# Establishing New National Measurement Systems for Millimetre-wave and Terahertz Frequencies

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**Abstract**

The National Physical Laboratory (NPL) is the UK's National Measurement Institute. As such, NPL is tasked with developing, maintaining and disseminating measurement capability at the very highest levels of accuracy. NPL develops measurement capability in areas of relevance to science and technology. As new science and technology is developed, new measurement capability is required to underpin and validate the new science and technology. In recent years, much use has been made of the millimetre-wave and terahertz parts of the electromagnetic spectrum. This is for applications in electronics and telecommunications, defense and security, radio astronomy and atmospheric science, and, healthcare and pharmaceuticals. All these applications have driven the need for accurate and reliable measurement capabilities at these frequencies. This talk will review some recent developments being made at NPL to establish such measurement capabilities.

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