Remote meeting rules

- During the presentation please:
  - **mute yourself** and turn the **video off**
  - use the **Chat** function to make comments, ask questions or inform on technical issues
- After the presentation there will be time for discussion and questions:
  - Please use the **raise your hand function** if you wish to speak; you will be called to speak when it is your turn *(don‘t forget to “unraise“ after it)*
  - The raise hand function can be found under the „Participants“ tab
- This webinar will be recorded and will be made available for later viewing

WEBINAR
Towards a dual logo ISO-IEC Material Declaration Standard

[Draft Proposal]

IEC/TC111 & ISO/TC207
30 June and 6 July 2020
Zoom meeting

International Electrotechnical Commission

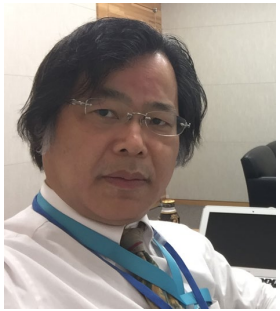
Key experts

… involved in the preparation of the new dual-logo material declaration standard proposal

Koshi Kamigaki (JP)

Proposed new dual-logo Std convener

IEC MT 62474 co-convenor



Walter Jager (CA)

IEC VT 62474 co-convenor

Robert Friedman (USA)

IEC VT 62474 co-convenor

Jean Pierre Theret (FR)

IEC MT & VT62474 expert

Solange Blaszkowski (NL)

Proposed ISO Co-convener

ISO TC 207/SC1 & IEC MT & VT 62474 member

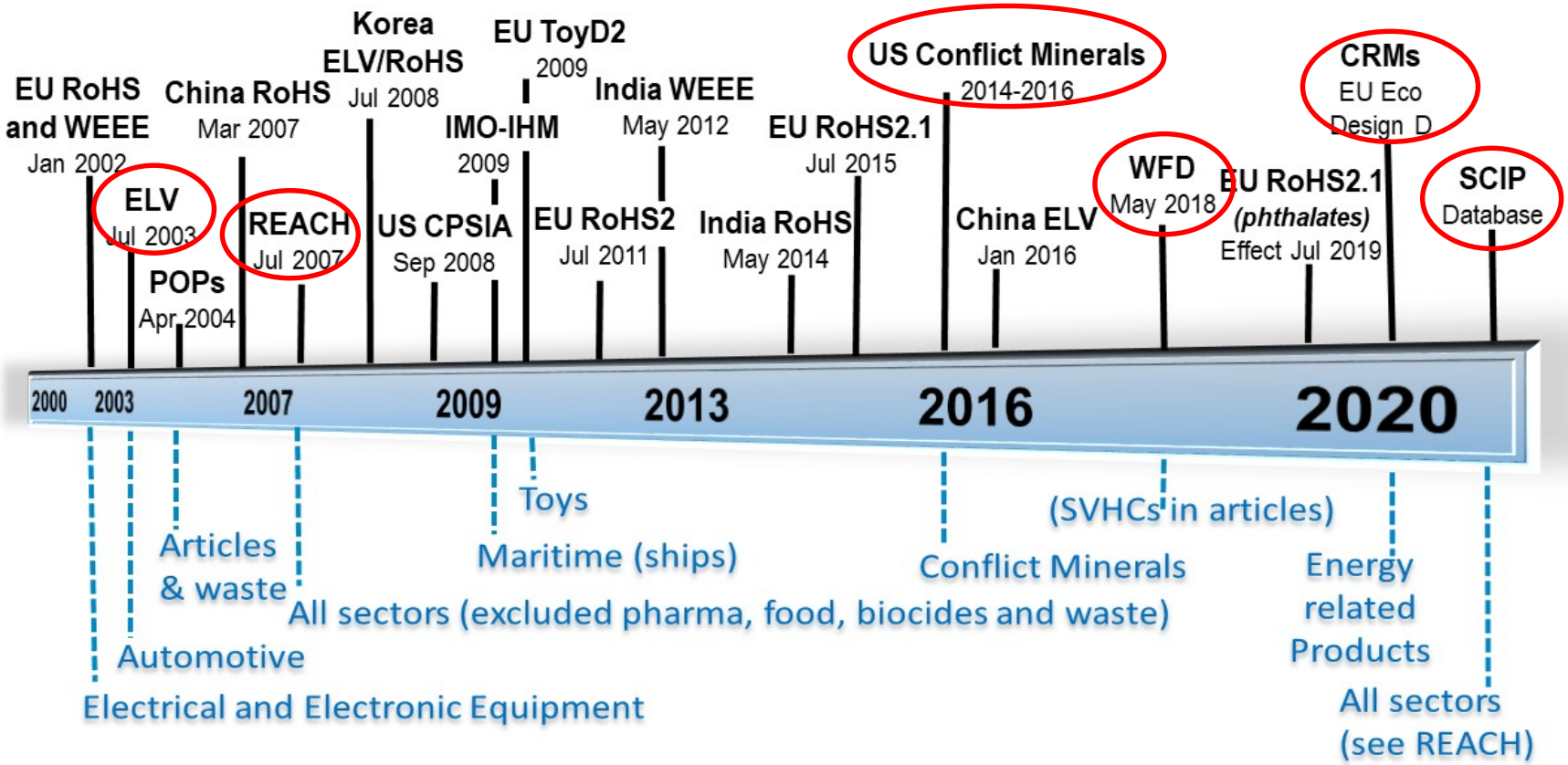
inches?
meters?
grams!!!
miligr...
Arghhh
SCIP
ROHS
POPs
REACH
LCA
ECD
Material
composition

