

TALER

Taxable Anonymous Libre Electronic Reserves

Project number: Horizon Europe 101135475

D3.2

Report on the TALER Bookseller

SUCCESSFUL LAUNCH

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\mathbf{PP}	Restricted to other programme participants (including the Commission services)						
\mathbf{RE}	Restricted to a group specified by the consortium (including the Commission services)	Τ					
CO	Confidential, only for members of the consortium (including the Commission services)						

	HISTORY OF CHANGES							
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	DATE							
0.1	2025-05-09	Preliminary version (unreleased)						
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0.5	2025-05-29	Add screenshots and fix lists						
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0.7	2025-05-30	Arrange screenshots and link to follow-up topic on TALER						
		ICH						
0.8	2025-05-30	Final review by GLS						
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Report on the TALER Bookseller

SUCCESSFUL LAUNCH

Jean-Michel MASSIBOT Reviewers: Özgür Kesim (CBG) and Leo Wittmann (GLS)

 $\begin{array}{c} 2025\text{-}05\text{-}30\\ \text{Revision } 1.0 \end{array}$

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Abstract

The TALER Bookseller, second deliverable by PS, and third in WP3 was delivered on time despite unforeseen constraints.

The TALER Bookseller provides a fully working demonstration of TALER software, enabling anyone to acquire digital versions of books sold by PS using GNU Taler payment system online.

Keywords: WP3, PS, Bookseller, Taler, implementation, BOOKZ

Chapter 1 D3.2 TALER Bookseller is online!

WP3, *Verticals Towards Commercialization* aims to investigate three vertical markets, in complement to WP2's Finance vertical market:

- 1. The Independent Book Sector (#books)
- 2. Inclusion and e-Health (#inclusion)
- 3. The Free/Libre Open Source Software Supply Chain (#floss)

The TALER Bookseller focuses on the first item and proposes that PS, the publishing partner within the TALER consortium, sell their books online using GNU Taler. This report provides details of the implementation and access to the online shop running the system.

1.1 Means of Verification

- 1. The website https://bookseller.taler.net/ is online.
- 2. Anyone can follow the demonstrator: installing TALER Wallet, obtaining credits from the demo bank, shopping for PS books, obtaining the corresponding digital files.
- 3. TALER Bookseller announcement to the Fediverse: https://ich.taler.net/t/ngi-taler-bookseller-d3-2/419
- 4. Press Release is public: https://ich.taler.net/t/ngi-taler-bookseller-d3-2-is-online/418
- 5. PS TALER page links to the TALER bookseller: https://ps.lesoiseaux.io/taler/#taler-d32
- 6. PS online store proposes to pay with TALER: https://shop.bookseller.taler.net/

Chapter 2 Making of D3.2

The independent book sector forms an ideal market vertical: all publishers have web sites, they form tight networks with their supply chain (printshops, distributors) and customers (bookshops), and cooperate at regional, national, and international level through federations. Moreover, since the 2020 confinement, most independent publishers and bookshops started selling online independently, considering Amazon, with reason, a threat to their operations and sustainability. As an independent publisher, PS is part of this network of MSMEs who actively resist monopoly and are eager and determined to embrace innovation.

The history of PS stems from free software activism and book making. Even before we incorporated our association, we were active making books: our founders were instrumental in structuring *Cost of Freedom* (2015), in support for late Syrian Creative Commons activist Bassel Khartabil, who died in Bashar Al Assad's prisons; they also ran a booksprint for *software freedom*, *your way* (2016) which documented the Debian fork and proposed a human and collective approach to free software that informed the core of *petites singularités*' path forward.

From this experience, PS started producing books on a yearly basis since 2019, and started professionalizing this activity since 2021. Coming from free software and the GNU project, it was only natural for PS to embrace GNU Taler, a promising electronic payment system that was the only credible proposal from the free software community to counter dominant projects competing to take control of online payment systems across the board. Besides being the only viable proposal coming from the free software, GNU Taler offers unique characteristics that make it a serious contender against industrial giants in payment systems.

GNU Taler's unique design brings, in our opinion, four invaluable advantages over competition:

- 1. privacy of the buyer (good to *uphold EU values*);
- 2. transparency of the seller (good for thwarting tax evasion and money laundering);
- 3. free software (good for *technical sovereignty and security*);
- 4. and *much cheaper operational costs* than existing solutions (good for long-term competition and keeping transaction costs low).

