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PREAWARD EVALUATION
AND RESPONSIBILITY DETERMINATION
OF FOREIGN CONTRACTORS

by

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Preaward Evaluation
and Responsibility Determination
of Foreign Contractors

by

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ABSTRACT

International procurement is an important and complex aspect of defense acquisition. In fiscal year 1987 more than $3.8 billion in DOD contracts and subcontracts were awarded to foreign contractors. Adequate preaward evaluation of foreign contractors is essential to ensure price reasonableness and successful completion of the contract. This thesis identifies and examines the special considerations and unique problems in evaluating and determining responsibility of foreign contractors. Research data were obtained through interviews with corporate procurement managers and DOD contracting officers and program managers. The thesis provides useful guidance for contracting officers and program managers engaged in international acquisition and faced with evaluating foreign contractors.

TABLE OF CONTENTS

I. INTRODUCTION

A. BACKGROUND

Since the end of World War II, reduced trade barriers have lead to substantially increased international trade and unsurpassed standards of living. The continued growth of international trade has resulted in an interdependent and, perhaps, irrevocably intertwined world economy. One product that provides an example of this world economy is the classic Singer sewing machine consisting of shells produced in Ohio, motors from Brazil and drive shafts from Italy, all assembled in Taiwan and sold throughout the world. [Ref. 1:pp. 26-29]

The growth in international trade and movement toward a global economy are also reflected in the substantial value of Department of Defense (DOD) purchases abroad. In fiscal year 1987 (FY 87) alone more than $2.1 billion in DOD contracts (exclusive of subsistence, petroleum, construction and support services) were awarded to foreign contractors. Additionally, more than $1.7 billion in DOD purchases were subcontracted by U.S. prime contractors to foreign subcontractors in FY 87. [Ref. 2]

International procurement is an important and complex aspect of defense acquisition. It is a function of arms collaboration efforts, international trade agreements and competition. While potentially providing substantial

benefits, international procurement entails additional risks as well. Entering into a contract with a foreign company involves many unique considerations not included in contracting with a domestic firm. Such considerations may include domestic procurement legislation, foreign business and manufacturing practices, and other economic, cultural and political factors.

B. OBJECTIVES

The purpose of this research effort has been to focus on the unique preaward considerations of contracting with a prospective foreign contractor. Specifically, the research effort has sought to identify and address the special considerations and unique problems in evaluating and determining responsibility of foreign contractors.

The primary objective of the research effort has been to provide a useful guide for contracting officers and program managers involved in international acquisition and faced with evaluating prospective foreign contractors. In answering the primary and subsidiary research questions, it should provide information and guidance that is not adequately addressed in current DOD literature.

C. RESEARCH QUESTIONS

In accordance with the above objectives, the primary research question is as follows: What are the special considerations and unique problems in evaluating and

determining responsibility of foreign contractors, and how might they be addressed?

In addressing this research question, the following subsidiary research questions were also considered.

1. What unique aspects of foreign acquisition make preaward evaluation and responsibility determination particularly important?
2. What should be considered in assessing the financial capability of foreign firms?
3. What special considerations are involved in assessing the technical, production and quality assurance capabilities of foreign contractors?
4. What special considerations are involved in determining price reasonableness of foreign proposals?
5. What other factors should be considered in evaluating and determining responsibility of foreign contractors?
6. What organizations and sources of information are available to assist the contracting officer in evaluating foreign contractors?
7. What are some of the techniques and methods employed by U.S. corporations in preaward evaluation of foreign firms, and how might they be applied to DOD acquisition?
8. To what extent can or must DOD contracting officers rely on foreign governments having Memoranda of

Understanding (MOUs) with DOD for foreign contractor evaluation and responsibility determination?

9. To what extent should foreign subcontracting be considered in evaluating and determining responsibility of domestic contractors?

D. SCOPE

To attain the stated objectives of the research effort, the researcher has compiled and analyzed experiences and practices of U.S. corporations and DOD officials in evaluating and contracting with foreign sources. The research effort has focused on large foreign procurements of major systems, subassemblies, components and research/development. Additionally, the research has focused on procurement from those nations which currently receive the bulk of U.S. defense contracts and subcontracts. Those nations include the NATO allies, France and Israel. Canada, the U.S.'s closest ally and largest trading partner, has a well established system for U.S. Government procurement and has thus been excluded from the scope of the research effort.

E. LITERATURE REVIEW AND METHODOLOGY

Secondary research data was collected through a comprehensive review of existing literature. The literature base was collected through the Naval Postgraduate School library and the Defense Logistics Studies Information Exchange (DLSIE). The researcher identified very little

information which specifically addresses preaward evaluation of foreign contractors. The researcher did review a large amount of literature which addresses the broad area of international acquisition including Government regulations and studies, academic texts, previous Naval Postgraduate School theses and various business and professional journals.

Primary research data were collected through the survey method. The surveys consisted of in-depth personal interviews with corporate procurement managers, and DOD contracting officers and program managers. Some telephone interviews were also conducted.

The personal interviews were limited to the extent that the corporate interviews were conducted with corporations located in the San Jose, California area and the DOD interviews were conducted in the Washington, DC area. These limitations were necessitated by time and funding constraints. Nevertheless, the interviews spanned several different corporations and DOD procurement offices with relevant experience. The researcher believes the interviews thus provide sufficient data for the research effort.

F. SUMMARY OF FINDINGS

Potential inadequacies in the information and data provided to the contracting officer to assist in evaluating foreign contractors may warrant a more proactive approach to preaward evaluation by the contracting officer. Evaluating prospective foreign contractors requires an understanding of

foreign business and manufacturing practices and economic conditions.

Potential considerations in evaluating foreign proposals and determining responsibility of foreign contractors include: ensuring the contractor adequately understands the specifications; evaluating the impact of foreign labor concepts; the ability of foreign prime contractors to adequately manage major U.S. subcontractors; the adequacy of foreign contractors' accounting systems; the adequacy of cost and pricing data provided; the impact of exchange rate fluctuations; technology transfer; ethical standards and concepts; the applicability of standard contract clauses; contract dispute provisions; intellectual property rights ownership; and potential difficulties in contract administration.

G. ORGANIZATION OF STUDY

This thesis consists of five chapters. The second chapter provides an overview of the international acquisition environment. The third chapter presents the primary and secondary research data collected. It is divided into three major sections: (a) the general requirements of preaward source evaluation; (b) preaward evaluation of foreign suppliers by U.S. corporations; and (3) preaward evaluation of foreign contractors by DOD. Chapter IV is a summary and analysis of the material discussed in the preceding chapter. The conclusion and recommendations for further study are

presented in Chapter V. The thesis also includes three appendices relevant to international acquisition.

II. BACKGROUND

A. INTERNATIONAL TRADE

DOD procurement abroad may be viewed as a subset of international trade. In theory, international trade is based on the specialization of nations in the production of goods and services for which they have a comparative advantage, or lower opportunity cost. International exchange of such goods results in an expansion of total output and consumption and thus a higher standard of living for those nations involved. Economists widely support international trade and reject such protectionist arguments as "protection from cheap foreign labor" (which does not necessarily mean lower foreign product costs) and "cost equalization" (which makes no economic sense whatsoever since if costs were equal there would be little benefit from international trade). Important factors affecting international trade in practice include the General Agreement on Trade and Tariffs (GATT), foreign currency exchange and protectionist forces and policies.

1. General Agreement on Trade and Tariffs (GATT)

The General Agreement on Trade and Tariffs (GATT) is an evolving agreement amongst most non-communist nations which establishes the rules and conduct of international trade and seeks to reduce trade barriers. GATT has been an important force in increasing world trade amongst industrial

nations in the past forty years. However, in recent years GATT has been criticized for failing to make further progress in increasing world trade, particularly in the areas of services and agricultural products, and for reducing quotas and subsidies [Ref. 3:p. 39]. Recent agreements largely independent of GATT, such as the U.S.-Canada free trade accord and the planned 1992 elimination of trade barriers within the European Community, are expected to substantially increase world trade in the future.

2. Foreign Currency Exchange

Imports of foreign goods and services provide foreign nations with U.S. currency which they in turn require to purchase U.S. goods and services. Since 1973 most nations have operated under a system of flexible exchange rates which cause the value of each nation's currency to fluctuate in the international market as a result of supply and demand.

Supply and demand of currencies is based on various factors such as economic growth, political stability, interest rates and inflation. In practice, supply and demand is frequently manipulated by major central banks buying or selling large amounts of currencies. In fact, a secret accord reached by the so-called Group of Seven (G-7) major industrial nations is generally considered to be instrumental in the depreciation of the U.S. dollar relative to European and Japanese currencies since late 1985.

The value of a nation's currency in the international market provides a strong force to stimulate either increased imports or exports. Some attribute the current U.S. trade deficit to the strong dollar (relative to European currencies and Japan's) from 1981 through 1985 which made imports relatively inexpensive. Likewise, the current boom in U.S. exports is largely attributed to the relatively weak dollar.

