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Quality of Future Internet Services

COST Action 263 Final Report

Volume Editor

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Preface

This state-of-the-art survey of technologies, algorithms, models, and experiments in the area of Internet Quality of Service is the final report of COST (European Cooperation in the field of Scientific and Technical Research) Action 263, *Quality of future Internet Services, http://www.fokus.fraunhofer.de/cost263* (QofIS). COST 263 ran from January 1999 until October 2003 with the participation of some 70 researchers from 38 organizations from 14 European countries (France, Hungary, Italy, Sweden, UK, Belgium, Germany, the Netherlands, Portugal, Slovenia, Switzerland, Finland, Greece, Romania, and Spain). The Action belonged to the COST area "Multimedia and Internet Communication"; together with COST 264, *Networked Group Communication*, this Action continued the effort started in 1992 by COST 237, *Multimedia Telecommunications Services*. Both groups have combined their efforts now in the Network of Excellence in *Emerging Networking Experiments and Technologies, http://www.ist-e-next.net* (E-NEXT) of the 6th European Framework program.

The book consists of seven chapters that were written in 18 months by 67 individual authors. The main objective of this book is to report the state of the art in the area of QofIS, as percieved by the authors, including achievements that were originated by the authors. The book was designed in a top-down manner: after three years of running the Action with close co-ordination of research efforts, it was easy to achieve a consensus on the table of contents. To ensure the content quality the following roles were defined and assigned to COST 263 members: chapter editor, chapter author, chapter reader. In all cases the chapter editor was also a chapter author, while the chapter reader was selected from among the non-authors for that chapter. Our main method of working was electronic mail and shared workspace powered by the *Basic Support for Cooperative Work http://bscw.fokus.fraunhofer.de* (BSCW) server.

After that, groups of authors contributed individual papers to particular chapters. Chapter editors did the initial integration of the papers, providing comments to the authors, and enforcing improvements that often came from the chapter readers. Actually, it took longer than expected; however, the COST 263 community was committed to continuing this effort, and in June 2002 the Action applied for a one-year extension of COST 263 with the particular objective of finishing this book. We thankfully acknowledge COST TC-TIST and COST CSO for the approval of this extension. The final integration step was done by the chapter editors – all individual contributions are now presented within a single flow of text with a common introduction, conclusion and list of references per chapter. The first chapter aims at providing a roadmap for the whole book and serves as a summary of the book's content.

We wish to record our appreciation of the efforts of many people who helped to make this book happen: to the authors (we regret that it was not possible to integrate all the individual contributions); to the COST TC-TIST members and

the Secretariat, originally part of the European Commission and lately part of the European Science Foundation; and to Springer-Verlag for continuous support of the QofIS workshop *http://www.qofis.org* and this final report.

We learned about the untimely death of our dear colleague Prof. Olga Casals on June 11 and we would like to dedicate this volume to her memory.

July 2003   Michael Smirnov
Berlin   (on behalf of all the editors)

About This Book

This book is the final report of COST – *Cooperation europeenne dans le domaine de la recherche scientifique et technique*. Action 263 – *Quality of future Internet Services*.

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