MCNEG 2004 MEETING

Welcome to NPL

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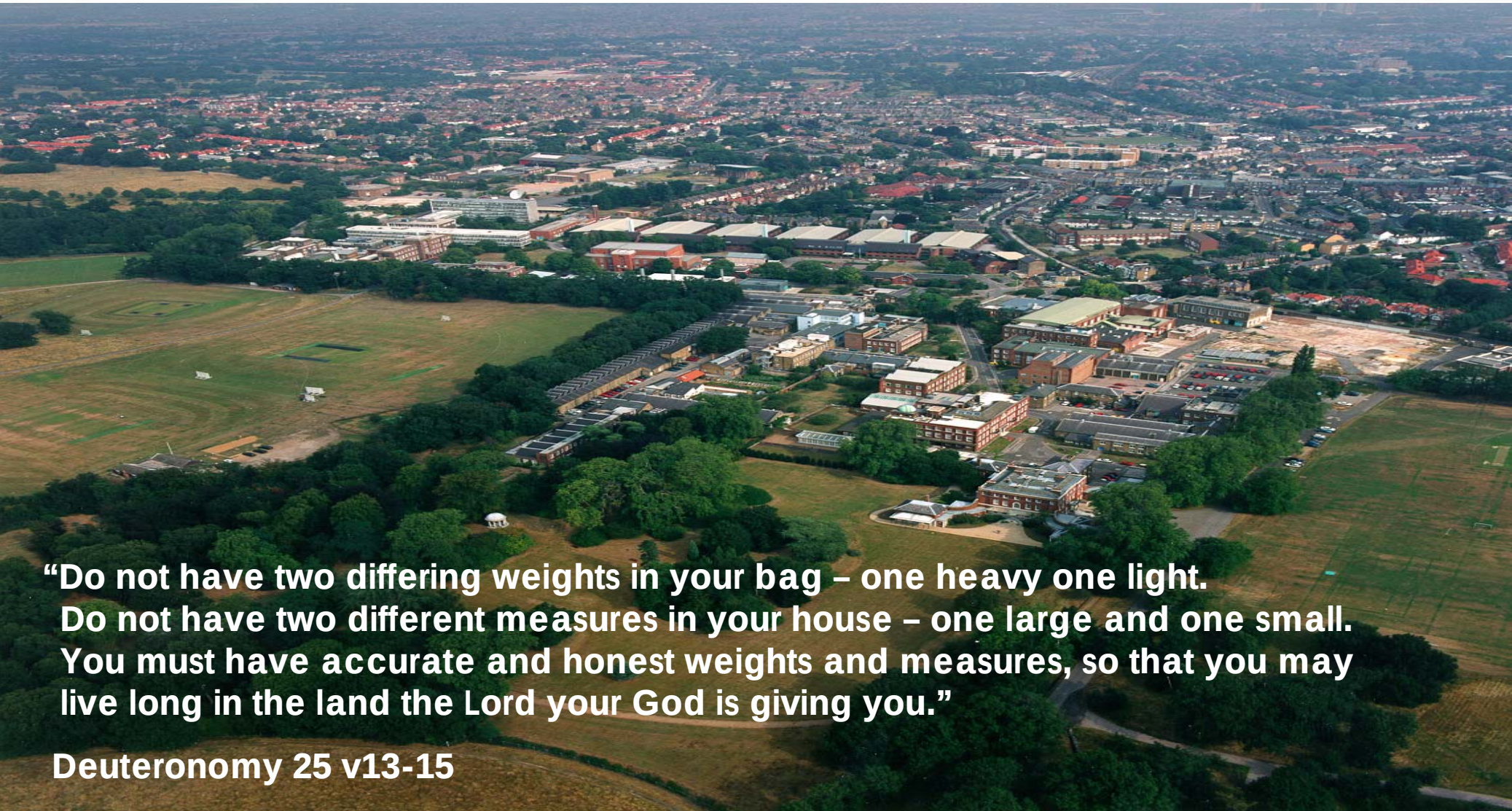
15 March 2004

