What is claimed:

1. A laser-riser blowout preventer package for operably releasably associating an offshore drilling rig, a vessel or a platform on a surface of a body the water with a borehole in a seafloor of the body of water, the laser-riser blowout preventer package comprising:

    a. a riser section comprising a first and a second end, wherein the first end has a first coupling and the second end has a second coupling;

    b. a laser module operably associated with the riser section; and,

    c. and a blowout preventer configured to be operably associated with the riser section and the borehole;

    d. wherein, when the laser-riser blowout preventer package is deployed and operably associating the offshore drilling rig with the borehole in the seafloor, the laser module upon firing a laser beam can completely cut the riser section at a predetermined location on the riser section, thereby releasing the offshore drilling rig from the blowout preventer.

2. The laser-riser blowout preventer package of claim 1, wherein the first coupling is selected from the group consisting of: a dog connector, a flange-connector, a key connector, a clip connector, a bowen connector, and a threaded connecter.

3. The laser-riser blowout preventer package of claim 1, wherein the second coupling is a blowout preventer connector.

4. The laser-riser blowout preventer package of claim 3, wherein the blowout preventer connector is hydraulic.

5. The laser-riser blowout preventer package of claim 1, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the first coupling.

6. The laser-riser blowout preventer package of claim 1, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the second coupling.

7. The laser-riser blowout preventer package of claim 1, further comprising 29 additional riser sections.

8. A laser-riser blowout preventer package comprising: a riser section comprising a first means for coupling and a second means for coupling; a means for providing a laser beam to cut a component of the riser section; and a blowout preventer.

9. The laser-riser blowout preventer package of claim 8, wherein the first means for coupling is a dog-style riser coupling.

10. The laser-riser blowout preventer package of claim 8, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the first means for coupling.

11. The laser-riser blowout preventer package of claim 8, wherein the first means for coupling is a flange-style riser coupling.

12. The laser-riser blowout preventer package of claim 11, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the first means for coupling.

13. The laser-riser blowout preventer package of claim 8, wherein the first means for coupling is a key-style riser coupling.

14. The laser-riser blowout preventer package of claim 13, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the second means for coupling.

15. A laser module for use with a marine riser, the laser module comprising:

a. a housing configured for association with a marine riser, the housing defining an inner area, whereby at least a portion of the marine riser may be contained within the inner area;

b. the housing having a first laser cutter and a second laser cutter;

c. the first and second laser cutters, being positioned within the housing and the first and second laser cutters each having a laser discharge end;

d. a first beam path extending from the laser discharge end of the first laser cutter to the inner area of the housing; and

e. a second beam path extending from the laser discharge end of the second laser cutter to the inner area of the housing;

16. The laser module of claim 15, wherein the housing comprises an annular housing with the inner area comprising an annulus of the housing and wherein the marine riser comprises a center tube, an external pipe, and a coupling, and wherein the annular housing is configured to accommodate the center tube, the external pipe and the coupling.

17. The laser module of claim 15, wherein the first beam path is directed to a portion of the inner area, which portion is configured for placement adjacent a center tube of the marine riser.

18. The laser module of claim 15, wherein the first beam path is directed to a portion of the inner area, which portion is configured for placement adjacent an external pipe of the marine riser.

19. The laser module of claim 15, wherein the first beam path is directed to a portion of the inner area, which portion is configured for placement adjacent a coupling of the marine riser.

20. The laser module of claims 15, wherein the first and second laser cutters are configured within the housing to move within the housing, whereby the first and second laser cutters have the ability to at least partially orbit around the marine riser when the housing is associated with the marine riser.

21. A quick release riser section comprising:

a. a riser section, comprising a first end having a first coupling, a second end having a second coupling and a center tube;

b. a laser cutter; and,

c. a beam path extending between the laser cutter and the riser section.

22. The quick release riser section of claim 21, wherein the first coupling comprises a key and the beam path is directed toward the key.

23. An offshore drilling rig system comprising:

an offshore drilling rig; and

a quick release riser blowout preventer package, the package comprising:

a. a riser comprising a plurality of riser sections, wherein the plurality of riser sections are configured for being lowered from and operably connected to the offshore drilling rig to a depth at or near a seafloor;

b. a blowout preventer configured for being operably connected to the riser and lowered by the riser from the offshore drilling rig to the seafloor; and,

c. the riser comprising a laser module;

d. the laser module comprising a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed from the laser cutter toward one of the plurality of riser sections;

e. wherein, when the package is deployed and operably associating the offshore drilling rig with a borehole in the seafloor, the laser module upon firing a laser beam can cut at least a portion of the one of the plurality of riser sections at a predetermined location, thereby providing for the quick release of the offshore drilling rig from the blowout preventer.

