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04/19/23 Metaverse Standards Forum: Oversight #48

funksoup started this conversation in **Oversight**



funksoup on Apr 19 Maintainer

edited ▾

Metaverse Standards Forum: Oversight

Wednesday, 19 April 2023 from 21:00-22:30 EST (01:00-02:30 UTC)

Agenda:

Incorporation rollout update

- Announcement and online materials
- New signup form
- Board update
- Coverage

Domain Group Updates

- 3D Web Exploratory Group first meeting this Thursday
- Register Working Group update
- Approval of Network Requirements and Capabilities Exploratory Group [Charter](#)
- Discussion on Academia and Research Exploratory Group [Proposal](#)
- Exploratory Group Proposal pipeline
- Working Group action template

Forum outreach update

- And New Member Orientation Meetings

--> [Google slides](#)<--

--> [Slides as PDF](#)--

I (@funksoup) asked to add an item to the agenda concerning interoperability -- competing standards between OMI's [OMI_collider](#) and [OMI_physics_body](#) glTF extensions and Microsoft's physics [KhronosGroup/glTF#2257](#) (via [@aaronfranke](#))

-- Issue is described in detail in this [OMI_collider and OMI_physics_body pull request](#) and there's a bulleted list of specific differences and impacts.

Today's Agenda

- The Forum is now an independent non-profit industry consortium!
 - Why and how we incorporated
 - Public announcement on Tuesday April 18th
 - What it means to your membership
- Outreach update
 - Get involved in promoting the Forum (and your organization!)
- Domain Pipeline updates
 - Initiate, discover and engage with Exploratory and Working Groups that are relevant to your organization
- New Member Orientations
 - Find your way around the Forum and its resources



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Page 4

↑ 1

3 comments

Oldest

Newest

Top



funksoup on Apr 19

Maintainer

Author

Ubiquitous Standards for the Metaverse

Industry Standards

Standards are the basis for ubiquitous infrastructure



ISO IEC ITU

IEC 60038 Standard voltages
IEC 60228 Conductors of insulated cables
IEC 60269 Low-voltage power fuses
IEC 60320 C13 Connectors and C14 Inlets
IEC 60884 Household Plugs And Socket-Outlets
IEC 61970 APIs for energy management

Multiple Standards

Widely adopted platforms require many hardware and software standards



Constellation of Standards

An open and inclusive metaverse at pervasive scale will need the right standards at the right time – from MANY standards organizations!



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Page 5

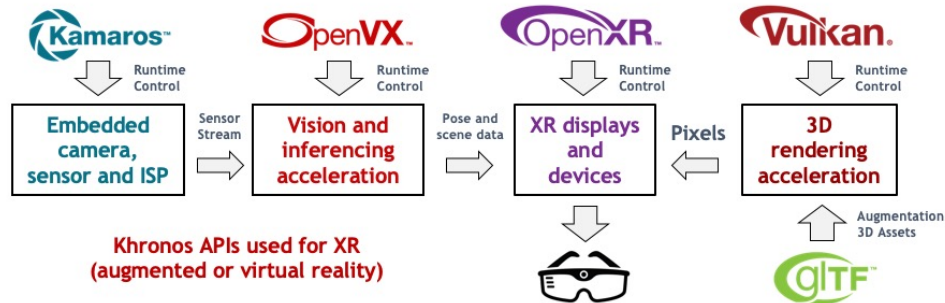
Khronos "Connects Software to Silicon"



Standards Organization founded in 2000
~200 Members ~ 40% US, 30% Europe, 30% Asia

Non-profit, member-driven, open to any company
Well-defined multi-company governance and IP Framework

Open, royalty-free interoperability standards to harness the power of GPUs, multiprocessors and XR hardware
3D graphics, augmented and virtual reality, parallel programming, inferencing and vision acceleration

