

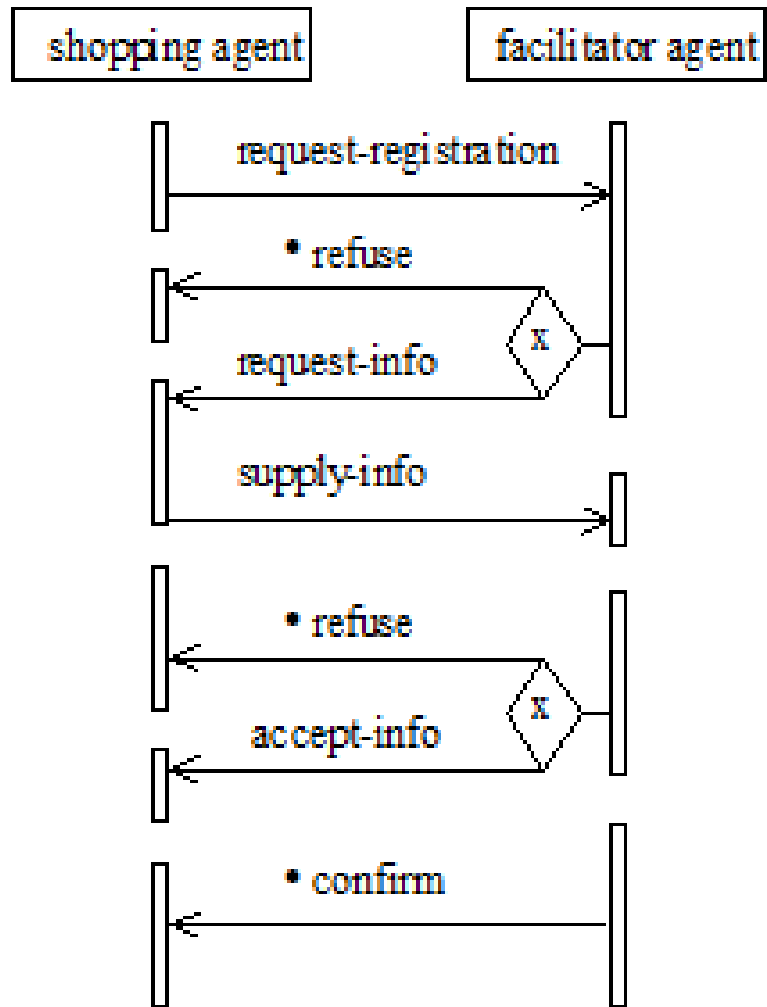
A contract net protocol for a registration - negotiation  
protocol between a shopping agent and a  
facilitator agent



# The class hierarchy diagram of agents in an electronic marketplace

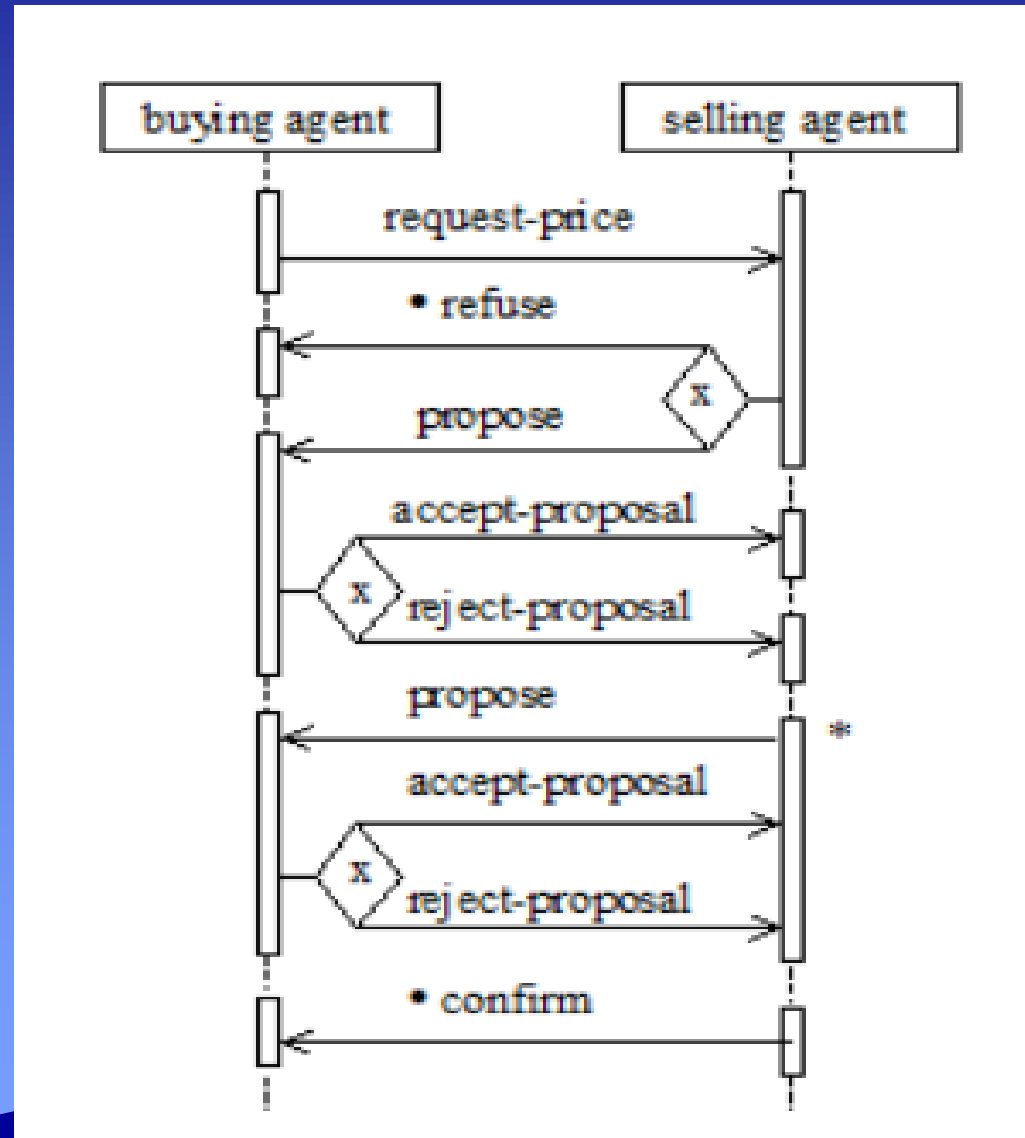


# The registration protocol



- When a conversation based on a contract net protocol begins, the shopping agent sends a request for registration to a facilitator agent.
- The facilitator agent can then choose to respond to the shopping agent by refusing its registration or requesting agent information.
- Here the “x” in the decision diamond indicates an exclusive-or decision.
- If the facilitator refuses the registration based on the marketplace’s size, the protocol ends; otherwise, the facilitator agent waits for agent information to be supplied.
- If the agent information is correctly provided, the facilitator agent then still has a choice of either accepting or rejecting the registration based on the shopping agent’s reputation and the marketplace’s functionality. Again, if the facilitator agent refuses the registration,
  - the protocol ends;
  - otherwise, a confirmation message will be provided afterwards.

# The price-negotiation between a buying agent and a selling agent



# An example of the price-negotiation protocol

