**Zeitschrift:** Technische Mitteilungen / Schweizerische Post-, Telefon- und

Telegrafenbetriebe = 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 Telegrafenbetriebe

**Band:** 49 (1971)

Heft: 11

Rubrik: Summaries and notices

# Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Mehr erfahren

## **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. En savoir plus

## Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. Find out more

**Download PDF:** 10.08.2025

ETH-Bibliothek Zürich, E-Periodica, https://www.e-periodica.ch

p. 614...622

Third order intermodulation-free channel series for mobile radio telephone services and their interference spectra

by Peter König, Berne

Two methods for the calculation of intermodulation-free channel series by means of a computer are described. The one method is applicable if the frequency band available is free, the other, if it is partly occupied. Either procedure enables optimal solutions with regard to channel utilization to be found. An additional calculation programme serves for the determination of the channels disturbed by a random series. A catalogue lists the more usual intermodulation-free channel series and gives details of their spectrum of interference.

p. 623...635

# The structure of the Swiss Trunk Telephone Network

by Robert Frey, Berne

Since World War II the Swiss inland trunk telephone traffic has quintupled, and within the next 20 years the present traffic is expected to triple. This article describes the development of today's trunk network, the general planning principles and our guidelines for future handling of our trunk telephone service. The handling of traffic via high-capacity circuit groups with possibilities of overflow to a second route receives special attention.

## **News Items**

#### Posts

At the end of August the 5000th roller container was supplied to the Swiss postal services. These 1.6 cubic-metre containers, which are replacing the conventional trolleys, have been adapted to standard-pallet dimensions and can be folded and stacked when empty. The first series of roller containers was ordered in 1968, and today all operating centres, with the exception of Geneva, have been equipped with them.

A new parcel sorting installation for the large postal centres of the future has been designed by the Swiss PTT Postal Engineering Department. In comparison with the most modern plant now in operation at Zurich-Sihlpost, the new sorting installation will have the following advantages: handling of big and small parcels, universal control position for 1–3 operators, more compact construction, facilities for connecting chutes at both ends. At a temporary installation in Zurich various technical solutions, control facilities and the operational capacity have been tested.

#### Telephone

The **twelfth mobile telephone exchange** of Switzerland has been put into operation at Altdorf.

The inquiry office of Sitten has been equipped with microfilm readers.

By the end of September, 203 Swiss telephone exchanges serving 1.1 million users (54%) were equipped for **International Subscriber Dialling.** In May and June, fully automatic international calls reached an average of 66.1%. In some telephone areas the percentage was substantially higher, e.g. Davos (91.1), Locarno (89.9), Basle (82.1).

On 1st October, International Subscriber Dialling was extended to Japan. From Switzerland 75% of all European and overseas telephones can now be reached by ISD.

On 9 September an additional two satellite voice circuits were opened between Berne and New York (via Raisting). There are now 42 satellite circuits available with the USA.

### Telegraphs, Telex

On 7 September the Basle primary office was connected to the ATECO telegram switching centre. At the same time the phonogram service (No. 10) for telephone areas Aarau, Olten and Langenthal was switched to that office.

The 4000th telex station in the Zurich telecommunication region has recently been put into operation. While it took 27 years (1934–1961) to reach the 1st one thousand, the 2nd and 3rd were connected within four years each, and the 4th within 2½ years only.

# Radio, Television

At the end of September a new installation for remote control of fm transmitters was put into operation at the switching centre of the Berne radio studio. This equipment, which can be operated both manually and by clocks, has been designed for three independent chains of programmes, and includes a spare unit for each.

In August the first of four **studios** in the new **Zurich-Seebach TV building** was completed. It measures 300 square metres and is equipped with 3 colour TV cameras and 2 magnetic-tape recording units.

In the 1st half of 1971, 203,000 radio and 93,200 television sets were sold in Switzerland, that is 44,000 and 12,000 more than in the same period of last year.

#### Miscellaneous

At the beginning of September, after visits to Chile and the United Kingdom, a group of twelve delegates from the **telecommunications organization** of the **People's Republic of China** came to Switzerland for one week. The delegation, headed by Director General Chung-Fu-Hsieng, were welcomed by the Management of the Swiss PTT and had discussions with the Head of the Telecommunication Department, Mr Locher, and members of his staff. They also inspected telecommunication plant and visited Swiss telecommunication firms. The delegation then proceeded to France, from where it returned to Peking.



The Chinese Delegation in Berne. General Director Chung-Fu-Hsieng (right) is welcomed by the head of Swiss PTT's telecommunications department, F. Locher

On 20 August Switzerland signed the new Intelsat agreements in Washington. These documents, which replace the 1964 temporary agreements, introduce important changes regarding the competences of members and their right to participate in policy-making.

In September the Zurich Telecommunication Directorate opened a customer information centre of modern design near Bahnhofstrasse, the city's main street. The adjoining public call office at Fusslistrasse has been equipped with 1 telex and 16 telephone booths of the latest type. Airconditioned and sound-proof, they are also fitted with shelf, desk and seating-accommodation (see cover and photographs on page 636).

At the annual meeting of the CEPT Telecommunications Commission in The Hague, a number of member organizations agreed to order from a firm of management consultants a study on the future development of data transmission in Europe. The study is to be conducted in the course of next year.