



# Unite Briefing:

**Analysis for the inclusion of 'Metals'  
in the Defence Industrial Strategy**

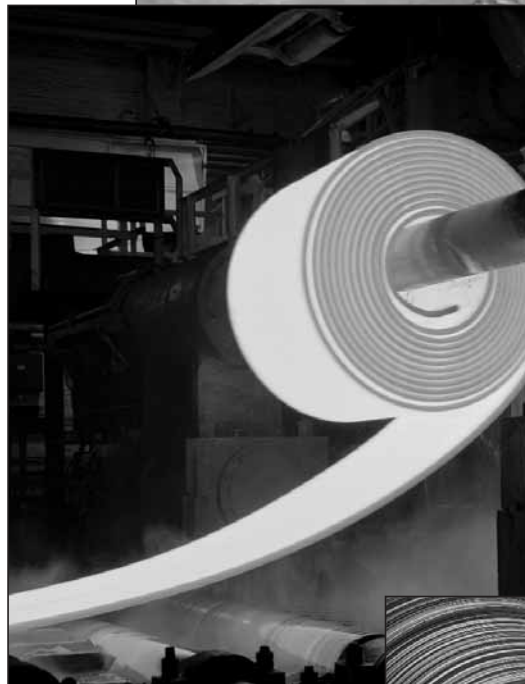


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# Analysis for the inclusion of 'Metals' in the Defence Industrial Strategy

This analysis, presented by Unite, addresses the importance of domestically produced steel and other metals to our nation's overall national defence objectives and the increased need for steel to bolster our economic and military security. The United Kingdom steel industry and the thousands of skilled men and women who comprise its workforce produce high quality, cost-competitive steel products for military use in applications ranging from aircraft carriers and nuclear submarines to armour plate for tanks and field artillery pieces, as well as major military aircraft in production today. These critical applications require consistent, high quality on-shore supply sources.

While leading-edge defence applications represent only a small portion of overall domestic sales of steel products, defence-related materials are produced on the same equipment, using some of the same technology, and are developed by the same engineers who support the larger commercial businesses of steel companies in the UK. Thus, the companies are not typical defence contractors who derive the majority of their sales and profits from their defence business. It is the overall financial health of UK steel producers, and not simply the profitability of their defence business, that is essential to their ability to be reliable defence suppliers.

The domestic steel industry also believes that, over an extended period of time, the United Kingdom could lose much of its steel-related manufacturing base if UK steel producers continue to move production offshore due to market-distorting foreign government incentives. If we continue to lose our manufacturing base due to market-distorting foreign competition or UK economic policies that are hostile to domestic investment and UK-based manufacturing, it could become impossible to produce here; the UK military would lose its principal source of strategic metals; and we as a nation would become dangerously dependent upon unreliable foreign sources of supply.

The UK steel industry, consisting of all carbon and alloy steel producers and specialty metal producers, employs more than 70,000 highly skilled workers<sup>1</sup> who produce over 14 million tonnes of steel and high-technology specialty alloy products annually. The industry includes state-of-the-art, large and small electric arc furnace producers (or "mini mills") that make steel from recycled scrap, and highly efficient large "integrated" steel producers who make steel from virgin materials and recycled steel.

Steel is produced in many forms, including flat-rolled and long products, carbon pipe and tube products, wire and other fabricated products. Carbon and alloy steel is used in all major end-use markets, including construction, automotive, machinery, appliance and containers. Specialty steels are high technology, high value materials, produced by small and medium-sized companies. These specialty metals are used in extreme environments that demand exceptional hardness, toughness, strength and resistance to heat, corrosion and abrasion, such as in the aerospace and chemical processing industries. All segments of the domestic steel industry contribute directly or indirectly to the defence industrial base.

