

# Thought of Metaverse standardization

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Convener of ISO/IEC JSEG15

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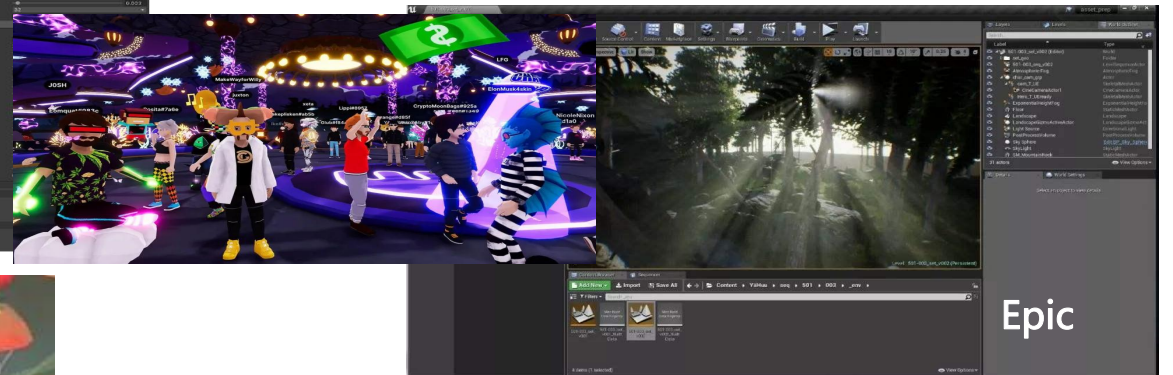
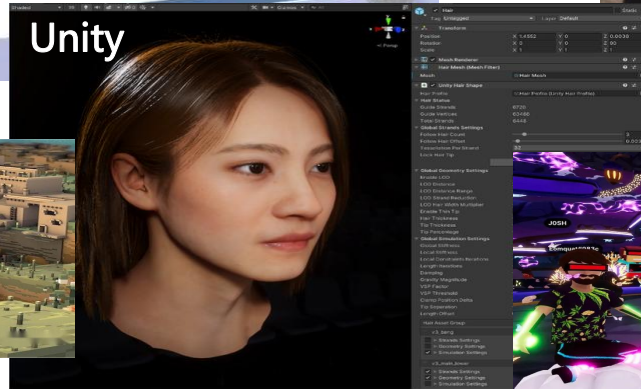
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Introduction of ISO/IEC JSEG15

# Metaverse is coming

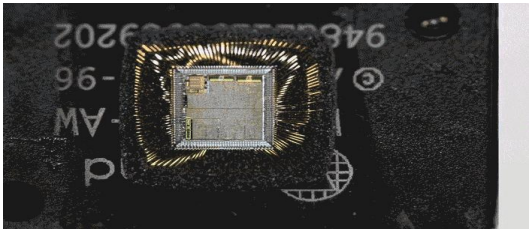
International internet giant are jumping into Metaverse, treating Metaverse as the future



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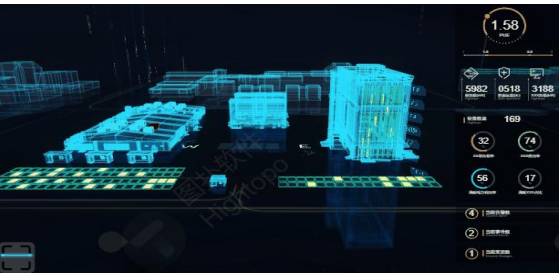
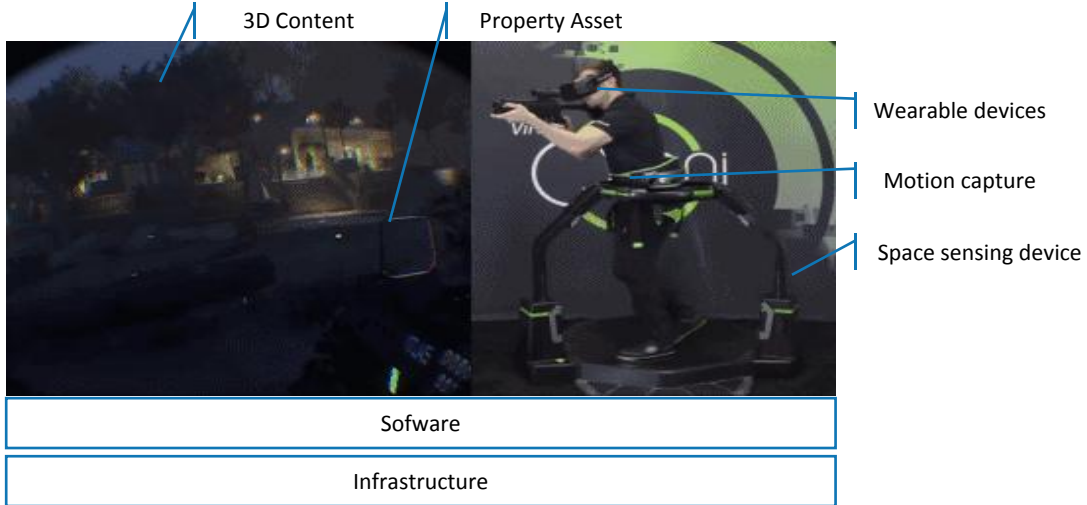
# Application Scenarios