**It started out as a simple analysis,
but piled up to information overload.**

Content

- Product chemicals Legislations – status
- Understanding of the chemical content of products
- Data exchange formats – why needed and what is out there
- A dual-logo material declaration standard – need, plan & timeline
- The IEC 62474 Ed.2 Standard
- The Vision for a dual logo ISO-IEC Material Declaration Standard
- The new dual logo standard – scope

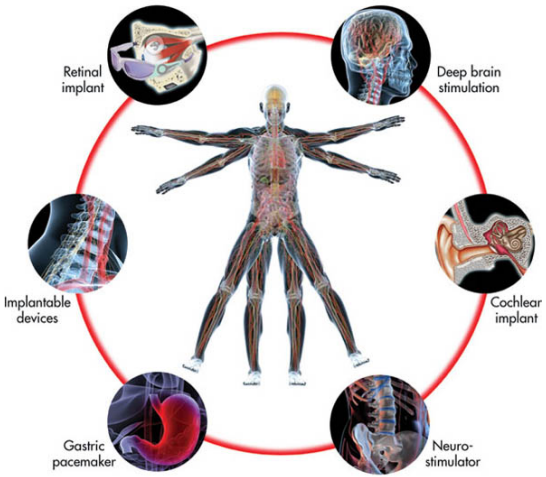
Increased number and variety product chemicals Legislations



Non exhaustive list of examples

Technology convergence

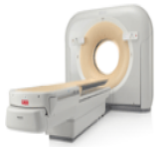
Wearable electronics, medical electronics, smart glasses, augmented reality games, sensors and heating/cooling in clothing, tracking tags in food, etc.

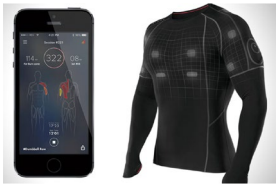


Increased complexity of laws and regulations

Articles in complex products

	MRI	CT	high-end X-Ray (IGT)	Ultrasound
Number of parts and components*	40,000	12,000	20,000	14,000





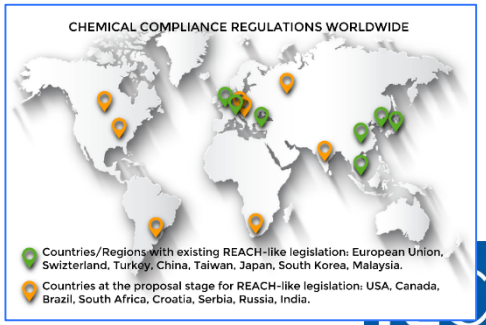
In Europe, the Court of Justice determined that the obligations in Art. 7.2 and 33 of REACH are:

