*F*oundation for

*I*ntelligent

*P*hysical

*A*gents

Resolutions of San Francisco meeting

1. Board Resolutions

FIPA notes the decision of the Board to

1. Call the Annual Meeting of FIPA during the Kawasaki meeting in October 1999. As a number of Board positions will become open at that meeting members are encouraged to make the Membership and Nomination Committee aware of their availability to provide candidate directors by contacting Richard Nicol (Chair), Bruno Caprile, Key-Sun Choi, Charles Pow, Hiroki Suguri.
2. The determination of FIPA membership fees to the level of 3,500 CHF and 1,750 CHF for Full Members and Associate Members, respectively;
3. Award the contract for the development of the Meeting Scheduler Application to AEGIS, subject to positive finalisation of final negotiations. FIPA9707 gives the basic guidelines that will be followed in the negotiations;
4. Issue a notice of a "FIPA application competition" according to the following guidelines:
   - Participants will demonstrate a FIPA agent based application
   - Participants may be members or non members
   - The application will be rated according to its level of interest and completeness
   - Interoperability is of added value but is not a prerequisite
   - The winner will be awarded a prize up to 10,000 USD
   - Prize will be awarded as follows:
     - FIPA members will assess the candidates
     - Each FIPA member will assign a number between 0 to 10 to each candidate application.
     - The winner will be the one for which the average of the scores is highest
     - The value of the prize will be the average times 1,000 USD
   - Time: at the April 2000 meeting of FIPA.
   - The Board in consultation with the FIPA Academy will consider ways to identify and assign funds for the purpose of subsidising qualified student participants

2. Secretariat Report

FIPA notes the report of the Secretariat (fipa9704). Members who have not provided the signed

statutes and notified the names of formal communication points are requested to do so without delay.

3. Resolutions of Technical Committees

A. TC A Resolutions

TC A proposes that FIPA adopt the following resolutions:

1. OMG Agents WG RFI

The members of FIPA have previously expressed the intent of submitting the Architecture Overview document to the Agents Working Group of the Object Management Group in response to their Request For Information ec/99-02-03. The members of FIPA, and especially the chairs of the FIPA technical committees, are requested to review the document for its suitability according to the following timetable:

- TC-A will issue the current draft of the Architecture Overview on Friday, July 9th, 1999.

- TC-A will accept comments from FIPA members through July 22nd 1999. (Minor editorial comments may be made up to July 27th 1999.) Comments may include requests for clarification and suggestions for changes. All comments should be sent to fipa-arch@fipa.org and copied to geoff.arnold@sun.com.

- TC-A will amend the document in the light of these comments. It will distribute revised drafts of the Architecture Overview document on July 15th, 1999 and July 28th, 1999 via email to fipa-arch@fipa.org .

- The TC chairs are asked to announce a decision as to whether the submission should proceed; this decision should be announced to the reflector no later than July 29th, 1999.

- If the submission is approved, a copy of the document will be delivered to OMG no later than August 2nd, 1999. A copy of the document will also be made available on the FIPA website. (The OMG meeting begins on August 23rd, 1999.)

2. Future relationships between FIPA and OMG

The liaison representatives of FIPA and the OMG Agents Working Group are requested to explore the possibility of future collaboration between the two organizations.

3. FIPA TC-A Interim Meeting

TC-A intends to hold an interim meeting on August 26th and 27th 1999. The meeting will be hosted by Sun Microsystems, Inc., and will take place at their Mountain View, CA campus. FIPA members who intend to participate in this meeting should contact geoff.arnold@sun.com or kate.stout@sun.com no later than August 12th, 1999. The minutes of this meeting will be distributed via the fipa-arch@fipa.org reflector.

4. Call for Information: Agent Framework Instantiation

TC-A requests that FIPA issue a Call for Information related to the creation of one or more FIPA standards for Agent Frameworks. Here a framework refers to an instantiation of the FIPA abstract architecture based upon a particular collection of technologies. Examples of such frameworks are:

- A C++/POSIX/CORBA Framework
- A Java/JavaBeans Framework

- An April Framework
- A Prolog Framework

Suggestions for additional frameworks are welcome.

The intent of this Call for Information is that FIPA members and others should prepare materials related to this subject and bring them to the next FIPA meeting, in Kawasaki, Japan in October, 1999. This will allow FIPA to consider the desirability and feasibility of initiating Work Program items to develop such standards.

The information requested includes, but is not limited to, the requirements on such a framework; APIs, protocols and object models; methods for the creation, deployment and management of systems based on the framework; interoperability consideration; message encodings; and examples of existing systems employing some or all of the relevant technologies.

