**Tangle Identity**

Rolling Meeting notes

# Next Scheduled Call: **14th of May** Proposed time: 4 - 5 pm CET

# **Resources**

Tangle EE Member Contacts:  
[Member Contacts](https://drive.google.com/open?id=1fMVT3vxRMZhtqUHrQXkiOW8o2Bv_D6Vt4IIlCposB0w)

Mailing list:  
[tangle.ee-wg@eclipse.org](mailto:tangle.ee-wg@eclipse.org)   
*To post a message to all the list members, send email to* [*tangle.ee-wg@eclipse.org*](mailto:tangle.ee-wg@eclipse.org)*.  
You must be* [*subscribed*](https://accounts.eclipse.org/mailing-list/tangle.ee-wg) *to the list before you can post.  
To access a web archive of this list, visit the* [*tangle.ee-wg Archives*](http://www.eclipse.org/lists/tangle.ee-wg)

Tangle EE Shared drive:  
<https://drive.google.com/open?id=1vZWMUziyjhjd-yHu-jwUpfBBdLUOYLah>

Slack workspace:  
tangleee-wg.slack.com

Slack invite link:  
<https://join.slack.com/t/tangleee-wg/shared_invite/zt-ci1v1wio-eHiQjNpC_Od2Jamgii0mng>

Tangle EE WG Charter:<https://www.eclipse.org/org/workinggroups/tangle_ee_charter.php>

Eclipse Unified Identity Project:  
<https://projects.eclipse.org/proposals/eclipse-unified-identity>   
  
Eclipse Decentralized Marketplaces Project:  
<https://projects.eclipse.org/proposals/eclipse-decentralized-marketplaces>

**Green Origin Certification project**

**Purpose:** Scoping & Refinement + forming Project Team

**Thursday, May 14th at 4:00 – 5:00pm CET**

**Attendees: (Please add):**

Wilfried Pimenta (IOTA)

Mark Nixon (IOTA)

Antonio Nardella (IOTA)

Jelle Millenaar (IOTA)

David Sønstebø (IOTA)

Thabata Dias (IOTA)

Stéphane Didier (CNA)

Jan Pauseback (IOTA)

Wilfried Pimenta (IOTA)

Thale Gartland (IOTA)

Johannes Mayer (Laboratory for MAchine Tools and Production Engineering (WZL) RWTH Aachen University)

Alaettin Dogan (Helmut Schmidt University)

Martin Schmidt (Energinet)

André Bryde Alnor (Energinet)

Peter Lyck Ingerslev (Energinet)

Maria Teresa Delgado (Eclipse Foundation)

Markus Luecking (Forschungszentrum Informatik)

Antonio Vilei (STMicroelectronics)

Andrea Palmieri (STMicroelectronics)

Sulav Adhikari (Dell Technologies)

Stéphane Didier (Calypso Network Association)

Christoph Strnadl (Software AG)

**Agenda (Add your topics below):**

* Welcome
* Energinet identity problems

**Captured minutes (please add if anything critical is missing):**

* Everyone in this WG has an opportunity to shine themselves and contribute.
* Need to find a way to make sure that the project can be cut up in pieces where everyone can contribute their own stuff
* How do we create reusable parts and how do we echo questions that not only rise with this project, but with the Identity project in general.

Martin (Energinet):

* Presentation
  + Guarantee of the origin (GTO) of the electricity to the owner. Required in the EU directives of green energy. F.ex: if we want to create green hydrogen → need to be able to prove the origin of the electricity.
  + Must be a correlation in time and location
  + Currently running the project on Hyperledger Sawtooth. Cannot scale → issue. Want to base it on IOTA instead
  + How do we give every meter a valid identity on the hyperledger? How can we delegate access to these sorts of services?
  + Near 57 million transactions per hour (in Denmark alone) → EU 330 million electricity meter, 1.7 million transactions per second

André (Energinet):

* Presentation
  + What work guidance are necessary to be working on to allow this to happen?
  + How do we scale to 1.7 million transactions per second? How do we ensure that the data is secure and truthful? How can end users delegate access to the data on the ledger? How can we anonymize data on the ledger?
  + Proof of scalable framework with all this data on the tangle / or in an off-tangle setup, colored coins.

***Question****: Is this already in trial in Denmark? (Antonio)*

André (Energinet):

* A field trial and a line trial. We are the issuing body in Denmark, have the regulatory setup connection to do this
* Prove that all of these things work in a production setup within the boundaries of regulation.

***Question:*** *How many meters are the system handling? (Antonio)*

Martin (Energinet):

* Not many, just rolled out the first internal trial.
* Doing it as opt-in → people can join as the project grows. A series of companies joining the project in the next week and coming weeks.
* Slowly more and more meters to the system
* Won’t be able to handle 20%/10% of Denmark
* The concept is ready, people can begin doing it.
* What are the minimum requirements for the ledger itself?

***Question:*** *Is there some of those that you guys are also interested in working on proving, solving or that you need in your product lines? (David, IOTA)* → regarding the presentation André shared

***Question:*** *To what extent from a projectile perspective do we need to develop that architecture from scratch?* ***(****Christoph, Software AG)*

André (Energinet):

* Most cases it is already building blocks there, mainly a matter of connection
* Lacking before: power of attorneys.
* Built into the setup today (difficult to scale, and the environment available on it will become to costly)
* The building blocks are there, but need to extend and integrate into this new setup where it can be scalable.

Antonio (STMicroelectronics):

* We would be interested in working on this scenario where it’s decentralized and contributing from the hardware side
  + André, Energinet: Very interesting, and a more trustworthy setup could be interesting as well.
  + David, IOTA: When we are covering all of EU → acceleration for hardware is needed. What can we boost significantly via integrated circuitry?

Christoph (Software AG):

* The generalization of the use cases into a much broader machine domain would be essential. Not only limited to smart meters.
* Integrating all the different open source and ideas will be the challenges at the same time
  + David (IOTA): One of the biggest logistics we will have is between all of us in this WG. Important to set up bi-weekly calls, get some action items.

***Question:*** *How can we use the frame provided by Energinet to look into the DID stack? (Wilfried, IOTA)*

Jelle:

* Certain base functionalities that the IF are working on (DID implementations), but a bunch a question that are interesting to research as a group;
  + The power of attorney (can be used in other identity related applications).Maybe also look into our researchers and Universities in the WGl. Are there any publications worthy subjects in this type of research?
  + Zero knowledge proof
  + The consensus model

***Question:*** *From your perspective Jelle, do you think we can solve it all, or do we need to wait for some research on the topics? (Christoph, Software AG):*

* Jelle (IOTA): Not wait, can collaborate together on this, but wouldn't use it in production right now.

***Question:*** *From an industry perspective, which part of the technology can be implemented today, and which cannot be? What works right now? (Christoph, Software AG)*

David (IOTA):

* Need to find out what we need. Set up the working groups within the Tangle EE WG
* Power of attorney fits into the framework of smart contracts.
* How do we go about all the ideas? Which parts do we focus on? What can be generalized?

***Question:*** *Should we set up a community entity that joins the Tangle EE WG? Maybe take leverage of some developers in the community. (David, IOTA)*

* They can join as individual committees in the WG
* Invite academic institutions to the WG, need a formal invitation from SC. Ask universities to what extent would they be able to contribute .

**Action items (Add action items below):**

* Share the slides and a more in depth walkthrough
* Create slack channels for each one of those 4 items on the tangle ee slack workspace to continue the discussions after the call
* Set up a list of potential problems, everyone can vote on what is most important.
* Create overview of the working hours
  + Need a project team, who has the capacity to put in some regular hours of work?