ONCE AN ARTICLE, ALWAYS AN ARTICLE

From Jan 5, 2021 requirements for manufacturers to register products and provide information on the presence of SVHCs >0.1% of the article at the new ECHA database (scip)

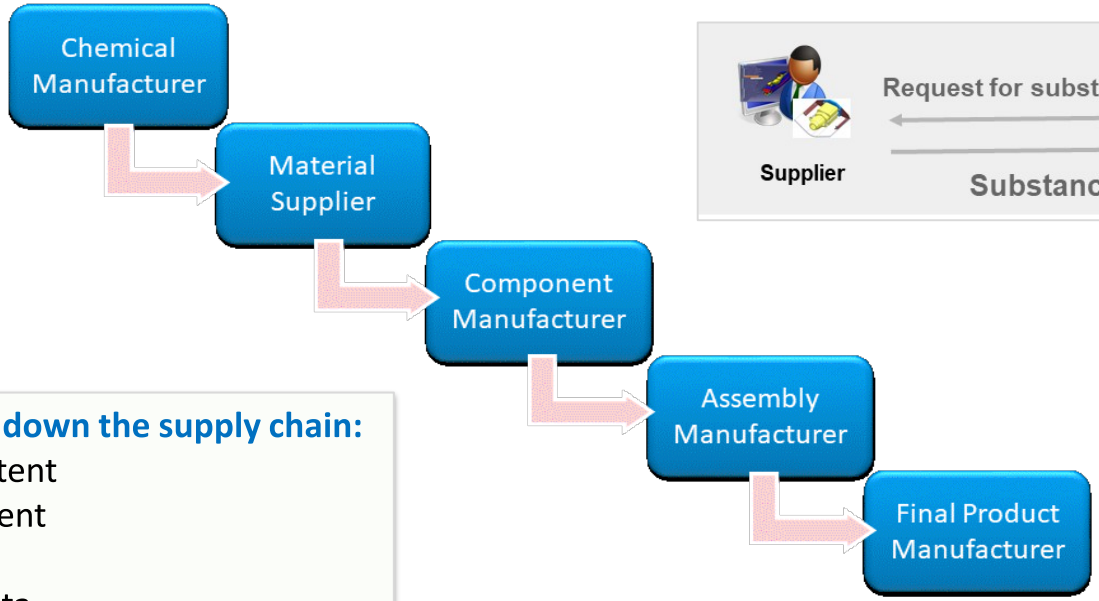
REACH COMPLIANCE SCIP

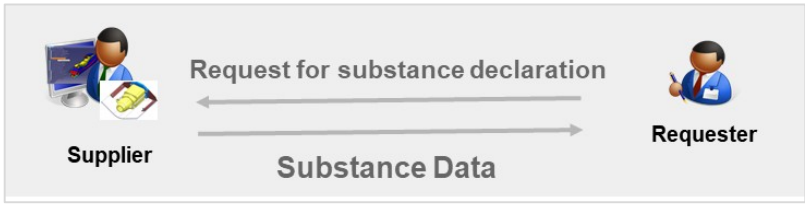
REACH spreading globally:



How to get better understanding of the chemical content of products

- Need for information on substance & material content of products is increasing
- This can be achieved through “Material Declarations” in the supply chain





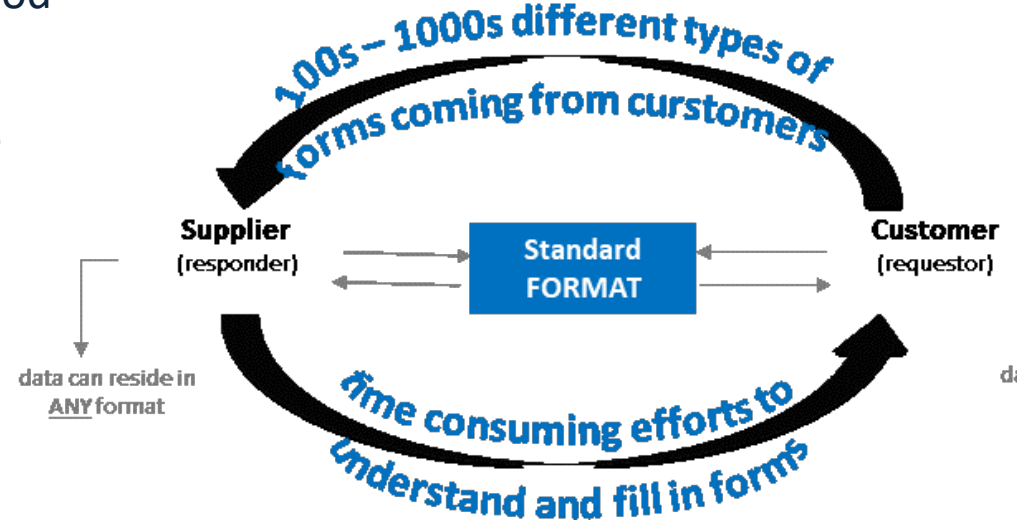
Information flows down the supply chain:

- Substance content
- Materials content
- Product parts
- Compliance data

Why are harmonized data exchange formats needed?

The supply chain has many forms, formats, tools, processes, etc., that can be used to provide substance and material declaration data, but they are:

- Time consuming to collect data for different suppliers and to enter the same data in different formats multiple times
- Not easily understood
- Mistake ridden
- Changing over time



Data exchange formats - WHAT IS OUT THERE?

Sector	Data Exchange Formats	Substance Lists
Automotive	IMDS (sector proprietary format)	GADSL: Global Autom. Declarable Substance List) GLAPS: Global List of Autom. Process Substs.)
EEE	**IEC 62474 (International)**	IEC 62474 DSL (Declarable Substances List) Capable to manage alternate DLS's (from other sectors)
Electronics	IPC-1752A (USA)	Legislation lists (E.g. RoHS, REACH) COCIR list: Medical Devices related (used in BOMcheck)
Aerospace & Defence	IPC-1754 (USA)	AD-DSL: Aerospace and Defence Declarable Substances List
Child Care	---	ENPC: Merge of regulatory requirements
Railway	---	RISL: UNIFE Railway Industry Substances List
Cosmetics	---	COSING: annex II and annex III
Ship Industry	---	IHM: Inventory of Hazardous Substances for end of life of ships over 500 GT (by IMO)

Legislation requirements and availability of data – CONCLUSIONS

- Number of requirements and complexity of product chemical legislations is increasing in all sectors. No longer practical to deal with the requirements manually
- Complexity of product chemical legislations as well as the supply chain increasing:
  - Technology converging across sectors (mixed technologies)
  - Articles in complex products and the Right for Information in Europe; Spreading globally
- More and more sectors affected by chemical legislations (Building Ind., Textile, etc.)
- Often same player in the supply chain serve multiple product sectors
- Circular Economy will push increased demand of knowledge on products composition
- Today there is no International Standard dedicated to multiple product sectors and specific types of requirements!

