CLAIMS

What is claimed is:

1. A method comprising;

with a mobile station:

identifying assistance data associated with a Satellite Positioning System (SPS) that is used by said mobile station to support a position determination process based, at least in part, on received SPS signals; and

transmitting electromagnetic signals representing at least one message over a wireless communication link to at least one network resource, said at least one message comprising at least one element identifying said assistance data and a specific format of said assistance data if said assistance data is available in different formats.

2. The method as recited in Claim 1, wherein said message is associated with only said SPS.

3. The method as recited in Claim 2, wherein said message comprises a data field enabled to identify said specific format.

4. The method as recited in Claim 1, wherein said at least one message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

5. The method as recited in Claim 4, wherein said single message comprises a second data field identifying said specific format.

6. The method as recited in Claim 1, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

7. The method as recited in Claim 6, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

8. The method as recited in Claim 1, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

9. The method as recited in Claim 1, wherein said specific format of said assistance data comprises a native format or a non-native format.

10. The method as recited in Claim 1, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

11. A method comprising;

with a specific apparatus,

receiving electromagnetic signals representing at least one message as transmitted over a wireless communication link from a mobile station, said at least one message comprising at least one element identifying assistance data associated with a Satellite Positioning System (SPS) and identifying a specific format of said assistance data if said assistance data is available in different formats; and

providing said assistance data via electromagnetic signals representing one or more messages transmitted over a wireless communication link to said mobile station, said assistance data being associated with said SPS and if identified in said received message said assistance data being provided in said specific format.

12. The method as recited in Claim 11, wherein said received message is associated with only said SPS.

13. The method as recited in Claim 12, wherein said received message comprises a data field enabled to identify said specific format.

14. The method as recited in Claim 11, wherein said received message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

15. The method as recited in Claim 14, wherein said single message comprises a second data field identifying said specific format.

16. The method as recited in Claim 11, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

17. The method as recited in Claim 16, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

18. The method as recited in Claim 11, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

19. The method as recited in Claim 11, wherein said specific format of said assistance data comprises a native format or a non-native format, and further comprising:

receiving electromagnetic signals representing said assistance data in said native format from said SPS.

20. The method as recited in Claim 11, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

21. An apparatus comprising;

within a mobile station:

means for identifying that assistance data associated with a Satellite Positioning System (SPS) that is used by said mobile station to support a position determination process based, at least in part, on received SPS signals; and

means for transmitting electromagnetic signals representing at least one message over a wireless communication link to at least one network resource, said at least one message comprising at least one element identifying said assistance data and a specific format of said assistance data if said assistance data is available in different formats.

22. The apparatus as recited in Claim 21, wherein said message is associated with only said SPS.

23. The apparatus as recited in Claim 22, wherein said message comprises a data field enabled to identify said specific format.

24. The apparatus as recited in Claim 21, wherein said at least one message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

25. The apparatus as recited in Claim 24, wherein said single message comprises a second data field identifying said specific format.

26. The apparatus as recited in Claim 21, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

27. The apparatus as recited in Claim 26, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

28. The apparatus as recited in Claim 21, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

29. The apparatus as recited in Claim 21, wherein said specific format of said assistance data comprises a native format or a non-native format.

30. The apparatus as recited in Claim 21, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

31. A specific apparatus comprising;

means for receiving electromagnetic signals representing at least one message as transmitted over a wireless communication link from a mobile station, said at least one message comprising at least one element identifying assistance data associated with a Satellite Positioning System (SPS) and identifying a specific format of said assistance data if said assistance data is available in different formats; and

means for providing said assistance data via electromagnetic signals representing one or more messages transmitted over a wireless communication link to said mobile station, said assistance data being associated with said SPS and if identified in said received message said assistance data being provided in said specific format.

32. The specific apparatus as recited in Claim 31, wherein said received message is associated with only said SPS.

33. The specific apparatus as recited in Claim 32, wherein said received message comprises a data field enabled to identify said specific format.

34. The specific apparatus as recited in Claim 31, wherein said received message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

35. The specific apparatus as recited in Claim 34, wherein said single message comprises a second data field identifying said specific format.