NPL

- History
- NPL today
- The National Measurement System

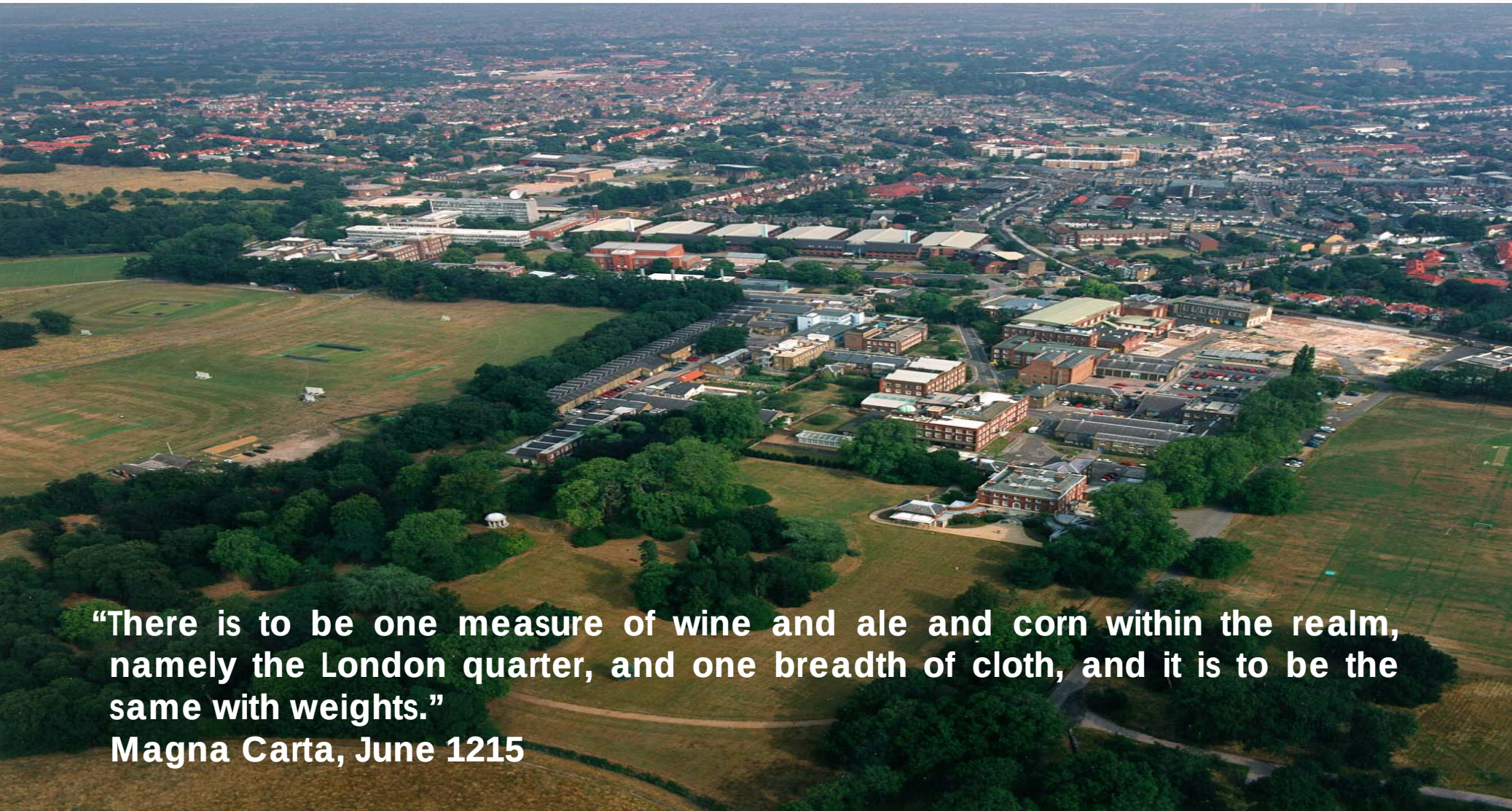
NPL –raison d'etre



"Do not have two differing weights in your bag – one heavy one light. Do not have two different measures in your house – one large and one small. You must have accurate and honest weights and measures, so that you may live long in the land the Lord your God is giving you."

