IEC/ISO SMART programme

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Purpose

- Raise awareness on the IEC/ISO SMART Programme
- Start a discussion with Japanese stakeholders on the relevance of and participation in the programme

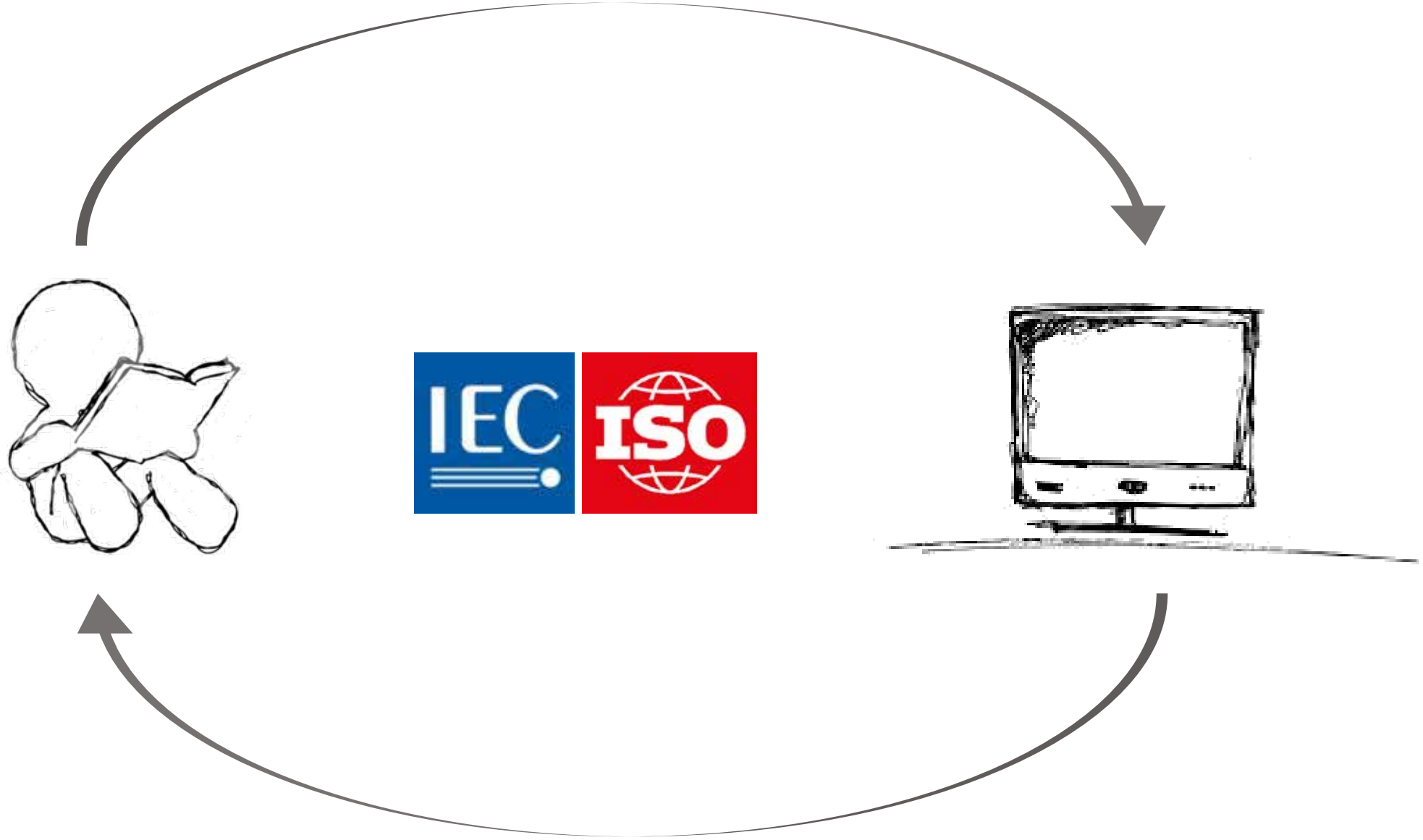
Why SMART?

