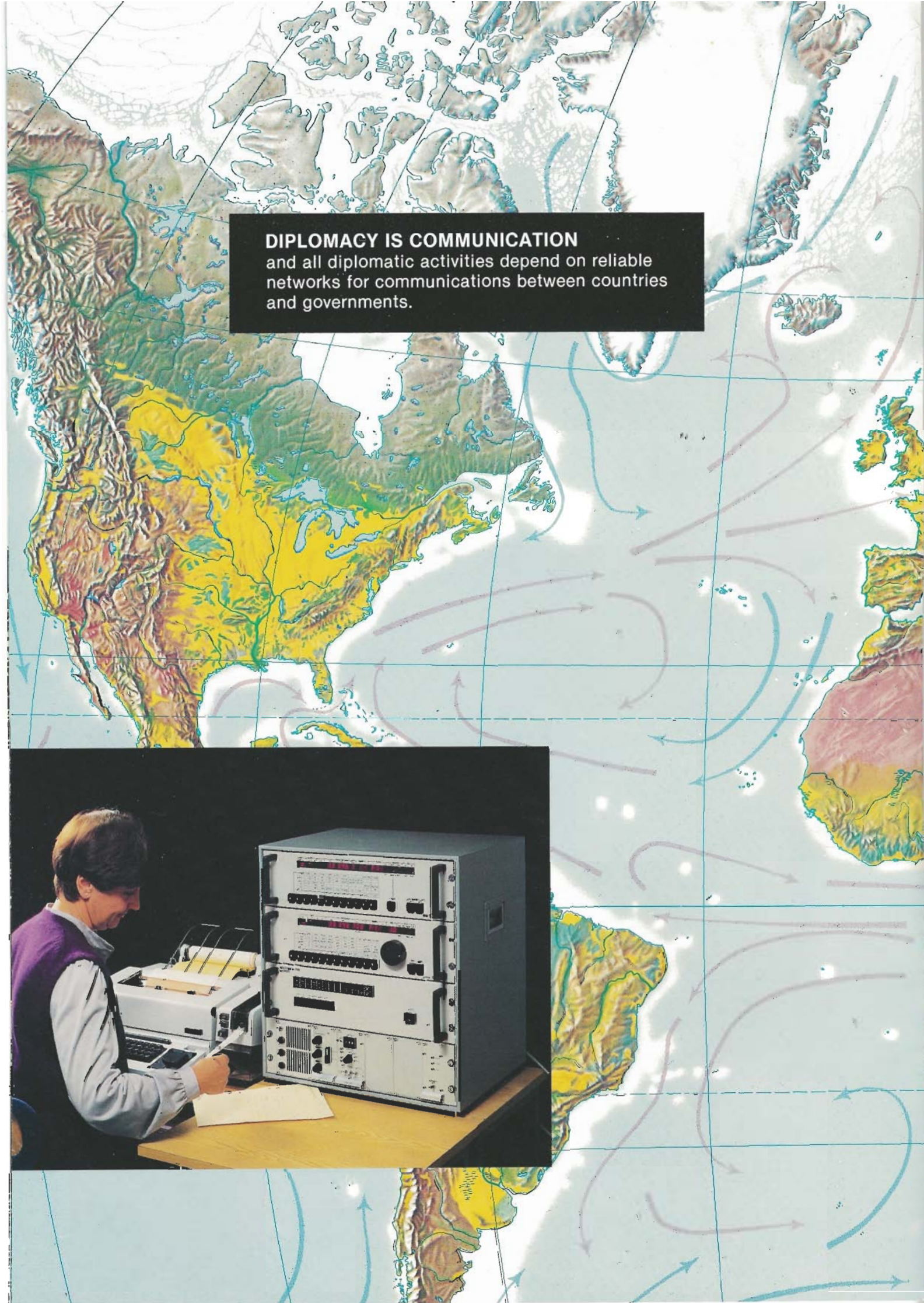


# HF Radio Communications Network

A scenic view of a city waterfront, likely Stockholm, Sweden. The image shows a large, classical-style building with a green roof and a stone wall in the foreground. A boat is visible in the water. The sky is blue with some clouds. The text 'HF Radio Communications Network' is overlaid on the top left of the image.

**Standard Radio & Telefon AB**

Radio Division



**DIPLOMACY IS COMMUNICATION**

and all diplomatic activities depend on reliable networks for communications between countries and governments.





### **RELIABLE COMMUNICATIONS**

Shortwave radio is a reliable message handler, which allows the use of many alternative channels for the information flow.

