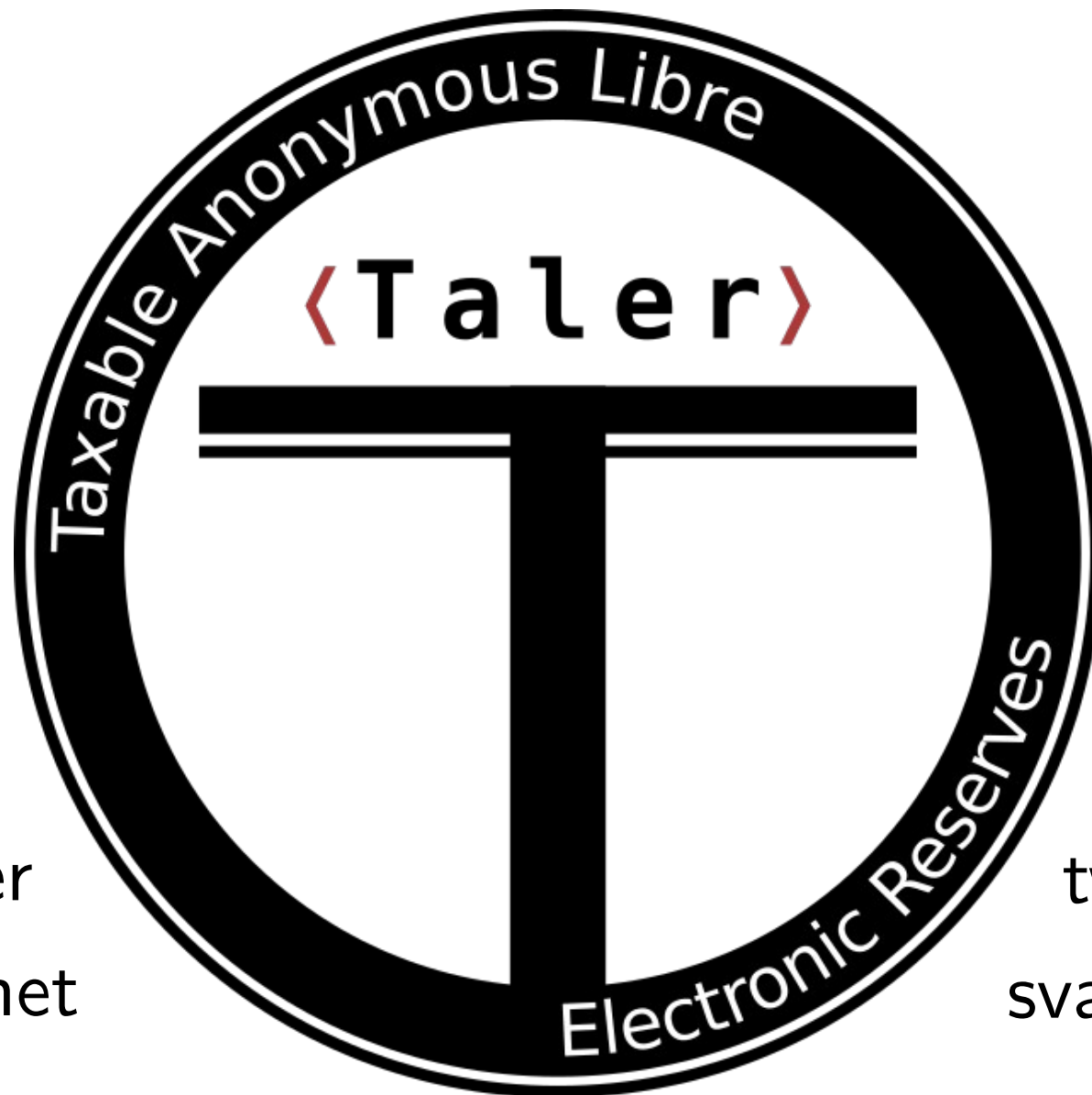


“Digital cash, made socially responsible” OR  
“Independent One-Click Cash Payments”

