Virtual Worlds and Web4.0 EU Strategy: The Road So Far and the Road Ahead

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Artificial intelligence in Horizon Europe calls: an interdisciplinary challenge

Anne BAJART
Deputy Head of Unit
DG CONNECT - Interactive Technologies, Digital for Culture and Education

The Virtual Worlds partnership

Memorandum of Understanding

private side

Virtual Worlds Association

public side

European Commission

A strong and multi-disciplinary Partnership, to develop and promote a thriving industrial and end-user ecosystem, covering all aspects of the Virtual Worlds value chain, while actively engaging with people and society

Industry (large companies, SMEs, start-ups,spin-offs)

Academia (universities, innovation and research organisations)

Policy makers (national, regional, local levels) & regulator

End-users (unions, customers associations, sectoral applications users,

https://research-and-innovation.ec.europa.eu/system/files/2023-07/ec_rtd_candidate-list-european-partnerships.pdf

https://www.virtualworldsassociation.eu/

Signed 10/12/2025

European Commission

HEurope Work Programme 2026-2027

TOPICS	TYPE OF ACTION	BUDGETS (MEUR)	EXPECTED EU CONTRIBUTION PER PROJECT (MEUR)
HORIZON-CL4-2026-04-HUMAN-01: **Developing and demonstrating core technologies for Virtual Worlds and Web4.0**	IA	**30.00**	4.00 to 5.00
HORIZON-CL4-2026-04-HUMAN-02: **Web 4.0 architectural framework and Open Internet Stack applications for virtual worlds**	RIA	**16.80**	3.00 to 9.00
HORIZON-CL4-2027-04-HUMAN-01: **Advanced and Innovative hardware components for Virtual Worlds**	RIA	**39.00**	5.00 to 6.00
HORIZON-CL4-2027-04-HUMAN-02: **Create A thriving and competitive Virtual Worlds and Web4.0 ecosystem**	CSA	**3.00**	3.00 MEUR

+ Cluster 4 Digital, Industry and Space

Destination: Digital and industrial technologies driving human-centric innovation

[Horizon Europe work programmes - Research and innovation]

HORIZON-CL4-2026-04-HUMAN-01: Developing and demonstrating core technologies for Virtual Worlds and Web 4.0 (IA) (Virtual worlds Partnership)

- Contribute to bringing the full integration of VW and Web 4.0 technologies to the next level
- Prepare the next generation of VW technologies, which will
    - propose a **deeper & closer-to-real immersion**, by multisensory simulation
    - **capture & interpret user movements and environmental data**, while providing realistic multimodal tactile and kinesthetic interactions, and feedback for engaging and lifelike experiences
    - improve **real-time user interactions** by minimizing latency and increasing responsiveness and naturalness
    - **dynamically respond** to users' inputs and environmental changes

- **Involve SSH expertise to produce meaningful societal impact of the project research activities**

Open

Close date: 15/04/2026

European Commission

HORIZON-CL4-2027-04-HUMAN-01: Advanced and Innovative hardware components for Virtual Worlds (RIA) (Virtual worlds Partnership)

Next generation of engaging and lifelike immersion

- Stimulation of all senses (sight, hearing, feel, touch, smell), for a fully immersive close-to-reality experience.
- Users will be submerged with realistic sensations making the experience as immersive as possible

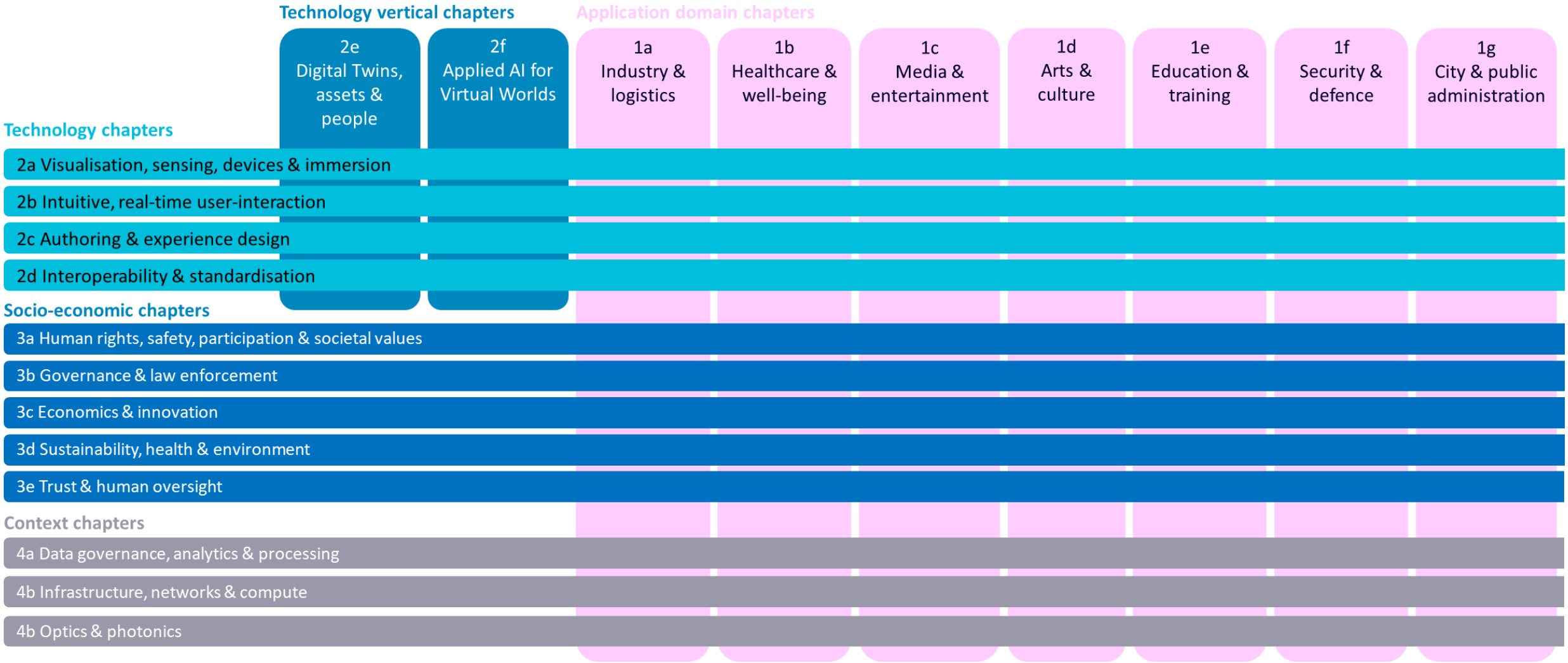
- Proposals covering
    - novel scientific approaches or push the limit of existing ones to improve the synchronization and integration of the **different modalities**
    - Integration of various components in fully tested devices, demonstrating the usefulness and efficiency of their system in **illustrative scenarios** in the industrial and societal contexts.
    - focus on **performant, reliable, miniaturised, interoperable advanced and innovative** technologies, **with inclusivity**, **energy** consumption and energy efficiency at the centre of concerns.
- **effective contribution of SSH disciplines and the involvement of SSH experts**, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities

Opens: 17/11/2026 (tbc)
Closes 18 /03/2027 (tbc)

The Virtual Worlds partnership

Strategic Research & Innovation Agenda

Virtual Worlds Association



XR4HUMAN

Responsible development and uptake of XR technologies

Guidance and tools to ensure Equitable, Inclusive, and Human-Centered development of XR Technologies

https://xr4human.eu/

European Commission

Thank you