3. Protectionist Forces and Policies

Strong political forces exist to curb free trade in most nations. Job protection is a major reason for such political forces. In the U.S., protectionist forces have traditionally been quite strong in industries with powerful political lobbies, such as the automobile, steel and agriculture industries. Protectionist forces may result in the establishment of tariffs or nontariff trade barriers, such as quotas or subsidies.

In recent years U.S. Gross National Product (GNP) as a percent of world GNP has decreased substantially. The U.S. is clearly losing the uncontested dominance of the world economy that it has possessed since the end of World War II. This has resulted in a growing trend toward "economic nationalism" under which the public may perceive economic competitors such as Japan to be a greater threat than military/political adversaries [Ref. 4]. Though providing needed capital and creating U.S. jobs, foreign ownership of

U.S. corporations further exasperates emotional fears of world economic competition.

Thus, in spite of the currently healthy U.S. economy, protectionist attitudes appear to be growing stronger in the U.S. [Ref. 4]. In fact, a major trade bill was recently signed into law. Amongst other measures, the bill requires presidential action against perceived unfair trade practices of foreign nations and increases presidential options for relief to domestic industries harmed by imports. Though viewed as mildly protectionist, the bill was originally introduced with some very strong protectionist measures.

Protectionist policies are certainly not limited to the U.S. Protectionist policies are thought to contribute to the low economic conditions of many third world nations. Additionally, there is currently a perception of growing protectionism in Europe aimed primarily at the U.S. and Japan. It is feared that European nations may wish to reduce U.S. and Japanese trade influence upon eliminating European Community trade barriers in 1992.

B. CORPORATE PROCUREMENT ABROAD

As a function of international trade, U.S corporations buy from foreign suppliers due to material scarcity or to maximize quality or reduce costs. With costs of materials and services typically consuming nearly 58% of each sales dollar for U.S. manufacturing firms [Ref. 5:p. 11], global sourcing is becoming increasingly important for U.S. firms to

compete against foreign companies or U.S. companies engaged in international purchasing. Within the purchasing profession, if one "masters the changing complexities of international trade, [he will] be virtually guaranteed a voice in his company's highest strategic councils." [Ref. 6:p. 66]

Another reason for corporate procurement abroad is to comply with offset agreements resulting from foreign sales. Offsets involve industrial or commercial compensation as a condition of sale [Ref. 7:p. 7-1]. Offset agreements are prevalent in corporate sales to foreign governments, such as with sales of military goods. For example, in a recent competition between McDonnel Douglas Corporation and General Dynamics Corporation to supply the Swiss Air Force with a new jet fighter, both companies offered offset contracts of 100% of the $1.9 billion contract amount. Offset agreements may require procurement of components or subsystems for incorporation into the product being sold or procurement of manufactured products, raw materials or services unrelated to the item being sold [Ref. 7:pp. 7-1,7-2]. Foreign investment provides another media for offset agreements.

C. GOVERNMENT/DOD PROCUREMENT ABROAD

Governments throughout the world are major participants in the procurement process as both buyers and law makers. Governments are naturally concerned with domestic economic and social conditions and thus tend to discriminate against

foreign sources in their own procurements. [Ref. 8:pp. 344-345] With its massive budget, DOD is the largest player in U.S. Government procurement and faces various forces seeking domestic preference. However, it also faces strong forces, such as international arms collaboration efforts, which seek to reduce domestic preference. These conflicting forces make international procurement a particularly complex aspect of defense acquisition. Important factors affecting defense procurement abroad include the following: the Buy American Act; the Balance of Payments Program: the Agreement on Government Procurement; arms collaboration efforts (particularly North Atlantic Treaty Organization Rationalization, Standardization and Interoperability--NATO RSI); offsets; and technology transfer/industrial base considerations.

1. Buy American Act

The Buy American Act is the primary factor limiting procurement of defense items from foreign sources. It originated in the 1930s to counter protectionist policies of other nations [Ref. 8:p. 346]. The Act requires that only "domestic end products be acquired for public use. " [Ref. 9:para. 25.102] However, it allows great latitude in defining domestic end products as those whose cost of components produced in the U.S. exceeds only 50% of its total component cost and in allowing various exceptions to its provisions. Exceptions are allowed for products not to be used in the

U.S., for items which are not available in the U.S., and for items whose costs in the U.S. are unreasonably high. [Ref. 9:para. 25.101,25.102] In fact, the Act has been criticized because of its inadequacy in protecting defense items from foreign content because of its difficulty to enforce.

Buy American Act provisions are waived under the Agreement on Government Procurement (see subparagraph 3) and as a result of MOUs in support of arms collaboration efforts (see subparagraph 4). Conversely, it should be noted that in addition to the Buy American Act restrictions, various commodities or products which are available in the U.S. are frequently restricted from foreign sourcing through protectionist language in the annual Department of Defense Appropriations Acts.

2. Balance of Payments Program

The Balance of Payments (BOP) Program is an important factor discouraging foreign procurement. The program originated in the 1960s to curb the outflow of U.S. dollars and depletion of U.S. gold reserves [Ref. 8:p. 350]. Though a depletion of gold reserves is no longer a consideration since the implementation of flexible exchange rates, an adverse balance of payments position is still an important consideration due to the large U.S. trade deficit.

In addition to numerous non-procurement related controls, BOP Program provisions have been implemented, purportedly on a temporary basis, to give preference to

domestic bids by increasing the evaluation price of foreign bids up to 50% in accordance with the provisions of the DOD Federal Acquisition Regulation Supplement (DFAR) 25.105. As with the Buy American Act, various exceptions to the BOP Program bid evaluation criteria are allowed. Of particular importance to DOD acquisition are exclusions resulting from MOUs in support of international arms collaboration efforts. Additionally, DFAR 25.102 authorizes requests for BOP Program waivers when relatively substantial domestic expenditures may result. [Ref. 10:para. 25.102,25.105]

3. Agreement on Government Procurement

The Agreement on Government Procurement is a potentially significant development in its reduction of naturally protectionist tendencies of Government procurement. The agreement was developed under the auspices of GATT and implemented under the Trade Agreements Act of 1979. The agreement as implemented waives the Buy American Act and Balance of Payments Program provisions to reduce preferential treatment of domestic suppliers on a reciprocal basis amongst signatory nations. [Ref. 8:pp. 351-354] However, much DOD procurement is excluded from the agreement's provisions as set forth in Federal Acquisition Regulation (FAR) 25.403(d) which excludes purchases of arms, ammunition, war materials or items indispensible for national security [Ref. 9:para. 25.403(d)].

4. Arms Collaboration/NATO RSI

Arms collaboration efforts between the Western allies, particularly those efforts called out under North Atlantic Treaty Organization Rationalization, Standardization and Interoperability (NATO RSI) policies, provide the largest force encouraging procurement of foreign weapon systems and components. NATO RSI seeks a rational pooling of resources to maximize NATO defenses. It seeks increased standardization, reduction of duplication of weapon systems, and increased interoperability between NATO equipment and forces. NATO RSI is not limited to equipment considerations but addresses tactics and doctrine as well. The primary goal of NATO RSI is military effectiveness and, secondarily, cost savings. [Ref. 8:pp. 360-361]

NATO RSI was implemented by DOD Directive (DODD) 2010.6 in March 1977 which authorized MOUs between NATO nations regarding weapons programs and trade, dual production of weapon systems and coordinated development of families of new weapon systems. NATO RSI procedures are not limited strictly to NATO member nations but may include other nations with common defense interests such as France, which withdrew from NATO military participation in 1966. Other arms cooperation activities exist with various friendly non-NATO nations such as Israel, Japan and the Republic of Korea [Ref. 7:pp. 2-23,2-24].

NATO RSI efforts have resulted in a so-called "two-way street" in defense trade. The "two-way street" concept remains controversial amongst U.S. defense contractors, who claim that technology transfer restrictions limit their ability to sell overseas, and amongst European contractors, who claim that U.S. protectionism and military parochialism limit their ability to enter the U.S. market. [Ref. 11:p. 74] U.S. contractors claim European protectionism as well. Their views are supported by recent European aircraft projects chosen over U.S. or joint U.S./European systems, such as the new European fighter aircraft program. Nevertheless, statistics maintained by DOD indicate the "two-way street" is becoming a reality with FY 87 data showing $4.0 billion in NATO purchases from the U.S. and $3.3 billion in U.S. purchases from NATO, or a ratio of 1.2:1 [Ref. 2]. This compares favorably to roughly 3:1 in 1985 and 1984, and 4:1 in 1983 [Ref. 11:p. 76].