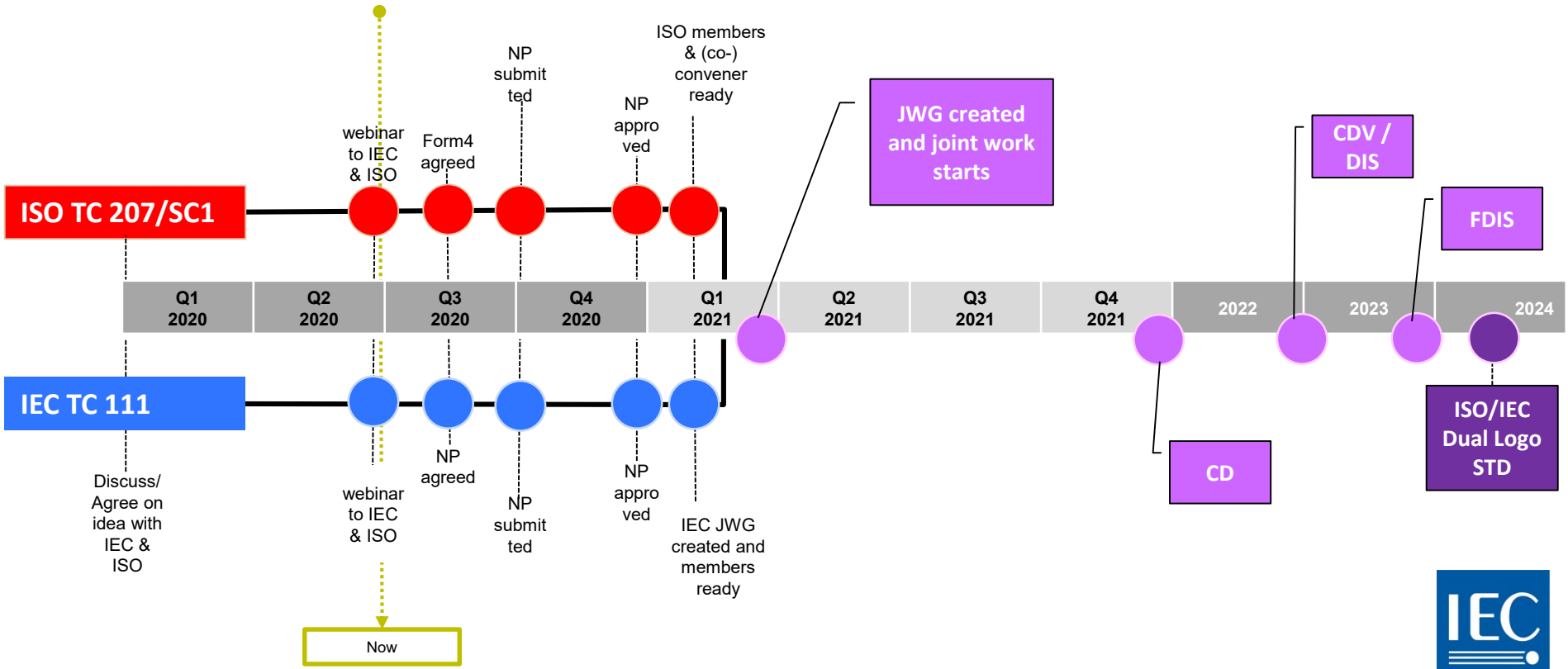
The need for an international multisector MD standard

- Need for harmonized data exchange formats for multiple sectors increasing
- Increased need for data quality, effectiveness and efficiency of the reporting process
- Need to reduce costs for manufacturers and their supply chains by increasing interoperability between existing tools and standards
- **Given the complexity and cost considerations, it is highly needed to have a single (overarching) international standard, able to cover multiple product sectors and different types of general and also sector specific requirements!**

Developing a new dual logo standard: THE PLAN

- Collaboration between IEC TC 111 / VT and MT 62474 and ISO TC 207 / SC1
- Mode of participation: Mode 5 – Integrated liaison (equality of participation)
- Joint activity will take place under the lead of IEC
- Latest version of the IEC 62474 will be used as starting point
- The final dual logo standard must be able to work with multi-sector substance lists, and general as well as specific requirements (e.g. material classes, process chemicals, exemption lists, etc.) (called “reference data”)
- Data exchange formats will be the responsibility of overarching ISO-IEC team
- Reference data to be owned by sectoral teams

