

**ABSTRACT** (Figure 1)

A communications network (1) such as a Global Multi Service Network is provided with a management system which
5 comprises a distributed control system (4). The distributed control system (4) is an open community of co-operating intelligent software agents (5, 6) which individually have control, or responsibility for managing, one or more nodes
10 (3) of the communications network (1). There are software agents of more than one type and the service management agents (5) which have control over nodes (3) of the network (1) enter a negotiation process with customer agents (6) in the provision of new services, so as to meet the constraints of both customer requirements and the interest of the
15 relevant service provider. In the event of agent failure, the service management agents (5) initiate a bidding process to reallocate the responsibilities of a failed agent.