DODD 2010.6 was based on the Culver-Nunn Amendment to the DOD Authorization Act for 1977 and still provides the basis for international armaments cooperation today [Ref. 7:pp. 2-1,2-2]. However, more recent legislative initiatives such as the Nunn-Roth-Glenn Amendment to the FY 83 Defense Appropriations Bill and the Nunn and Quayle amendments to the FY 86 DOD Authorization Act have provided further impetus for armaments cooperation and foreign procurement. The Nunn-Roth-Glen Amendment provided the statutory basis for waiving

domestic preference legislation under general and reciprocal MOUs [Ref. 7:p. 2-27]. The Nunn Amendment authorized and encouraged cooperative research and development efforts, and the Quayle Amendment redefined the Arms Export Control Act to encourage cooperative development and production [Ref. 7:p. 2-8].

The various methods of international armaments cooperation consist of codevelopment; coproduction; opening defense markets; packaging; and the family of weapons approach [Ref. 7:pp. 2-10,2-11]. An MOU normally provides the basis for such cooperation.

a. Memoranda of Understanding

DODD 2010.6 encourages establishing MOUs to promote bilateral arms cooperation and trade; establish regular reviews of such programs and trade; and to efficiently utilize NATO resources through expanded competition. MOUs are made with NATO as a body, specific NATO nations and other friendly governments. [Ref. 7:p. 2-12] The U.S. Congress does not ratify MOUs; therefore, they represent understandings rather than formal treaties. Two types of MOUs are used, general/reciprocal and program specific MOUs.

(1) General/Reciprocal MOUs. 15 general and reciprocal MOUs have been executed. The countries include: the United Kingdom; Norway; the Netherlands; the Federal Republic of Germany; Italy; Portugal; Belgium; Denmark;

Luxembourg; France; Spain; Sweden; Israel; Egypt; and Turkey. These agreements are included in DFAR Appendix T. Generally, they waive buy national programs and seek to enhance competition on a reciprocal basis. [Ref. 10:Appx. T] Industry is responsible for pursuing business opportunities opened as a result of the MOUs. The general/reciprocal MOUs thus allow foreign contractors to bid on otherwise non-restricted DOD procurements and set the stage for further cooperation under major defense programs.

(2) Program Specific MOUs. Program specific MOUs are negotiated after system requirements are defined for each nation involved in a particular armaments collaboration effort. The MOUs outline the roles of the nations involved in the particular program and set the tone for reciprocity. More detailed technical agreements in such areas as financial arrangements, intellectual property rights and cost sharing may be appended to the MOU. The MOUs normally allow a large degree of flexibility in the business matters of the program. Current DOD initiatives stress a streamlined MOU process to give the services flexibility and authority to negotiate specific MOUs based on previously agreed upon concepts. [Ref. 7:pp. 2-13,2-14,2-15]

b. Codevelopment

A codevelopment program is normally based on a government-to-government MOU which defines each nation's participation in the cooperative development of a particular

system. It may or may not lead to the subsequent participation in the production of the system. Important elements in a codevelopment agreement include technology transfer, proprietary data and intellectual property rights. Examples of codevelopment programs include the Army's Multiple Launch Rocket System (MLRS) and the Navy's Rolling Airframe Missile (RAM). [Ref. 7:pp. 2-10,2-15,2-16,2-17]

c. Coproduction

Coproduction of a weapon system or item may involve parallel (duplicative) or interdependent (non-duplicative) production of a weapon system or its components. Technology transfer from the developing to the non-developing source is an essential issue in the coproduction MOU. A licensing arrangement is typically employed. Coproduction programs are attractive to industry since they involve a clearly defined product and market. Examples of coproduction programs include the AGM-65 MAVERICK Missile, the STINGER Air Defense Missile, the Penguin Missile and the AV-8B Harrier Aircraft. [Ref. 7:pp. 2-18,2-19]

d. Opening Defense Markets

The opening defense markets approach involves matching one country's requirements with existing systems or items of another country based on a reciprocal MOU [Ref. 7:p. 2-11]. The approach fosters international competition with the resultant cost savings of such competition. Savings may also result from the utilization of existing systems and

technology. Examples of this approach include the PERSHING II 10-Ton Truck, the 9mm Pistol, the T-45TS Aircraft and the Army's Mobile Subscriber Equipment (MSE) Program. [Ref. 7:pp. 2-20,2-21]

e. Packaging

The packaging method of arms collaboration is the newest approach developed. It involves combining existing systems of different nations to satisfy a common defense requirement. The U.S. Patriot and German-French Roland Cooperative Agreement to upgrade the air defenses of Central Europe provides an example of the packaging method. [Ref. 7:p. 2-22]

f. Family of Weapons

The weapons family approach to international arms collaboration is an all encompassing approach including both codevelopment and coproduction. The approach involves developing and aggregating related or complementary weapon systems by mission area. The U.S. Advanced Medium-Range Air-to-Air Missile (AMRAAM) and European Advanced Short-Range Air-to-Air Missile (ASRAAM) are being developed under this approach. [Ref. 7:p. 2-23]

5. Offsets

Foreign countries buying U.S. weapon systems often insist on offsets in U.S. purchases or investments. As previously discussed, offsets are prevalent in direct commercial sales of U.S. weapons. Offsets also typically

result from sales under the Foreign Military Sales (FMS) Program--where the U.S. Government acts as the buying agent for the foreign government and normally charges the foreign government for a fair share of nonrecurring costs.

It is DOD policy not to enter into government-to-government offset agreements. Rather, industry must make the industrial arrangements to satisfy the foreign government's demands. Only if a U.S. industry-foreign government agreement cannot be reached will DOD consider a government-to-government offset agreement. Then, such an agreement should be as broad as possible and not involve specific targets. Also, the U.S. firm benefitting from the sale is responsible for fulfilling the offset agreement. [Ref. 7:pp. 7-20,7-21]

6. Technology Transfer/Industrial Base Considerations

Technology transfer and industrial base considerations tend to restrict foreign procurement. Technology transfer considerations arise when a foreign source requires access to classified data. It may, of course, be necessary to safeguard such data for national security interests and thus restrict foreign sourcing. Technology transfer issues are quite complex. They require difficult decisions and coordination with other U.S. Government agencies and foreign governments.

With regard to industrial base considerations, the Competition in Contracting Act of 1984 allows an exception to

full and open competition to establish or maintain the U.S. industrial mobilization base [Ref. 7:p. 2-26]. A strong advocacy for improving the U.S. defense industrial base has recently reemerged which may lead to more protectionist DOD procurement policies.

D. The European Industrial Environment

It is difficult to characterize Europe as a whole since it consists of several independent nations with different languages, cultures, values and, in some cases, deeply rooted antagonisms between the nations. Nevertheless, several similarities in industrial and business practices exist. Additionally, the evolution of the European Community, a group of Western European nations seeking to pool their economic resources into a single, stronger economy, has helped to assimilate the European economy and industrial base.

Overall, European governments play a much more paternalistic role in their industries. In fact, partial or complete government ownership of corporations within key industries is common, particularly in France and the United Kingdom. The European nations thus have a more protective and noncompetitive industrial environment [Ref. 7:pp. 4-4,4-9]. The primary concern of European governments with regard to their industries is to maintain and stabilize employment (Current unemployment in most European nations is generally higher than in the U.S.). There tends to be greater emphasis

on labor's contribution to value added than on capital investment [Ref. 7:p. 15-16]. The European emphasis on labor stability is also reflected in government prohibitions against layoffs, higher fringe benefits, a less mobile work force and a preference for continuity of manufacturing output [Ref. 7:pp. 4-9,4-10].

A noncompetitive industrial environment is also fostered through structural and historical factors. Structurally, smaller domestic markets mean fewer competitors. Also, government imposed mergers of firms in certain industrial sectors have further limited competition. Historically, the trade guilds, and more recently labor unions, have exerted strong control over labor. And in non-guild related industries, firms tend to seek a non-competitive market niche rather than impose on someone else's area. Several nearly monopolistic industries exist. Where competition does exist, cartels may be formed to split market share. [Ref. 7:p. 4-4]

Though automation is fast appearing throughout Europe, the European manufacturing worker in some industries is still viewed as a craftsman and is allowed more input to the product being manufactured. Drawings and specifications may thus be less detailed than in the U.S. [Ref. 7:p. 4-11] A highly skilled engineering work force and the labor intensive nature of the European industries permit flexible manufacturing programs with efficient, small lot production

runs, as opposed to the U.S. emphasis on automation, high volume and high labor specialization [Ref. 7:pp. 4-7,4-8].

The European governments have a particularly close relationship with their generally much smaller defense industries. The level of defense expenditures in European nations can sustain only one or two firms in any particular defense sector. Those firms are considered essential to national defense and are protected with Government ownership, subsidies or buy national restrictions. Though the European defense firms generally enjoy a sole source relationship with their own governments, they often must remain competitive in the international markets. Exports in the aerospace industry, particularly in France and the UK which typically export 40%-50% of total output, are considered essential to recoup heavy research, development and investment costs [Ref. 7:p. 15-17].