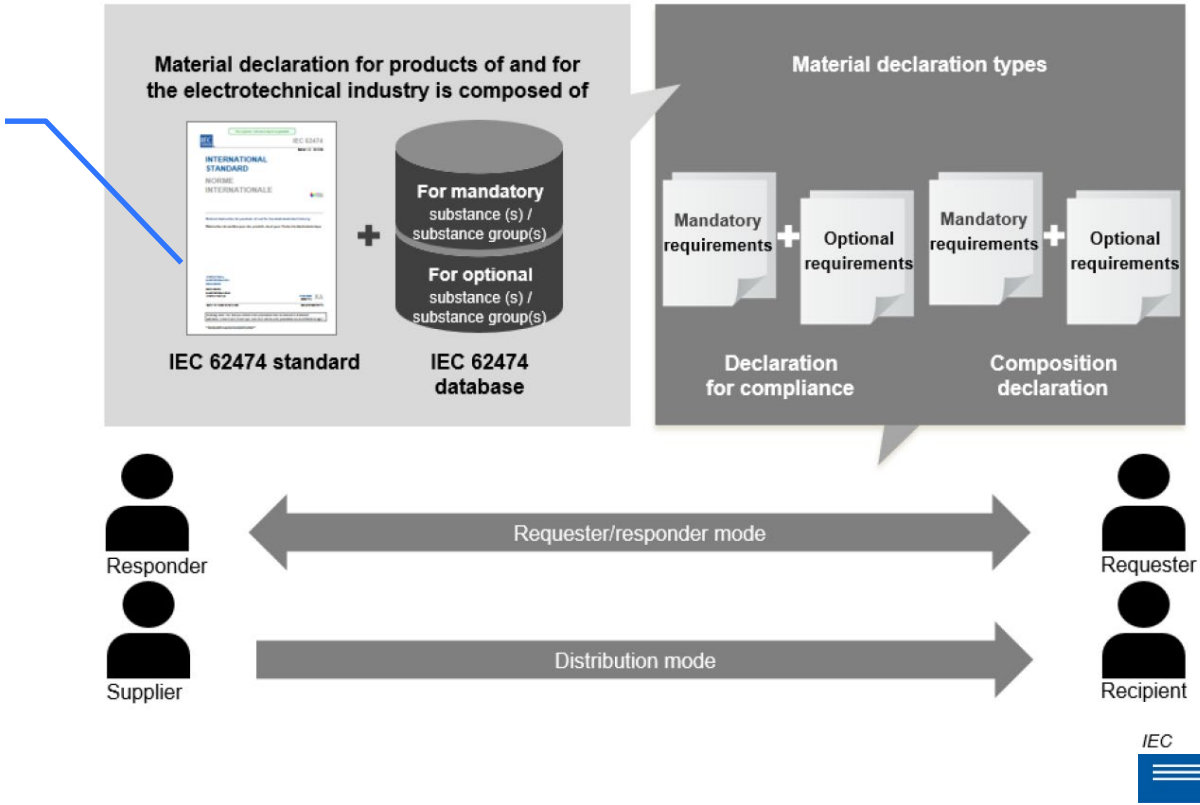
Developing a dual logo standard – process and timeline



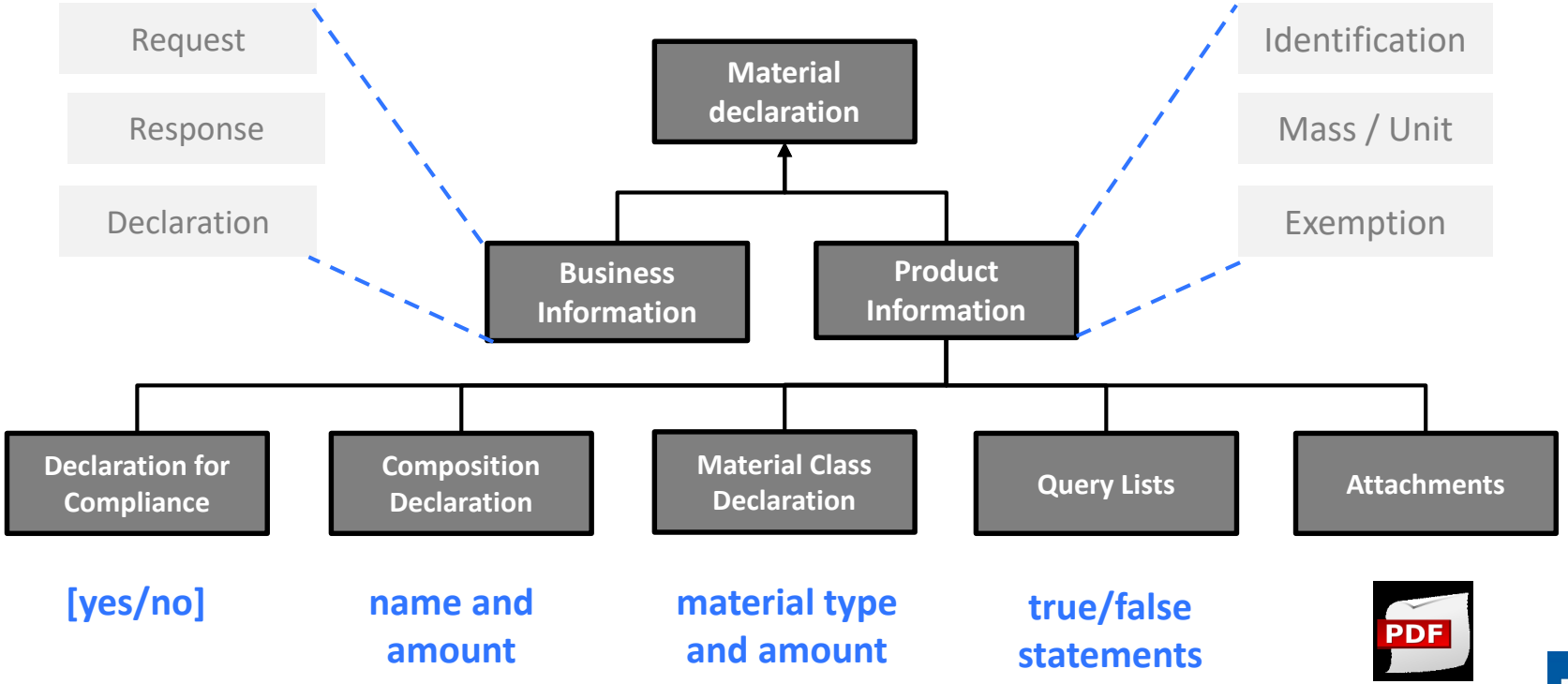
The IEC 62474 Ed.2 Standard and the Vision for a new ISO-IEC dual logo Material Declaration Standard

