Summaries and notices

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Radio Broadcasting over Medium and Long Waves (Part II)

W. Ebert, Berne

In Part I, published in the May issue, the author dealt with the characteristics and use of the various wavebands for radio broadcasting and outlined the present state of European medium-wave broadcasting. He now continues discussion of the technical and operational requirements for reorganization of the medium and long-wave bands and, in conclusion, briefly touches on planning methods.

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Basic Requirements for Transmission Performance of Community Aerial Systems

E. Scherrer, Berne

The author quoteds and explains extracts from this specification, with a view to facilitating its interpretation and application.

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Technical Requirements for Central Aerial Television Systems

H. Roggli, Berne

In view of the growing importance of central aerial systems for television and vhf radio reception, Swiss PTT has worked out technical requirements guaranteeing adequate transmission performance. A series of measurements, described in this article, were conducted beforehand to ensure compatibility of the specification with operational characteristics obtainable in practice.

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Cable Television

The Influence of Periodical Cable Impedance Irregularities on the Quality of a Television Image in the VHF Range

Chr. Bärfuss and H. Ammann, Berne

The relations between the periodical impedance irregularities of a standardized coaxial cable 1.2/4.4 mm (length 460 m) and the quality of a monochrome television image are examined for a VHF transmission. The results are presented in the form of diagrams.

As an example, for this cable length, a just visible perturbation is obtained for a structural return loss of 11 dB and a frequency difference of 1 MHz between cable resonance frequency and picture carrier. For a higher frequency difference and the same structural return loss, an improvement of the image quality is observed.

The structural return loss is not necessarily a representative criterion of the image quality. This quality is mainly determined by second-reflexion, which is hard to measure, however. A new tentative objective quality parameter based on the 2T-pulse overshoot is therefore introduced.

News Items

Telephone

A series of 2000 keypads has been ordered for **conversion of PABX telephones to pulse keying.**

The **Telemaster 350 RV automatic dialler** has been approved for use in the Swiss public network.

The PTT are testing a new **telephone station** for control of the existing police and fire alarm system over leased lines and the switched network.

Geneva is the first Swiss network group where the two-digit **service, information and emergency call numbers** have been replaced by three-digit ones. The increase from 19 to 99 numbers has made it possible to include services formerly allocated standard six-digit numbers (e.g. international enquiries, morning and alarm calls and taxis). The large capacity of the new exchange will reduce congestion during periods of heavy demand for mechanized services (news, sports coverage, etc.) and thus prevent the blocking of emergency services (police, fire-brigade). Further network groups to be equipped with 3-digit service numbers this year are Neuchatel and Basle, followed by Zurich, Bellinzona, Berne, Bienne and St. Gall in 1975.

An **automatic morning and alarm call system** for 1128 orders has been opened at Olten. Swiss PTT now operates 14 such installations with a total capacity of 30,740 orders.

On 2 May the **Swiss satellite earth station at Leuk/Brentjong** was officially opened in the presence of national and international telecommunications representatives and the press.

An **1800-channel microwave link** will be opened between **Basle and Stuttgart** in July.

Telegraph, Telex

At the end of 1973, the **Swiss telex system** comprised 19,020 subscriber's stations, 19 automatic exchanges, 2 international manual and semi-automatic call offices, 1956 interexchange lines as well as 1523 channels to European and 364 to overseas countries. Inland traffic amounted to 33 million and international traffic to 74 million chargeable minutes. Of the international telex calls, 96.3% were dialled direct by the subscribers.

In April **telex service between Switzerland and the Mongolian People's Republic** was opened via Zurich–Moscow. At the same time, **4 telex channels to Peking** came into operation. They are routed via Berne Radio-Suisse and Fucino, the Italian earth station.

Radio, Television

With a view to introducing the **CCIR test lines** into the Swiss television system, the PTT are tentatively inserting test signals in picture lines 17, 18, 330 and 331 of programme chain I.

From 22 April to 7 June the **World Administrative Radio Conference for Maritime Mobile Telecommunications** is being held at Geneva. This has also provided the theme "Telecommunications and Transport" for the 6th World Telecommunication Day on 17 May.

Miscellaneous

On 1 July Swiss PTT will raise the charges for **international mail items and inland telegrams** as well as the **telex rentals and the charges for use of public telephones.** The increase in revenue is estimated at 46 million francs.

The PTT has worked out a **computer programme** enabling hyperbolic tangent development curves to be calculated on the basis of certain known input data. The programme will above all be used in **forecasting telephone penetration** (number of main stations per 100 population) but it is also suitable for other applications. By introducing an additional exponential parameter, the programme can be adapted to asymmetrically shaped development curves, as required for improved accuracy in long-range local network planning.