CLAIMS

1. A communication network for providing a distributed ledger, comprising at least one node configured to:

provide a distributed ledger function to other nodes.

2. The communication network of claim 1, wherein the communication network is configured as a telecommunication network.

3. The communication network of claim 2, wherein the telecommunication network is configured as a mobile telecommunication network.

4. The communication network of claim 2, wherein the at least one node is an edge node of the telecommunication network.

5. The communication network of claim 4, wherein the at least one node provides an application programming interface.

6. The communication network of claim 4, wherein the communication network is further configured to provide the edge node on demand.

7. The communication network of claim 1, wherein the distributed ledger function is provided, based on a virtual network function.

8. The communication network of claim 7, further comprising an orchestrator for configuring the distributed ledger function.

9. The communication network of claim 7, wherein the virtual network function is based on a virtual infrastructure.

10. The communication network of claim 1, further comprising at least one further node, wherein the nodes are virtually linked to each other.

11. The communication network of claim 1, wherein an access to the distributed ledger is granted based on a smart contract.

12. The communication network of claim 1, wherein the distributed ledger includes a blockchain.

13. The communication network of claim 1, wherein the distributed ledger includes data for mobility as a service.

14. The communication network of claim 1, wherein the other nodes to which the distributed function is provided are part of a consortium.

15. The communication network of claim 14, wherein the distributed ledger function is provided based on a permission.

16. A method of providing mobility as a service, comprising:

maintaining a distributed ledger on multiple nodes, wherein the distributed ledger includes journey data of users using the mobility as a service.

17. The method of claim 16, wherein the distributed ledger includes a blockchain.

18. The method of claim 17, wherein the blockchain includes multiple blocks, the block including the journey data.

19. The method of claim 16, further including providing access to the distributed ledger.

20. The method of claim 19, wherein the access to the distributed ledger is granted based on a permission right.

21. The method of claim 16, further comprising providing at least one of a user profile management function, passenger journey management function, and distributed ledger management function.

22. The method of claim 21, wherein the user profile management function includes storing user information.

23. The method of claim 22, wherein the user information includes at least one of name and birth of date of the user.

24. The method of claim 21, wherein the user profile management function includes storying payment information.

25. The method of claim 24, wherein the payment information includes at least one of credit card information and bank account information.

26. The method of claim 21, wherein the user profile management function includes storing subscription information.

27. The method of claim 26, wherein the subscription information includes at least one of subscribed service and pass information.

28. The method of claim 21, wherein the passenger journey management function includes a book function for at least one of seat reservation, transport means sharing arrangement, transport means reservation.

29. The method of claim 21, wherein the passenger journey management function includes transmitting journey data to the blockchain management function.

30. The method of claim 21, wherein the passenger journey management function includes determining or storing a current status of a travel of a user.

31. The method of claim 21, wherein the determining includes receiving information from a device of the user, wherein the device is an end-user terminal or a sensor.

32. The method of claim 21, wherein the distributed ledger management function includes adding data to the distributed ledger or reading data from the distributed ledger.

33. The method of claim 21, wherein the distributed ledger management function includes performing a consensus protocol.

34. The method of claim 33, wherein the consensus protocol is based on the Practical Byzantine Fault Tolerance.

35. The method of claim 16, further comprising providing a revenue.

36. The method of claim 35, wherein providing a revenue includes calculating an amount of revenue for a mobility service provider of the mobility as a service.

37. The method of claim 36, wherein the amount of revenue is calculated based on an amount of service delivery.

38. The method of claim 36, wherein the amount of revenue is balanced out by searching for another mobility service provider having a surplus corresponding to the amount of revenue.

39. The method of claim 38, wherein the mobility service providers are included in a consortium.

40. The method of claim 36, wherein the amount of revenue is provided from a revenue pool.

41. The method of claim 40, further comprising collecting a surplus from the mobility service providers and providing it to the revenue pool.

42. The method of claim 36, wherein the amount of revenue is provided by a mobility service provider having the highest surplus.

43. The method of claim 36, wherein the amount of revenue is calculated based on a sum of net sales.

44. The method of claim 43, wherein the sum of net sales are associated with an identification.

45. The method of claim 36, wherein the amount of revenue is calculated based on a sum of service deliveries.

46. The method of claim 45, wherein the sum of service deliveries is associated with a mobility service provider identification.

47. A network equipment comprising circuitry configured to:

maintain a distributed ledger on multiple nodes, wherein the distributed ledger includes journey data of users using the mobility as a service.

48. The network equipment claim 47, wherein the distributed ledger includes a blockchain.

49. The network equipment of claim 48, wherein the blockchain includes multiple blocks, the block including the journey data.

50. The network equipment of claim 47, wherein the circuitry is further configured to provide access to the distributed ledger.

51. The network equipment of claim 50, wherein the access to the distributed ledger is granted based on a permission right.

52. The network equipment of claim 47, wherein the circuitry is further configured to provide at least one of a user profile management function, passenger journey management function, and distributed ledger management function.

53. The network equipment of claim 52, wherein the user profile management function includes storing user information.

54. The network equipment of claim 53, wherein the user information includes at least one of name and birth of date of the user.

55. The network equipment of claim 52, wherein the user profile management function includes storying payment information.

56. The network equipment of claim 55, wherein the payment information includes at least one of credit card information and bank account information.

57. The network equipment of claim 52, wherein the user profile management function includes storing subscription information.

