

DC4EU

Digital Wallets, credentials and interoperability

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Co-funded by
the European Union

Interoperability

Description	E-mail	
Governance	DNS	
Infrastructure	Servers and clients	
Standards	Content: IMF Delivery: SMTP, POP & IMAP	
Data	Text messages	

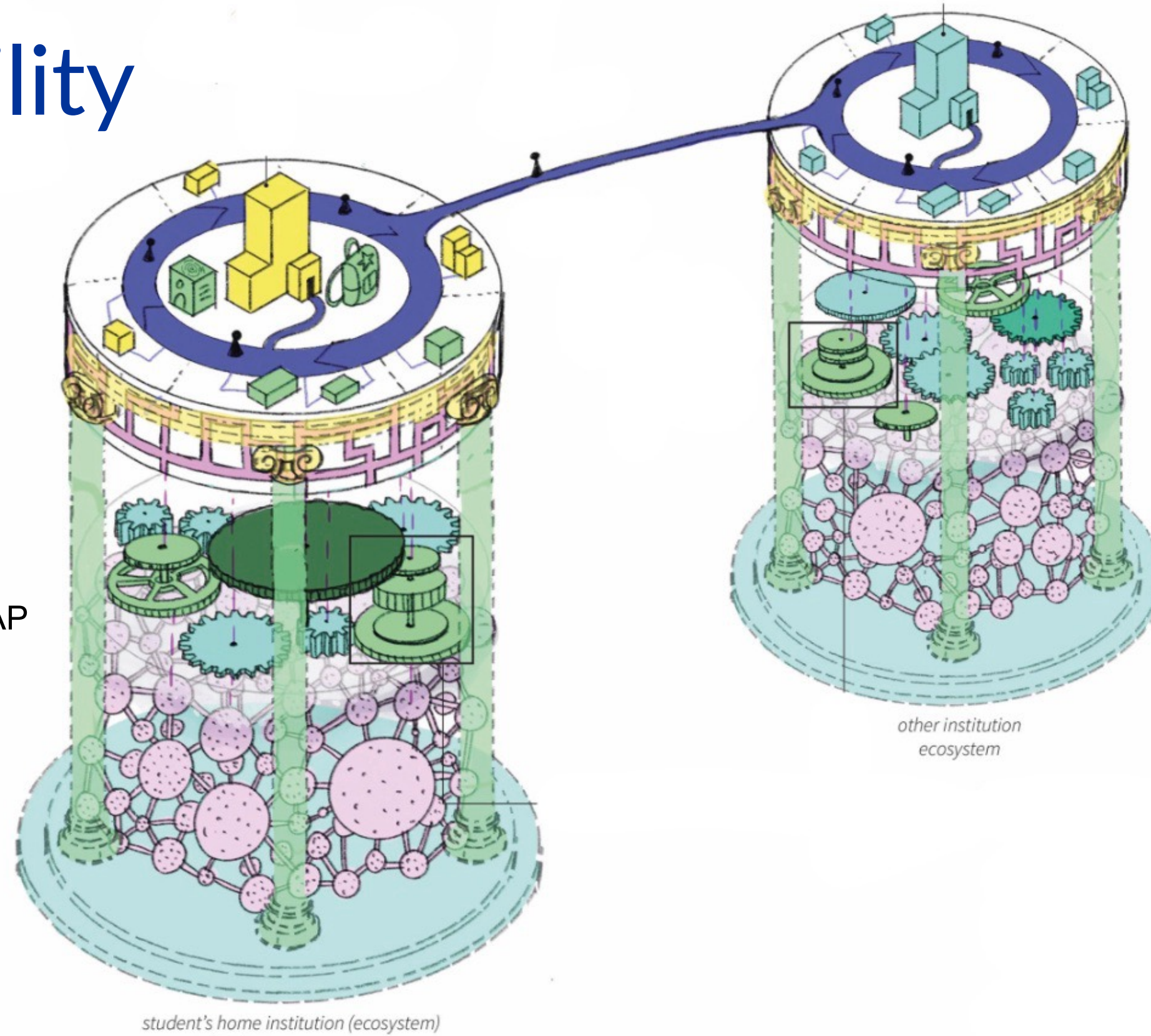
Interoperability

DNS

Servers and clients

Content: IMF
Delivery: SMTP, POP & IMAP

Text messages



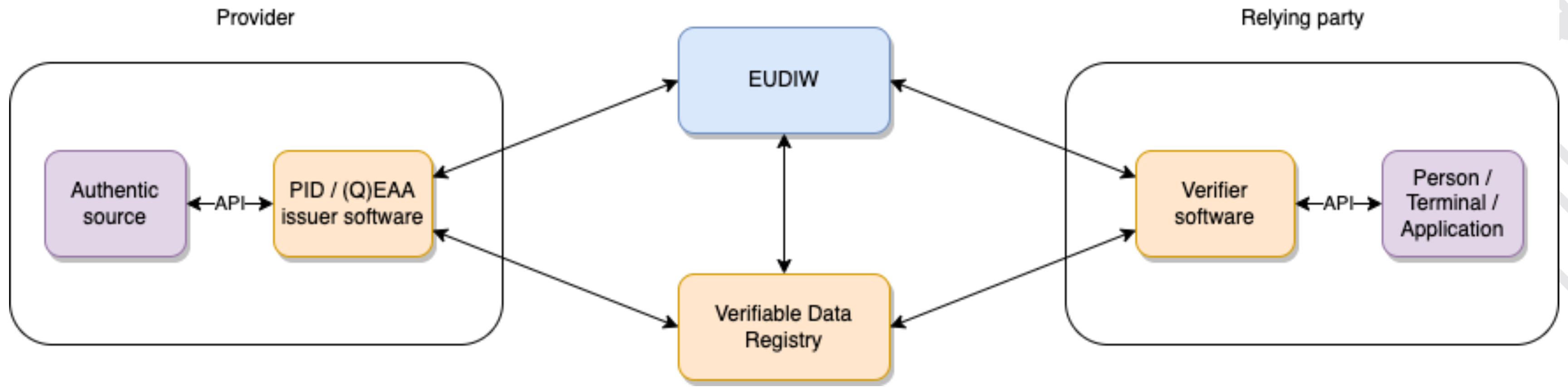
Interoperability model by SURF



Issues

Description	E-mail	
Identity	Used as proof of identity	
Integrity	Hard to avoid tracking	
Integrity	Hard to control who send you information, SPAM	
Integrity	Hard to know what information is stored about you	
Sovereignty	The user is not in control over data, e.g. stored on a server	
Authenticity	Signatures complicated, tricky to really verify who an e-mail is from	

Wallet entities



Interoperability

Description	E-mail	Wallets
Governance	DNS	Verifiable data registries
Infrastructure	Servers and clients	Issuers, holders & verifiers
Standards	Content: IMF Delivery: SMTP, POP & IMAP	Content: SD-JWT Delivery: OpenID4VCI, OpenID4VP
Data	Text messages	Credentials