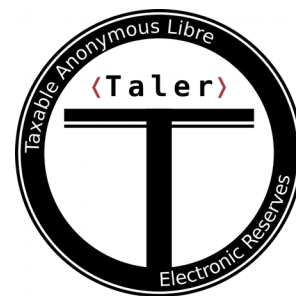


**Taler.net**  
IRC#taler  
(on freenode)  
twitter@taler  
mail@taler.net

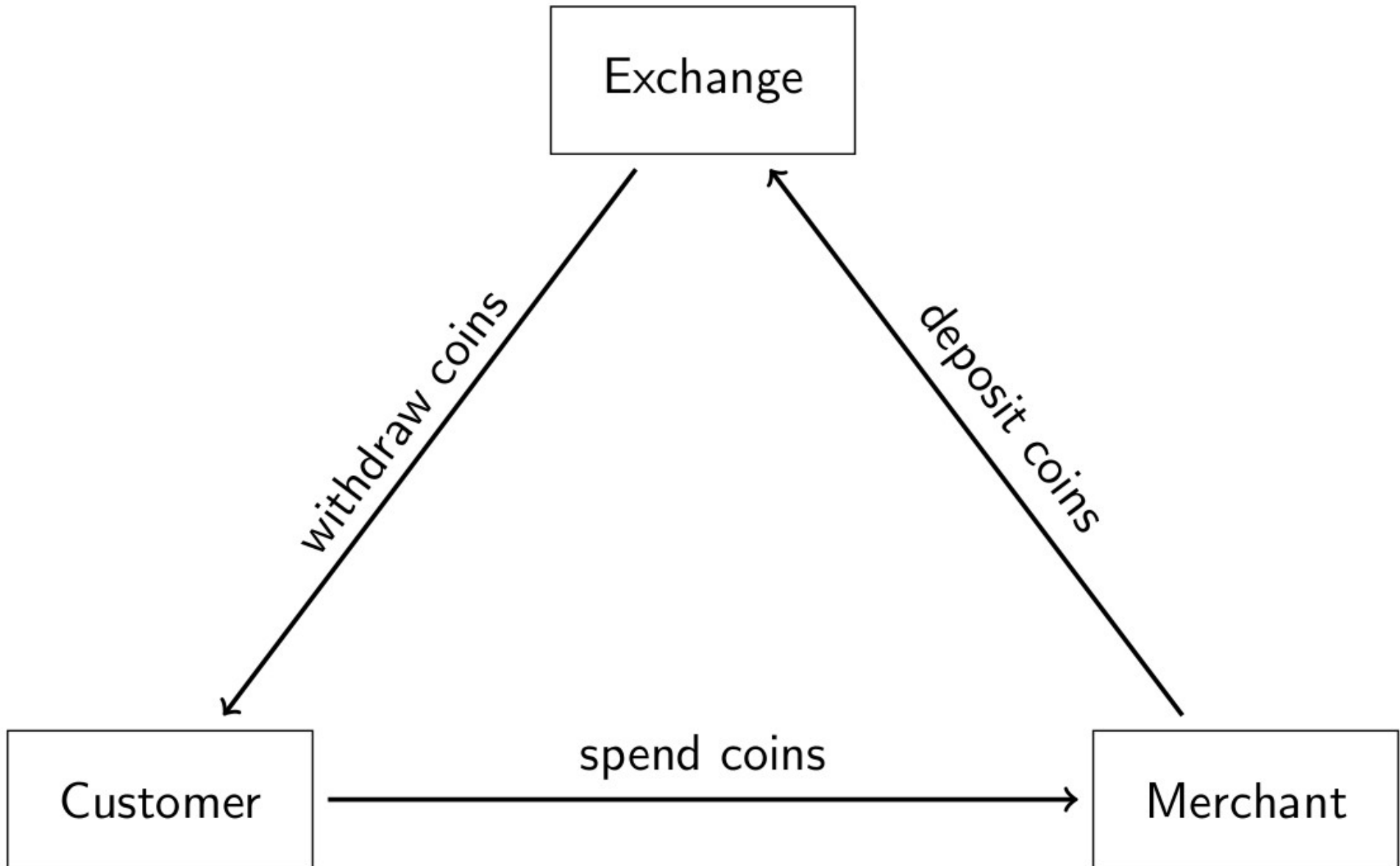
**sva**  
IRC:sva  
twitter@sva  
sva@taler.net

