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U.S. Export Controls and Technology Transfer
Requirements
– A UK Perspective

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Summary

- U.S. export control and technology transfer policy and requirements do not serve U.S. interests.
- This was recognized in the 2009 White House announcement of an initiative to change the export control regime, and in the Quadrennial Defense Review.
- The UK has had critical experience with these requirements in connection with the Joint Strike Fighter (JSF) program.
- The issue of UK access to JSF source codes was resolved at the Bush-Blair level in 2006, but re-opened in 2009 by the U.S.
- The UK will undertake a Strategic Defence Review, which will likely include an evaluation of the benefits of participating in U.S.-led defence projects.
- Analysis of UK views and experiences can indicate the extent to which U.S. policy discourages countries from joining U.S.-led multinational projects.

Recognizing the Problem – Quoting the QDR

- “Today's export control system is a relic of the Cold War and must be adapted to address current threats. The current system impedes cooperation, technology sharing, and interoperability with allies and partners.”
- “The U.S. export system itself poses a potential national security risk.”
- “These deficiencies can be solved only through fundamental reform. The President has therefore directed a comprehensive review tasked with identifying reforms to enhance U.S. national security, foreign policy, and economic security interests.”

Déjà vu All Over Again

- UK got access to JSF source codes in 2006.
- DOD announced in November 2009 that U.S. would not release source codes and “that includes everybody.”
- A reprogramming facility will be set up to develop JSF software and distribute upgrades. Changes to the software will be integrated at that facility.
- UK replied that it “currently has the JSF data needed at this stage of the programme, and is confident that in future we will continue to receive the data needed to ensure that our requirements for operational sovereignty will be met.”
- House of Commons Defence Committee stated in 2010 “We also note that there still appear to be outstanding issues concerning technology transfer for the JSF, which are of key importance to the success of the programme.”

Timing is Everything

- UK just held a general election.
- There will be a Strategic Defence Review.
 - Last SDR was in 1998.
- MOD has generated numerous papers in preparation for the SDR.
- No project epitomizes the UK commitment to work with the U.S. more than the JSF.
- U.S. could not have picked a worse time to re-open the source code issue with the UK.

Mutual Awareness

- The UK appreciates that the U.S. has every justification for protecting its cutting-edge military technology.
- However, the U.S. may not appreciate the extent to which U.S. export control and technology transfer policies have generated disincentives among allies and partners to participate in a U.S.-led development programme.
- The UK experience with the JSF will be the focus of research to determine the impact of U.S. policy and practice.

MOD “Green Paper” – U.S. and Europe

- For the UK, no relationship is “more important than with the U.S.”
 - “The UK benefits greatly from bilateral co-operation in the nuclear, intelligence, science, technology and equipment fields.”
- **Notable commentary on Europe.**
 - “The return of France to NATO's integrated military structures offers an opportunity for even greater cooperation with a key partner across a range of defence activity.”
 - However, UK experience with A400M and other Euro-projects has not been completely satisfactory.
 - But U.S. decisions, such as on the JSF, generate the view that the U.S. is a difficult partner.
 - This strengthens those who support greater European cooperation.

“Green Paper” – Acquisition/Technology

- Considerable attention to defence acquisition.
 - “There are operational, industrial and economic benefits from working with other countries on acquisition. However such acquisition involves risks, constraints, and potential costs. We must choose the right approach for each project.”
- More nuanced view on military technology.
 - “We will need to develop a greater understanding of the requirement for technological edge in our systems and of the risks associated with losing it. We will need to be more agile in exploiting new technologies in our own capabilities. We need to recognise that the technology we require depends on the threat we face.”

Defence Strategy For Acquisition Reform– Current Status

- MOD spends £20 billion annually on goods and services.
- Around two-thirds of the total Defence Budget.
- £6 billion on equipment.
- £5 billion supporting equipment in service.
- The MOD reports that "nearly 90% of our equipment projects now deliver front-line needs to cost, and over 80% deliver them to time."

Defence Strategy For Acquisition Reform – Future Challenges

- Plans for new equipment are too ambitious, and must be scaled down to match likely funding.
- Need to improve management of equipment projects.
- Key factors on international projects.
 - “Deciding whether to acquire equipment in collaboration with other countries has crucial ramifications for its performance, cost and timescale. It often has important implications for international Defence relationships more generally, and for the Government's wider foreign and security policies. We need to make sure all these issues are properly weighed in reaching final acquisition decisions.”
- Need to “examine the scope for managing technology and innovation better so that we can provide and update defence equipment more quickly, and at a price we can afford.”

Global Strategic Trends

- Hegemonic dominance of U.S. will fade, but U.S. will remain pre-eminent.
 - While most developed countries will minimise defence expenditures, the U.S. is likely to be the exception, "making by far the greatest commitment to defence, although its economic power and technological advantage is likely to become increasingly challenged."
- Europe will develop more capabilities, which is not the same as sufficient capabilities.
- Requirements for defence acquisition programs will become more complicated.

Character of Conflict

- Around 2020, "the UK's strength in defence technology, along with many other Western nations (but probably excluding the U.S.), may have been surpassed by these emerging powers."
 - UK defence budgets will very likely be tight in this period.
 - "Investments now in technology could hedge against relative technology decline in UK defence."
- U.S. is central for UK military planning.
 - "It is extremely unlikely that the UK will conduct warfighting without U.S. leadership, but in other operations the UK may be called upon to lead a non-U.S. coalition."

