CLAIMS:

1. A floating platform comprising:

a horizontal planar deck;

a buoyant structure for supporting the horizontal planar deck, the structure being formed of:

a first space frame truss comprising a first and a second pair of supporting diagonal tubular members, a first buoyant horizontal tubular member and a first part of the horizontal planar deck, the first space frame truss being arranged in an inverted triangular prism arrangement such that diverging ends of the first pair of diagonal tubular members extends upwards to the first part of the horizontal planar deck from a first end of the first horizontal tubular member and diverging ends of the second pair of diagonal tubular members extends upwards to the first part of the horizontal planar deck from a second end of the first horizontal tubular member, whereby converging ends of the first pair of diagonal tubular members are attached to the first end of the first horizontal tubular member using a first corner connecting node, and converging ends of the second pair of diagonal tubular member is attached to the second end of the first horizontal tubular member using a second corner connecting node;

a second space frame truss comprising a third and a fourth pair of supporting diagonal tubular members, a second buoyant horizontal tubular member and a second part of the horizontal planar deck, the second space frame truss being arranged in an inverted triangular prism arrangement such that diverging ends of the third pair of diagonal tubular members extends upwards to the second part of the horizontal planar deck from a first end of the second horizontal tubular member and diverging ends of the fourth pair of diagonal tubular members extends upwards to the second part of the horizontal planar deck from a second end of the second horizontal tubular member, whereby converging ends of the third pair of diagonal tubular members are attached to the first end of the second horizontal tubular member using a third corner connecting node and converging ends of the fourth pair of diagonal tubular members are attached to the second end of the second horizontal tubular member using a fourth corner connecting node;

whereby the first and second space frame trusses are attached together through a first connecting buoyant tubular member attached to the first and the third corner connecting nodes and through a second connecting buoyant tubular member attached to the second and fourth corner connecting nodes,

wherein a diameter of each of the buoyant tubular members is larger than a diameter of each of the diagonal tubular members;

a first balancing buoyant tubular member having a first and a second balancing connecting node attached to ends of the first balancing buoyant tubular member, whereby the first balancing connecting node is attached to the first corner connecting node of the first space frame truss and the second balancing connecting node is attached to the second corner connecting node of the first space frame truss such that the first balancing buoyant tubular member is parallel with the buoyant horizontal tubular member of the first space frame truss; and

a second balancing buoyant tubular member having a first and a second balancing connecting node attached to ends of the second balancing buoyant tubular member, whereby the first balancing connecting node is attached to the third corner connecting node of the second space frame truss and the second balancing connecting node is attached to the fourth corner connecting node of the second space frame truss such that the second balancing buoyant tubular member is parallel with the buoyant horizontal tubular member of the second space frame truss.

2. The floating platform according to any one of claims 1 or 2, wherein the buoyant structure further comprises:

a lower horizontal buoyant structure formed of four buoyant horizontal tubular members that are connected together using four lower corner connecting nodes, whereby each lower corner connecting node is directly attached to one of the corner connecting nodes of the first or second space frame trusses.

3. The floating platform according to claim 1 wherein the buoyant structure further comprises:

a third space frame truss comprising a fifth and a sixth pair of supporting diagonal tubular members, a third buoyant horizontal tubular member and a third part of the horizontal planar deck, the third space frame truss being arranged in an inverted triangular prism arrangement such that diverging ends of the fifth pair of diagonal tubular members extends upwards to the third part of the horizontal planar deck from a first end of the third horizontal tubular member and diverging ends of the sixth pair of diagonal tubular members extends upwards to the third part of the horizontal planar deck from a second end of the third horizontal tubular member, whereby converging ends of the two pairs of diagonal tubular members are attached to the first or the second ends of the third horizontal tubular member using a fifth or a sixth corner connecting node;

whereby the second and third space frame trusses are attached together through a third connecting buoyant tubular member attached to the third and the fifth corner connecting nodes and through a fourth connecting buoyant tubular member attached to the fourth and sixth corner connecting nodes, and

wherein a diameter of each of the buoyant tubular members is larger than a diameter of each of the diagonal tubular members.