Why we need to change

There are ongoing demands for **faster**, more agile developments

Processes and products are perceived to be **outdated** and unattractive to the new generation of experts and users

Our products and services do not fit into the new '**digital world**' paradigm


IEC
ISO

What is SMART?

SMART Programme is...

A **transformational programme** aimed at supporting **user's current and evolving needs** through producing standards that are applicable, readable and transferable by machines

Current offer → **Future offer**

Human involvement ↘

Paper

PDF

XML

smart

Machine involvement ↗

Example

Level 1 – open digital format

….it is important to wear a medical face mask when….

….and to take an Aspirin in case of….

Level 2 – machine readable document

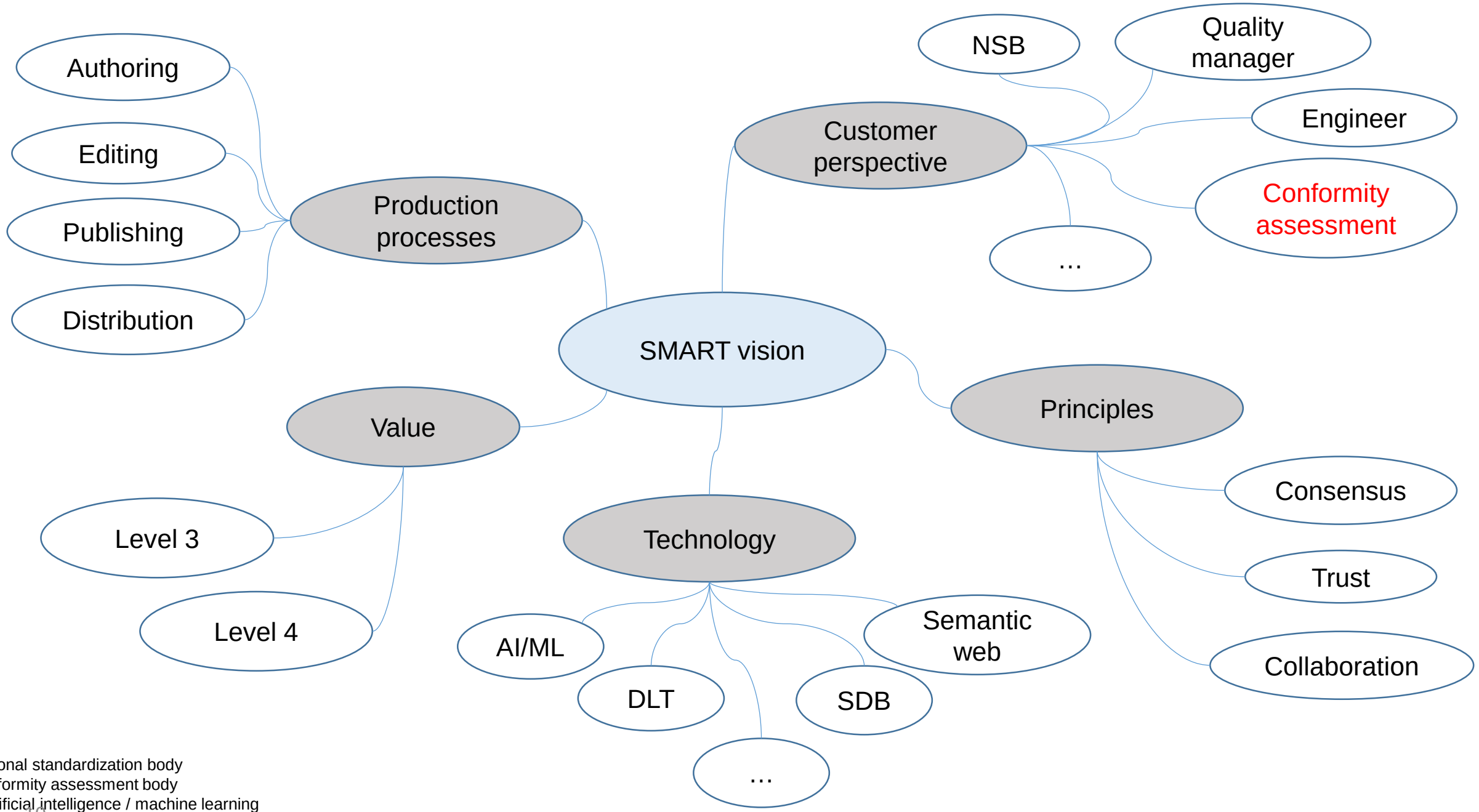
```
- <text:p text:style-name="Standard">
    <text:span text:style-name="T1">....it is important to wear a
  </text:p>
- <text:p text:style-name="Standard">
    <text:span text:style-name="T1">....and to take an Aspirin in
  </text:p>
  <text:p text:style-name="Standard"/>
```