It is also interesting to note the differences in the European defense acquisition agencies. The Europeans generally have a single, centralized defense procurement agency. As in the case of France, that agency may be a separate branch of the military or, as with most of the other European nations, a civilian agency. Only Norway and Turkey allow their armed services to buy their own equipment. In general, the European governments enjoy a much closer, less antagonistic relationship with their monopolistic defense contractors. The European press provides much less scrutiny

over defense contractors which may prevent industry image problems but may also obscure inefficiency or corruption. [Ref. 12:pp. 8,9,46]

Though the European industrial environment is generally seen as less competitive, less automated and less capital intensive than in the U.S., changes are underway. The European Community's goal of eliminating all trade barriers amongst member nations in 1992 is forcing a more competitive atmosphere to determine the continent's industrial leaders in the 1990s. Additionally, the currently high value of the European currencies against the dollar is forcing cost cutting measures in European industries which rely on exports. Several European firms have consolidated or formed intra-European consortiums to achieve economies of scale while still ensuring domestic industrial participation in important markets. The Airbus Industrie international passenger jet consortium provides an example of such a consortium.

The three major industrial nations of Europe are the United Kingdom (UK), Federal Republic of Germany (FRG) and France. Each is also an important U.S. ally and receives substantial amounts of DOD procurement dollars. More than $1.1 billion in DOD contracts and subcontracts (exclusive of subsistence, petroleum, construction and support services) were awarded to UK contractors in FY 87 [Ref. 2]. Important British defense contractors include British Aerospace,

Rolls-Royce, Hawker Sidley and British Marconi. Many UK firms have been privatized in recent years. Under the conservative leadership of Prime Minister Margaret Thatcher since 1979, some $29.7 billion in state owned assets, have been privatized [Ref. 13].

More than $421 million in DOD contracts and subcontracts were awarded to the FRG, or West Germany, in FY 87 [Ref. 2]. Significant amounts in construction and base services contracts are also awarded yearly to support American troops stationed there. Important West German defense contractors include Siemans and Messerschmidt-Boelkow-Blohm. Germany's economic strength is largely export driven. In fact, in 1987 it had a massive trade surplus of 117.5 billion marks [Ref. 14], or approximately $63 billion.

France received some $339 million in DOD contracts and subcontracts in FY 87. Though France withdrew from NATO military participation in 1966, it remains an important player in the defense of Western Europe. France maintains a strong nuclear arsenal and recently has been working to integrate its conventional forces with NATO--a position which has recently dubbed France the "Hawk of Europe." [Ref. 15] France made strong inroads into the U.S. defense market through its recent participation in the army's $8 billion MSE program with Thompson, S.A.'s battlefield communications equipment. Its centralized defense procurement agency is

viewed as a European model and has been studied for recent U.S. prcposals for a centralized procurement agency.

Finally, it is worth reviewing one non-European nation which has been receiving increasingly large amounts of U.S contracts. A strong U.S. ally, the Middle Eastern nation of Israel enjoys a privileged trading status with the U.S. It is allowed duty free exports and Buy American Act/Balance of Payments Program waivers under the U.S.-Israel Free Trade Agreement. It was awarded DOD contracts and subcontracts exceeding $252 million in FY 87 [Ref. 2]. Important defense contractors include Israeli Aircraft Industries and Israeli Military Industries. Israel maintains particularly strong aerospace and electronics industries. Though the Israeli defense contractors remain under close Government control, there has been an increasing trend toward privatization throughout the Israeli economy.

III. DISCUSSION

A. OVERVIEW

This chapter presents the primary and secondary research data collected. First discussed are the general requirements of preaward contractor evaluation. This is followed by a discussion of preaward evaluation of foreign contractors by U.S. corporate procurement managers and, secondly, by a discussion of preaward evaluation of foreign contractors by DOD contracting officers and program managers. The special considerations in evaluating and determining responsibility of foreign contractors as identified by the corporate procurement managers and DOD officials interviewed are presented in their respective sections of this chapter.

B. GENERAL PREAWARD EVALUATION REQUIREMENTS

Adequate preaward contractor evaluation is essential to avoid potential postaward problems such as poor quality, late deliveries, unethical contractor conduct or business failure. The general requirements of preaward contractor evaluation are implicit in the following long-standing definition of a good supplier:

> A good supplier is one who is at all times honest and fair...who has adequate plant facilities, and know-how so as to be able to provide materials which meet the purchaser's specifications, in the quantities required, and at the time promised; whose financial position is sound [and] whose prices are reasonable....[Ref. 5:pp. 118-119]

The preceding definition indicates a necessity for evaluating the following elements prior to contract award: management integrity; production capability; technical capability; quality assurance capability; financial capability; and price reasonableness. In Government contracting each of these elements, with the exception of price, is evaluated in determining contractor responsibility. Price reasonableness is usually evaluated separately. These same elements may be evaluated in even more detail as part of a separate technical evaluation or as part of a competitive source selection evaluation process. However, to avoid redundancy, these elements will be discussed only as they relate to responsibility determination and price reasonableness determination. The special considerations identified in these areas with regard to foreign procurement are discussed in sections C and D of this chapter.

1. Responsibility Determination

Federal Acquisition Regulation 9.103 requires that Government contracts be awarded to responsible contractors only. Responsibility is a subjective determination based on professional judgement. To be determined responsible, a contractor must meet the minimum requirements of seven general standards which include: (1) financial capability; (2) delivery/performance capability; (3) satisfactory performance record; (4) integrity and business ethics; (5) management controls and technical skills; (6) adequate

production facilities and equipment; and (7) eligibility for award. Additionally, special standards may be developed by the contracting officer when required to ensure adequate contract performance. [Ref. 9:para. 9.103,9.104]

While prime contractors are generally responsible for determining responsibility of their subcontractors, subcontractor responsibility may have an important impact on overall responsibility of the prime contractor. The contracting officer may wish to have a prospective contractor provide evidence of a proposed subcontractor's responsibility or, as in the case of urgent requirements or substantial subcontracting, directly determine a prospective subcontractor's responsibility. [Ref. 9:para. 9.104-4]

The contracting officer must have sufficient information to make an affirmative determination of responsibility. Such information is frequently on hand or readily available to the contracting officer within the procuring activity through current and past experience with the contractor. When such information is not available to the contracting officer, it may be obtained through the preaward survey process--a formal evaluation of a prospective contractor's performance capability normally conducted by the cognizant contract administration office.

The first step in evaluating contractor responsibility should be to verify eligibility for award. This requires reviewing eligibility data, such as the

Consolidated List of Debarred, Ineligible and Suspended Contractors, and ensuring that the contractor is otherwise eligible, considering such items as foreign sourcing restrictions and small business set-aside requirements. The remaining elements of responsibility evaluation can be broken down into the following categories: technical capability; production capability; quality assurance capability; financial capability; accounting system adequacy; and other factors.

a. Technical Capability

Evaluating technical capability requires determining if the prospective contractor's key management personnel have the required technical knowledge, experience and understanding of the solicitation requirements. The contractor must have adequate technical/management resources or the ability to obtain them in the event of award. [Ref. 16:p. 1-11]

b. Production Capability

Assessing a prospective contractor's production capability requires evaluating his ability to plan, control and integrate manpower, facilities and other resources necessary to successfully perform the contract. This includes determining whether the firm possesses or has the ability to obtain the necessary facilities, material, equipment and labor. [Ref. 16:p. 1-11] A key issue with regard to production capability is whether or not the

contractor can meet the required delivery schedule considering his available resources and currently scheduled work. Evaluation of past performance may be an important element in determining production capability.

c. Quality Assurance Capability

Assessing quality assurance capability may require evaluating a prospective contractor's quality assurance system, personnel, facilities and equipment to ensure he is able to comply with the quality assurance requirements of the contract. [Ref. 16:p. 1-14]

d. Financial Capability

Evaluating a prospective contractor's financial capability requires determining if he has adequate financial resources, or access to them, to acquire facilities, equipment and materials necessary to perform the contract [Ref. 16:p. 1-14]. This may involve reviewing the contractor's financial statements to determine if his financial structure is sound and contacting financial institutions to verify assets and credit authorization.

e. Accounting System Adequacy

A prospective contractor's accounting system should be reviewed to ensure Government estimating and allocating requirements are satisfied when a cost or incentive type contract is contemplated, or when progress payments are expected. Contractor accounting system reviews

are normally performed by the Defense Contract Audit Agency (DCAA).

f. Other Factors

Various other factors may be reviewed to assess contractor responsibility when deemed necessary by the contracting officer. Such factors may include Government property control, packaging and transportation capability, and security clearance adequacy.