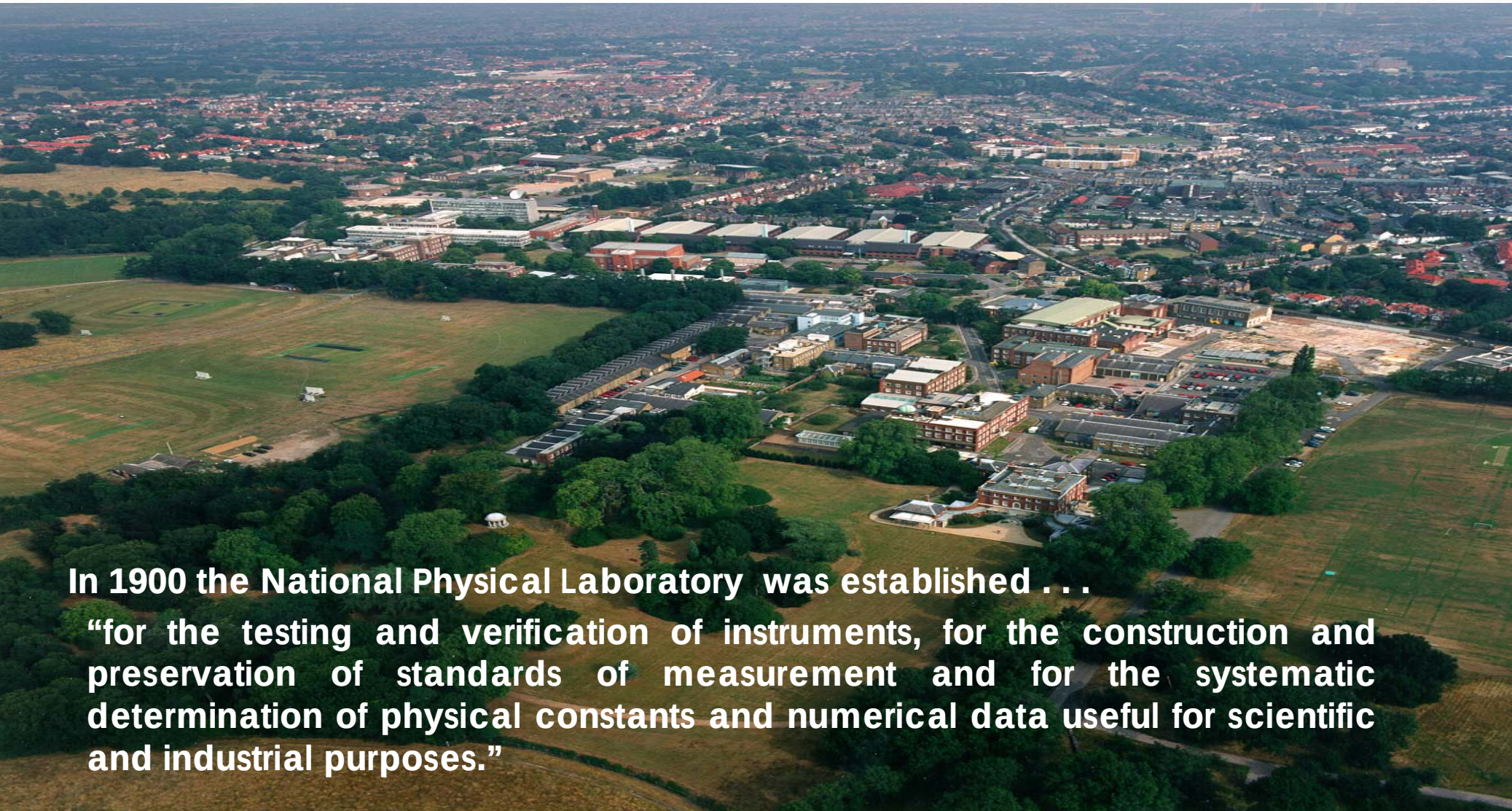
Deuteronomy 25 v13-15

NPL –raison d'etre



"There is to be one measure of wine and ale and corn within the realm, namely the London quarter, and one breadth of cloth, and it is to be the same with weights."
Magna Carta, June 1215