As an independent publisher in 2025, who needs to sell books online, and at events, GNU Taler provides a cost effective and ethical payment solution, and we're looking forward to see it thriving on the European Single Market. Due to its much lower operational costs, GNU Taler is also perfectly suited to handle micro-payments, opening new opportunities for publishers, like selling ebooks or single articles. This deliverable, for PS, was therefore a first practical step in exploring what we — professionals of the independent book sector — can do with GNU Taler.

The original plan within the consortium was that:

- GLS provides a businnes account to PS
- PS implements Taler payment on the online bookstore
- PS sells books online using Taler payment system
- Books are sold in Euro

Unfortunately, the intended course of events had to adapt to reality.

2.1 Unforeseen Constraints

The original motivation of the consortium was to offer the GNU Taler payment services for the whole European market with a particular emphasis on making the system technically safe while guarding private user data. However, the current deployments cannot offer PS a bank account and/or access to the Taler system due to limitations in the individual service provider's licensing or product structure. Under these circumstances, PS is not legally authorized to, and cannot become a Taler Merchant within the upcoming payment system in euros by GLS, jeopardizing the original intent, and leaving PS only a few weeks to adjust to a suitable solution for this deliverable.

Moreover, we were not able to find dedicated bookseller software supporting Taler payment APIs, within the technical stack used by PS. Our free software of choice eventually applied to, and was selected for, funding through the NGI TALER Open Calls, but they prefered not to pursue this funding and postponed Taler support to focus on their regular roadmap and more practical matters; although we could have run a temporary server for the purpose of this deliverable, using a existing implementation of Taler, made outside the scope of NGI TALER, we deemed useless to pursue something that we would not be able to maintain on the long term. Besides, there's already such a demonstrator not using euros but a fictional currency, running at https://demo.taler.net that does not require any setup from customers since it comes pre-configured with Taler software.

2.2 Resolving the Issues

Since we could not achieve our original intent for reasons independent of our will, we decided to reduce the scope of the D3.2 demonstrator to something manageable. We seeked the Project Officer and offered a leaner version of the original bookseller across the Eurozone, to focus on the implementation of the demonstrator for BOOKZ, a fictional currency distinct from KUDOS; BOOKZ are designed, similarly to KUDOS, as a fictional currency for the purpose of buying and selling books. The demonstrator would be integrated with PS online bookstore, so that potential buyers could choose to acquire electronic versions of our books using the Taler payment system. The demonstrator implements the following GNU Taler components:

- The *libeufin-bank* software;
- The *taler-exchange* software;
- The *taler-merchant-backend* software;
- The Taler Point of Sale app for Android;
- The *Taler Wallet* apps for Android, iOS, or the Web.

The *libeufin-bank* software, running at https://bank.bookseller.taler.net/, simulates all bank accounts involved in the demo: the customer's bank account, the account for the *TALER Bookseller Exchange*, and the *TALER Merchant*'s bank account. During the demo, each customer must open a bank account in BOOKZ, to simulate their own bank account in EUR. When the bank account is created, it is automatically credited with a sum of BOOKZ that can be wired to the *TALER Bookseller Exchange* in order to withdraw TALER BOOKZ tokens in the customer wallet for privacy-preserving payments at the *TALER Merchant*.

The *taler-exchange* software, running at https://exchange.bookseller.taler.net, simulates the financial entity that is authorized to accept fiat currency and deliver bearer tokens (so-called *digital cash*, as it serves the same purpose as paper money: transferring value to the bearer). The Exchange only interacts with the bank(s) and the wallet(s), and remains transparent to the customer outside of the withdrawal operation (turning fiat currency into digital tokens), and to the Merchant during the deposit operation (when the Merchant passes the digital cash to the Exchange in order to be transferred back to fiat currency into their bank account via aggregate wire transfer).

The *taler-merchant-backend* provides a Web interface to manage an inventory with stocks, products and description. It may be connected to a front-end shopping application such as *WooCommerce*. The ongoing NGI TALER Open Calls operated every two months by our partner NLnet aims to grow the number of software integrating Taler payments, that can be found in the Integrations category of TALER ICH, our integration community hub, operated by PS (also known as D3.1).

