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Gert Zülch, Juan Luis Cano, Henri Muller(-Malek) (edts.)

## Production Management Simulation Games

Planning Games for Redesign of Production Systems and Logistic Structures

Supported by the European Leonardo da Vinci Programme

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### **Preface**

The objective of the *CAESAR*-project is the development and dissemination of computer simulation sustained training modules for continuing professional and vocational training through a cooperation of universities and industrial partners. Learning by doing, practising teamwork and using simulation technologies are the main characteristics of the training modules. The special form of teaching, that of computer simulation supported planning games, gives the seminar participants the opportunity to improve their qualifications and core skills, e.g. by working in teams, speaking a foreign language and using current information technology orientated methods and approaches.

The training modules contain aspects of modern computer-aided planning and optimization techniques. Simulation which is a new and upcoming tool for prospective evaluation of planning ideas is used by the participants during the seminars to reduce possible reservations about this technique. Furthermore, the training modules also handle other common computer-aided techniques such as spreadsheet calculation and project management software.

As a result of the project, five training modules which have been fit to the industrial demands have been developed. The modules cover aspects of production planning and control, production controlling, work structuring, project management philosophy implementation and optimization of logistics chains. Meanwhile, a network of seminars has been created in the form of a co-operation between universities, companies and vocational associations. Even outside partners often seize the opportunity to participate in the *CAESAR* planning games, either in all modules or in specific ones.

As a long term product, this book and the supporting CD-ROM have been developed in order to present the main ideas of the *CAESAR* planning games to a broad audience. This book shall enable

the reader to independently study the essentials of production management. For this purpose, the existing simulation programs and models have been adapted so that they may be used as stand-alone tools.

The editors and authors gratefully acknowledge the financial support, which was given to the two parts of the *CAESAR* project by the European *LEONARDO DA VINCI* office in Brussels. Without this support, the result of a common European activity would not have come into existence.

Karlsruhe, Germany Ghent, Belgium Zaragoza, Spain

February 2001

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Planning Games for the Redesign of Production Systems and Logistic Structures



Developed during the project



 $\underline{C}omputer\ \underline{A}ided\ \underline{E}ducation\ with\ a\ \underline{S}imulation\ \underline{A}pproach$  for the  $\underline{R}edesign\ of\ Production\ Processes$ 

with financial support from the European Commission

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