countries. They apply not only to publicly-owned utilities and private bodies undertaking similar activities, but also to private companies in energy, water, transport and communications operating under special or exclusive rights. This appears to include offshore oil licenses, although some exemptions may be given by individual countries in offshore activities. At present, the Netherlands has applied to the Commission to be able to give exemptions, but the U.K. has not decided whether to apply or not. Apart from the Netherlands, no other European country has made such a decision.

Under the directive, supplies contracts will be covered if they exceed 400,000 ECU (European currency units, equivalent to approximately $430,000) and works contracts if they exceed 5,000,000 ECU (say, $5,350,000). Purchasers will be able to reject bids of non-E.C. origin, even if they are lowest. Also, they will be compelled to reject any such bid if an offer of E.C. origin comes within three percent of it.

The definition of E.C. origin is, however, only the place of last substantial transformation, i.e., it is not assessed by a complicated cost calculation. Finally, the directive may be modified as a result either of negotiations with an individual country or of a General Agreement on Tariffs and Trade (GATT) agreement.

3.5 Trends in Procurement for Offshore Oil and Gas Industries

In offshore projects, a pyramid of procurement hierarchies is normally formalized. At each stage in the project one organization vests procurement authority in another. For example, a syndicate of field licensees may nominate one oil company as operator. The operating oil company is then the client for a (number of) main contractor(s). The main contractor may, for example, head up design work himself but act as purchasing agent for goods and services including, for example, fabrication. Conversely, nominated items with long delivery periods may be purchased directly by the operating company and delivered directly to the fabricator. Further down the pyramid are many more sellers of goods and services who, in turn, purchase components from manufacturers or their agents. The offshore supplies industry is thus a vast

heterogeneous business, with the only shared characteristic being some form of contractual arrangement with an oil company or its agent.

If other resources from the sea require projects with an economic impact comparable to one of the small- or medium-sized oil or gas fields in the U.K. North Sea, then its likely form of management, irrespective of ownership, will be modelled on present-day offshore projects. Oil companies are acknowledged as leaders in the development of professional purchasing.

As their industry has matured, oil companies usually have been able to obtain their specified requirements on time and at the keenest long-run price. In general, they will avoid becoming dependent on any one vendor. Thus, they will avoid or buy out exclusive intellectual property and seek to obtain specifiable goods or services from as many suppliers as will be sustained in a competitive marketplace. Oil companies are also leaders in the development of quality assurance systems. In the U.K., for example, 12 U.K.-based operating companies set up the Quality Appraisal Service Company (QUASCO) to conduct technical audits for prospective suppliers' production capacity, organizational resources, and compliance with safety and quality standards.

The above attributes are equally important outside the hydrocarbon industry and it is more than likely that any growth in other uses of subsea technology will obtain its commercial, as well as its operating, engineers from organizations used to oil and gas industry practice. Any catalogue of vendors for subsea technology will thus contain:

- project management organizations

- design contractors

- fabrication and assembly contractors

- goods and services contractors/ subcontractors

- manufacturers

Very few requirements for subsea projects are likely to be available off the shelf, and the volumes of goods are such that consumer-goods type assembly