IEC 62474: the data exchange standard and a database

IEC 62474 contains two parts: the STANDARD (containing core requirements and rules) and a DATABASE (containing details that require regular maintenance).
This increases overall flexibility of the standard, allowing for fast updates when e.g new substances are regulated or changes are needed in the data-exchange formats

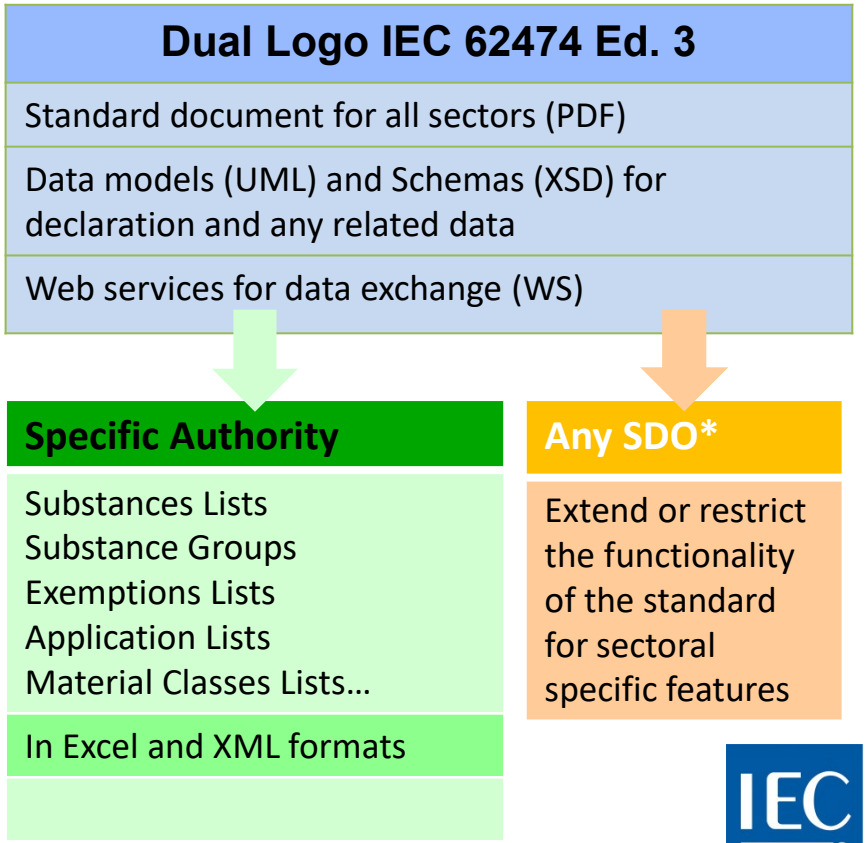


IEC 62474 ed.2 standard on material declaration

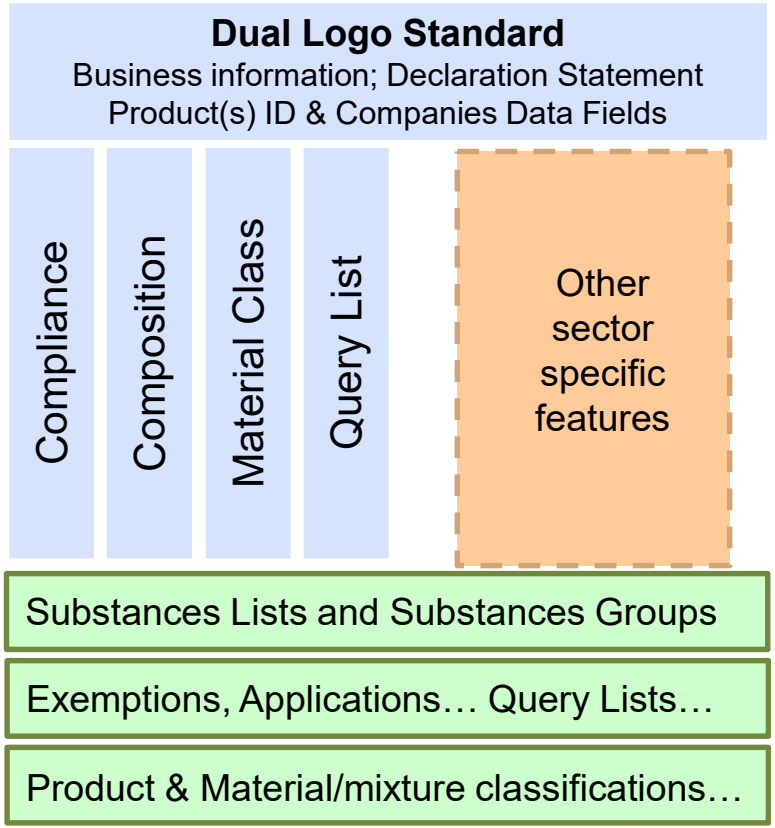


The new dual logo standard: the Vision

1. The dual logo IEC 62474 will **cover most of the needs of all sectors** for reporting substances and materials in products, parts or articles
2. The dual logo standard provides **document** (PDF), **data model, schema, developers table** and **web services** (WS).
3. It offers a **modular and extendable architecture** for other standard development organization (SDOs) to complement specific features needed for declaration
4. Specific authority (sectors) could use their own **reference data**



The new dual logo Std: modular & open architecture



1. The dual logo standard will continue to cover the **business information** (requester, supplier, product ID…) as the foundation of the architecture.
2. And the **four types of material declaration**: Compliance, Composition, Material Classes and Queries
3. Option for **integration of sector specific features** to accommodate their regulatory needs, such as:
4. Specific authority (sector, regulator) can define their own **reference data** (substances lists), for instance:
   - IEC: DSL and Material Classes for EEE sector
   - IMDS: GADSL, GLAPS and Material Classes
   - IAEG: AD-DSL, Query Lists, and Descriptor lists
   - ZDHC: RMSL substances list for textile sector…
   - ECHA: REACH Candidate List…

The new dual logo standard (Ed. 3.0): the target

STANDARD INCLUDES

- Extend product scope from EEE to ISO product scope
- Build a data exchange format that supports a variety of reference data (e.g. hazardous substances, critical materials, process chemicals, etc.)
- Modular approach that enables additional sector specific features
- Specification for web services for system to system data exchange

STANDARD DOES NOT INCLUDE

- Sector specific reference data: DSL/RSL, Material Classification, Sector specific Exemptions Lists

Q&A session

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- Alternatively, use the **Chat** to write your comment or question

Webinar material

The webinar material (video and presentation) together with the questions (incl. answers) will be available on the IEC TC 111 website for view / download:

https://tc111.iec.ch/templates-documents/

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