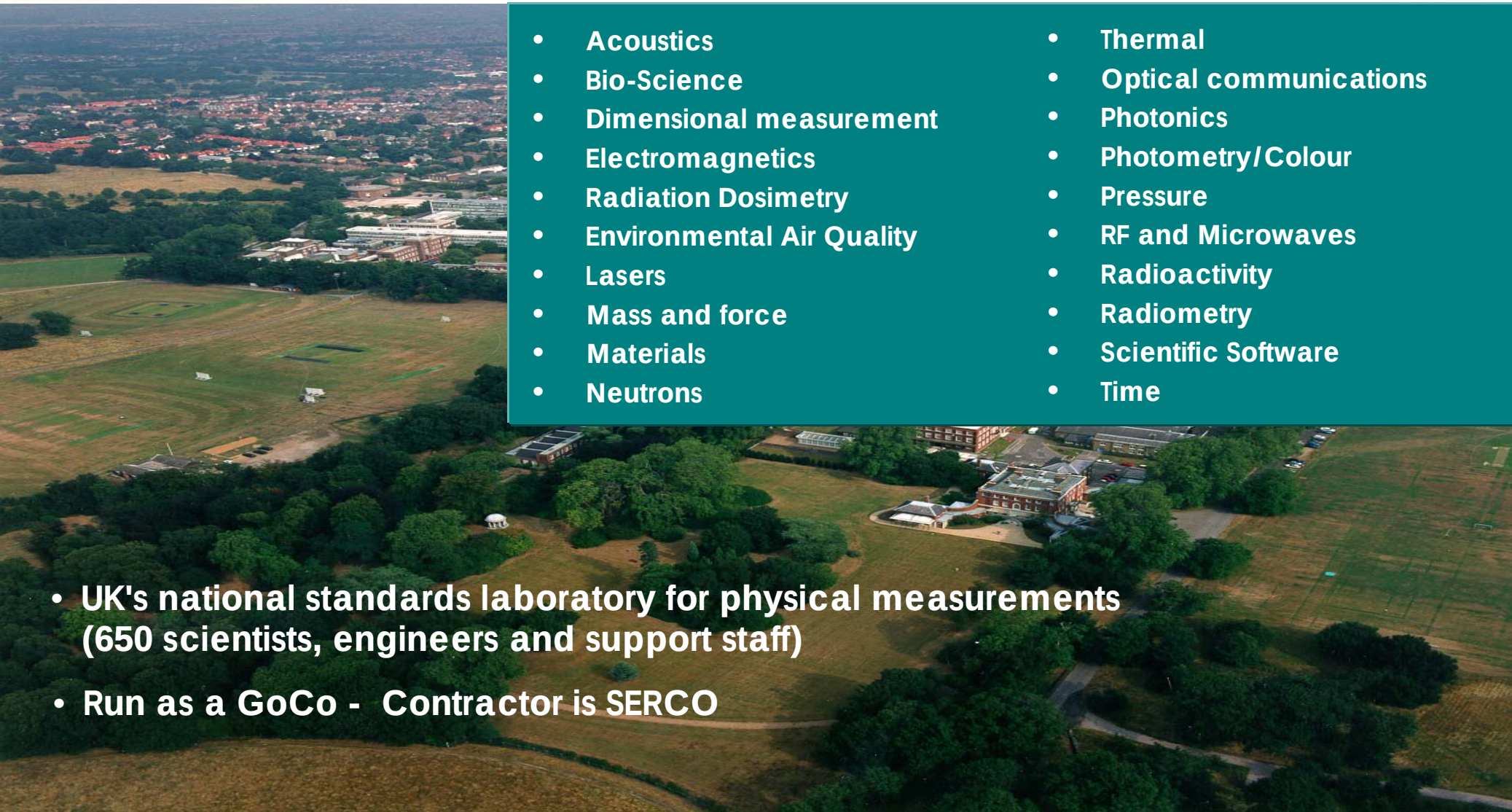
NPL – 104 years old



In 1900 the National Physical Laboratory was established . . .

"for the testing and verification of instruments, for the construction and preservation of standards of measurement and for the systematic determination of physical constants and numerical data useful for scientific and industrial purposes."

NPL – in 2004



- Acoustics
- Bio-Science
- Dimensional measurement
- Electromagnetics
- Radiation Dosimetry
- Environmental Air Quality
- Lasers
- Mass and force
- Materials
- Neutrons
- Thermal
- Optical communications
- Photonics
- Photometry/Colour
- Pressure
- RF and Microwaves
- Radioactivity
- Radiometry
- Scientific Software
- Time

- UK's national standards laboratory for physical measurements (650 scientists, engineers and support staff)
- Run as a GoCo - Contractor is SERCO

The GoCo

- **GoCo - Laboratory is Government Owned and Commercial Operated**
- **First contract won by SERCO 1995 – 2004**
- **SERCO have been selected to run NPL for at least next 10 years from April 2004 – long-term commitment from DTI**
- **SERCO partnered with SIRA for the bid.**