58. The network equipment of claim 57, wherein the subscription information includes at least one of subscribed service and pass information.

59. The network equipment of claim 52, wherein the passenger journey management function includes a book function for at least one of seat reservation, transport means sharing arrangement, transport means reservation.

60. The network equipment of claim 52, wherein the passenger journey management function includes transmitting journey data to the blockchain management function.

61. The network equipment of claim 52, wherein the passenger journey management function includes determining or storing a current status of a travel of a user.

62. The network equipment of claim 52, wherein the determining includes receiving information from a device of the user, wherein the device is an end-user terminal or a sensor.

63. The network equipment of claim 52, wherein the distributed ledger management function includes adding data to the distributed ledger or reading data from the distributed ledger.

64. The network equipment of claim 52, wherein the distributed ledger management function includes performing a consensus protocol.

65. The network equipment of claim 64, wherein the consensus protocol is based on the Practical Byzantine Fault Tolerance.

66. The network equipment of claim 47, wherein the circuitry further configured to provide a revenue.

67. The network equipment of claim 66, wherein providing a revenue includes calculating an amount of revenue for a mobility service provider of the mobility as a service.

68. The network equipment of claim 67, wherein the amount of revenue is calculated based on an amount of service delivery.

69. The network equipment of claim 67, wherein the amount of revenue is balanced out by searching for another mobility service provider having a surplus corresponding to the amount of revenue.

70. The network equipment of claim 69, wherein the mobility service providers are included in a consortium.

71. The network equipment of claim 67, wherein the amount of revenue is provided from a revenue pool.

72. The network equipment of claim 71, wherein the circuitry is further configure to collect a surplus from the mobility service providers and providing it to the revenue pool.

73. The network equipment of claim 67, wherein the amount of revenue is provided by a mobility service provider having the highest surplus.

74. The network equipment of claim 67, wherein the amount of revenue is calculated based on a sum of net sales.

75. The network equipment of claim 74, wherein the sum of net sales are associated with an identification.

76. The network equipment of claim 67, wherein the amount of revenue is calculated based on a sum of service deliveries.

77. The network equipment of claim 76, wherein the sum of service deliveries is associated with a mobility service provider identification.

78. A communication device comprising circuitry configured to:

access a distributed ledger on multiple nodes, wherein the distributed ledger includes journey data of users using the mobility as a service.

79. The communication device claim 78, wherein the distributed ledger includes a blockchain.

80. The communication device of claim 79, wherein the blockchain includes multiple blocks, the block including the journey data.

81. The communication device of claim 78, wherein the circuitry is further configured to maintain the distributed ledger.

82. The communication device of claim 78, wherein the access to the distributed ledger is granted based on a permission right.

83. The network equipment of claim 78, wherein the circuitry is further configured to provide at least one of a user profile management function, passenger journey management function, and distributed ledger management function.

84. The communication device of claim 83, wherein the user profile management function includes storing user information.

85. The communication device of claim 84, wherein the user information includes at least one of name and birth of date of the user.

86. The communication device of claim 85, wherein the user profile management function includes storying payment information.

87. The communication device of claim 86, wherein the payment information includes at least one of credit card information and bank account information.

88. The communication device of claim 83, wherein the user profile management function includes storing subscription information.

89. The communication device of claim 88, wherein the subscription information includes at least one of subscribed service and pass information.

90. The communication device of claim 83, wherein the passenger journey management function includes a book function for at least one of seat reservation, transport means sharing arrangement, transport means reservation.

91. The communication device of claim 83, wherein the passenger journey management function includes transmitting journey data to the blockchain management function.

92. The communication device of claim 83, wherein the passenger journey management function includes determining or storing a current status of a travel of a user.

93. The communication device of claim 83, wherein the determining includes receiving information from a device of the user, wherein the device is an end-user terminal or a sensor.

94. The communication device of claim 83, wherein the distributed ledger management function includes adding data to the distributed ledger or reading data from the distributed ledger.

95. The communication device of claim 83, wherein the distributed ledger management function includes performing a consensus protocol.

96. The communication device of claim 95, wherein the consensus protocol is based on the Practical Byzantine Fault Tolerance.

97. The communication device of claim 78, wherein the circuitry further configured to provide a revenue.

98. The communication device of claim 97, wherein providing a revenue includes calculating an amount of revenue for a mobility service provider of the mobility as a service.

99. The communication device of claim 98, wherein the amount of revenue is calculated based on an amount of service delivery.

100. The communication device of claim 98, wherein the amount of revenue is balanced out by searching for another mobility service provider having a surplus corresponding to the amount of revenue.

101. The communication device of claim 100, wherein the mobility service providers are included in a consortium.

102. The communication device of claim 98, wherein the amount of revenue is provided from a revenue pool.

103. The communication device of claim 102, wherein the circuitry is further configured to collect a surplus from the mobility service providers and providing it to the revenue pool.

104. The communication device of claim 98, wherein the amount of revenue is provided by a mobility service provider having the highest surplus.

105. The communication device of claim 98, wherein the amount of revenue is calculated based on a sum of net sales.

106. The communication device of claim 105, wherein the sum of net sales are associated with an identification.

107. The communication device of claim 98, wherein the amount of revenue is calculated based on a sum of service deliveries.

108. The communication device of claim 107, wherein the sum of service deliveries is associated with a mobility service provider identification.