24. A method of drilling subsea wells by using a laser module associated with a riser section, the method comprising:

a. lowering a blowout preventer from an offshore drilling rig to a seafloor using a riser comprising a plurality of riser sections, wherein the blowout preventer comprises a blowout preventer cavity defined by the blowout preventer, the riser comprises a riser cavity defined by the riser;

b. one of the plurality of riser sections having a laser module associated therewith, wherein the laser module comprises a laser cutter for emitting a laser beam that defines a beam path and wherein the beam path is directed from the laser cutter toward a component of the one of the plurality of riser sections;

c. securing the blowout preventer to a borehole defining a borehole cavity, whereby the borehole cavity, the blowout preventer cavity and the riser cavity are in fluid and mechanical communication; and,

d. advancing the borehole by lowering tubulars from the offshore drilling rig down through the riser cavity, the blowout preventer cavity and into the borehole;

e. whereby, a drilling operation is enhanced by having an ability in an emergency situation to fire a laser beam from the laser module to completely cut the component of the one of the plurality of riser sections in the beam path, thereby weakening the riser.

25. A method of performing drilling, workover, intervention, completion or service activities on a subsea well by using a laser module associated with a riser section, the method comprising:

a. positioning a riser between a surface of a body of water and a seafloor, the riser comprising a riser cavity defined by the riser,

wherein the riser is in fluid communication with a subsea well and an offshore rig, vessel or platform;

b. associating a laser module with the riser, wherein the laser module comprises a laser cutter for emitting a laser beam that defines a beam path and wherein the beam path is directed from the laser cutter toward a component of the riser; and,

c. performing activities on the well by advancing structures through the riser cavity;

d. providing the capability to fire a laser beam from the laser module to completely cut the riser in the beam path, thereby weakening the riser and providing a controlled disconnection of the riser.

What is claimed:

1. A laser-riser blowout preventer package for operably releasably associating an offshore drilling rig, a vessel or a platform on a surface of a body the water with a borehole in a seafloor of the body of water, the laser-riser blowout preventer package comprising:

    a. a riser section comprising a first and a second end, wherein the first end has a first coupling and the second end has a second coupling;

    b. a laser module operably associated with the riser section; and,

    c. and a blowout preventer configured to be operably associated with the riser section and the borehole;

    d. wherein, when the laser-riser blowout preventer package is deployed and operably associating the offshore drilling rig with the borehole in the seafloor the offshore drilling rig, vessel or platform is mechanically connected and in fluid communication with the borehole; and, the laser module upon firing a laser beam can completely cut the riser section at a predetermined location on the riser section, thereby releasing the offshore drilling rig, vessel or platform from the blowout preventer.

2. The laser-riser blowout preventer package of claim 1, wherein the first coupling is selected from the group consisting of: a dog connector, a flange-connector, a key connector, a clip connector, a bowen connector, and a threaded connector.

3. The laser-riser blowout preventer package of claim 1, wherein the second coupling is selected from the group consisting of: a dog connector, a flange connector, a key connector, a clip connector, a bowen connector, and a threaded connector.

4. The laser-riser blowout preventer package of claim 1, wherein the second coupling is a blowout preventer connector.

5. The laser-riser blowout preventer package of claim 4, wherein the blowout preventer connector is hydraulic.

6. The laser-riser blowout preventer package of claim 1, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the first coupling.

7. The laser-riser blowout preventer package of claim 1, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the second coupling.

8. The laser-riser blowout preventer package of claim 2, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the first coupling.

9. The laser-riser blowout preventer package of claim 2, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the second coupling.

10. The laser-riser blowout preventer package of claim 3, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the first coupling.

11. The laser-riser blowout preventer package of claim 3, wherein the laser module comprises a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed toward the second coupling.

12. The laser-riser blowout preventer package of claim 1, wherein the laser module is adjacent the first coupling.

13. The laser-riser blowout preventer package of claim 1, wherein the laser module is adjacent the second coupling.

14. The laser-riser blowout preventer package of claims 1, 2, 4, 6, 7, 8 or 9, wherein the laser module comprises two laser cutters.

15. The laser-riser blowout preventer package of claim 1, comprising 9 additional riser sections.

16. The laser-riser blowout preventer package of claim 1, comprising 29 additional riser sections.

17. The laser-riser blowout preventer package of claim 1, comprising 59 additional riser sections.

18. The laser-riser blowout preventer package of claim 1, comprising 99 additional riser sections.

19. The laser-riser blowout preventer package of claim 2, further comprising 59 additional riser sections.

20. A laser-riser blowout preventer package comprising:

a. A riser section comprising a first riser coupling and a second riser coupling;
b. A means for providing a laser beam to cut a component of the riser section;
c. The means for providing a laser beam engaging an exterior of the riser section; and
d. A blowout preventer;
e. Whereby the means for providing a laser beam is capable of cutting the riser section from the exterior to release an offshore drilling rig, vessel or platform from the blowout preventer.