Shortwave radio is also independent of third party assistance, whereas normal intercontinental telephone wire systems are depending on a large number of intermediate centres, making them more sensitive to interference of any kind.

# SRT HF Radio Sy



Receiver CR90

## HIGH RELIABILITY

Day or night – your communication network must be operating at any time. The high reliability of the SRT radio system is ensured by use of components of high quality, by conservative rating, thorough tests and quality assurance.



Transmitter Driver TD90

## HIGH ACCURACY

A necessity in modern radio communication is a possibility of a rapid and stable contact whenever required. In the SRT system this is ensured thanks to a rapid frequency setting and the use of frequency synthesizers.



Traffic Control Unit TCU90

## FLEXIBILITY

HF communication is subject to variations in the propagation conditions, which vary with the time of the day and the year.

Thanks to the use of synthesized units giving access to thousands of frequencies you can set up your frequency plan without keeping a stock of crystals.

# stem

## MAINTENANCE

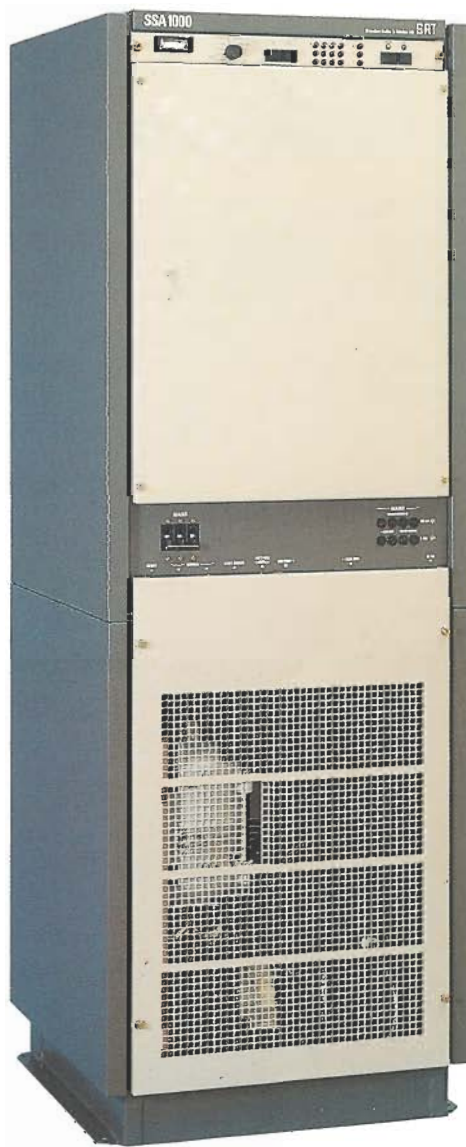
A radio network ought to be operated as well as maintained by the ordinary staff. The SRT system is built up of modules and is equipped with instruments for easy fault finding.