The metaverse can be applied to chip design, industrial manufacturing, power and energy industries, it will make a great impact on our lives. However the identities, assets, contents could not switch in different applications



**Semiverse**=semiconductor+metaverse

Digitize the chip design and manufacturing process, Reduce the cost of design and testing



Electric power inspection



Equipment operation simulation

**Energy metaverse**



**Industrial metaverse**



Art



Education



Gaming

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## Key content of Metaverse based on ontology

Metaverse is systems engineering, technicality is most important for the performing of Metaverse system. requiring standards to support the engineering and information technology.

### Ontology of Metaverse

Conceptualization Key components	Explicit Key factors	Formal Engineering	Share Consensus
Governance system Cooperative system Economy system Content system Technical system	Collaboration Identity Asset Activities ( Data )	Space Application Service System Network	Governing & regulation Application & service Content & asset Data & protocol Tech & platform Basic

# Standardization needs for the industry



## Consensus

Establish **industrial consensus, common concepts**, reducing industrial friction.



## Benchmark

Identify basic **benchmark**, requirements and other issues, establishing technical ethics governance methods



## Integration

Propose the **development path** and promote **technology integration and Internet upgrading**



## Connection

Built the **connection** between different platform and technical system



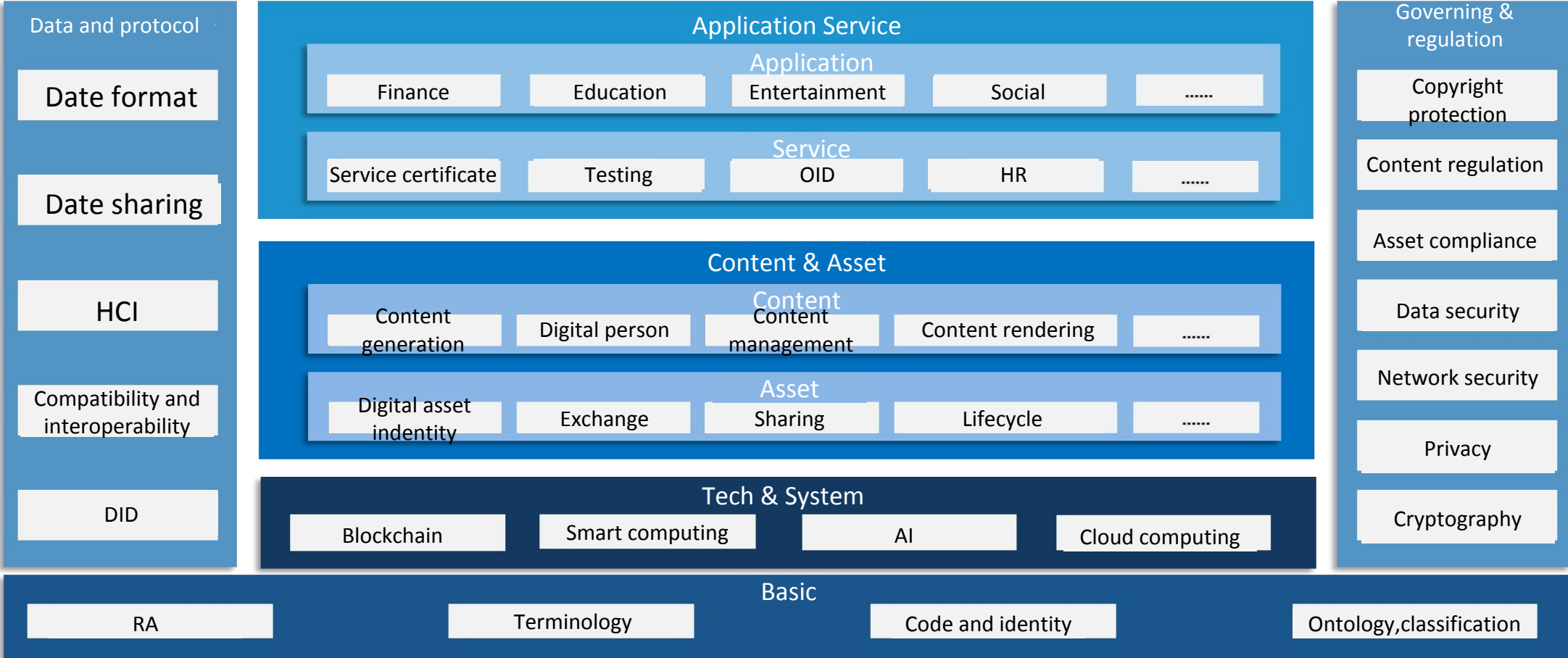
## Coordination

Coordinate all **elements** from a systematic perspective, so as to coordinate the Metaverse ecosystem

Metaverse have entered the industry and it is in the stage of exploring.  
There will be more applications in the future, requiring the supports of standardization.

# Standard focus

Standardization can solve the problem of consensus at different levels



[https://www.iec.ch/dyn/www/f?p=103:186:611161111337458::::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:43649](https://www.iec.ch/dyn/www/f?p=103:186:611161111337458::::FSP_ORG_ID,FSP_LANG_ID:43649),

102 Experts

