CLAIMS

1. A network entity for wireless communication supporting network data analytics, the network entity comprising instructions executable by at least one processor to cause the network entity to:

obtain a request to provide an inference output for a network analytics operation identified by an analytic identifier;

output an inference request to each of a set of one or more model training functions, the set of one or more model training functions being participants in a federated learning training process for a trained model corresponding to the network analytics operation;

obtain an inference output from each of the set of one or more model training functions; and

output a response comprising an aggregate inference output, the aggregate inference output being based on a respective contribution weight, in the federated learning training process, for each of the one or more model training functions.

2. The network entity of claim 1, wherein the instructions are further executable by the at least one processor to cause the network entity to:

obtain information from a second network entity, the information comprising: an identifier of a model, one or more identifiers of one or more functions to participate in the federated learning training process, and an identifier associated with a current instance of the federated learning training process.

3. The network entity of claim 2, wherein the information comprises information identifying a federated learning passive participant.

4. The network entity of claim 3, wherein at least one model training function comprises at least one of a network data analytics function (NWDAF) or an application function (AF).

5. The network entity of any of claims 2 to 4, wherein the instructions are further executable by the at least one processor to cause the network entity to: obtain the information based on the analytic identifier.

6. The network entity of any preceding claim, wherein the network entity comprises at least one of:

a network data analytics function (NWDAF) supporting an analytics logical function; or

an NWDAF configured to control federated learning processes.

7. The network entity of any preceding claim, wherein the instructions are further executable by the at least one processor to cause the network entity to:

receive the request from a consumer entity, wherein the consumer entity is a consumer analytics logical function; and

output the response to the consumer entity.

8. The network entity of any preceding claim, wherein the inference output is the aggregate inference output, and wherein the instructions are further executable by the at least one processor to cause the network entity to:

obtain the aggregate inference output from a third network entity.

9. The network entity of claim 8, wherein the third network entity comprises an application function (AF).

10. The network entity of any of claims 1 to 7, wherein the inference output comprises respective inference outputs from each of the set of one or more model training functions, and

wherein the instructions are further executable by the at least one processor to cause the network entity to:

obtain each of the respective inference outputs from the respective function of the set of one or more model training functions; and

determine the aggregate inference output based on each of the obtained respective inference outputs.

11. The network entity of claim 10, wherein the instructions are further executable by the at least one processor to cause the network entity to:

obtain the respective contribution weight; and

determine the aggregate inference output based on the respective contribution weight.

12. A method, performed by a network entity of a wireless communication network, the method comprising:

obtaining a request to provide an inference output for a network analytics operation identified by an analytic identifier;

outputting an inference request to each of a set of one or more model training functions, the set of one or more model training functions being participants in a federated learning training process for a trained model corresponding to the network analytics operation;

obtaining an inference output from each of the set of one or more model training functions; and

outputting a response comprising an aggregate inference output, the aggregate inference output being based on a respective contribution weight, in the federated learning training process, for each of the one or more model training functions.

13. The method of claim 12, further comprising:

obtaining information from a second network entity, the information comprising: an identifier of a model, one or more identifiers of one or more functions to participate in the

federated learning training process, and an identifier associated with a current instance of the federated learning training process.

14. A communication network system comprising:

a first network entity and a second network entity,

wherein the first network entity is configured to:

obtain a first request to provide an inference output for a network analytics operation identified by an analytic identifier;

output a second request to the second network entity to perform an inference operation in respect of the network analytics operation,

wherein the second network entity is configured to:

output a third request to each of one or more functions to participate in a federated learning training process for a model to perform the network analytics operation;

obtain an inference output from each of the one or more functions;

output to the first network entity an aggregated inference output based on the obtained inference outputs and respective contribution weights, in the federated learning training process, for each of the one or more functions, and

wherein the first network entity is further configured to:

output a response comprising the aggregate inference output.

15. The communication network system of claim 14, wherein the second network entity is configured to provide training data based on the inference output to the one or more functions for training the model.