

Festival SeaNaps

HABeaTUS

A blockchain-based Festival

First of all, we'd like to propose a way of payment almost exclusively based on digital currencies (and of course, we have plans to adapt to the scenarios in which festival goers want to stick to Euros).

The hardware used is quite simple:

RFID Bracelets: Festival goers would be given bracelets, in which RFID chips are incorporated, every time they want to load their account with money, or to proceed to payments.

There will be two sorts of points on the festival's location where Festival goers can get those: in the official currency booth, dedicated only to those questions, or at any goods-selling spots of the Festival (be it for drinks, food, goodies, etc.). On the selling points, all "sellers" will dispose of boxes with not-yet-used bracelets, whose RFID chips are still "virgin". This way, anytime someone comes to buy his first drink or piece of pizza, the sellers will be able to provide a bracelet **and** charge it for the person to buy his or her product.

NFC Terminals: to proceed with those operations, all sellers on the festival site will dispose of individual "terminals". Again, quite simple, the only device a seller needs is a smart phone able to use Near Field Communication (NFC). We are currently creating a simple application to run on those, and which would give 2 possible actions to the seller when it flashes a festival goer bracelet: "pay" or "(re)load the bracelet with cash"

A local wifi used as a private intranet: on the space of the Festival, it will allow each of the connected seller devices to work realtime without being slowed down by the crowd's traffic. It will serve as a connection to a Blockchain that will be used as the general ledger of the festival. *So far, we've started with the Ethereum public blockchain. Later comes the why? And the How?*

Why using blockchain technology

The main reason why we want to bother using the blockchain technology instead of using classical euro transactions like most festivals is because we believe there is a failure in the way those mainstream circuits are paying the artist.

In most festivals, especially "for free" events, most of the revenue of a festival (apart from its subvention and sponsoring funds) is coming from the sale of drinks during the live events. However, in the chain of transactions, payments among partners and fees taken by various third part (mainly banking and financial entities), the artist almost always ends up being the last (and less) paid.

Using the Blockchain is for us the opportunity to test how something like Smart contracts could be able to shake this established system.

Smart Contracts: their use would permit three things:

- To formalize the agreements and contracts made between all the partners of the Festival (including furnishers, goods sellers, security providers, and of course musicians), to make it transparent, fair for all, and unquestionable. To get them involved and interested in working together is both the condition and consequence of this plan.
- To provide instant percentage, for all artists performing during the Festival, on each product sold thanks to their presence and work. An example? Imagine a beer being sold for four Euros in one of our food trucks. Our wish is to implement a smart contract on this transaction and all other ones, specifying that 70% of it will go to the person selling the beer, that 10% would go to the musicians playing the day that beer is sold, that 10% goes to the persons providing security, that 5% would be dedicated to paying the personal maintaining the toilet area clean (the more beer, the more steps towards a WC) and 5% to an association working for local development. *Note: this percentage rate is just an example; it will be transparently decided by all partners involved before the festival.*
- To give awareness to the festival goers on the direction their money is taking once they have spent it. To question the way our cultural economical system is considering the artists work. At a time in which the traditional and monopolistic music industry has shown its limits and yet continues on exploiting the 99,9% of artists who are not rich and famous, it is up to us to propose other solutions, be it for live or recorded music.

The Space and time:

The music Festival will last three days, but the digital currency system and experience developed will last for two days more afterwards. During this total of 5 days, several points of the city (shops, cinemas, concert venues, etc.) sharing the same ethic of work and interested in participating will also propose this alternative to their customers.

The smart contract implemented might be then slightly different (less focused on the artist retribution, more on the funding of local development associations), but will be using the same idea and system.

This will both permit to involve local actors in the experiment and the festival, but also for festival goers to spend the rest of their crypted currency left on their bracelet if there is some during two more days and to invest it in a fair and effective redistribution process. Of course this will not be the only way festival goers could get the rest of their money back. First of all, booths at the festival will be dedicated to unload and reimburse bracelets. And an online portal will be active for a month afterwards, allowing them to exchange their left "Lips" for euros, bitcoins, ether, or whatever pleases them.

