



Consiglio Nazionale delle Ricerche  
AREA DELLA RICERCA DI FIRENZE



**Objective Quality 1995**



**International Symposium on Software Quality Techniques and Acquisition Criteria  
Florence, Italy, 29-31 May 1995**

Chairman: Dr. [Paolo Nesi](#)

[Conference location](#)

Software quality is becoming the key issue in the field of the information technology for maintaining and/or proposing products and thus industries on the market. On the contrary, since the quality is yet for many aspects a subjective issue, its meaning and achievement remain quite unclear yet. The most widely diffuse definition of quality specifies that its degree directly depends on the customer's satisfactory, while another definition is based on the phrase "fitness for the purpose". In effect, both these definitions are reductive since the quality is something of more and more complex, and changes from an industry to another; and, needs to be modeled at least on the basis of the customers' needs, context of the market, industrial goals, system requirements, etc. Therefore, the quality profile, specifying the importance of each quality parameter, must be defined by considering the effect of these factors. As regards the quality achievement, most the major industries are quite convinced that increasing product quality a sensible reduction of costs for systems software design, and maintainability, etc., is obtained; on the contrary a great part of small and medium industries are not very sensitive to the quality problems yet. This is due to the fact that (i) the mechanisms by which the product quality can be achieved and how quality criteria can be introduced in the company, (ii) in which measure the product quality must be obtained in order to meet the industrial goals, and (iii) what are the measures that should be performed for a correct evaluation of software quality, etc., are still unclear. Moreover, these factors are less clear to the industries which are not used to perform long term planning and auto-assessment. Therefore, the uncertainties related to the lack of answers to the above mentioned questions mainly depend on the status of the industry in terms of basic know-how, and flexibility of mind-set management.

These facts justify the organization of a Symposium named Objective Quality. According to this, during the selection of papers a high attention has been given in order to provide guidelines and solutions to the above mentioned problems.

In the Symposium the results produced from the most important European Projects in field of quality and quality process assessment and improvement will be presented (e.g., ESSI APPRAISAL, ami, ESPRIT BOOTSTRAP, ESPRIT MUSiC, ESPRIT REBOOT, SPICE), experiences of university/research centers

(CNR-IEI, CQ\_ware-CESVIT, Politecnico di Torino, QualityLab, Scuola Superiore G. Reiss Romoli, Tecnopolis CSATA, Universita' di Firenze, University of Lancaster, University of Oulu, etc.), and those of European industries (ALENIA, ARTIS, BULL, Cap Volmac, Data Management, ENEL, ETNOTEAM, FIAT, ISMES, Objectif Technologie, SIA, SIEMENS, SINTEF DELAB, TechForce BV, etc.). Thus, the mixture of research institutes, companies and European projects make the symposium a good occasion for both researchers and practitioners.

**Organized by:**

- o Area of Research - CNR (Council National Research), Italy
- o CESVIT, Agency for High Technology
- o Department of Systems and Informatics, University of Florence
- o QualityLab Consortium

The proceedings will be published as a Lecture Notes in Computer Science, N.926, Springer Verlag.

**with the Support of:**

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**and the help of:**

AICQ, Distretto Tecnologico del Canavese, Rete Regionale Toscana Hi-Tech, Qseal, TABOO, UNINFO.

**SYMPOSIUM PROGRAMME**

**29 May**

*Session Chair: P. Nesi, Universita' di Firenze, Italy*

*8:45 The Impact of Software Quality*

*G. Bucci, Dipartimento di Sistemi e Informatica Universita' di Firenze, Italy*

*10:00 Bootstrap: A Software Process Assesment and Improvement Methodology*

*P. Kuvaja, Department of Inf. Proc. Sci., University of Oulu, Finland*

*11:00 coffee break*

*11:00 Quantitative Approach to Software Process Improvement*

*A. Kuntzmann-Combelles, Objectif Technologie, France*

*12:15 lunch*

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*Session Chair: A. Serra, ASIC, Italy*

*14:00 The SPICE Project: an International Standard for Software Process Assessment, Improvement and Capability Determination*

*T. Coletta, Software Quality Assurance Laboratory, Tecnopolis CSATA Novus Ortus, Italy*

*14:45 Quality Estimation of Software Applications for Banking*

*M. Campanai, CESVIT/CQ\_ware, Italy*

*E. Ferretti, V. Valori, Cassa di Risparmio di Firenze, Italy*

*15:30 coffee break*

*15:45 Software Quality of Use: Evaluation by MUSIC*

*L. Binucci, Data Management spa, Italy*

*-- Associated event of IBM --*

*16:45 -- Test Methodology for Networking Software - A Practical Experience*

*L. Moreno, IBM Semea, Networking Software, Laboratory*

*17:45 -- Quality in OS/q Warp Life-Cycle*

*S. Harnett, IBM, Boca Raton, Florida, USA*

### **30 May**

*Session Chair: A. Cicu, QualityLab, Italy*

*9:00 Validating Software Requirements Using Operational Models*

*G. Bruno, R. Agarwal, Politecnico di Torino, Italy*

*10:00 Development of a Model for Reusability Assessment*

*T. Stalhane, SINTEF DELAB, Norway*

*11:00 coffee break*

*11:15 The Impact of Reuse on Software Quality*

*E.-A. Karlsson, Q-Labs, Sweden*

*J.-M. Morel, Bull S.A., France*

*12:15 lunch*

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*Session Chair: G. Bruno, Politecnico di Torino, Italy*

