

- identify the task outputs (if any) that each of the identified agents can produce;
- specify average cost and time (if known) for each of the identified task outputs.

5

The data inputs concerning task outputs again need only comprise identifiers for task outputs which can be understood by the agent from the tasks definition, Step 5, described below.

The Organisation Editor 325 uses the data input in this step (Step 3) to  
 10 create a relationship table which is then stored in the Acquaintance Model 215 of the agent. (The relationship table is described above under the heading "2.4 Acquaintance Database 215".)

The outputs of Step 3 are therefore a set of agent relationships 545 which the CABS system stores in the acquaintance model 215 of the agent, and a set of  
 15 variables 540 describing the resources (products) that the base agent believes the target agent can produce.

#### 4.4 Step 4: *Agent Coordination Strategy Specification 510*

20 For each of the agents identified in Step 1 above, the identities of the UCP-compliant coordination graphs which the agent can execute to realise its different coordination strategies have to be input, via the Co-ordination Editor 330. CABS currently provides the following coordination graphs in its coordination graph database 310 which user can select and assign to agents by loading the agent's  
 25 coordination graph database 255:

1. Master-slave (hierarchical task distribution)
2. Contract net (Limited contract net)
3. Multiple Round First Price Sealed Bid
- 30 4. Multiple Round First Price Open Bid (similar to English Auction)
5. Multiple Round Second Price Sealed Bid
6. Multiple Round Second Price Open Bid (similar to Vickery Auction)
7. Multiple Round Reverse Price Open Bid (similar to Dutch Auction)
8. Single Round Derivatives of the last five strategies