

WORLD METROLOGY DAY 2026
Metrology: Building Trust in Policy Making

ADDRESS BY THE ACTING CHIEF EXECUTIVE OFFICER
Mr Duncan Mutengwe
National Regulator for Compulsory Specifications (NRCS)

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12:30*

OPENING & WELCOME.

Welcome to World Metrology Day 2026

Good morning, ladies and gentlemen.

On behalf of the National Regulator for Compulsory Specifications - the NRCS - I am honoured to welcome you to this national webinar, hosted jointly with our esteemed partner, the National Metrology Institute of South Africa, NMISA.

Today, 20 May 2026, we join metrology organisations, policymakers, scientists, industry leaders and citizens around the world in marking World Metrology Day - the annual commemoration of the signing of the Metre Convention in Paris on this day in 1875.

"When 17 nations gathered in Paris 151 years ago, they made a commitment that resonates still today: that the world must speak the same language of measurement. That commitment is the foundation on which fair trade, consumer protection and trusted governance are built."

The 2026 theme - Metrology: Building Trust in Policy Making - could not be more timely. In a world of geopolitical uncertainty, supply chain disruption and rapid technological change, the integrity of measurement has never mattered more to policy, to industry, and to the everyday lives of citizens.

Acknowledgements

Acknowledgements

- We extend our sincere gratitude to all those who have made today's webinar possible, and who continue to advance the cause of measurement science in our region:
- NMISA — our co-hosts and South Africa's custodians of national measurement standards
- The International Bureau of Weights and Measures (BIPM) — the global anchor of measurement science
- The International Organisation of Legal Metrology (OIML) — standard-setter for legal metrology worldwide
- UNESCO — which formally recognised World Metrology Day as an International Day in 2023
- SADC MEL and SADC MET — for their essential regional coordination across Southern Africa
- PTB Germany — for their generous sponsorship and technical support in the region
- Our speakers, panellists, policymakers, industry partners and all participants joining us today

WHO WE ARE: The National Regulator for Compulsory Specifications (NRCS)

For those joining us from our regional and international partner organisations, allow me to briefly introduce the NRCS.

Established on 1 September 2008 as an agency of the Department of Trade, Industry and Competition, the NRCS is South Africa's independent product safety and legal metrology regulator. We emerged from the original Regulatory Division of the South African Bureau of Standards, inheriting decades of technical expertise and institutional knowledge.

Our mandate is straightforward but wide-reaching:

- Protect public health and safety
- Safeguard the environment
- Facilitate fair trade

We achieve this through the development, administration and enforcement of compulsory specifications and technical regulations across six core business areas: Automotive; Electrotechnical; Chemicals, Materials and Mechanicals; Foods and Associated Industries; the Built Environment - and Legal Metrology.

"Legal Metrology is not a technical niche. It is the arm of government that stands between the consumer and the dishonest trader - it is regulation made tangible, every single day."

THE 2026 THEME IN CONTEXT.

Metrology: Building Trust In Policy Making

The BIPM and OIML chose this year's theme with great deliberateness. Their message is clear:

"Measurement underpins informed decision-making. From trade and innovation to public health and emerging technologies, reliable measurement provides the evidence base on which sound policy - and public trust - depend."

This theme speaks to three interdependent relationships that define the modern regulatory state:

- Science and Governance: Accurate, traceable data enables governments to make decisions with confidence and account for those decisions with credibility.
- Legal Metrology and Policy: Scientific metrology ensures measurements are accurate and comparable across borders. Legal metrology ensures they are applied consistently and fairly in practice. Together, they translate policy intent into lived reality.
- Public Trust and Compliance: Citizens trust institutions when they experience fairness - when the litre of fuel they pay for is actually a litre, when the electricity they are billed for matches what was consumed, when the kilogram they purchase reflects what is in the bag.

This is not abstract governance theory. This is what the NRCS does, every day.

BUILDING THE REGIONAL FOUNDATION

From Johannesburg To The Webinar: The OIML D1 Workshop

Today's webinar does not happen in isolation. It builds on a significant regional milestone that took place just weeks ago.

From 21 to 24 April 2026, Johannesburg hosted the SADC MEL/SADCMET Workshop on OIML D1 - National Metrology Systems: Developing the Institutional and Legislative Framework. The event brought together Directors of National Measuring Institutes and Legal Metrology Organisations from across the SADC region, sponsored by PTB Germany and supported by the BIPM, OIML and the NRCS.

