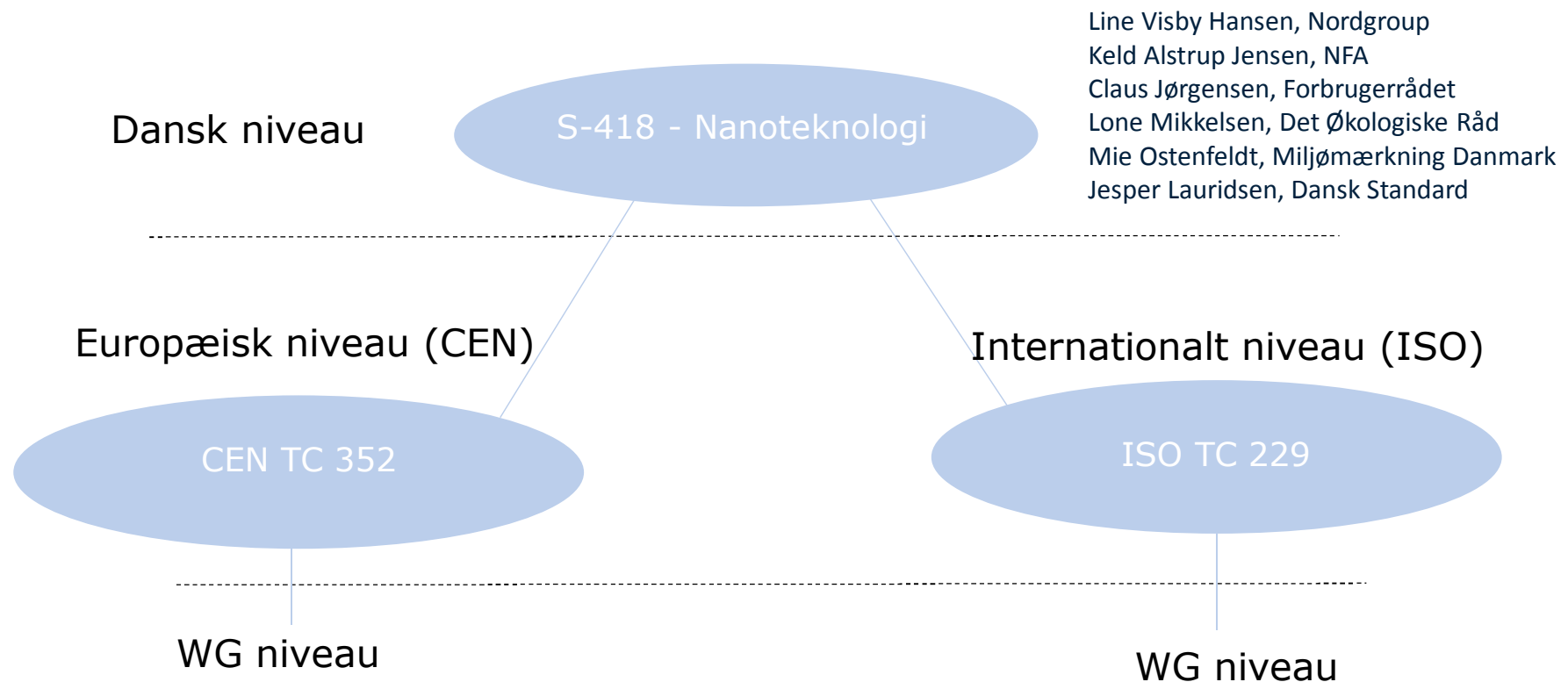


Standarder og køreplan for udvikling af metoder til karakterisering af nanomaterialer

Europa Kommissionen har gennem mandat M461 inviteret de europæiske standardiseringsorganer til at samarbejde om udviklingen af tekniske vejledninger og standardiserede metoder til at karakterisere nanomaterialer.

Oplæg af Jesper Lauridsen, konsulent hos Dansk Standard

Standardiseringsudvalg S-418 Nanoteknologi



Arbejdsgrupper CEN TC 352

- “ WG 1 "Measurement, characterization and performance evaluation”
- “ WG 2 "Commercial and other stakeholder aspects”
- “ WG 3 Health, safety and environmental aspects

Arbejdsgrupper ISO TC 229

- “ CAG Chairman Advisory Group
- “ JWG 1 Terminology and nomenclature
- “ JWG 2 Measurement and characterization
- “ TG 2 Consumer and societal dimensions of nanotechnologies
- “ TG 3 Nanotechnologies and sustainability
- “ WG 3 Health, Safety and Environmental Aspects of Nanotechnologies
- “ WG 4 Material specifications

