<u>UML State Diagrams for Semantic Web Service Engagement:</u> (1) Commitment Protocol



<u>UML State Diagrams for Semantic Web Service Engagement:</u> (2) FIPA Request Protocol



<u>UML State Diagrams for Semantic Web Service Engagement:</u> (3) FIPA Query-Reply Protocol

Precondition: the requestor has selected a candidate service provider, based on a prior discovery and selection process/protocol. Input: the identity of the candidate service provider and the requirements of the requestor. Requestor Provider Notation: R - a request for a service, including [Init] / Send(R) QoS requirements and requestor ID Wait [Receive(R)] / None Wait for Results **Enact Service** Output: an agreement about the service to be enacted and the identity of the provider. There is no explicit contract.