



Participant Profile

for the
Turkish-German Strategy Workshop 2006
TÜBİTAK Marmara Research Center,
Istanbul- Gebze Turkey
13 – 15 December 2006



International Bureau (IB)
of the Federal Ministry of
Education and Research
(BMBF)

1. Contact details and personal information

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¹ **Role/function** e.g. working group leader, managing director, postdoc, PhD etc.

² **Organisation type** e.g. university, research institution, small and medium enterprise (SME), industry etc.

Working Group:	<input type="checkbox"/> 1 Material Technologies <input type="checkbox"/> 2 Biotechnology, Genomics and Food <input type="checkbox"/> 3 Energy <input checked="" type="checkbox"/> 4 Information and Communication Technologies <input type="checkbox"/> 5 Environmental Protection, Climate Change and Sustainable Development
Areas of activity:	<input checked="" type="checkbox"/> research <input checked="" type="checkbox"/> technology development <input checked="" type="checkbox"/> demonstration <input type="checkbox"/> training <input type="checkbox"/> dissemination <input type="checkbox"/> other:
Keywords characterising your area of research:	Please choose the appropriate key words (max. 5) from the following list: http://www.cordis.lu/fp6/keywords 06.02.14.00.00.00.00 Industrial Engineering 05.06.34.00.00.00.00 Production Economics 06.03.31.03.00.00.00 Manufacturing systems
Expertise, technologies and infrastructures available in your institution:	Research activities / expertise: Planning Flexible Manufacturing Systems Methods: Mathematical Programming Key technologies: Planning Data Models, Algorithms, Heuristics Infrastructures: Manufacturing Management Laboratory, BU Flexible Automation Laboratory Key publications: Çanakoğlu E., Taner Bilgiç (2006), "Competitive Models of Telecommunication Supply Chains with Effort Dependent Demand", <i>European Journal of Operational Research</i> , (to appear). Bilge, Ü., M. Fırat, E. Albey, 2006, "Adaptive Fuzzy Logic Approach to Real-Time Manipulation of Routing Flexibility", to appear in <i>Journal of Intelligent Manufacturing</i>



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2. Past and present research collaborations

Are you familiar with the European Framework Programme?

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> with Framework Programme 5 <input checked="" type="checkbox"/> with Framework Programme 6 <input checked="" type="checkbox"/> with Framework Programme 7	

EU-projects you are involved in:
Past projects

Programme title / contract number / title / acronym / your function (coordinator / partner / contractor)	
Present projects	

Other international collaborations:

SAP-BU Bilateral Collaboration

Name(s) and contact details of potential partners:

If you would like to suggest the participation of particular partners from the partner country based on existing contacts or collaboration experience, you are welcome to indicate their names and contact details below:

3. Presentation at the Workshop

I will give a presentation at the workshop (approx. 10 min.) to present my institution, my expertise, and my collaboration interests. The contents of my presentations is summarised below (max. 1 page).

Manufacturing enterprises have several layers of planning and control problems ranging from strategic level decisions to operational control decisions. Distributed planning and control encompasses all layers of decisions.

At the highest level, strategic supply chain decisions like supply network design, contract design, and electronic marketplace design problems are also most often necessarily distributed planning problems.

At the tactical and operational levels, capacity and production planning, detailed operational scheduling and shop-floor control decisions are modeled as distributed planning and control problems to improve flexibility and responsiveness of the system.

At an abstract level, not only these problems have a similar structure and the modeling tools are common but they have significant interdependencies.

The basic tenet of distributing planning and control with autonomous agents is to introduce agility, responsiveness and flexibility to the enterprise. These different levels of planning and control problems are extensively being investigated in the Industrial Engineering Department.

Our group aims to bring together those knowledge and technologies under the main theme of distributed planning and control. The cross-fertilization of different levels is going to yield a more coherent body of knowledge with respect to managing the fast and flexible manufacturing enterprise.



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I agree with the publication of my data on the Workshop website!

PLEASE FILL IN THIS FORM UNTIL 22 SEPT. 2006 AND RETURN IT TO:

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