## NETWORK STRUCTURE

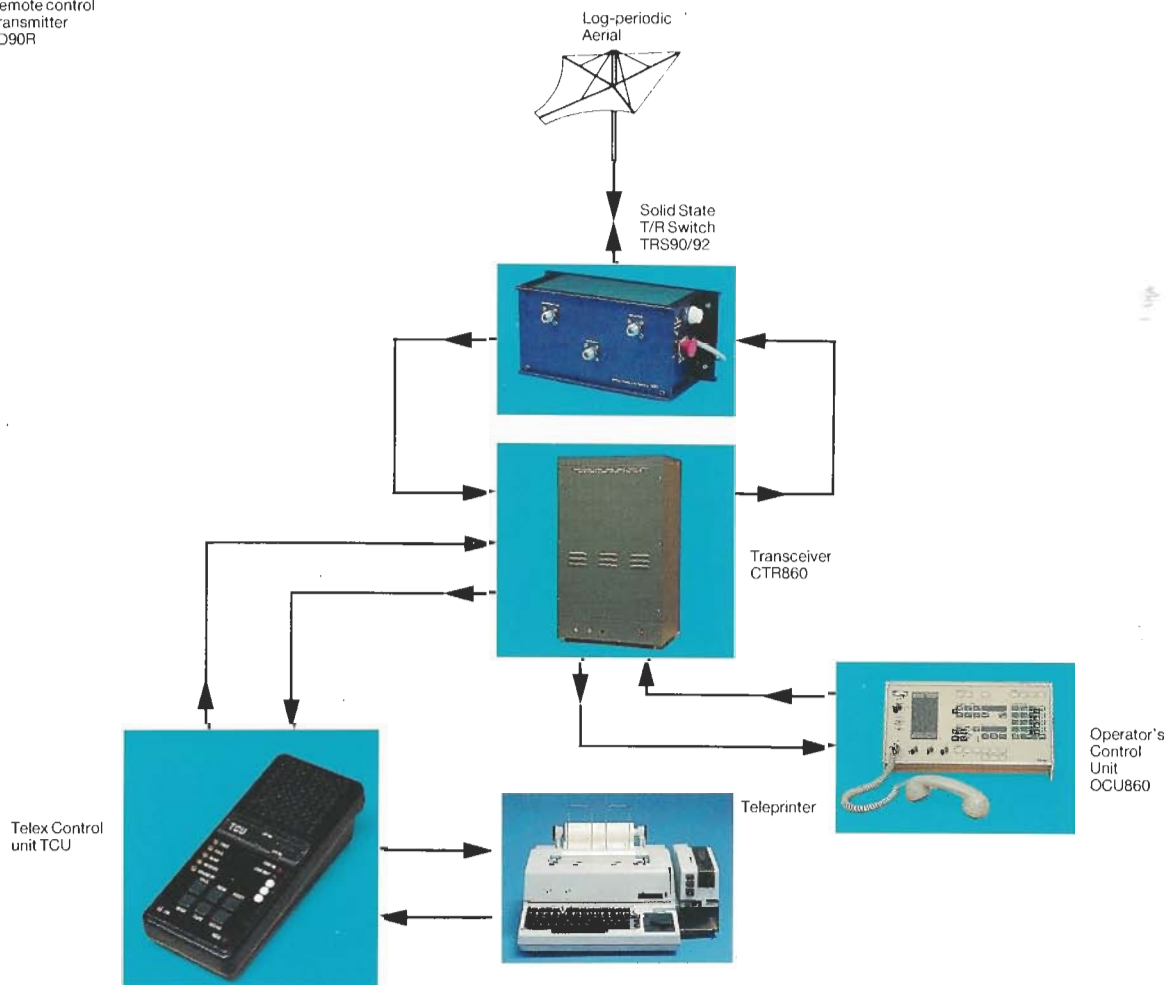
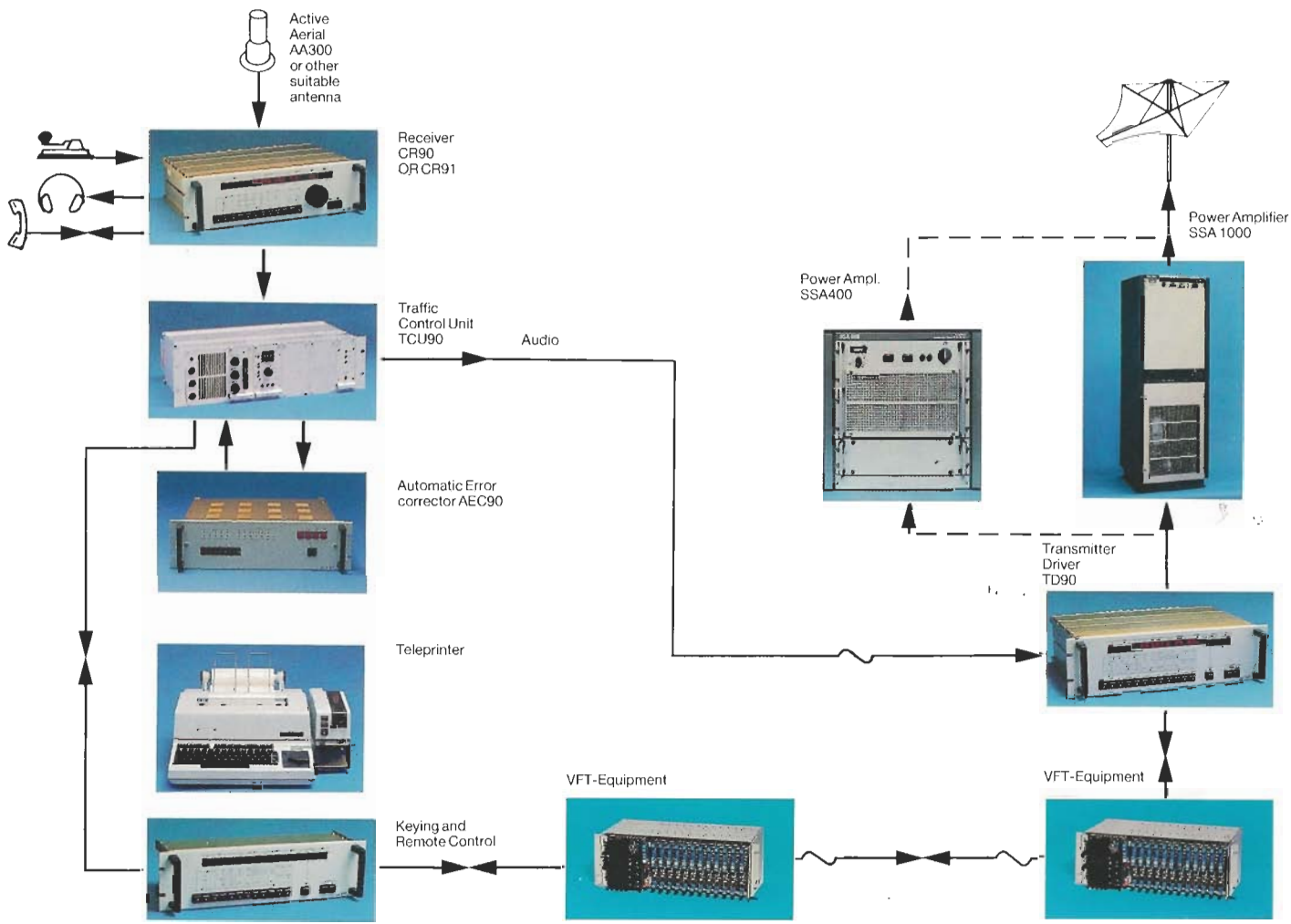
Systems can be tailor-made to meet your specific requirements. On the next page you will find examples of a network lay out.