13 publicerede standarder under CEN/TC 352

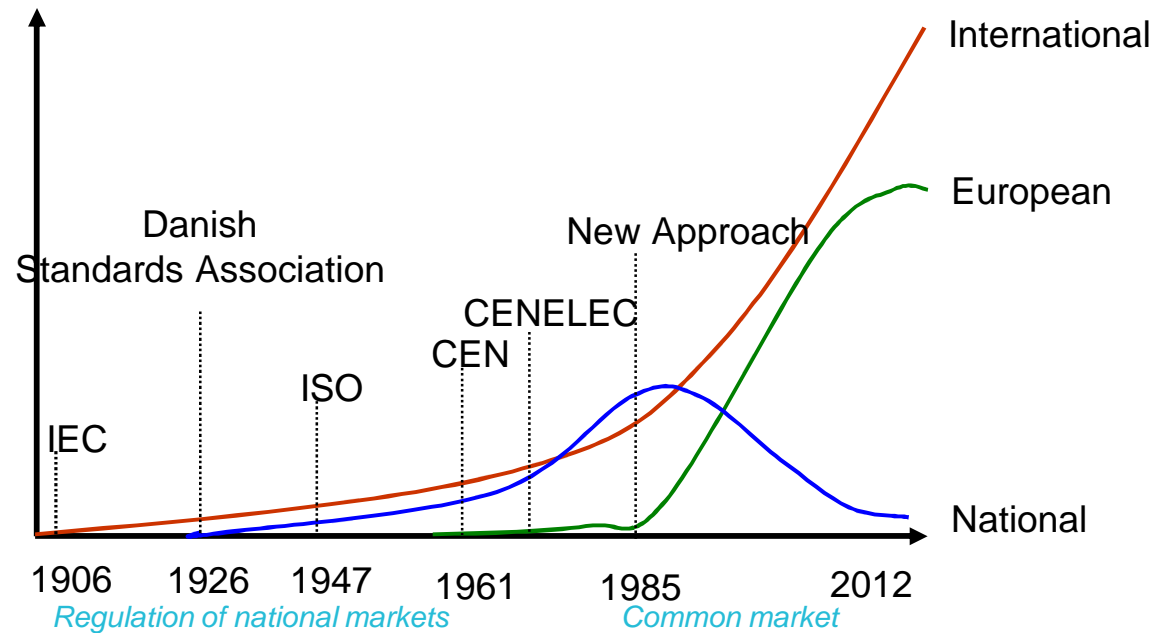
Reference	Published date	Title
EN ISO 29701:2010	2010-09-15	Nanotechnologies - Endotoxin test on nanomaterial samples for in vitro systems - Limulus ameocyte lysate (LAL) test (ISO 29701:2010)
EN ISO 10801:2010	2010-12-15	Nanotechnologies - Generation of metal nanoparticles for inhalation toxicity testing using the evaporation/condensation method (ISO 10801:2010)
EN ISO 10808:2010	2010-12-15	Nanotechnologies - Characterization of nanoparticles in inhalation exposure chambers for inhalation toxicity testing (ISO 10808:2010)
CEN ISO/TR 11811:2012	2012-08-15	Nanotechnologies - Guidance on methods for nano- and microtribology measurements (ISO/TR 11811:2012)
CEN ISO/TS 13830:2013	2013-12-18	Nanotechnologies - Guidance on voluntary labelling for consumer products containing manufactured nano-objects (ISO/TS 13830:2013)
CEN ISO/TS 27687:2009	2009-10-28	Nanotechnologies - Terminology and definitions for nano-objects - Nanoparticle, nanofibre and nanoplate (ISO/TS 27687:2008, Corrected version 2009-02-01)
CEN ISO/TS 80004-1:2014	2014-12-10	Nanotechnologies - Vocabulary - Part 1: Core terms (ISO/TS 80004-1:2010)
CEN ISO/TS 80004-3:2014	2014-12-10	Nanotechnologies - Vocabulary - Part 3: Carbon nano-objects (ISO/TS 80004-3:2010)
CEN ISO/TS 80004-4:2014	2014-12-10	Nanotechnologies - Vocabulary - Part 4: Nanostructured materials (ISO/TS 80004-4:2011)
CEN ISO/TS 12025:2015	2015-05-20	Nanomaterials - Quantification of nano-object release from powders by generation of aerosols (ISO/TS 12025:2012)
CEN ISO/TS 17200:2015	2015-05-20	Nanotechnology - Nanoparticles in powder form - Characteristics and measurements (ISO/TS 17200:2013)
CEN ISO/TS 80004-8:2015	2015-05-20	Nanotechnologies - Vocabulary - Part 8: Nanomanufacturing processes (ISO/TS 80004-8:2013)
CEN ISO/TS 80004-6:2015	2015-05-20	Nanotechnologies - Vocabulary - Part 6: Nano-object characterization (ISO/TS 80004-6:2013)

