

2023-03-15 TSPTF Meeting Notes

Meeting Date & Time

15 Mar 2023 This Task Force meets **three out of every four Wednesdays** (the fourth Wednesday is the Technology Stack WG plenary meeting). There are two meetings each Wednesday to serve different time zones:

- **NA/EU meeting: 08:00-09:00 PT / 16:00-17:00 UTC**
- **APAC meeting: 18:00-19:00 PT / 02:00-03:00 UTC**

See the [Calendar of ToIP Meetings](#) for exact meeting dates, times and Zoom links.

Zoom Meeting Recordings

- NA/EU Meeting: <https://zoom.us/rec/share/vGaCQMp4xlTsAVKsxbv3H1sURX5ZXWd-LjFd2yMaj-PNZIG8rsAyzfdWOZDqEBQ7.55xZUhhvqKlksZCV>
- APAC Meeting: https://zoom.us/rec/share/lgAXxwX57hj_gGYmKt7qykFh4wuobFJEZuVka5G-dGrxt0axUzZIXpyebqjMuR7c.qLHz7yAF8FILimZw

Attendees

NA/EU

- [Drummond Reed](#)
- [Daniel Hardman](#)
- [Wenjing Chu](#)
- [Samuel Smith](#)
- [Darrell O'Donnell](#)
- [Judith Fleenor](#)
- [Oskar van Deventer](#)
- [Michael Herman](#)
- [Christine Martin](#)
- [Clare Nelson](#)
- [Antti Kettunen](#)
- [Daniel Bachenheimer](#)
- [Lance Byrd](#)
- [Leon Tian](#)
- [Markus Sabadello](#)
- [Mathieu Glaude](#)
- [Neil Thomson](#)
- [Rodolfo Miranda](#)
- [Scott Whitmire](#)
- [Steven Milstein](#)
- [Subhasis Ojha](#)
- [Viky Manaila](#)
- [Vladimir Simjanoski](#)
- [Willem de Kok](#)
- [Steve McCown](#)

APAC:

- [Drummond Reed](#)
- [Michael Herman](#)
- [Wenjing Chu](#)
- [Jo Spencer](#)
- [Dima Postnikov](#)
- [Jefferson Braswell](#)

Agenda Items and Notes (including all relevant links)

Time	Agenda Item	Lead	Notes
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3 m in	<ul style="list-style-type: none"> Start recording Welcome & antitrust notice New member introductions Agenda review 	Leads	<ul style="list-style-type: none"> Antitrust Policy Notice: <i>Attendees are reminded to adhere to the meeting agenda and not participate in activities prohibited under antitrust and competition laws. Only members of ToIP who have signed the necessary agreements are permitted to participate in this activity beyond an observer role.</i> New Members:
2 m in	Review of previous action items	Leads	<input type="checkbox"/> ACTION: Drummond Reed to start a GitHub discussion on the question of TSP Workshops and also add it to the agenda for our March 22 meeting.
5 m ins	Last Call for Proposals & prep for "TSP Workshops"	Drummond Reed	<p>After today's Proposal #4 from Michael Herman and next week's Proposal #3 Part B from Wenjing Chu, we are asking if there are any other proposals in our proposal stage. If so, please speak up now or contact Drummond Reed this coming week so we can get you on the schedule.</p> <p>ACTION: Drummond Reed to send an email to the Technology Stack WG mailing list and post to the ToIP Slack with a Last Call for Proposals.</p> <p>Secondly, Neil Thomson and others have suggested that as we move into our consolidation stage, we are going to need one or more "Special TSP Workshops" of at least 2-3 hour duration. We hope to begin scheduling these in early April — and possibly hold a hybrid in-person/virtual workshop during Internet Identity Workshop (April 18-21).</p>
4 0 m ins	Proposal #4: Michael Herman	Michael Herman	<p>Michael made his presentation of Proposal \$4 in both the NA/EU and APAC meetings. Several of Michael's slides are captured in screenshots below.</p> <ul style="list-style-type: none"> Here is the recording of Michael's presentation in the NA/EU meeting. Here is the recording of Michael's presentation in the APAC meeting. Here is a link to the slides Michael presented. Here is the Github discussion thread on his proposal.
1 0 m ins	Q&A on the above.	All	<p>Q&A on the NA/EU call is captured on the Zoom recording.</p> <p>Notes from Q&A on the APAC call:</p> <ul style="list-style-type: none"> Wenjing Chu asked if Michael was proposing to use: a) DIDComm V2, and b) did he specifically include Verifiable Credentials? Michael said, "Yes, it can be DIDComm V2" and "No, it doesn't include Verifiable Credentials". But Michael clarified that it does include DIDComm V2 attachments. So Michael's proposal is "essentially DIDComm V2". Jefferson Braswell asked how Michael's proposal differed from TCP/IP routing and messaging. Michael said that his proposal is a higher level protocol that packet exchange. So it is a message routing and queuing would operate at a higher layer and supports disconnected clients. Jefferson Braswell asked if it resembled Kafka. Jo Spencer shared that Kafka is a message protocol operating over MQ. Jo Spencer asked, "Are we only concerned about trust in the message component, or does it also extend to the data component." Michael referenced his slide shown in screenshot #7 below. Michael also clarified that his term "superprotocols" applies to agent-to-agent protocols that build on DIDComm. Jo Spencer felt that Michael should externalize his calls to trust foundations (what Michael is called subprotocols).
	<ul style="list-style-type: none"> Review decisions /action items Planning for next meeting 	Leads	Next week's meeting will be Wenjing Chu presenting Proposal #3 Part B.