That workshop achieved three things of lasting importance to our region:

- **Interpretation of the OIML D1 Model Law on Metrology** - equipping national leaders to advise their governments on appropriate legislative elements for adoption in national law.
- **Legislative Gap Analysis** - enabling member states to identify where their current frameworks fall short of international best practice and what infrastructure needs to be developed.
- **Action Planning** - moving from diagnosis to commitment, with country-level plans for addressing legislative and institutional gaps.

"Sound metrology legislation is the precondition for trusted measurement. Without the legal framework, even the most technically capable cannot deliver the policy outcomes that citizens deserve."

The OIML D1 Edition 2020 - approved at the 55th CIML meeting - is applicable to both legal metrology and scientific and industrial metrology. Its guidance and Model Law provide the backbone for harmonised national metrology systems across the SADC region, and ultimately across the African continent.

This matters for AfCFTA, for SADC trade facilitation, and for South Africa's ability to position its goods and services in a competitive global market.

LEGAL METROLOGY IN EVERYDAY LIFE

Where Policy Meets The Pump: Legal Metrology You Can See

The most powerful argument for investing in legal metrology infrastructure is the one that needs no technical explanation - it is an argument every citizen already feels.

"When you fill your tank, you trust that the reading on the dispenser is true. That trust is not automatic - it is earned, sustained and enforced."

With fuel prices at sustained elevated levels and with South African households and businesses feeling the full weight of every litre purchased, accurate fuel measurement is no longer merely a technical compliance matter. It is a matter of economic justice.

Through its Legal Metrology programme, the NRCS:

- Type-approves fuel dispensers to ensure they meet prescribed performance standards before entering service
- Verifies dispensers across the country to confirm continued accuracy within legal tolerances
- Conducts market surveillance inspections to detect and act against dispensers that are non-compliant or operating outside verified parameters
- Applies a graduated enforcement response - from directives and embargoes to prosecution - where non-compliance is confirmed

The same principles apply across every sector where measurement governs a transaction:

- Electricity meters - ensuring that every unit billed reflects actual consumption, protecting households and small businesses
- Water meters - safeguarding a constitutionally protected resource
- Pre-packaged goods - verifying that the mass, volume or count declared on the label is what reaches the consumer
- Paraffin and LPG - critical household energy sources for millions of South Africans

This is the institutional bridge between policy and people. This is what Legal Metrology delivers.

METROLOGY IN THE DIGITAL AGE

Digitalisation: Transforming Legal Metrology For The Future

The regulatory world we operate in today would be unrecognisable to the delegates who gathered in Paris in 1875. And it will look very different again in the decade ahead.

Since 2022, the OIML's Digitalisation Task Group has been examining the impact of digital transformation on legal metrology - from the Internet of Things and sensor networks to artificial intelligence, machine learning and additive manufacturing. The message is clear: legal metrology must evolve or risk irrelevance.

For the NRCS, digitalisation is not a future ambition - it is a current strategic imperative. Our 2025/26–2027/28 strategy is built on three pillars: Decarbonisation, Diversification and Digitalisation.

In practical terms, this means:

- Automating end-to-end online processing of pre-market approvals and inspections - reducing red tape and turnaround time for industry
- Developing compulsory specifications for lithium-ion batteries and electric vehicle charging stations - ensuring that new energy technology enters the market with the same measurement integrity as the technology it replaces
- Expanding regulatory frameworks to cover emerging sectors, including aquaculture and new energy infrastructure
- Aligning with the BIPM's SI Digital Framework and the Joint Statement of Intent on Digital Transformation in the International Quality Infrastructure

"A digitally transformed NRCS is not simply a more efficient NRCS. It is a more trusted NRCS - one that can deliver real-time evidence to policymakers, respond faster to market failures, and protect consumers at the speed of modern commerce."

SOUTH AFRICA ON THE WORLD STAGE

South Africa's Role in Global Metrology Governance

South Africa does not participate in global metrology as a passive observer. We are active contributors to the frameworks that govern measurement for the benefit of all nations.