Power Amplifier SSA400



Power Amplifier SSA 1000



# Equipment examples

## TRANSMITTERS

Three alternatives, covering the frequency range 1.6 to 30 MHz, can be offered:

The SST1000 with an output power of 1000 W PEP or continuous

The SST 400 with an output power of 400 W PEP or continuous

The SST 100 with an output power of 100 W PEP or continuous

All three use the same type of driver – the TD90 – with digital tuning in 100 Hz steps and internal memory for up to 109 preprogrammed channels.

## RECEIVER

The synthesized, solid state receiver CR90/CR91 covers the frequency range 10 kHz to 30 MHz. It has digital or single knob continuous tuning in steps of 1–, 10–, 100– or 1000 Hz and an internal memory for up to 109 pre-programmed channels.

## TRANSCEIVER CTR860

CTR 860 is a flexible SSB HF communication package for Radio telephony and telex operation in the frequency range 1.6–30MHz. The transmitter gives 800 W into 50 ohm. The transceiver is controlled from the keyboard of a separate control unit OCU 860, allowing control of the system and its 272 programmable channels.

## REMOTE CONTROL EQUIPMENT

In most cases the best conditions for radio communication are outside crowded cities, while you want the control site at the main station in the city. This can easily be achieved thanks to the Remote Control System RC90, which permits control of all receiver and transmitter functions over normal telephone lines or via radio link.

## TRAFFIC CONTROL UNIT TCU 90

The TCU 90 includes a variety of optional plug-in modules for connection of ancillary equipments, such as microphone, headset, keyer and teleprinter.

The Operator's Control Units OC90 and OC90R, the FSK demodulator FS90 and the Radio Telephone Terminal RT 90/RT 91, which permits connection to the public telephone network, are examples of TCU submodules.

## VFT EQUIPMENT

When several transmitters and/or receivers are involved in the system and several telephone lines would be needed for the transfer of modulation, saving of lines can be achieved by introducing a VFT equipment, for instance the SRT GH1220.

## AERIALS

We offer aerials from all leading manufacturers besides our own small AA300, an active aerial for reception.

## AUTOMATIC ERROR CORRECTOR AEC90

To improve and ensure the reliability at telex transmission, the network can be equipped with ARQ(Automatic Request) equipment or FEC (Forward Error Correction) equipment at simplex operation. The error rate can thereby be reduced by a factor of between 100 and 10000.

## REMOTELY CONTROLLED STATION WITH CR90 AND SST 1090/490

An example of a setup with remote control of the transmitter via your domestic telephone network. If the receiver site is to be separated from the control site the receiver can be remotely controlled by means of the remote control unit CR90R in the same way as the driver is controlled by TD90R.

## LOCALLY CONTROLLED STATION WITH CTR860

A radio station setup for simplex operation utilizing the Transceiver CTR860



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