Bernard Gray Report

- On multinational programmes, “the potential economic benefits of acquiring equipment in this way are significant.”
- However, “The inherent difficulties in ensuring that all participants in any collaboration have their interests aligned is widely held to be at the root cause of many problems and, more generally, the view across the MoD and the wider defence industry is that such problems are a characteristic of all collaborative projects to a greater or lesser extent.”

Haddon-Cave Report

- Focussed on loss of a NIMROD aircraft in Afghanistan in 2006.
- One key theme: the MOD must be an intelligent customer and not find itself at the mercy of industry and suppliers with whom the MOD are not able to properly engage.
- Two additional points related to JSF:
 - The report emphasized the need to control the supply chain.
 - Also emphasized the need to manage capabilities through-life.

UK Participation in JSF

- UK is the only Level 1 partner.
- It has provided \$2 billion in the system design and development phase.
- UK selected the STOVL variant for its carriers.
- It will purchase 138 planes with 60 in the period 2015-19.
- BAE Systems is the largest non-U.S. industrial participant in JSF.

U.S.-UK Defence Trade

- 99.8% of licenses applications are approved.
- 8,500 items totalling \$14 billion.
- UK firms have bought 50 U.S. aerospace and defence firms since 2001.
- U.S. defence firms having either set up operations in the UK or acquired firms.
- UK provides three-quarters of all foreign investment in the U.S. defence sector.
- U.S. defence industries export \$1 billion a year to the UK.
- UK exports to the U.S. are about \$350 million.

Strong Defence Relationship

- Ten umbrella DOD-MOD MOUs.
- Over 100 exchange agreements
- 30 project agreements.
- For the U.S., the UK is the largest collaborative relationship.
- For the UK, the U.S. provides about 50% of the MOD's Defence Science and Technology Laboratory's projects.

Source Code Dispute – Round 1

- House of Commons Defence Committee
 - “It is vital that the UK gets all the information and access to technology it requires from the U.S. to have 'Sovereign Capability' -- the ability to maintain the Joint Strike Fighter aircraft and undertake future upgrades independently.”
 - “If these assurances are not given, it is questionable whether the UK should continue its involvement in the programme.”
- Congress said the U.S. should share JSF technology with the UK.
- Blair-Bush agreement in May 2006, but dispute lingered until end of the year.

Source Code Dispute II – Additional Complications

- The Administration wants to get rid of the F136 second engine for the JSF.
 - This is key to the UK, as it is a GE/Rolls Royce product.
- JSF cost increases from £37 to £62 million come at a bad time for the MOD budget.
 - Speculation about whether only one aircraft carrier might be fully fitted out with F-35s.
- U.S.-UK Defence Trade Cooperation Treaty is still on hold.
 - House of Commons Foreign Affairs Committee noted that "We are disappointed that despite promises to do so, the U.S. Senate has not yet ratified the UK-U.S. Defence Trade Cooperation Treaty."

Not An Optimal Atmosphere

- House of Commons Foreign Affairs Committee stressed in a 2010 report that the UK should continue to work closely with the U.S.
- But "the UK needs to be less deferential and more willing to say no to the U.S. on those issues where the two countries interests and values diverge."

Larger Implications

- Unprecedented U.S.-UK cooperation in intelligence, nuclear defence, and military deployments.
- UK has established it can bring value to the table (anti-IED capabilities).
- Ultimately, the UK questions whether the U.S. values UK contributions.
- And if the U.S. cannot resolve technology issues with the UK, what lessons will other countries draw?
 - Australia also has long-standing disputes with the U.S. on technology access.

Frustration Into Action?

- European firms are “designing around” ITAR regulations.
- If the differential is not great, European firms are opting for non-ITAR items.
- French White Paper cites the need for non-ITAR-controlled electronics components to avoid limitations on French freedom of action.

Centre for Transatlantic Relations Study

- "Virtually every interview we conducted highlighted U.S. defense trade controls as a 'barrier' significantly impeding Transatlantic cooperation..."
- Four key concerns expressed to researchers.
- Limits on operational sovereignty
 - "The UK, one of our closest allies, as well as France and Italy, expressed strong concerns about this issue."
- Reliance on ITAR controlled systems generating risks of schedule delays and increases in costs.
- Re-export restrictions.
- The complications the regulations generate for multinational facilities.

U.S. Policy Questions

- Does the U.S. intend to carry all future defence development costs by itself?
- Does the U.S. want international partners to share the costs?
- Does the U.S. believe other countries can bring valuable technology and expertise to multinational programmes?
- Can the U.S. defence industry rely solely on DOD contracts?
- How important is it for the U.S. to promote such cooperative efforts to promote interoperability of other military forces with U.S. forces?

U.S. Export Control and Technology Transfer Questions

- How does the U.S. assess the risk of technology leakage vs. the benefits of cooperation and shared costs?
- Are U.S. regulations excessively broad?
- Do the U.S. regulations fail to discriminate between high and low tech items?

Final Considerations

- U.S. export control and technology transfer policies and their implementation are a disincentive for countries to participate in U.S.-led multinational projects.
- The UK experience with the JSF in particular indicates the frustration which is generated, and will be the subject of a research study.
- The UK experience may be valuable for the U.S. in seeking to address the difficult policy questions that it faces.