Screenshots/Diagrams (numbered for reference in notes above)

PROPOSAL 4

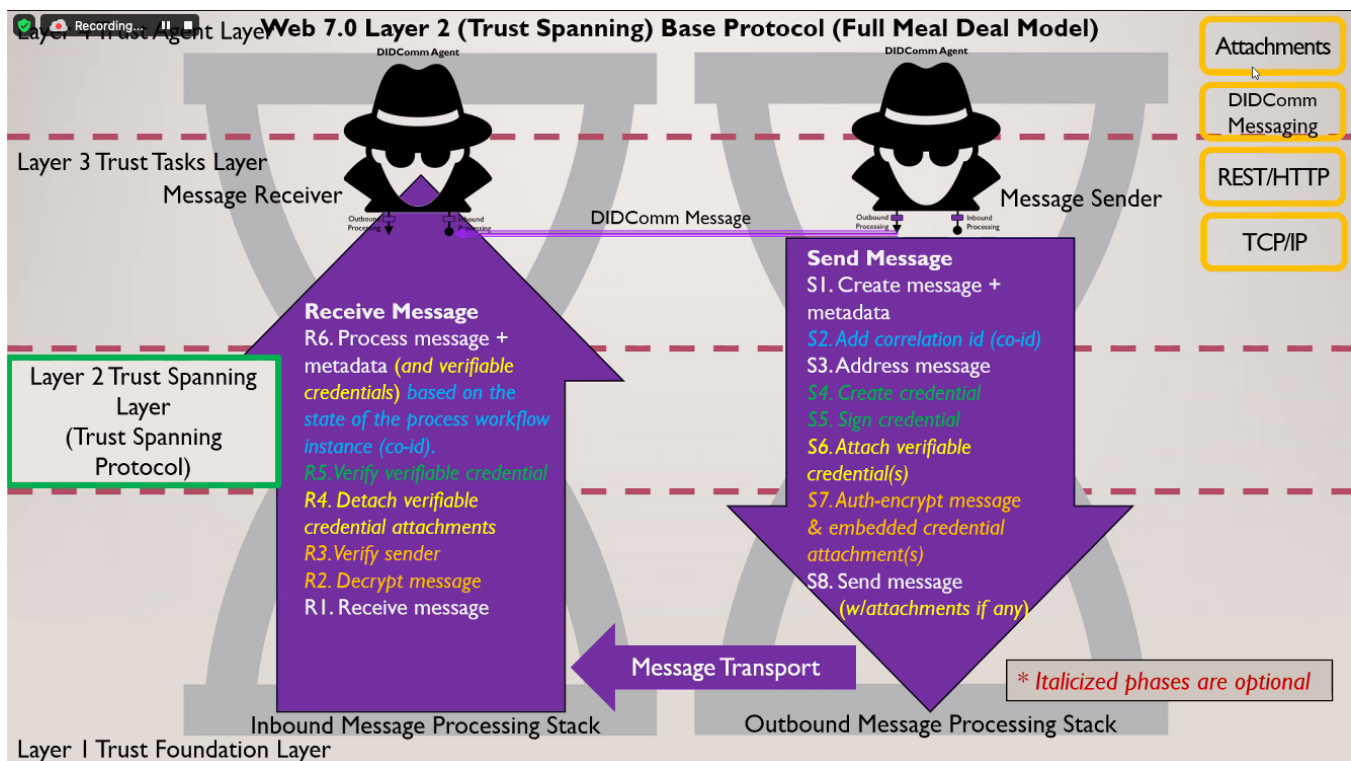
1. Proposal 4 Background
2. Proposal 4 Examples
3. Proposal 4 Summary: Recommendation for VI Standardization
4. Proposal 4 Definitions and Drill-down
 - i. Web 7.0 Celtic Tree of Life Trust Spanning Layer Model: Super Protocols, Base Protocols, and Subprotocols
 - ii. Verifiable Credential Sender-Receiver Model
 - iii. Layer 1 Subprotocols
 - iv. Layer 3 Super Protocols & Overlays
5. Conclusion: Recommendation for VI Standardization

¹ This presentation has lots of detail, but the goal is to present these concepts at an Awareness level.

