

## PREFACE

Despite the long history of the component disciplines (such as database management and communication standards) distributed databases in real-time control cover fields where brand-new technologies are needed. While in other environments the sophisticated high-level conceptual layers and other complex conceptual structures are vital to ensure system integration or to make the complexity manageable, here they are useless.

The traditional high-level conceptual models, therefore, are generally not applicable here (more precisely, others are more desirable); on the other hand, the huge transaction fluxes involved, and the rigidity of the time constraints, prohibit the use of conventional solutions as well.

Presently, in this field, we cannot speak about quasi-standard solutions at international levels. However, efficiently applied systems exist, realised mostly on an *ad hoc* basis. Such case-studies are of vital importance for the future and I am convinced that these are going to lead to further pre-standard solutions – and this volume contains papers on many such undertakings.

Also, I do not share the opinion that existing theories cannot provide basic help when realising distributed real-time databases. In the fields of database-management, communication and process control, vast knowledge is at our disposal, providing – if nothing else – at least the limits to the possible paths which may be followed.

During this Workshop, representatives of both extremes met. Those wishing to solve industrial problems at whatever cost were sitting alongside the academic representatives of specific disciplines and with the dedicated advocates of international standards. All in all, it proved to be a successful combination.

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