

# Lecture Notes in Computer Science

1938

Edited by G. Goos, J. Hartmanis and J. van Leeuwen

**Springer**

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Sathya Rao    Kaare Ingar Sletta (Eds.)

# Next Generation Networks

Networks and Services  
for the Information Society

5th IFIP TC6 International Symposium,  
INTERWORKING 2000  
Bergen, Norway, October 3-6, 2000  
Proceedings



Springer

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Cataloging-in-Publication Data applied for

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

Next generation networks : network services for the information society ; 5th IFIP TC6 international symposium, Bergen, Norway, October 3 - 6, 2000 ; proceedings / Sathya Rao ; Kaare Ingar Sletta (ed.). - Berlin ; Heidelberg ; New York ; Barcelona ; Hong Kong ; London ; Milan ; Paris ; Singapore ; Tokyo : Springer, 2000  
(Lecture notes in computer science ; Vol. 1938)  
ISBN 3-540-41140-2

CR Subject Classification (1998): C.2, H.3, H.4, D.2, D.4.4, K.4-6

ISSN 0302-9743

ISBN 3-540-41140-2 Springer-Verlag Berlin Heidelberg New York

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Springer-Verlag Berlin Heidelberg New York  
a member of BertelsmannSpringer Science+Business Media GmbH  
© 2000 IFIP International Federation of Information Processing, Hofstrasse 3, 2361 Laxenburg, Austria  
Printed in Germany

Typesetting: Camera-ready by author  
Printed on acid-free paper      SPIN 10781268      06/3142      5 4 3 2 1 0

# Networks and Services for the Information Society

The International Symposia on Interworking received their initial impetus from work done in several projects of the ACTS (Advanced Communication Technologies and Services) Program, which was part of the 4<sup>th</sup> Framework Program of the European Union. This year's Symposium was the fifth of a series of biannual conferences, and was now back in Europe again, following Bern (in 1992), Nice (1994), Nara, Japan (1996), and Ottawa (1998).

**“Networks and Services for the Information Society”** was the overall theme of this year's Interworking 2000 symposium hosted by Telenor, Norway, in Bergen - a beautiful city on the west coast of Norway. A major reason for this choice: Bergen is the European City of Culture for the year 2000.

Interworking 2000 aimed to provide a platform for exchanging views on heterogeneous communication network issues including their concepts, evolution, services, equipment and user requirements. It has highlighted the importance of interoperability between equipment, protocols, signalling and network management for the provision of end-to-end services at an international level.

Contributors to the Symposium include technology and industry leaders gathered from all aspects of telecommunications networking, as well as experts from universities and research institutes.

The research and development work around the globe and the deployment of new technologies in the field has been heading towards the realisation of a virtual society based on information and communication technologies. With the evolution towards this information society, high-speed networks and infrastructures, based on formal international or proprietary standards, will have to interwork with each other in order to provide end-to-end interconnection and operation, independent of the underlying network infrastructure.

Recent years have seen the innovation in both the hardware and software of high-speed communications, using advanced new technologies including ATM, IP networking (IPv6), mobile communication (UMTS) and intelligence in networks, services and operational systems. At the same time, the applications for collaborative working, virtual presence and secured electronic commerce – all steps towards the information society of the 21<sup>st</sup> century – are becoming a reality.

The success of any service will depend upon the ability of networks, application and service platforms to inter-operate with each other in supporting the end-to-end applications with guaranteed QoS. This publication aims to give the reader an idea of how this can be achieved.

The Interworking 2000 conference has integrated ‘Next Generation Networks (NGN)’ projects of the Information Society Technologies (IST) Programme launched by the European Commission. This has facilitated greater dissemination of results from European NGN initiatives to the wider audience at large.

We sincerely hope that this volume will grant its readers an overview of the technologies involved in Networks and Services as foreseen for the information society of the coming century.

## Acknowledgements

This Volume could not exist without the contributors of its papers. We would like to thank them on behalf of the Symposium organisers, for their support in making this a very successful conference. The editors would also like to thank all reviewers for their help in selecting quality papers.

Organising such international events is not easy without the support of sponsors. We would like to thank TELENOR, which was very generous in accepting to host this conference under its Patronage. Our sincere thanks also go to all industrial sponsors and to the members and staff of the European Commission, who provided support of various kinds. In particular we would like to thank Dr. Paulo de Sousa of the European Commission, who helped us integrating the NGN concertation activity into the conference, and Ms. May Krosby of Telenor, who took care of the Secretariat.

Last but not least, our sincere thanks to committee members who provided timely help in realising this conference and to our publishers Springer-Verlag for bringing out an excellent volume in time for the conference.

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