

FOUNDATION FOR INTELLIGENT PHYSICAL AGENTS

FIPA Not Understood Communicative Act Specification

Document title	FIPA Not Understood Communicative Act Specification		
Document number	DC00049B	Document source	FIPA TC C
Document status	Deprecated	Date of this status	2001/08/10
Supersedes	None		
Contact	fab@fipa.org		
Change history			
2000/10/16	Deprecated by FIPA00037		
2001/08/10	Line numbering added		

© 2000 Foundation for Intelligent Physical Agents - <http://www.fipa.org/>

Geneva, Switzerland

Notice

Use of the technologies described in this specification may infringe patents, copyrights or other intellectual property rights of FIPA Members and non-members. Nothing in this specification should be construed as granting permission to use any of the technologies described. Anyone planning to make use of technology covered by the intellectual property rights of others should first obtain permission from the holder(s) of the rights. FIPA strongly encourages anyone implementing any part of this specification to determine first whether part(s) sought to be implemented are covered by the intellectual property of others, and, if so, to obtain appropriate licenses or other permission from the holder(s) of such intellectual property prior to implementation. This specification is subject to change without notice. Neither FIPA nor any of its Members accept any responsibility whatsoever for damages or liability, direct or consequential, which may result from the use of this specification.

19 **Foreword**

20 The Foundation for Intelligent Physical Agents (FIPA) is an international organization that is dedicated to promoting the
21 industry of intelligent agents by openly developing specifications supporting interoperability among agents and agent-
22 based applications. This occurs through open collaboration among its member organizations, which are companies and
23 universities that are active in the field of agents. FIPA makes the results of its activities available to all interested parties
24 and intends to contribute its results to the appropriate formal standards bodies.

25 The members of FIPA are individually and collectively committed to open competition in the development of agent-
26 based applications, services and equipment. Membership in FIPA is open to any corporation and individual firm,
27 partnership, governmental body or international organization without restriction. In particular, members are not bound to
28 implement or use specific agent-based standards, recommendations and FIPA specifications by virtue of their
29 participation in FIPA.

30 The FIPA specifications are developed through direct involvement of the FIPA membership. The status of a
31 specification can be either Preliminary, Experimental, Standard, Deprecated or Obsolete. More detail about the process
32 of specification may be found in the FIPA Procedures for Technical Work. A complete overview of the FIPA
33 specifications and their current status may be found in the FIPA List of Specifications. A list of terms and abbreviations
34 used in the FIPA specifications may be found in the FIPA Glossary.

35 FIPA is a non-profit association registered in Geneva, Switzerland. As of January 2000, the 56 members of FIPA
36 represented 17 countries worldwide. Further information about FIPA as an organization, membership information, FIPA
37 specifications and upcoming meetings may be found at <http://www.fipa.org/>.

38 **Contents**

39	1	Scope	1
40	2	Not Understood	2
41	3	References	3
42			

42 **1 Scope**

43 This document specifies the Not Understood communicative act that is compliant to [FIPA00037] requirements.

44

45

45

2 Not Understood

Summary	The sender of the act (for example, <i>i</i>) informs the receiver (for example, <i>j</i>) that it perceived that <i>j</i> performed some action, but that <i>i</i> did not understand what <i>j</i> just did. A particular common case is that <i>i</i> tells <i>j</i> that <i>i</i> did not understand the message that <i>j</i> has just sent to <i>i</i> .
Content	A tuple consisting of an action or event, for example, a communicative act, and an explanatory reason.
Description	<p>The sender received a communicative act that it did not understand. There may be several reasons for this: the agent may not have been designed to process a certain act or class of acts, or it may have been expecting a different message. For example, it may have been strictly following a pre-defined protocol, in which the possible message sequences are predetermined. The <i>not-understood</i> message indicates to that the sender of the original (misunderstood) action that nothing has been done as a result of the message.</p> <p>This act may also be used in the general case for <i>i</i> to inform <i>j</i> that it has not understood <i>j</i>'s action. The second term of the content tuple is a proposition representing the reason for the failure to understand.</p> <p>Note: It is not possible to fully capture the intended semantics of an action not being understood by another agent. The characterization below captures that an event happened and that the recipient of the not-understood message was the agent of that event. Additionally, because it is possible that (the reason for failure) is not a well-formed formula, cannot be part of the semantic characterization.</p>
Formal Model	$\langle i, \text{not-understood}(j, a, \text{ }) \rangle$ $\langle i, \text{Inform}(j, \text{ } \rangle$ $\text{FP: } B_i \quad B_i (Bif_j \quad Uif_j \text{ })$ $\text{RE: } B_j$ <p>Where:</p> $= \quad (x) B_i ((e \text{ Done}(e) \quad \text{Agent}(e, j) \quad B_j(\text{Done}(e) \quad \text{Agent}(e, j) \quad (a = e))) = x).$
Example	<p>Agent <i>i</i> did not understand a <i>query-if</i> message (see [FIPA00053]) because it did not recognize the ontology.</p> <pre>(not-understood :sender i :receiver j :content ((query-if :sender j :receiver i ...) (unknown (ontology www))) :language FIPA-SL)</pre>

46

47

47 **3 References**

- 48 [FIPA00037] FIPA Communicative Act Library Specification. Foundation for Intelligent Physical Agents, 2000.
49 <http://www.fipa.org/specs/fipa00037/>
- 50 [FIPA00053] FIPA Query If Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.
51 <http://www.fipa.org/specs/fipa00053/>