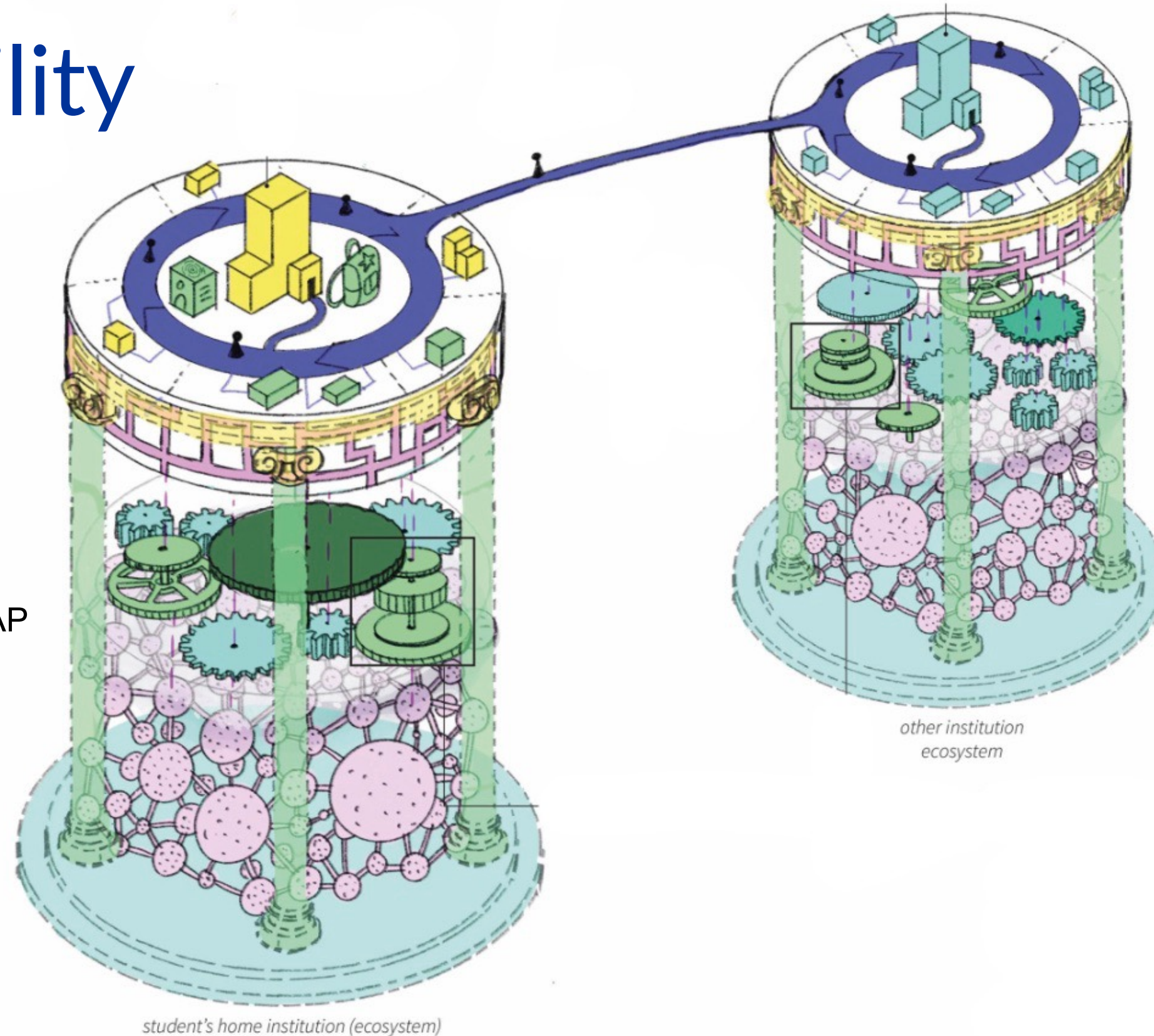
Interoperability

DNS

Servers and clients

Content: IMF
Delivery: SMTP, POP & IMAP

Text messages



Verifiable data registries

Issuers, holders & verifiers

Content: SD-JWT
Delivery: OpenID4VCI, OpenID4VP

Credentials

*other institution
ecosystem*

student's home institution (ecosystem)

