Claims

1. A deployable sensor system for incorporation on a marine installation, the sensor system comprising:

a sensor mount securable to the marine installation; and

a sensor arranged to be mounted on the sensor mount; wherein

the sensor mount has a raised configuration and a deployed configuration; and wherein

the sensor is arranged to be held rigidly in place below a hull of the marine installation when the sensor mount is in the deployed configuration and the sensor mount is arranged to rigidly hold the sensor in a higher position in the raised configuration than in the deployed configuration.

2. A marine installation having the sensor system according to claim 1 incorporated thereon.

3. The marine installation according to claim 2, wherein the marine installation includes an external recess, a feedthrough and/or a moonpool in the hull for receiving the sensor mount and/or accessing the sensor when the sensor mount is in the raised configuration.

4. The marine installation according to claim 2 or claim 3 including a plurality of sensor mounts secured to the marine installation, each sensor mount having a raised configuration and a deployed configuration and each sensor mount having at least one sensor mounted thereon.

5. The marine installation according to claim 4, wherein at least one sensor mount is moveable between the deployed and raised configurations independently of at least one other sensor mount.

6. The marine installation according to any one of claims 2 to 5, wherein at least one sensor mount is removeable from the marine installation.

7. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor mount is arranged to be slidably secured to the marine installation.

8. The sensor system or marine installation according to any one of the preceding claims, arranged for the transition between the raised and deployed configurations of at least one sensor mount to include the at least one sensor mount sliding in a vertical direction relative to the marine installation.

9. The sensor system or marine installation according to any one of the preceding claims, arranged for at least one sensor mount to be selectively lockable at one or more configurations intermediate between the raised and deployed configurations.

10. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor includes:

a camera;

a sonar system; or

a wildlife detector.

11. The sensor system or marine installation according to any one of the preceding claims, arranged for at least one sensor to be located adjacent the hull of the marine installation when its respective sensor mount is in the raised configuration.

12. The sensor system or marine installation according to any one of the preceding claims, arranged for at least one sensor to be located within the hull of the marine installation when its respective sensor mount is in the raised configuration.

13. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor is rotatable relative to the marine installation.

14. The sensor system or marine installation according to claim 13, wherein each rotatable sensor is selectively lockable at two or more orientations.

15. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor mount is an elongate, rigid beam.

16. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor mount includes one or more lumens for allowing control signals, sensor data, electrical power and/or motive power to be transmitted between the marine installation and the sensor(s).

17. The sensor system or marine installation according to any one of the preceding claims, wherein an outer surface of at least one sensor mount includes a hydrodynamic fairing.

18. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor is removeable from its respective sensor mount.

19. The sensor system or marine installation according to any one of the preceding claims, further comprising an on-board processor for processing output from the, some, or each sensor(s).

20. The sensor system or marine installation according to any one of the preceding claims, wherein the sensor(s) is/are arranged to monitor sensitive and/or fragile parts of the marine installation.

21. The sensor system or marine installation according to claim 20, wherein, in response to a detection by the sensor(s) that an object is likely to collide with the sensitive and/or fragile parts of the marine installation, the sensor system is configured to issue an alert to an operator and/or take appropriate action to minimise damage.

22. The sensor system or marine installation according to any one of the preceding claims, wherein the marine installation is a flowing-water-driven turbine assembly.

23. The sensor system or marine installation according to any one of the preceding claims, wherein at least one sensor has a protective cage for protecting the sensor.

24. A method of installation of a marine installation according to claim 2 or any claim dependent thereon, the method comprising the steps of:

(a) positioning the or each sensor mount in its/their raised configuration;

(b) towing the marine installation to an installation site; and

(c) installing the marine installation at the installation site.

25. The method of claim 24, further comprising the steps of:

(d) deploying the sensor mount(s) to perform data collection using the sensor(s); and

(e) removing the sensors for use elsewhere once sufficient data has been collected.