# What is Taler

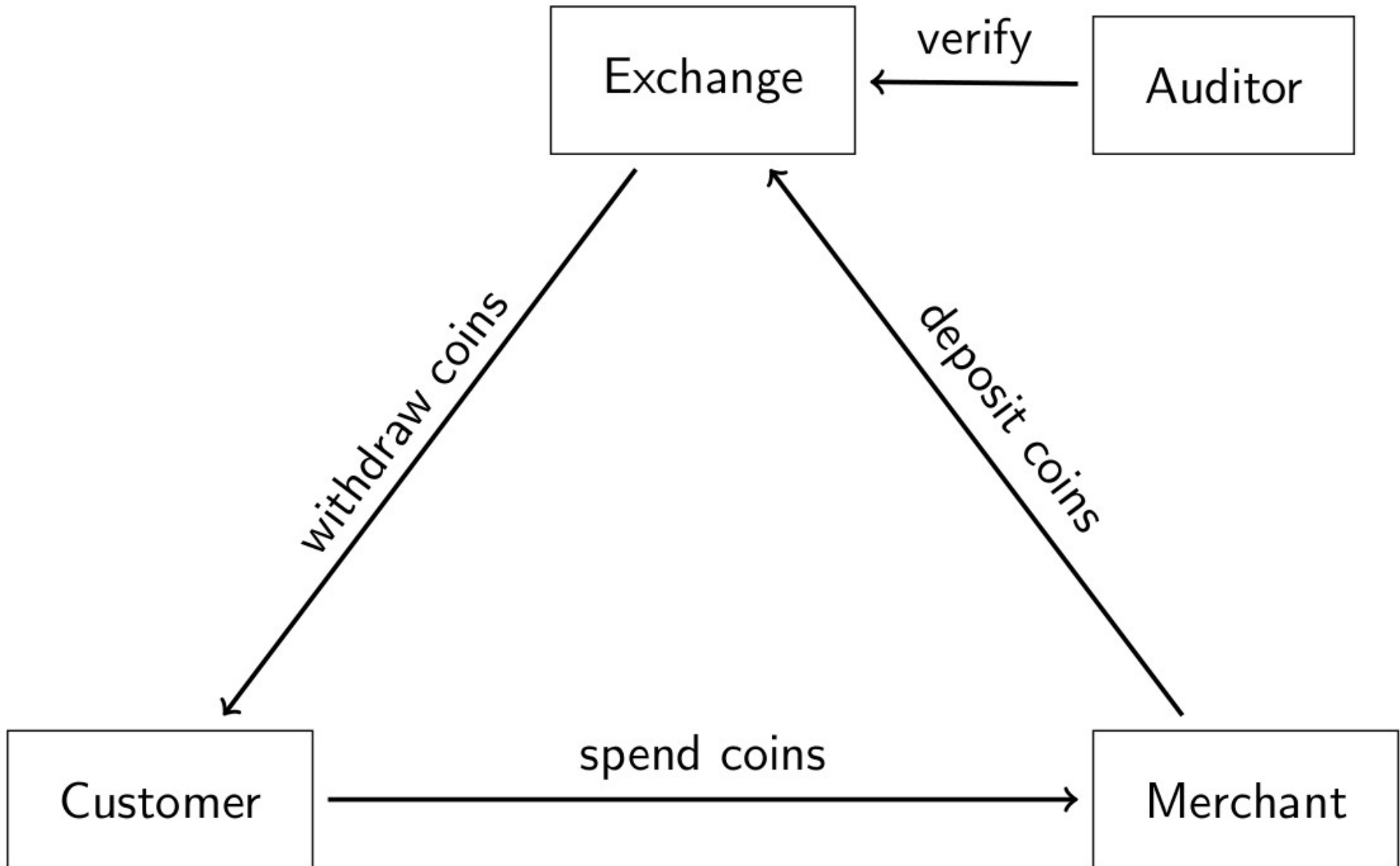
- ♦ Payment system, using existing infrastructure
- ♦ Pay in existing currencies (eg SGD, INR, Bitcoin)
- ♦ Electronic coins stored in wallets on device
- ♦ Like cash: buy anonymous, sell taxable
- ♦ Convenient & fast: one-click web-speed payments
- ♦ Free Software and uses good old Crypto
- ♦ University research project, entering real world now