We tested the sales of electronic version of PS books during the first edition of the *Political* Book Fair in Lille, using the taler PoS app for Android. The Point of Sales (PoS) app connects to the Taler Merchant Backend and retrieves the inventory of products, which appears on the screen, divided in categories. For our purpose, PS made a collection-based catalog. Tapping on the collection name, then on the desired product, would add it to the cart. Once the order is ready, the PoS offers two ways of payment:

- flashing a QR code from the Taler Wallet;
- sharing a *taler://pay/* link to share via email or a messaging application, for use with the Web version of the Taler Wallet.

In order to pay with Taler, the customer must do two things: install a Taler Wallet and withdraw digital cash.

Each customer must use a Taler Wallet. The wallet app is available for Android and iOS, as well as major web browsers (Chrome/Chromium, Firefox, Opera). The Exodus Privacy website rates Taler Wallet with *zero trackers*, in accordance with the privacy-by-design and privacy-by-default goals of GNU Taler; this is unlike most other payment apps on Android. Once the wallet is installed, the customer must withdraw BOOKZ (in this demo, this also requires adding the correct Taler Exchange, since each Exchange is currently tied to a single currency: hit the + button and enter 'https://exchange.bookseller.taler.net' for the Exchange URL); the TALER Bookseller Exchange replies with a specially crafted wire order, that the customer can use from their bank account to wire currency to the Taler Exchange ; then the Exchange issues tokens and credits them to the Taler Wallet.

In order to withdraw digital cash, customers need to wire money from their bank account to the Taler Exchange for their currency. In this demo, the currency is BOOKZ, therefore customers must have a bank account at https://bank.bookseller.taler.net/.

This bank account will be used during the withdrawal operation that can be initiated from the Taler Wallet. The TALER Bookseller Exchange gives a wire order to the customer, who can then use the bank account to wire the requested amount in BOOKZ currency to the bank account of the Exchange (named 'exchange' in the demo). The wire order contains a cryptographic key that authenticates the operation, ensuring the digital cash go to the right Wallet.

With BOOKZ in their Taler Wallet, customers can buy books from PS!

2.3 D3.2 in Action

The TALER Bookseller demonstrator is fully documented online and integrated in our usual discussion spaces.

Please visit https://bookseller.taler.net

The Appendix below presents screenshots of the various components involved in the demonstrator, means of verification, and relevant pictures.

2.4 Future Work

Summary

- 1. Update demo with new releases
- 2. Review documentation
- 3. Increase participation in the documentation
- 4. Integrate with PS bookshop in EUR

Follow up to this report will be available on TALER ICH.

This demonstrator is based on the recently released version 1.0.0 of Taler software. During our research, PS found several occurrences of bugs in the software and the documentation, leading to timely fixes by the development team. PS intends to update the demo as new versions of the software are released, in order to help testing and reporting issues to developers.

The current documentation appears to suffer from rot: some passages, written years ago, may have been obsoleted by newer versions, as discovered during the implementation of this demo. Therefore, PS intends to review documentation to ensure software can be installed without hiccups by following the documented processes, and clarified where confusion may arise from a lack of understanding of the system. With a composable software of that magnitude, discrepancies between code and documentation are bound to happen.

Unfortunately, most software funding focuses on development, and not on maintenance and documentation. Smaller issues in documentation, often hard to impossible to detect, may generate a cascading chain of incurred costs in time and frustation; therefore it's important to ensure highest quality assurance not only for code but also for the documentation. Following the adage "more eyeballs make all bugs shallow", through open debate on https://ich. taler.net/, PS enables anyone in the Taler community, technician or not, to report issues unrelated to code, offering a space for discussion and triage before an eventual escalation to reporting qualified issues to the principal bug tracker of the Taler project at https://bugs. taler.net.

We believe that an inclusive community involving all stakeholders is necessary to fulfill the promise of software freedom and digital sovereignty. We're also confident that developer time is precious and therefore must be shielded from unqualified, time-consuming issues: the conversational nature of a forum complements the mailing-list, providing a curated and searchable facility to discover and resolve common problems. This approach allows more people to participate in curating effective documentation that can eventually integrate the official project documentation.

PS envisions a moment when, once the NGI TALER is successfully completed and Taler payment in Euro is available across the Eurozone, we can integrate it fully with the PS bookstore. This deliverable D3.2 is but a first step on that journey.