5. Issue Architecture Overview document

TC-A requests that FIPA publish the latest draft of the Architecture Overview document, fipa9409, and make it available through the FIPA web site. The members of FIPA are asked to review the document and forward comments to the reflector fipa-arch@fipa.org. A reflector will be set up at fipa-arch@east.sun.com for the purpose of continuing the discussions with the aim of refining the architecture document before sending it to OMG. After that the discussion should continue until Kawasaki. Frank McCabe is asked to moderate the discussions and present a summary at the beginning of the Kawasaki meeting. The Secretariat will send the email addresses of FIPA active participants to geoff.arnold@sun.com.

6. Thanks for participation

TC-A thanks the FIPA membership for its feedback and comments on the TC-A reflector since the Nice meeting.

TC-A thanks the following for their work at this meeting: Geoff Arnold, Nina Berry, Thierry Bouron, Jeff Bradshaw, David Levine, Robert Luna, Frank McCabe, Abe Mamdani, Paul O'Brien, Jim Odell, Stefan Poslad and Andy Spydell.

B. TC B Resolutions

TC B proposes that FIPA adopt the following resolutions:

1. Approval of the following specifications

Agent Naming
> FIPA spec 17 –1999 Agent Naming Ver 0.2
> Final document to be edited for July 20.

Agent Message Transport
> FIPA spec 16 –1999 Agent Message Transport Ver 0.2
> Final document to be produced during the intermediate meeting
> September 8-10

2. Commitment to produce the following specifications at the end of Japan meeting,
> Agent configuration management(Ed. J. Dale, FIPA spec 15 - 1999)
> Agent message transport (Ed. S. Willmott, FIPA spec 16 - 1999)
> Agent naming (Ed. B. Burg, FIPA spec 17 - 1999)
> Agent Management FIPA98 v2 (Ed. B. Burg, FIPA spec 1 - 1999)

3. The following logistics will be used:
   email reflectors,
   presentations in plenary meetings, written proposals.

- Have a FIPA TC B intermediate meeting in Lausanne, September 8-10 1999

- TC B approves the transmission of the following specifications to OMG
  FIPA spec 17 –1999 Agent Naming Ver 0.2
  FIPA spec 16 –1999 Agent Message Transport Ver 0.2

- TC B to give feed-back on TC A Architecture

- TC B Asks TC C to make names optional in the ACL and content language (default :sender and :receiver)

4. TC B gratefully thanks to: Fabio Bellifemine, Phil Buckle, Bernard Burg, Jonathan Dale, Kiyoshi Kogure, Ryusuke Masuoka, Donie O'Sullivan.

C. TC C Resolutions
TC C proposes that FIPA adopt the following resolutions:

1. The TC approves Version 0.2 of FIPA Spec 2 – 1999, Agent Communication Language, including the following changes to Version 0.1:

   - An update to the proposed Agent Unified Modeling Language (AUML) for specifying and representing Interaction Protocols.
   - An update to the CAs and IPs for handling brokerage. The incorporation of the new parameter `:reply-to` in messages was reaffirmed as requiring no change in the formal semantics of ACL. It may however have implications on how agents follow interaction protocols.
   - The action `forward`, which enables an agent to forward messages to another designated agent, initially specified as an action of the ACC service, is recommended for supporting brokerage and proxy services. The corresponding content languages used in brokering should support this action.
   - Requirement 6 specifying the minimal expressive power of FIPA content languages has been weakened to allow FIPA compliant content languages to be applicable only to a subset of communicative acts (i.e. not necessarily express all of objects, actions and propositions).
   - The editors of this specification are Mark Greaves and Jeremy Pitt.

2. AUML will be presented to OMG's Object Design and Analysis Task Force (ADTF) for consideration as a profile of UML.

3. It was reaffirmed that message encoding is to be handled by TC B (in FIPA Spec 16) where TC C supplies the abstract message components to be encoded. The precise description of these components will be included in FIPA Spec 2 at the next meeting.

4. We look forward to continued relationship with TC A and TC B matters relating to agent

communication. In particular, the requests of TC B for removing the `:envelope` parameter and adding user-defined parameters to ACL messages will be considered in detail at the next meeting. TC B is requested to put these requests in writing (so that we don't forget them).

5. The TC approves Version 0.2 of FIPA Spec 18 – 1999, FIPA Content Languages, including the following changes to Version 0.1:

   - Update to the SL grammar (and its profiles SL0, SL1 and SL 2) to allow for the tuples required by the communicative acts. The users of SL2 (e.g. Luciano Serafini) should reexamine the issue of SL2 decidability.
   - Update to, including semantics of, the constraint-based content language (`FIPA-CSP`)
   - Introduction of Knowledge Interchange Format (ANSI NCITS.T2/98-004) as a content language (`FIPA-KIF`) making use of the KIF prefix notation and full KIF system. Mechanisms for dealing with other KIF encoding schemes and profiles will be discussed on the mailing list, and may be incorporated at the next meeting.
   - The editors of this specification are Monique Calisti and Bart Bauwens.