2. Price Reasonableness Determination

The objective of Government pricing is to pay fair and reasonable prices for materials and services. Price reasonableness may be presumed when the contract is awarded under adequate competition and price analysis--an examination of overall price without evaluating the separate cost elements and profit--indicates the price is fair and reasonable. When adequate competition does not exist, price reasonableness must be determined through cost and price analysis. Cost analysis involves examining the contractor's proposed cost elements and profit for reasonableness, allowability and allocability.

C. FOREIGN PREAWARD EVALUATION BY U.S. CORPORATIONS

As a basis for comparison to the preaward evaluation process in DOD procurement and to develop a comprehensive listing of preaward evaluation considerations, the researcher interviewed several procurement managers of U.S. corporations engaged in international procurement. The

individuals/corporations interviewed were selected based on proximity to the Naval Postgraduate School and relevant experience in international procurement. The researcher contacted procurement managers at twelve corporations, generally located in the San Jose, California area, to determine relevant experience and to arrange interviews. Five personal interviews and one telephone interview at different corporations were conducted. The corporations were primarily defense oriented and their foreign procurement experience consisted of DOD subcontracts, offset purchases and commercial purchases of foreign systems, subassemblies and components. The interviews were structured but contained several open-end questions which led to general discussion. To elicit candid responses, the interviewees were promised that their personal and corporate identities would remain confidential. Following are the special considerations identified by these procurement managers in evaluating foreign sources.

1. Responsibility Determination

Selection of the right vendor can have a direct and significant effect on a company's profit/loss statement. U.S. corporations aggressively evaluate their foreign suppliers prior to award to ensure economic benefit and successful completion of the contract. Amongst the corporations interviewed, in-depth, on-site evaluation of foreign suppliers is considered essential. Preaward

evaluation is generally conducted on-site by teams consisting of one or more individuals with expertise in the various preaward evaluation areas--technical, production, quality assurance, financial, and procurement.

Additionally, one firm interviewed that procures particularly complex electronic equipment employs in-country consultants, or "management houses," for evaluation assistance. Such consultants are motivated by profit to provide important advise regarding the capabilities of foreign firms and may be retained for future assistance in contract administration. Other corporations interviewed employ in-country representatives of "big-eight" accounting firms for audit assistance. In-country consultants and accounting firms are, of course, familiar with business conditions within the particular country, industry and firm, and may provide essential independent advise and assistance in the preaward phase of international procurement. Foreign governments may also provide such assistance to U.S. corporations under defense related procurement.

Corporations developing long-lasting supplier relationships may later establish in-country buying offices, staffed in part by qualified foreign nationals, to administer foreign contracts and conduct future procurement actions. Cost savings and efficiency are made possible by thorough understanding of the country's language, legislation/ regulations and economic/business conditions.

Various sources of information exist to identify potential foreign sources and obtain product information. However, no procurement managers interviewed use such information for anything more than source identification and general background information. On-site evaluation of foreign contractors is considered essential in the preaward phase. Following are special considerations identified by corporate procurement managers within the specific elements of contractor responsibility determination.

a. Technical Capability

The key consideration of corporate procurement managers regarding technical capability of foreign contractors is to ensure that the foreign company adequately understands the specifications. Misunderstanding of specifications may stem from language barriers (even in the U.K. where English words may have quite different connotations) or from different manufacturing practices. Misunderstandings may occur under performance as well as design specifications. Differing standards and units of measurement must also be addressed. When detailed design specifications are provided, one procurement manager observed that some European firms tended to want to reengineer specifications or ignore strict tolerances in preference to a more craftsman-like manufacturing approach.

Several procurement managers interviewed noted that specifications provided to foreign firms must be very

exact and include precise examples of unacceptable work. One procurement manager recommended employing foreign consultants to help draft specifications when foreign sourcing is planned. Despite the need to adequately clarify specifications to determine technical capability, the procurement managers interviewed generally considered European manufacturing firms highly capable of technical excellence in a wide range of products.

b. Production Capability

The procurement managers interviewed identified no particular production capability considerations regarding foreign suppliers.

c. Quality Assurance Capability

The corporate procurement managers interviewed identified no particular quality assurance capability considerations in evaluating foreign contractors. In fact, European contractors were thought to generally take a more wholesome and proactive approach toward quality control. European firms were found to meet or exceed U.S. quality control standards. When DOD quality assurance specifications are required, European firms may be qualified under Allied Quality Assurance Publication (AQAP) standards.

d. Financial Capability

Evaluating financial capability of foreign contractors is complicated by differing accounting, auditing and reporting standards outside the U.S. Financial

difficulties may be obscured to U.S. analysts unfamiliar with foreign standards. Two procurement managers interviewed were faced with financial failure of foreign contractors. In-country representatives of "big-eight" accounting firms may be employed for more expert advise regarding financial capability. One procurement manager interviewed expressed a preference for dealing only with well known foreign conglomerates to avoid potential financial difficulties.

e. Accounting System Adequacy

The primary consideration identified with regard to foreign accounting system adequacy is the general lack of sophistication in foreign accounting systems. The result is insufficient cost and pricing data, a problem made worse by an unwillingness to provide required data. The corporations interviewed overwhelmingly rely on fixed price type contracts when dealing with foreign contractors. Contract financing may be provided through milestone billing, which is generally the preferred method amongst foreign firms.

f. Other Factors

The primary other factor identified by corporate procurement managers interviewed is the need to ensure management integrity. Management integrity of foreign contractors is generally considered to be of high caliber; deals are frequently consummated on little more than a handshake. However, in some countries contingent fees and "under-the-table" payoffs are actually expected. U.S.

purchasing managers feel they must be up-front with foreign contractors in their ethical standards to avoid any apparent or actual unethical conduct, particularly in DOD subcontracts.

Another preaward consideration identified is the potential difficulty of administering foreign contracts. Consideration should be given as to what functions must be handled on-site and what functions can be accomplished from the home office. Overall, the procurement managers interviewed considered on-site technical surveillance to be essential but believed that other contract administration functions could be accomplished through the home office.

Another factor that should be considered in the preaward phase is the forum for handling disputes. The preferred method is by arbitration in the U.S. under U.S. law. As a general rule, the laws of the buying nation should prevail. Nevertheless, recourse against a foreign supplier may be limited. The procurement manager must therefore understand what recourse he has against a foreign supplier and negotiate acceptable provisions for handling disputes. Above all, however, the procurement managers interviewed pointed out their preference for avoiding any litigation with foreign contractors in favor of negotiating quick settlements to disagreements that may arise.

Other preaward considerations identified by corporate procurement managers include the complications

imposed by import/export documentation and restrictions, customs requirements and ensuring performance guarantees (letters of credit).

2. Price Reasonableness Determination

The procurement managers interviewed identified two primary considerations in evaluating price reasonableness of foreign proposals. First is the general unwillingness of foreign contractors to reveal cost and pricing data. Second is the need to minimize the risks involved in foreign exchange rate fluctuations.

With regard to the first issue, European contractors generally regard all financial data as proprietary and are reluctant to reveal such data. Without sufficient supporting data, procurement managers are forced into price analysis as the primary method of determining price reasonableness, even where cost analysis is appropriate. Typical price analysis techniques employed consist of independent cost estimating and the use of parametric relationships, or rough yardsticks.

With regard to the second consideration, international procurement requires management of foreign exchange exposure risk. The sometimes preferred pricing method is to let the foreign seller assume all foreign exchange exposure risk by pricing the contract and providing for payment in U.S. dollars. Most foreign sellers, naturally, are unwilling to accept such an arrangement. Even if they do, it may result in an unacceptable outcome for both

parties. One procurement manager interviewed, for example, cited a situation where the contract was priced and provided for payment in U.S. dollars, but a significant depreciation of the dollar relative to the foreign currency during contract performance resulted in an inability of the seller to continue contract performance. At the other extreme is for the buyer to assume all risk by pricing the contract and agreeing to make payment in the foreign seller's currency.

The assumption of foreign exchange exposure risk can be lessened by hedging in the forward exchange market, money market or currency futures market [Ref. 17:pp. 684-686]. In most major corporations such transactions are considered routine. One procurement manager interviewed expressed a preference for contract pricing and payment in the seller's currency to ensure a good price and successful completion of the contract, while using the forward exchange market to reduce the foreign exchange exposure risk involved. Transaction costs are, of course, incurred under currency hedging transactions.

A third alternative used by some procurement managers interviewed is to share foreign exchange exposure risk by providing for payment in the buyer's currency based on a projected exchange rate. However, exchange rate fluctuations are difficult to forecast, particularly as the life of the contract increases, and may potentially result in an unacceptable outcome.

D. FOREIGN PREAWARD EVALUATION BY DOD

The researcher interviewed several DOD contracting officers and program managers engaged in international procurement. To permit personal interviews with a wide range of DOD officials in a single geographic location, the researcher contacted senior procurement managers in the Washington, DC area (where all of the Navy's hardware systems commands and the Strategic Defense Initiative Office are located) to identify individuals with relevant experience and to arrange interviews. Eight DOD contracting officers and three program managers were interviewed. The DOD officials procured a variety of foreign systems, subassemblies, components and research/development through both prime contracts and subcontracts. The interviews were structured but contained several open-end questions which led to general discussion. To elicit candid responses, the interviewees were promised that their identities would remain confidential. One unstructured telephone interview with an overseas U.S. contract administration official was also conducted.