Chapter 3

Appendix: Screenshots



Figure 3.0.1: The TALER Bookseller Home Page

TALER	TALER Bookseller Bank	
		Welcome to TALER Bookseller Bank!
		Username
		identification
		Password
		Log in
		Register
Learn more Copyright ©	about GNU Taler 2014—2025 Taler Systems SA. Version 1.0.2	4417deda)

Figure 3.0.2: The TALER Bookseller Demo Bank Home Page

Taler Bank	© 🧶 🗮						
Welcome, Bank admin	istrator 0						
Newbergh							
New bank account	Login username *						
	exchange						
	Account ID for authentication						
	Full name *						
	TALER Bookseller Exchange						
	Name of the account holder						
	Email						
	To be used when second factor authentication is						
	enabled						
	Phone						
	To be used when second factor authentication is						
	enabled						
	Max debt						
	BOOKZ 1312						
	How much the balance can go below zero.						
	Minimum cashout						
	BOOKZ 0						
	account.						
	Is this account public?						
	Public accounts have their balance publicly accessible						
	Does this account belong to a Payment						
	Service Provider?						
	Cancel						
	Create						
Learn more about GNU Taler							
Copyright © 2014—2025 Taler Systems SA. V	lersion 1.0.2 (4417deda)						

Figure 3.0.3: The Taler Exchange bank account must be marked to 'belong to a Payment Service Provider'

Username	Name	Balance	
admin	Bank administrator	- BOOKZ 13355.79	Change password
exchange	TALER Bookseller Exchange	BOOKZ 1406.63	Change password
ps	PS	BOOKZ 1447.79	Change password
samizdat	SAMIZDAT	BOOKZ 1325.37	Change password
test	TEST	BOOKZ 100	Change password

Figure 3.0.4: The TALER Bookseller Demo Bank Accounts (admin and Exchange)

TALER Bookseller Bank	
	Account registration
	Login username *
	account identification to login
	Password *
	Password
	Use a strong password: 8 characters minimum, don't use any public information related to you (names, birthday, phone number, etc) and mix lowercase, uppercase, symbols and numbers
	Repeat password *
	Same password
	Full name *
	John Doe
	Cancel Register
Learn more about GNU Taler Copyright © 2014—2025 Taler Systems SA. Version 1.0.	(4417/deda)

Figure 3.0.5: Bank account registration form

TALER Bookseller Bank		
	Account registration	
	Login username *	
	jane	
	Password *	
	Use a strong password. & characters minimum, don't use any public information related to you (names, birthday, phonen number, etc) and min lowercase, uppercase, symbols and numbers	
	Repeat password *	
	Full name *	
	Jane Doe	
	Cancel Register	
Learn more about GNU Taler Copyright © 2014—2025 Taler Systems SA. Version 1.0.2	417dedi)	

Figure 3.0.6: Bank account registration form filled for Jane Doe

Wetcome, Jane Doe BOOKZ 1312 Send money Image: Counterpart Subject Withdraw digital money into your mobile wallet or browser extension Image: Counterpart Subject Transactions history Subject 2905/2025 BOOKZ 1312 admin 160251 BOOKZ 1312 admin borus Image: Transaction provement of the sense of the	Send money Image: Im	TALER Bookseller Bank				
Send money Image: to a Taler wallet for a mother bank account Withdraw digital money into your mobile wallet or browser extension Image: transfer to an account with known bank account number. Tansactions history Tansactory Date Amount Counterpart Subject 2905/2025 1602.51 BOOK2 1312 admin bonus Iso2251 BOOK2 1312 admin bonus Test page Next	Send money Image: to a Taler wallet for another bank account Withdraw digital money into your mobile wallet or browser extension The a wire transfer to an account with known bank account number. Transactions history Tanactions history Subject 2905/2025 60/21312 admin bonus Image: Transactions in the provide the state of		<u>Welcome, Jane I</u>	Doe		BOOKZ 1312
image: into a Taler wallet to another bank account Withdraw digital money into your mobile wallet or browser extension The a wire transfer to an account with known bank account number. Transactions history Date Amount Counterpart Subject 2905/2025 1602:51 BOOKZ 1312 admin bonus First page Next	Image: to a Taler wallet to another bank account Windraw digital money into your mobile wallet or browser extension Let write transfer to an account with known bank account number. Tarsactions history Date Amount Counterpart Subject 29/05/2025 1 BOOKZ 1312 admin bonus Iffict page Interpart First page Next		Send money			
Date Amount Counterpart Subject 2905/2025	Date Amount Counterpart Subject 2905/0225 16:02:51 BOOK2 1312 admin bonus		S Withdraw digital m	to a Taler wallet noney into your mobile wallet or browser extension	↔ to anoth Make a wire transfer to an acco	ner bank account unt with known bank account number.
Date Amount Counterpart Subject 29/05/2025	Date Amount Counterpart Subject 29/05/2025	Transactions history				
29/05/2025 16:02:51 BOOKZ 1312 admin bonus First page Next	29/05/2025 16.02:51 BOOKZ 1312 admin bonus First page Next		Date	Amount	Counterpart	Subject
160251 BOOKZ 1312 admin bonus First page Next	160251 BOOKZ 1312 admin bonus First page Next		29/05/2025			
First page Next	First page Next		16:02:51	BOOKZ 1312	admin	bonus
						First page Next
		arn more about GNU Taler				