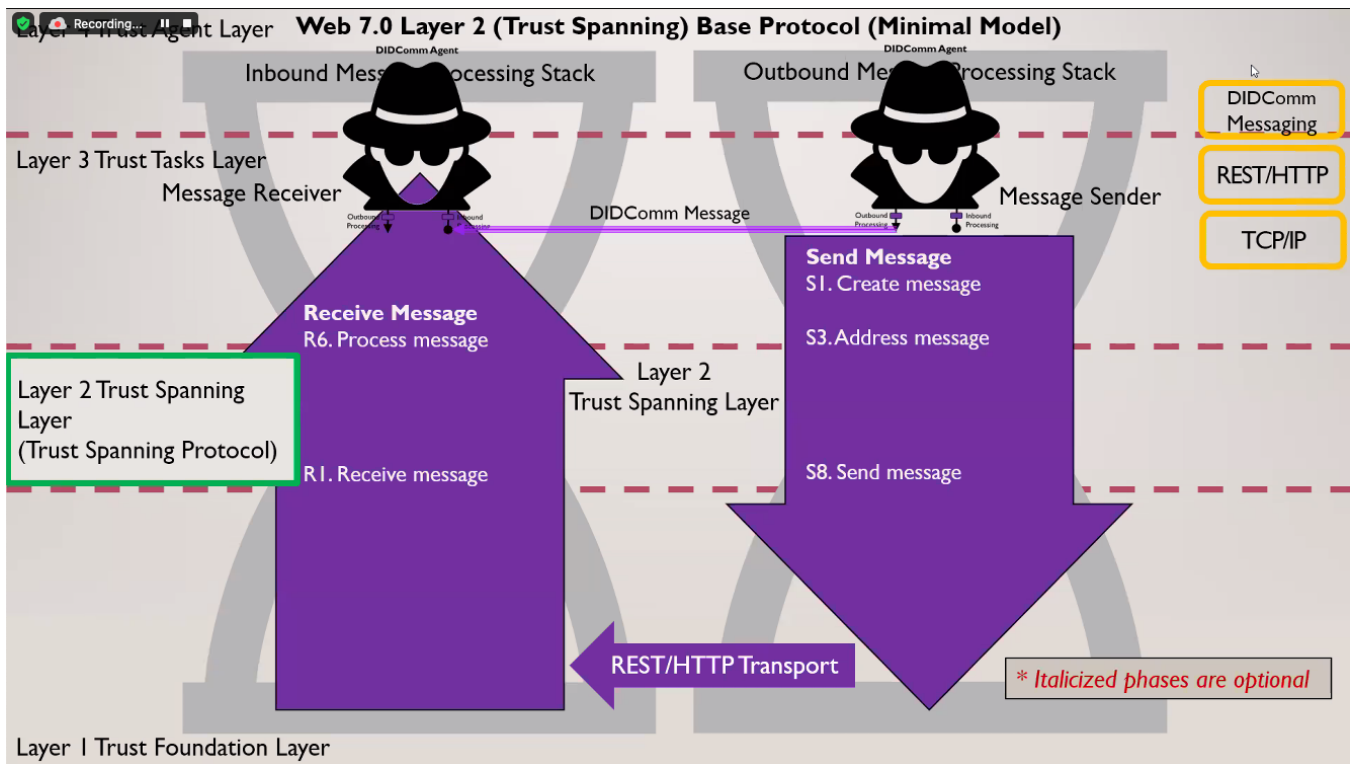
² Web 7.0 tagline: Take what you need; leave the rest