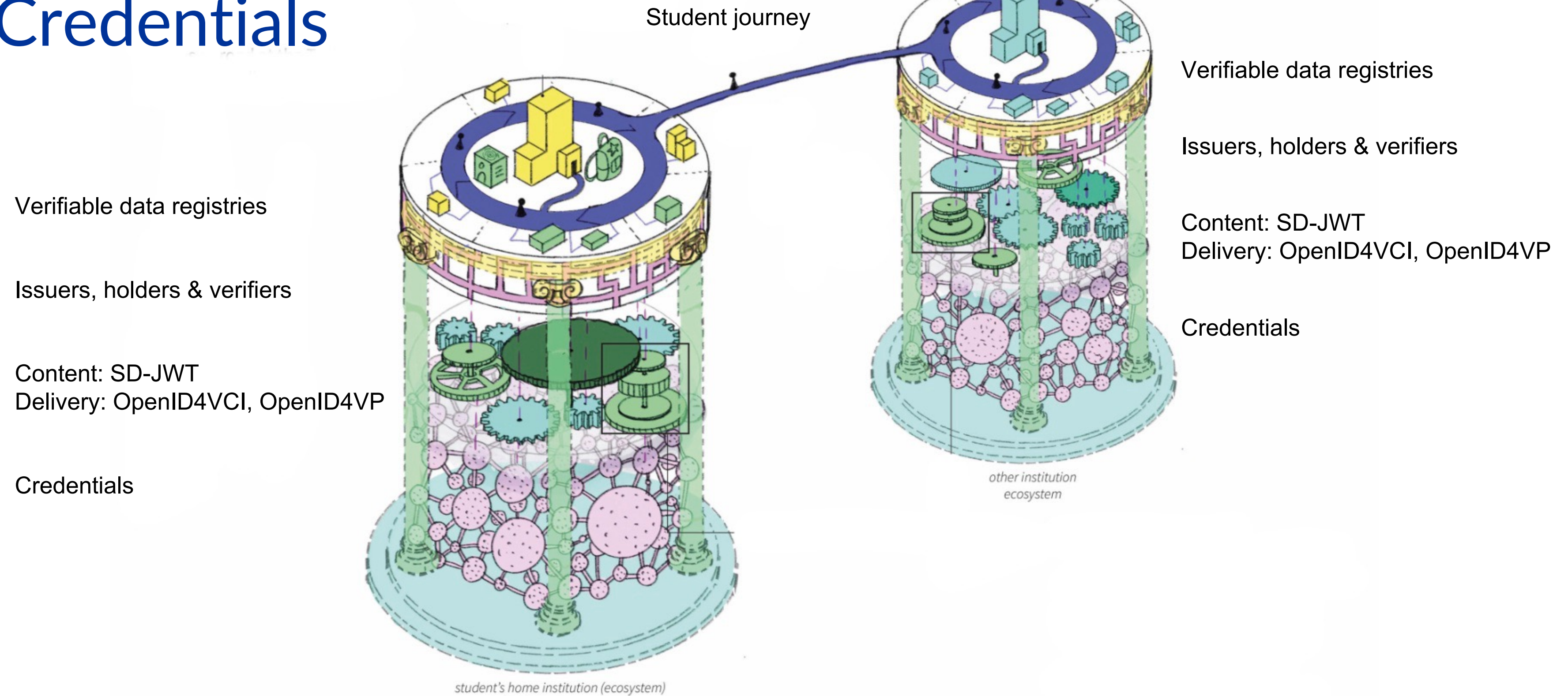
Interoperability model by SURF



Issues

Description	E-mail	Wallets
Identity	Used as proof of identity	The identity is part of the wallet with a high assurance level
Integrity	Hard to avoid tracking	Issuer not aware of when credentials are used or verified
Integrity	Hard to control who send you information, SPAM	Trust registers for entities like issuers and verifiers
Integrity	Hard to know what information is stored about you	Selective disclosure lets user choose what information to share and to whom
Sovereignty	The user is not in control over data, e.g. stored on a server	Holder is in control of credentials
Authenticity	Signatures complicated, tricky to really verify who an e-mail is from	Signatures and user binding part of the ecosystem both in wallet and from issuer

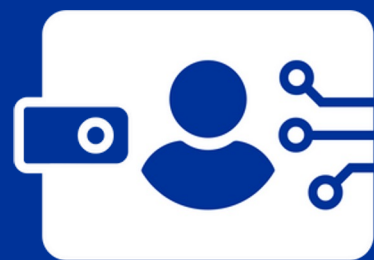
Credentials



Interoperability model by SURF

Thank

YOU!



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