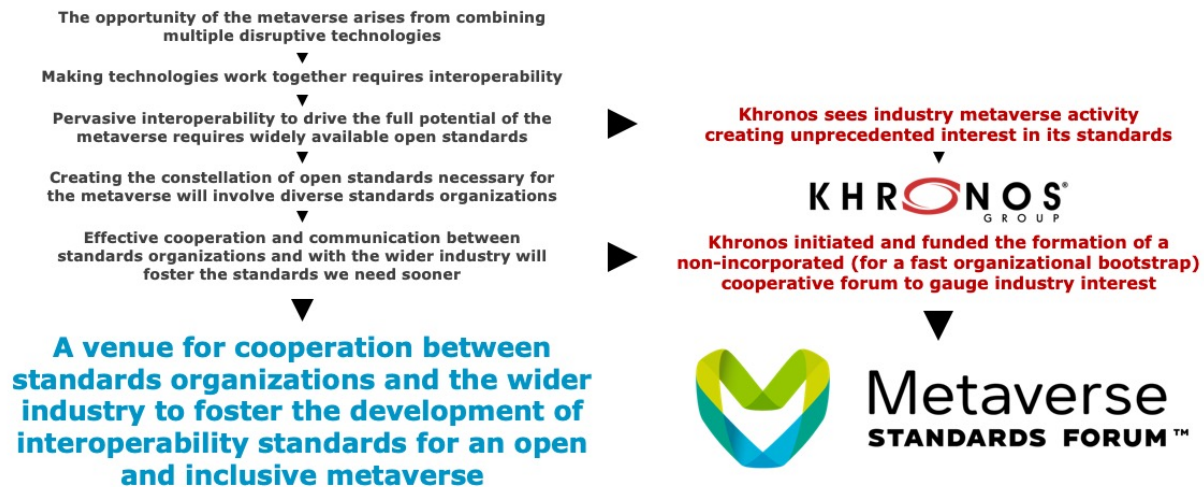


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Page 6

Metaverse Standards Forum Genesis and Vision



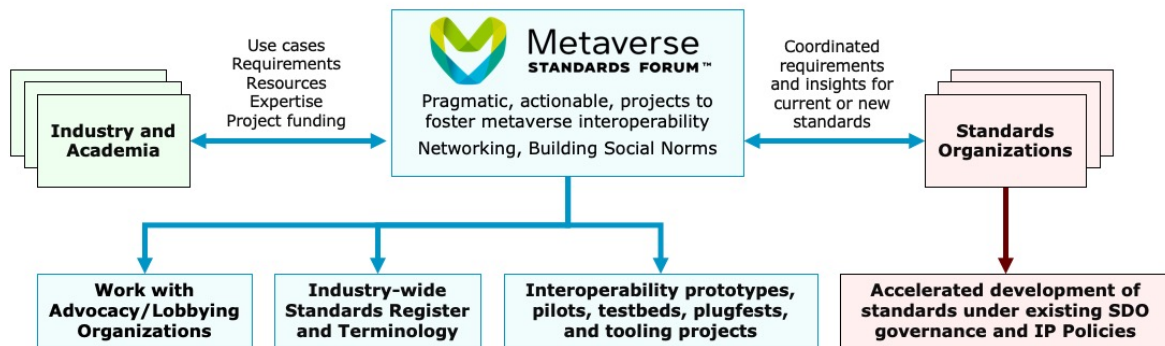
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Page 7

Better Metaverse Standards – Sooner!

- Coordination and cooperation between Standards Developing Organizations (SDOs) and wider industry
- NOT another SDO! All standardization 'heavy-lifting' continues at existing SDOs
- Open to all, no participation fee, no NDA, no patent licensing
- The Forum exists to accelerate the mission of its members – including SDOs and advocacy organizations



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Page 8

Today - Over 2400 Members and Counting

Wide diversity of organizations, including...

SDOs

Khronos, W3C, Open Geospatial Consortium, IEEE, OMI, ASWF, Spatial Web Foundation, VRM Consortium, XRSI, OMG, Open AR Cloud, OMA3 ...

Platforms

Meta, Microsoft, Sony, Google, Baidu, Huawei, General Motors, RedHat, Siemens, Tencent, Mozilla, Paramount ...