36. The specific apparatus as recited in Claim 31, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

37. The specific apparatus as recited in Claim 36, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

38. The specific apparatus as recited in Claim 31, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

39. The specific apparatus as recited in Claim 31, wherein said specific format of said assistance data comprises a native format or a non-native format, and further comprising:

means for receiving said assistance data in said native format from said SPS.

40. The specific apparatus as recited in Claim 31, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

41. A mobile station comprising;

at least one receiver operatively enabled to receive electromagnetic signals associated with a Satellite Positioning System (SPS);

at least one wireless transceiver; and

at least one processing unit operatively coupled to said receiver and said wireless transceiver and being operatively enabled to:

identify assistance data associated with said SPS that is used by said mobile station to support a position determination process based, at least in part, on said received electromagnetic signals associated with said SPS; and

initiate transmission of electromagnetic signals representing at least one message over a wireless communication link to at least one

network resource using said wireless transceiver, said at least one message comprising at least one element identifying said assistance data and a specific format of said assistance data if said assistance data is available in different formats.

42. The apparatus as recited in Claim 41, wherein said message is associated with only said SPS.

43. The apparatus as recited in Claim 42, wherein said message comprises a data field enabled to identify said specific format.

44. The apparatus as recited in Claim 41, wherein said at least one message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

45. The apparatus as recited in Claim 44, wherein said single message comprises a second data field identifying said specific format.

46. The apparatus as recited in Claim 41, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

47. The apparatus as recited in Claim 46, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation

System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

48. The apparatus as recited in Claim 41, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

49. The apparatus as recited in Claim 41, wherein said specific format of said assistance data comprises a native format or a non-native format.

50. The apparatus as recited in Claim 41, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

51. A specific apparatus comprising;

at least one processing unit operatively enabled to:

access signals representing at least one message as transmitted over a wireless communication link from a mobile station, said at least one message comprising at least one element identifying assistance data associated with a Satellite Positioning System (SPS) and identifying a specific format of said assistance data if said assistance data is available in different formats; and

in response to said at least one message, initiating transmission of electromagnetic signals representing said assistance data in one or more messages over a wireless communication link to said mobile station, said assistance data being associated with said SPS and if identified in said received message said assistance data being provided in said specific format.

52. The specific apparatus as recited in Claim 51, wherein said received message is associated with only said SPS.

53. The specific apparatus as recited in Claim 52, wherein said received message comprises a data field enabled to identify said specific format.

54. The specific apparatus as recited in Claim 51, wherein said received message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

55. The specific apparatus as recited in Claim 54, wherein said single message comprises a second data field identifying said specific format.

56. The specific apparatus as recited in Claim 51, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

57. The specific apparatus as recited in Claim 56, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

58. The specific apparatus as recited in Claim 51, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

59. The specific apparatus as recited in Claim 51, wherein said specific format of said assistance data comprises a native format or a non-native format, and further comprising:

an SPS receiver operatively coupled to said at least one processing unit and enabled to receive said assistance data in said native format from said SPS.

60. The specific apparatus as recited in Claim 51, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

61. An article comprising:

a computer readable medium having computer implementable instructions stored thereon which if implemented by one or more processing units in a mobile station operatively enable the mobile station to:

as part of a position determination process, identify assistance data associated with a Satellite Positioning System (SPS) that is used by said mobile station to support a position determination process based, at least in part, on received SPS signals; and

initiate transmission of electromagnetic signals representing at least one message over a wireless communication link to at least one network resource, said at least one message comprising at least one element identifying said assistance data and a specific format of said assistance data if said assistance data is available in different formats.

62. The article as recited in Claim 61, wherein said message is associated with only said SPS.

63. The article as recited in Claim 62, wherein said message comprises a data field enabled to identify said specific format.

64. The article as recited in Claim 61, wherein said at least one message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

65. The article as recited in Claim 64, wherein said single message comprises a second data field identifying said specific format.

66. The article as recited in Claim 61, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

67. The article as recited in Claim 66, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

68. The article as recited in Claim 61, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

69. The article as recited in Claim 61, wherein said specific format of said assistance data comprises a native format or a non-native format.

