

Overview of the Metrology Abilities in Bulgaria

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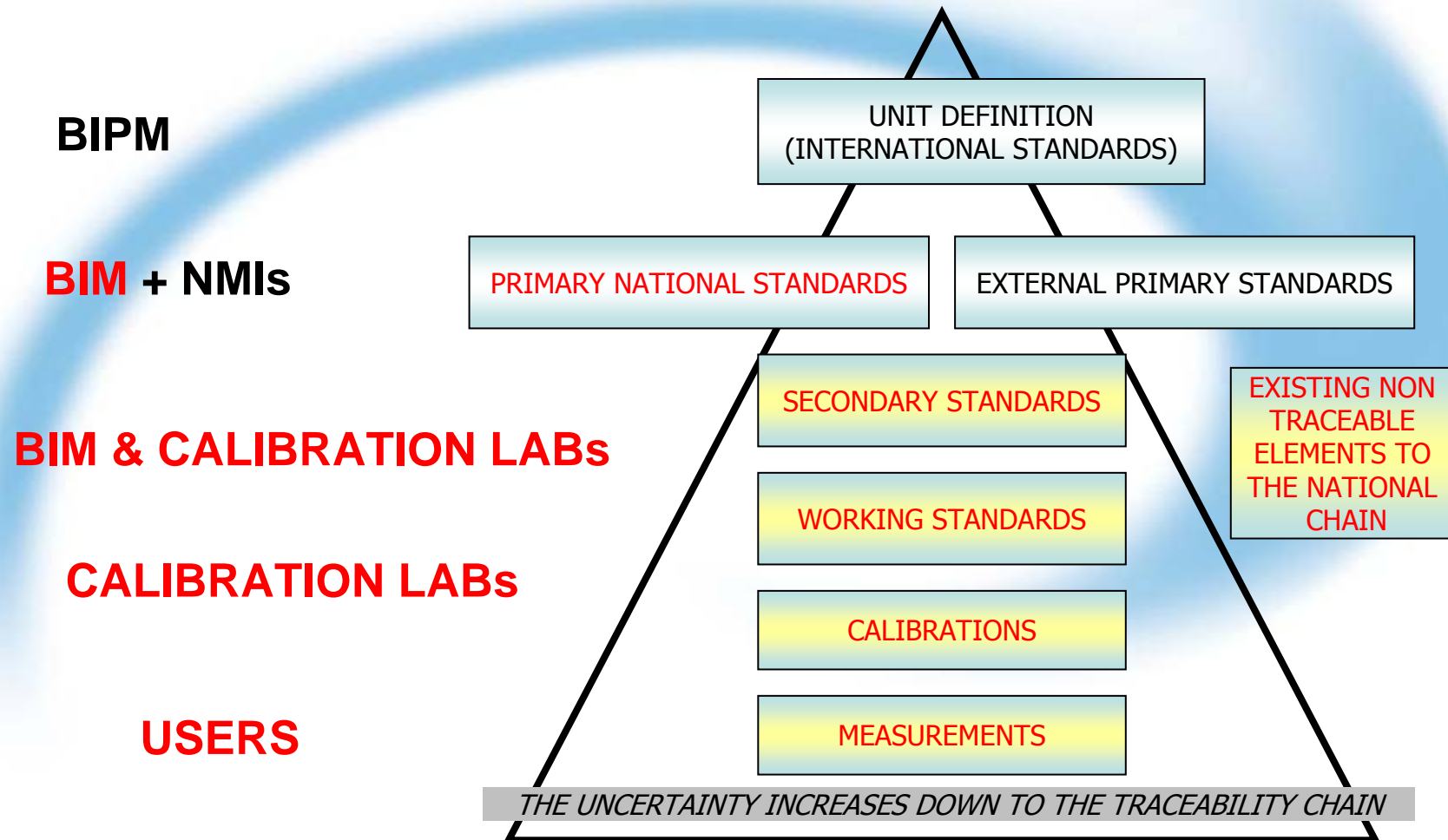
Metrology \Leftrightarrow Traceability

Metrology is defined by the BIPM as "the science of measurement, embracing both experimental and theoretical determinations at any level of uncertainty in any field of science and technology."

