

# Information and Communication System R&S<sup>®</sup> PostMan II

Client-server architecture for advanced Internet/intranet communications via radio



**ROHDE & SCHWARZ**

# R&S®PostMan II

R&S®PostMan II is a combined hardware/software product with client-server architecture for advanced Internet/intranet communications via radio. It offers e-mail, fax, file transfer, voice and data services by radio from any point on earth. The internationally standardized TCP/IP protocol ensures interoperability with systems from other manufacturers, allowing R&S®PostMan II to be used in computer networks with different platforms and operating systems. There are no special hardware or software requirements for the workstation terminals (the "clients").

R&S®PostMan II allows information to be exchanged between individual workstation terminals as well as throughout entire computer networks via a LAN. An R&S®PostMan II server with an optional interface expansion can simultaneously exchange information across several links and in both directions (receive and transmit). For example, an e-mail can be transmitted over one link while a fax is being sent over another.

The primary transmission media are HF/VHF/UHF radio, satellite radio and the GSM network. The transmis-

sion protocol that is used was specially developed by Rohde & Schwarz. It is particularly well suited for secure data transmissions via half-duplex radio links. In radio transmissions, R&S®PostMan II controls the connected transceiver or modem via a serial interface. This feature is implemented as standard for the Rohde & Schwarz Transceiver R&S®XK2000.

Once the R&S®PostMan II software has been modified as necessary, virtually any data-capable transceiver can be implemented.

The following applications are possible:

- ◆ E-mail (with attachment)
- ◆ Fax service
- ◆ Voice mail
- ◆ File transfer (FTP)
- ◆ Chat
- ◆ Transparent TCP/IP
- ◆ Radio telephony
- ◆ GPS tracking
- ◆ Broadcast telegram mode

## E-mail

Any e-mail client such as Microsoft Outlook or Lotus Notes can be used for e-mail transmission. To reduce transmission time, both the text body and the attached files undergo data compression. If the radio link is interrupted, R&S®PostMan II automatically attempts to contact the addressee even through alternative routes or media, depending on the chosen settings.

## Fax

Faxes to be sent can either be generated electronically on a PC or placed in the fax machine as hardcopy. The destination address entered on a workstation terminal or the number dialed on a fax machine may be another computer or fax machine. If access to public telephone networks is available, worldwide fax service is possible.

## Voice mail

Voice mail is used to send a voice message directly from a telephone. After the R&S®PostMan II telephone number and the recipient's number have been dialed, a voice message can be left on the R&S®PostMan II server. R&S®PostMan II then automatically delivers the voice message as an e-mail attachment to the other party.

## Chat

The chat service is used for realtime interactive e-mail communications between multiple parties. R&S®PostMan II uses the transparent TCP/IP mode to exchange the data, which makes it possible to expand this service to existing networks.

