

# 2021-05-05 Credential Formats, Signatures, and Exchange Protocols Drafting Group Meeting Notes

## Attendees

- [Brent Zundel](#), Co-chair
- [Daniel Bachenheimer](#), Co-chair
- [David Janes](#)
- [Drummond Reed](#)
- [Kaliya Young](#), Co-chair & WG Co-chair
- [Nuttawut Kongsuwan](#)
- Pam Dingle
- [Riley Hughes](#)
- [Tony Rose](#)
- [Trev Harmon](#), PM
- Vitor Pamplona
- [Wenjing Chu](#)

## Agenda Items

Time	Item	Who
2 min	Welcome & Antitrust Policy Notice	Trev
	Review and reconciliation with the work done by <a href="#">Paper Credentials Drafting Group</a>	Everyone
1 min	Wrap up	Brent

## Recording - [Link](#)

## Notes

- Did the IP and antitrust announcement.
- David is here today from the Paper Creds drafting groups.
- David said the plan is to take a W3C VC, signed as specified, with payload as specified, and encode it to a QR code.
- They expect that this should work with BBS+.
- Obviously, a picture or biometric would cause issues with the size. They are trying to keep everything under 500 bytes.
- They have a policy that some data may be cached, and with the QR code, you should have everything needed to verify the credential.
- Once a QR code is written, that specific code can't be updated. So, we need to make sure we have all the necessary information.
- They are expecting a signed JSON-LD payload.
- Brent brought up that the signature scheme that is being suggested is a "two-part" signature. We had a discussion regarding how this might be encoded into QR code form.
- Is Paper Creds differentiating between paper-based credentials and paper-based passes? We had a discussion on this subject. Paper Creds is expecting that what is encoded will be in a final, usable form.
- Drummond is planning on updating the credential/pass "swimlane" diagrams. There's another possible path that came from a recent discussion with IATA. We discussed these diagrams.
- David noted that paper is probably going to be the most common use case.
- We had a discussion regarding the correlatability of paper credentials. A key point here is that there's a plethora of potential verifiers.
- Even printing out a whole stack of passes, there's still sufficient information to create correlation. Verifiable digital passes also likely have this issue, even with the other anti-correlation techniques available only to digital.
- We had a short discussion on the EU COVID-19 Certificate.
- We had a discussion regarding the verified presentation. This can be simple or a multi-step protocol.
- Raw data should target being no larger than 1500 bytes.
- Brent believes that there's no required verifier binding in the presentation.
- We had a discussion regarding how the signature scheme works with BBS+ with link secrets (ZKP & CL).

## Chat Log

00:25:20 Trev Harmon: Link to "review copy" to what Drummond is showing:  
[https://docs.google.com/presentation/d/1OGWA5bMNFGn3UQlJmb0X0pAxsJc07WyUN4c4HtTHKx0/edit#slide=id.gd6968dcb86\\_0\\_70](https://docs.google.com/presentation/d/1OGWA5bMNFGn3UQlJmb0X0pAxsJc07WyUN4c4HtTHKx0/edit#slide=id.gd6968dcb86_0_70)

00:31:57 Trev Harmon: As a side note, the newest amendments to what the EU is doing has renamed the "Digital Green Certificate" to the "EU COVID-19 Certificate".

00:44:14 Drummond Reed: <https://identity.foundation/presentation-exchange/spec/v1.0.0/>

00:58:54 Nuttawut Kongsuwan: <https://matrglobal.github.io/bbs-signatures-spec/>

00:59:05 Drummond Reed: Thanks

00:59:16 Nuttawut Kongsuwan: ^^^ BBS+ doc by MATTR

01:05:17 Drummond Reed: I have to run now, but fantastic conversation. It was very badly needed. I recommend to do another call once both groups have their revised drafts.

#### **Action Items**

1. Next meeting is Friday (10:00 EDT).