Three subfields:

- **Scientific or fundamental metrology** concerns the establishment of measurement units, unit systems, the development of new measurement methods, realisation of measurement standards and the transfer of traceability from these standards to users in society. (*Development potential*)
- **Applied or industrial metrology** concerns the application of measurement science to manufacturing and other processes and their use in society, ensuring the suitability of measurement instruments, their calibration and quality control of measurements. (*Development potential*)
- **Legal metrology** concerns regulatory requirements of measurements and measuring instruments for the protection of health, public safety, the environment, enabling taxation, protection of consumers and fair trade. (*Internal, State and EC Motivation*)
- A core concept in metrology is (metrological) traceability, defined as "the property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons, all having stated uncertainties."

Traceability in Bulgaria



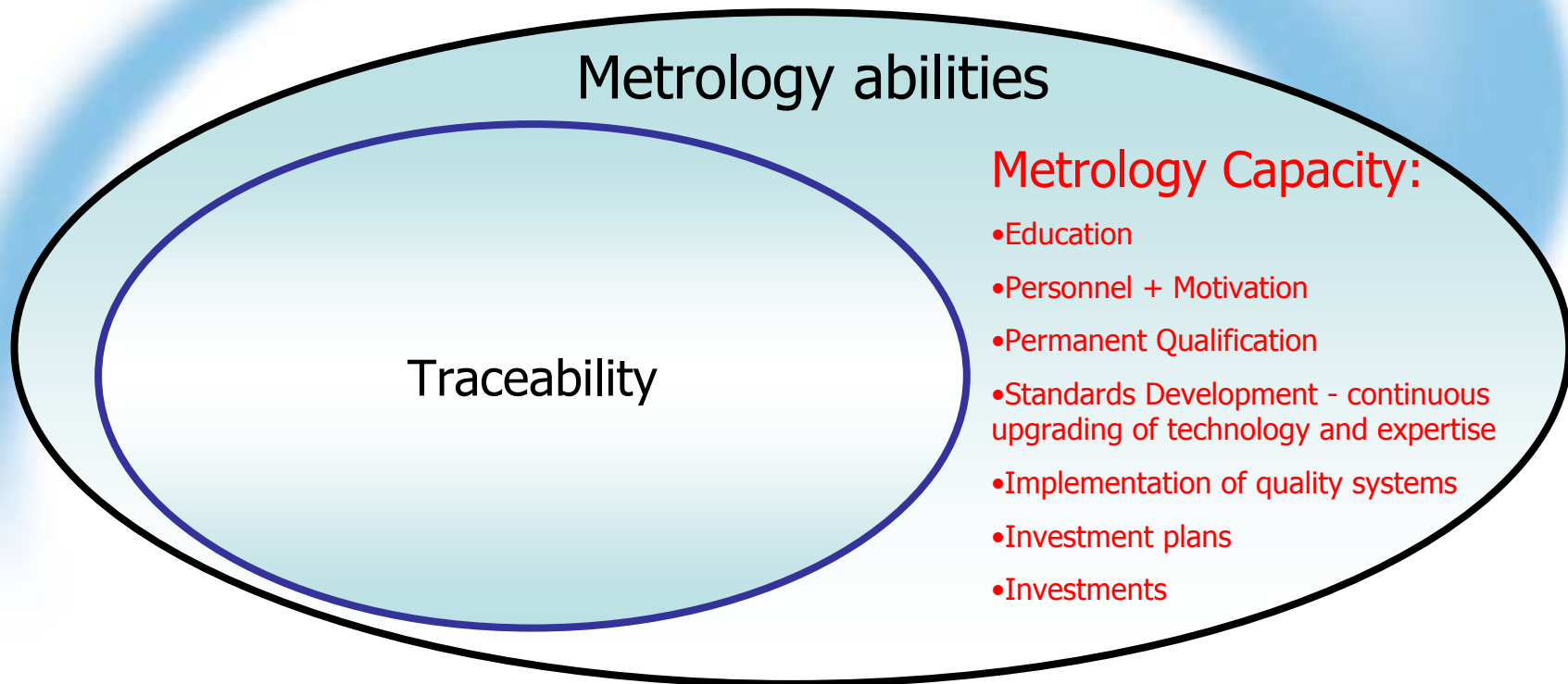
Metrological infrastructure in Bulgaria

- **Ministry of Economy and Energy – *policy maker***
- **Bulgarian Institute of Metrology – *CIPM-MRA (Mutual Recognition Arrangement) signatory***
- **Bulgarian Accreditation Service - *accredited traceability***
- **State Agency for Metrology and Technical Surveillance**
- **Bulgarian Institute for Standardization**
- ***Others***

