

CLAIMS

1. A satellite telecommunication system for effecting communication between a network-~~(1400)~~ and remote systems ~~(1200)~~ via a forward satellite link (FWD) and a return satellite link (RTN), the
5 satellite telecommunication system comprising:

- a gateway ~~(1100)~~ configured for establishing the forward satellite link (FWD) and the return satellite link (RTN) to the remote systems ~~(1200)~~, said gateway comprising:
 - a satellite hub ~~(1110)~~ configured for receiving outgoing data and for transmitting said outgoing data to at least one of the remote systems ~~(1200)~~ via the forward satellite link (FWD), said satellite hub ~~(1110)~~ including a first traffic controlling module ~~(1111)~~;
10 - wherein the first traffic controlling module ~~(1111)~~ is configured for obtaining a first flow ~~(1120a)~~ of the outgoing data being transmitted from the satellite hub ~~(1110)~~ such that said first flow ~~(1120a)~~ follows a predetermined traffic profile;
 - a virtual hub module ~~(1300)~~ configured for forwarding, from the network ~~(1400)~~, the outgoing data to the satellite hub ~~(1110)~~, said virtual hub module ~~(1300)~~ including a
15 second traffic controlling module ~~(1311)~~;
 - wherein the second traffic controlling module ~~(1311)~~ is configured for obtaining a second flow ~~(1120b)~~ of the outgoing data being forwarded from the virtual hub module ~~(1300)~~ such that said second flow ~~(1120b)~~ is unchanged by the first traffic controlling module
20 ~~(1111)~~.

2. The satellite telecommunication system according to claim 1, wherein the virtual hub module ~~(1300)~~ is further configured for forwarding, from the network ~~(1400)~~, the outgoing data to another satellite hub ~~(1160)~~ including another traffic controlling module ~~(1161)~~ different from the first
25 traffic controlling module ~~(1111)~~.

3. The satellite telecommunication system according to claim 2, wherein the another satellite hub ~~(1160)~~ is comprised by another gateway ~~(1150)~~.

30 4. The satellite telecommunication system according to any one of the previous claims, wherein the second traffic controlling module ~~(1311)~~ comprises a traffic database ~~(1311d)~~ for storing a plurality of traffic policies; and wherein the second traffic controlling module ~~(1311)~~ is configured for obtaining the second flow ~~(1120b)~~ based on the plurality of traffic policies.

5. The satellite telecommunication system according to claim 4, wherein the plurality of traffic policies comprises bandwidth limiting policies, traffic priority policies, traffic rerouting policies, and/or outgoing data volume policies.

5 6. The satellite telecommunication system according to any one of the previous claims, wherein the virtual hub module ~~(1300)~~ further includes a management and monitoring module ~~(1312)~~, said management and monitoring module ~~(1312)~~ being configured for managing and monitoring the communication between the network ~~(1400)~~ and the remote systems ~~(1200)~~.

10 7. The satellite telecommunication system according to claim 6, wherein the management and monitoring module ~~(1312)~~ is further configured for generating and managing a data volume voucher upon request by a user; wherein the generating of the data volume voucher includes the generation of a unique URL based on a unique identifier associated to the user.

15 8. The satellite telecommunication system according to claim 6 or 7, wherein the second traffic module ~~(1311)~~ comprises a tracking unit ~~(1311f)~~ connected to the management and monitoring module ~~(1312)~~ and configured for tracking, for each of the remote systems ~~(1200)~~, the outgoing data volume being transmitted.

20 9. The satellite telecommunication system according to any one of claims 6-8, wherein the satellite hub ~~(1110)~~ further comprises a supervision database for storing supervision data; wherein the satellite hub ~~(1110)~~ is further configured for collecting, from the remote systems, the supervision data in parallel with the outgoing data; and wherein the management and monitoring module ~~(1312)~~ is further configured for reading the supervision data of the supervision database.

25 10. The satellite telecommunication system according to claim 9, wherein the management and monitoring module ~~(1312)~~ comprises a logging database ~~(1312e)~~, said logging database ~~(1312e)~~ being configured for logging the user input data.

30 11. The satellite telecommunication system according to claim 10, wherein the virtual hub module ~~(1300)~~ further includes an activity processing module ~~(1313)~~ configured for processing the user input data, logged in the logging database ~~(1312e)~~ of the management and monitoring module ~~(1312)~~, according to a predetermined template.

35 12. The satellite telecommunication system according to claim 4 or 5 and to any one of claims 6-11, wherein the management and monitoring module ~~(1312)~~ is further configured for modifying at

least one traffic policy of the traffic policies stored in the traffic database ~~(1311d)~~ or for storing another traffic policy in the traffic database ~~(1311d)~~, based on the user input data.

5 13. The satellite telecommunication system according to any one of the previous claims, wherein at least one remote system of the remote systems ~~(1200)~~ is a polling system ~~(1200')~~; and wherein the virtual hub module ~~(1300)~~ further includes a performance metering module configured for metering a connectivity performance of the polling system ~~(1200')~~ via the forward satellite link (FWD) and the return satellite link (RTN).

10 14. The satellite telecommunication system according to claim 13, wherein the performance metering module is further configured for sending a warning message to the user upon metering a level of the connectivity performance below a predetermined level.

15 15. The satellite communication system according to any one of the previous claims, wherein the satellite hub ~~(1110)~~ is configured for transmitting the outgoing data via the Ku-band, the C-band, or the Ka-band.

20 16. A virtual hub module for forwarding, from a network ~~(1400)~~, outgoing data to a satellite hub ~~(1110)~~, the virtual hub module ~~(1300)~~ comprising a traffic controlling module ~~(1311)~~; wherein the traffic controlling module ~~(1311)~~ is configured for obtaining a flow of the outgoing data being forwarded from the virtual hub module ~~(1300)~~ such that the flow is unchanged by a hub traffic controlling module ~~(1111)~~ included in the satellite hub ~~(1110)~~.

25 17. The virtual hub module according to claim 16, wherein the virtual hub module ~~(1300)~~ is further configured for forwarding, from the network ~~(1400)~~, the outgoing data to another satellite hub ~~(1160)~~ including another hub traffic controlling module ~~(1161)~~ different from the hub traffic controlling module ~~(1111)~~.