4. The floating platform according to claim 1 wherein the buoyant structure further comprises:

a mini turret affixed to the corner connecting nodes of the first and second space frame trusses to allow the floating platform module to weathervane about the mini turret.

5. The floating platform according to claim 4 wherein the buoyant structure further comprises:

a pair of rudders affixed to the corner connecting nodes of the first and second space frame trusses, the pair of rudders being connected to a directional controller provided on the planar deck whereby the directional controller is configured to use the pair of rudders to control a bearing of the floating platform module.

6. The floating platform according to claim 2 wherein the buoyant structure further comprises:

a ballast tank provided at a base of the lower horizontal buoyant structure;

an accumulator and an air compressor provided on the horizontal planar deck whereby the accumulator is configured to supply compressed air to the ballast tank; and

a controller, provided on the horizontal planar deck, to control an amount of compressed air supplied by the accumulator and the air compressor to the ballast tank.

7. The floating platform according to claim 6 whereby the accumulator is further configured to supply compressed air to one or more of the buoyant horizontal tubular members of the lower horizontal buoyant structure.

8. The floating platform according to claim 1 whereby solar panel modules are provided on the horizontal planar deck such that the solar panel modules are elevated from a surface of a water body when the platform is in use.

9. The floating platform according to claim 1 whereby the buoyant structure further comprises:

a fourth buoyant horizontal tubular member having a first end attached to a centre of the second corner connecting node and having a second end attached to a centre of the seventh corner connecting node;

a seventh pair of diagonal tubular members having ends that diverge upwards from the seventh corner connecting node to a fourth part of the horizontal planar deck;

a fifth buoyant horizontal tubular member having a first end attached to the fourth corner connecting node and having a second end attached to an eighth corner connecting node;

an eighth pair of diagonal tubular members having ends that diverge upwards from the eighth corner connecting node to a fifth part of the horizontal planar deck,

whereby a fifth connecting buoyant tubular member has an end attached to the seventh corner connecting node and another end to the eighth corner connecting node, and

wherein a diameter of each of the buoyant tubular members is larger than a diameter of each of the diagonal tubular members.

10. The floating platform according to claim 2 wherein the floating platform further comprises:

another buoyant structure provided below the buoyant structure for supporting the buoyant structure, the another buoyant structure being formed of

a fourth space frame truss comprising a seventh and an eighth pair of supporting diagonal tubular members, and a fourth buoyant horizontal tubular, the fourth space frame truss being arranged in an inverted triangular prism arrangement such that diverging ends of the seventh and eighth pair of diagonal tubular members extends upwards to the corner connecting nodes of the first and second space frame trusses, whereby converging ends of the seventh pair of diagonal tubular members are attached to the first end of the fourth horizontal tubular member using a seventh corner connecting node and converging ends of the eighth pair of diagonal tubular members are attached to the second end of the fourth horizontal tubular member using a eighth corner connecting node;

a fifth space frame truss comprising a ninth and a tenth pair of supporting diagonal tubular members, and a fifth buoyant horizontal tubular, the fifth space frame truss being arranged in an inverted triangular prism arrangement such that diverging ends of the ninth and tenth pair of diagonal tubular members extends upwards to the corner connecting nodes of the second and third space frame trusses, whereby converging ends of the ninth pair of diagonal tubular members are attached to the first end of the fifth horizontal tubular member using a ninth corner connecting node and converging ends of the tenth pair of diagonal tubular members are attached to the second end of the fifth horizontal tubular member using a tenth corner connecting node;

whereby the fourth and fifth space frame trusses are attached together through a fifth connecting buoyant tubular member attached to the seventh and ninth corner connecting nodes and through a sixth connecting buoyant tubular member attached to the eighth and tenth corner connecting nodes, and

wherein a diameter of each of the buoyant tubular members is larger than a diameter of each of the diagonal tubular members.