

NEXT GENERATION INTERNET

The “donau” scheme (draft-grothoff-donau)

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IETF 125: DISPATCH

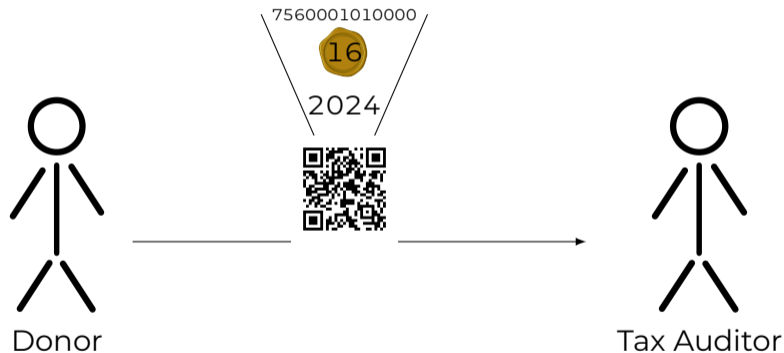
donau URI scheme

<https://lsd.gnunet.org/lsd0013/>

- ▶ Donations to charities are often tax-deductable
 - ▶ Filing taxes with unstructured paper-receipts is messy
 - ▶ Taxes are often still filed on paper
- ⇒ `donau://` as a QR-code compatible proof of tax-deductable donations

The URI contains the amount donated, the corresponding year, the tax id number and the donation statement signature.

Validation



- ▶ The tax auditor is able to view the data and check the signature using the provided smartphone app.

Discussions at IETF

- ▶ uri-review: <https://mailarchive.ietf.org/arch/msg/uri-review/tSTAIyY9ZRCYmTt4L1Y0wpnoIN4/>
 - ▶ Good inputs from Ted Hardie
 - ▶ All points made were addressed
 - ⇒ IANA provisional registration exists
- ▶ Draft includes OCR-friendly Base32-encoding inspired by Crockford but allowing **u** \equiv **v** (also used by RFC 9498).
- ⇒ Separation was suggested, if anyone wants this?

Context

This is part of a larger protocol effort (<https://git-www.taler.net/>):

- ▶ Enable *anonymous* donations
- ▶ Ensure only approved charities can sign donation statements
- ▶ Make total amount of donations received per charity transparent to authorities
- ▶ Free software for citizens, charities, and tax authorities exists

This is part of an even larger protocol effort:

- ▶ Taler protocol enables *anonymous* digital cash
- ▶ Complex protocol with giving change, refunds, age-restrictions, etc.
- ▶ Already birthed RFC 8905.

Options for next steps

- ▶ Leave it at donau draft
- ▶ Send donau draft to ISE for informational track (separation of appendix?)
- ▶ Create payment BOF and charter WG for payment protocols¹

GNU Taler

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¹Note: No blockchains/DLTs involved here.

References

1. Özgür Kesim, Christian Grothoff, Florian Dold and Martin Schanzenbach. *Zero-Knowledge Age Restriction for GNU Taler*. **27th European Symposium on Research in Computer Security (ESORICS), 2022.**
2. David Chaum, Christian Grothoff and Thomas Moser. *How to issue a central bank digital currency*. **SNB Working Papers, 2021.**
3. Christian Grothoff, Bart Polot and Carlo von Loesch. *The Internet is broken: Idealistic Ideas for Building a GNU Network*. **W3C/IAB Workshop on Strengthening the Internet Against Pervasive Monitoring (STRINT), 2014.**
4. Jeffrey Burdges, Florian Dold, Christian Grothoff and Marcello Stanisci. *Enabling Secure Web Payments with GNU Taler*. **SPACE 2016.**

Acknowledgments

Funded by the European Union (Project 101135475).



**Co-funded by
the European Union**

Funded by SERI (HEU-Projekt 101135475-TALER).

Project funded by



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
**State Secretariat for Education,
Research and Innovation SERI**

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