70. The article as recited in Claim 61, wherein said at least one element comprises at least one of a request element and/or a response element, and wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

71. An article comprising:

a computer readable medium having computer implementable instructions stored thereon which if implemented by one or more processing units in a specific apparatus of a wireless network resource device operatively enable the specific apparatus to;

access at least one signal representing at least one message as in one or more electromagnetic signals received over a wireless communication link from a mobile station, said at least one message comprising at least one element identifying assistance data associated with a Satellite Positioning System (SPS) and identifying a specific format of said assistance data if said assistance data is available in different formats;

access signals representing said assistance data, said assistance data being associated with said SPS and if identified in said received message said assistance data being provided in said specific format; and

initiate transmission of one or more electromagnetic signals representing said accessed signals representing said assistance data in one or more messages over a wireless communication link to said mobile station.

72. The article as recited in Claim 71, wherein said received message is associated with only said SPS.

73. The article as recited in Claim 72, wherein said received message comprises a data field enabled to identify said specific format.

74. The article as recited in Claim 71, wherein said received message, comprises a single message that is enabled to be selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

75. The article as recited in Claim 74, wherein said single message comprises a second data field identifying said specific format.

76. The article as recited in Claim 71, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

77. The article as recited in Claim 76, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), and/or modernized Global Positioning System (GPS).

78. The article as recited in Claim 71, wherein assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, and/or health data, associated with said SPS.

79. The article as recited in Claim 71, wherein said specific format of said assistance data comprises a native format or a non-native format.

80. The article as recited in Claim 71, wherein said at least one element comprises at least one of a request element and/or a response element, and

wherein said at least one element is compliant with at least a Telecommunications Industry Association (TIA) IS-801-B standard and/or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

CLAIMS

1. A method in a mobile station, the method comprising:

identifying requested assistance data associated with a Satellite Positioning System (SPS) used by said mobile station, wherein the requested assistance data support a position determination process at the mobile station based, at least in part, on received SPS signals; and

transmitting electromagnetic signals representing at least one message over a wireless communication link to at least one network resource, said at least one message comprising at least one element identifying said requested assistance data and a specific format of said requested assistance data, wherein said requested assistance data is available in a plurality of formats.

2. The method as recited in claim **1**, wherein said at least one message is associated with only said SPS.

3. The method as recited in claim **2**, wherein said at least one message comprises a data field that identifies said specific format.

4. The method as recited in claim **1**, wherein said at least one message comprises a single message that is selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

5. The method as recited in claim **4**, wherein said single message comprises a second data field identifying said specific format.

6. The method as recited in claim **1**, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

7. The method as recited in claim **6**, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), or modernized Global Positioning System (GPS).

8. The method as recited in claim **1**, wherein the requested assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, or health data.

9. The method as recited in claim **1**, wherein said specific format of said requested assistance data comprises a native format or a non-native format.

10. The method as recited in claim **1**, wherein said at least one element comprises at least one of a request element or a response element, and wherein said at least one element is compliant with at least one of a Telecommunications Industry Association (TIA) IS-801-B standard or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

11. An apparatus within a mobile station, the apparatus comprising:

means for identifying requested assistance data associated with a Satellite Positioning System (SPS) used by said mobile station, wherein the requested assistance data support a position determination process at the mobile station based, at least in part, on received SPS signals; and

means for transmitting electromagnetic signals representing at least one message over a wireless communication link to at least one network resource, said at least one message comprising at least one element identifying said requested assistance data and a specific format of said requested assistance data, wherein said requested assistance data is available in a plurality of formats.

12. The apparatus as recited in claim **11**, wherein said at least one message is associated with only said SPS.

13. The apparatus as recited in claim **12**, wherein said at least one message comprises a data field that identifies said specific format.

14. The apparatus as recited in claim **11**, wherein said at least one message comprises a single message that is selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

15. The apparatus as recited in claim **14**, wherein said single message comprises a second data field identifying said specific format.

16. The apparatus as recited in claim **11**, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

17. The apparatus as recited in claim **16**, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), or modernized Global Positioning System (GPS).