- NMISA represents South Africa at the BIPM - ensuring our national measurement standards are internationally comparable and traceable.
- The NRCS represents South Africa at the OIML - contributing to the development of international legal metrology recommendations and participating in the OIML Certification System (OIML-CS).
- Together, NMISA and the NRCS anchor South Africa in both the scientific and legal dimensions of the global measurement system.

At the continental level, the NRCS actively participates in:

- SADC MEL - the SADC cooperation framework for legal metrology
- AFRIMETS - the Intra-Africa Metrology System
- The AfCFTA Technical Barriers to Trade working groups - ensuring that South Africa's standards and regulatory frameworks enable trade, not obstruct it

South Africa's Legal Metrology Act of 2014 is widely recognised as placing us on par with leading developed economies - and well ahead of many of our developing-country trading partners. This is a strategic asset. When our instruments are type-approved against OIML recommendations, our trading partners can accept our measurements. That is not just technical alignment - it is economic diplomacy.

South Africa's first legal metrology legislation - the Weights and Measures Act of 1922 - came into force on 27 April 1923. More than a century later, the Legal Metrology Act of 2014 represents the maturation of that legacy into a modern, internationally aligned regulatory framework

Measurement at the Heart of National Policy

The 2026 theme invites us to make the connection explicit: where does legal metrology directly enable South Africa's national policy priorities?

The answer is: everywhere that policy depends on data.

- **Energy Transition** - As South Africa navigates the Just Energy Transition, accurate metering of electricity generation, consumption and storage is not optional. Policy targets for renewable energy, demand-side management and carbon emissions reporting are only credible if the underlying measurements are trusted.
- **Consumer Protection** - The National Consumer Commission and the NRCS share a common purpose: protecting citizens from unfair practices. Legal metrology is the measurement dimension of consumer protection law - and it operates at scale, across every retail transaction in the economy.
- **Industrial Policy - the dtic's** master plans for the automotive, chemicals, agro-processing and oceans economy sectors all depend on South African products meeting internationally recognised measurement standards. Without this, market access is at risk.
- **Public Health** - Whether it is vaccine storage temperature monitoring, clinical diagnostic equipment or pharmaceutical dispensing, health system integrity depends on measurement integrity.
- **Environmental Compliance** - Emissions monitoring, water quality regulation and climate reporting all rest on traceable, verifiable measurements. As South Africa faces increasing scrutiny on its environmental commitments, the role of metrology in providing the evidence base has never been more critical.

"You cannot govern what you cannot measure. And you cannot trust what is not measured correctly."

CALL TO ACTION

Building Trust: What We Ask of Policymakers and Industry

World Metrology Day is not only a celebration - it is a call to action. Today I want to make three specific requests.

To policymakers and legislators:

Invest in your metrology infrastructure. Laws without measurement systems are unenforceable. When you legislate on energy, environment, health or trade, ensure that the measurement framework underpinning that legislation is sound, resourced and internationally aligned.

To industry and business:

Compliance is not cost - it is credibility. A verified measuring instrument is a statement to your customer: I am giving you what I promised. In a competitive market, that trust is a commercial advantage.

To our SADC regional partners:

The OIML D1 workshop in Johannesburg was a beginning, not an end. The Model Law on Metrology is a tool. Use it. The gaps identified in your national frameworks are not failures - they are the agenda for the next phase of regional cooperation. The NRCS stands ready to support that work.

CLOSING REMARKS

Closing: The Trust That Makes Everything Else Possible

Ladies and gentlemen, measurement is the quiet infrastructure of civilisation. It is the reason a contract is enforceable, a medicine is safe, a bridge is sound, a trade agreement is real.

In 1875, seventeen nations committed to a common measurement system because they understood that without shared standards, commerce, science and governance would fragment. That insight is as true today as it was then - and perhaps more urgent.

In an era of disinformation, institutional mistrust and contested facts, metrology offers something rare and valuable: objective, traceable, verifiable truth. When a measurement is made correctly and in accordance with law, it cannot be argued with. It is the foundation on which trust is built.

"The NRCS exists to protect the public. Not through bureaucracy for its own sake - but through the daily, disciplined work of ensuring that every measurement that touches a citizen's life is accurate, fair and worthy of trust."

To our co-hosts NMISA - thank you for this partnership. To our speakers and panellists - we look forward to the conversations ahead. To every participant on this webinar - your engagement in the cause of metrology is itself an act of building trust.

Happy World Metrology Day, 2026.

THANK YOU

