CLAIMS

1. An apparatus that implements a first network function in a mobile communications network, the apparatus comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the apparatus to:

receive, from a second network function, a first request for model training, wherein the first request comprises a vertical federated learning indication and a data set requirement;

determine a data set available in the mobile communications network that matches the data set requirement; and

send the data set to the second network function.

2. The apparatus of claim 1, wherein the at least one processor coupled with the at least one memory is further configured to cause the apparatus to: determine a first list comprising one or more third network functions in the mobile communications network that are available to support the model training according to the vertical federated learning indication.

3. The apparatus of claim 2, wherein the at least one processor coupled with the at least one memory is further configured to cause the apparatus to: send the first list to the second network function.

4. The apparatus of claim 3, wherein the first list corresponds to a list of network functions that support vertical federated learning based on a data set alignment.

5. The apparatus of any preceding claim, wherein the at least one processor coupled with the at least one memory is further configured to cause the apparatus to: determine whether the data set matches the data set requirement based on a data set alignment.

6. The apparatus of claim 5, wherein the data set alignment is performed by the first network function.

7. The apparatus of claim 6, when dependent on claim 2, wherein the at least one processor coupled with the at least one memory is further configured to cause the apparatus to: determine whether the data set matches the data set requirement based on a data set alignment, wherein the data set alignment is performed by one or more of the third network functions.

8. The apparatus of any preceding claim, wherein the second network function is not part of the mobile communication network.

9. The apparatus of any preceding claim, wherein the vertical federated learning indication comprises one or more of an analytics identifier or a vertical federated learning service identifier.

10. The apparatus of any preceding claim, wherein the data set requirement comprises one or more of an event identifier or a sample range.

11. The apparatus of any preceding claim, wherein the at least one processor coupled with the at least one memory is further configured to cause the first network function to: send, to a fourth network function, a second request for the model training, wherein the second request comprises the vertical federated learning indication and the data set requirement.

12. The apparatus of claim 11, wherein the at least one processor coupled with the at least one memory is further configured to cause the apparatus to: receive, from the fourth network function, a response message, wherein the response message comprises an indication of available samples for the model training.

13. A method performed by a first network function in a mobile communications network, the method comprising:

receiving, from a second network function, a first request for model training, wherein the first request comprises a vertical federated learning indication and a data set requirement;

determining a data set available in the mobile communications network that matches the data set requirement; and

sending the data set to the second network function.

14. The method of claim 13, further comprising determining a first list comprising one or more third network functions in the mobile communications network that are available to support the model training according to the vertical federated learning indication.

15. The method of claim 14, further comprising sending the first list to the second network function.

16. The method of claim 15, wherein the first list corresponds to a list of network functions that support vertical federated learning based on a data set alignment.

17. The method of any of claims 13 to 16, further comprising determining whether the data set matches the data set requirement based on a data set alignment.

18. An apparatus that implements second network function, the apparatus comprising:

at least one memory; and

at least one processor coupled with the at least one memory and configured to cause the apparatus to:

send, to a first network function in a mobile communications network, a first request for model training, wherein the first request comprises a vertical federated learning indication and a data set requirement;

receive, from the first network function, a data set that matches the data set requirement, wherein the data set is available in the mobile communications network.

19. The apparatus of claim 18, wherein the at least one processor coupled with the at least one memory is further configured to cause the apparatus to: receive, from the first network function, a first list comprising one or more third network functions in the mobile communications network that are available to support the model training according to the vertical federated learning indication.

20. A method performed by a second network function, the method comprising:

sending, to a first network function in a mobile communications network, a first request for model training, wherein the first request comprises a vertical federated learning indication and a data set requirement;

receiving, from the first network function, a data set that matches the data set requirement, wherein the data set is available in the mobile communications network.