Summaries and notices

Summaries and Notices

Summaries

p. 308...313

Operational Possibilites of Cordless Telephone Systems

R. Klingler, Berne, E. Jakob
and Ch. Korfmacher, Solothurn

Cordless telephones according to the analogue CT-1 standard are very common in Switzerland and have proved reliable in practical service. On the basis of a study described in this report, the authors examine which upper traffic density limit can be reached with the CT-1 standard and how the results depend on the physical layout of the fixed and mobile parts of equipment. The authors also examine the mixed operations (business applications with high traffic concentration and private applications in the same area) as well as the call set up times. The results show that the existing CT-1 standard for «speech only» transmission is also still sufficient for business applications today.

p. 314...317

Extended Access Technology to the Information Services

R. Burri, Berne, and B. Fraefel, Zurich

Information services have always been an important part of economic life. The teleinformatics can be considerably favourable for the individual distribution of information. The access to information with personal computers or simple terminals from remote locations via a public data network is dealt with in the main part of this article. Extended Packet Assembly/Disassembly functions (PAD) realized with the most modern communication technology enable an essential increase in the efficiency of the service access.

p. 318...328

2-Wire Base Band Modem BB-64k/NAG-64k

M. Mathys and K. Möri, Berne

In this article the assembly, function and concept of operation of the 64 kbit/s base band modem NAG-64k/BB-64k of the firm Ascom Hasler are described. These devices form important basic units for the connection of different types of terminal equipment on the digital transmission network.

p. 329...332

Propagation Conditions on a 20 GHz Satellite Link

R. Zbinden, Berne

As a result of increasing demand for satellite communications, one is forced to make new frequency bands accessible for commercial use. The author explains the results of propagation tests which were carried out for this purpose. The signals received from satellite links must show a minimum strength which has a certain level above the noise floor. To enable the operation also in bad weather, the influence of rain, which shows a much stronger effect at 20 GHz than in the lower frequency bands used so far, must be taken into consideration when planning a satellite earth station. An additional attenuation caused by atmospheric gases and clouds must also be taken into consideration.

News Items

Telephone

The long distance radio link **Lugano–Zurich** was put into operation in June with a transmission capacity of 140 Mbit/s. Furthermore, the temporary radio links **Vuillerens–Morges** with 8 Mbit/s as well as **Döttingen/TZ–Reuenthal/MZA** and **Bauma/TZ–Steg/MZA** with a transmission capacity of 2 Mbit/s each were put into operation.

A total of **ten further base stations** of the phase 3 were put into operation for the **Natel C** mobile telephone network in June. In addition both of the **Seelisberg tunnels** were made accessible for the Natel C with one base station each.

In the general administration building of the PTT in Berne, a new **private automatic branch exchange** (PABX) of the Type SL 1 was put into operation with three nodes and three remote units and a total of 7300 internal subscriber lines.

On the occasion of the **International Switching Symposium (ISS)** in Stockholm at the end of May the worldwide **first international connection of direct dialing broad band networks** was introduced with success. Switzerland participated with short video conferences.

Teleinformatics

A new **video conference studio** was put into operation in **Berne** in the PTT headquarters building on the Viktoriastrasse 21. It is designed for six active participants and is equipped with two close up cameras as well as a document and a room camera. Another video conference studio was put into operation in the community of **St. Moritz.**

In order to increase the **security of banking applications of videotex** a qualification test will be carried out with a **personal videotex chip card** which serves as identification and authentification as well as encoding of the data from end to end.

Radio, Television, Radiocommunications

Two **FM stations** were put into operation in June on the **Brusio** multi purpose station for the DRS R (99.0 MHz) and RSI 3 (106.7 MHz) programmes. Furthermore, the FM programmes DRS R (89.0 MHz) and RSI 3 (107.3 MHz) were put into operation on the **Bondo** multi purpose station on the 13th June. At the same time the frequencies were changed: DRS 1 is now to be heard on 102.6 MHz, RSI 1 on 94.8 MHz and RSI 2 on 97.9 MHz.
Two new **1 kW television transmitters** from Rohde and Schwarz were put into operation on the **Les Ordons** station in June as replacement.

The **Radio-Data-System** (RDS) as well as the **Eurosignal** have been in operation in the **Kerenzerberg road tunnel** since the middle of May.

The **17th Plenary Session of the CCIR** took place from 21 May to 1 June with over 500 delegates from 75 administrations taking part. A reorganisation proposed by the president for more efficient organisation of work was rejected. Nevertheless the working methods could be adapted to that of the CCITT in order to be able to keep abridge of the swift technical development. There were no important decisions made in the field of High Definition TV (HDTV) and no solutions in view.

Miscellaneous

The **Board of Governors of the Intelsat organization** authorized its Director General to enter into an agreement with the **NASA** for a shared space shuttle mission for the reboost of the Intelsat-VI (F3) spacecraft which is on a parking orbit. It is planned to catch up with the satellite and to equip it in the cargo bay of the space shuttle with a new perigee motor supplied by **Hughes Aircraft Company** which will bring it subsequently into a geostationary orbit.

The **International Communications Association Exhibition** (ICA 90) took place in New Orleans, USA in May. The PTT took part once again at this exhibition, and for the first time with the participation of **Swiss Telecom North America.** In particular, leasing lines, private network services, arCom 400, MEGACOM and video conference were presented.