

What is claimed is:

1. A method for operating a satellite system, the satellite system including at least a first satellite in low Earth orbit (LEO), and at least a second satellite in an orbit other than LEO, the method comprising:

routing, in accordance with a first routing logic for a forward link, a first data packet from the core network to one of a first satellite in low earth orbit (LEO) or a second satellite in an orbit other than LEO, and from the one satellite in the forward link to a user; and

routing, in accordance with a second routing logic for a reverse link, a second data packet from a user to one of the first satellite or the second satellite, and from the one satellite in the reverse link to the core network.

2. The method of claim 1 wherein one of the first routing logic or the second routing logic is based latency of communications.

3. The method of claim 1 wherein the first routing logic is different than the second routing logic.

4. The method of claim 1 wherein the second satellite is in MEO, the satellite system including at least a third satellite in geostationary orbit (GEO), wherein:

(a) routing in accordance with the first routing logic for the forward link further comprises routing the first data packet from the core network to one of:

- (i) the first satellite in LEO,
- (ii) the second satellite in MEO, or
- (iii) the third satellite in GEO, and

from the one satellite in the forward link to the user; and

(b) routing in accordance with the second routing logic for the reverse link further comprises routing the second data packet from the user to one of:

- (i) the first satellite in LEO,
- (ii) the second satellite in MEO, or
- (iii) the third satellite in GEO, and

from the one satellite in the reverse link to the core network.

5. The method of claim 4 wherein the first routing logic is different than the second routing logic.

6. The method of claim 5 wherein one of the first routing logic or the second routing logic is based latency of communications.

7. A method for routing a first data packet in a satellite system, the satellite system including a plurality of satellites, at least a first of which satellites is in low Earth orbit (LEO), and remaining satellites include at least one satellite in medium Earth orbit (MEO) and at least one satellite in geocentric orbit (GEO), the method comprising determining a latency of the first data packet, wherein:

- (i) if the latency is characterized as critical, route the first data packet to the first satellite,
- (ii) if the latency of the first data packet is characterized as medium, route the first data packet to the satellite in MEO, and
- (iii) if the latency of the first data packet is characterized as high, route the first data packet to the satellite in GEO.

8. A method for routing a first data packet in a satellite system, the satellite system including a plurality of satellites, at least a first of which satellites is in low Earth orbit (LEO), and remaining satellites include some satellites in an orbit other than LEO, the method comprising determining a latency of the first data packet, wherein:

- (i) routing the first data packet to the first satellite when the latency is critical,
- (ii) when the latency of the first data packet is characterized as medium:
 - (a) determine if one of the remaining satellites provide a lower latency than a satellite in a geocentric orbit (GEO),
 - (b) route the first data packet to the satellite providing the lower latency than a satellite in GEO if such a satellite is available,
 - (c) route the first data packet to the satellite in GEO is a lower latency satellite is not available.