1. Responsibility Determination

Overall, the DOD contracting officers interviewed were found to take a less active role than corporate procurement managers in preaward evaluation of prospective foreign contractors. Preaward surveys of foreign contractors may be obtained through the cognizant contract administration

office set forth in DOD Instruction 4105.59 or through foreign governments of MOU countries using U.S. forms and standards. However, none of the contracting officers interviewed had conducted preaward surveys of foreign contractors. Instead, there generally was a presumption of contractor responsibility. This presumption stemmed from foreign government sponsorship of the contractor or from the fact that the contractor was a major defense firm in its country. Also, in major systems acquisition, sourcing decisions are generally made at levels above the contracting officer and program manager based on political as well as cost/benefit considerations. The contracting officer is in essence directed to use a particular firm and sees little purpose of formal preaward evaluation.

It should be noted, however, that substantial technical evaluation of foreign weapon syscems and components is conducted prior to procurement under the Foreign Weapons Evaluation (FWE) Program or through independent program office reviews. The FWE program provides for technical evaluation of friendly foreign nations' weapon systems, components and technologies to determine potential DOD use [Ref. 7:p. 14-3]. The purpose of the program is to reduce research, development and acquisition costs and accelerate weapon system fielding, while promoting standardization and interoperability of U.S./allied equipment [Ref. 7:p. 14-1]. The FWE program focuses on technical evaluation of the

equipment rather than on the capability of the particular contractor. However, since foreign weapon systems are generally produced sole source, evaluation of the system is evaluation of the contractor as well.

It should be noted that foreign contractors are increasingly entering the U.S. defense market in partnership with U.S. defense firms. The partnerships are generally made through subcontracting. In the case of substantial foreign subcontracting, the contracting officers interviewed did not choose to directly evaluate responsibility of the foreign subcontractors outside of FWE reviews or program office technical reviews.

Despite the absence of formal preaward evaluation outside of the FWE program or program office technical reviews, several lessons learned were identified in evaluating foreign contractors.

a. Technical Capability

As with corporate procurement managers, the primary consideration identified by DOD officials in evaluating technical capability of foreign contractors is the need to ensure that foreign contractors adequately understand the specifications. Again, misunderstanding are seen to stem from different interpretations and different manufacturing processes.

b. Production Capability

The primary consideration identified by DOD officials with regard to evaluating production capability of foreign contractors is the need to ensure that delivery schedules or milestones can be met. This stems from the European concern for labor stabilization and may result in an inability to meet deadlines and a lack of learning in manufacturing processes. One DOD contracting officer pointed out an attitude of "we'll get it done when we get it done" on the part of one otherwise satisfactory Norwegian contractor. Related considerations include the potential for strikes due to the powerful labor unions and the aversion to working overtime in Europe.

Several DOD officials pointed out the lack of learning on the part of European contractors in favor of maximizing labor's contribution and maintaining labor stability. Some European firms will work around production surges with heavy subcontracting to prevent hiring and subsequently releasing personnel. This of course may raise additional quality and technical capability considerations.

Another production capability consideration identified is the need to adequately evaluate foreign contractors' ability to manage U.S. subcontractors. Two contracting officers interviewed observed a lack of cooperation with the foreign prime by U.S. subcontractors. The lack of cooperation by U.S. subcontractors appeared to

result from proprietary data conflicts and feelings that they should have received the prime contracts.

The DOD officials generally saw factory automation overseas as behind U.S. levels, though nevertheless considered foreign production capability to be quite good.

c. Quality Assurance Capability

No particular quality assurance capability considerations were identified by DOD officials interviewed. As with corporate procurement managers, the DOD representatives interviewed noted that European and Israeli firms generally take an excellent approach toward quality and can meet U.S. or AQAP quality standards.

d. Financial Capability

No particular financial capability considerations were identified by DOD officials interviewed.

e. Accounting System Adequacy

As with corporate procurement managers, the DOD officials interviewed expressed concern over the lack of sophistication of foreign contractors' accounting systems. Some contracting officers cited cases of a single, all encompassing overhead account or the use of single, composite labor categories.

The DOD contracting officers interviewed generally relied on fixed price type contracts when contracting with foreign firms. Also, one contracting

officer interviewed separated requirements into several deliverables to allow a sort of milestone billing process to avoid the requirement for progress payments. It should be noted that foreign contractors are exempt from all Cost Accounting Standards (CAS) with the exception of CAS 401, "Consistency in Estimating, Accumulating and Reporting Costs," and CAS 402, "Consistency in Allocating Costs Incurred for the Same Purpose." [Ref. 7:p. 10-17] Contracts awarded to foreign government agencies (such as with the Navy's Penguin Missile Program) are exempt from all cost accounting standards [Ref. 7:p. 10-17].

Audits of foreign contractors' accounting systems may be requested from overseas Defense Contract Audit Agency (DCAA) offices or from foreign governments under reciprocal MOUs. Foreign contractors generally prefer their own agencies for such review since they are familiar with the regulations and unwritten practices in the particular nation.

f. Other Factors

The primary other factor identified by DOD contracting officers and program managers in evaluating foreign contractors is the need to identify technology transfer requirements early in the process and to evaluate the suitability for transferring such data to foreign contractors. As previously indicated, the technology transfer process is a lengthy, complex matter involving the coordination of other U.S. Government agencies and the

foreign government concerned. If not proactively pursued, it can lead to delays in contract award and subsequent delivery delays. The Strategic Defense Initiative Office, which actively solicits foreign participation in its research and development contracts to benefit from any foreign technological developments, attempts to identify technology transfer requirements before solicitation release and to indicate the level of foreign participation allowed during synopsis. This maximizes foreign participation and prevents award delays.

Other general preaward considerations identified include contract clause negotiation, contract administration and intellectual property rights. With regard to the first issue, the usual boilerplate contract clauses may or may not be applicable to foreign contracts. Foreign contractors may require lengthy discussions on the implications of each contract clause. The contracting officer should determine the applicability of standard clauses and be prepared to discuss them with the foreign contractor to prevent delays in award.

Contract administration of foreign contracts may be accomplished by foreign governments under reciprocal MOUs or by the cognizant contract administration office (CAO) identified in DOD Instruction 4105.59. Some DOD contracting officers voiced concern over the ability of overseas CAOs to administer weapon system contracts due to their primary

experience with base services and commercial item contracts. Foreign government contract administration, on the other hand, may not be considered adequate. It may be necessary to have on-site technical surveillance by program office personnel to ensure adequate performance. Under major weapon system programs, such as with the F-16 aircraft program, a separate overseas CAO may be established.

Throughout Europe intellectual property rights generally remain with the developing contractor, unlike in the U.S. where the party that funds the development is considered to own the rights. Contracting officers negotiating with foreign contractors should be aware of this so that provisions acceptable to both parties can be agreed upon.

2. Price Reasonableness Determination

As with corporate procurement managers, the primary consideration identified by DOD contracting officers with regard to price reasonableness determination is the inadequacy of cost and pricing data provided by foreign contractors. As discussed previously, foreign contractors are generally unwilling to release cost and pricing data, and the data provided are often inadequate for cost analysis. Data provided may be handwritten, oversimplistic or vague. As pointed out by one contracting officer, political considerations coupled with the vagueness of cost and pricing data provided may make prosecuting defective pricing

allegations against foreign contractors particularly difficult. Cost and pricing data may be audited by foreign governments under reciprocal MOUs or by overseas DCAA offices.

The primary consideration with regard to exchange rate fluctuations is the potential for violation of the Anti-Deficiency Act. Unlike in commercial contracting where foreign exchange exposure is a matter of negotiation, the FAR and DFAR require that foreign contracts be priced and paid in local currency [Ref. 7:p. 10-25]. Foreign proposals are evaluated based on the current exchange rate, and the U.S Government bears all currency fluctuation risk. The Anti-Deficiency Act violation becomes possible when the dollar depreciates relative to the foreign currency resulting in greater expenditures than authorized. Several contracting officers interviewed were faced with potential violations from the significant depreciation of the U.S. dollar relative to European currencies in recent years. Additional funds generally were made available through reprogramming. The additional costs to DOD have been substantial.

IV. SUMMARY AND ANALYSIS

A. OVERVIEW

The purpose of this chapter is to summarize, clarify and analyze the data presented in Chapter III. Particular attention has been given to comparing preaward evaluation of foreign contractors by private industry with that of DOD, based on the interviews conducted. First addressed is the preaward evaluation process in foreign procurement. This is followed by a summary and analysis of the special considerations identified in determining responsibility of foreign contractors and, secondly, the special considerations identified in determining price reasonableness of foreign proposals.

