

FOUNDATION FOR INTELLIGENT PHYSICAL AGENTS

FIPA Inform If Communicative Act Specification

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37 specifications and upcoming meetings may be found at <http://www.fipa.org/>.

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42 **1 Scope**

43 This document specifies the Inform If communicative act that is compliant to [FIPA00037] requirements.

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46 **2 Inform If**

Summary	A macro action for the agent of the action to inform the recipient whether or not a proposition is true.
Content	A proposition.
Description	<p>The <i>inform-if</i> macro act is an abbreviation for informing whether or not a given proposition is believed. The agent which enacts an <i>inform-if</i> macro-act will actually perform a standard <i>inform</i> act (see [FIPA00046]). The content of the inform act will depend on the informing agent's beliefs. To <i>inform-if</i> on some closed proposition :</p> <p style="padding-left: 40px;">if the agent believes the proposition, it will inform the other agent that , and,</p> <p style="padding-left: 40px;">if it believes the negation of the proposition, it informs that is false (i.e.).</p> <p>Under other circumstances, it may not be possible for the agent to perform this plan. For example, if it has no knowledge of , or will not permit the other party to know (that it believes) , it will send a <i>refuse</i> message (see [FIPA00055]).</p>
Formal Model	<pre><i, inform-if(j,) > <i, inform(j,) > <i, inform(j,) > FP: Bif_i B_i (Bif_j Uif_j) RE: Bif_j</pre> <p><i>Inform-if</i> represents two possible courses of action: <i>i</i> informs <i>j</i> that , or <i>i</i> informs <i>j</i> that not .</p>
Example	<p>Agent <i>i</i> requests <i>j</i> to inform it whether Lannion is in Normandy.</p> <pre>(request :sender i :receiver j :content (inform-if :sender j :receiver i :content "in(lannion, normandy)" :language Prolog) :language FIPA-SL)</pre> <p>Agent <i>j</i> replies that it is not:</p> <pre>(inform :sender j :receiver i :content "\+ in(lannion, normandy)" :language Prolog)</pre>

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48 **3 References**

- 49 [FIPA00037] FIPA Communicative Act Library Specification. Foundation for Intelligent Physical Agents, 2000.
50 <http://www.fipa.org/specs/fipa00037/>
- 51 [FIPA00046] FIPA Inform Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.
52 <http://www.fipa.org/specs/fipa00046/>
- 53 [FIPA00055] FIPA Refuse Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.
54 <http://www.fipa.org/specs/fipa00055/>