Tools and Engines

Epic, Unity, Adobe, Autodesk, Otoy, Maxon, Cesium, ESRI, Blackshark.ai, Croquet, Lamina1, Niantic, Ready Player Me, DGG, Manticore ...

XR

HTC, Magic Leap, Nreal, Panasonic, Tobii, zSpace ...

Hardware

NVIDIA, Intel, AMD, HP, Acer, Dell, Qualcomm, Samsung, Sony, MediaTek, Oppo, Lenovo, ZTE, LG ...

Wireless and Networking

China Telecom, Deutsche Telekom, T-Mobile, Verizon, NTT, AT&T, Telefónica, Juniper, Comcast ...

3D Commerce

Alibaba, Alvanon, Avataar, CLO, Browzwear, IKEA, VNTANA, Metaverse Fashion Council, Target, Wayfair ...

Universities and Institutes

Stanford, John Hopkins, Yale (XRP), Queens University Belfast, University Salford, New York Institute Technology, APMG ...

Advocacy

XRSI, AREA, XR Association, VRAR Association, XR Guild, Web3 Marketing Association, International Virtual Reality Healthcare, Swiss Institute for Disruptive Innovation, IOT Consortium, Metaverse Japan, RIAA ...



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Page 9

A Unique Cooperative Opportunity

Broad global participation in the Forum enables a unique opportunity for metaverse standards cooperation, coordination and leadership for Forum members to accelerate *their* objectives

Comprehensive, international gathering of industry requirements and expertise in Forum Working Groups

Any Forum member can propose, lead, contribute to, participate in, or monitor Domain Working Groups

Wide visibility and adoption of Forum initiatives



**Metaverse
STANDARDS FORUM™**

The Forum receives regular requests for cooperation from organizations such as the World Economic Forum and the ITU



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Page 10

Metaverse Standards Forum Inc.

- The Forum is now incorporated as an independent non-profit industry consortium!
 - The Oversight Committee has been discussing and planning this transition since November 2022
 - On March 22nd, the Principals in the Oversight Committee unanimously approved initiation of incorporation
 - Delaware 501(c)(6) non-profit, non-stock corporation
- Enables the Forum to operate independently
 - Enter into contracts and liaisons, and own a bank account
 - Collect membership dues to fund operations and projects
 - Strengthens liability protection for the Forum and its members
- The Forum now has formal [Bylaws](#) and a new matching [Membership Agreement](#)
 - Designed to enable a seamless transition from the 'old' Forum to the 'new'



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Page 11

↑ 1

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funksoup on Apr 19

Maintainer

Author

Maintaining Established Forum Principles

- The goals and daily operation of the Forum are unchanged
 - Enabling industry cooperation for an open and interoperable metaverse
 - We are STILL not an SDO 😊
 - No NDA for Forum activities
 - Consensus-based - one organization one vote
- Continued \$0 dues for Participant Members
 - Access to all Domain Group activities
- Principal Members continue to participate on the Oversight Committee
 - Overseeing the Domain Group pipeline and day-to-day Forum operations
- A new elected Board with directors serving two-year terms



Principal Dues to Fund Forum Operations and Projects

- Principal dues will make the Forum financially independent from Khronos
 - Dues determined using data from membership surveys – thank you all who responded!
- All Principals can cast one vote in decisions and elections, regardless of dues paid
 - Avoid any concerns over inappropriate 'buying of influence'
- Principal fees tiered on member size, for participation by organizations of all sizes and geographies
 - Reduced fees for non-profits, academic institutions and 'COPPs' (see next slide)

Principal Dues	Tier
\$0	COPPs and Non-profits approved for Principal Fee Waiver Invited Industry Experts (individuals)
\$50 per employee	Micro Enterprises (< 10 emp. AND <\$2M revenue/assets)
\$999	Small Enterprises (< 50 emp. AND <\$10M revenue/assets) Accredited Academic Institutions COPPs without fee waiver
\$4,999	Medium Enterprises (< 250 emp. AND <\$50M revenue/assets)
\$9,999	Large Enterprises (>250 emp. OR > \$50M revenue/assets)

