

SME Exports

Institute of Physics submission to a
House of Lords Select Committee inquiry.

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14 September 2012

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Christine Salmon Percival
Select Committee on SME Exports,
Committee Office,
House of Lords,
London
SW1A 0WP

IOP Institute of Physics

Dear Ms Percival,

SME Exports

The Institute of Physics is a leading scientific society promoting physics and bringing physicists together for the benefit of all. It has a worldwide membership of around 45 000 comprising physicists from all sectors, as well as those with an interest in physics. It works to advance physics research, application and education; and engages with policy makers and the public to develop awareness and understanding of physics, and the social and economic benefits that it creates. Its publishing company, IOP Publishing, is a world leader in professional scientific communications.

This submission was prepared in consultation with the Institute's Business and Innovation Board, with input from members of the Institute with direct experience of the issues raised.

The Institute welcomes the opportunity to respond to the House of Lords Select Committee inquiry on SME exports, the attached annex includes responses to points of particular relevance the Institute and its work.

If you need any further information on the points raised, please do not hesitate to contact us.

Yours sincerely,



Dr Norman Apsley FREng CEng FInstP
Vice President, Business and Innovation



John Brindley
Director, Membership and Business

SME Exports

1. Physics-based sectors, sectors whose performance is critically dependent on physics, including areas of energy production and distribution, manufacturing and telecommunications, make a significant contribution to the economy of the UK. Recent research commissioned by the Institute has suggested that exports from physics-based sectors in the UK in are worth more than £100 billion.¹ It was a stated aim of the Conservative party prior to the 2010 General Election that the UK should become the leading high-technology exporter in the European Union. It is not clear that any progress has been made towards this target. Physics-based businesses are natural exporters as there can only be a limited UK-based market for the technologies and innovations they produce, and the sector should be a focus for government and other agencies who wish to improve the UK export performance.
2. It is not possible to treat exporting as a separate quantity to the broader package required to enable SMEs to succeed in the UK. The submission below details some specific areas of concern for smaller physics-based SMEs, and also highlights some areas of the UK's innovation landscape that require attention from government if the exporting performance of the UK is to be improved.
3. While exporting SMEs need to be globally-minded from business conception and the connections and markets forged need to be international, a strong domestic market can be an important step in enabling these companies to break into the export market. The role of public procurement and particularly the SBRI programme in promoting high-technology businesses should remain a focus of government. The research and development support, and subsequent contracts that are possible through the scheme, can provide an opportunity for SMEs to develop a global differentiator within their industry. Similar programmes are in place within our international competitors and these demand that the UK keeps pace.
4. To specifically promote exporting within physics-based SMEs, knowledge and understanding of science, technology, engineering and mathematics (STEM) subjects of governmental staff, especially the UKTI, is fundamental.² The connections between UKTI and the Technology Strategy Board, for example, should be strengthened. An area specific to physics-based business is that in addition to considering the export potential of final products, the whole supply chain needs to be evaluated when discussing SME exports. The products of physics-based SMEs are often devices and technologies, are which subsequently incorporated in devices manufactured by other companies that are then exported from the UK.

¹ IOP Physics in the UK Economy 2012 (due for publication October 2012)

² For background see :

http://www.iop.org/policy/consultations/industry_innovation/file_55144.pdf

5. Another consideration when discussing SME exports, especially physics-based businesses, is the time between conception and commercialisation and even profit making, which can be longer in physics-based industries than in other exporting sectors. Building relationships that may lead to early export markets can therefore be a similarly long-term process. A further consideration for many science-based businesses is the need to work within what can be many levels of regulation of products and technologies and many different jurisdictions while technologies and products are being developed. Closer connection between UKTI and agencies tasked with supporting business through this stage could also be beneficial.
6. There are some financial barriers that remain in place preventing SMEs from exporting. It has been suggested by some smaller companies that the subsidies offered for exploratory visits abroad are still unaffordable to micro-businesses, as they are financially too high risk to put up the necessary additional funding that would be required to make such visits to new sites.

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