B. THE PREAWARD EVALUATION PROCESS

Essential functions in the preaward evaluation process include determining contractor responsibility and price reasonableness. These determinations require professional judgement and sufficient information to support such judgment. In government procurement, the required information may be obtained through preaward surveys, technical reviews, audit assistance and data provided by the contractor.

In the international procurement arena, preaward surveys and audit assistance for DOD contracts and subcontracts may

be obtained from foreign governments under reciprocal MOUs or from the cognizant U.S. contract administration and DCAA offices overseas. Separate technical reviews may be conducted by program office personnel and through the Foreign Weapons Evaluation Program. The researcher notes that provisions for obtaining audit assistance, including preaward surveys, from foreign governments are generally included in annexes to the general/reciprocal MOUs in Appendix T of the DFAR. Reciprocal audit service agreements are currently in effect with the UK, FRG, Netherlands and France [Ref. 7:p. 10-34]. In some cases, the language within the MOUs implies a general requirement to use the foreign government audit service rather than that of U.S. agencies. Contracting officers evaluating foreign contractors should familiarize themselves with the provisions of the general/reciprocal MOUs.

The researcher observes that there is a potentially significant issue with regard to the adequacy of preaward surveys and audit assistance provided by foreign governments. Given the closer relationship between government and industry throughout Europe and Israel, the researcher believes that such information may not be sufficiently objective. Additionally, some contracting officers interviewed expressed concern over the adequacy of audit assistance provided by U.S. agencies overseas. Such agencies have been geared toward base services contracts and commercial item contracts

to support U.S. installations overseas and may not be adequately staffed or experienced in the area of major weapon systems acquisition. Furthermore, the researcher notes that these offices may have cognizance over several contractors in different countries and can not reasonably be expected to become expert in the accounting and cost estimating systems of each contractor evaluated.

Given the potentially inadequate quality of information provided to assist the contracting officer in determining responsibility and price reasonableness, the question is raised as to what action the contracting officer can take to sufficiently evaluate foreign contractors. The current focus of preaward evaluation of foreign contractors by DOD is on technical capability, as evidenced by the use of FWE and independent program office reviews. Amongst the contracting officers interviewed, responsibility of foreign contractors in other areas, such as production and financial capability, was generally presumed because of foreign government sponsorship or because of the status of the foreign contractor as a major defense firm. While none of the DOD officials interviewed had experienced any major difficulties with foreign contractors, such as business failure and default termination, DOD contracting officers may wish to consider a more proactive approach to preaward evaluation and responsibility determination.

Corporate procurement managers appear to take such an approach with their use of in-depth, on-site contractor reviews in all areas of responsibility, complemented with the independent advise of in-country consultants and accounting firms. It would not appear permissable for DOD contracting officers to likewise obtain the assistance of independent consultants and accounting firms as it may conflict with international agreements and Government regulations. What DOD contracting officers and program managers can do, however, is to continue with the use of program office technical reviews for complex requirements and to perform some degree of independent contractor evaluation in the other areas of responsibility, based on contract dollar value and complexity. A more proactive preaward evaluation process of foreign subcontractors under U.S. prime contracts involving substantial foreign subcontracting may also be warranted. Nevertheless, the complexities of international acquisition will still require a large degree of reliance on information provided by foreign governments.

C. RESPONSIBILITY DETERMINATION

Through the interviews with corporate procurement managers and DOD contracting officers/program managers, several special considerations in determining responsibility of foreign contractors were identified. However, the researcher observes that the considerations identified are not necessarily applicable to each of the countries included

in the scope of the research effort. This points to the need for the contracting officer/program manager to develop an understanding of the particular business/manufacturing practices and economic conditions within the prospective contractor's country. Nevertheless, several potential considerations in evaluating foreign contractors were identified. Following is a summary of those considerations identified which are applicable to defense procurement.

The primary consideration with regard to technical capability is to ensure that foreign contractors adequately understand the specifications. This consideration is a result of the language barrier (even in the U.K. where English words have different connotations) and the more craftsman-like European manufacturing approach which allows broader interpretation of specifications. Different standards and units of measurement must also be addressed. Specifications and statements-of-work provided to foreign contractors must be very exact. Contracting officers may wish to provide specific examples of unacceptable work.

The primary consideration with regard to production capability is to ensure that the contractor can meet the required delivery schedule and accommodate any anticipated changes in scope, given the European preference for labor stability and maximization of labor's contribution to the product. A lack of manufacturing learning may also exist. The researcher notes that these considerations would be

particulary applicable to sole source foreign manufacturers. A related consideration is the impact of substantial subcontracting required to meet production schedules. Another production capability consideration is to ensure that foreign prime contractors can adequately manage any major U.S. subcontractors, given the perceived reluctance of some U.S. defense contractors to work with foreign competitors on a subcontract basis.

No special considerations were noted with regard to foreign quality assurance capability. Foreign contractors were seen to maintain very high quality standards and be able to meet U.S. or AQAP standards.

The analyst evaluating financial capability must understand foreign accounting, auditing and reporting standards in order to sufficiently evaluate foreign financial reports. None of the DOD contracting officers interviewed had evaluated financial capability but rather had presumed the foreign contractors to have the required capability. While there is nothing which indicates their presumptions were incorrect, some degree of independent evaluation may be warranted.

The primary consideration noted with regard to the adequacy foreign contractors' accounting systems is the lack of sophistication of their systems. An inadequate accounting system may preclude progress payments and the use of cost or incentive type contracts, and it may present difficulties in

performing cost analysis. Some contracting officers have accommodated inadequate foreign accounting systems by using firm fixed price contracts and breaking requirements into several deliverables to allow a sort of milestone billing. Foreign contractors are exempt from all cost Accounting Standards except CAS 401 and 402.

Other considerations in responsibility determination of foreign contractors include the need to ensure that foreign contractors understand U.S. ethical standards and to evaluate the feasibility of technology transfer to foreign contractors. While overall management integrity of foreign contractors is considered good, unacceptable practices in the U.S. may be considered acceptable overseas. The U.S. contracting officer must ensure that the foreign contractor understands his ethical standards and concepts up-front to avoid any apparent or actual ethics violations. With regard to technology transfer, a lengthy and complex process is involved. Technology transfer should be considered early in the procurement process to determine its feasibility and to avoid potential procurement delays.

Other preaward considerations identified (though not necessarily contractor responsibility determination considerations) include intellectual property rights ownership, the applicability of standard contract clauses, special provisions for handling disputes, and potential contract administration organizations.

D. PRICE REASONABLENESS DETERMINATION

Both the corporate procurement managers interviewed and the DOD officials interviewed identified particular problems in the areas of cost analysis and foreign exchange exposure. With regard to cost analysis, foreign contractors regard financial data as proprietary and are reluctant to release such data. Additionally, the data provided are often insufficient for cost analysis. The contracting officers interviewed cited examples of single, all-encompassing overhead accounts and composite labor rates/categories covering virtually all employees. Corporate procurement managers rely on independent cost estimates and other price analysis comparisons to verify price reasonableness. In the absence of adequate price competition, DOD contracting officers must perform cost analysis using the data provided, however inadequate. The researcher concludes that contracting officers evaluating price reasonableness of foreign contractors may wish to consider developing independent cost estimates to supplement the cost analysis conducted.

With regard to exchange rate fluctuations, both DOD and private industry are faced with the problem of foreign exchange exposure risk. Corporate procurement managers have several options in handling foreign exchange exposure. They can negotiate for contract pricing and payment in U.S. dollars (no risk assumption); pricing and payment in U.S.

dollars based on a projected exchange rate (risk sharing); or pricing and payment in the foreign currency (total risk assumption). U.S. corporations assuming foreign exchange exposure risk can enter into currency hedging transactions to minimize the risk.

DOD contracts must be priced and paid in local currency, thus forcing DOD to assume all currency exposure risk. Consideration must be given to the fact that additional funds may have to be obtained to cover the increased costs if the dollar depreciates and that a violation of the Anti-Deficiency Act may result. While currency exchange rates are difficult to forecast, particularly over long periods, the researcher concludes that contracting officers should not evaluate foreign proposals solely based on current exchange rates. Risk analysis should be performed to consider overall price based on potential future exchange rates considering current economic conditions and forecasts. Also, contracting officers may consider minimizing foreign exchange exposure risk through the use of advance payments or by negotiating currency loss sharing formulas or limitations [Ref. 7:p. 13-26].

V. CONCLUSION

A. CONCLUSION

International procurement is an important and complex element of defense acquisition. It is important in that it is a function of international trade, international competition and arms collaboration efforts. It is complex in that it involves various conflicting laws, regulations and initiatives, and requires an understanding of foreign business/manufacturing practices and economic conditions. Thorough preaward evaluation of foreign contractors is important to ensure price reasonableness and successful completion of the contract in the complex international procurement arena.