Principal members play a key leadership role in the Forum

Participation in Oversight Committee

May stand for election to the Forum Board of Directors

Priority marketing and networking privileges



Standards Organization Participation

Enabling Participation by a Broad Diversity of Standardization Organizations

Inclusive definition of organizations involved in standardization

'COPP' is a 'Collaborative Organization with Public Products'

Produces publicly available, metaverse standards-related specifications, policies, recommendations, or open-source software through a collaborative process under representative governance

Members may apply for COPP designation at any time

Typically, on joining or annual renewal
Designation at the discretion of the Board

Once an organization is designated as a COPP

Principal Fees are capped at \$999

May apply for fee waiver to \$0

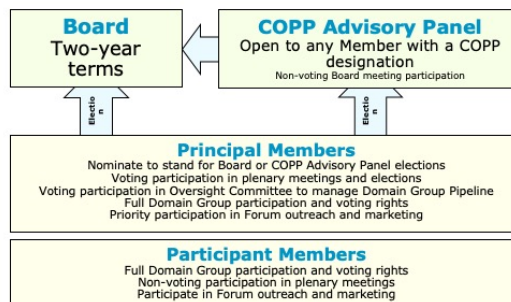
Can participate through a liaison agreement

Can be represented by designated individual industry experts

COPP Advisory Panel

Any COPP may stand for election to the COPP Advisory Panel

Non-voting Board meeting participation



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Page 14

Post-Incorporation Membership Transition

- We do need ALL Members (Principals and Participants) to execute the new [Membership Agreement](#)
 - For protection of all members, we need to ensure that everyone is operating under the same legal framework
 - Terms are almost identical to the current participant agreements, just within an incorporated framework
 - No patent licensing, no NDA
- All members will enjoy existing Membership Rights for 3 months after public announcement
 - Time to review and execute the new agreement as Participant or Principal
 - Then an additional 3 months - but only at Participant level
- New membership agreements will be posted for electronic execution on the Forum Website on 18th April
 - 10% Principal dues discount if join in initial 90 days after public announcement

All members retain current level of membership without payment for three months
EXCEPT no Board election nomination or voting rights unless execute new Principal agreement

10% off membership dues for members executing new membership agreement

New Principals may request to be elected to an Initial Board

Members that have not executed a new membership agreement are provided Participant-only membership for an additional 3 months

Members that have not executed a new Participant or Principal membership agreement and paid dues (if required) are terminated

Incorporation Publicly Announced
April 18th, 2023

Initial 90 Days

Announcement +3 Months

Announcement +6 Months



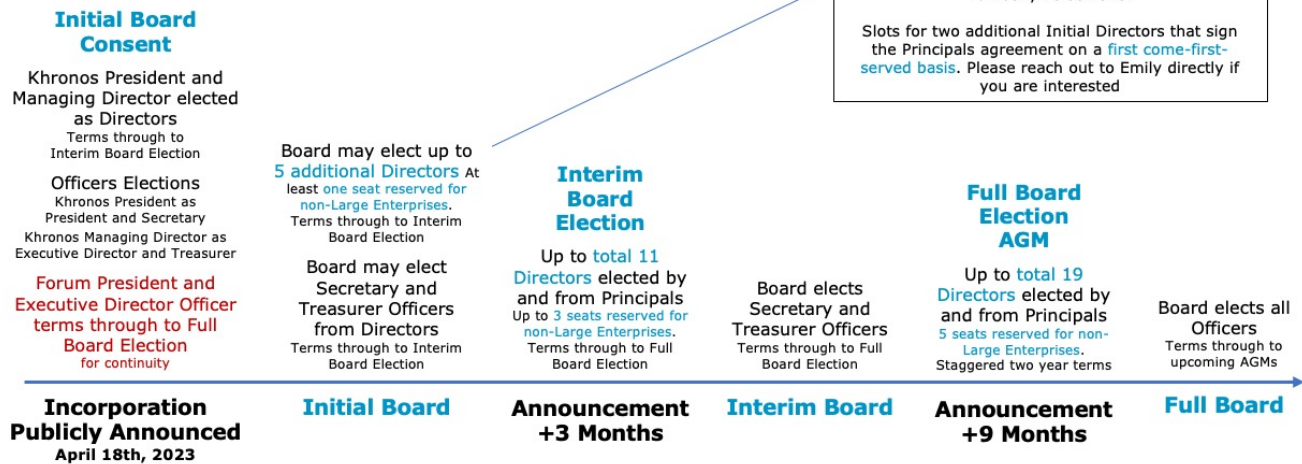
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Page 15