Figure 3.0.7: Bank account registered for Jane Doe

R TALER Bookseller Bank			
<u>Welcome, Jane Doe</u>			BOOKZ 1312
Send money	ler wallet 🛛 📀	↔ to another	bank account
Victoriaw olgital money into your mi Use your Taler wallet After using your wallet you will need to cancel the operation on this site.	authorize or Provider extension	Make a wire transfer to an account	with known bank account number.
	Current balance is BOC 50.00 25.00	10.00 5.00	
	Cancel		Continue
Transactions history			
Date A	Amount	Counterpart	Subject
29/05/2025			

Figure 3.0.8: Bank account Jane Doe sends money to her wallet



Figure 3.0.9: Bank account Jane Doe sends money to her wallet

		(((TALER
			R
		Digital ca	sh withdrawal
		Service fe	ee description
All fo	e indicated bel	ow are in the sa	me and only currency the exchange works.
Exchane	ge: https://exch	ange.bookseller	taler.net/
		Doe	Auditors an't have auditors
Curren	cy BOOKZ		
		Coin	operations
Every for a p	operation in this period of time. 1	s section may be The exchange w coin is used	e different by denomination value and is valid ill charge the indicated amount every time a I in such operation.
		[Jeposits
_	0.01	0.00 0.00	25-May-2028 25-May-2028
	0.04	0.00	25-May-2028
_	0.08	0.00	25-May-2028 25-May-2028
	0.32	0.00	25-May-2028
_	0.64	0.00	25-May-2028
_	2.56	0.00	25-May-2028
_	5.12	0.00	25-May-2028
_	20.48	0.00 0.00	25-May-2028 25-May-2028
	40.96	0.00	25-May-2028
De	nomination	Fee	Until
	0.01	2.02	10 Mar 1010
	0.01	0.00	26-May-2026
-	0.04	0.00	26-May-2028
	0.08	0.00	26-May-2028 26-May-2028
	0.32	0.00	26-May-2026
-	0.64	0.00	26-May-2026 26-May-2026
	2.56	0.00	26-May-2025
-	5.12	0.00	26-May-2026 26-May-2026
	20.48	0.00	26-May-2026
-	40.96	0.00	28-May-2026
0		100	Refunds
-	0.01	0.00	26-May-2025
	0.02	0.00	26-May-2026
-	0.04	0.00	26-May-2028 26-May-2028
	0.16	0.00	28-May-2026
_	0.32	0.00	26-May-2028
	1.28	0.00	28-May-2026
_	2.56	0.00	26-May-2026
	5.12	0.00 0.00	26-May-2026 26-May-2026
_	20.48	0.00	26-May-2026
	40.95	0.00	26-May-2026
0	nomination	Fee	Refresh
_	0.01	0.00	26-May-2026
	0.02	0.00	26-May-2026
-	0.04	0.00	26-May-2025 26-May-2025
	0.16	0.00	26-May-2026
_	0.32	0.00	26-May-2026 26-May-2028
	1.28	0.00	26-May-2026
	2.56	0.00	26-May-2026
-	5.12	0.00 0.00	26-May-2026 26-May-2026
	20.48	0.00	26-May-2026
-	40.95	0.00	26-May-2028
0		Tere	Unai
Every period	r operation in th of time. The exe	Transfe is section may b change will chang x-1	r operations e different by transfer type and is valid for a ge the indicated amount every time a transfer s made. alter-bank
	closing wire	0.00	01-Jan-2026 01-Jan-2026
Every period	operation in th of time. The exe Feature	Wallet is section may b change will chan Fee	operations e different by transfer type and is valid for a ge the indicated amount every time a transfer made.
	account	0.00	01-Jan-2028
_	purse	0.00	01-Jan-2026
PRIV	NCY POLICY		TERMS OF SERVICE
			Return to wallet