21. The laser-riser blowout preventer package of claim 20, wherein the first riser coupling is a dog-style riser coupling.

22. The laser-riser blowout preventer package of claim 21, wherein the second riser coupling is a dog-style riser coupling.

23. The laser-riser blowout preventer package of claim 20, wherein the second riser coupling is a means for connecting the riser section to the blowout preventer.

24. The laser-riser blowout preventer package of claim 23, wherein the means for connecting the riser section to the blowout preventer is hydraulic.

25. The laser-riser blowout preventer package of claim 20, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the first riser coupling.

26. The laser-riser blowout preventer package of claim 20, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the second riser coupling.

27. The laser-riser blowout preventer package of claim 21, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the dog-style riser coupling.

28. The laser-riser blowout preventer package of claim 22, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the dog-style riser coupling.

29. The laser-riser blowout preventer package of claim 23, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the first riser coupling.

30. The laser-riser blowout preventer package of claim 23, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the means for connecting the riser section to the blowout preventer.

31. The laser-riser blowout preventer package of claim 20, wherein the first riser coupling is a flange-style riser coupling.

32. The laser-riser blowout preventer package of claim 31, wherein the second riser coupling is a flange-style riser coupling.

33. The laser-riser blowout preventer package of claim 31, wherein the second riser coupling is a means for connecting the riser section to the blowout preventer.

34. The laser-riser blowout preventer package of claim 33, wherein the means for connecting the riser section to the blowout preventer is hydraulic.

35. The laser-riser blowout preventer package of claim 31, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the flange-style riser coupling.

36. The laser-riser blowout preventer package of claim 31, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the second riser coupling.

37. The laser-riser blowout preventer package of claim 33, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the flange-style riser coupling.

38. The laser-riser blowout preventer package of claim 33, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the means for connecting the riser section to the blowout preventer.

39. The laser-riser blowout preventer package of claim 20, wherein the first riser coupling is a key-style riser coupling.

40. The laser-riser blowout preventer package of claim 39, wherein the second riser coupling is a key-style riser coupling.

41. The laser-riser blowout preventer package of claim 39, wherein the second riser coupling is a means for connecting the riser to the blowout preventer.

42. The laser-riser blowout preventer package of claim 41, wherein the means for connecting the riser section to the blowout preventer is hydraulic.

43. The laser-riser blowout preventer package of claim 39, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the key-style riser coupling.

44. The laser-riser blowout preventer package of claim 39, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the second riser coupling.

45. The laser-riser blowout preventer package of claim 41, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the key-style riser coupling.

46. The laser-riser blowout preventer package of claim 41, wherein the means for providing a laser beam comprises a laser cutter for emitting a laser beam having a beam path, wherein the beam path is directed toward the means for connecting the riser section to the blowout preventer.

47. A laser module for use with a marine riser, the laser module comprising:

    a. A housing configured for mechanical association with a marine riser, the housing defining an inner area, whereby at least a portion of the marine riser is contained within the inner area upon engagement of the housing with the riser;

    b. The housing having a first laser cutter and a second laser cutter;

    c. The first and second laser cutters, being positioned within the housing and the first and second laser cutters each having a laser discharge end;

    d. A first beam path extending from the laser discharge end of the first laser cutter to the inner area of the housing; and

    e. A second beam path extending from the laser discharge end of the second laser cutter to the inner area of the housing;

    f. Wherein the first and second laser cutters are capable of cutting the marine riser.

48. The laser module of claim 47, wherein the inner area of the housing comprises an annulus and wherein the marine riser comprises a center tube, an external pipe, and a coupling, and wherein the annulus is configured to accommodate the center tube, the external pipe and the coupling.

49. The laser module of claim 47, wherein the first beam path is directed to a portion of the inner area, the portion of the inner area being configured for placement adjacent a center tube of the marine riser.

50. The laser module of claim 47, wherein the first beam path is directed to a portion of the inner area, the portion of the inner area being configured for placement adjacent an external pipe of the marine riser.

51. The laser module of claim 47, wherein the first beam path is directed to a portion of the inner area, the portion of the inner area being configured for placement adjacent a coupling of the marine riser.

52. The laser module of claim 47, wherein the first and second laser cutters are configured within the housing to move within the housing, whereby the first and second laser cutters have the ability to at least partially orbit around the marine riser when the housing is engaged with the marine riser.

53. The laser module of claim 47, wherein the marine riser comprises a coupling comprising a flange, a bolt and a nut.

54. The laser module of claim 53, wherein the first beam path is directed to a portion of the inner area of the housing, which portion is configured for placement adjacent the bolt.