Vision

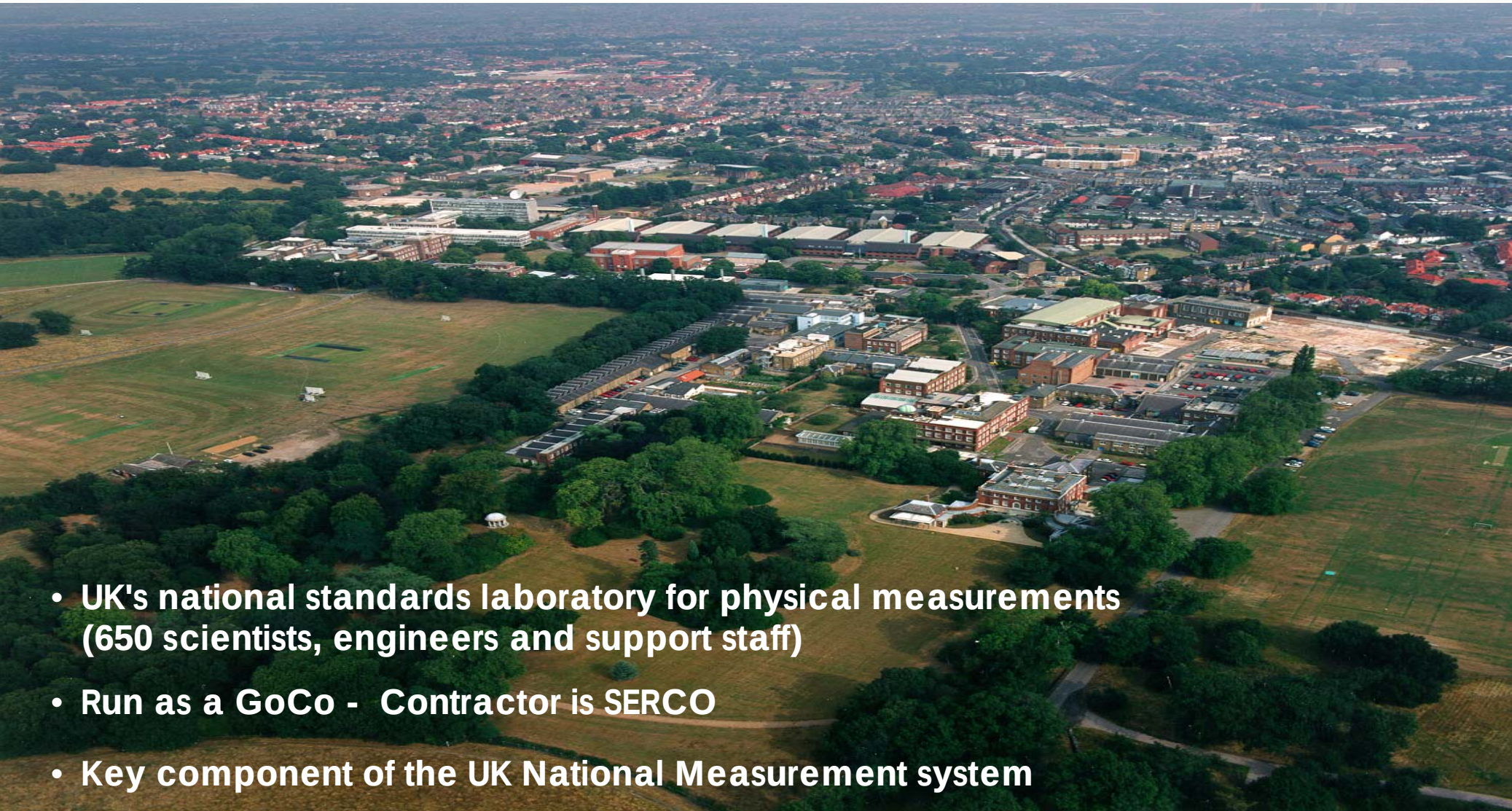
“Our vision for NPL is to be the National Measurement Institute that delivers the highest economic and social impact, through excellent and responsive science.

We foresee a Laboratory with an enhanced global reputation, built on achievements in science and in applying metrology to deliver maximum benefit for the UK economy and quality of life.”