6. The TC requests comments to the above draft specifications from the membership and public at large for incorporation into the final specifications, due to be released at the next meeting (Kawasaki, Oct. 18-22). In particular, it is expected that members of TC C will continue to improve the specifications and submit these improvements for the next meeting. This work will be carried out jointly via e-mail and the agent communication mailing list, agent_comm@fipa.org. Topics to be targeted include brokerage, AUML, Content Language, document structure, and abstract message components.

7. The TC gratefully acknowledges the contributions of Bernhard Bauer, Bart Bauwens, Thierry Bouron, Monique Calisti, Tim Finin, Michael Genesereth, Mark Greaves, Michael Harrelson, Marcus Huber, Hiroki Iciki, Abe Mamdani, Ryusuke Masuoka, James Odell, Makoto Okada, Jeremy Pitt, Donald Steiner, as well as TC A, TC B, and those who submitted proposals to CfP 7.

D. TC D Resolutions

TC D proposes that FIPA adopt the following resolutions:

1. TC D thanks the members who presented the demonstrations of FACTS project: Alcatel, Broadcom, British Telecom, France Telecom, CSELT, KPN, GMD, Imperial College, ITC-irst, NHK, Nortel Networks and ONERA-CERT.
2. TC D thanks the Intelligent Agent Society of Japan for translating the FIPA specifications into Japanese.
3. TC D approves the document "FIPA Field Trial Plans and Results" (fipa9705.doc).
4. TC D approves the document "FIPA-related Software Developed by Members and Non-Members" (fipa9706.doc).
5. TC D approves that the two documents will be published on the FIPA web site for the general public.
6. TC D encourages members to keep these documents up to date. Any update information shall be mailed to suguri@comtec.co.jp. Especially, TC D requests the FACTS project members to supply their field trial results.
7. TC D approves the document "FIPA 99 Spec 13 Version 0.2: Developer's Guide" (fipa9713.doc). TC D welcomes any input for the Developer's Guide from anybody.

8. TC D requests TC A to provide a list of terms used in the specifications for completeness and accuracy.
9. TC D requests the Secretariat to maintain FIPA mailing list system so that it will function properly.
10. TC D acknowledges the contributions of: François Arlabosse, Laurent Maillet-Contoz, Denis Pierre and Hiroki Suguri.

E. TC E Resolutions

TC E proposes that FIPA adopt the following resolutions:

1. To select Wireless Application Protocol (WAP) developed by WAP Forum to be the wireless Message Transport Protocol.

2. To establish a workgroup (WAP WG) to explore all the technical issues related to the usage of WAP as FIPA wireless Message Transport Protocol. The members of WAP WG are: Michael Berger, Heikki Helin, Markku Tamski, XX & YY (WAP specialists), and Heimo Laamanen. WAP WG welcomes new members to participate its work. The first meeting will be at the 19th of August in Helsinki (audio/video facilities will be provided). The results of WAP Group will be distributed via the reflector site of TC E.

3. To have an interim meeting at the 22nd – 24th of September in Munich (hosted by Siemens).

4. To accept the version 0.2 of FIPA Spec 1999 14 - Nomadic Application Support.

5. To give special thanks to Heikki Helin, Michael Berger, Stefano Campadello, Takahiro Kawamura, Markku Kojo, Kari Koivuniemi, Minna Mäkäräinen, John Shepherdson, and Markku Tamski.

F. TC Chairs resolutions

FIPA should respond in a timely fashion to the OMG RFI # cc/99-02-03

This response will be based on the following current drafts of:

Architecture overview (draft)
FIPA'97 parts 2, 3
FIPA'98 parts 1, 8, 11, 12
FIPA'99 Naming, Message transport

A covering letter will accompany this submission highlighting the relationships and current status of above specifications. Frank McCabe will assemble an executive summary taken from the introduction of the FIPA specification being transmitted.