# How does Taler work?

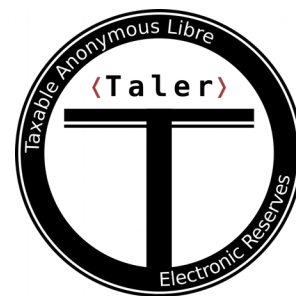


# How does Taler work?



# View as private Customer

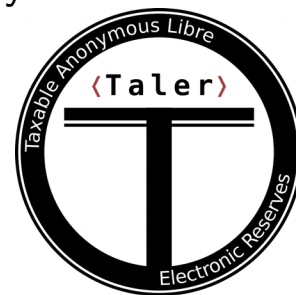
- ♦ **Fast:** pay with one click (or send money to a friend)
- ♦ **Convinient:** withdraw using credit card or wire transfer
- ♦ **Safe:** no false-positives in the fraud detection
- ♦ **Secure:** no counterfeit, proof of payment, backup of wallet
- ♦ **Free Software:** no hidden “gadgets”, third parties can verify
- ♦ **Private:** like cash: no personal information required, no Credit Card details



# View as commercial Merchant

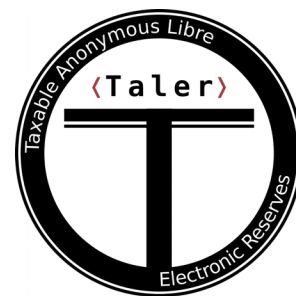
- ♦ **Fast:** payments at Web-speed
- ♦ **Convenient:** implement into shop with HTML or JS
- ♦ **Safe:** no legitimate customer rejected by fraud detection
- ♦ **Secure:** signed contracts, no sensitive customer account information = no security audits on own infrastructure
- ♦ **Free Software:** integrate easy, competitive pricing/support
- ♦ **Ethical:** no pyramid scheme, not suitable for illegal business
- ♦ **Legal:** complies with Regulation (EU) 2016/679 (GDPR)

Requires privacy by design and data minimization for all data processing; 25<sup>th</sup> May 2018



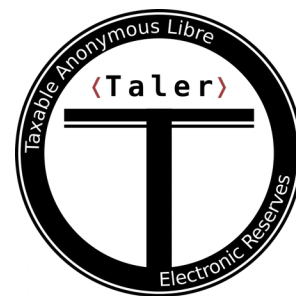
# View as Customer & Merchant

- ♦ **Low fees:** efficient protocol, no fraud, competitive providers (can be used for small transactions)
- ♦ **Flexible:** any currency/amount, different payment models
- ♦ **Stable:** no fluctuation risks, just as traditional currencies (with usual government protections for financial services)
- ♦ **Efficient:** No waste of energy, no waste of money for the whole economic system (eg like mining costs in bitcoin)



# View as taxing Government

- ♦ Free software = commons: no monopoly, preserve independence
- ♦ Taxability: reduces black markets
- ♦ Efficiency: high transaction costs hurt the economy
- ♦ Security: signed contracts, no counterfeit
- ♦ Audited: no bad banks
- ♦ Privacy: protection against foreign espionage



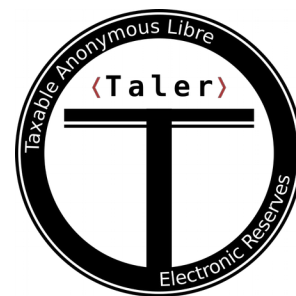


# View as Techie (Crypto used)

Taler uses a few ancient constructions:

- Cryptographic hash function (1989)
- Blind signature (1983)
- Schnorr signature (1989)
- Diffie-Hellman key exchange (1976)
- Cut-and-choose zero-knowledge proof (1985)

Of course modern instantiations are used!