Metrology abilities > Traceability

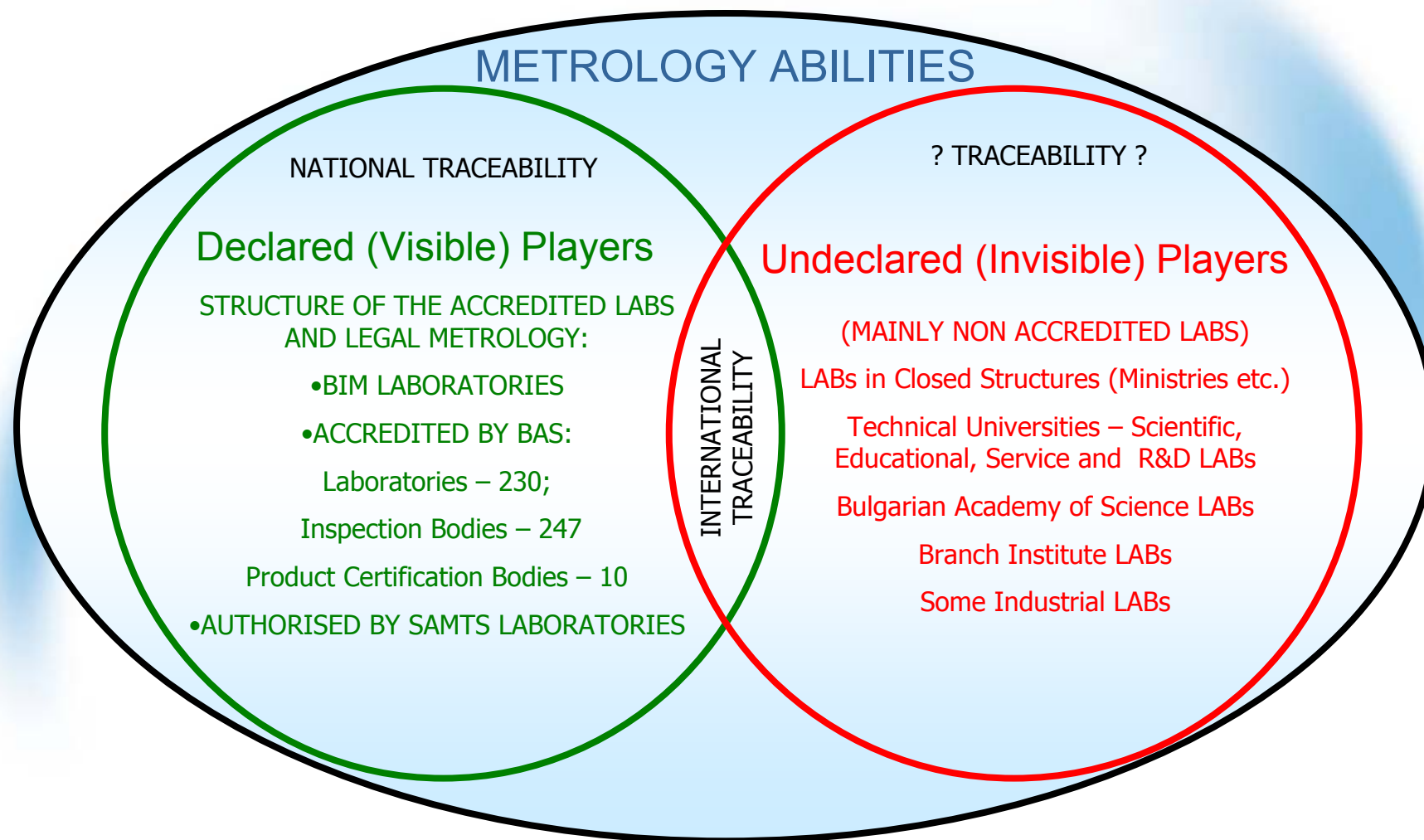
Traceability \neq Metrology abilities

Metrology abilities = Metrology Capacity + Traceability

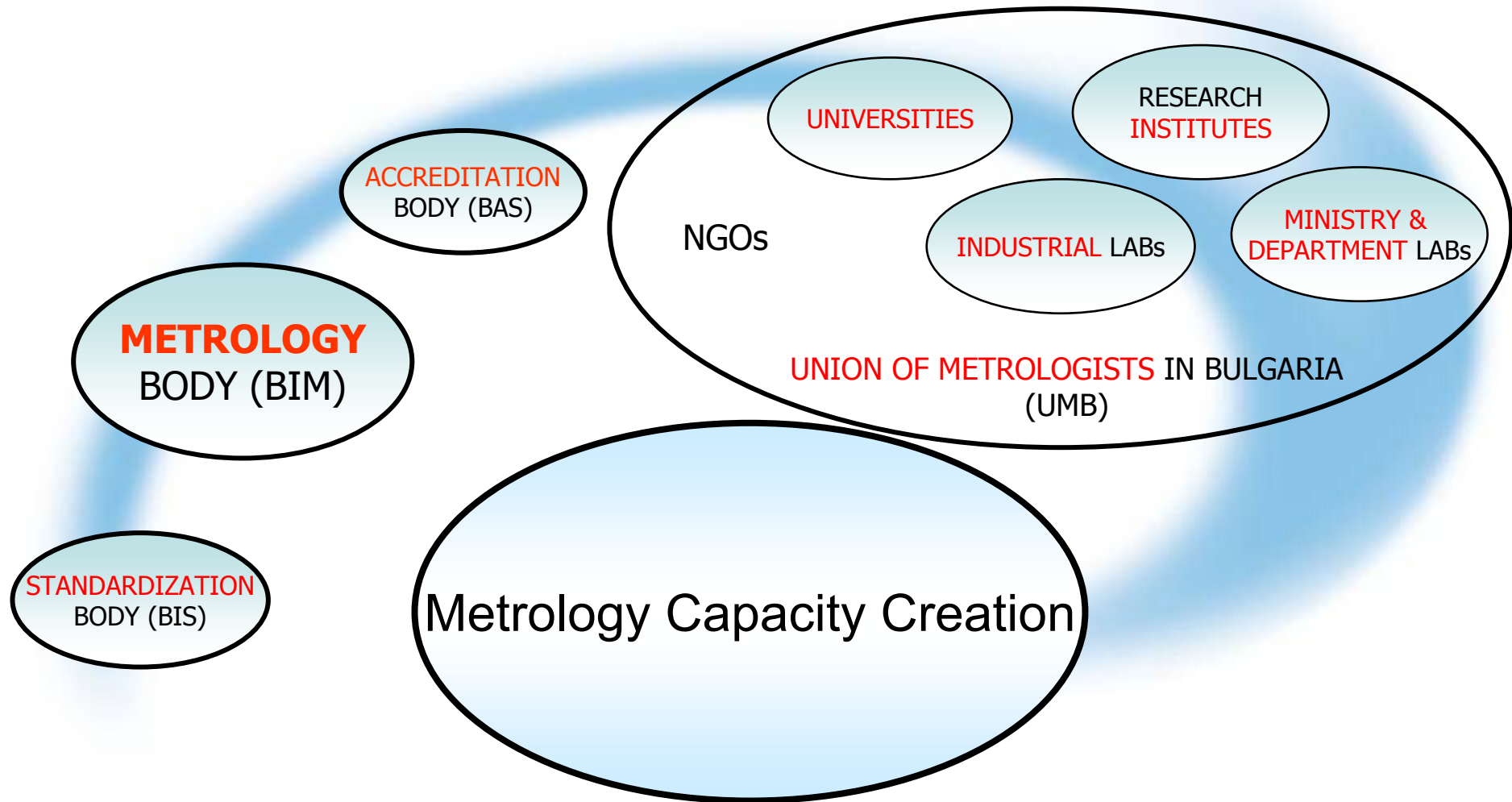


National Traceability

Declared and hidden players



Creation of Metrology Capacity



The ways to improve the Metrology Capacity

- To use the potential of the hidden players for increasing the Metrology Abilities – the potential of the non accredited labs.
- The role of NGOs to consolidate the Metrology Capacity.
- Improvement the capacity of BIM in Fundamental Metrology – reported areas: Chemistry, Biology, Medicine, Food Industry, Radiation and Magnetic Influence
- International Cooperation and International Experience Exchange

REMINDER!

The task of metrology and metrologists is to achieve the dependable measurement results that are needed to ensure quality and efficiency of production in industry, fairness in trade, consumer protection, health and safety of human and animal life and protection of the environment.

THANK YOU FOR THE ATTENTION!