Figure 3.0.10: Taler Wallet (web extension) showing information for the BOOKZ Exchange

TALER Bookseller Bank				
	Welcome, Jane	Doe		BOOKZ 1312
	Send money	to a Taler wallet	↔ to anothe Make a wire transfer to an accour	er bank account
	Using a form payto:// UF A special UR be transferr account:	I that specifies the amount to d and the destination	Payto URE:* psyto://t-taler-bank/bank.booksell exchange?receiver- name:TLRH2080oksellerH2028B 2%3A100Amessage=236/R82227B B60NR7F24CDYGG85C410P0G280 Cancel	lertalecnet/ nktamourt-800K 2053MPK69514YW
	Transactions hist	bry		
	29/05/2025	Amount	counterpart	Subject
	16:02:51	BOOKZ 1312	admin	bonus
				First page Next
more about GNU Taler ight © 2014—2025 Taler Systems SA. Version 1.0	.2 (4417deda)			

Figure 3.0.11: Bank account Jane Doe sends money to the BOOKZ Exchange using a taler://pay/ link

(TALER	
⊗ Digital cash withdrawal	
Return to wallet	

Figure 3.0.12: Taler Wallet loading information from Exchange

TALER Bookseller Bank										
	<u>Welcome, Ja</u>	ane Doe					E	300KZ 121:	2	
	Send mone	y								
	S D Withdraw o	to a T ligital money into your	aler wallet	er extension	↔ Make a wire tran	to another bank a Isfer to an account with kno	ICCOUNT wn bank account number	٤		
	Transaction	s history								
	Date	Amount	Counterpart	Subject						
	29/05/2025									
	16:26:21	- BOOKZ 100	exchange	X36VB422XFB20FS31	MPN69514YWB6DNR7	F24CDYGG85C41QP0G2B0				
	16:02:51	BOOKZ 1312	admin	bonus						
							First page	Next		
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Figure 3.0.13: Bank account Jane Doe: the BOOKZ Exchange received money

		TALER		
	Balance	Dev tools 🛛 🛛 🔡	٥	
121 0	tps://exchange.bookseller. 1 May 2025, 17:27 ^{otalis}	taler.net/	Withdrawal 100 - 00 BOOKZ	
	Transfer		100 BOOKZ	
			DELETE	

Figure 3.0.14: Taler Wallet's balance was updated with the right amount

TALER	Digital payme	nt for the rest of us
	About the TALER Bookseller Exchange	
	Overview	
	This Taler Exchange allows you to obtain BOOKZ, a flotional currency, in order to buy electronic versions of petites singularités books.	
	To start the demo, you will need a Taler Wallet and then go to TALER Bookseller.	
	Visit the list of available shops for this demonstrator of GNU Taler payment system.	
	Operator	
	This <u>Taler exchange</u> is operated by <i>petites singularités</i> ASBL, a non-profit established in Brussels, and part of the <u>NGI TALER</u> consortium.	
	You can learn more about PS role in NGI TALER.	
	petites singularités staff can be contacted on TALER ICH.	
About petites singularités	About TALER	Acknowledgement
P.S.: is a non-profit association based in Brussels, researching collective practices and free technology production.	TALER European consortium is rolling out a new electronic payment system for humans.	European Union
		Grant Agreement N° 101135475
62	025 petites singularités — NGI TALER brings the electronic payment system GNU Taler to the Eurozone	
	(TALER	