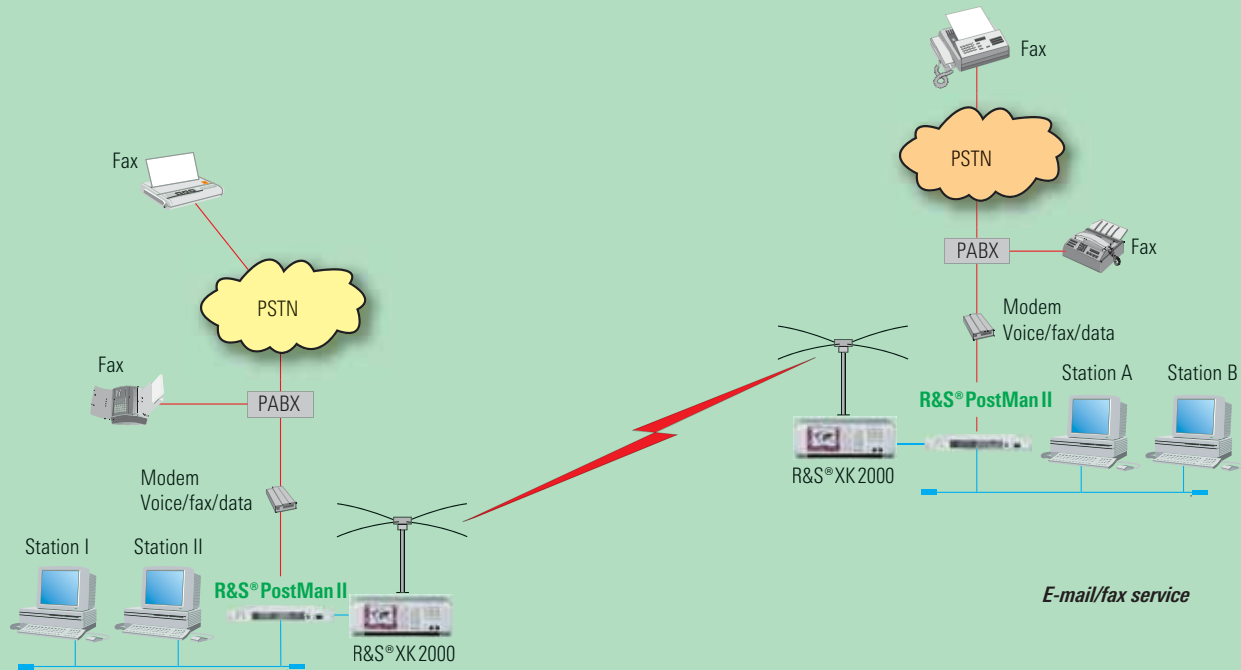
## Radio telephony

Radio telephony is provided by using the automatic phone patch (APP) option for the HF Transceiver Family R&S®XK2000. This makes shortwave telephone calls possible.

## GPS tracking

Another R&S®PostMan II feature is the capability to track mobile stations by using the global positioning system (GPS). If a station is equipped with a GPS

# Information and communication system

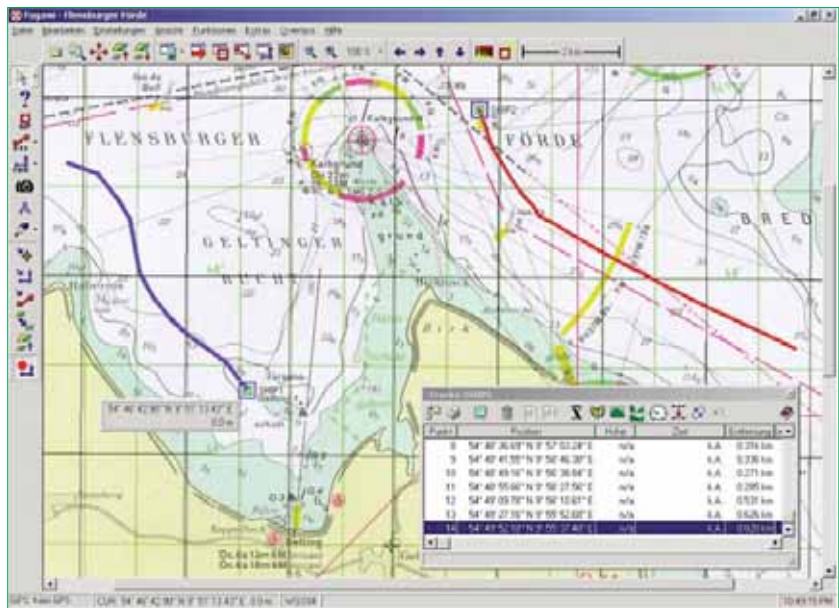


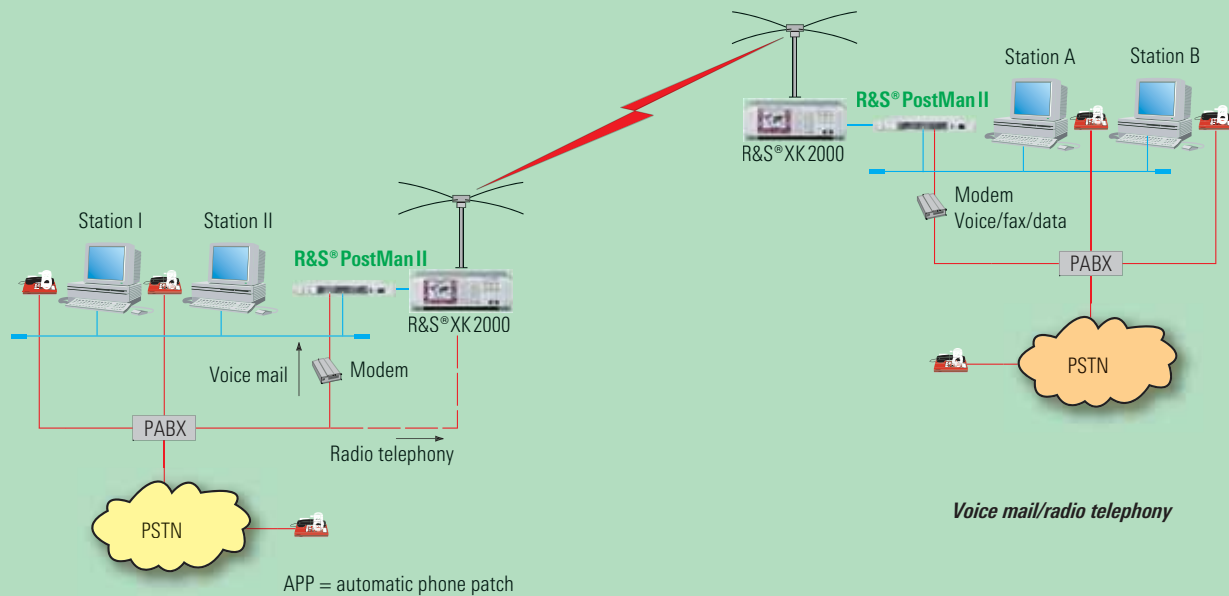
receiver, position data can be transmitted in addition to the actual data after analysis of the National Marine Electronics Association (NMEA) protocol. The current position of and the route covered by each mobile station can thus be tracked from a command center. The standard package includes an interface with which scanned maps can be calibrated.