4. Approval of FIPA 1999 ver. 0.2 specifications

FIPA approves the following ver. 0.2 draft specifications

FIPA Draft ID	Title	Doc#	Publication
FIPA Draft 0 - 1999	Architectural Overview	fipa9710	Yes

FIPA Draft 1 - 1999	Agent Management	fipa9711	Yes
FIPA Draft 2 - 1999	Agent Communication Language	fipa9712	Yes
FIPA Draft 13 - 1999	"FIPA Developers' Guide"	fipa9713	Yes
FIPA Draft 14 - 1999	Nomadic Application Support	fipa9714	Yes
FIPA Draft 16 - 1999	Agent Message Transport	fipa9716	Yes
FIPA Draft 17 - 1999	Agent Naming	fipa9717	Yes
FIPA Draft 18 - 1999	Content languages	fipa9718	Yes

5. Resolutions of the SIG on Product Design and Manufacturing

1. Change in Product Design and Mfg. chair to Nina Berry, since Sandia National Labs is now a member.

2. Product Design and Manufacturing group remains as a SIG
   - 2 additional meetings based on this format are held at the upcoming Oct. and Jan. meetings.
   - After Jan. 2000 meeting, we will determine if SIG should be re-instated as a TC

3. Pursue liaison activities with other manufacturing related organizations:
   OMG mfg. group   Nenad Ivezic
   NIST mfg. task bed   Nenad Ivezic, by Oct. 1999
   CIRP   Nina Berry
   Etc.

4. Promote Product Design and Mfg. SIG outside of FIPA at related workshops for manufacturing, E-commerce, etc.

5. Establish a web site to promote Product Design and Mfg. SIG and establish a pointer to this site from the FIPA web page. By Sept. 1999

6. Interoperability experiment will be a central focus of the supply chain project, and build off existing knowledge of FIPA interoperability test. This will enhance and promote the interoperability needs of the manufacturing community. Decision on actual experiment will be made at Jan. 2000 meeting.

7. Financial support for this project will be pursued by SIG members and the results of these ventures will be reported at Oct. 1999 and Jan. 2000 meetings. Potential support will be sought from government agencies, industry, and FIPA.
   DOE, DARPA, NIST   Nenad Ivezic and Nina Berry
   EC   John Shepherdson
   Japan   ???????
   FIPA   Manny Aparicio

8. Meeting summary and recommendations (fipa9708) will be submitted on July 13, 1999.

6. Resolutions of the SIG on Standardisation
The SIG did not hold the traditional meeting this time. FIPA sends its best wishes to Wiet Bouma for a prompt recovery.

7. Specifications planned for 1999

FIPA approves its publication plan for 1999 with the corresponding TCs and editors in charge:

FIPA Spec ID	Title	TC	Editor
FIPA Spec 0 - 1999	Architectural Overview	A	Geoff Arnold
FIPA Spec 1 - 1999	Agent Management	B	Bernard Burg
FIPA Spec 2 - 1999	Agent Communication Language	C	Mark Greaves, Jeremy Pitt
FIPA Spec 13 - 1999	FIPA Developers' Guide	D	Hiroki Suguri
FIPA Spec 14 - 1999	Nomadic Application Support	E	Heikki Helin
FIPA Spec 15 - 1999	Agent Configuration Management	B	Jonathan Dale
FIPA Spec 16 - 1999	Agent Message Transport	B	Steve Willmott
FIPA Spec 17 - 1999	Agent Naming	B	Bernard Burg
FIPA Spec 18 - 1999	Content languages	C	Monique Calisti, Bart Bauwens

8. FIPA-related software

FIPA welcomes the list of FIPA-related software developed by members (fipa9706). FIPA welcomes the announcement of Nortel Networks that their FIPA-compliant Agent Platform is now OSS. People interested should contact Rob Hadingham or Phil Buckle to register.

9. Field trials by members

FIPA welcomes the description of FIPA field trials being conducted or planned by members and consortia (fipa9405).

10.Demonstrations at San Francisco

FIPA thanks the members of the FACTS project for their demonstration on Wednesday: Alcatel, British Telecom, Broadcom, CSELT, France Telecom, GMD, Imperial College, ITC-IRST, NHK, KPN, Nortel Networks and ONERA-CERT.

11.Press Release

FIPA approves the San Francisco Press Release (fipa9703).

12.Workplan

FIPA approves its workplan

Year	Month	Days	Place
1999	Jul	05-09	San Francisco
1999	Oct	18-22	Kawasaki
2000	Jan	24-29	London
2000	Apr		America

FIPA will decide on its workplan for 2000 and beyond at the next meeting in Kawasaki. All members are requested to contribute their ideas in writing by 15 October to the FIPA Secretariat. Fipa97yy reports some ideas aired during the final plenary in San Francisco.

13.FIPA organisation

FIPA approves its organisation (FIPA9708)

14.Acknowledgement

FIPA thanks Fujitsu and the Intelligent Agent Society of Japan for offering FIPA excellent meeting facilities, friendly support and a Wednesday tour of the San Francisco Bay during the hosting of its 14th meeting, in particular:

Frank McCabe (Fujitsu)

Jonathan Dale (Fujitsu)

Hiroki Suguri (Intelligent Agent Society of Japan)