Figure 3.0.15: Taler Exchange home page shows Exchange Operator information

May 29 20:43:21 taler taler-exchange-httpd[1006789]: (FT1NA7YEC7KPAWG811S705	ZGR) INFO KYC not enabled
May 29 20:43:21 taler taler-exchange-httpd/10067891; (ET1NAZYEC7KPAWG811S705)	ZGR) INFO Cancelling DB event listening
May 29 20:43:21 taler taler-exchange-httpd[1006789]: (ETINAZYEC7KPAWG811S705)	Z6R) INFO Executing PO command UNITSTEN XHVRK1KKJYCT9RVZ50DWZJ8E89SVEK03YR502XEMMMDGRWJ806EW6'
May 29 20:43:21 taler taler-exchange-httpd/1006789]: (ETINAZYEC7KPAWG8115705)	Z6B) INFO Request for '/kyc-check/98ZBZ2TGBGMGBG500XM6MWDX1TKC2B6VBTCACKV7H0WE6YTGVC00' completed with HTTP status
204 (0)	
May 29 20:43:21 taler taler-exchange-httpd[1006789]; (0XJ8MSHX310NW7SVA5W3EH	KPC) INFO Handling new request
May 29 20:43:21 taler taler-exchange-httpd[1006789]: (HZ9E7RZA731W76F5MZWXYA	0A0) INFO Handling request (GET) for URL '/kyc-check/TKBFF7S9S0J8HCJWNTH0C06BP61D0H7832WV0S3V61TMPH41FFV0'
May 29 20:43:21 taler taler-exchange-httpd/1006789]: (HZ9E7BZA731W76E5MZWXYA	RAR) INFO Checking KYC status for normalized payto hash TKBEF7S9SRJ8HCJWWTHOC86BP61D8H7832WV8S3V61TMPH41FFV8
May 29 20:43:21 taler taler-exchange-httpd/1006789]: (HZ9E7BZA731W76E5MZWXYA	0A0) INFO Long polling for target 1 with timeout 29 m
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May 29 20:43:21 taler taler-exchange-httpd[1006789]: (HZ9E7RZA731W76F5MZWXYA	0A0) INFO Executing PO command 'LISTEN XJGTOACEJBCVX7CPMZ4NFBK1PA9A8VZBB2HTHAG59YFJDC5H01M6G'
May 29 20:43:21 taler taler-exchange-httpd[1006789]; (HZ9E7RZA731W76F5MZWXYA	0A0) INFO KYC not enabled
May 29 20:43:21 taler taler-exchange-httpd[1006789]: (HZ9E7RZA731W76F5MZWXYA	0A0) INFO Cancelling DB event listening
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May 29 20:43:21 taler taler-exchange-httpd[1006789]: (D785DRZKCEDZAYR5Q9K218	ZAM) INFO Handling request (GET) for URL '/kyc-check/98ZB72TGBGMGRG500XM6MWDX1TKC2B6VRTCACKV7H0WE6YTGVCQ0'
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May 29 20:43:21 taler taler-exchange-httpd[1006/89]: (XMNGKET5RWP9ST99WW6KTY	DAM) INFO Handling request (GET) for URL '/kyc-check/IKBFF/S9S0J8HCJWNIHQC06BP61D0H/B32WV0S3V61IMPH41FFV0'
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May 29 20:43:21 taler taler-exchange-httpd[1006789]: (TYGCB5WRN36RDBNG7X8N40)	RKM) INFO Cancelling DB event listening
May 29 20:43:21 taler taler-exchange-httpd/1006789]; (TYGCB5WRN36RDBNG7X8N40)	RKM) INFO Executing PO command UNLISTEN XHVBK1KKJYCT9BVZ50DW7J8E89SVEK03YR502XEMMMDGRWJ80GEWG'
May 29 20:43:21 taler taler-exchange-httpd[1006789]; (TYGCB5WRN36RDBNG7X8N40)	RKM) INFO Request for `/kyc-check/98ZB72TGBGMGRG500XM6MWDX1TKC2B6VRTCACKV7H0WE6YTGVC00' completed with HTTP status
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Figure 3.0.16: Taler Exchange is running (viewing KYC logs...)

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Figure 3.0.17: Taler Merchant Backend home page

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Figure 3.0.18: Taler Merchant Backend inventory

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Figure 3.0.19: Taler Merchant Backend product view



Figure 3.0.20: Testing Taler payment live in Lille



Figure 3.0.21: Point of Sale with BOOKZ inventory



Figure 3.0.22: Thank you for buying with GNU Taler!

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Figure 3.0.23: Press Release for D3.2 $\,$

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Figure 3.0.24: Fediverse announcement for D3.2 $\,$