*14:00 Practical Guidelines for Ada Reuse in an Industrial Environment*

*I. Sommerville, Lancaster University, UK*

*L. Masera, SIA, Italy*

*C. Demaria, Alenia, Italy*

*15:00 Process Quality Problems from the Point of View of the User and of the Purchaser of Software*

*A. Cicu, QualityLab, Italy*

*16:00 coffee break*

*16:15 Object-Oriented Design of the UPT Service: Evaluation of the Design Quality and Experience Learned*

*G. Lofrumento, S. Pileri, Scuola Superiore G. Reiss Romoli, Italy*

*-- Associated event of Olivetti --*

*17:15 -- Validation & Delivery Services: an Extension to the Quality Assuranace Phase of Custom Projects*

*M. Bologna, Olivetti*

### **31 May**

*Session Chair: A. Bertolino, IEI-CNR, Italy*

*9:00 Recent Industrial Experiences with Software Product Metrics*

*G. Bakker, F. P. Hirdes, Techforce BV, The Netherlands*

*10:00 Quality Measurement of Software Products: an Experience about a Large Automation System*

*A. Spinelli, D. Pina, P. Salvaneschi, ISMES SpA, Italy*

*E. Crivelli, R. Meda, ENEL/DSR-CRA, Italy*

*11:00 coffee break*

*11:15 Benefits of Using Model-based Testing Tools*

*G. Bruno, Politecnico di Torino, Italy*

*M. Varani, ARTIS, Italy*

*W. Vico, FIAT Auto Mains, Italy*

*C. Offerman, Cap Volmac, The Netherlands*

*12:15 lunch*

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*Session Chair: M. Campanai, CESVIT CQ\_ware, Italy*

*14:00 Software Testing for Dependability Assessment*

*A. Bertolino, IEI-Istituto di Elaborazione della Informazione del CNR, Italy*

*15:00 Quantifying the Benefits of Software Testing: an Experience Report from the GSM Application Domain*

*G. Bazzana, O. Balestrini, S. Finetti, Etnoteam, Italy  
R. Del Miglio, A. Lora, Siemens Telecom, Italy*

*16:00 coffee break*

*-- Associated event of UNINFO --*

*16:15 -- Strutture Normative Nazionali ed Internazionali nel Settore Informatico  
G. Fogaroli, UNINFO*

*16:45 -- Standard Internazionali a Supporto della Qualita' e dell'acquisizione del software  
M. Costamagna, CSELT  
M. Caracciolo, FINSIEL*

*17:15 -- Ciclo di Vita e Qualita' dei Sistemi Basati sulla Conoscenza: Esigenze e Prospettive  
G. Guida, Universita' di Brescia*

*17:45 -- Conference closure*

#### **ACCOMODATION and REGISTRATION**

The conference cost is 900.000 Italian Lire + IVA for the whole conference (three days) or 350.000 Italian Lire + vat for each single day, and it is comprised of coffee breaks, lunches, proceedings as LNCS Springer Verlag.

For students, the cost is 300.000 Italian Lire + vat (three days) or 120.000 Italian Lire + vat (for single day), and it is comprised of coffee breaks, proceedings as LNCS Springer Verlag.

A special discount will be applied to members of conventioned associations.

The conference attenders will be supported by a conference kit, simultaneous bidirectional translations, access to the demonstration/exposition area and to the associated events of IBM, Olivetti, UNINFO, reported in above final programme.

For further information about related events and their schedule, hotel costs, etc., and to send the registration and accomodation forms please don't hesitate to contact the Organization Secretary:

Consulta Umbria  
(Objective Quality 1995)  
Piazza Italia, 9  
06121 Perugia, Italy  
Tel: +39-(0)75-5720608  
Fax: +39-(0)75-5721913

Otherwise you can get the postscript version of the registration form, the hotel reservation form ([oq95.ps](#)) ([regform.ps](#)), or the ASCII versions: ([oq95.txt](#))

[\(regform.txt\)](#) You can also take the abstracts of the symposium ([abstracts.txt](#)) or a brief summary in Italian ([sommario.txt](#))

A more detailed version of the program will be available on WWW and under request:

<http://www-dsi.ing.unifi.it/~nesi/oq95.html> (this page)

in Italian:

<http://www.area.fi.cnr.it/eventi/cesvit/cesvit.htm>

or you can get the program, the registration forms and other information on the anonymous ftp:

<ftp-dsi.ing.unifi.it>

in the directory /oq95.

or you can directly contact the Chairman:

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