to the MPAK. Applications need to be aware of both MDOT and MPAK protocols.

The IAS supports MDOT version 2 and MDOT version 3. Tunnelling functionality is transparent from an IAS point of view. Security is not an integral part of the IAS software. The IAS is as secure as any other node in the operator's LAN. IP-based fixed terminals (FST) are configured in the normal manner with a subscription MAN number in the Network Control Center.

It is important to note that the IAS introduces no new hardware or software requirements in the Mobitex network.

Technical specifications
- Support for up to 100 IP-based Fixed Terminals
- Support for 8 interfaces towards Mobitex MOX:es
- Support for Mobitex Host Group functionality
- Compatible with Mobitex System Release R14E or higher
- Support for MDOT version 2 and 3
- Support for 10 MDOT server ports
- Support for different authorization levels of the configuration interface
- SNMP support for supervision

Hardware requirements
- A SUN workstation/server with at least one PCI slot available for a HSI/P IO board. Minimum hardware requirement: SUN Ultra 5 workstation
- Standard network Ethernet card and cable
- Communication board configured for synchronous communication and RS-499 balanced interface with cabling

Software requirements
- Solaris OS version 9 or higher
- Solstice X.25 desktop slimkit version 9.2 or higher
- Java 2

Supervision & Management workstation requirements
- SNMP Manager (HP Open View 6 or higher recommended) used for alarm supervision
- Java enabled browser (Netscape Navigator 4.51 or higher recommended), required to access the IAS configuration interface and on-line documentation