Level 3 – machine readable content

```
<warning>Wear a medical face mask</warning>
<product>Aspirin</product>
```

Level 4 – machine interpretable content

```
<warning ref=ISO22609:2004>Wear a medical face
mask</warning>
<product ref=FDA-NDA-016039>Aspirin</product>
```



NSB – national standardization body
CAB – conformity assessment body
AI/ML – artificial intelligence / machine learning
DLT – distributed ledger technology
SDB – standards as databases

Who is SMART for?

SMEs who want to seamlessly identify standards requirements

End users interested in providing timely feedback on standards content

Customers seeking a broader range of customized information

End users looking for easier access to data

Large corporations that must comply with different regulatory requirements

Assessors/auditors looking for more efficient ways to evaluate compliance

NSBs interested in sustaining and growing their business in response to national user needs

Businesses who are interested in part of a standard

Industries that use automated requirement management systems

CEOs and quality managers interested in having a timely and transparent state of compliance

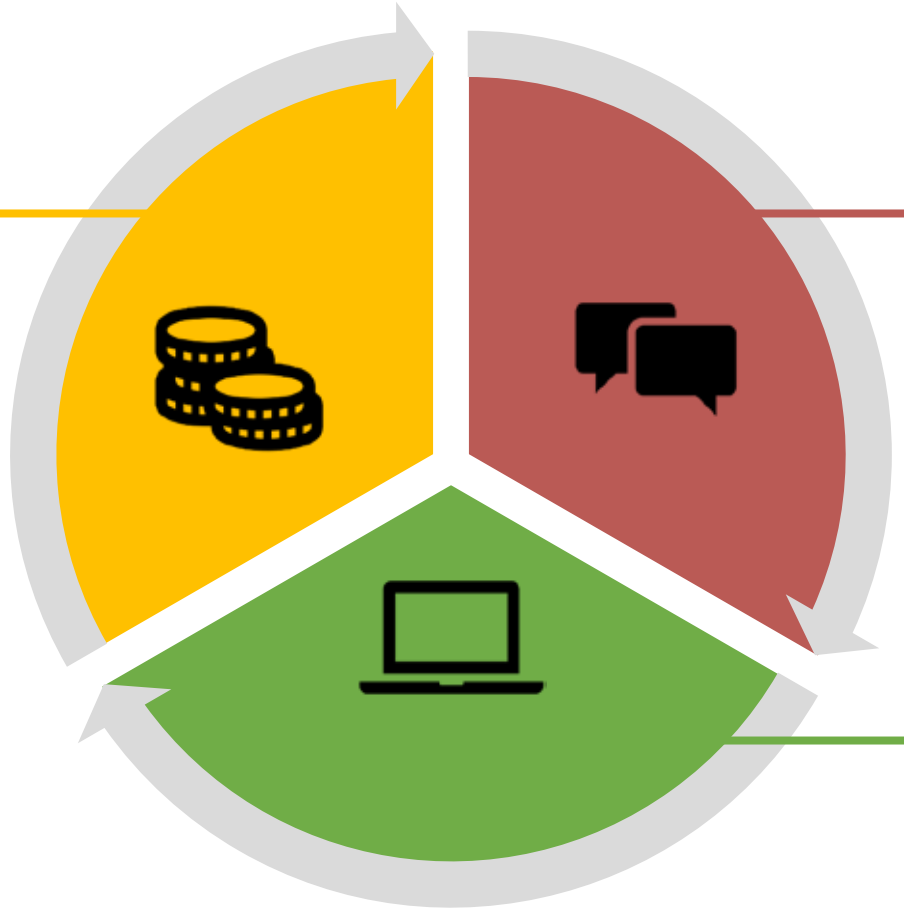
Users wanting to see **customer expectations** better integrated in the standards lifecycle

