

**Zeitschrift:** Technische Mitteilungen / Schweizerische Post-, Telefon- und Telegrafienbetriebe = Bulletin technique / Entreprise des postes, téléphones et télégraphes suisses = Bollettino tecnico / Azienda delle poste, dei telefoni e dei telegrafi svizzeri

**Herausgeber:** Schweizerische Post-, Telefon- und Telegrafienbetriebe

**Band:** 67 (1989)

**Heft:** 4

**Rubrik:** Summaries and notices

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**Download PDF:** 02.04.2025

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## Summaries

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### Examination of the Possible Influences of High Frequency Electromagnetic Waves on the Forest

K. Joos, Basel

The present annual ring analytical work is a consequent study with similarly planned pattern of examination subsequent to a first forest damage investigation in connection with electromagnetic waves as an anthropogenic environmental factor. In the region of the Bantiger (BE) radio and television transmitter, two groups of three and four ecologically comparable wooded areas which differ mainly by the electromagnetic density on the site were examined. Compared to the first study, these results here are considerably inferior. The growth analyses were carried out on a total of 267 trees of the beech, spruce and fir species. They included a comparison of the abrupt change in growth at the sites with various electromagnetic field strengths as well as a comparison of the true growth performances in two seven year measuring periods – before commencement of operation of the transmitter and today. The new results confirm those of the first examination: between both groups of wooded areas there are neither in the long-term growth behaviour nor in today's growth performance differences which are attributed to a negative connection with the varying field strengths. A damaging influence of the density of electromagnetic waves in the UKW (FM) and UHF (AM) range customary in the region on the condition of the forest cannot be proved.

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### OSI-LAB – Test service for the procedures of the Electronic Mailbox X.400

F. Maurer, Berne

The author explains the operation test with the OSI-LAB. This service permits the testing of data interchange procedures, as are defined on the OSI-model, as to their conformity with the norms. In a first phase, OSI-LAB offers testing possibilities for the procedures defined in the norm-series X.400 of the mailbox MHS. OSI-LAB represents an indispensable tool for the PTT with regard to the mailbox service «arCom 400». It plays a decisive role in the development of MHS products in the industry. Depending on the attitude of the PTT in the area of value added services (VANS), OSI-LAB could

be developed and test possibilities offered for other applications such as ISDN/Swissnet, X.25, X.500, electronic data interchange (EDI) etc.

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### The drink in the OSI wine glass

J. Pitteloud, Berne

The author gives a general account of the conditions of standardization of the presentation and application layers reached the end of 1988 in the OSI (Office System Inter-connection)-architecture and tries to explain briefly the objectives and the applicability of the norms. A few decision making factors are described.

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### Tolerated interference effect between the terrestrial directional radio and the satellite radio

V. Denzler, Berne

The terrestrial directional radio services and the satellite services are partly assigned the same frequency bands. The directional radio transmitters can therefore interfere with the weak reception signals from the satellite ground stations. In the same way a signal from a power transmitter amplifier of a ground station can impair the quality of a directional radio connection. For the coordination of two radio services, the tolerated noise level among others is of particular importance. Procedures are described in the article with which the tolerated noise level and the tolerated carrier – interference level respectively can be assessed.

## News Items

### Telephone

As a result of notices put up in the University and in the Federal Institute of Technology in Zürich, 60 students (male and female), mostly from the faculties of law and medicine, have spontaneously applied for **employment at the information service no. 111**. After attending a two week course they will be able to begin work.

The **signaling system CCITT No. 7** between the EWSD (electronic switching system) transit exchange Zürich-Herdern III/3, Basel-Wall Street, Berne-Ittigen, Lausanne-Savoie, Brig and the EWSD connecting exchange Vevey has been successfully used since January. Since February the usable channels which are controlled with the signaling system

No. 7 could even be bi-directionally operated.

In section west, in Solothurn, Lutry and Renens, as well as in section east, in Basel/Grosspeter one **Natel-C base station** each was put into operation in February 1989 and that of Landquart was expanded from 8 to 14 channels.

In February two **new FDMA-communication circuits** (analog technique) were put into operation with Pakistan via Leuk.

## Teleinformatic

The **telex density** in Switzerland at the end of 1988 amounted to 5.88 connections per 1000 inhabitants as opposed to 5.33 the previous year.

In the month reported, the **video conference service with Australia** was opened up via Leuk. The traffic is handled over an Intelsat-satellite with a transmission capacity of 2 mbit/s.

For the management communication, one connection each has been made with **Italy** in the Eutelsat-network via Zürich-Herdern and with the **USA** in the Intelsat-network via Geneva-Vernier with a transmission capacity of 64 kbit/s and 128 kbit/s respectively.

## Radio, Television and Radio Communications

Due to **reception problems** in the topographically difficult regions, the Attinghausen station (88.5 Mhz) has been beaming the DRS 1 programmes in Mono again on a trial basis since 15th February. Those effected are the regions of Altdorf and Erstfeld. The tests will last till the Autumn of 1989.

A temporary music line (1544 kbit/s) was connected with the USA and the ground station Geneva-Vernier via an Intelsat-satellite for the **Alpine Ski World Championships in Vail/Colorado**.

## Miscellaneous

The managing committee of the **working group R of the European Broadcasting Union (EBU)** which deals with terrestrial and satellite television, met in Zürich from 25th to 27th January. The main item on the agenda concerned the norm changes of the radio data system (RDS) which deals with the second development phase including the studios. Further important topics were the influence of man and animal by high frequency currents, the digital sound transmission system as well as necessary internal structural adaptations of the working group.