ABSTRACT

COMMUNICATIONS SERVER APPARATUS AND METHOD FOR ALLOCATING RESOURCES TO SERVICE REQUESTS RELATED TO A SHARED ECONOMY ON DEMAND SERVICE OR ASSET PROVISION

A communications server apparatus, and associated method, for allocating resources to service requests related to a shared economy on demand service or asset provision, the communications server apparatus comprising a processor and a memory, and being configured, under the control of the processor, to execute instructions stored in the memory to receive a plurality of service requests, each service request comprising data representative of a service or asset requested and a delivery time at or by which said service or asset is required; determine, in respect of each said service request, a lead time comprising a time period between a time at which a respective service request is received and the associated delivery time; compare each said lead time with a predetermined threshold, and define each respective lead time as high if it is greater than the predetermined threshold and low if it is less than the predetermined threshold; receive resource data comprising data representative of available resources capable of providing said service or asset; generate cost matrix data, each element of said cost matrix being representative of an available resource-service request pair, said cost matrix data assigning, in respect of each available resource- service request pair, a cost value; wherein assigning cost values comprises calculating, for each available resource-service request pair, a cost value, dependent on whether the lead time associated with the respective service request is high or low; and, for each service request, select, from a respective set of available resource-service request pair cost values, a minimum cost value and assign the available resource associated with the selected cost value to the respective service request.

(Fig.1)