## Broadcast telegram mode

In the broadcast telegram mode, messages in ASCII text format are transmitted within fixed timeslots without the peer station issuing an acknowledgement. This application ensures maximum security against hostile radiolocation. Several network subscribers can be reached in one transmit operation without having to set up multiple connections.

## GPS tracking





## A modern solution for radio networks

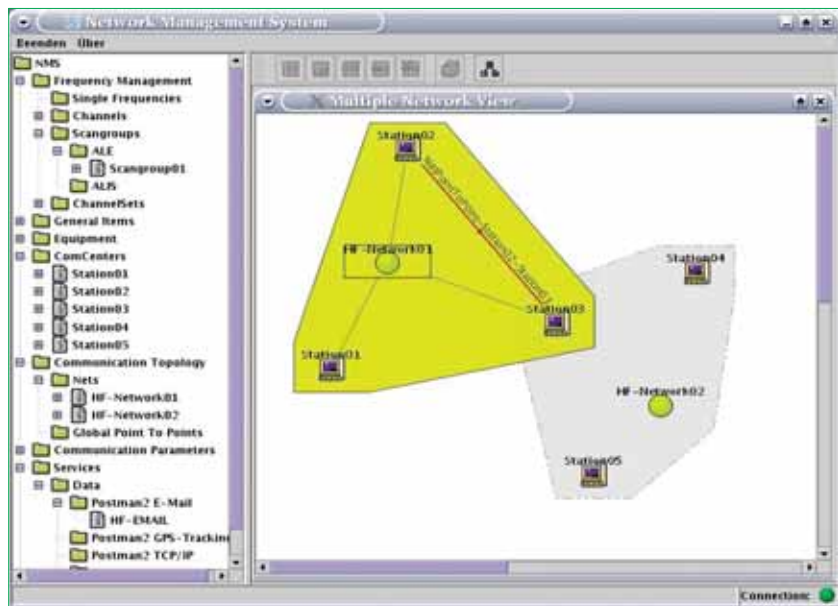
### Encrypted transmission

All exchanged information can of course be protected against unauthorized access with the aid of customized encryption procedures. A large number of encryption options are available, ranging from software-only or combined hardware/software solutions up to the integration of customized encryption units into the information flow.

### Configuration and network management

System management and network planning are prerequisites for reliable and smooth operation in radio-based communications networks. A convenient graphical user interface is provided for managing all required network data and available resources. The preconfigured

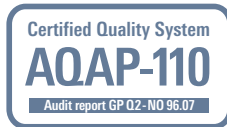
### Network management



instrument settings are automatically activated on the transceivers. Network management is provided as a service on the R&S PostMan II server and is

started from a workstation terminal in the network. The generated network management data is stored in a SQL database on the R&S PostMan II server.

Ordering information		
R&S® PostMan II Information and Communication System Incl. Industrial Controller R&S® PSL1 Basic services Network services	R&S® DS102	6131.7664.02
Proprietary Data Waveform Protocol E-mail Chat Transparent TCP/IP	R&S® DS102B8 (mandatory)	6131.7906.02
Fax Service Software	R&S® DS102B1	6124.2502.02
Voice Mail Software	R&S® DS102B2	6124.2554.03
GPS Tracking Software Incl. standard map, without GPS receiver, antenna and special customized map	R&S® DS102B3	6124.2602.02
SITMinisafe2-PM2 Encryption module		on request
Broadcast/Telegram Mode Software	R&S® DS102B6	6124.2754.03



*Industrial Controller R&S® PSL1*





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