

# AgentLink III - Agent-Oriented Software Engineering TFG

## Call for Contribution

TF1 – Rome (Italy)

**Location:** Rome, Italy

**Meeting dates:**

- July 1<sup>st</sup> (14:00-18:00, joint session with NETAGENTS and PROMAS TFGs)
- July 2<sup>nd</sup> (9:00-18:00)

**Contact (Chair):** Massimo Cossentino, ICAR-CNR (Italian National Research Council),  
cossentino@pa.icar.cnr.it.

**TFG AOSE web site:** <http://www.pa.icar.cnr.it/~cossentino/al3tf1>

**AgentLink III web site:** <http://www.agentlink.org>

### Scope and Aims of the TFG AOSE

The scope of this TFG is to work on agent-based methodologies to construct MAS applications. Up to date, several works focused on the analysis and design phases; actually a great number of methodologies are dealing with them: ADELFE, GAIA, INGENIAS, MASE, MESSAGE, PASSI, PROMETHEUS or TROPOS to list just a few of them. This TFG focuses on both the methodological aspect of designing a MAS and the related technological support provided by CAME/CASE CASE tools. We aim to answer some questions such as: which is the right direction for the future in AOSE? How to reuse works already done about methodologies? Which kind of CASE do we need to design MAS? How can they interact with other development tools? How can we select/evaluate/validate a methodology?

During the activity of this forum the proposed aims are:

- Designing the MAS meta-models linked with existing methodologies in order to propose to designers (or begin to think about) a design methodology including templates and patterns for different types of agent and types of agent systems as recommended in the roadmap of AgentLink II.
- Finding one or several benchmarks to test the different methodologies.
- Identify and express guidelines for the construction of future standard design methodologies that could strengthen the adoption of patterns and increase the level of reusability.
  - Defining the set of core building blocks required by an agent-oriented methodology.
  - Being linked with the standardization work of the FIPA. One of its aims is to define methodology fragments in order to build a methodology process in a flexible manner.
  - Expressing the different existing methodologies with the same formalism to highlight the differences and the similarities and promote the reuse of some parts of these methodologies to build a new one.
  - Propose some guidelines to be followed for the construction of CASE tools so that they could more easily interact with each other and support several different methodologies.

- Discussing about the future of AOSE and identifying the most relevant directions to explore in order to support the growth of this field towards its maturity.

## **How to Participate?**

Four ways of participating to this event are possible:

- By answering this call for presentation about a specific MAS meta-model. A short text (2 or 3 pages) describing the meta-model or some slides should be sent to the TFG's chair (cf. above) by June 18<sup>th</sup>. A selection will be done and the authors of accepted proposals will be informed by June 23<sup>th</sup>.
- By providing some information about case-studies, benchmarks, significant parameters and quality indexes of design methodologies in order to study them during the meeting. Send the descriptive text in a file (raw text, pdf, ps, MS Word) to the chair by June 21<sup>th</sup>.
- By preparing a description of your MAS design methodology (if you created/adapted one) in terms of: name, reference materials (links to papers, web sites, ...), contact person, design tool (if a specific one is needed), modelling language adopted, scope of the methodology (e.g.: BDI/state-based/self-adaptive agents, information systems/robotics, ...), short description of the methodology (half page)
- By attending the meeting in Rome. Please inform the chair of your participation to enable him to send you all the needed documents before the meeting.