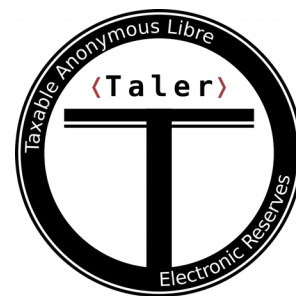
# View as Techie (Tech&Licenses)

RESTful protocol over HTTP or HTTPS

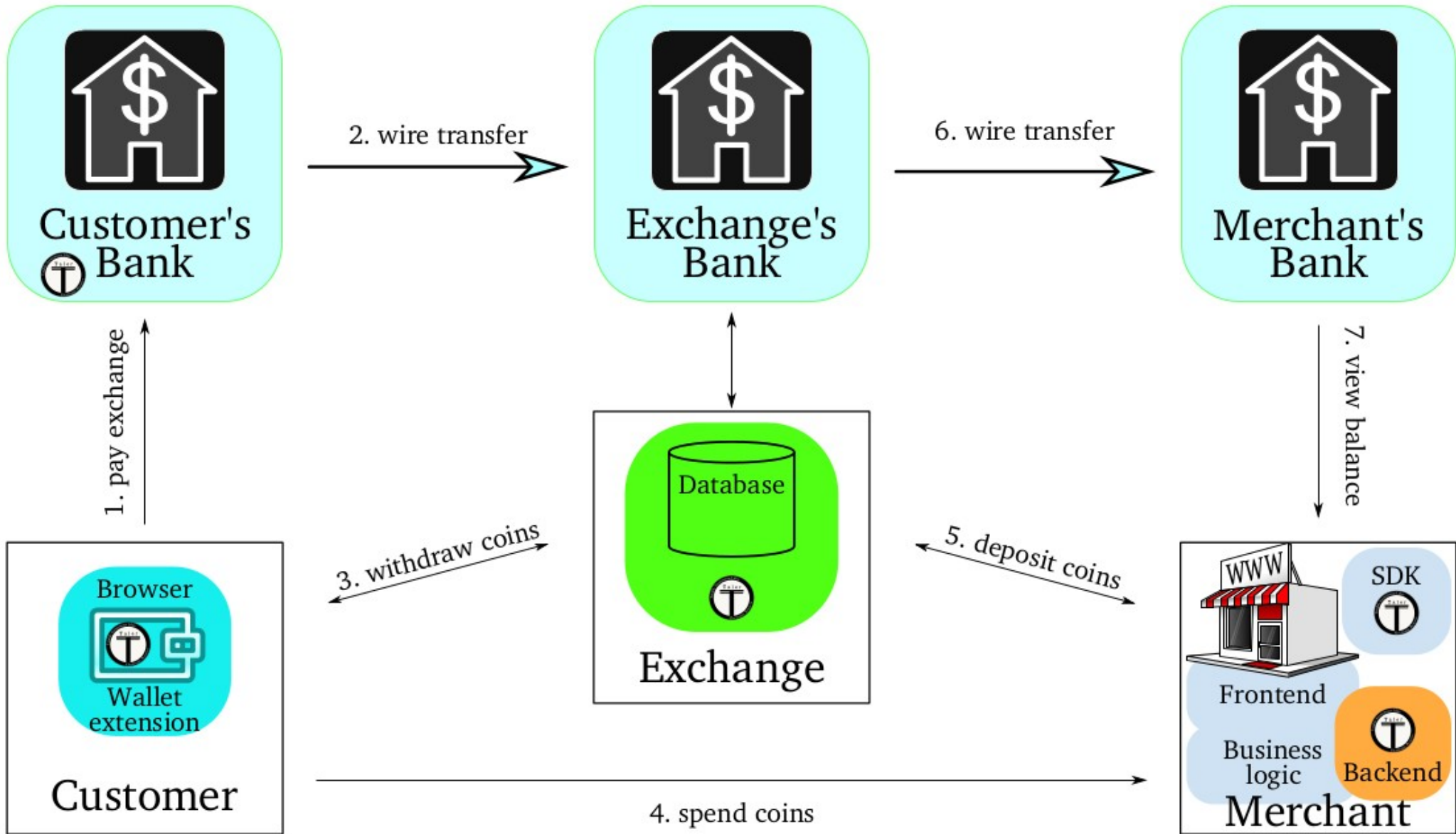
(security does not depend upon the use of HTTPS)

