

# Joint Statement of Intent

## On the digital transformation in the international scientific and quality infrastructure

### Recognising that

- governments, industry, academia, and civil society have been working toward comprehensive digital transformation for many years, and, in so doing, are increasingly
  - establishing systems to collect, aggregate, analyse and interpret digital data;
  - introducing networked sensor systems for diverse scientific and industrial applications;
  - sharing data at local, national, regional, and international scales;
- the scientific community has made significant progress in establishing reliable foundations for digital data interchange and management, including the FAIR principles for data management and stewardship;
- the organisations of the international quality infrastructure (metrology, accreditation, standardization, and conformity assessment) have a critical role working together to ensure sustainable economic development;
- the International System of Units (SI) plays a particular role in the international quality infrastructure providing confidence in the accuracy and global comparability of measurements needed for international trade, manufacturing, human health and safety, protection of the environment, global climate studies, and scientific research;
- maintaining this confidence in the accuracy and global comparability of measurements will require the creation and adoption of a full digital representation of the SI, including robust, unambiguous, and machine-actionable digital representations of units of measurement and of measurement results and uncertainties;
- progress on global challenges such as this requires the participation of, and critical thinking from, diverse communities;
- successfully effecting such a comprehensive digital transformation for metrology and ensuring its benefits are fully realised will require the active participation of a wide range of stakeholders; particularly other members of the International Quality System;

**We the undersigned undertake to support in a way appropriate to each organisation the development, implementation, and promotion of the SI Digital Framework as part of a wider digital transformation of the international scientific and quality infrastructure.**