18. The apparatus as recited in claim **11**, wherein the requested assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, or health data.

19. The apparatus as recited in claim **11**, wherein said specific format of said requested assistance data comprises a native format or a non-native format.

20. The apparatus as recited in claim **11**, wherein said at least one element comprises at least one of a request element or a response element, and wherein said at least one element is compliant with at least one of a Telecommunications Industry Association (TIA) IS-801-B standard or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

21. A mobile station comprising:

at least one receiver operatively enabled to receive electromagnetic signals associated with a Satellite Positioning System (SPS);

at least one wireless transceiver; and

at least one processing unit operatively coupled to said receiver and said wireless transceiver and being operatively enabled to:

identify requested assistance data associated with said SPS used by said mobile station, wherein the requested assistance data support a position determination process based, at least in part, on said received electromagnetic signals associated with said SPS; and

initiate transmission of electromagnetic signals representing at least one message over a wireless communication link to at least one network resource using said wireless transceiver, said at least one message comprising at least one element identifying said requested assistance data and a specific format of said requested assistance data, wherein said requested assistance data is available in a plurality of formats.

22. The mobile station as recited in claim **21**, wherein said at least one message is associated with only said SPS.

23. The mobile station as recited in claim **22**, wherein said at least one message comprises a data field that identifies said specific format.

24. The mobile station as recited in claim **21**, wherein said at least one message comprises a single message that is selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

25. The mobile station as recited in claim **24**, wherein said single message comprises a second data field identifying said specific format.

26. The mobile station as recited in claim **21**, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

27. The mobile station as recited in claim **26**, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), or modernized Global Positioning System (GPS).

28. The mobile station as recited in claim **21**, wherein the requested assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, or health data.

29. The mobile station as recited in claim **21**, wherein said specific format of said requested assistance data comprises a native format or a non-native format.

30. The mobile station as recited in claim **21**, wherein said at least one element comprises at least one of a request element or a response element, and wherein said at least one element is compliant with at least one of a Telecommunications Industry Association (TIA) IS-801-B standard or an associated Third-Generation Partnership Project 2 (3GPP2) standard.

31. An article comprising:

a non-transitory computer readable medium having computer implementable instructions stored thereon which if implemented by one or more processing units in a mobile station operatively enable the mobile station to:

as part of a position determination process, identify requested assistance data associated with a Satellite Positioning System (SPS) used by said mobile station, wherein the requested assistance data support a position determination process at the mobile station based, at least in part, on received SPS signals; and

initiate transmission of electromagnetic signals representing at least one message over a wireless communication link to at least one network resource, said at least one message comprising at least one element identifying said requested assistance data and a specific format of said requested assistance data, wherein said requested assistance data is available in a plurality of formats.

32. The article as recited in claim **31**, wherein said at least one message is associated with only said SPS.

33. The article as recited in claim **32**, wherein said at least one message comprises a data field that identifies said specific format.

34. The article as recited in claim **31**, wherein said at least one message comprises a single message that is selectively associated with one of a plurality of SPS using a first data field that identifies said SPS.

35. The article as recited in claim **34**, wherein said single message comprises a second data field identifying said specific format.

36. The article as recited in claim **31**, wherein said SPS comprises at least one Global Navigation Satellite System (GNSS).

37. The article as recited in claim **36**, wherein said at least one GNSS comprises at least one of Galileo, GLONASS, Satellite Based Augmentation System (SBAS), Quasi-Zenith Satellite System (QZSS), or modernized Global Positioning System (GPS).

38. The article as recited in claim **31**, wherein the requested assistance data comprises at least one of ephemeris data, almanac data, model data, timing data, or health data.

39. The article as recited in claim **31**, wherein said specific format of said requested assistance data comprises a native format or a non-native format.

40. The article as recited in claim **31**, wherein said at least one element comprises at least one of a request element or a response element, and wherein said at least one element is compliant with at least one of a Telecommunications Industry Association (TIA) IS-801-B standard or an associated Third-Generation Partnership Project 2 (3GPP2) standard.