Claims:

1. An admission control system for a satellite-based Internet access and transport network including a plurality of user terminals connected to a terrestrial ground network via low Earth orbit satellite constellations, the terrestrial ground network further connected to a core network, comprising at least a packet data network gateway, which in turn is connected to the Internet, the admission control system comprising:

a globally federated database configured to provide status information with respect to the user terminals, the terrestrial ground network, the low Earth orbit satellite constellations and the core network; and

a computer system, in communication with at least a portion of the globally federated database, that executes program control instructions to:

(1) admit user terminals for use in one or more respective service regions, wherein each admitted user terminal is associated with and enables a respective service class and a respective service subscriber, wherein each service region is an area in which a user terminal that enables a respective service class operates and from which it consumes capacity,

(2) enable a static admission control mode that is configured to always allow service subscribers to access the satellite-based network for the lifetime of the service subscriber's service, and

(3) enable a dynamic admission control mode that is configured to selectively allow service subscribers to access the satellite-based network for session-based quality of service support, based on the status information provided by the globally federated database;

wherein the admission control system is configured to provide access to the satellite-based Internet access and transport network that includes a moving set of satellite spot beams each having independent schedules.

2. The system according to claim 1, wherein the static admission control mode is further configured to provide a basic data service that handles a set of IP traffic flows not otherwise

classified for specialized carriage wherein there is only one basic data service active per user terminal at any given time.

3. The system according to claim 1, wherein: (1)each satellite spot beam is characterized by a satellite spot beam area; (2) at least one user terminal is fixed in location; and (3) the at least one user terminal that is fixed in location has a service region with an area that is substantially twice the satellite spot beam area, wherein the service region is an area from which the at least one user terminal operates and from which it consumes capacity.

4. The system according to claim 3, further comprising an enterprise portal interface configured to communicate with a plurality of service provider enterprise portals.

5. The system according to claim 4, further comprising an operations support system interposed between the service provider enterprise portal and the computer system.

6. The system according to claim 1, wherein the computer system always admits a predetermined model of user terminals.

7. The system according to claim 6, wherein the predetermined model of user terminals that are always admitted are not associated with a guaranteed bit rate service class.

8. The system according to claim 1, wherein the computer system determines whether to admit a user terminal based on the status information provided by the globally federated database.

9. The system according to claim 8, wherein the computer system admits a user terminal if the status information indicates that sufficient capacity will exist in its respective service region for the lifetime of its respective service class.