CIPM Vision 2023

Transforming the International System of Units
for a Digital World

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Online Briefing on the establishment of a Forum for Metrology and Digitalization, 22nd May 2023

An overview

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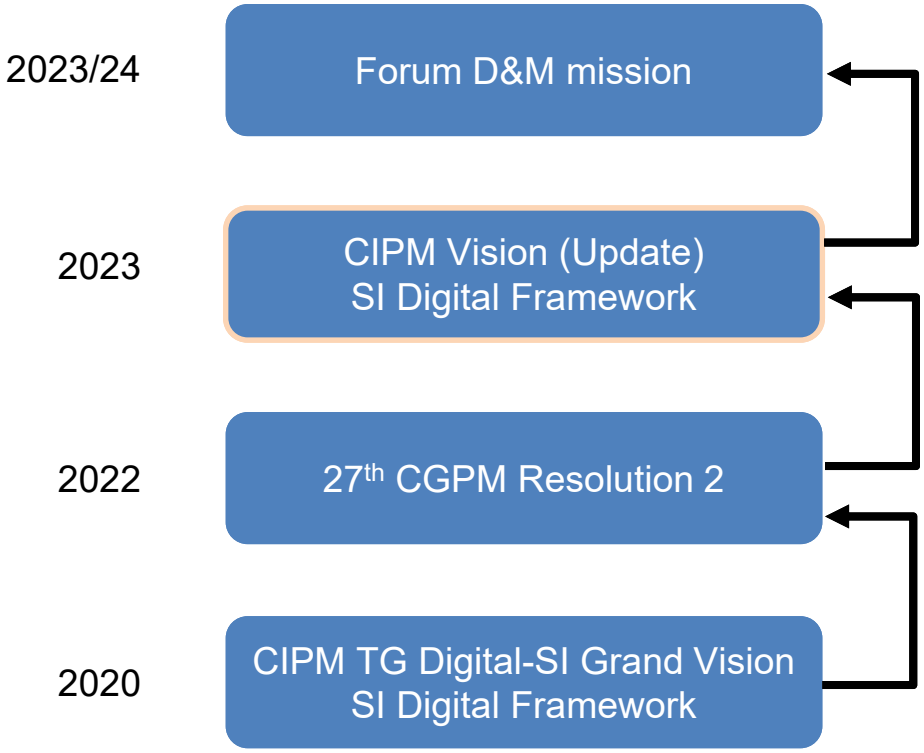

Forum progressing development of vision and implementation of SI Digital Framework

Updates of Grand Vision
Broader picture based on IOs' and BIPM's developments

Mission to develop SI Digital Framework
Call to NMIs/Dis and IOs to make this collaborative effort (& Joint Statement with IOs)

Transforming the International System of Units for a Digital World by establishing various data, services, and tools (all based on FAIR principles) **building an SI Digital Framework**

Vision & Objectives

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The SI Digital Framework – the network of tools, services, and applications that instantiate the Digital SI – assures that measurements are FAIR, machine-readable, machine-actionable, and support digital metrological traceability.

PRODUCTS

SI Brochure

VIM

GUM

KCDB

- Key Comparison
- CMCs

MeP

UTC

SI-defining Constants

PRINCIPLES

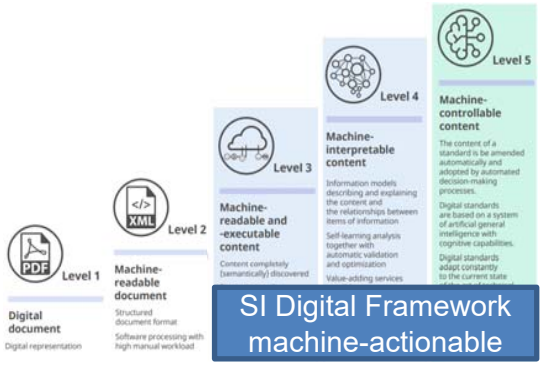
Findable

Accessible

Interoperable

Reusable

MATURITY



Smart Standards

Highlights of mission & joint efforts

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Core mission (resolution)

- A globally accepted digital representation of the SI
- Facilitating use of digital certificates in existing infrastructure
- Adoption of FAIR in metrology
- Other communities recognize importance of metrological traceability (trust)

Joint efforts (Forum, IOs, …)

- SI core representation & data services, defined by CIPM & implemented by BIPM
- Data services provided by the NMIs and related organizations
- Applications in the broader metrology community & research that rely upon SI

More information

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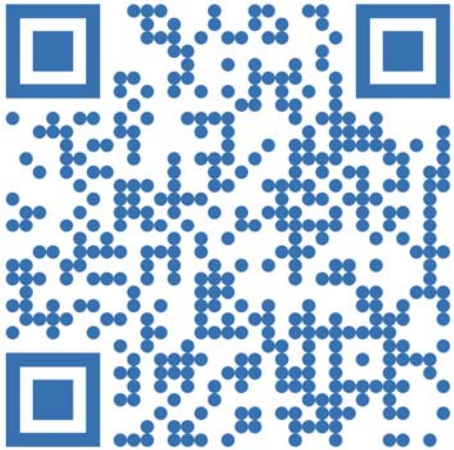

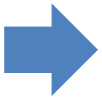

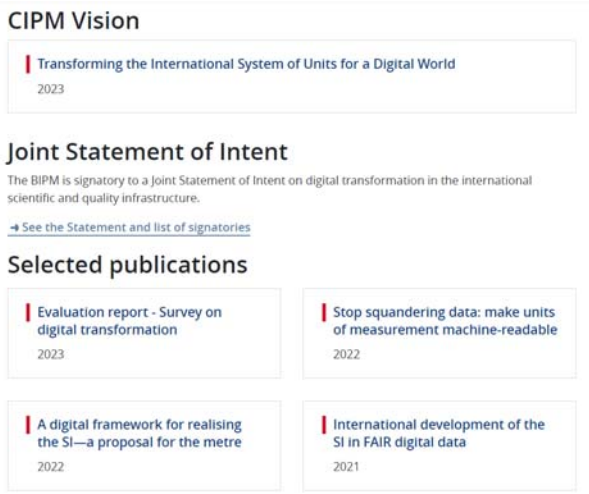

CIPM Task Group on the SI Digital Framework
(CIPM-TG-DIG)

https://www.bipm.org/en/committees/ci/cipm/wg/cipm-tg-dig