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<sup>1</sup> Source: Office of National Statistics' latest Annual Business Inquiry

# Criticality of the Steel Industry to National Defence and the Defence Infrastructure

The United Kingdom carbon alloy and specialty steel industries are vital partners to British defence contractors and to the MOD. Domestic and specialty metals are found in virtually every military platform. Whether it is missiles, jet aircraft, submarines, helicopters, or munitions, British-made steels and specialty metals are crucial components of UK military strength. A few examples follow:

1. The US Joint Strike Fighter (JSF) program is building 2 multi-role single engine fighter demonstrators. Both designs are collaborative projects. Rolls Royce provides [Harrier type] vectored thrust engine components for the Boeing JSF, and collaborate on the Lockheed Martin design by supplying the shaft driven remote lift fan.<sup>2</sup>
2. Steel plate is used in the bodies and propulsion systems of the naval fleet.
3. The control cables on virtually all military aircraft, including fighter jets and military transport planes, are produced from steel wire rope.

A (not exhaustive), list of major UK manufacturers who utilise steel and specialist alloys in support of the United Kingdom's Defence Industry include:<sup>3</sup>

BAE Systems PLC	QinetiQ Group PLC	Rolls Royce Group
Thales Defence PLC	BP International Ltd	VT Group PLC
AMEC PLC	The Weir Group	Marshall Group
Swan Hunter (Tyneside) Ltd		

Steel's importance to the military must also be looked at in a broader context to include both direct and indirect steel shipments to the military infrastructure that are needed to support our defence efforts, both at home and overseas -- all of the steel that goes into the rails, rail cars, ground vehicles, tanks, ships, military barracks, fences and bases, which are not classified as shipments to ordinance, aircraft, shipbuilding or other military uses.

The United Kingdom's defence companies are justifiably proud of their record in recent years, in the face of fierce overseas competition. Reductions in the UK's Armed Forces and the heavy demands on our remaining service personnel, who face an unpredictable international security environment, make it inevitable that considerable reliance will be placed upon the support and surge capacity offered by our comprehensive indigenous defence industrial base.

Without this effective industrial base, the ability of the UK to exert independence of action or influence over collective security arrangements would be constrained. It is essential that government policies ensure that industry retains the necessary capabilities to support our forces in a changing world.

<sup>2</sup> Source: Defence & Aerospace (D&A) Materials & Structures National advisory Committee

<sup>3</sup> The management of Defence (website)

# Major Economic Policy Considerations Flowing from the Criticality of Steel to UK National Security

If the UK is to maintain its strategic capability to produce steel and other strategic metals critical to the national defence, it must pursue economic policies that encourage continued investment in the United Kingdom in both manufacturing and technology. These policies must be based on the following assumptions:

1. UK multinational companies will continue to invest here if the "investment" playing field is relatively level because investing in the United Kingdom will be a viable, reasonably low-cost option with considerably less business risk;
2. It is not necessary or even desirable to stop investment overseas by multinational companies. It is only necessary to create an environment that encourages significant, ongoing investment here; and
3. If investment continues to occur in the United Kingdom at a reasonable rate, the UK will maintain its manufacturing base and the competitive advantage that it currently enjoys in steel production.

There are numerous areas where we can and should ensure that domestic government policies facilitate, rather than hinder, the most efficient cost structures in the UK. For example, we should ensure that cost factors related to energy, environmental regulations and other regulatory requirements are not disproportionately high for manufacturers of steel and specialty metals in the United Kingdom. In this regard, effective UK economic policies would help ensure that we have a "level cost" playing field. Such policies should include initiatives that would:

- Significantly lower energy costs for domestic manufacturers;
- Demand that the environmental control systems in foreign countries increase to levels comparable to those used by UK manufacturers;
- Government can play a direct part in supporting manufacturing through state aid and procurement policies. This is an area where much still needs to be done to create the level playing field on which UK based manufacturers are offered the same support as employers elsewhere in Europe.

In a paper published in January 2006 by The Institute of Manufacturing<sup>4</sup>, the value of a modern manufacturing company was described as:

*"When thinking about value it is easy to assume it is the same as profit or revenue. However, a firm's value goes beyond its financial performance and includes social impact and strategic importance to the regional and national economy."*

The defence industry is not only a major employer, but it is also the generator of high technology, that is readily adaptable to civilian use in fields, such as avionics and engine technology. The future of the UK's defence industry will almost certainly have to be properly planned, if it is to remain an efficient and essential national support organisation in times of crisis.

<sup>4</sup> Defining High Value Manufacturing Jan 2006