## SEG 15 Joint SEG with ISO - Metaverse

Scope **Structure** Documents Meetings / Workshops Collaboration Platform

**Officers** Members Working Groups

### SEG 15 Officers



Co-convenor **Mr Ming Li** [Send Email](#)

Co-convenor **Mr Maxime Rosello** [Send Email](#)

Secretary **Mr Peter J. Lanctot** [Send Email](#)

### IEC Secretariat Contacts

Standards Project Administrator **Ms Marlene Maillet** [Send Email](#)

The tasks of the Joint SEG include the following:

- Develop a common understanding and definition of Metaverse.
- Investigate the needs for standardization in the area of Metaverse, taking into account current research, technology and standardization activities, and trends.
- Recommend an initial roadmap for standardization activities in the area of Metaverse.
- Recommend an appropriate organization of the work in IEC and ISO (including partner organizations as needed).
- Engage at the earliest stage with IEC and ISO TC/SC/SyCs, including JTC 1, as well as with other relevant organizations such as consortia.
- Make further recommendations to SMB and TMB as appropriate.



# Meetings & Schedule

6/Apr/2023

For IEC use only  
SEG 15/02/DA  
2023-03-27

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**  
**Standardization Evaluation Group 15 - Metaverse**  
**Draft Agenda**

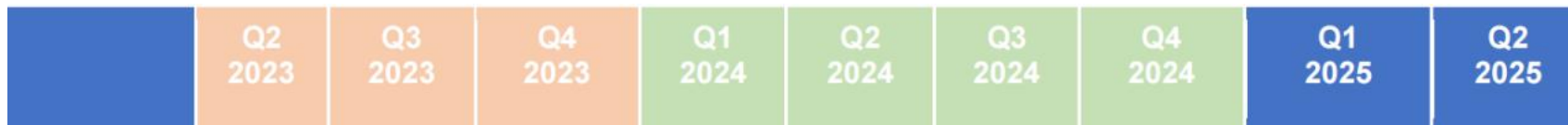
Virtual meeting via Zoom: Details sent by Secretary  
Date of Meeting: Thursday 6 April 2023  
Time (2-hours): 11:00 to 13:30 UCT - Zoom link sent  
(New York 07h-09:30h; Central Europe 13h-15:30h; Delhi 16:30h-19:00h;  
Beijing 19h-21:30h; Seoul/Tokyo 20h-22:30h; Sydney 21h-23:30h)

**ITEMS for DISCUSSION**

1. Welcome, and opening remarks – Ming LI and Maxime ROSELLO
2. Roll call – Peter LANCTOT, SEG 15 Secretary
3. Review of Scope and Objectives of SEG 15 – SEG 15 Secretary
  - Overview of IEC and SEG's
  - Expected deliverables

It was agreed that before a multi-working group structure could be formed, SEG 15 needs to understand and evaluate the current landscape of Metaverse consisting of three domains :

- Market landscape (needs, relevance, business strategy)
- Technology landscape
- Risks, Concerns and Challenges landscape



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# Thanks for your listening

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