How are we getting there?

An overarching joint IEC/ISO programme

Delivered via three parallel project areas

Joint Business Model Group: Identify and test appropriate business model



Joint Use Cases Group: Gather representative and comprehensive users' needs

ISO Technical Solutions + IEC SG12: Select and build technical solutions

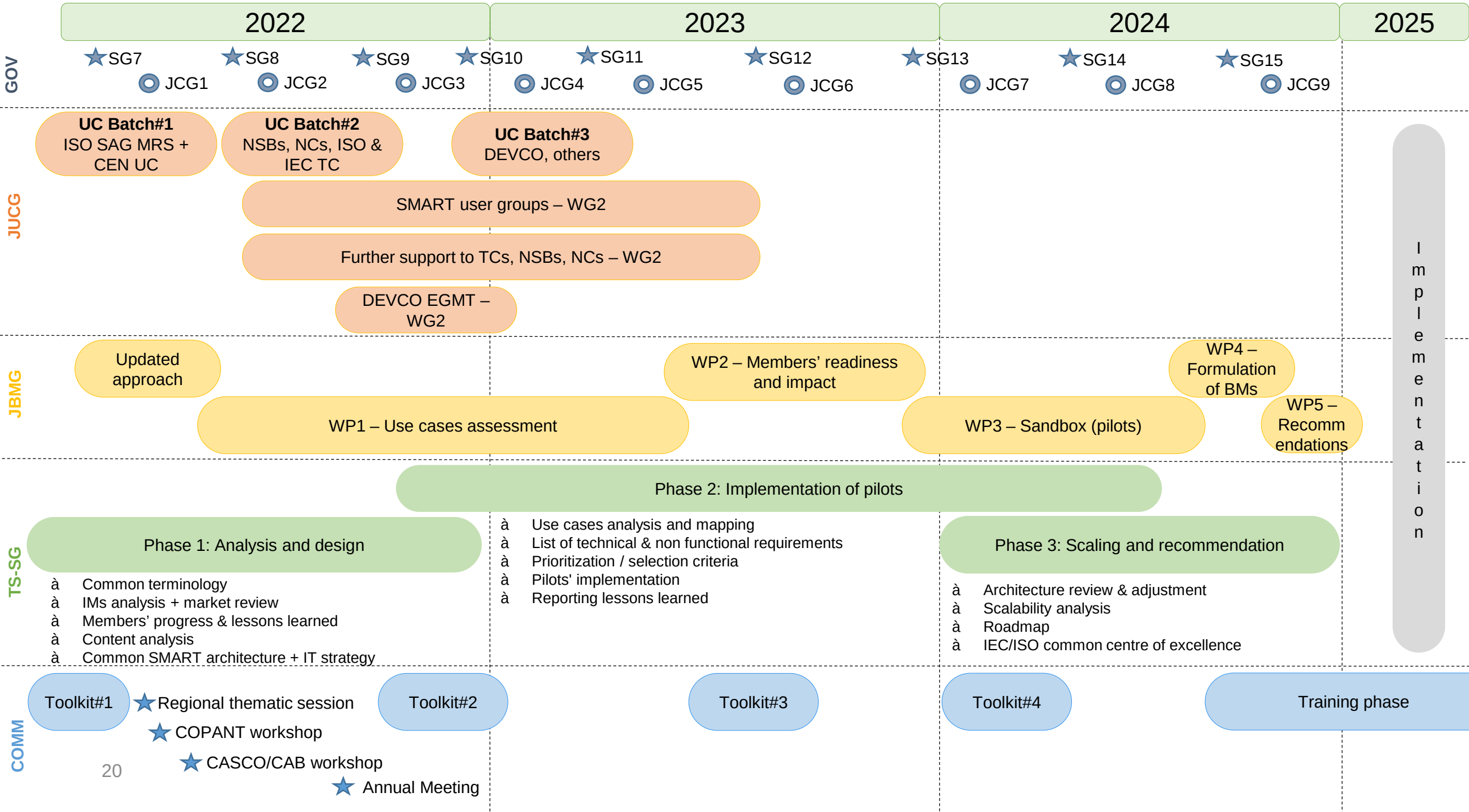
Overall timeline

2021	2022	2023	2024
• ISO SG and IEC TF established • Projects defined and launched • Team identified	• Collaboration framework set up • Use cases set up and gathered • Revenue models and readiness assessed • Terminology, design analysis and requirements set against use cases • Pilots started	• Additional use cases gathered and analysed • Impact on business models assessed • Pilots and testing carried out based on prioritized use cases	• Business model formulated • Scalability and new processes defined • Technical implementation scaled up

Challenges

- Having a broad enough collection of user stories
- Finding a sustainable solution for all stakeholders
- Anticipating any potential legal/ commercial/ conformity assessment implication related to this new deliverable

What’s next?


2022
2023
2024
2025
GOV
SG7
SG8
SG9
SG10
SG11
SG12
SG13
SG14
SG15
JCG1
JCG2
JCG3
JCG4
JCG5
JCG6
JCG7
JCG8
JCG9
JUCG
UC Batch#1
ISO SAG MRS + CEN UC
UC Batch#2
NSBs, NCs, ISO & IEC TC
UC Batch#3
DEVCO, others
SMART user groups – WG2
Further support to TCs, NSBs, NCs – WG2
DEVCO EGMT – WG2
JBMG
Updated approach
WP1 – Use cases assessment