From Serco bid document

Four components

NPL – in 2004



- UK's national standards laboratory for physical measurements (650 scientists, engineers and support staff)
- Run as a GoCo - Contractor is SERCO
- Key component of the UK National Measurement system

serco NPL

The UK National Measurement System

Technical Infrastructure to ensure measurement in UK is:

- Traceable
- Consistent
- Internationally recognised

Excellence in measurement science to:

- Enable regulatory compliance
- Improve quality of life
- Provide economic benefit

The NMS is divided into 18 technical programmes

- Ionising Radiation Metrology is one of the largest programmes

Ionising Radiation

serco NPL

Radiation Dosimetry

Radioactivity Metrology

Neutron Standards

Environment | **Protection** | **Diagnosis** | **Therapy** | **Industry**

Ionising Radiation

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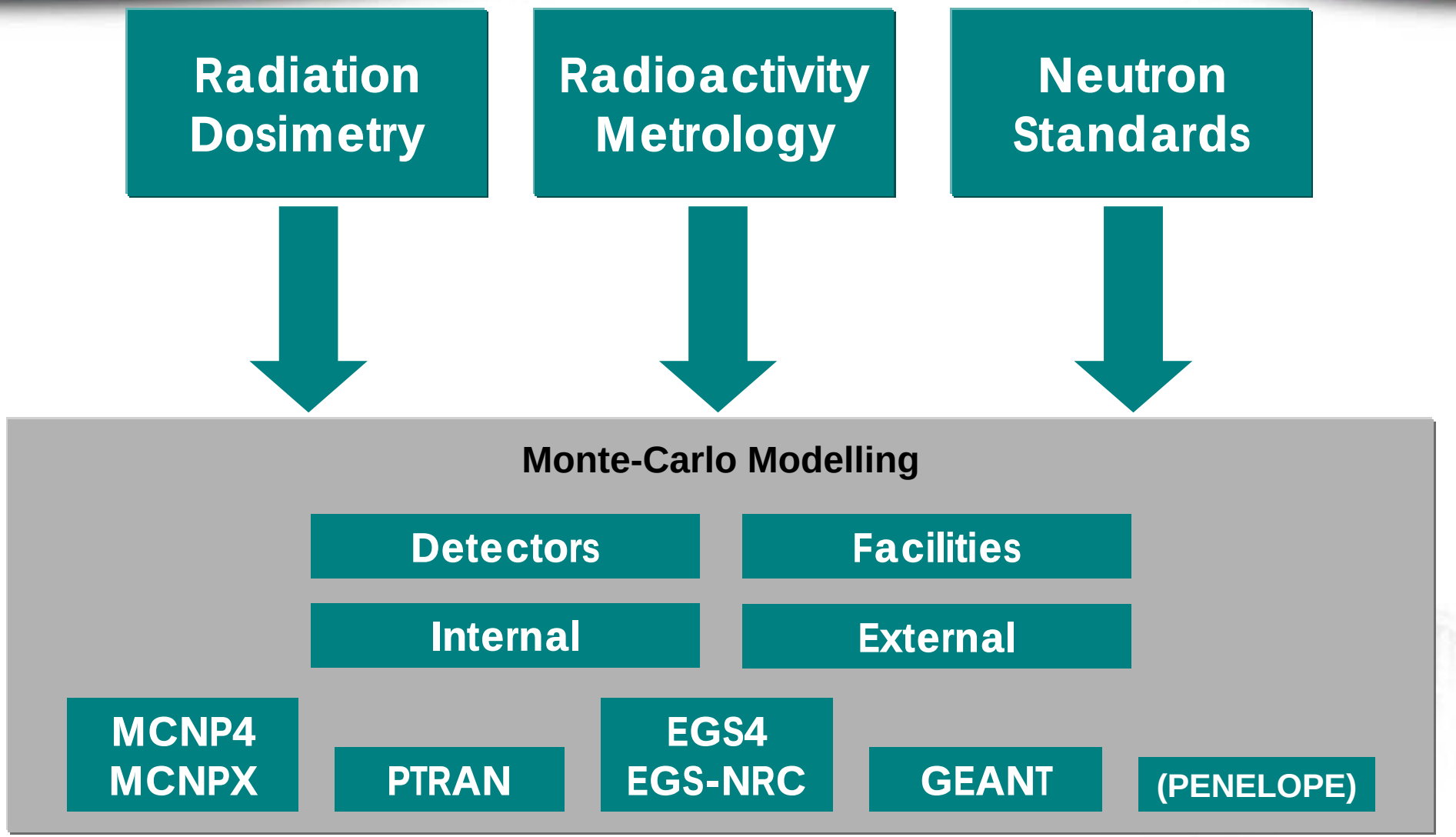

Welcome