Licenses:

- Affero GPLv3+ for the exchange
- LGPLv3+ for reference code demonstrating integration with merchant platforms
- Licenses like Apache/Mozilla/GPLv3+ for wallets and related customer-facing software.



# Again, how does it work?

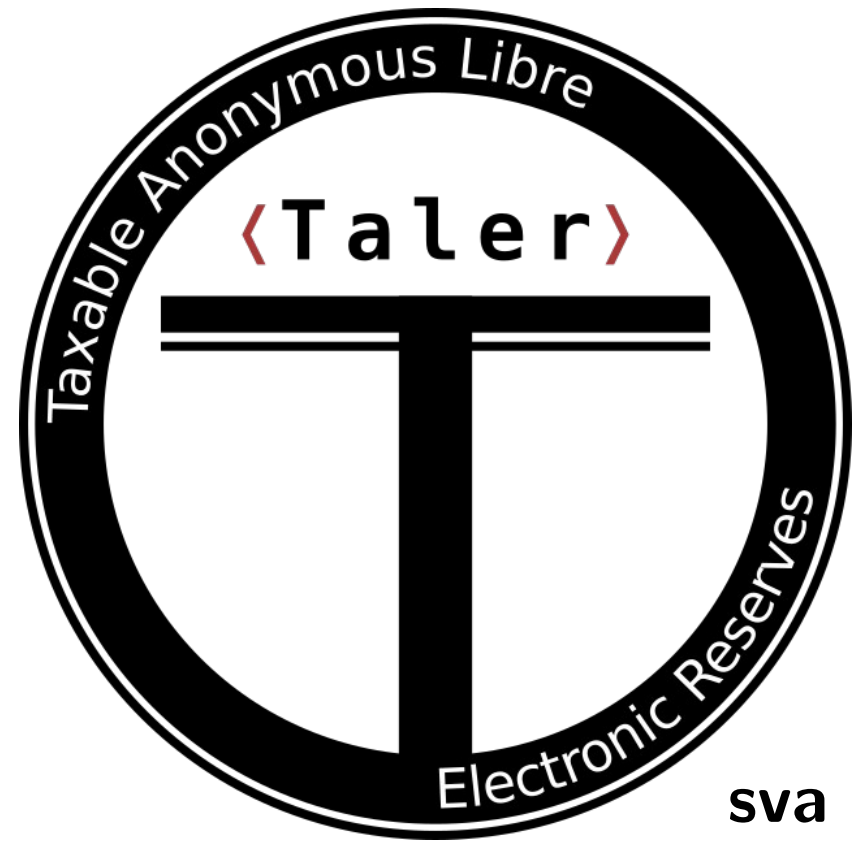


# View on others

	Cash	Bitcoin	Zero coin	Creditcard	GNU Taler
Online	----	++	++	+	+++
Offline	+++	--	--	+	--
Trans. cost	+	----	----	-	++
Speed	+	----	----	o	++
Taxation	-	--	----	+++	+++
Payer-anon	++	o	++	----	+++
Payee-anon	++	o	++	----	----
Security	-	o	o	--	++
Conversion	+++	----	----	+++	+++
Libre	-	+++	+++	- - -	+++

# Go on...

- ♦ [demo.taler.net](http://demo.taler.net)
- ♦ [docs.taler.net](http://docs.taler.net)
- ♦ [api.taler.net](http://api.taler.net)
- ♦ [git.taler.net](http://git.taler.net)
- ♦ **subscribe [taler@gnu.org](mailto:taler@gnu.org)**
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- ♦ tell friends, give feedback,  
find exchanges, e.g. banks!



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