



Biology-Inspired techniques for Self Organization in dynamic Networks

Project Number: IST-2001-38923
<http://www.cs.unibo.it/bison>





BISON Project Goals

- Develop techniques and tools that are suitable for building network information systems with life-like properties
- Exploit ideas from complex adaptive systems to achieve robust and self-organizing solutions for problems arising in dynamic environments
 - Overlay networks
 - Ad-hoc networks
 - Peer-to-Peer systems
 - Grid computing





BISON Project Expected Results

- A coherent set of heuristics that can guide the search for biology-inspired complex adaptive system giving a desired global behavior
- A systematic framework for constructing solutions to technological problems that inherit the attributes of biology-inspired processes, including self-repair and self-organization





BISON Project Details

- Partners
 - University of Bologna, Italy (Coordinator)
 - Telenor Communication AS, Norway
 - Technical University of Dresden, Germany
 - IDSIA, Lugano, Switzerland
- January 1, 2003 start date, duration 36 months
- Total cost of €2,251,594 with community funding for €1,128,000
- Co-ordinator
 - Prof. Ozalp Babaoglu
 - Department of Computer Science
 - University of Bologna, 40127 Bologna, Italy
 - URL:** <http://www.cs.unibo.it/babaoglu>
 - Tel:** +39 051 2094504
 - Fax:** +39 051 2094510