10

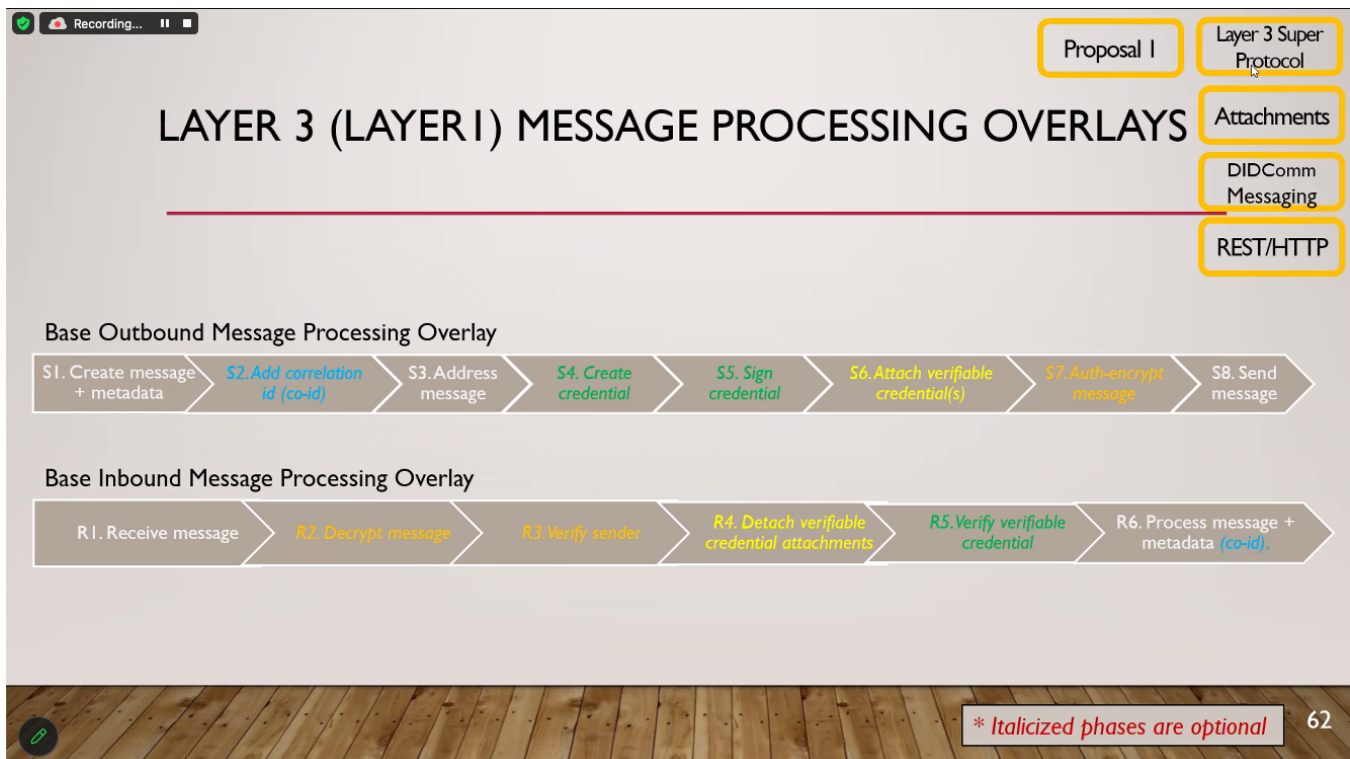
#2



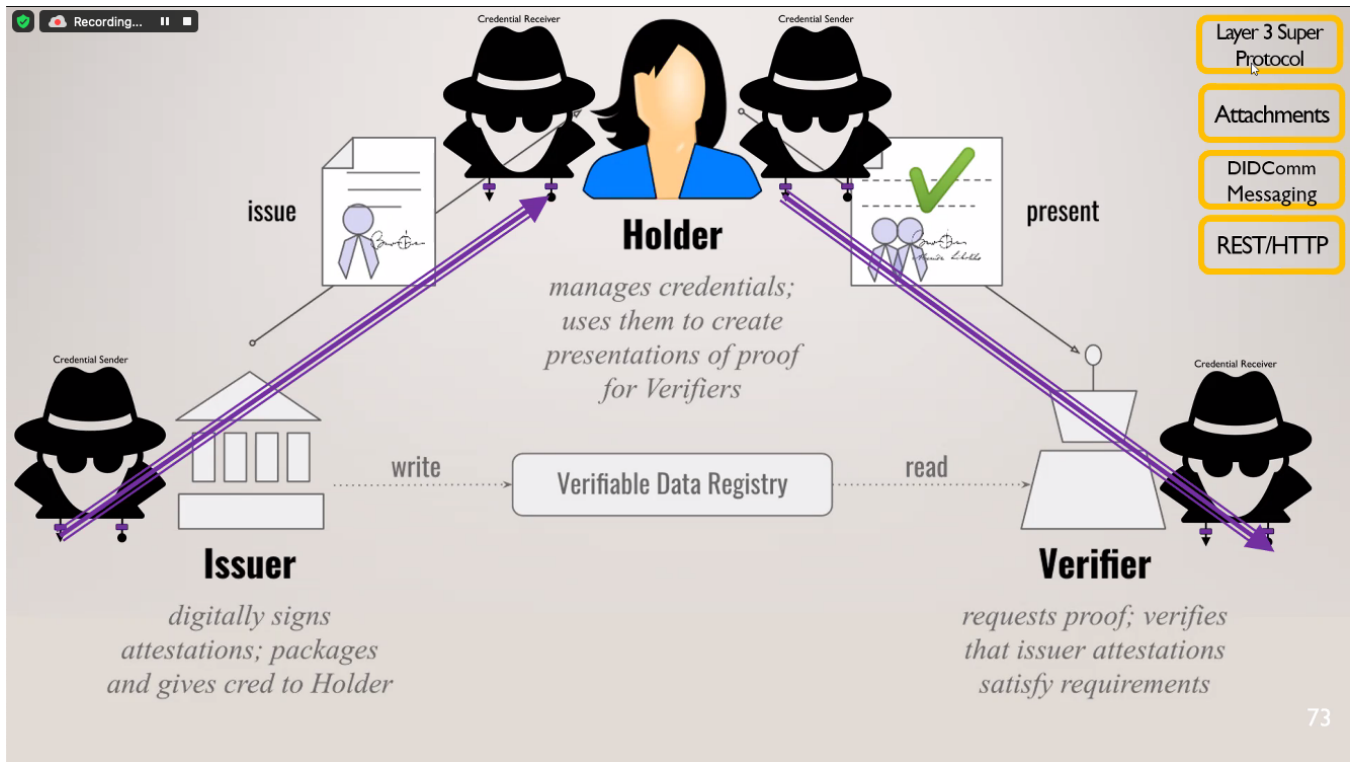
#3



#4



#5



#6

**SIDE BAR: WEB 7.0 DIDCOMM
DID REGISTRY GATEWAY:
AUTOMATIC AGENT CODE
GENERATION**

POP QUIZ

- a. Base Protocol
- b. Subprotocol
- c. Super Protocol
- d. None of the above

```

54  protocol Create
55  {
56      Type: HTTP;
57      Request: CreatedDIDCommRequest;
58      Response: CreatedDIDCommResponse;
59  }
60
61  protocol Read
62  {
63      Type: HTTP;
64      Request: ReadDIDCommRequest;
65      Response: ReadDIDCommResponse;
66  }
67
68  protocol Update
69  {
70      Type: HTTP;
71      Request: UpdatedDIDCommRequest;
72      Response: UpdatedDIDCommResponse;
73  }
74
75  protocol Deactivate
76  {
77      Type: HTTP;
78      Request: DeactivateDIDCommRequest;
79      Response: DeactivateDIDCommResponse;
80  }
81
82  server DIDRegistryGatewayServer
83  {
84      protocol Create;
85      protocol Read;
86      protocol Update;
87      protocol Deactivate;
88  }
89
                    
```

84

#7

Layer 3 Super Protocol

Attachments

DIDComm Messaging

REST/HTTP

EMBEDDED ATTACHMENTS vs. EXTERNAL ATTACHMENTS

1. Embedded Attachments – the attachment content (bytes) is attached to a message by embedding the content directly as a subelement of the message.
 - For embedded attachments, trust/security/privacy can be handled by:
 - a) the attachment format (e.g. as a verifiable credential), and
 - b) the attachment format wrapped by message format (e.g. DIDComm Message auth-encryption)
2. External Attachments – the attachment content (bytes) is stored independently of (external to) the message. The attachment content is “attached” to a message by reference (e.g. a URL message subelement that dereferences to a blob stored on IPFS)
 - Referenced attachments: trust/security/privacy is specified using a Layer 3 Trust Tasks super protocol
 - While trust/security/privacy of the message (containing the reference to the attachment) is handled by the Layer 2 Trust Spanning Protocol, trust/security/privacy of the external attachment (data path) is specified/handled by a Layer 3 Trust Tasks super protocol (signal/control path)

67

#8

LAYER 1 SUBPROTOCOLS: DID RESOLUTION, NETWORK ROUTING

Layer 4. Trust Agent Layer

Layer 3. Trust Tasks Layer (Super Protocols)

Layer 2. Trust Spanning Layer (Base Protocols)

Layer 1. Trust Foundation Layer (Subprotocols)

The Celts saw the strength and longevity of the oak tree as a symbol of endurance.

40

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Decisions

- None

Action Items

- ☐ ACTION: [Drummond Reed](#) to start a GitHub discussion on the question of TSP Workshops and also add it to the agenda for our March 22 meeting.
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