Determining contractor responsibility and price reasonableness requires professional judgement based on the consideration of relevant information. Information provided by foreign governments, overseas U.S. contract administration and audit offices and the contractor may not be entirely adequate or reliable in international contracting. Some degree of independent contractor evaluation by DOD contracting officers and program managers may be warranted.

Evaluation of foreign contractors requires an understanding of foreign business/manufacturing practices and

economic conditions. Potential considerations in evaluating foreign contractors include the following.

1. The adequacy of the contractor's understanding of the specification/statement-of-work, considering interpretation problems, different manufacturing concepts, and different standards and units of measurement.
2. The impact of foreign labor concepts on delivery schedule, subcontracting and manufacturing learning.
3. The foreign prime contractor's ability to adequately manage major U.S. subcontractors, particularly where the U.S. subcontractor is a competitor of the foreign prime contractor.
4. The adequacy of a foreign contractor's accounting system for handling progress payments and cost or incentive type contracts, given the foreign exclusion to most cost accounting standards, reluctance of foreign contractors to reveal financial data and the potential lack of sophistication of foreign accounting systems.
5. The ability to determine price reasonableness given the foreign reluctance to reveal cost and pricing data and the potential inadequacy of data provided.
6. The potential impact of exchange rate fluctuations on contract price.

7. The feasibility of technology transfer and impact of the technology transfer process on contract award.
8. The need to ensure that the foreign contractor understands U.S. ethical standards and concepts.
9. The applicability of standard contract clauses.
10. Provisions for handling disputes in foreign contracts.
11. Provisions for handling intellectual property rights ownership.
12. Potential difficulties in administering a foreign contract.

B. RECOMMENDATIONS FOR FURTHER RESEARCH

Potential topics for further research stemming from the analysis and conclusions of this research effort include the following:

1. An analysis of the adequacy and objectivity of audit assistance and preaward surveys conducted by foreign governments.
2. The development of potential alternatives for accommodating foreign exchange exposure in international procurement.
3. An analysis of the framework for and difficulties in administering foreign contracts.

APPENDIX A

FY 87 TOP TEN FOREIGN PROCUREMENT COUNTRIES[1]

(Thousands $)

Country	Prime Contract Awards*	Sub Contract Awards	Total Awards
United Kingdom	$ 700,919	$ 404,397	$1,105,316
Canada	440,422	524,886	965,308
Germany	338,912	82,121	421,033
France	111,473	228,049	339,522
Israel	163,513	89,024	252,537
Netherlands	34,031	173,420	207,451
Japan	115,162	5,401	120,563
Belgium	21,088	71,072	92,160
Italy	67,921	20,723	88,644
Korea	77,014	6,458	83,472

* Based on DD350 Reporting System. Excludes subsistence, petroleum, construction and support services contracts.

[1]Data obtained from the DOD, Office of International Acquisition, FY 87 MOU Defense Trade Balance Summary.

APPENDIX B

CURRENT/PROPOSED MILITARY COOPERATIVE PROJECTS[2]

System	Countries
F-16 Fighter Aircraft	Belgium, Denmark, Netherlands, Norway
F-5G Fighter Aircraft	Canada, Republic of China, Switzerland, Republic of Korea (ROK)
F/A-18 Fighter Aircraft	Canada, Spain, Australia
F-15 Fighter Aircraft	Japan
P3 ASW Patrol Aircraft	Japan
AV-8B V/STOL Aircraft	UK, Spain
I-HAWK Medium Range Ground-to-Air Missile	Belgium, Denmark, France, FRG, Greece, Italy, Japan, Netherlands, Norway
AMRAAM Advanced Medium Range Air-to-Air Missile	FRG, UK
MAVERICK Close Air Support Missile	Belgium, Denmark, FRG, Greece, Italy, Netherlands, UK, Portugal, Turkey
SPARM Antiradiation Missile	Belgium, Canada, FRG, Greece, Italy, Netherlands, UK
AIM/9L Air-to-Air Missile	FRG, Italy, Norway, UK, Japan
NAVSTAR Global Positioning System	Belgium, Canada, Denmark, France, FRG, Italy, Netherlands, Norway, UK
AH-1S Helicopter	Japan

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[2]Data obtained from Management of Multinational Programs, Defense Systems Management College, Fort Belvoir, VA, 1987.

STINGER Infrared Homing Missile	Belgium, FRG, Denmark, Greece, Italy, Norway, Turkey, Netherlands
PATRIOT Surface-to-Air Missile	FRG, Italy, Japan, Netherlands
Improved TOW Missile System	Nine NATO Nations
M114A2 155mm Howitzer	ROK
M109G Howitzer Conversion	Netherlands, Italy, FRG
M101A1 105mm Howitzer	ROK
81mm Mortar	ROK
M79 Grenade	ROK
M19 Antitank Mine	ROK
NATO SEA GNAT Radio Decoy	Denmark, UK
PENGUIN Antiship Missile	Norway, UK, Greece
HARPOON Antiship Missile	Canada, Denmark, FRG, Greece, Netherlands, Spain, Turkey, UK
PRC 77 Tactical Radio	ROK
GRC 122 Tactical Radio	ROK
VRC 12 Tactical Radio	ROK
120mm Tank Gun	FRG
155mm Precision Guided Munition	Eleven NATO Nations
M240 Armor Machine Gun	Belgium
M252 Improved 81mm Mortar	UK
9mm Pistol	Italy
AWACS Airborne Warning and Control System	Twelve NATO Nations
KC 135 Re-Engining Tanker Aircraft	France

ASRAAM Advanced Short Range Air-to-Air Missile	FRG, Norway, UK
LRSOM Long Range Standoff Missile	FRG, UK
LAMS/MFR Missile/Multi-function Radar	Canada, France, FRG, Netherlands, Spain, UK
MSAM/ESAM Medium Range/ Extended Range Air-to-Air Missile	Belgium, France, FRG, Italy, Netherlands, UK, Norway, Spain, Turkey
SES Surface Effect Ship	Canada, France, FRG, Spain, UK
RAM Anti-Antiship Missile	Denmark, FRG
M109A2/A3 Artillery Support Vehicle	FRG, Italy, Netherlands
NFR 90 Frigate	Canada, France, FRG, Italy, Netherlands, Spain, UK
MLRS Rocket System	France, FRG, Italy, UK, Turkey
MAN 10-Ton Truck	FRG
Mine Detection and Neutralization System	Canada, FRG, Netherlands, UK, France
Expendable Radar Jammers	Canada, Denmark, France, FRG, Italy, Netherlands, UK

APPENDIX C

FY 86 DOD CONTRACTS OVER $5M WITH MOU COUNTRIES[3]

Contractor	Country	Contract Number
Bundesamt Fuer Wehrtechnik	FRG	DAJA3786C0326
Bundesamt Fuer Wehrtechnik	FRG	F6154686D0022
Construcciones Aeronauticas SA	Spain	F0960385C0006
Construcciones Aeronauticas SA	Spain	F4260086C6464
Daimler Benz AG	FRG	DAJA3778G0011
Eaton Corp.	FRG	F0960382D0663
Fabrique Nationale Herstal SA	Belgium	DAAA0985G0002
Fairchild Weston Systems, Inc.	France	DAAB0786CG269
Fairey Marine LTD	UK	N6257886C6029
Federal Republic of Germany	FRG	DAAH0186CA051
Fisher Controls LTD	UK	DAAB0786CP023
Hollandse Signaalapparaten BV	Netherlands	F6154686C0028
Hyster Company	UK	DAA30786CJ032
Industrial Acoustics Company LTD	UK	F4160886C1450
Israeli Aircraft Industries	Israel	N0001986C0081
Lucas Industries Inc.	UK	N0001984C0343
Maschinenfabrik Augsburg	FRG	DAJA3781C0023
Martin Baker Aircraft Company LTD	UK	N0001985C0143
Matra Company	France	F4260086C0177
Negretti and Zambra Aviation LTD	UK	N0001985C1050

[3]Data Provided by DOD Office of International Acquisition.

Netherlands Ministry of Defense	Netherlands	DAJA3783H0031
Oto Melara SPA	Italy	N0002485C7038
Remploy LTD	UK	N6817186C9517
Rheinmetall GMBH	FRG	DAJA3786C0579
Rolls Royce LTD	UK	N0001982C0436
Rolls Royce LTD	UK	N0001983C0255
Rolls Royce LTD	UK	N0001984C0340
Rolls Royce LTD	UK	N0001986C0004
Rolls Royce LTD	UK	N0038384G4352
Royal Ordnance Factories	UK	DAAA2185C0104
Royal Ordnance Ammunition LTD	UK	DAAA2186C0002
Tadiran Limited	Israel	M6700486C0167
Tadiran Israel Electronics Ind.	Israel	DAAB0782CB049
Termomeccanica Italiana SPA	Italy	DAAK0186DC001

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