



National
Measurement
Office

Establishing a new partnership for the National Physical Laboratory

Briefing Note

2nd April 2013

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Purpose

The National Measurement Office (NMO), an Executive Agency of the Department for Business, Innovation and Skills (the Department) is working to develop and deliver the model for the future operation of the National Physical Laboratory (NPL). This will involve an international search (the Process) to secure an academic partner or partners, possibly including an applied science organisation, for the operation of the NPL and to create a postgraduate institute associated with the NPL site at Teddington, South West London.

This document includes a high level summary of the Department's aims for and desired outcomes from the model for the future operation of NPL and sets out an overview of the possible new arrangement. The NMO wishes to explore this arrangement in the context of the aims and desired outcomes.

The purpose of this document is to:

- raise awareness about the Process to select partners to work with NMO to deliver its aims and the desired outcomes;
- provide interested parties with further details of NMO's current thinking and information to facilitate constructive and focused dialogue in advance of the commencement of the formal Process; and
- make available details of how to register interest and engage with NMO.

At this stage the focus is on understanding the level of appetite in the market for involvement in the arrangement for the future operation of NPL; getting market feedback on the new arrangement in the context of the Department's aims and the desired outcomes; and to better understand the feasibility and deliverability of the arrangement taking account of the value proposition from the perspective of interested parties.

The output from this engagement will be used by NMO to validate the benefits to each parties from the outcome of the Process, to inform its design and to ratify the timetable.

Potentially interested parties, who have not already done so, are requested to register their interest by e-mailing James Reeve at npl.future@nmo.gov.uk. NMO will then arrange for an opportunity to discuss further, if desired.

Background

NPL is the UK's principal National Measurement Institute (NMI) and is a world-leading centre of excellence in developing and applying the most accurate measurement standards. At the heart of its mission is delivering impact by disseminating research, measurement best practice and traceability for the economic and social benefit of the UK. NPL Management Limited is currently a £73 million turnover organisation of which £47m relates to the Department's National Measurement System (NMS) activity.

The link below provides details of NPL's 2012 Annual Review.

NPL 2012 Annual Review (<http://www.npl.co.uk/publications/annual-review/>)

On 27 November 2012 the Minister for Universities and Science announced the intention to replace the existing Government-owned, Contractor-operated arrangement for NPL with the formation of a strategic alliance with one or more partners. He indicated that this could be achieved through some form of joint venture between the Department and one or more UK or international universities or applied science organisations with an interest in investment in science and technology. A partnership with an academic institution would also allow for the formation of dedicated applied science postgraduate institute.

The Department's aims

The context for this decision was to seek to meet the Department's aims which are to:

- bring greater expertise and intellectual flexibility to strengthen NPL's science;
- make better use of the existing facilities by strengthening NPL's links with its academic partners, through new and existing collaborations with academia and industry;
- encourage greater interaction with business, driven by closer integration of existing innovation infrastructure and commercial activity; and
- make better use of the NPL site at Teddington, South West London, by granting partners access to spare capacity.

The objective of the Process is to meet these aims through establishing a partnership that produces a strong NPL and enables the successful launch of a new postgraduate institute, providing value for money for the UK and facilitating a smooth transition on expiry of the current contract.

The links below provide details of the Ministerial Statement of 27 November 2012 together with a presentation and summary of a subsequent stakeholder event held on 18 December 2012.

<http://www.bis.gov.uk/nmo/national-measurement-system/Future-operation-of-NPL/Ministers-written-statement> (27 November 2012 - Written Ministerial Statement on future operation of NPL)

<http://www.bis.gov.uk/nmo/national-measurement-system/future-operation-of-npl/Presentations-to-stakeholders> (18 December 2012 - Future Operation of NPL – slides and summary from post announcement briefing with academic and industry)

Desired outcomes

NPL contributes to the UK economy through reinforcing the standing of UK as a place to do science, the economic impact of its science and the revenue and jobs that this enables. Guided by the Department's aims, set out in the Minister's Statement of 27 November 2012, NMO has developed the desired outcomes set out below. At this stage these are draft but have been included to provide a sense of scale and the level of aspiration which the Department has for NPL:

	Desired outcome
1. Delivering scientific excellence	Active in developing science that is world-leading in terms of originality, significance and rigour and with a population of Fellows of the Royal Society and Royal Academy of Engineering.
2. Expanding NPL's scientific base	Utilising existing spare capacity at NPL and its site at Teddington. This is estimated to be sufficient to accommodate around 200 additional full-time equivalent scientists.
3. Supporting UK growth	Increasing the direct financial benefit to UK organisations through measurement innovation from the current level of £634 million in 2012 to over £1 billion.
4. Attracting investment	Attracting investment to the site, including investment to equip and operate the newly announced £25 million Advanced Metrology Laboratory.
5. Growing NPL's business	Growing NPL's revenue to create a £100 million plus research organisation with growth coming from non-NMS sources.
6. Expansion of NPL both in Teddington and regionally	A site at Teddington that is thriving and NPL has an established presence at other sites across the UK bringing it closer to industry.
7. Being a world leader in metrology	Retaining the UK's standing in global metrology and maintaining NPL as a partner of choice for other world leading National Metrology Institutes.
8. Demonstrating value for NMS investment	Increased collaboration and alignment of public and private funding to leverage the NMS investment. For example on specific projects attracting funding from other sources including industry worth a multiple of the NMS investment.

9. Providing education and expertise for the future	A postgraduate institute, producing highly sought after Master's and Doctoral researchers for industry.
10. Promoting science and engineering	A high profile and effective voice for science and engineering.

Delivery of the New Arrangements

NMO is interested in exploring with interested parties what they may contribute to the delivery of the future operation of NPL and how this would best be provided. This section considers one possible structure that could deliver the Department's aims and the desired outcomes. NMO is willing to consider novel or alternative structures which are better placed to meet the Department's aims.

NMO is seeking partners who are prepared to provide a long term commitment to NPL and to align their interests with the long term success of NPL as measured by achievement of the Department's aims and the desired outcomes. The key is that all parties – including NPL itself – mutually benefit in this new arrangement and share in the risk and rewards. NMO currently expects that this might be best achieved through one or more partners taking an ownership stake in NPL.

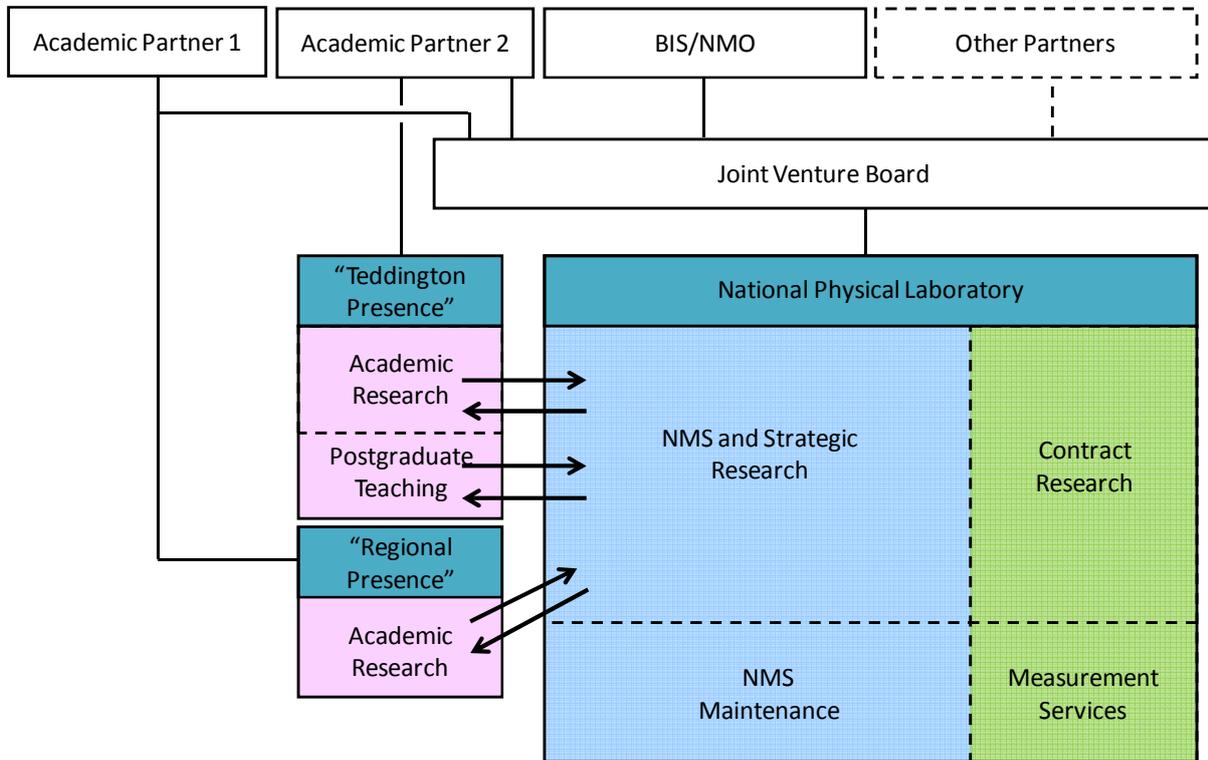
The Department has broadly identified a number of roles that partners could potentially contribute to in the arrangement:

- contributing to the scientific leadership of NPL that will support the development of a scientific vision that fosters the Department's aspirations for innovation and growth, maintains NPL's position as a premier-division NMI and supports NPL's growth plans;
- strategically guiding NPL's delivery of NMS activity (NMS & strategic research; NMS maintenance; measurement services; grant funded work) whilst ensuring that NPL's reputation for impartiality, independence and integrity is sustained;
- growing NPL's commercial activity (Contract Research including pursuing a wider commercialisation agenda); and
- establishing a postgraduate training and research institute associated with NPL's Teddington site.

Collectively these roles provide partners with:

- opportunities to share facilities, people and expertise at NPL. In addition there may be opportunities to further develop the existing facilities and spare capacity on the site;
- an opportunity to influence the scope of work performed in the recently announced new £25 million Advanced Metrology Laboratory to be built on the Teddington site, which will provide a uniquely stable environment in the UK for ground-breaking metrology;
- an opportunity for UK universities to enhance their Research Excellence Framework (REF) submission (both science quality and routes to impact) through joint appointments (international institutions may be able to derive similar benefits from the arrangement). NPL has around 2,500 customers, has published 264 peer-reviewed papers in 2012 and has a track record of delivering economic and societal impact with best-in-class technology transfer);
- an opportunity to establish a postgraduate training and research institute alongside NPL's world-leading scientists and facilities, increase their student cohort and develop, with NPL, highly attractive MSc, EngD and PhD programmes. These courses would offer a unique opportunity for students to work closely with an internationally respected research establishment with extensive industrial links and the opportunity to collaborate in NPL's extensive management training programme. This would strongly differentiate a course in a globally competitive marketplace; and
- potential to benefit from a financial return to be worked out as part of the partnership arrangement, including growing the commercial business and jointly exploiting intellectual property.

The structure below has been developed to characterise the new arrangements and to facilitate discussions with interested parties. It is emphasised that the structure is not prescriptive on which parties undertake nor on the ownership and contractual framework through which these are delivered. It is however envisaged under any structure that there will be an involvement of BIS / NMO and a combination of partners to provide a complementary balance of academic coverage and commercial expertise. Above all, for the sustained success of NPL as a critically important UK asset, partners are sought that bring shared values, long-term commitment and strategic alignment with NPL.



Next Steps

As noted above, potentially interested parties, who have not already done so, are requested to register their interest by e-mailing James Reeve at npl.future@nmo.gov.uk. NMO will then arrange for an opportunity to discuss your organisation’s thoughts on this document further, if you wish.

Further links

<http://www.bis.gov.uk/nmo/news-and-events/news/2013/Jan/Announcement-of-advanced-metrology-laboratory> (25 January 2013 - Announcement of £25 million for Advanced Metrology Laboratory at NPL)

<http://www.npl.co.uk/> (NPL website)

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