Post-Incorporation Board Timeline

- Board processes for quorum and actions as per bylaws



Initial Board

Serving for 90 days until first Board Elections
Neil Trevett: President and Secretary
Emily Stearns: Executive Director and Treasurer
Ulrich Dropmann, Nokia
Matt White, Berkeley Synthetic Inc.
Yu Yuan, VerseMaker

Slots for two additional Initial Directors that sign the Principals agreement on a **first come-first-served basis**. Please reach out to Emily directly if you are interested



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Page 16

Forum Incorporation Public Announcement

- Public Launch of the Forum Incorporation on April 18 at 6 AM PT
 - Draft [press release](#) and [press briefing deck](#) any feedback is welcome as comments in the documents
- Pre-briefs with press began this week
 - Financial Times, Protocol, Reuters, The New Stack, Voices of VR, Immersive Wire, CNET, Decrypt, Axios, 80.LV
- Analyst briefs will take place over April and May
 - Forrester, Moor Insights & Strategy, 451 Group, Frost & Sullivan, Strategy Analytics, McKinsey, ABI Research, Info-Tech, Aragon, Jon Peddie, Gartner, etc.
- Coordinated Social Media Campaign - we need your help!
 - Encourage all members to post on the day of announcement
 - Not before 6 AM PT on April 18** – will send 'all clear' on General list
 - Follow the Forum social channels for news and announcements: [@metaverse_forum](#) on Twitter and [LinkedIn](#)

Twitter card for members to (optionally) use on the day of announcement.
Available on the Forum Portal [here](#)



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Page 17

Organizing for Effective Forum Action

1. Gather interoperability Topics from all members

Online input from all members on actionable topics that need improvement today!

Over 200 topics suggested and counting, for example..

Database of metaverse standards
Taking 3D assets between worlds
Asset LODs
glTF / USD interoperability
Avatar customization / animation
3D Apparel and Fashion
Cloth Simulation
Metaverse traversal
Geospatial ontologies
Geospatial streaming
Decentralized User ID
Ethical framework
User privacy
Child safety
Payment frameworks
Etc. etc..

2. Organize Topics into Domains

Consensus on member interest AND where the Forum can add industry value

Topics naturally falling into Domains

Privacy, Safety, Security, Inclusion
Interoperable 3D Assets
Real/Virtual World Integration
Identity (was User Identity)
Avatars and Apparel
Teaching, Education, Certification
Metaverse Standards Register
XR and UI
Metaverse Definition
Networking
Geospatial
Payments and Economy
Runtimes and Object Model
Governance and Advocacy
Video Broadcasting and Meetings
Forum Outreach
Tooling and Creators
Gaming
Health and Medical
Performance and Scalability
Business Analytics

3. Create Domain Working Groups

Make recommendations and work products publicly available

Any Forum member can propose and participate in any Domain Working Group

Forum Working Groups focus on effective, pragmatic projects to enhance short business opportunities:

Generating requirements for standards development
Interoperability testbeds and plugfests
Open-source tooling
Recommendations and guidelines
Etc.



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Page 18



1

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funksoup on Apr 19

Maintainer

Author

Exploratory Group Brainstorming

- Any member is welcome to brainstorm and seek co-proposers for new Domain Group activities
- Please add ideas to the [Brainstorming Tab](#) of the Plenary Google Sheet
- Three topics currently seeking input and feedback
 - Ownership and identity in the Metaverse**
 - Accessibility in the Metaverse**
 - Best Practices for Living and Working in the Metaverse**

Reach out to Neil or Emily if you would like to chat about initiating a new Exploratory Group!

