The ComSoc Guide to Next Generation Optical Transport: SDH/SONET/OTN

Huub van Helvoort

**DESCRIPTION**

**A comprehensive guide to SDH, SONET, and OTN**

*The ComSoc Guide to Next Generation Optical Transport* provides a unique overview of SDH and OTN for engineers who are new to the field, as well as manufacturers, network operators, and graduate students who need a basic understanding of the topics. Fully up-to-date with the latest research and written by one of the foremost experts in the field, it covers:

- Network architectures
- Frames and structures
- Network modeling
- Packet transport network modeling
Frequency justification

- Protection mechanisms

- Mapping methodologies

- Concatenation

- SDH and SONET overhead processing

The book is complemented with 200 illustrations that explain key concepts in an easy-to-understand format, while references point readers to the appropriate standards documents for further reading. Whether you’re new to the field or just need a basic understanding of SDH, this is a must-have guide.

---

**ABOUT THE AUTHOR**

Huub van Helvoort, MSEE, Eindhoven University of Technology, is a Senior Member of the IEEE. He has worked at Philips Telecommunication Industries, AT&T, Lucent Technologies, TranSwitch Corporation, and Huawei Technologies. He is a designer and architect of second- and third-generation SDH equipment and devices. In addition, he has taught telecommunication technology to post graduate students at the University of Utrecht in the Netherlands. Among van Helvoort’s major achievements is the standardization of VCAT, LCAS, and GFP. He represented the above companies in the international standards body ITU-T and the regional standards bodies ANSI OPTXS and ETSI. He is currently rapporteur of ITU-T Q10: “OAM for Transport Networks” and editor of several ITU-T recommendations.

---

**SERIES**

The ComSoc Guides to Communications Technologies