WP2 – Members' readiness and impact
WP3 – Sandbox (pilots)
WP4 – Formulation of BMs
WP5 – Recommendations
Implementation
TS-SG
Phase 2: Implementation of pilots
Phase 1: Analysis and design
à Common terminology
à IMs analysis + market review
à Members' progress & lessons learned
à Content analysis
à Common SMART architecture + IT strategy
à Use cases analysis and mapping
à List of technical & non functional requirements
à Prioritization / selection criteria
à Pilots' implementation
à Reporting lessons learned
Phase 3: Scaling and recommendation
à Architecture review & adjustment
à Scalability analysis
à Roadmap
à IEC/ISO common centre of excellence
COMM
Toolkit#1
Regional thematic session
COPANT workshop
CASCO/CAB workshop
Annual Meeting
Toolkit#2
Toolkit#3
Toolkit#4
Training phase

Next steps

- Use cases(UC) batch 1 mapping
- Publishing of UC guidance for members
- Launch of Use cases batch 2
- Elaboration of commercial scenarios
- Ongoing terminology phase
- ISO Annual Meeting 2022

How to know more?

How to know more

For everyone:

www.iso.org/smart

Information on:

- ***SMART programme:***
  Mara Rolando (rolando@iso.org) and/or Augustin Rollet (rollet@iso.org)
  Gilles Thonet (gth@iec.ch)
- ***Joint Use cases project**: Nathan Taylor (taylor@iso.org) and Miroslav Siket (msi@iec.ch)*
- ***Joint Business model project**: Boris Maggia (maggia@iso.org) and Guilaine Fournet (gnf@iec.ch)*
- ***ISO Technical solutions**: Yuliya Gerasymchuk (gerasymchuk@iso.org)*
- ***IEC SG12**: Miroslav Siket (msi@iec.ch)*

Thank you