



**Blockchain  
Commons**

*Creating Open & Interoperable,  
Secure & Compassionate  
Digital Infrastructure*

**Christopher Allen**

@ChristopherA

ChristopherA@BlockchainCommons.com

cell +1.510.908.1066

Executive Director,

Blockchain Commons, LLC

7302 Yellowstone Rd

Cheyenne, WY 82009-2077

www.BlockchainCommons.com

main +1-307-220-7988

June 10th, 2022

TO: Wyoming Legislative Select Committee on Blockchain,  
Financial Technology, and Digital Innovation Technology

**Re: June 15 2022 Sheridan Meeting, 10:30pm Digital Identity**

Committee Chairs, members of Wyoming Legislative Select  
Committee on Blockchain, Financial Technology, and Digital  
Innovation Technology & LSO:

Thank you for having me back to provide testimony on the future  
of digital identity and privacy technology in Wyoming.

My name is Christopher Allen, and I am the founder of Blockchain  
Commons, a blockchain infrastructure development and research  
organization. I am the co-author of the W3C Decentralized  
Identifier specification, and I also represent the broader  
international decentralized identity standards community through  
my work.

The last five years of legislative activity stemming from this  
committee continue to place Wyoming in the forefront of digital  
asset technology & regulation. The laws successfully organized  
and executed by this committee and the task force that preceded  
it led to the establishment of my organization, Blockchain  
Commons, which is proudly domiciled in Wyoming. Thank you for  
continuing your legislative efforts to push forward a growing  
number of fundamental legal guidelines. In today's digital identity  
session, I would like to provide some thoughts and insights on  
Data Privacy, e-Residency, and Private Key Disclosure Law.

**Data Privacy**

In my testimony before this committee in prior years, I've been  
sharing not only best practices for securing digital assets, but also  
how to protect individuals participating in an increasingly digital  
world. I want to ensure that we can offer them redress for harms  
that include not just property loss, but also violations of authority,  
connecting digital identity to the precedent of the 4th amendment  
"secure in papers".

Last year, in support of these concepts, you passed a law offering a definition of digital identity, creating a new legal foundation for protecting individuals.

I would like to see this Committee continue this work by defining duties of care and best practices for digital identity and by offering clarity via laws and regulations that will provide people this safety while also continuing to attract corporations to Wyoming due to its sound, secure and pragmatic solutions to these problems.

I also want to commend last year's work on Genetic privacy; I believe that there is some great language there that we should consider applying to digital identity and biometric privacy.

### **e-Residency**

I've testified in the recent sessions about going beyond 2019-HB70, the law enabling legislation corporate registration, to enable a form of Wyoming e-Residency.

I've identified a few areas that need further consideration beyond existing legislation, so that Wyoming can offer services to organizations seeking to domicile in Wyoming. New laws can accomplish some of these unresolved issues, while others will need to be resolved through regulation.

While the current Commercial Registered Agent status is convenient for corporations, I suggest that there needs to be a third type of agent: Digital Registered Agent (DRA). A DRA is similar to a CRA but with additional capabilities and responsibilities: they will be able to present digital proofs to the Secretary of State on behalf of organizations they register.

In last year's presentation, I covered the logistics of e-Residency. One fundamental idea that follows is that it must be clear that e-Residency is not residency, but rather a utility that facilitates corporate domicile under Wyoming law. The first step to further legislation on e-Residency is to complete the implementation of previously passed laws 2019-HB070 & 2019-HB105, but at a higher level than the minimum standards set forth in these laws, so that it meets industry-leading and blockchain standards.

Wyoming's Secretary of State office should consider US Homeland Security requirements set out by Anil John when moving toward DIDs and VCs. Specifically, functions requiring digital signatures, corporate registration, etc., should consider these requirements.

Wyoming currently boasts a competitive advantage with the legal structure that is in place, so it is vital we take the next steps to further this program.

A slideshow, included, contains additional details and can be also be found at <https://docs.google.com/presentation/d/1rNs2yO2b4n4m0dFlzGUOcW1k7utMlsG6>

### Private Key Disclosure Law

I greatly appreciate that the Private Key Disclosure bill draft is an agenda topic for this committee session. With the passage of 2021 SB-39, I suggest that the draft bill be edited from covering “digital asset” to “digital asset or digital identity”, and that it otherwise be revised to build off of the existing Digital Identity law. We hope these revisions will address the valid concerns raised by members of this legislature when the bill was first introduced.

From a technological perspective, Blockchain Commons finds the draft vital for its fifth amendment protections. We also believe extrapolating protections of the fourth amendment against unreasonable search and seizures to the digital medium is also relevant. Passwords, encryptions, and private keys are the mediums through which we securely connect and interact with the digital world. The forced disclosure of a private key paves the way for bearing false witness undetectably.

As a technologist and cybersecurity expert, I can attest to the immense difficulties of transferring a private key without bearing false witness.

Unfortunately, our courts do not currently have the technical and security infrastructure to reasonably protect a keyholder’s rights and ensure that the private key — someone’s digital signature and verification of identity — does not end up in the hands of a malicious actor and otherwise cause morally egregious harms. We’ve had past testimony from Federal Attorney General and Prosecutor Mary Beth Buchanan to this effect. This is why care must be taken as to when a key disclosure is required.

Obviously, after a case is brought in front of a judge or jury and a judgment has been made, a reasonable case can be made for forced disclosure of the private key. However, having to disclose the private key in the early stages of the legal process, in discovery, pre-trial, and pre-judgment, is an unjustified overreach because an individual lacks avenues of appeal and other protections at that time. Because of the real damage that could be done by such a closure, and opportunities for false witness, or irreversible transactions, I find the protections of this Private Key Disclosure bill crucial for the future of digital rights in Wyoming.

I would like to extend my thanks to Collin Kinniry, a graduate from Wabash College entering law school in the fall, and Sunint Bindra, a student at Dartmouth College studying computer science and economics, both summer interns at Blockchain Commons, for working with me on this testimony. They also will be available this summer to assist with any further research, clarification, or input on these topics.

Regards,



Christopher Allen