55. The laser module of claim 53, wherein the first beam path is directed to a portion of the inner area of the housing, which portion is configured for placement adjacent the nut.

56. The laser module of claim 53, wherein the first beam path is directed to a portion of the inner area of the housing, the portion of the inner area being configured for placement adjacent the flange.

57. The laser module of claim 47, wherein the marine riser comprises a coupling comprising a shoulder.

58. The laser module of claim 57, wherein the first beam path is directed to a portion of the inner area of the housing, the portion of the inner area being configured for placement adjacent the shoulder.

59. A quick release riser section comprising:

    a. A riser section, comprising a first end having a first coupling, a second end having a second coupling and a center tube;

    b. A laser cutter engaging an exterior of the riser section; and,

    c. A beam path extending between the laser cutter and the riser section; whereby the laser cutter is capable of cutting the riser section from the exterior to release an offshore drilling rig, vessel or platform from a blowout preventer.

60. The quick release riser section of claim 59, wherein the center tube has a central region located between the first and second ends, and wherein the beam path intersects the central region.

61. The quick release riser section of claim 59, wherein the beam path intersects the first coupling.

62. The quick release riser section of claim 59, wherein the first coupling comprises a key and the beam path is directed toward the key.

63. The quick release riser section of claim 59, wherein the first coupling comprises a flange and the beam path intersects the flange.

64. The quick release riser section of claim 59, wherein the first coupling comprises a bolt and the beam path intersects the bolt.

65. The quick release riser section of claim 59, wherein the first coupling comprises a nut and the beam path intersects the nut.

66. An offshore drilling rig system comprising:

    an offshore drilling rig; and

    a quick release riser blowout preventer package, the package comprising:

    a. a riser comprising a plurality of riser sections, wherein the plurality of riser sections are configured for being lowered from the offshore drilling rig to a depth at or near a seafloor; and mechanically connected to the offshore drilling rig; and in fluid communication with the offshore drilling rig;

    b. a blowout preventer, the blowout preventer configured for being mechanically connected to the riser; in fluid communication with the

riser; and lowered by the riser from the offshore drilling rig to the seafloor; and,

c. the riser comprising a laser module; and,

d. the laser module comprising a laser cutter for emitting a laser beam defining a beam path, wherein the beam path is directed from the laser cutter toward one of the plurality of riser sections;

e. wherein, when the package is deployed and mechanically connecting the offshore drilling rig with a borehole in the seafloor, the laser module upon firing a laser beam can cut at least a portion of the one of the plurality of riser sections at a predetermined location, thereby providing for the quick release of the offshore drilling rig from the blowout preventer.

67. A method of drilling subsea wells by using a laser module operably associated with a riser section, the method comprising:

a. lowering a blowout preventer from an offshore drilling rig to a seafloor using a riser comprising a plurality of riser sections, wherein the blowout preventer comprises a blowout preventer cavity defined by the blowout preventer, the riser comprises a riser cavity defined by the riser;

b. one of the plurality of riser sections having a laser module operably associated therewith, wherein the laser module comprises a laser cutter for emitting a laser beam that defines a beam path and wherein the beam path is directed from the laser cutter toward a component of the one of the plurality of riser sections;

c. securing the blowout preventer to a borehole defining a borehole cavity, whereby the borehole cavity, the blowout preventer cavity and the riser cavity are in fluid and mechanical communication; and,

d. advancing the borehole by lowering tubulars from the offshore drilling rig down through the riser cavity, the blowout preventer cavity and into the borehole;

e. whereby, a drilling operation is enhanced by having an ability in an emergency situation to fire a laser beam from the laser module to completely cut the component of the one of the plurality of riser sections in the beam path, thereby weakening the riser.

68. A method of performing drilling, workover, intervention, completion or service activities on a subsea well by using a laser module, the method comprising:

    a. positioning a riser between a surface of a body of water and a seafloor, the riser comprising a riser cavity defined by the riser, wherein the riser is in fluid communication with a subsea well and an offshore rig, vessel or platform;

    b. mechanically associating a laser module with the riser, wherein the laser module comprises a laser cutter for emitting a laser beam that defines a beam path and wherein the beam path is directed from the laser cutter toward a component of the riser; and,

    c. performing activities on the well by moving a structure through the riser cavity ;

    d. providing the capability to fire a laser beam from the laser module to completely cut the riser in the beam path, thereby weakening the riser and providing a controlled disconnection of the riser.

69. The method of claim 68, wherein the structure is selected from the group consisting of a tubular, a tool and a drill pipe.

70. The laser-riser blowout preventer of claim 1, wherein the laser module mechanically engages an exterior of the riser section.