Oh, I just said "**Lips**", what is it

A new and temporary digital crypted currency: the LIP.

We have decided to create for this event what most call an "Altcoin". A few details about that newcomer that doesn't intend to exist for longer than the experiment time:

- It is called the "Lip" (1 Lip, 2 Lips)
- It looks like this: "11". (can you spot the leipziger "Hochhaus" silhouette ?)
- It is indexed on euros (1 Lip = 1 Euro).
- It is implemented using the Ethereum Blockchain, as well as the smart contract that runs with it.
- Both at the Festival's and in partners' locations around town, all transactions will be recorded on

a Blockchain based ledger, allowing each one (partners, festival goers, etc.) to check where the money goes. Thereby, it will also provide a real time accounting for the festival.

I know that many people will start rolling eyes to the ceiling and ask: but why bother? Why not using Bitcoin or Ether? So let's give it a quick explanation before we discuss for hours about it.

1) Because Ether and Bitcoin might be doing great in many contexts, but are not suitable for a festival. For instance:

- Opening and funding an ETH or BTC wallet with Euros is too complex and intrusive for just attending a festival. One needs 2 days with a platform like Kraken and needs to provide sensible information (id information, selfie with id card, proof of residence). We can propose this to persons who just want the piece of pizza they see on the counter to end up in their stomach within 30 seconds.

- Ether or Bitcoin price are too volatile with respect to Euro for our situation. We don't want to take any risk in the payment of our artists, and it might also scare some non informed festival-goers.

2) Because as any experiment, ours need to have a date of start and a date of end, and creating the currency for it is possible and makes it accurately observable.

3) Because the fact of creating a currency that is both taking a local (usable online but mainly concerning physical and local interactions at first and questioning the way the local economy can be invested by its inhabitants) and a worldwide perspective (using the nationless aspect and world computing possibilities of the blockchain) is making it twice more interesting.

4) Because its neutrality will also allow it to stay out of parish strife such as the one opposing Bitcoin to Ether. For that reason, we are also opening the door to any blockchain community wanting to try implementing their model to this particular problem. Our datas will be public, and can be implemented on the bitcoin blockchain on parallel to the Ethereum one. The research's outcomes would benefit from this opening of perspectives and methods.

I will stop here for now, and of course, there are many questions left aside in this short document. There are those we already have answers for:

- *How will we deal with those who just want to use Euros?*
- *Who is allowed to mint Lips and is there an algorithm?*
- *How to secure the system against theft (bracelet, seller smartphone)*
- *Why the Ethereum public Blockchain as a first choice?*
- *Isn't creating an intranet to which SeaNaps has control on and through which all transactions go the same a traditional centralized system?*
- *Who will pay for the Gas?*
- *In technical terms, is it really doable? Won't you need tons of money and effort to put up something like that?*
- *How will you communicate to the audience before and during the festival? Do you think this will interest them?*
- ...

If you are ever wondering about one these, just pick it up, and I'll answer with pleasure.

And then, there are the questions we didn't even think about yet...

That is one of the reasons why we want to keep the whole development process as open as possible to contributions, be it only to express skepticism. Because within open critic lays improvements towards efficiency, fairness and ethic. So, one last question: if you were to desire it, how could you contribute to the **SeaNaps** Festival project?

By:

- Questioning it.
- Supporting it
- Talking around you about it.
- Developing (parts of) it
- Taking part in the research team (which will involve academic and private fields. It is only natural that some hackers are part of it too). That could also mean to organize and/or take part in the organization of conferences dedicated the experiment (one at the beginning of the festival, one at the end of it).
- Taking part in the logistic organization
- Taking part in the artistic production, or workshop (you can propose workshops ideas).
- Helping in networking, communicating, finding donations, sponsors, subventions, an audience, a good dish to sell on the festival, etc.

There is no restriction in joining the **SeaNaps** Festival. We will never have too many brains or arms for it. So if you find it interesting, feel free to contact us and let us know in which way it is for you.

Cheers and many thanks for reading me.

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