ISO/TC 229 har udgivet 43 standarder

Link:

http://www.iso.org/iso/home/store/catalogue_tc/catalogue_tc_browse.htm?commid=381983&published=on&includesc=true

Mandat M461, hvad er det?



EU Kommissionen mandat M461 til CEN/TC 352

CEN/TC 352 vil forfølge følgende strategier for at nå sine mål, herunder dem, der kræves i henhold til Europa Kommissionens mandat M461

- (i) Udarbejdelse af generiske standarder hvor det er muligt

- (ii) Anvendelse af Vienna-agreement, hvorved overlapninger mellem CEN / TC 352 og ISO / TC 229 arbejde undgås

- (iii) I lighed med andet internationale standardiseringsarbejde fungerer, brugen af engelsk som arbejdssprog op til tidspunktet for udstedelsen af et udkast til offentlig høring

- (iv) Koordinering og samarbejde med andre relevante organer (TC'ere, ISO og OECD)

Der er i alt identificeret 14 TC'ere som potentielt involverede i implementeringsarbejdet: 7 CEN/TC'ere, 6 ISO/TC'ere og 1 IEC/TC

7 CEN/TCs:

- “ CEN/TC 137 Assessment of workplace exposure to chemical and biological agents
- “ CEN/TC 138 Non-destructive testing
- “ CEN/TC 162 Protective clothing including hand and arm protection and lifejackets
- “ CEN/TC 195 Air filters for general air cleaning
- “ CEN/TC 230 Water analysis
- “ CEN/TC 248 Textiles and textile products
- “ CEN/TC 352 Nanotechnologies

6 ISO/TCs

- “ ISO/TC 24/SC4 Particle characterization “
- “ ISO/TC 142 Cleaning equipment for air and other gases
- “ ISO/TC 194 Biological evaluation of medical devices
- “ ISO/TC 201 Surface chemical analysis
- “ ISO/TC 202 Microbeam analysis
- “ ISO/TC 229 Nanotechnologies

1 IEC/TC)

- “ IEC/TC 113 Nanotechnology standardisation for electrical and electronic products and systems

Leverancer mandat M461 Annex I

1. Methodologies for nanomaterial characterization in the manufactured form and before toxicity and eco-toxicity testing
2. Sampling and measurement of workplace, consumer and environment exposure to Nanomaterials
3. Methods to simulate exposures to nanomaterials

Leverancer mandat M461

Annex II

- “ 1 HS&E
- “ 2 Occupational handling and exposure
- “ 3 Guidance on safe handling of manufactured nanoparticles and other manufactured nanoscale entities (including selection of Personal Protective Equipment)
- “ 4 Guidance on containment, trapping and destruction of nanoparticles and other manufactured nanoscale entities
- “ 5 Guidance on dosimetry and exposure determination in occupational settings relevant to manufactured nanomaterials
- “ 6 Methodology to Determine effectiveness of Filtration Media against Nanomaterials
- “ 7 Standard Method to Assess Emissions from Handling, or Machining of Nanomaterial Containing Products
- “ 8 Protocols for determining the explosivity and flammability of nano-powders (for transport, handling and storage)
- “ 9 Guidance on detection and identification of nanoparticles and other nanoscale entities (in all media types, including waste streams from manufacturing and manufacturing discharges)
- “ 10 Protocols for the characterization of manufactured nanoparticles from aerosols and from environmental sources, including sampling, sample stabilization, agglomeration, aggregation, etc.
- “ 33 Guide to the identification and definition of measurands required for characterising, evaluating functional properties and performance, etc, of materials and devices at the nanoscale
- “ 34 Product specifications for different manufactured nanomaterials
- “ 36 Guide to basic morphology and purity of manufactured nanoparticles and other nanoscale entities
- “ 37 Guides to purity evaluation of manufactured nanoparticles and other nanoscale entities
- “ 38 Guide to modelling (measurement, simulation and visualization) at the nanoscale
- “ *new Guide to the management of waste and the disposal of nanomaterials*

Spørgsmål?



DANSK STANDARD