

THE MME CHALLENGE

Blockchain Use Case 1

Smart Contract Templates for payment of government taxes and levies

Application example: Ethereum Smart Contract Templates provided by the Swiss VAT authorities for the settlement of Swiss VAT on Smart Contract based taxable transactions on the Ethereum protocol (i.e. supplies of goods or services provided domestically against payment):

- Generic regulatory Smart Contract Templates
- Registration / identification / transaction process incl. KYC and whitelisting of wallet addresses considering data protection.
- Distinction between domestically provided taxable services and export (exempt): Documentation of the place of performance? Identification of the recipient (KYC)?
- Different tax rates according to type of service: 7.7% normal, 3.7% accommodation, 2.5% reduced (eg food), 0% Export
- Invoicing: details of the taxable person (name, address, VAT number), details of the recipient (name, address), Date, type of service, remuneration, tax rate, tax amount -> how can Blockchain transaction data be used for this purpose, taking data protection into account?
- Quarterly, a tax declaration is automatically generated in which the transactions are reported.
- Depending on the service, the recipient of the service can claim input tax, provided that he is himself liable to tax.
- Value Added Tax Act:
<https://www.admin.ch/opc/de/classified-compilation/20081110/index.html>

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Blockchain Use Case 2

Automating VAT payment for exchange of goods and services on a distributed service infrastructure

Example for such a use case:

- golem (distributed computing network, e.g. like decentralized AWS)
- IPFS (distributed file network, e.g. like decentralized dropbox)

User Story 1

- User 1 lives in Switzerland and presents his computer to User 2 (also living in Switzerland) within the scope of an entrepreneurial activity against payment of 10 ETH.
- User 1 is generally subject to VAT because he generates more than CHF 100,000 a year in sales from his entrepreneurial activity.
- User 1 must therefore register for VAT and pay his VAT.
 - Wallet addresses whitelists.
 - Providing computer services for a fee is a service which is subject to a tax rate of 7.7%.
 - It must therefore the tax Smart Contract based to the tax authorities paid and
 - a corresponding receipt can be created.
- User 2 the paid input tax to make valid, if he is taxable himself. For it would have itself likewise for VAT and have his wallet addresses whitelisted.

User Story 2

- User 1 lives in Switzerland and sets his computer User 2 (residing abroad) against his computer within the scope of an entrepreneurial activity. Payment of 10 ETH is available.
- User 1 is basically subject to VAT because he generates more than CHF 100,000 in annual turnover from his entrepreneurial activities.
- User 1 must therefore register for VAT
 - Wallet addresses whitelisted.
 - The place of performance of the service is at the place of the recipient.
 - However, the export of services is exempt (i.e. 0%) if it can be sufficiently proven.
- No tax has to be paid, but a corresponding document can be created.