Topic	Proposed	Score	Comments
Ownership and Identity in the Metaverse The "Ownership and Identity in the Metaverse" working group is dedicated to providing a framework for the ownership and identity of digital assets and experiences in the metaverse. This group will focus on defining the rights and responsibilities of creators, owners, and users of digital assets and experiences, and on developing standards and best practices for the ownership and identity of digital assets and experiences.	BRANDSTORMING / SEEKING ADDITIONAL PROPOSERS Michael Owen Williams michael.owen.williams@metastandard.org	11	11
Accessibility in the Metaverse The "Accessibility in the Metaverse" working group is dedicated to providing a framework for the accessibility of digital assets and experiences in the metaverse. This group will focus on defining the rights and responsibilities of creators, owners, and users of digital assets and experiences, and on developing standards and best practices for the accessibility of digital assets and experiences.	BRANDSTORMING / SEEKING ADDITIONAL PROPOSERS Neil Williams neil.williams@metastandard.org	8	8
Best Practices for Living and Working in the Metaverse The "Best Practices for Living and Working in the Metaverse" working group is dedicated to providing a framework for the best practices for living and working in the metaverse. This group will focus on defining the rights and responsibilities of creators, owners, and users of digital assets and experiences, and on developing standards and best practices for the best practices for living and working in the metaverse.	BRANDSTORMING / SEEKING ADDITIONAL PROPOSERS Emily Williams emily.williams@metastandard.org	2	2



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Page 19

Forum Domain Group Pipeline

Metaverse Standards Register

Publicly available database mapping the landscape of metaverse-relevant standardization activities

gITF/USD 3D Asset Interoperability (visuals, behaviors)

Cooperation between USD and gITF to increase synergy and reduce duplication of effort, gaps, fragmentation and industry confusion

Real/Virtual World Integration (Digital twins, IOT)

Constructs to describe and integrate the physical world and created representations

Asset Management (web3, protection, digital rights)

Digital rights, protection, portability, access, availability

Interoperable Avatars

Cross-platform avatars and characters for film, gaming, fashion and social platforms

Digital Fashion/Wearables

Clothing (including layering), shoes, hats, accessories

Network Requirements and Capabilities to Support Metaverse Applications

Industry requirements for seamlessly transitioning traffic on multiple wireline and wireless technologies for deploying metaverse applications at scale

Privacy, Cybersecurity & Identity

Recommendations for responsible innovation that mitigates human and societal harm from objective and subjective privacy risks – including cybersecurity and identity risk management

Technical Interoperability and End-User Troubleshooting

Enabling end-users to ensure reliable metaverse experiences

3D Web Interoperability

Enable the broadest possible interoperability of Metaverse Content using the Web

Ownership and Identity

Accessibility

Best Practices for Living and Working in the Metaverse

Key
Working Groups
Exploratory Groups
Exploratory Group Proposals

Domain Group activities on
Forum Public Web Page
<https://metaverse-standards.org/domain-groups/>

Domain Group pipeline [Wiki](#) on
the Member Portal



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Page 20

Latest Domain Pipeline Updates

- 3D Web Interoperability Exploratory Group
 - Making the Metaverse fully interoperable with the web and its standards ecosystem
 - Comments welcome in the [3D Web Interoperability Exploratory Group Proposal](#)
- Network Requirements and Capabilities Exploratory Group
 - Plan to request approval on their [Charter](#) at Oversight #16 on 19th April
- Digital Fashion Wearables Exploratory Group
 - Meetings restarted on Monday, March 27 at 8AM PT
- Technical Interop and End User Troubleshooting Exploratory Group
 - First meeting on Thursday, March 30 at 9AM PT
- Don't forget to [join any Groups of interest on the Portal](#) for calendar notices and discussions
 - The [Domain Group Pipeline Wiki Page](#) gives an overview of the status of all Working and Exploratory Groups
 - The [Forum Global Calendar](#) provides a holistic view of all Forum meetings
 - All [meeting recordings](#) are available to all members



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Page 21

↑ 1

0 replies

Category



Oversight

Labels

None yet

1 participant

