

LF Energy New Project Proposal: USEF Flex Trading Protocol (UFTP)

General information:

- Name of project
 - USEF Flex Trading Protocol (UFTP)
- Project description (what it does, why it is valuable, origin and history)
 - The USEF Flex Trading protocol (UFTP) is a subset of the [USEF Framework](#). Focused specifically on the exchange of flexibility between Aggregators (AGRs), DSOs and TSOs, it describes the corresponding market interactions between them to resolve grid constraints by applying congestion management or grid-capacity management. UFTP can be used as a stand-alone protocol for flexibility forecasting, offering, ordering, and settlement processes. Its purpose is to support the use of flexibility markets for grid-congestion issues and standardize the set-up and operation of these markets across different DSOs, TSO's and different countries.
- Project lead
 - To be decided by the project's Technical Steering Committee. For ad interim: Jelle Wijnja
- Project financial sponsor organization(s)
 - GOPACS
- Names of other key contributing individuals and organizations
 - Universal Smart Energy Framework Foundation (USEF Foundation)
 - OrangeNXT
 - DNV
 - Alliander N.V.
 - Stedin Netbeheer B.V.
- Proposed Technical Steering Meeting (TSC) member
 - Robben Riksen (GOPACS)
 - Jelle Wijnja (Alliander)
 - Jorian Gauw (Stedin)
- Existing community links:
 - Repository hosting
 - UFTP: <https://github.com/USEF-Foundation/UFTP> (public repo)
 - UFTP java library: <https://github.com/appbeats/uftplib> (private repo that will be open sourced)
 - UFTP api: <https://github.com/appbeats/uftpapi> (private repo that will be open sourced)
 - project website and docs
 - <https://www.usef.energy/usef-flexibility-trading-protocol-specification/>
 - mailing lists, slack, irc – USEF user community mailing list

Korthuis, Emile <emile.korthuis@alliander.com>; Cuijk, Mark van <mark.van.cuijk@alliander.com>; Brouwer, Erik <erik.brouwer@ict.nl>; Willems, Marcel <marcel.willems@enexis.nl>; Klapwijk, Paul <paul.klapwijk@enexis.nl>; Laan van der, Marten <m.d.van.der.laan@pl.hanze.nl>; Laarakkers, Joost <joost.laarakkers@tno.nl>; Koehorst, Bart <bart.koehorst@scholt.nl>; Maas, Frits <frits.maas@scholt.nl>; Baert, Frederik

<frederik.baert@zelospark.com>; Sieben, Bram <bram.sieben@alliander.com>; Bushell, Simon <simon.bushell@sympower.net>; Sicurani, Olivia <olivia.sicurani@sympower.net>; Van Heesbeen, Jorg <jorg.vanheesbeen@jedlix.com>; Gauw, Jorian <jorian.gauw@stedin.net>; Olij, Marcel <marcel.olij@enexis.nl>; Ran, Bob <bob.ran@tno.nl>; Thewis, Seppe <seppe.thewis@enervalis.com>; Wijbrandi, Wilco <wilco.wijbrandi@tno.nl>; Loureiro, Tatiana <tatiana.loureiro@r2msolution.com>; Obra, Paul <pobra@radiuselnet.dk>; Tomasini, Federica <federica.tomasini@enel.com>; Lampropoulos, Iannis <i.lampropoulos@uu.nl>; McGlynn, Rosie <rosie.mcglynn@passivsystems.com>; Ruthven, Dorothea <druthven@scottishpower.com>; Bode, Jeroen <jeroen.bode@usef.energy>; Wijnja, Jelle <jelle.wijnja@alliander.com>; Sáez Armenteros, Aurora <Aurora.Saez@dnv.com> Hugo van der Zwaag <hugo.van.der.zwaag@alliander.com>

- social media accounts:
 - Twitter: @USEFsmartenergy
 - LinkedIn: USEF Foundation <https://www.linkedin.com/company/usef-foundation/about/>
- Project security plan
 - Not available
- Link to code base:
 - UFTP: <https://github.com/USEF-Foundation/UFTP> (public repo)
 - UFTP java library: <https://github.com/appbeats/uftplib> (private repo that will be open sourced)
 - UFTP api: <https://github.com/appbeats/uftpapi> (private repo that will be open sourced)

Open source status:

- Please describe the project's license.
 - Currently the project is no open source license yet, however the project's intention is to adapt [Apache License, Version 2.0](#) when adopted by LF Energy.
- Is this project's code publicly posted? On github or elsewhere?
 - Github:
 - UFTP: <https://github.com/USEF-Foundation/UFTP> (public repo)
 - UFTP java library: <https://github.com/appbeats/uftplib> (private repo that will be open sourced)
 - UFTP api: <https://github.com/appbeats/uftpapi> (private repo that will be open sourced)
- Does this project have an ongoing public (or private) technical meetings?
 - Yes, private technical meetings via GOPACS
- Do this project's community venues have a code of conduct? If so, what is it?
 - Currently, the project has no code of conduct yet, however, the project's intention is to adapt [Apache License, Version 2.0](#) when adopted by LF Energy.
- Describe the project's leadership team and decision-making process.
 - The current process is:
 - The parties which have implemented / are implementing the UFTP protocol and its predecessor, the USEF protocol are able to make a request for change. These parties are assembled in the USEF User Community
 - The USEF Design team will work out these requests for change

- The USEF User Community is involved in order to make a final decision which request of change to adapt
 - The USEF Design team will implement these changes
- This process will change because the USEF Design Team will take a step backward and GOPACS DevOps team will set-up a new process.
- Does this project have public governance (more than just one organization)?
 - Grid operators TenneT, Stedin, Liander, Enexis Groep and Westland Infra are working together on GOPACS. GOPACS is a unique initiative in Europe and has resulted from active collaboration between the Dutch national grid operator (Transmission System Operator, TSO) TenneT and the regional grid operators (Distribution System Operators, DSOs). Therefore GOPACS is characterized with public governance.
- Does this project have a development schedule and/or release schedule?
 - No
- Does this project have dependencies on other open source projects? Which ones?
 - No
- Describe the project's documentation.
 - Description of the protocol and .XSD files and message library.
- Describe any trademarks associated with the project.
 - None of our knowledge

Project status:

- Do you have a project roadmap? please attach [Are this project's roadmap and meeting minutes public posted?]
 - The project roadmap is no yet public posted.
 - High-level overview of the project roadmap:
 - Open sourcing of the USEF Flex Trading Protocol
 - USEF Flex Trading Protocol will be integrated within GOPACS in 2021/2022.
 - Small improvements will be made based on user experiences
- Does this project have a legal entity and/or registered trademarks?
 - No
- Has this project been announced or promoted in any press?
 - Via newsletter of USEF
- Does this project compete with other open source projects or commercial products?
 - Not to our knowledge

Project value:

- Why would this project be a good candidate for inclusion in LF Energy?
 - UFTP is an answer for an open source protocol for bilateral flexibility trading between aggregator and DSO/TSO across the world.
- Provide a statement on alignment with the mission in the [LF Energy charter](#).
 - UFTP helps to digitally transform the power systems sector by proving an open source protocol for bilateral flexibility trading.
- What specific need does this project address?
 - Need for a standardized protocol for bilateral flexibility trading between aggregator and DSO/TSO congestion management.
- Describe how this project impacts the energy industry.

- Currently, many restrictions on transportation of electricity are based on congestion on the lower voltage grid. Therefore many sustainable energy sources such as wind turbines and solar panels cannot be installed. With the help of congestion management, the (lower voltage) grid can be used more efficiently and more sustainable energy sources can be connected. Standardisation of the interaction between the Aggregator and the DSO / TSO will reduce the implementation costs for both parties, and thus reduce market entry barriers for Aggregators and operational costs for DSOs.
- Describe how this project intersects with other LF Energy projects.
 - UFTP connects with the 'Customer & Market' domain as open source protocol for bilateral flexibility trading between aggregator and the DSO / TSO
- Who are the potential benefactors of this project?
 - TSOs, DSOs and congestion service providers (aggregators) and end-consumers with flexible assets such as electric vehicles, solar PV or heat pumps. Standardization of the interaction between the Aggregator and the DSO will reduce the implementation costs for both parties, and thus reduce market entry barriers for Aggregators and operational costs for DSOs.
- What other organizations in the world should be interested in this project?
 - Aggregators (congestion service provider), distribution service operations (DSO's), transmission service operators (TSO's), energy suppliers, balance responsible parties (BRPs) and prosumers of energy

Project needs:

- How would this project benefit from inclusion in LF Energy?
 - More international publicity of UFTP making it more attractive for other users to apply this open source protocol. With more user experiences across different countries, UFTP can become more mature and working towards a standard for Aggregator / DSO / TSO flexibility procurement and trading.
 - (Based on the existing USEF User Community) setting up the open source community for UFTP.
- Please describe any infrastructure needs or requests (e.g., web hosting).
 - Web hosting, a Development environment like the current GitHub environment
- Plan for achieving next maturity level (Incubation -> Early Adoption -> Graduated)
 - UFTP will be integrated within GOPACS and improvements will be made based on user experiences.